

# Communicable Illnesses Policy Consultation

Stakeholder Submissions

February 14, 2023 to March 28, 2023

### Table of contents – Stakeholder submissions

Bayshore HealthCare	4
Canadian Manufacturers and Exporters (CME)	8
Canadian Vehicle Manufacturers' Association (CVMA)	13
CarePartners	14
CBI Health	17
Circle of Care (CofC)	19
Compass Group Canada	21
Construction Employers Coalition (CEC)	23
Council of Ontario Construction Associations (COCA)	24
GEM Health Care Services	28
Home Care Ontario	31
Hydro One Networks Inc	34
Industrial Accident Victims Group of Ontario (IAVGO)	41
Injured Workers Community Legal Clinic (IWC)	66
Kingston Health Sciences Centre and Providence Care	75
L.A. Liversidge, LL.B	95
Mandlowitz Consulting and Paralegal Services (MCPS)	108
Michael S. Green	115
Occupational Health Clinics for Ontario Workers (OHCOW)	126
Office of the Employer Adviser (OEA)	139
Office of the Worker Adviser	143
Ontario Business Coalition (OBC)	158
Ontario Federation of Labour (OFL)	162
Ontario General Contractors Association (OGCA)	168
Ontario Long Term Care Association (OLTCA)	169
Ontario Mining Association (OMA)	171
Ontario Nurses Association (ONA)	174
Ontario Power Generation (OPG)	184
Ontario Retirement Communities Association (ORCA)	186
Ports Toronto	192
Regional Municipality of Durham	193
Safety Works Consulting Inc	195
Schedule 2 Employers' Group (S2Eg)	197
Spectrum Health Care	199
Suzanne Dajcak Professional Corporation	201
Tillsonburg District Chamber of Commerce	204
Toronto Transit Commission (TTC)	214
University of Toronto	220
United Steelworkers District 6 (USW D6)	222

Viana Roofing & Sheetmetal Ltd	232
Workers' Compensation Network (WCN)	233
Workers' Health and Safety Legal Clinic (WHSLC)	238
WSPS Advisory Committees'	241



March 28, 2023

2101 Hadwen Road, Mississauga, ON, L5K 2L3 Tel: 416.595.2720 Fax: 416.595.2710 www.bayshore.ca



## Consultation Secretariat Workplace Safety and Insurance Board (WSIB) Consultation Secretariat@wsib.on.ca

Re: Bayshore HealthCare Response to the WSIB Communicable Illnesses Policy Consultation

Bayshore HealthCare welcomes the opportunity to comment on the WSIB Ontario draft Communicable Illnesses Policy Consultation. Although WSIB states that the policy is "not a change in direction" and the policy "provides detailed and clear guidance about how entitlement in communicable illness claims has been, and will continue to be, adjudicated".

Bayshore believes that additional clarity is required regarding the key points outlined below.

Specifically, our concerns address three topics:

- 1. The process for confirmation of the illness
- 2. Clarity around where and how the claimant was exposed
- 3. The length of time communicable disease claims will impact company insurance premiums

The policy requires that all claimants document their illness either through confirmation from a laboratory test or from a formal diagnosis made by a qualified health professional. Bayshore believes that taken in isolation, this requirement is insufficient to prove communicable disease illness. For example, there are no laboratory tests available for common communicable diseases such as influenza or the common cold. Further, in the absence of laboratory validation, doctors or other health professionals will not be able to confirm an illness based solely on symptoms as many illnesses exhibit common symptoms. There will also be instances where physicians who are asked to write medical notes by a patient to support a claim, may agree to write these medical notes without sufficient clinical evidence. Unless there is a laboratory test that can be administered with high results accuracy, a confirmation of a communicable disease will be unreliable. Bayshore recommends that WSIB identify the tests that are acceptable for confirmation of specific diseases.

Communicable diseases, by their very definition, are highly contagious and spread easily throughout the community. How would it be possible for anyone to truly determine whether an individual was infected with influenza while taking the bus to work or whether the infection



occurred in their place of work? Infections can occur in any area or workplace such as a thirdgrade classroom or even the emergency department of a hospital. Allowing this decision to be made by an assessor invites variability to the process if the only data inputs include transmission routes, opportunities for exposure and frequency of potential exposure.

From Bayshore perspective, it is critical to note that a home care worker may spend a half to two-thirds of their day either travelling or in activities outside of direct patient care where exposures can also occur. In this regard, it becomes even more difficult to determine the origination of the illness. The requirement and practice of wearing personal protective equipment (PPE) would also be a significant factor in determining workplace exposure.

Bayshore recommendation specifically related to communicable diseases is to apply the criteria in very specific circumstances such as:

- Declaration of a Public Health Emergency related to a communicable disease
- 2. Declaration of a confirmed outbreak in a place of work
- 3. Exposures limited to remote or confined workspaces (such as agricultural workers who live together)
- 4. Illness from communicable diseases not commonly found in the community

Where these conditions do not exist, there will never be sufficient evidence of transmission in a specific work setting.

Additionally, if exposures and claims occur during a Public Health Emergency, it is likely that this emergency condition will be time-limited in nature. Claims processed for a specific year will impact premiums for the following eight (8) years or even longer (6 years with actual financial impact), even if the emergency condition or illness transmission no longer exists.

Bayshore recommends that WSIB revisit or amend this policy to contain the time period for which an impact to premiums occur – such as 12 months following the end of an Emergency Order condition. In addition, since many of these exposures will be beyond the control of an employer, Bayshore recommends keeping the costs collectivized for this period of time or alternately report these costs on a standalone basis and implement plans to offset this cost for employers.

Bayshore recommends that the Ministry of Labour (MOL) develop a streamlined process during a declared emergency or a Public Health Outbreak to track exposures in order to reduce separate reports and excessive visits with MOL inspectors for every singular exposure.



Finally, Bayshore recommends that any claims be closed once the "main symptoms" of the condition have been resolved.

Given the possible variability in disease state, exposure and claim management, it will be critical to ensure that all adjudicators are trained consistently and with regularity to ensure variability of claims approvals and processing is limited.

Bayshore appreciates the opportunity to provide our recommendations to The Workplace Safety and Insurance Board's Policy and Consultation Services Division (PCSD) regarding the policy consultation on the WSIB draft communicable illnesses policy. We would be pleased to meet to review these recommendations.

Yours Sincerely,

Shot J. Cotrillo

Stuart Cottrelle

President

Cc: Janet Daglish, National Director, Business Development & Government Relations
Andrew Anderson, Director, Occupational Health and Safety

From: Andrew Anderson
To: Consultation Secretariat

**Subject:** thoughts regarding the communicable disease OPM

**Date:** Thursday, February 16, 2023 4:15:46 PM

Attachments: <u>image001.png</u>

**CAUTION:** This email originated from outside the organization. Do not click any links or open any attachments, unless you recognize the sender and know that the content is safe. If you are unsure or believe that you were the target of a phishing attempt please contact IT Security at ITSecurity@wsib.on.ca as soon as possible.

Folks,

I have just two comments regarding your communicable disease policy.

- 1. In the 'Entitlement Criteria' you should consider including another bullet such as 'the worker was compliant with the required Personal Protective Equipment (PPE) and still contracted the known communicable illness while in the course of employment'.
- 2. Table 1 More emphasis that you have <u>only included a few examples</u> as they did not include some of the common ones we see in health care such as TB,C-Diff, MRSA, Blood Safety etc.

Questions, please call.

Andrew Anderson

#### **Workplace Violence**

Bayshore Health Care is committed to the prevention of Workplace Violence & Harassment by providing a safe work environment for those who work within its' many facilities, and in our client's homes. Bayshore will not tolerate any acts of violence & harassment and will take all reasonable and practical measures to prevent and protect employees from acts of violence, threatening, harassing or abusive behaviours.

Bayshore's responses to Workplace Violence & Harassment can range from verbal warnings, clinical interventions and/or Police involvement to correct and protect employees and clients from unwanted and inappropriate behaviours.



## Andrew A. Anderson Director Occupational Health and Safety

Bayshore HealthCare 2101 Hadwen Road, Mississauga, ON, L5K 2L3

T: 905.822.8075 Ext 32279 Mobile: 416.738.8773

E: aanderson@bayshore.ca / www.bayshore.ca





March 28, 2023

Consultation Secretariat
Workplace Safety Insurance Board

Sent via email: consultation-secretariat@wsib.on.ca

Dear Workplace Safety & Insurance Board Consultation Secretariat:

Canadian Manufacturers & Exporters (CME) appreciates the opportunity to provide feedback to the Workplace Safety & Insurance Board's (WSIB) "Communicable Illnesses Policy Consultation".

#### The Importance of a COVID-19 Specific Policy

CME recognizes the tremendous work done by the WSIB to develop a framework for efficiently adjudicating COVID-19 pandemic claims. While CME appreciates that the development of a COVID-19 specific policy was not doable during the actual pandemic, we support the need to develop a COVID-19 policy now to codify adjudicative practices used by the WSIB during the pandemic, and to add clarity to the adjudication process for COVID-19 cases.

As an overall comment, CME believes that the draft Communicable Illnesses Policy is too broad in covering various types of illnesses which have different modes of transmission. CME would suggest that, in addition to a COVID-19 specific policy, the WSIB develop separate policies to address different types of non-COVID-19 communicable illnesses more clearly. We believe that a specific COVID-19 policy will provide an opportunity to clarify whether the WSIB will accept the results of rapid tests for COVID-19 claims (which is not something that would apply to all communicable illnesses mentioned in the policy). Furthermore, having a separate policy for COVID-19 could give the WSIB an opportunity to provide additional clarity on how COVID-19 claims, including long COVID-19, will be adjudicated by the WSIB.

#### The Importance of a Diagnostic or Positive Test Result to Establish the Presence of COVID-19

On the issue of confirming a positive result for contracting COVID-19, the WSIB is proposing that the following will generally be necessary to establish the worker has, or had, a specific communicable illness at the relevant time:

- laboratory confirmation of current infection (e.g., positive laboratory or diagnostic test, or result), or
- a diagnosis by a treating health professional qualified to provide such a diagnosis based on a clinical assessment of the worker during the period of illness.

However, the WSIB is also proposing that a claim for a communicable illness may be adjudicated in the absence of laboratory or clinical evidence from the relevant time indicating the existence of a current infection in the worker if the worker has or had a legitimate reason for not seeking health care or laboratory testing during the period of illness such as: the period of illness is short-lived (i.e.,





24 - 48 hours); or the worker cannot access or does not qualify for diagnostic testing; or a laboratory confirmation is not available for the communicable illness.

CME does not support the WSIB's proposal that the adjudication of a COVID-19 claim may proceed in the absence of laboratory or clinical evidence. Such adjudication proposal would fail to satisfy the WSIB's legislative requirement for meeting one of three criteria for establishing entitlement to benefits: that of proof of an injury or illness. We believe this is critical to satisfying the WSIB's own stated entitlement criteria that "the worker contracted a communicable disease". We maintain that anything short of a diagnostic test result or positive laboratory result brings into question whether the communicable illness even existed. The entitlement criteria requiring the presence of a confirmed injury, illness or disease was one of the founding principles of the establishment of a compensation system, which dates back to 1914 when the system was created. CME believes that not requiring either a positive laboratory result, or a diagnostic test result, fails to establish proof of any illness, injury or disease.

CME does not believe that the WSIB should allow exceptions to the need for evidence of current infection for COVID-19 claims. Given the wide availability of rapid tests the general public can access, there should be no barriers to having the diagnostic test result needed to confirm whether the worker has in fact contracted a communicable illness.

## Importance of determining if the Communicable Illness was contracted in the course of employment

The second eligibility criterion for determining entitlement to WSIB benefits is confirming the Communicable Illness was contracted "in the course of the employment", meaning the decision-maker is satisfied that the worker was exposed to and contracted the communicable illness while at the workplace, or during working hours, or while performing a work-related duty or an activity reasonably incidental to employment. Determining whether a worker contracted a communicable illness while "in the course of employment", as opposed to outside of that employment, would require the decision-maker to gather and weigh the evidence related to potential work-related and non-work-related exposures to the communicable illness.

CME again stresses the importance of establishing that the Communicable Illness was contracted while in the workplace, working ("in the course of the employment"). CME supports the WSIB's proposal of considering all the evidence related to potential work-related exposure. While enquiring about non-work-related exposure is important, the decision maker should not consider the absence of any non-work-related exposure as confirmation that the communicable illness was contracted at work, as the reporting of non-work-related exposure is not easily verified by decision makers.

#### Determining the Communicable Illness arose out of the employment

The 3<sup>rd</sup> eligibility criterion which a decision maker must consider to determine if a claim is allowable, is to determine if a communicable illness "arose of the employment". To satisfy this criterion, the WSIB must determine that the worker's employment made a "significant contribution" to contracting a communicable illness which it does by considering: whether the employment placed the worker at





an increased risk of contracting the communicable illness as compared to the risk experienced by the general public during ordinary or routine activities of daily living; and whether the communicable illness was contracted by the worker from exposure that occurred "in the course of their employment" as a result of the identifiable increase in risk. Decision makers consider both the risk factors that are associated with the worker's occupation or job as well as the individual circumstances that led to the worker contracting the communicable illness.

CME supports the WSIB's proposed use of the "significant contribution" requirement to determine if the communicable illness "arose out of the employment". Again, the premise of the workplace compensation system is to compensate for lost time and health care benefits for illnesses or injuries arising in the workplace, and workplace connection and dominance is critical.

#### Community-acquired communicable illnesses

Regarding community-acquired communicable illnesses, such as influenza, the common cold and COVID-19, the WSIB is proposing that a worker who contracts one of these communicable illnesses in the course of the employment **is generally not entitled to benefits** unless the worker's employment increased their risk of contracting the communicable illness <u>in some additional way.</u>

CME supports the WSIB's proposed approach, that a worker who contracts one of these communicable illnesses "in the course of the employment" is generally not entitled to benefits unless the worker's employment increased their risk of contracting the communicable illness. However, we are concerned with the suggestion that entitlement may be granted if the worker's employment contributed to the illness in some "additional way". We propose that the WSIB provide more clarity, by way of additional examples, of what is meant by the "additional ways" that a worker's employment increased their risk of contracting the communicable illnesses and when such claims would be allowed or denied.

As we stated in our earlier remarks, the issue of community-acquired communicable illnesses is a good example of why the Communicable Illnesses policy should be separated into 2 if not 3 different policies. A point in case is reference to the common cold, which should not be included in this discussion as allowance of such cases will be very rare. To include reference to the common cold would suggest the WSIB is considering allowing it in more circumstances than has been historically the case.

Furthermore, CME agrees that this section of the draft policy should be updated to indicate that in determining entitlement for a community-acquired communicable illness the WSIB will consider whether opportunities existed for exposure to, and transmission of, the communicable illness both inside and outside of the worker's employment. This is important as community acquired communicable illnesses are a fact of life and the workplace should not be responsible for costs for such community acquired illnesses. While this is indicated more broadly earlier on in the policy, since the policy addresses these community-acquired illnesses differently than other communicable illnesses we believe it would be helpful to clarify that this factor will be considered even if the





worker's employment increased their risk of contracting the communicable illness in some additional way.

#### Removal of the Reference to the Common Cold

CME proposes that the reference to the common cold be removed from this policy entirely. As stated by the OEA in its submission, due to the potential prevalence of the common cold in the community generally, it would be a rare circumstance where it could be established that the common cold arose out of and in the course of a worker's employment. By contrast, according to WSIB statistics¹ there have been over 55,000 allowed COVID-19 claims since the start of the COVID-19 pandemic. Furthermore, unlike COVID-19 and influenza, the common cold is not tracked by Public Health Ontario, nor are outbreaks declared by public health officials. In reviewing influenza cases that have been before the Workplace Safety and Insurance Appeals Tribunal (WSIAT), in a number of those cases² there was a declared outbreak in the worker's workplace, and this appears to have factored into the WSIAT's decision to allow the claim.

By including an illness such as the common cold in the draft policy, the current wording could be interpreted to suggest that claims for the common cold could be broadly allowed by the WSIB for workers working in certain settings (e.g., health care). Furthermore, this wording may encourage workers to file a claim for the common cold with the WSIB if they:

- feel their employment increased their risk of contracting illness in some way,
- have some symptoms of respiratory illness (such as a cough, sore throat and runny nose),
- need to isolate at home due to the current public health guidance that is in place regarding staying home when sick<sup>3</sup>,
- and cannot work from home due to the nature of their work.

Leaving the common cold reference in this policy will also result in confusion for employers as to when they are required to file a Form 7 for a worker who has COVID-19, influenza, or the common cold. If the WSIB keeps the common cold reference, CME proposes that more guidance is needed for employers as to when they are required to file a Form 7. In the absence of such guidance, it is likely that some employers will be unclear or confused about when a Form 7 is required if their worker has COVID-19, influenza, or the common cold as these illnesses can be prevalent in the general population. Since the WSIB may levy penalties or charge employers with an offence for not meeting their reporting obligations, it is important that employers clearly understand how those obligations apply in this context.

<sup>&</sup>lt;sup>1</sup> https://safetycheck.onlineservices.wsib.on.ca/safetycheck/explore/additional/provincialDownloads?lang=en

<sup>&</sup>lt;sup>2</sup> For example, see WSIAT Decision 47/22, Decision 58/17, Decision 1365/14.

<sup>&</sup>lt;sup>3</sup> <a href="https://www.ontario.ca/page/protection-covid-19-and-other-respiratory-illnesses#:~:text=lf%20you%20have%20symptoms%20of%20COVID%2D19,have%20not%20developed%20additional%20symptoms">https://www.ontario.ca/page/protection-covid-19-and-other-respiratory-illnesses#:~:text=lf%20you%20have%20symptoms%20of%20COVID%2D19,have%20not%20developed%20additional%20symptoms</a>





#### **Influenza Cases**

It is unclear to CME why influenza cases are being considered for inclusion in this policy when they are currently being adjudicated in the Occupational Disease Adjudication Branch as an occupational disease. CME proposes that influenza cases be addressed in a separate, non COVID-19 policy, Communicable Illnesses policy or remain being adjudicated by the Occupational Disease Adjudication Branch.

#### **Closing Remarks**

CME supports the need to codify into policy the COVID-19 adjudication practices which the WSIB implemented during the COVID-19 pandemic, and proposes the need to create separate policies for dealing with non-COVID-19 communicable illnesses.

We also maintain that the guiding principles of entitlement, namely the presence of an illness or injury, contracted "during the course of", "and arising from", the employment, should remain the corner stone of the communicable illnesses policy.

CME maintains that the policy should remove reference to the common cold and to influenza.

CME is always available to provide any necessary clarity or elaboration of the points we have made in our submission.

Regards,

Maria Marchese
Director, Workplace Safety & Compensation Policy
CME Ontario



March 28, 2023

Mr. Christopher Misura Manager, Policy and Consultation Services Workplace Safety and Insurance Board 200 Front Street West Toronto, Ontario M5V 3J1 Canadian Vehicle
Manufacturers' Association
Association canadienne
des constructeurs de véhicules

116 Albert Street Suite 300 Ottawa, ON K1P 5G3

Tel: 416-364-9333 info@cvma.ca www.cvma.ca

Subject: Communicable illnesses policy consultation

Dear Mr. Misura:

The Canadian Vehicle Manufacturers' Association (CVMA) representing Ford Motor Company of Canada, Limited, General Motors of Canada Company, and Stellantis (FCA Canada Inc.) appreciates the opportunity to review the WSIB's draft Communicable illnesses Operational Policy. Our feedback on the draft policy follows.

CVMA members recognize that the WSIB is proposing a Communicable illnesses Operational Policy that is intended to reflect both the Board's history of adjudicating communicable illness claims and recent experiences from the COVID-19 pandemic. While such a policy is intended to provide clarity and transparency, we share the comments outlined by the Office for the Employer Advisor (OEA) and concerns that the proposed policy is very broad and some of the proposed language does not provide sufficient clarity.

We support the OEA suggestions regarding the language in the section "Community-acquired communicable illnesses" and providing specific explanations and examples on the types of situations the WSIB would view as increasing the risk of contracting the communicable illness "in some additional way" and providing clear indication in the policy regarding consideration of potential exposure to a communicable illness outside of the workplace. Clear language and examples would assist in enhancing consistency in decision making and provide better guidance to workers and employers. We also support removing the reference to the common cold from the Communicable illnesses Operational Policy as this term could lead to confusion and unintended consequences.

The WSIB may wish to consider a series of more targeted policies to clearly address different types of communicable disease, recognizing the need to balance administration and management of multiple policies and providing sufficient specificity and clarity. In addition, we would support the development of additional guidance on when a Form 7 would be required for COVID-19, influenza, or other communicable diseases subject to the policy. This is important in ensuring that employers clearly understand reporting obligations and avoids potential penalties based on unintentional misinterpretation.

We look forward to understanding how the WSIB will be addressing the concerns identified. Should you wish to discuss our comments, please do not hesitate to contact me directly at 416-560-0167.

Yours sincerely,

Darensoum

Karen Hou

Director, Vehicle and Workplace Safety

cc: Consultation Secretariat@wsib.on.ca



March 27, 2023

#### **Consultation Secretariat**

Workplace Safety and Insurance Board (WSIB) Consultation Secretariat@wsib.on.ca

#### Re: CarePartners Response to the WSIB Communicable Illnesses Policy Consultation

CarePartners welcomes the opportunity to comment on the WSIB Ontario draft Communicable Illnesses Policy Consultation. Although WSIB states that the policy is "not a change in direction" and the policy "provides detailed and clear guidance about how entitlement in communicable illness claims has been, and will continue to be, adjudicated".

CarePartners believes that additional clarity is required regarding the key points outlined below. Specifically, our concerns address three topics:

- 1. The process for confirmation of the illness
- 2. Clarity around where and how the claimant was exposed
- The length of time communicable disease claims will impact company insurance premiums

The policy requires that all claimants document their illness either through confirmation from a laboratory test or from a formal diagnosis made by a qualified health professional. CarePartners believes that taken in isolation, this requirement is insufficient to prove communicable disease illness. For example, there are no laboratory tests available for common communicable diseases such as influenza or the common cold. Further, in the absence of laboratory validation, doctors or other health professionals will not be able to confirm an illness based solely on symptoms as many illnesses exhibit common symptoms. There will also be instances where physicians who are asked to write medical notes by a patient to support a claim, may agree to write these medical notes without sufficient clinical evidence. Unless there is a laboratory test that can be administered with high results accuracy, a confirmation of a communicable disease will be unreliable. CarePartners recommends that WSIB identify the tests that are acceptable for confirmation of specific diseases.

Communicable diseases, by their very definition, are highly contagious and spread easily throughout the community. How would it be possible for anyone to truly determine whether an individual was infected with influenza while taking the bus to work or whether the infection occurred in their place of work? Infections can occur in any area or workplace such as a third-grade classroom or even the emergency department of a hospital. Allowing this decision to be



made by an assessor invites variability to the process if the only data inputs include transmission routes, opportunities for exposure and frequency of potential exposure.

From CarePartners perspective, it is critical to note that a home care worker may spend a half to two-thirds of their day either travelling or in activities outside of direct patient care where exposures can also occur. In this regard, it becomes even more difficult to determine the origination of the illness. The requirement and practice of wearing personal protective equipment (PPE) would also be a significant factor in determining workplace exposure.

CarePartners recommendation specifically related to communicable diseases is to apply the criteria in very specific circumstances such as:

- 1. Declaration of a Public Health Emergency related to a communicable disease
- 2. Declaration of a confirmed outbreak in a place of work
- 3. Exposures limited to remote or confined workspaces (such as agricultural workers who live together)
- 4. Illness from communicable diseases not commonly found in the community

Where these conditions do not exist, there will never be sufficient evidence of transmission in a specific work setting.

Additionally, if exposures and claims occur during a Public Health Emergency, it is likely that this emergency condition will be time-limited in nature. Claims processed for a specific year will impact premiums for the following eight (8) years or even longer (6 years with actual financial impact), even if the emergency condition or illness transmission no longer exists.

CarePartners recommends that WSIB revisit or amend this policy to contain the time period for which an impact to premiums occur – such as 12 months following the end of an Emergency Order condition.

In addition, since many of these exposures will be beyond the control of an employer, CarePartners recommends keeping the costs collectivized for this period of time or alternately report these costs on a standalone basis and implement plans to offset this cost for employers.

CarePartners recommends that the Ministry of Labour (MOL) develop a streamlined process during a declared emergency or a Public Health Outbreak to track exposures in order to reduce separate reports and excessive visits with MOL inspectors for every singular exposure.

Finally, CarePartners recommends that any claims be closed once the "main symptoms" of the condition have been resolved.

Given the possible variability in disease state, exposure and claim management, it will be critical to ensure that all adjudicators are trained consistently and with regularity to ensure variability of claims approvals and processing is limited.

CarePartners appreciates the opportunity to provide our recommendations to The Workplace Safety and Insurance Board's Policy and Consultation Services Division (PCSD) regarding the





policy consultation on the WSIB draft communicable illnesses policy. We would be pleased to meet to review these recommendations.

Yours Sincerely,

#### **Rhonda Lammert**

Director, Occupational Health and Safety



3300 Bloor Street West Suite 900 West Tower Toronto, Ontario M8X 2X2



28 March 2023

#### **WSIB Consultation Secretariat**;

The WSIB Ontario has launched a consultation process for feedback related to their draft communicable illness policy. CBI Health appreciates the opportunity to comment on some potentially broader issues stemming from the policy as written. Although WSIB states the policy is "not a change in direction" and the policy "provides detailed and clear guidance about how entitlement in communicable illness claims has been and will continue to be adjudicated", CBI Health believes that additional clarity is required around key points as outlined below.

Specifically, our concerns address three topics:

- 1. The process for confirmation of the illness
- 2. Clarity around where and how the claimant was exposed
- 3. The length of time communicable disease claims will impact company insurance premiums

The policy requires that all claimants document their illness either through confirmation from a laboratory test or from a formal diagnosis given by a qualified health professional. We believe that taken in isolation, this requirement is insufficient to prove communicable disease illness. Tests to diagnose specific viruses have strict eligibility criteria and are not commonly available. In the absence of laboratory validation, doctors or other health professionals will not be able to confirm an illness based on symptoms alone since many illnesses exhibit common symptoms. There will also be instances where doctors, asked to write medical notes by a patient to support a claim, will write these notes without sufficient clinical evidence. Unless there is a laboratory test that can be administered with high results accuracy, confirmation of a communicable disease will be unreliable. We recommend that WSIB identify what tests are acceptable for confirmation of specific diseases.

Communicable diseases, by their very definition, are highly contagious and spread easily throughout the community. How would it be possible for anyone to truly determine whether someone was infected with influenza while taking the bus to work or whether it happened in their place of work, perhaps a third-grade classroom or the emergency department at a hospital? Leaving this decision to an assessor invites variability to the process if their only data inputs include transmission routes, opportunities for exposure, and frequency of potential exposure. The requirement and practice to wear personal protective equipment (PPE) would also be a significant factor in determining workplace exposure.

Our recommendation specifically related to communicable diseases is to apply the criteria in very specific circumstances:

- 1. Declaration of a Public Health Emergency related to a communicable disease
- 2. Declaration of a confirmed outbreak in a place of work



- 3. Exposures limited to remote or confined workspaces (such as agricultural workers who live together)
- 4. Illness from communicable diseases not commonly found in the community

Where these conditions do not exist, there will never be sufficient evidence of transmission in a specific work setting. If exposures and claims occur during a Public Health Emergency, it is likely that this emergency condition will be time-limited in nature. Claims processed for a specific year will impact premiums for the following eight years (6 years with actual financial impact), even if the emergency condition or illness transmission no longer exist. We recommend that WSIB revisit or amend this policy to contain the time period for which an impact to premiums occur – possibly 12 months following the end of an Emergency Order condition. In addition, since many of these exposures will be beyond the control of an employer, we recommend keeping the costs collectivized for this period of time or alternately report these costs on a standalone basis and implement plans to offset this cost for employers. Lastly, we recommend that any claims be closed once the "main symptoms" of the condition have been resolved.

Given the possible variability in disease state, exposure, use of appropriate PPE and claim management, it will be critical to ensure that all adjudicators are trained consistently and with regularity to ensure variability of claims approvals and processing is limited.

Sincerely,

Tom Dalby

Vice President, Human Resources and Labour Relations



March 28, 2023

#### **Consultation Secretariat**

Workplace Safety and Insurance Board (WSIB) Consultation Secretariat@wsib.on.ca

Re: Circle of Care's Response to the WSIB Communicable Illnesses Policy Consultation

Circle of Care welcomes the opportunity to comment on the WSIB Ontario draft Communicable Illnesses Policy Consultation. Although WSIB states that the policy is "not a change in direction" and the policy "provides detailed and clear guidance about how entitlement in communicable illness claims has been, and will continue to be, adjudicated".

Circle of Care believes that additional clarity is required regarding the key points outlined below.

Specifically, our concerns address three topics:

- 1. The process for confirmation of the illness
- 2. Clarity around where and how the claimant was exposed
- 3. The length of time communicable disease claims will impact company insurance premiums

The policy requires that all claimants document their illness either through confirmation from a laboratory test or from a formal diagnosis made by a qualified health professional. Circle of Care believes that taken in isolation, this requirement is insufficient to prove communicable disease illness. For example, there are no laboratory tests available for common communicable diseases such as influenza or the common cold. Further, in the absence of laboratory validation, doctors or other health professionals will not be able to confirm an illness based solely on symptoms as many illnesses exhibit common symptoms. There will also be instances where physicians who are asked to write medical notes by a patient to support a claim, may agree to write these medical notes without sufficient clinical evidence. Unless there is a laboratory test that can be administered with high results accuracy, a confirmation of a communicable disease will be unreliable. Circle of Care recommends that WSIB identify the tests that are acceptable for confirmation of specific diseases.

Communicable diseases, by their very definition, are highly contagious and spread easily throughout the community. How would it be possible for anyone to truly determine whether an individual was infected with influenza while taking the bus to work or whether the infection occurred in their place of work? Infections can occur in any area or workplace such as a third-grade classroom or even the emergency department of a hospital. Allowing this decision to be made by an assessor invites variability to the process if the only data inputs include transmission routes, opportunities for exposure and frequency of potential exposure.

From Circle of Care's perspective, it is critical to note that a home care worker may spend a half to two-thirds of their day either travelling or in activities outside of direct patient care where exposures can also occur. In this regard, it becomes even more difficult to determine the origination of the illness. The requirement and practice of wearing personal protective equipment (PPE) would also be a significant factor in determining workplace exposure.

Funded by:



















Circle of Care's recommendation specifically related to communicable diseases is to apply the criteria in very specific circumstances such as:

- 1. Declaration of a Public Health Emergency related to a communicable disease
- 2. Declaration of a confirmed outbreak in a place of work
- 3. Exposures limited to remote or confined workspaces (such as agricultural workers who live together)
- 4. Illness from communicable diseases not commonly found in the community

Where these conditions do not exist, there will never be sufficient evidence of transmission in a specific work setting.

Additionally, if exposures and claims occur during a Public Health Emergency, it is likely that this emergency condition will be time-limited in nature. Claims processed for a specific year will impact premiums for the following eight (8) years or even longer (6 years with actual financial impact), even if the emergency condition or illness transmission no longer exists.

Circle of Care recommends that WSIB revisit or amend this policy to contain the time period for which an impact to premiums occur – such as 12 months following the end of an Emergency Order condition. In addition, since many of these exposures will be beyond the control of an employer, Circle of Care recommends keeping the costs collectivized for this period of time or alternately report these costs on a standalone basis and implement plans to offset this cost for employers.

Circle of Care recommends that the Ministry of Labour (MOL) develop a streamlined process during a declared emergency or a Public Health Outbreak to track exposures in order to reduce separate reports and excessive visits with MOL inspectors for every singular exposure.

Finally, Circle of Care recommends that any claims be closed once the "main symptoms" of the condition have been resolved.

Given the possible variability in disease state, exposure and claim management, it will be critical to ensure that all adjudicators are trained consistently and with regularity to ensure variability of claims approvals and processing is limited.

Circle of Care appreciates the opportunity to provide our recommendations to The Workplace Safety and Insurance Board's Policy and Consultation Services Division (PCSD) regarding the policy consultation on the WSIB draft communicable illnesses policy. We would be pleased to meet to review these recommendations.

Yours,

Kai Svirida

Kai Svirida

Health, Safety and Wellness Specialist

**Human Resources Department** 

Circle of Care



#### 100 Kellogg Lane, London Ontario, N5W 0B4

March 23, 2023.

WSIB Workplace Safety and Insurance Board 200 Front Street West Toronto, Ontario M5V 3J1

Attention: Consultation Secretariat@wsib.on.ca

#### **RE: Communicable Disease Draft Policy 15-03-15**

Thank you for the opportunity to provide feedback regarding the Draft Operational Policy regarding communicable diseases.

On page 2 (second paragraph), the draft policy states that in the absence of laboratory or clinical evidence, the claim will be adjudicated based on several factors, including a review of compatibility with signs and symptoms of the illness. We have concerns with an adjudicator allowing entitlement to a claim simply based on the worker's "presentation" (based on the worker's self-reporting of symptoms). We recommend that medical confirmation of the diagnosis should be required for claim entitlement. The policy specifies that the adjudicator may request the advice or opinion of a medical consultant. The employer agrees that the advice or opinion of a medical consultant is an important factor in determining compatibility. However, as we have learned from the Covid 19 pandemic, we also have concerns that access to advice or the opinion of a medical consultant may in practice become problematic, particularly if there is a future significant outbreak and/or pandemic with significant spread in the community. We request that the WSIB ensure that appropriate administrative resources are allocated, and review future threats, trends, and statistics to be prepared for significant future outbreaks.

On page 3 (employment risk factors), the policy outlines the factors that would place a worker at an increased risk of contracting a communicable illness in comparison to ordinary activities of daily living. In our experience with Covid 19 assigned adjudicators – inconsistency of policy and risk application was noted. We request that the WSIB ensure adjudicators are properly trained to understand the process of risk levels. Adjudicators should weigh and review the evidence regarding the risk mitigation measures implemented by employers (personal protective equipment, ventilation, cleaning routines, social distancing, etc.). If appropriate safety measures have been implemented and they significantly reduce the risk for exposure, they

should be given careful consideration when comparing the work-related exposure risk to the risk of exposure in the general community.

As we have noted during this pandemic, the work-related measures in many cases would out-weigh the risk of exposure in the community (where measures are not implemented).

We recommend that the adjudicators should be provided the appropriate training regarding occupational diseases, infections, symptomatology, sources of infection, etc. and that they communicate effectively with employers to gather all facts associated with the employer's efforts to mitigate transmission.

On page 4 (community-acquired communicable illnesses). We have concerns with the example provided - the "common cold". Although the policy notes that outside of a public health emergency, interactions at work "generally do not place the worker at a greater risk..." The term "generally" leaves this policy open to interpretation with the potential for accepting claims for the common cold. The example provided is that the worker contracts the illness while performing a job duty that subjected them to an exposure risk "in excess of the norm", such as delivering health care to a person known to have the communicable illness. In practice, we submit it would be problematic to adjudicate a case for the common cold (with over 200 different viruses associated with it, no specific test available or required, no tracking of "outbreaks", mild symptomology, and it is widespread in the community). We recommend removal of wording associated with "common cold".

We also emphasize that the worker's employment must be shown to have created a "<u>significantly</u>" increased risk in comparison to the public at large and that this wording should be incorporated into this section of the policy (noting that it is included in the prior sections).

Thank you for your consideration of this submission.

Regards,

Jana Parr

Director, Claims Management, Compass Group Canada

(519) 679-2661 x 3266

## Construction Employers Coalition (for WSIB and Health & Safety and Prevention)



Delivery: Consultation\_Secretariat@wsib.on.ca

March 28, 2023

Consultation Secretariat, Policy and Consultation Services Workplace Safety & Insurance Board 200 Front Street West Toronto ON M5V 3J1

Dear Consultation Secretariat:

#### **Re: WSIB Communicable illnesses policy consultation**

I am writing to provide comment on the Board's "**Draft Operational Policy, 15-03-15, Communicable Illnesses**" ("Draft Policy") as outlined on the Board's webpage "<u>Communicable</u>

<u>illnesses policy consultation</u>." The CEC is in general agreement with the submission of L.A. Liversidge (link <a href="here">here</a>) on this matter.

- *Legal analysis*: It is strongly recommended that this consultation process commence afresh after the development and release of an academic level legal paper addressing the meaning and application of the significant contribution test as it applies to communicable illness claims.
- *Entitlement assessment*: The policy should then be consistent with that analysis and focus on guidance to establish an identifiable employment related injuring process.
- *Policy language*: It is respectfully suggested that the Draft Policy could be clearer and more succinct. There are many redundant phrases which offer little adjudicative or policy guidance, and leaves the application and assessment of the policy unclear.

I would be pleased to discuss this matter at your request.

Yours truly,

Andrew Pariser, CEC Chair



March 27, 2023

WSIB Consultation Secretariat
Workplace Safety and Insurance Board
200 Front Street
Toronto, Ontario
Consultation Secretariat@wsib.on.ca

#### Communicable Illnesses Draft Policy - CONSULTATION

At its regular meeting convened on March 20, 2023, the Council of Ontario Construction Association's WSIB-OH&S Committee received a detailed presentation from the Office of the Employer Advisor about their submission in respect to the above-noted consultation. After considerable discussion, the Committee agreed to endorse the OEA's submission, which is attached.

Sincerely,

Ian Cunningham

San luminghau

President

#### Office of the Employer **Adviser**

505 University Avenue, 20th Floor Toronto ON M5G 2P1

Toll Free: 1-800-387-0774 Tel: 416-327-0020 Fax: 416-327-0726

#### Bureau des conseillers des employeurs

505, avenue University, 20e étage Toronto (Ontario) M5G 2P1

Sans frais: 1-800-387-0774 Tél: 416-327-0020 Téléc: 416-327-0726



#### Office of the Employer Adviser

Bureau des conseillers des

employeurs

March 23, 2023

**WSIB** Consultation Secretariat Consultation Secretariat@wsib.on.ca

Dear WSIB Consultation Secretariat,

Re: Communicable Illnesses Policy Consultation

The Office of the Employer Adviser (OEA) appreciates the opportunity to provide feedback on the WSIB's draft Communicable Illnesses policy as part of the WSIB's policy consultation.

#### General comments

The draft policy is quite broad and is intended to cover various types of illnesses with different modes of transmission. The OEA suggests that the WSIB consider whether there would be a benefit to splitting this policy into two or more policies.

Having separate policies may help to address the different types of communicable illnesses more clearly. For example, having a separate policy for COVID-19 could give the WSIB an opportunity to provide additional clarity on how COVID-19 claims, including long COVID-19, will be adjudicated by the WSIB. Additionally, it would provide an opportunity to clarify whether the WSIB will accept the results of rapid tests for COVID-19 claims (which is not something that would apply to all the other communicable illnesses mentioned in the policy).

#### Comments on the "Community-acquired communicable illnesses" section of the draft policy

The OEA would like to note the following regarding the "Community-acquired communicable illnesses" section of the draft policy:

1. The OEA suggests that the current wording of the draft policy be clarified to be more specific about what types of situations the WSIB would view as increasing the worker's "risk of contracting the communicable illness in some additional way." For convenience, the full paragraph from the draft policy is set out below [emphasis added]:

Communicable illnesses, such as influenza, the common cold, and COVID-19 are highly transmissible and can be prevalent in the general population. In-person interactions that can easily spread these communicable illnesses are a part of everyday life and occur both inside and outside of employment (e.g., in the home, community, and public settings). Outside of a public health emergency, in-person interactions at work with colleagues, customers, clients, or others, generally do not place the worker at a greater risk of contracting one of these communicable illnesses than the risk experienced by the general public. Therefore, a worker who contracts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increased their risk of contracting the communicable illness in some additional way. For example, the worker contracts the communicable illness while performing a job duty that subjected them to an exposure risk in excess of the norm, such as delivering health care to a person known to have the communicable illness.

The OEA suggests that the policy could be more specific in explaining what is meant by "in some additional way", to give more clarity about when such claims will be allowed or not allowed, and to enhance consistency in the WSIB's decision-making on this point. We believe that it would also be helpful if the WSIB could provide additional examples in the policy.

Furthermore, the OEA suggests that this section of the draft policy be updated to indicate that in determining entitlement for a community-acquired communicable illness the WSIB will consider whether opportunities existed for exposure to and transmission of the communicable illness both inside and outside of the worker's employment. While this is indicated more broadly earlier on in the policy, since the policy addresses these community-acquired illnesses differently than other communicable illnesses we believe it would be helpful to clarify that this factor will be considered even if the worker's employment increased their risk of contracting the communicable illness in some additional way.

2. The OEA suggests that the reference to the common cold be removed from this policy.

Due to the potential prevalence of the common cold in the community generally, in our view it would be a rare circumstance where it could be established that the common cold arose out of and in the course of a worker's employment. By contrast, according to WSIB statistics<sup>1</sup> there have been over 55,000 allowed COVID-19 claims since the start of the COVID-19 pandemic.

Furthermore, unlike COVID-19 and influenza, the common cold is not tracked by Public Health Ontario, nor are outbreaks declared by public health officials. In reviewing

 $<sup>^{1}\,\</sup>underline{\text{https://safetycheck.onlineservices.wsib.on.ca/safetycheck/explore/additional/provincialDownloads?lang=en}$ 

influenza cases that have been before the Workplace Safety and Insurance Appeals Tribunal (WSIAT), in a number of those cases<sup>2</sup> there was a declared outbreak in the worker's workplace, and this appears to have factored into the WSIAT's decision to allow the claim.

By including an illness such as the common cold in the draft policy in this manner, the current wording could be interpreted to suggest that claims for the common cold could be broadly allowed by the WSIB for workers working in certain settings (e.g., health care). Furthermore, this wording may encourage workers to file a claim for the common cold with the WSIB if they:

- feel their employment increased their risk of contracting illness in some way,
- have some symptoms of respiratory illness (such as a cough, sore throat and runny nose),
- need to isolate at home due to the current public health guidance that is in place regarding staying home when sick<sup>3</sup>, and
- cannot work from home due to the nature of their work.
- 3. The OEA suggests that the WSIB provide guidance to employers regarding when they are required to file a Form 7 for a worker who has COVID-19, influenza, or the common cold (if it remains in the policy). Such guidance would preferably be included in policy or, in the alternative, in an Administrative Practice Document that is released concurrently with this policy.

In the absence of such guidance, it is likely that some employers will be unclear or confused about when a Form 7 is required if their worker has COVID-19, influenza, or the common cold as these illnesses can be prevalent in the general population. Since the WSIB may levy penalties or charge employers with an offence for not meeting their reporting obligations, it is important that employers clearly understand how those obligations apply in this context.

We hope the WSIB will find the above comments helpful. Please let us know if you wish to discuss.

Best regards,

S Adams

Susan Adams
Director, Office of the Employer Adviser
416-314-8735

Cc. Robin Senzilet, General Counsel (A)

<sup>&</sup>lt;sup>2</sup> For example, see WSIAT Decision 47/22, Decision 58/17, Decision 1365/14.

<sup>&</sup>lt;sup>3</sup> <a href="https://www.ontario.ca/page/protection-covid-19-and-other-respiratory-illnesses#:":text=If%20you%20have%20symptoms%20of%20COVID%2D19,have%20not%20developed%20additional%20symptoms">https://www.ontario.ca/page/protection-covid-19-and-other-respiratory-illnesses#:":text=If%20you%20have%20symptoms%20of%20COVID%2D19,have%20not%20developed%20additional%20symptoms</a>

From: Gaye Moffett

To: <u>Consultation Secretariat</u>

Cc: Gaye Moffett

**Subject:** Response to the WSIB Communicable Illnesses Policy Consultation

**Date:** Monday, March 27, 2023 4:35:12 PM

**CAUTION:** This email originated from outside the organization. Do not click any links or open any attachments, unless you recognize the sender and know that the content is safe. If you are unsure or believe that you were the target of a phishing attempt please contact IT Security at ITSecurity@wsib.on.ca as soon as possible.

#### **Dear Consultation Secretariat**

Workplace Safety and Insurance Board (WSIB)

GEM Health Care Services (2011) Inc. welcomes the opportunity to comment on the WSIB Ontario draft Communicable Illnesses Policy Consultation. Although WSIB states that the policy is "not a change in direction" and the policy "provides detailed and clear guidance about how entitlement in communicable illness claims has been, and will continue to be, adjudicated".

GEM Health Care Services (2011) Inc. believes that additional clarity is required regarding the key points outlined below.

Specifically, our concerns address three topics:

- 1. The process for confirmation of the illness
- 2. Clarity around where and how the claimant was exposed
- 3. The length of time communicable disease claims will impact company insurance premiums

The policy requires that all claimants document their illness either through confirmation from a laboratory test or from a formal diagnosis made by a qualified health professional. GEM Health Care Services (2011) Inc. believes that taken in isolation, this requirement is insufficient to prove communicable disease illness. For example, there are no laboratory tests available for common communicable diseases such as influenza or the common cold. Further, in the absence of laboratory validation, doctors or other health professionals will not be able to confirm an illness based solely on symptoms as many illnesses exhibit common symptoms. There will also be instances where physicians who are asked to write medical notes by a patient to support a claim, may agree to write these medical notes without sufficient clinical evidence. Unless there is a laboratory test that can be administered with high results accuracy, a confirmation of a communicable disease will be unreliable. **GEM Health Care Services (2011) Inc. recommends that WSIB identify the tests that are acceptable for confirmation of specific diseases.** 

Communicable diseases, by their very definition, are highly contagious and spread easily throughout the community. How would it be possible for anyone to truly determine whether an individual was

infected with influenza while taking the bus to work or whether the infection occurred in their place of work? Infections can occur in any area or workplace such as a third-grade classroom or even the emergency department of a hospital. Allowing this decision to be made by an assessor invites variability to the process if the only data inputs include transmission routes, opportunities for exposure and frequency of potential exposure.

From GEM Health Care Services (2011) Inc. perspective, it is critical to note that a home care worker may spend a half to two-thirds of their day either travelling or in activities outside of direct patient care where exposures can also occur. In this regard, it becomes even more difficult to determine the origination of the illness. The requirement and practice of wearing personal protective equipment (PPE) would also be a significant factor in determining workplace exposure.

\\recommendation specifically related to communicable diseases is to apply the criteria in very specific circumstances such as:

- 1. Declaration of a Public Health Emergency related to a communicable disease
- 2. Declaration of a confirmed outbreak in a place of work
- 3. Exposures limited to remote or confined workspaces (such as agricultural workers who live together)
- 4. Illness from communicable diseases not commonly found in the community

Where these conditions do not exist, there will never be sufficient evidence of transmission in a specific work setting.

Additionally, if exposures and claims occur during a Public Health Emergency, it is likely that this emergency condition will be time-limited in nature. Claims processed for a specific year will impact premiums for the following eight (8) years or even longer (6 years with actual financial impact), even if the emergency condition or illness transmission no longer exists.

GEM Health Care Services (2011) Inc. recommends that WSIB revisit or amend this policy to contain the time period for which an impact to premiums occur – such as 12 months following the end of an Emergency Order condition. In addition, since many of these exposures will be beyond the control of an employer, GEM Health Care Services (2011) Inc. recommends keeping the costs collectivized for this period of time or alternately report these costs on a standalone basis and implement plans to offset this cost for employers.

GEM Health Care Services (2011) Inc. recommends that the Ministry of Labour (MOL) develop a streamlined process during a declared emergency or a Public Health Outbreak to track exposures in order to reduce separate reports and excessive visits with MOL inspectors for every singular exposure.

Finally, GEM Health Care Services (2011) Inc. recommends that any claims be closed once the "main symptoms" of the condition have been resolved.

Given the possible variability in disease state, exposure and claim management, it will be critical to ensure that all adjudicators are trained consistently and with regularity to ensure variability of claims approvals and processing is limited.

GEM Health Care Services (2011) Inc. appreciates the opportunity to provide our recommendations to The Workplace Safety and Insurance Board's Policy and Consultation Services Division (PCSD) regarding the policy consultation on the WSIB draft communicable illnesses policy. We would be pleased to meet to review these recommendations.

Yours Sincerely,

Gaye Moffett, RN, B.Sc.N., M.Ed. (Admin)

863 208 July

Founder, President & CEO GEM Health Care Services / Services de Sante GEM 304-383 Parkdale Avenue, Ottawa ON K1Y 4R4

Phone: 613-761-7474 | 1-877-761-4361

Fax: 613-761-7738

Gaye.Moffett@gemhealthcare.com

www.GemHealthCare.com



March 27, 2023

#### **Consultation Secretariat**

Workplace Safety and Insurance Board (WSIB) Consultation\_Secretariat@wsib.on.ca

Re: Home Care Ontario Response to the WSIB Communicable Illnesses Policy Consultation

Home Care Ontario welcomes the opportunity to comment on the WSIB Ontario draft Communicable Illnesses Policy Consultation. Although WSIB states that the policy is "not a change in direction" and the policy "provides detailed and clear guidance about how entitlement in communicable illness claims has been, and will continue to be, adjudicated", Home Care Ontario believes that additional clarity is required regarding the key points outlined below.

Specifically, our concerns address three topics:

- 1. The process for confirmation of the illness
- 2. Clarity around where and how the claimant was exposed
- 3. The length of time communicable disease claims will impact company insurance premiums

The policy requires that all claimants document their illness either through confirmation from a laboratory test or from a formal diagnosis made by a qualified health professional. Home Care Ontario believes that taken in isolation, this requirement is insufficient to prove communicable disease illness. For example, there are no laboratory tests available for common communicable diseases such as influenza or the common cold. Further, in the absence of laboratory validation, doctors or other health professionals will not be able to confirm an illness based solely on symptoms as many illnesses exhibit common symptoms. There will also be instances where physicians who are asked to write medical notes by a patient to support a claim, may agree to write these medical notes without sufficient clinical evidence. Unless there is a laboratory test that can be administered with high results accuracy, a confirmation of a communicable disease will be unreliable. Home Care Ontario recommends that WSIB identify the tests that are acceptable for confirmation of specific diseases.

Communicable diseases, by their very definition, are highly contagious and spread easily throughout the community. How would it be possible for anyone to truly determine whether an

175 Longwood Road South Suite 319A Hamilton, Ontario L8P 0A1 Tel: 905-543-9474 Sue.vanderbent@homecareontario.ca individual was infected with influenza while taking the bus to work or whether the infection occurred in their place of work? Infections can occur in any area or workplace such as a third-grade classroom or even the emergency department of a hospital. Allowing this decision to be made by an assessor invites variability to the process if the only data inputs include transmission routes, opportunities for exposure and frequency of potential exposure.

From Home Care Ontario's perspective, it is critical to note that a home care worker may spend a half to two-thirds of their day either travelling or in activities outside of direct patient care where exposures can also occur. In this regard, it becomes even more difficult to determine the origination of the illness. The requirement and practice of wearing personal protective equipment (PPE) would also be a significant factor in determining workplace exposure.

Home Care Ontario's recommendation specifically related to communicable diseases is to apply the criteria in very specific circumstances such as:

- 1. Declaration of a Public Health Emergency related to a communicable disease
- 2. Declaration of a confirmed outbreak in a place of work
- 3. Exposures limited to remote or confined workspaces (such as agricultural workers who live together)
- 4. Illness from communicable diseases not commonly found in the community

Where these conditions do not exist, there will never be sufficient evidence of transmission in a specific work setting.

Additionally, if exposures and claims occur during a Public Health Emergency, it is likely that this emergency condition will be time-limited in nature. Claims processed for a specific year will impact premiums for the following eight (8) years or even longer (6 years with actual financial impact), even if the emergency condition or illness transmission no longer exists.

Home Care Ontario recommends that WSIB revisit or amend this policy to contain the time period for which an impact to premiums occur – such as 12 months following the end of an Emergency Order condition. In addition, since many of these exposures will be beyond the control of an employer, Home Care Ontario recommends keeping the costs collectivized for this period of time or alternately report these costs on a standalone basis and implement plans to offset this cost for employers.

Home Care Ontario recommends that the Ministry of Labour (MOL) develop a streamlined process during a declared emergency or a Public Health Outbreak to track exposures in order

to reduce separate reports and excessive visits with MOL inspectors for every singular exposure.

Finally, Home Care Ontario recommends that any claims be closed once the "main symptoms" of the condition have been resolved.

Given the possible variability in disease state, exposure and claim management, it will be critical to ensure that all adjudicators are trained consistently and with regularity to ensure variability of claims approvals and processing is limited.

Home Care Ontario appreciates the opportunity to provide our recommendations to The Workplace Safety and Insurance Board's Policy and Consultation Services Division (PCSD) regarding the policy consultation on the WSIB draft communicable illnesses policy. The Association would be pleased to meet to review these recommendations.

Yours Sincerely,

Susan D. VanderBent, CEO

Susan N. Vande B.P.

BA, BSW, MSW, MHsc



Hydro One Networks Inc.
483 Bay Street, 8<sup>th</sup> Floor, South Tower
Toronto, Ontario
M5G 2P5

Hydro One Networks Inc. Human Resources | Health & Wellness Dept. 483 Bay Street, 8<sup>th</sup> Floor, South Tower Toronto, Ontario M5G 2P5

**Attention: Consultation Secretariat** 

March 27, 2023

Workplace Safety & Insurance Board Consultation Secretariat 200 Front Street West, 17<sup>th</sup> floor Toronto, Ontario M5V 3J1

Attention: consultation\_secretariat@wsib.on.ca

#### Re: Communicable Illness Policy Consultation

Please receive Hydro One's submission regarding the WSIB's draft policy for *Operational Policy 15-03-15 Communicable Illnesses*. We appreciate the opportunity to participate in this consultation and we look forward to reviewing the final report to stakeholders.

Hydro One has a dedicated team of professionals specifically accountable for providing guidance, advice and support for all matters related to Occupational Health & Disability Management. Initially dedicated to WSIB Management and Early & Safe Return to Work, the work has further evolved to including support and guidance for managing Sick Leave absences, Long Term Disability, Accommodation, and Occupational Health, including response to the Covid-19 pandemic.

The feedback included below will address items in sequential order in-keeping with the Draft policy's layout. Hydro One believes these points will have the most significant impact to stakeholders, entitlement decisions, claims costs, and the insurance system as a whole:

#### Entitlement Criteria

It is Hydro One's position that given the nature of communicable illnesses, the WSIB decision-maker should have to determine that the worker's employment is the *predominant contributing factor* to contracting the illness, and the threshold for entitlement should reach the point of probability, and not simply possibility. The practice of assigning weight to the predominant cause is a practice applied under the Chronic Mental Stress and Traumatic Mental Stress policies previously.

It has been Hydro One's experience throughout the pandemic, that decision-makers often defended allowance of questionable claims by stating comments such as "It's possible that transmission occurred in this scenario", or "protocols and personal protective equipment (i.e. masks) are not 100% preventative". While, Hydro One does not disagree that transmission is possible in a variety of circumstances, when an employer has implemented preventative measures that have demonstrated effects in countering transmission, it is concerning when those measures in a controlled employment environment are given equal or lesser weight than a worker's unmonitored non-occupational activities, interactions, and behaviours in public and personal settings.



Hydro One proposes the language in the third bullet under this paragraph be revised to indicate:

It is more probable than not that the communicable illness arose out of the worker's
employment, in that the employment made the predominant contribution to contracting the
communicable illness.

Given that transmission and contraction of a communicable illness is typically passive in nature, and absent of a sudden specific event, the presumption for insured injuries (WSI Act, 13 (2)) would not apply, and burden of proof beyond the presumption must be established in order to grant entitlement.

#### Determining whether the worker contracted a communicable illness

Hydro One opines that confirmation of the illness is important for allowance of entitlement under the Act. Through experience of the COVID-19 pandemic, numerous cases of presumed COVID-19 were arbitrarily attributed to the workplace in the absence of testing, and based primarily on self-reported signs and symptoms experienced by workers. As noted in Appendix A of the draft policy, signs and symptoms of various conditions can mimic or share attributes other illnesses which may have no relevance to the workplace (i.e. common colds, allergies, influenza, and COVID-19 all share common symptoms).

Additionally, health care providers often err on the side of caution establishing presumed cases of a communicable illness. Out of an abundance of caution a health care provider may presume a specific illness and recommend following protocols, despite a negative test for an individual exhibiting symptoms.

Lastly, over the course of COVID-19 agencies and the medical community were able to develop relatively accurate tests as a means of performing widespread testing of the public at large; initially by medical professionals and eventually self-administered at-home tests. In the event of possible future communicable illnesses, all parties may not have the advantage of such widespread testing. In instances where viruses, infections, or conditions mutate rapidly, simple self-reporting and/or determination of presumed cases could result in extreme difficulty for all parties (WSIB, Employers, and Workers) in knowing how and when to differentiate between illnesses, and reportable vs. non-reportable conditions. Such widespread acceptance could result in a significant financial and administrative burden on the Workplace Safety & Insurance Board system.

#### Exception to laboratory or clinical evidence of current infection

As outlined above, the absence of clinical or laboratory *confirmation* of the illness could result in significant challenges for the parties in reporting claims. As learned throughout the COVID-19 pandemic, unless the individual was experiencing significant symptoms they were encouraged *not* to seek health care. And for much of the first year-plus (2020-into-2021), accurate testing for COVID-19 did not exist to most of the population. Relying on purely subjective reports of potential exposure(s) and symptomology may encourage false or fraudulent reporting; particularly for workers who do not have sick leave, short-term disability, or other paid leave coverage. Subjective reporting will incentivize those with no alternative disability/illness coverage to seek compensation through WSIB.

As previously mentioned, the relatively general symptoms of some of the more prevalent communicable illnesses could significantly burden the insurance system resulting from unconfirmed illnesses due to lack of testing, generalized conditions, and/or presumed cases established for precautionary reasons.

#### Determining whether the communicable illness was contracted in the course of employment

How will the WSIB endeavour to determine the contraction of an illness occurred in the workplace? This was a challenge for all parties throughout 2020 to present. Although the draft policy references 'factors' to consider, and a need to 'gather' and 'weigh' the evidence; the reality is that the nature of communicable illnesses are inherently passive. Airborne, droplets, and aerosol transmission are



microscopic in nature and 'evidence' of the transmission is typically presumptive at best. Furthermore, any contrary evidence to dispute or rebut such a presumption is almost impossible for an employer to establish noting employers have no authority or way to obtain information about a worker's personal behaviours, activities, socialization, or adherence to public health guidelines/requirements.

Even the most sophisticated employers with health & safety protocols, PPE, cleaning guidelines, and other measures to counter the spread of illness/infection were often met with comments of; "no PPE is perfect" or "it is still possible for the virus to be transmitted". While an opportunity for transmission may exist in the workplace, the heightened requirements of an employer seemed to be given equal weight when weighed against all the possible avenues a worker could encounter outside the workplace where personal behaviours were less structured; public gatherings and events, social circles/bubbles, families with school aged children or children continuing in recreational activities. Even as public health guidelines were removed, and employer's maintained stricter protocols; reliance on subjective worker reports were often sufficient to grant entitlement despite increased public avenues for transmission.

In the second bullet point, the Policy uses the phrasing:

• "including contact with... suspected of having communicable illness",

Hydro One is of the opinion that the term 'suspected' is too broad and subjective in terms of giving weight to evidence of possible transmission as it relates to coworkers in the workplace. Again, this would leave a great deal of weight on subjective reports from the ill worker in asserting the presence of and contact with suspected ill parties to gain entitlement. Enabling workers with the ability to subjectively amplify workplace factors while downplaying personal factors in the absence of actual objective facts and evidence misrepresents standard adjudication principles set out in other long-standing WSIB Policies, and the WSI Act itself.

As mentioned above, the presumption clause and the Benefit of Doubt policy (11-01-03) should not apply noting the nature of transmission and contraction, and the absence of definable objective events leading to illness.

The third and fourth bullets in this section will pose challenges for 'contact tracing' by employers. Many employers don't have internal occupational health services or broad health & safety teams with the capability to do an in-depth investigation to determine compatibility of incubation periods, or assessment of potential exposures. This would be particularly challenging where worker's may be at multiple locations over the course of a few days, travel for business, or interact with multiple groups in varying ways. Additionally, how do employers or workers distinguish between passive interaction and 'direct' contact with other workers, staff, or exposures. As noted above, over the course of COVID-19 protected exposure was not given adequate weight by decision makers in establishing *possibility* of transmission/contraction.

The final paragraph in this section should be <u>removed</u>, as it is so broad and would appear to enable a decision maker to apply a generalized approach without the need for establishing contact/transmission sources. The basic principles of the Five Point Check System outlined under *Policy 11-01-01-Adjudicative Process* should still apply, and the decision maker should have to establish that i) a personal work-related injury occurred, ii) there is proof of accident, and iii) compatibility of diagnosis to the exposure history. In the absence of an identifiable contact source or path of transmission, entitlement should not be granted simply because of a possibility of having contracted it in the workplace. This should be even more applicable to communicable illnesses where the prevalence in the general population is equal to or greater than individual workplaces.

#### Determining whether the communicable illness arose out of employment

In this section the phrasing "activities of daily living" is first mentioned in the first bullet. Hydro One requests the rephrasing or replacement of this language. Generally speaking, in the context of disability management the term "activities of daily living" is typically in reference to an injured or



disabled individual's ability to perform six primary daily personal tasks (personal hygiene, dressing, eating, bed mobility, locomotion, and bowel/bladder control). The intent of this section of the draft policy is to distinguish whether a worker's personal behaviours and activities would create a circumstance of increased risk than that of their employment activities/duties. Hydro One proposes that the phrasing related to risk should solely be in relation to the risk of the general population, as neither the WSIB, nor employers will have the ability to confirm what would be considered 'routine activities' for any specific individual(s).

Furthermore, it is suggested that the comparison shall be between their employment and the risk of the 'general public during ordinary or routine activities of daily living'. This would not appear to account for other non-routine behaviours, such as large public events (concerts, festivals, sporting events), recreational activities, family gatherings, religious gatherings and other non-routine personal circumstances that could create greater risk than the worker's employment. This raises a deeper question of how a) an employer is to know of a worker's non-occupational behaviours, and/or b) how the WSIB will intend to establish other potential exposures. It is well known that every individual's personal circumstances, behaviours, and routines differ from person to person. It would be biased to apply a 'general' approach to an individual's personal non-occupational behaviours and activities when weighing risk, but then apply a specific approach to weighing the workplace contribution to contracting illness.

Hydro One proposes that consideration should be given to limiting entitlement to communicable illnesses related to public health emergencies only for defined periods where specific public health guidelines are in-place limiting congregation of larger groups. As experienced in late-2021 and early-2022 during the height of the Omicron variant, significant relaxation of public health measures resulted in greater access to a variety of events, businesses, and activities that created an increased transmission, spread, and onset of illness. Employers were significantly challenged in determining work-relatedness for any onset of illness given the breadth of circumstances that individuals could contract the illness/variant. Where public health measures no longer strictly restrict interactions in the general population, a more clearly defined policy should limit entitlement to benefits in the absence of a clear heightened risk in the workplace. It is our opinion that the policy as it stands would not appropriately give weight to the extent of exposures that would occur in the general population where gatherings of larger groups could occur. Additionally, as mentioned above, neither the employer nor WSIB will be able to account for all the possible non-occupational circumstances that could equally pose risk to individuals.

Under this heading, we would propose the following revision to this applicable bullet:

"...the employment place the worker at an increased risk (i.e. increased likelihood) of contracting the communicable illness as compared to the risk experienced by the general public with consideration to any current state of emergency protocols, restrictions, or guidance issued by public health or other government entities at the time of suspected contraction of the illness, and...."

#### **Employment risk factors**

In this section, the reference to activities of daily living is raised again, and our position remains the same that this language is too broad to be utilized for purposes of determining entitlement. Like the revision of the bullet above, we would propose a revision of the first paragraph as follows:

• "A worker's employment will generally place the worker at an increased risk of contracting a communicable illness as compared to the risk to the general public, with consideration to any current state of emergency protocols, restrictions, or guidance issued by public health when:..."

Even with the revision to the opening paragraph, there is still concern with the application of the "factors" described in the draft policy. In the first bullet point in this section, it is suggested that consideration will be given to the rate of communicable illness in the workplace. *How will the WSIB* 



determine this 'rate'? Workplaces from employer-to-employer vary in nature, where some employers have multiple locations/sites, some outdoor, some indoor, some workers travel throughout a given day/week/month and determining how an employer/workplace-based rate applies to a specific worker will be difficult for all parties involved. Hydro One proposes that a statement identifying the fact that work sites, workplaces, and work locations will be unique from employer to employer, and possibly worker-to-worker. Such a statement will aid in ensuring appropriate weight and consideration is afforded prior to rendering a decision.

In addition, the first bullet applies the principle of comparing the rate to the rate of the general population. However, as learned through the COVID-19 pandemic, rates will differ in different regions. Does the WSIB intend to account for the rate in the specific region where the worker is employed, as opposed to a province-wide rate of illness? What will be the source of this rate, and who will verify it is objectively established and accurate? An employer in a given region may have a low rate of illness within the workplace, compared to their geographic region, but may also be higher than the provincial rate. Lastly, how will an employer be able to determine their own rate as an employer in the absence of required testing, record-keeping, and confidentiality?

The second bullet again references the phrasing 'routine activities of daily living', and we will not belabour the point mentioned above regarding rephrasing.

The second paragraph in this section uses the phrase "...in excess of the norm...". Similar to the questions regarding the 'rate' mentioned above; how will the 'norm' be determined and evaluated? The COVID-19 pandemic had varying degrees of accepted 'normalcy' with regard to public transmission, and as a result, we'd propose comparable wording used to replace 'routine activities of daily living' should be used to replace the reference to "the norm";

- "...transmission of a communicable illness in excess of the opportunities with the general population at large include..."
  - Note: 'General population' again does not account for regional/geographic rates that could differ across the population.

The third bullet in the second paragraph re: employer-provided accommodations should likely differentiate between a worker's own decision to stay with one or more persons, vs. a company's directive/requirement to do so. Some employers may afford 'room and board' allowances as part of a wage package, a stipend, or cover worker's travelling expenses. But it may be a worker's own discretion to choose to room with others in these situations, as opposed to a requirement/expectation from the Employer.

### Community-acquired communicable illness

It is Hydro One's position that this section is the most important section of the policy, and Hydro One respectfully requests that given the implications and clarity outlined therein, that this section should be moved to the top of the policy following *Immunization* under the primary heading *Entitlement Criteria*. As outlined in the sections and feedback above, decision makers should be giving significant weight to the current state of transmission/contraction of the illness in the general (or regional) population when considering entitlement. Having this section placed earlier in the policy would provide greater context-setting for the remainder of the policy when addressing the work-relatedness and level of risk applied in the other sections.

The only other comment in this section, is the use of the term "norm" again, in the example provided. As noted above, this broad term is too vague and is lacking a definition of what will be considered 'the norm'. The treatment of COVID-19 cases evolved over time where, as restrictions were lifted and vaccination rates rose, the accepted 'norm' of exposure in the general public changed as well.

# **Public Health Emergency**



Hydro One does not disagree with the guidance offered in this section. However, it is Hydro One's request that an additional note or comment be included to note that not all workplaces for 'essential workers' have the same level of risk. For example, Hydro One's role in maintaining power for our customers results in our staff being considered essential workers. However, much of our work does not involve extensive interaction with customers and the general public. While there may be some inperson interactions with the public, and with internal partners in maintaining power; the vast majority of the work may be done safely with social distancing, independent work, adherence to other internal health & safety practices, and public health guidelines. Additionally, much of our essential work is done in an outdoor environment. Alternatively, retail workers (grocery stores, and essential stores) and health care workers are likely to have a heightened risk given the increased interactions in an indoor environment with the public and patients respectively in a COVID-19-like health emergency. Both industry classifications may be deemed 'essential', but the work itself and the risk of exposure would be vastly different. Any essential worker may have an increased risk of contracting a communicable illness in comparison to those who may be directed to stay at home; however, being an essential worker in-and-of itself should not be the only consideration in determining entitlement and exposure risk.

It would be beneficial here to include a paragraph directing the decision-maker to consider the health & safety practices of the employer, the nature of the work duties, the environment the worker(s) work in (indoor vs. outdoor), and daily duration (continuous and cumulative) of duties involving in-person interactions. Health & safety practices could include personal protective equipment, vaccination/immunization policies, screening processes, social distancing, and various other practices that go beyond public requirements or personal practices and environments the individual may utilize or encounter away from the workplace. Perhaps improved worker and employer questionnaires should be considered to have a clearer understanding of the work related to communicable exposures. During COVID-19, WSIB developed questionnaires for ill workers, but a comparable questionnaire narrowing the scope of exposure in the workplace was not included/utilized.

Alternatively, it may also be beneficial to include language that, in the face of a public health emergency, allows the WSIB to establish defined Classes or NAICS groups whereby only those defined classifications would be entitled to benefits for communicable illnesses based on the nature and increased risk in those employment settings. This may limit unnecessary burden and challenges to more general classifications of employers.

## **Prevention of communicable illnesses**

Hydro One agrees that workers who have been exposed but have *not* contracted a communicable illness would not be entitled to benefit under the WSI Act. However, it remains our position that there will be significant difficulty for the WSIB to objectively assess confirmation of illness in many instances. As outlined above, the similar symptoms of many communicable illnesses, and the ever-changing nature of mutating viruses and bacteria will result in significant difficulty for all parties in determining the nature of a given illness. Additionally, the WSIB should proceed with caution in associating subjective reporting of illness by an ill worker in determining entitlement to benefits. Workers may see the advantage in reporting symptoms particularly where they do not have short-term disability, sick leave benefits, or other paid leave through their employer.

### **Additional Items & Comments**

### Secondary or Pre-Existing Conditions

Hydro One proposes the inclusion of statement or clarification in regard to the circumstance that a worker would not be entitled to loss of earnings for a period where they are required to remain out of the workplace as a precaution due to a pre-existing condition or comorbidity that results in a greater risk of a severe health outcome than that of the general public.



### Impact on premiums and collective liability

Hydro One proposes that costs associated with communicable illnesses should be rolled up to the applicable assigned NAICS code or Class for the given accident employer (or Schedule). Given the passive nature of transmission, and the challenges associated with factually determining sources of transmission, a collective ownership of the financial burden of the costs would be an appropriate consideration. Particularly for retail and health care-based employers, where the risk of exposure and contraction of the illness is directly related to non-workers bringing illnesses into the employment environment due to the essential nature of the service they provide. Essential workers cannot 'turn' potentially ill parties away from appropriate treatment or access to essential goods and services. Applying costs directly at the employer-level for such illnesses where a) the source may not be factually identifiable, and/or b) where the employers may have limited control over the level of risk and exposure, seems counter to the *Collective Liability* and *Fairness* principles intended under the New Rate Framework and the insurance system.

### Worker Income Protection Benefit & Infection Disease Emergency Leave

It may be in all parties' best interest to advocate for increased access and broader entitlement to government benefits for workers requiring *infectious disease emergency leave*, regardless of the source of the exposure and related illness. This could alleviate some of the burden and difficulties that would result from employers, workers, and the WSIB in attempting to differentiate exposures to aerosol, droplet, and airborne illnesses where identifiable exposures and level of risk are significantly difficult to establish and factually support. Establishing improved *Government* benefits in circumstances of public health emergencies would also reduce the likelihood of false reporting and the perceived incentive of reporting a work-related illness for workers who do not have other forms of paid leave.

## **Conclusion**

In conclusion, it is Hydro One's position that significant revisions are required within the draft policy. The proposed application of the policy as it reads currently is too broad and should a new pandemic or epidemic of a communicable illness occur within Ontario, the challenges created for contact tracing, and reporting would be significant and burdensome for employers, workers, and WSIB alike. Additionally, the generalized language throughout the policy would likely result in widespread entitlements based on subjective self-reporting by workers with limited-to-no ability for employers to respond and objectively present concerns or doubt should the WSIB not apply a greater threshold for entitlement.

We appreciate the opportunity to participate and provide feedback on this WSIB consultation on the proposed 15-03-15 – Communicable Illnesses operational policy. We look forward to receiving further feedback on the submissions of all stakeholders and reviewing the final Operational Policy prior to implementation.

Yours Sincerely,

David J. (D.J.) Harding

Manager, Health & Wellness Department Hydro One Networks Inc. | Human Resources

David.Harding@HydroOne.com

# **IAVGO Community Legal Clinic**

PHONE: (416) 924-6477

1500-55 UNIVERSITY AVENUE, TORONTO, ON M5| 2H7

FAX: (416) 924-2472

March 28, 2023

WSIB's Consultation Secretariat

Consultation Secretariat@wsib.on.ca

Dear Consultation Secretariat,

# Re: Communicable illnesses policy

The Board's "Communicable illnesses" policy means that injured workers and their families will bear the costs of work-related COVID. Workers who are precariously employed, racialized, and working in low-wage, unsafe employment suffer the most.

The policy breaches the law. It says that the Board will deny a claim even where a worker caught COVID at work. Unless the worker can also show that their job placed them at greater risk of catching COVID than the general public, the Board will deny that claim.

The policy further asserts, contrary to the evidence, that workers in crowded workplaces with close contact with others (manufacturing, retail) are not at greater risk of catching COVID than the public.

The policy lumps COVID – a disease which had killed nearly 7 million people and disabled many millions more – into the same category as minor illnesses like colds. This is absurd. COVID continues to kill and disable Ontarians, especially low-income, precarious, racialized Ontarians. As other stakeholders have suggested, the Board should create a new policy specific to COVID claims – one that reflects the science, addresses long COVID, and explains how the WSIB will address COVID claims suppression.

This is not a real consultation process. We provide submissions because the Board has shut the door to anything else. Instead of engaging with stakeholders in an accessible way, it:

- Posted information on its website written for graduate-level academics.
  - Both the consultation webpage and the draft policy are harder to read than the Harvard Law Review.

- Failed to directly tell stakeholders about the consultation.
- Accepted submissions only in writing and only by email.

This "consultation" excludes the voices the Board needs to hear. Nearly half of Canadians struggle with literacy. Many injured workers don't read or write in English. Many injured workers don't have reliable access to computers, the internet or email. Workers with disabilities and who work in precarious, high-risk jobs (the people who most need to respond) often need accommodations to participate in consultations like this one.

'The COVID-19 pandemic has laid bare in the cruellest way, the extraordinary precariousness and injustices of our world of work' - Guy Ryder, Director General of the International Labour Organization<sup>iv</sup>

The Board should start again with a public consultation about how to address COVID. This consultation should include in-person or zoom hearings where workers can speak directly to the Board.

### About IAVGO

The Industrial Accident Victims Group of Ontario is a community legal aid clinic. IAVGO has been funded for more than 40 years by Legal Aid Ontario.

IAVGO provides direct services to disabled workers injured on the job, and to the families of those who have been killed on the job. IAVGO's clients live throughout the province.

Our clients include some of the most vulnerable workers in Ontario. Every one of our clients, except for survivors of workers who have died, is a person with a disability or multiple disabilities. All are low-income, often living in poverty because of their inability to continue working.

Most of our clients also have at least one of the following characteristics:

- Racialized
- Live in rural and remote areas of the province
- Limited ability to read or write
- Little or no English language skills

- Low levels of education: usually high-school or below
- Mental health conditions including depression, post-traumatic stress disorder, or addiction
- No or limited Canadian immigration or citizenship
- Little or no job security
- Precarious housing or homelessness

For many years, we have worked alongside precarious and migrant workers to help them access compensation following workplace injuries.



# The proposed policy directs decision-makers to deny entitlement even where the worker caught COVID at work

The WSIB is denying entitlement to workers who catch COVID-19 on the job. The policy says that workers must have an increased exposure risk to get WSIB support, even if they actually catch COVID at work. It states, "a worker who contracts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increased their risk of contracting the communicable illness in some additional way" (p. 4).

Having established that worker **actually caught** COVID-19 at work, it is farcical that the Board denies them entitlement. The Board justifies itself by creating an artificial definition about whether an infection "arises out of" employment based on whether the worker had an increased risk in the

workplace. Due to ill-conceived legislative change in 2017, the Board can establish different "evidentiary requirements" or "adjudicative principles" for different entitlements. But, this power does not allow the Board to change by policy the entitlement provisions of the Act.

## <u>An example</u>

The Board's policy means that workers and survivors will receive no compensation for COVID they catch at work. For example, this scenario:

Ana works on an assembly line in a factory that supplies a major retailer. The worker next to Ana on the line was diagnosed with COVID in the past week. Ana tests positive for COVID and is hospitalized. She dies after several weeks. Her spouse, who now can't support their children on one income, files a WSIB claim.

The WSIB establishes that Ana caught COVID at work from her co-worker. She didn't have any other outside of work close contacts with people who tested positive.

But the WSIB denies entitlement and compensation to her survivors because Ana didn't face an "increased risk" of COVID compared to a member of the general public.

# Increased risk compared to the general public is the wrong question

The Board must determine whether a worker suffered from a workplace illness "arising out of and in the course of their employment". The Board regularly assesses workplace factors and non-work-related factors. It then determines work-relatedness based on the merits and justice of each case. It assesses whether, more likely than not, the work factors were a significant contributing cause to the worker's illness. That is exactly what it should do in COVID claims.

While increased risk compared to the general public may be one relevant factor in assessing work-relatedness, it cannot act as a litmus test to deny entitlement even where the evidence as a whole shows the infection was caused by work.

A proper assessment about whether a COVID infection is work-related would consider factors such as:

- Risk factors in the worker's workplace
  - Direct exposure to COVID at work
  - Duration, frequency and intensity of exposure to COVID at work
  - Conditions that favour transmission of COVID in the workplace (poor ventilation, no masking, no screening, no work from home options, no paid sick leave)
- Risk factors outside of the worker's workplace
  - Direct exposure to COVID outside of work
  - Duration, frequency and intensity of exposure to COVID outside of work
  - Conditions that favour transmission of COVID outside of work (masking, poor ventilation, etc.)

# The proposed policy excludes precarious front-line injured workers from coverage for COVID because it fails to reflect the science

The Board is failing its statutory obligation to monitor and implement scientific developments. The Board must:

"monitor developments in the understanding of the relationship between workplace insurance and injury and occupational disease,

(a) so that generally accepted advances in health sciences and related disciplines are reflected in benefits, services, programs and policies in a way that is consistent with the purposes of this Act"

The Board has failed to monitor and implement the science. It says that workers in crowded workplaces with close contact with others (e.g. manufacturing, retail) are not at a greater risk of catching COVID than the public. This assertion runs counter to the evidence – workers in manufacturing and similar industries requiring close in person contacts are at high risk.\*

The proposed policy will largely limit workplace COVID entitlement to a few groups of workers (health care workers and workers required to live in employer-provided congregate housing). This outcome makes no sense based on the health science evidence. Evidence confirms that industries with disproportionate risk for workplace-acquired COVID-19 infection include:

- Manufacturing xi
- Agriculture, Forestry, Fishing, and Hunting xii
- Transportation and Warehousing<sup>xiii</sup>

- Social assistance, educational services<sup>xiv</sup>
- Retail<sup>xv</sup>

Indeed, workers in manufacturing had the highest incidence of work death from COVID in Ontario.\*\*

This statement in the policy is especially baseless:

Outside of a public health emergency, in-person interactions at work with colleagues, customers, clients, or others, generally do not place the worker at a greater risk of contracting one of these communicable illnesses than the risk experienced by the general public.

In-person interactions do place workers at a greater risk. Researchers have studied the high instance of workplace transmission in manufacturing. It likely reflects working on-site "often in crowded conditions where physical distancing in lines of work is not possible, and environmental requirements for refrigeration/humidity may impact the use of personal protective equipment for COVID-19." xviii

## The burden of the Board's failures falls onto the most vulnerable

Based on arbitrary, non-evidence-based criteria, the proposed policy excludes most precarious front-line injured workers from coverage for COVID — and their families from coverage when they die from work exposures.

Ontarians who die from COVID, or are seriously injured by COVID, are disproportionality precarious, racialized, low-income workers. \*Viiixix\* And, these workers don't have access to paid sick days or private insurance if they suffer ongoing disability or death because of COVID. These inequities have grown with recent decisions of the provincial government to end paid sick days and health care support for the uninsured.\*\* The WSIB must provide for Ontario workers when they have workplace illnesses. It is failing.

# The Board's treatment of COVID and COVID claims suppression is unacceptable

The Board must address the reality that most workplace COVID infections are not reported to WSIB. The Board's policy on COVID should address COVID claims suppression.

For example, in 2020 and 2021, Amazon had large outbreaks in its workplaces, involving hundreds of workers. Yet, Amazon workers had only had 12 allowed COVID claims from 2020 to 2023.\*\*i For its part, despite multiple outbreak reports, Walmart workers had fewer than 5 allowed COVID claims 2020-2023, with none allowed in 2020.\*\*ii

The Board should launch an investigation into COVID claims suppression. Instead, the Board is encouraging claims suppression. Its "FAQs about claims and COVID-19" on its website discourages workers from filing COVID claims. The Board states, in response to the question "I think I contracted COVID-19 at work. Should I file a claim?":

Although most COVID-19 infections will not be work related, some may be. If you have a diagnosis/positive test or symptoms of COVID-19 and you think you became ill because you were exposed at work, you should tell your employer about your illness and details of your exposure and you may file a claim to determine if you are eligible for WSIB benefits.\*

# The Board should establish a policy about COVID claims

The policy lumps COVID into the category of minor illnesses like colds. This is absurd given the ongoing burden of COVID on Ontarians, and especially onto low-income, precarious, racialized Ontarians.\*\* The Board should create a new policy specific to COVID claims. The policy should:

- Be developed along with medical professionals and scientists who can advise the Board about how COVID spreads in workplaces.
- Respect the law and the principles guiding workers' compensation.
- Address how the Board will adjudicate long COVID claims. Evidence shows that about 15% of people will suffer post-COVID symptoms.
- Explain how WSIB will proactively address COVID claims suppression.

# What a meaningful consultation on COVID policy looks like





IWA4J & Justicia (J4MW) Injured Workers Day of Action at WSIB in Toronto, June 1, 2022

The Board has abandoned any real public consultation process. Workers now must stand outside the WSIB hoping to talk to anyone in charge of the Board's policy decisions, to no avail. See above how the Board turned workers away at the door of the WSIB last June 1<sup>st</sup>, Injured Workers' Day.

A meaningful public consultation would include, at minimum:

- The Board writes consultation information in plain language. As outlined above, both the consultation website and the draft policy required above a college level education to understand.
- The Board provides consultation information in multiple languages to accommodate workers who speak and read English as a second language.
- The Board tells workers the scientific basis for its approach to COVID policy, and lets workers speak to its scientific advisors.
- The Board allows workers to make in-person or zoom submissions directly to the WSIB decision-makers responsible for creation of the COVID policy.

A better consultation process would include an independently led review. The review should have an advisory board consisting of scientists and health care professionals, as well as experts in workers' compensation law and policy.

# Offer to participate in a further consultation process

As discussed above, IAVGO is willing to participate in a further, real, consultation that involves workers meaningfully. COVID has been, and remains, a crisis for precarious workers in Ontario. They must have a say.

Yours truly, IAVGO Community Legal Clinic

Maryth Yachnin

Jessica Ponting

Belia Berrocal

David Arruda

Linda Newton

Dora Chan

Sang-Hun Mun

Linda Newton

Mary DiNucci

Mary DiNucci

Aleksandar Ivovic

cc. Minister of Labour Monte McNaughton

<sup>&</sup>lt;sup>1</sup> Quinn KL, Katz GM, Bobos P, et al. Understanding the post COVID-19 condition (long COVID) in adults and the expected burden for Ontario. Science Briefs of the Ontario COVID-19 Science Advisory Table. 2022;3(65). https://doi.org/10.47326/ocsat.2022.03.65.1.0

<sup>&</sup>lt;sup>ii</sup> See attached readability assessments of both the WSIB consultation website on the draft policy and the draft policy itself.

<sup>&</sup>quot;CBC Radio, "Nearly half of adult Canadians struggle with literacy — and that's bad for the economy" (January 17, 2021), online: https://www.cbc.ca/radio/costofliving/let-s-get-digital-from-bitcoin-to-stocktok-plus-what-low-literacy-means-for-canada-s-economy-1.5873703/nearly-half-of-adult-canadians-struggle-with-literacy-and-that-s-bad-for-the-economy-1.5873757

<sup>&</sup>lt;sup>iv</sup> ILO. New Normal? Better Normal! 2020. Available at: https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS 743326/lang--en/index.htm (26 March 2023), date last accessed).

Vorkplace Safety and Insurance Act, 1997, s. 13 (1) "A worker who sustains a personal injury by accident arising out of and in the course of his or her employment is entitled to benefits under the insurance plan."

vi WSIA, s. 159 (2.1) "A policy established under clause (2) (a.2) or (a.3) may provide that different evidentiary requirements or adjudicative principles apply to different types of entitlements, where it is appropriate, having regard to the different basis for and the characteristics of each entitlement."

The absurdity of the Board's approach is evident in a recent Appeals Resolution Officer decision about COVID entitlement. The worker in this appeal was a worker who worked directly in close contact with COVID-infected patients, and so met the terms the Board's Adjudicative Practice Document (like those in the draft policy) of having an accepted increased risk of COVID. However, in the early days of the pandemic, despite symptoms that were suggestive of COVID, the Appeals Resolution Officer found they were unable to allow entitlement because two PCR tests were negative; 20230007 (Re), 2022 CanLII 128918 (ON WSIB).

WSIA, s. 13(1), "A worker who sustains a personal injury by accident arising out of and in the course of his or her employment is entitled to benefits under the insurance plan."

WSIA, s. 161(3).

\* McNamara et al, supra.

xi Murti, Michelle MD, MPH; Achene, Camille MHSc; Smith, Brendan T. PhD; Brown, Kevin A. PhD; Kim, Jin Hee MD, MPH; Johnson, James MPH; Ravindran, Saranyah MPH; Buchan, Sarah A. PhD. COVID-19 Workplace Outbreaks by Industry Sector and Their Associated Household Transmission, Ontario, Canada, January to June, 2020. Journal of Occupational and Environmental Medicine 63(7):p 574-580, July 2021. | DOI: 10.1097/JOM.000000000002201 [Murti et al]; Buchan SA, Smith PM, Warren C, et al

Incidence of outbreak-associated COVID-19 cases by industry in Ontario, Canada, I April 2020–31 March 2021

Occupational and Environmental Medicine 2022;79:403-411 [Buchan et al].

xii Murti et al.

xiii Murti et al; Buchan et al

xiv Buchan et al

<sup>xv</sup> Karpowicz I, O'Rourke S, Clyne A, Silvia I, Cooper T, Comella I, Rajotte I. Characteristics of COVID-19 Workplace Clusters in Rhode Island. R I Med J (2013). 2021 Dec 1;104(10):42-45. PMID: 34846382.

<sup>xvi</sup> Canadian Occupational Safety, "Ontario manufacturing workers most prone to COVID-19 deaths early in pandemic", 31 October 2022: https://www.thesafetymag.com/ca/topics/leadership-and-culture/ontario-manufacturing-workers-most-prone-to-covid-19-deaths-early-in-pandemic/425708

Will Murti M, Achonu C, Smith BT, Brown KA, Kim JH, Johnson J, Ravindran S, Buchan SA. COVID-19 Workplace Outbreaks by Industry Sector and Their Associated Household Transmission, Ontario, Canada, January to June, 2020. J Occup Environ Med. 2021 Jul 1;63(7):574-580. doi: 10.1097/JOM.00000000000002201. PMID: 33950040; PMCID: PMC8247533. Will Tracking COVID-19 Through Race-Based Data Race-based data collection among COVID-19 inpatients: A retrospective chart review, Clara Lu, MD https://orcid.org/0000-0003-0488-415X clara.lu@medportal.ca, Achieng Tago, MD, [...], and Madeleine Verhovsek, MD+1View all authors and affiliations, Volume 35, Issue 3, https://doi.org/10.1177/08404704221077189; Rao A, Ma H, Moloney G, Kwong JC, Jüni P, Sander B, Kustra R, Baral SD, Mishra S. A disproportionate epidemic: COVID-19 cases and deaths among essential workers in Toronto, Canada. Ann Epidemiol. 2021 Nov;63:63-67. doi: 10.1016/j.annepidem.2021.07.010. Epub 2021 Jul 24. PMID: 34314847; PMCID: PMC8435380.

xix The concept of precarious work has been described as researchers as follows:

Precarious work is a multidimensional construct encompassing low-quality employment conditions, including (i) employment insecurity, (ii) income inadequacy and (iii) a lack of rights and protection.2,3 Crucially, precarious work often intersects with other axes of vulnerability. Women, younger workers, migrants, lower-skilled workers, and lower-educated workers are at disproportionate risk of working under precarious conditions and suffering poor health outcomes as a result; Courtney L McNamara, Martin McKee, David Stuckler, Precarious employment and health in the context of COVID-19: a rapid scoping umbrella review, European Journal of Public Health, Volume 31, Issue Supplement\_4, November 2021, Pages iv40–iv49, <a href="https://doi.org/10.1093/eurpub/ckab159">https://doi.org/10.1093/eurpub/ckab159</a> [McNamara et al].

<sup>xx</sup> CBC, "Ontario to end paid sick days program, lift some COVID-19 measures in LTC homes", Available at:

https://www.cbc.ca/news/canada/toronto/ontario-end-paid-sick-days-ltc-measures-1.6787619#:~:text=CBC%20News%20Loaded-

"Ontario%20to%20end%20paid%20sick%20days%20program%2C%20lift%20some%20COVID,in% 20long%2Dterm%20care%20homes, (last accessed 27 March 2023); CTV, "Ontario to end program providing health care to uninsured residents", Available at:

https://toronto.ctvnews.ca/ontario-to-end-program-providing-health-care-to-uninsured-residents-1.6328932 (last accessed 27 March 2023).

- xxi WSIB Safety check statistics (attached); National Post, "More than 400 COVID-19 cases at Amazon warehouses in Ontario amid concern over industrial spread of virus" (18 December 2020); CBC, "Ontario probes possible labour violations at Amazon site shut down over COVID-19 outbreak: Outbreak has been linked to more than 600 COVID-19 cases, Peel top doctor says" (15 March 2021);
- wii WSIB Safety check statistics (attached); Simcoe.com, "Multiple workers at Alliston Walmart test positive for COVID-19" (15 January 2021); CTV News, "COVID-19 outbreak declared at Argyle Mall Walmart" (3 May 2021).
- WSIB, FAQs about claims and COVID-19 (June 13, 2022), Available at: <a href="https://www.wsib.ca/en/injured-or-ill-people/claims/faqs-about-claims-and-covid-19">https://www.wsib.ca/en/injured-or-ill-people/claims/faqs-about-claims-and-covid-19</a> (last accessed 26 March 2023).
- varie Quinn KL, Katz GM, Bobos P, et al. Understanding the post COVID-19 condition (long COVID) in adults and the expected burden for Ontario. Science Briefs of the Ontario COVID-19 Science Advisory Table. 2022;3(65). https://doi.org/10.47326/ocsat.2022.03.65.1.0
- xxx Government of Canada, "Post COVID-19 condition (Long COVID)", Available at: https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/symptoms/post-covid-19-condition.html (last accessed: 26 March 2023).

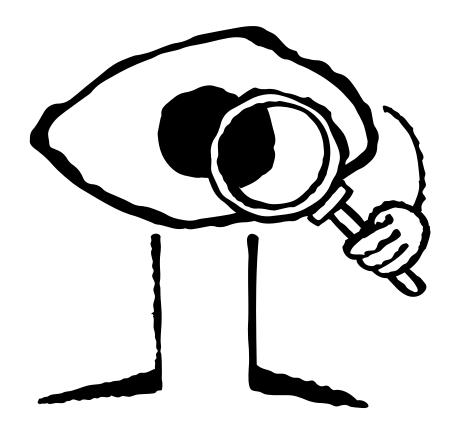


Menu

Readability checker

# Get an objective view

Readability assessment of draft policy



Readers prefer simpler writing – no matter their education level.\* Our checker will score your writing based on the Flesch reading ease scale, which looks at how long your words and sentences are. (There are a few readability tests out there, but we think this one's the clearest.)

\*There re plenty of studies the t show this. Here's one from Nielsen Norman Group.

# Paste in your writing.



the course of

the worker's employment.

Purpose

The purpose of this policy is to provide entitlement guidelines for claims for communicable

illnesses.

Guidelines

For the purposes of this policy, a "communicable illness" means an illness due to a specific

infectious agent (e.g., viruses, bacteria) that arises through transmission of that agent from

person to person or from animal to person; either directly or indirectly.

Fatitions ant aritaria

We don't store, share or record any text submitted into this field.

Submit



**12** 

That's your Flesch reading ease score, out of 100. The higher the score, the easier your writing is to read.

Looks like your score could use some work – right now, it's best understood by academics and is roughly on par with most terms and conditions. Try these tips to make your language simpler.

# **Hunger Games or Harvard Law?**



Grade	Score	Which is like	
4	100+	This sign	
5	90	Most comic books	
6	80	The Hunger Games	
7	70	Large chunks of The Writer's website	
8	65	Reader's Digest	
9	60	BBC News website	
10	50	The Financial Times	
11	40	Most of William Shakespeare	
12	30	Harvard Law Review	



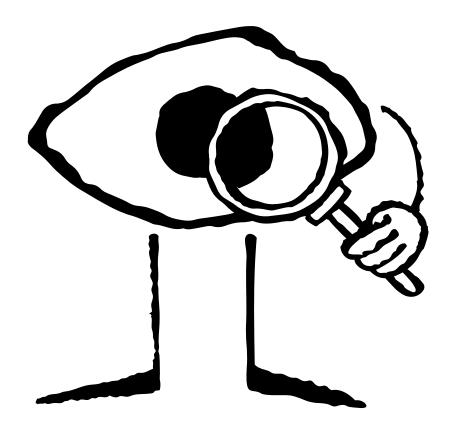
Let's talk about you

**London:** +44 207 940 7540 **New York:** +1 833 201 1628

# Readability checker

# Get an objective view Readability assessment of WSIB policy consultation webpage

policy consultation webpage



Readers prefer simpler writing – no matter their education level.\* Our checker will score your writing based on the Flesch reading ease scale, which looks at how long your words and sentences are. (There are a few readability tests out there, but we think this one's the clearest.)

\*There re plenty of studies the t show this. Here's one from Nielsen Norman Group.

# Paste in your writing.



Communicable illnesses policy consultation

The COVID-19 pandemic was an unprecedented event for Ontario's workplace safety and insurance system, both in terms of the speed with which it arrived in Ontario and the spread of the virus in the population. We responded guickly, in part, by implementing steps to support timely, transparent and consistent decision-making in COVID-19 claims. This allowed us to move swiftly to provide people who contracted work-related COVID-19 with wage-loss benefits, health care, and help getting back to work.

Early in the pandemic, we created an adjudicative approach document for initial entitlement in COVID-19 claims and made it available to the public on our website. We have a long history of adjudicating communicable illness claims that includes other previous global outbreaks, such as SARS and H1N1. Our approach with COVID-19 largely reflected our general approach to these claims.

We don't store, share or record any text submitted into this field.

Submit



That's your Flesch reading ease score, out of 100. The higher the score, the easier your writing is to read.

Looks like your score could use some work – right now, it's best understood by academics and is roughly on par with most terms and conditions. Try these tips to make your language simpler.

# **Hunger Games or Harvard Law?**

Have a look at our table to see how you fare against other types of writing.

Grade	Score	Which is like
4	100+	This sign
5	90	Most comic books
6	80	The Hunger Games
7	70	Large chunks of The Writer's website
8	65	Reader's Digest
9	60	BBC News website
10	50	The Financial Times
11	40	Most of William Shakespeare
12	30	Harvard Law Review

Enough about us

Let's talk about you

**London:** +44 207 940 7540 **New York:** +1 833 201 1628

3/24/23, 1:58 PM Safety Check

Français



# Health and safety statistics

**Provincial statistics** 

Safety Check

Additional resources

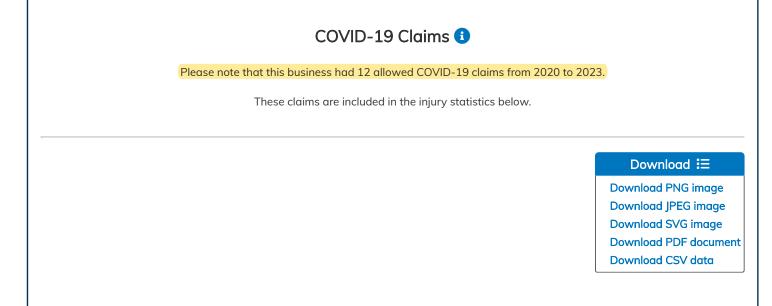
Health and Safety Index

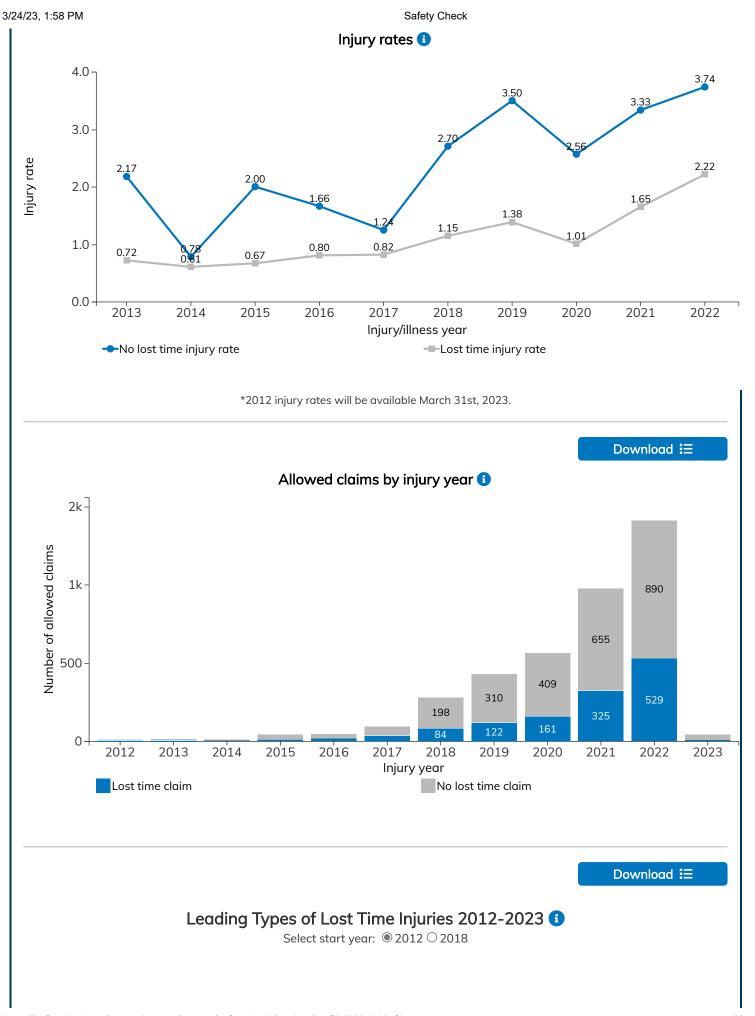
# Selected Business: Amazon Canada Fulfillment Services, ULC

Business legal name	Amazon Canada Fulfillment Services, ULC  Health and Safety Excellence Member  View all account names Member
	View Health and Safety Excellence Program <u>participation and membership history</u>
Classification	View all classifications
Pre-2020 classification	View all classifications
Business size	Large business (100 or more employees)
	Back To Search Results

Please note that reports generated by this search are governed by <u>Ontario's Open Data Directive</u>. This search tool and all other aspects of the website are not subject to the Open Data License and continue to be governed by the website <u>Terms of use</u>.









Part Of body Lower back (lumbar, Sprains and strains sacral, coccygeal regions)



Nature of injury



Source of injury Containers, boxes, barrels, packages (pressurized, non...



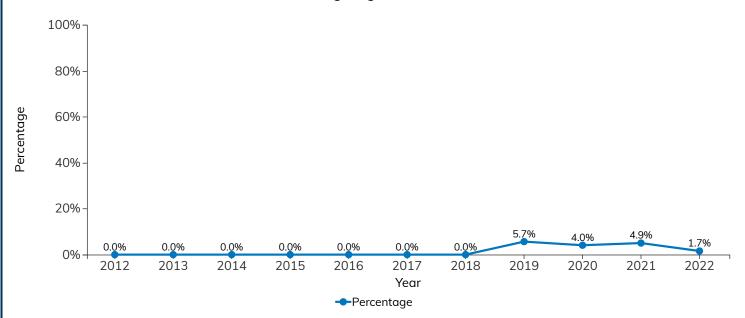
Event Overexertion



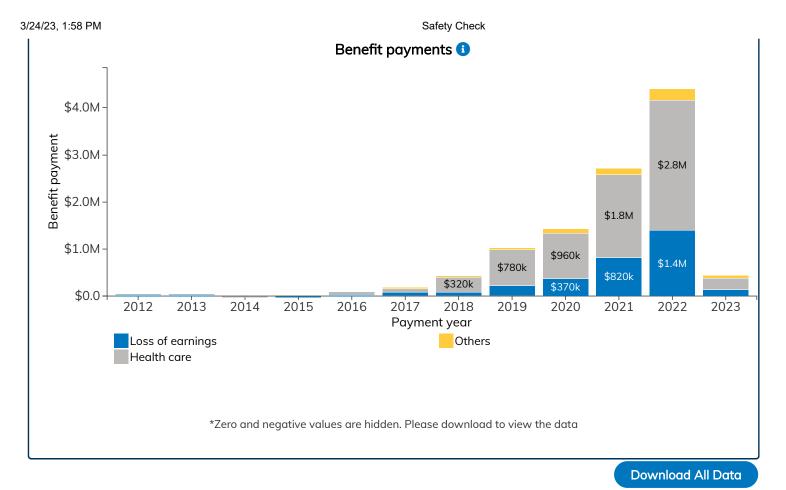
Occupation Longshore Workers And Material Handlers

Download **≡** 

Lost time claims receiving wage loss benefits at 12 months 13



Download **≡** 



© 2023, Workplace Safety and Insurance Board

3/24/23, 3:07 PM Safety Check

Francais



# Health and safety statistics

**Provincial statistics** 

Safety Check

Additional resources

Health and Safety Index

# Selected Business: Walmart Canada Logistics ULC / Logistique Walmart Canada ULC

Business legal name Walmart Canada Logistics ULC / Logistique Walmart Canada ULC View all account names

Health and Safety

Excellence Member

View Health and Safety Excellence Program participation and membership history

Classification View all classifications

Pre-2020 classification

View all classifications

Business size

Large business (100 or more employees)

**Back To Search Results** 

View injury statistics

View profile

Compare injury statistics

Please note that reports generated by this search are governed by <u>Ontario's Open Data Directive</u>. This search tool and all other aspects of the website are not subject to the Open Data License and continue to be governed by the website <u>Terms of use</u>.

# Injury Statistics for Walmart Canada Logistics ULC / Logistique Walmart Canada ULC

Change view: Business: Walm

Business: Walmart Canada Logistics ULC / Logistique Wal...  $\checkmark$ 



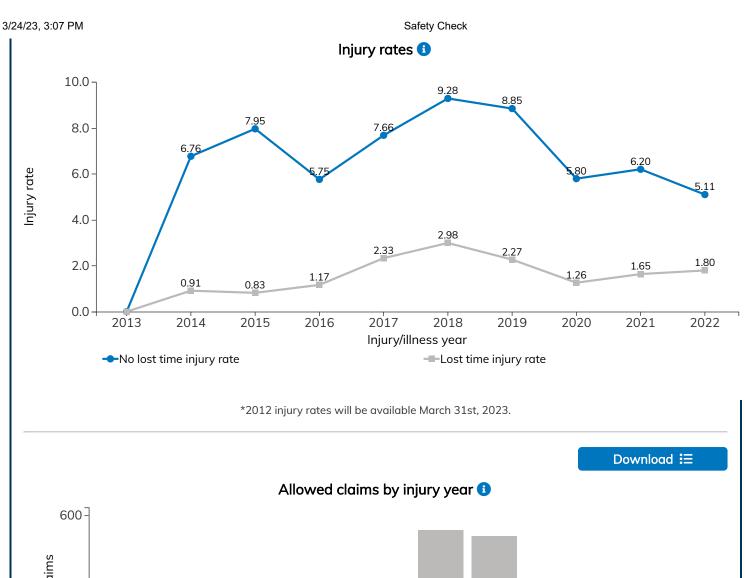
Graphical mode

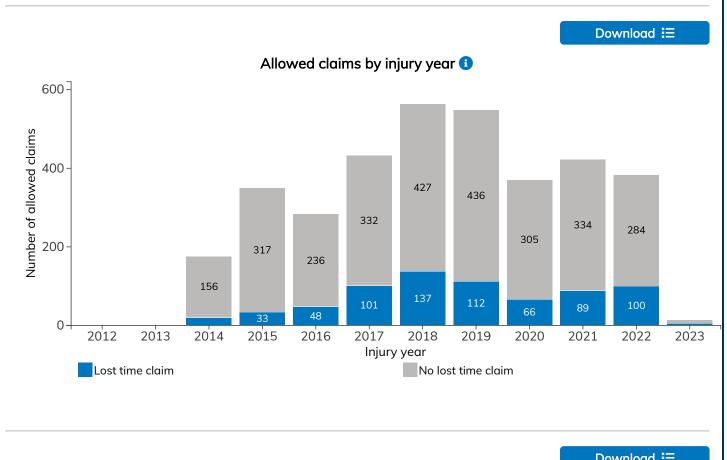
Table mode

COVID-19 Claims (1)

Please note that this business had less than 5 allowed COVID-19 claims from 2020 to 2023.

These claims are included in the injury statistics below.





Download **≡** 

Leading Types of Lost Time Injuries 2012-2023 (1)

Select start year: ● 2012 ○ 2018



Part Of body Lower back (lumbar, Sprains and strains sacral, coccygeal regions)



Nature of injury



Source of injury Containers, boxes, barrels, packages (pressurized, non...



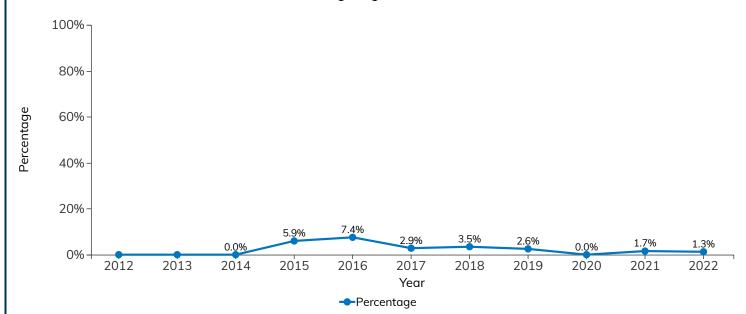
Event Overexertion



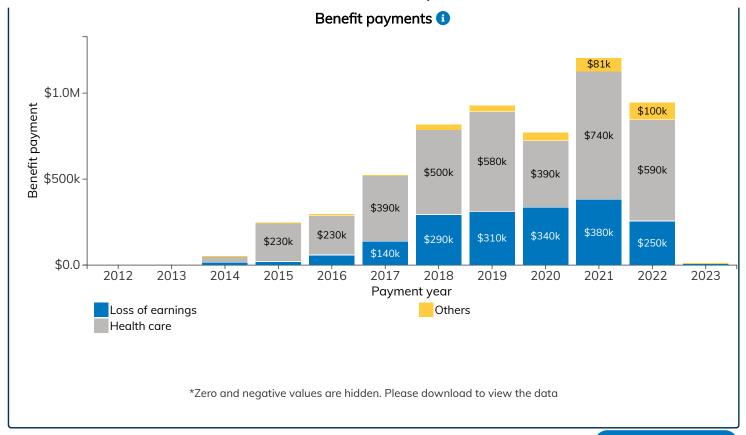
Occupation Longshore Workers And Material Handlers

Download **≡** 

Lost time claims receiving wage loss benefits at 12 months 1



Download **≡** 



Download All Data









© 2023, Workplace Safety and Insurance Board



# REPRESENTING INJURED WORKERS FREE OF CHARGE SINCE 1969

A community directed not for profit legal aid clinic

March 28, 2023

WSIB Consultation Secretariat 200 Front Street West Toronto, Ontario M5V 3J1

Sent by email to: consultation secretariat@wsib.on.ca

Dear Consultation Staff,

## Re: The WSIB's Draft Policy on Communicable Illnesses

The Injured Workers Community Legal Clinic is a legal aid clinic with a province-wide mandate. We have specialized in the area of workers' compensation since 1969. As a legal aid clinic, our services are provided to people with little or no income for no charge. In addition to legal advice and representation, our mandate includes community development, public legal education and participation in law and policy reform.

Thank you for the opportunity to make a submission. We support the WSIB's initiative to develop a policy for communicable illnesses.

# Summary of Positions on the Draft Communicable Illnesses Policy

- 1. Overall, our primary concern with the draft policy is that it is highly restrictive and that it does not apply the proper legal test for causation (significant contribution test), which will lead to a disproportionate number of claim denials relative to other types of injuries. Ultimately, this will create a chilling effect in which workers will not report their claims for these types of illnesses to the Board, based on an assumption that the claim will be denied.
- 2. We would submit that there should be paragraph(s) at the beginning of the Communicable Illnesses Policy clearly explaining in plain wording: 1. the standard of proof in workers' compensation claims: the balance of probabilities; 2. the benefit of doubt provision; 3. the legal test for causation: a significant contributing factor; and 4. the thin skull doctrine.
- 3. Furthermore, the proposed policy should adopt a framework pertaining to the "nature of the exposure" to assess each case, rather than a model based on the "general population", which is not individualized to the specific worker, and is therefore, contrary to foundational compensation principles.
- 4. It is our clinic's position that COVID-19 should be removed from this draft policy and that a separate policy specific to COVID-19 should be established with more comprehensive information on the illness, and that it be subject to periodic review.

1. Highly Restrictive Policy Will Lead to Denied claims

Tel: (416) 461-2411 Fax: (416) 461-7138 The policy as proposed is highly restrictive and the threshold for entitlement so great, that in our estimation, the vast majority of claims will be denied, with the exception of a narrow subset of workers in a specific type of work setting. While the policy makes passing reference to the significant contribution test for causation, in reality, when reviewing the totality of the policy, it appears that the predominant cause legal test for causation will be indirectly/unconsciously applied by the Board. The policy should be explicit in stating that the test for entitlement is whether it is more likely than not that the workplace exposure(s) made a significant contribution to the worker's injury/illness/disease.

We see parallels between the Chronic Mental Stress (CMS) policy and this draft policy insofar as both are contrary to established legal principles, and both lead/will lead to higher denial rates for entitlement relative to other types of injuries.

Freedom of Information (FOI) data from the WSIB for CMS claims reveals that the percentage of accepted claims for entitlement from 2018 to 2022 ranged from 4.5% to approximately 9%<sup>1</sup>, compared to an overall acceptance rate for all registered WSIB claims of close to 80%, from 2018 to 2020.<sup>2</sup> This is a marked difference. The reason why CMS claims are denied at such a high level is that the policy contains a legal test for causation (the predominant cause) and other provisions that create a higher threshold for entitlement compared to all other injuries. We believe that this draft policy contains a number of provisions, which will raise the bar for entitlement and lead to a substantial number of denials, similar to the CMS policy.

FOI data from the WSIB provides insight into how claims pertaining to pneumonia/influenza have been adjudicated over a 10 year period. As you can see, the numbers are low, comparable to CMS claims.

Pneumonia/Influenza	WSIR Claims	_ 2012_2021

Year	Accepted Claims	Denied Claims	Total Claims	Acceptance Rate
2012	9	115	124	7.2%
2013	10	165	175	5.7%
2014	9	152	161	5.6%
2015	10	378	388	2.6%
2016	8	42	50	16%
2017	21	59	80	26.2%
2018	26	187	213	12.2%
2019	14	101	115	12.1%
2020	9	116	125	7.2%
2021	4	15	19	21%3

In 5 of the 10 years, the acceptance rate was in line with CMS claims. In only 3 years did the acceptance rate exceed 15%, and those three years had fewer claims than the other years with higher

<sup>&</sup>lt;sup>1</sup> FOI Data from the WSIB - # 6940. The dataset only had CMS data to November 2022.

<sup>&</sup>lt;sup>2</sup> FOI Data from the WSIB - # 6297. The dataset contained information only to 2020.

<sup>&</sup>lt;sup>3</sup> FOI Data from the WSIB - # 6985. The dataset did not contain operations level data for 2022.

denial rates. Ultimately, the acceptance rates are significantly lower than the average acceptance rates for all registered claims, which hover around 80%. It's clear that adjudication in communicable illness claims at the Board has been flawed and will continue to be flawed with the introduction of this draft policy – if no changes are made.

Now, we will comment on more specific provisions of the draft policy and how they will establish a highly restrictive adjudicative environment negatively impacting injured and ill workers.

# Determining whether the worker contracted a communicable illness

The draft policy states:

"In addition to other relevant evidence gathered during the adjudication of a claim, one or both of the following will generally be necessary to establish the worker has or had at the relevant time a specific communicable illness:

- laboratory confirmation of current infection (e.g., positive laboratory or diagnostic test result), or
- a diagnosis by a treating health professional qualified to provide such a diagnosis based on a clinical assessment of the worker during the period of illness."

**Recommendation:** This section of the draft policy is unclear and will be interpreted in a manner that leads to the inappropriate denial of initial entitlement. Only one of the two – laboratory confirmation or a diagnosis – should be required to establish that a communicable illness existed at the relevant time, not both. Based on current adjudicative practices utilized at the WSIB, it is more likely than not that Eligibility Adjudicators/Case Managers will require both a laboratory confirmation and a diagnosis, which may not be necessary and/or feasible for the injured worker, making the process cumbersome.

The draft policy further states:

"In the absence of laboratory or clinical evidence of current infection, a decision-maker will determine whether the worker has or had at the relevant time a specific communicable illness based on the available evidence including, but not limited to:

- a laboratory test to detect a previous infection (e.g., antibody test)
- the worker's presentation (i.e., signs and symptoms) and whether it is compatible with the signs and symptoms of the communicable illness established to exist in the workplace."5

**Recommendation** (re the second bullet point): Claims should not be denied when key symptoms consistent with the illness are present, along with symptoms that may not yet be recognized for that specific illness, as with newer illnesses like COVID-19, the full range of symptoms is still not known, as there are new variants and mutations that manifest and present in slightly different ways.

**Recommendation:** If a claim is denied because of unrecognized symptoms, but then the medical literature is updated to include those symptoms, the Board should reconsider and grant retroactive entitlement to those claims which were denied because of previously unrecognized symptoms.

<sup>&</sup>lt;sup>4</sup> Draft Communicable Illnesses Policy.

<sup>5</sup> Ibid.

**Recommendation:** The Board should permit the filing of late applications when at the date of illness, the symptoms were not recognized as part of the illness.

# Determining whether the communicable illness was contracted in the course of employment

On Page two, the draft policy states:

"... the decision-maker must gather and weigh the evidence related to potential work-related and non-work related exposures to the communicable illness."

**Recommendation:** There should be an explicit reference to the WSIB's benefit of doubt provision when there is a statement regarding the weighing of evidence.

Page three of the draft policy states:

"In the absence of a specific work-related contact source, the decision-maker must determine the issue of whether the communicable illness was contracted by the worker while in the course of employment after weighing all of the available relevant evidence."

**Recommendation:** The section should make reference to the benefit of doubt provision and the significant contribution test. Moreover, this section should specify that entitlement can be granted in the event there are multiple non-work-related exposures. The available and relevant evidence reviewed should be individualized and not based on the general population.

# Determining whether the communicable illness arose out of employment

This section does not follow established workers' compensation legal principles. Page 3 states:

"A worker's employment will have made a significant contribution to contracting a communicable illness when the decision-maker is satisfied that:

- the employment placed the worker at an increased risk (i.e., increased likelihood) of contracting the
  communicable illness as compared to the risk experienced by the general public during ordinary or routine
  activities of daily living, and
- the communicable illness was contracted by the worker from exposure that occurred in the course of their employment as a result of the identifiable increase in risk.

The worker's employment will generally not have made a significant contribution to contracting the communicable illness when these conditions are not met."8

This wording does not capture the significant contributing factor test for causation and it creates a higher threshold for workers to obtain entitlement. The reference to "general public" is unclear and vague. With illnesses like COVID, the "general public" did not behave in a homogenous manner. For example, some people followed precautions strictly, while others were more laissez-faire and continued their lives as normal. Therefore, any attempt at determining what constitutes the "general public", will be flawed from the outset.

<sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Ibid.

The reference to "increased risk" is also problematic. As stated, the legal test for entitlement is whether on a balance of probabilities the workplace exposure made a significant contribution to the worker's injury/illness/disease. There is no precedent in WSIB policy or law that the worker must demonstrate that their workplace had an "increased risk" of illness/injury. The reference to "increased risk" is not relevant to WSIB law or policy.

**Recommendation:** The work exposure(s) and non-work-related exposure(s) of the individual worker are what should be examined when determining entitlement. A comparison to the "general population" is unnecessary and contrary to law, as are references to "increased risk". As such, the policy should be amended to remove these phrases. The policy should reflect the correct legal test for work-relatedness.

## **Employment Risk Factors**

## The draft policy states:

"the rate of communicable illness is significantly higher in the worker's place of work than in the general population (e.g. widespread outbreak in the workplace, treatment or care of populations with a significantly higher rate of the illness, or travel to a region with a significantly higher rate the illness), and/or

the worker's employment activities create opportunities for exposure to and transmission of the communicable in excess of the opportunities associated with ordinary or routine activities of daily living."

The WSIB already has specific presumptions for entitlement when there is evidence that the workplace created an increased risk of exposure/injury.

**Recommendation:** This section of the policy should be rewritten to include a provision creating a presumption of work-relatedness for any worker who contracts a communicable illness while employed in a workplace with increased risk or when their job duties create excess risk. Examples of a higher risk workplace, *include but are not limited to*: widespread outbreak in the workplace, treatment or care of populations with a higher rate of illness, or travel to a region with a higher rate of the illness. Examples of job duties creating excess risk, *include but are not limited to*: prolonged close contact with a person known to have the illness, direct contact with infectious substances, staying in employer-provided accommodations with one or more people with the illness.

To be clear, we are recommending that "increased risks" *only* be referenced in the policy as it relates to the Board adding a presumption.

# **Community-Acquired Communicable Illnesses**

It is true that the common cold and influenza are prevalent in the general population. However, we vehemently disagree with the WSIB's position that "a worker who contacts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increase their risk of contracting the communicable illness in some additional way." It is absurd that a worker is denied benefits unless their "employment increased the risk" of contracting the communicable illness. If we were to apply this logic, then someone who works at a

computer desk would be denied entitlement for lifting and moving a heavy object at work because their employment does not put them at "increased risk" of physical injury.

**Recommendation:** This section should be removed from the draft policy, as it creates a presumption against entitlement and is contrary to the foundational principles of the workers' compensation system.

# **Public Health Emergencies**

It should be noted that these declarations can be arbitrary and politically-motivated. For example, there was widespread opposition in the medical community when some of the public health measures were reduced or eliminated in Ontario.

**Recommendation:** The WSIB should be cautious and not over reliant on politically-motivated and arbitrary public health emergencies. It can become problematic for the WSIB to adjudicate matters one way because of a public health emergency, but then modify its adjudication once the public health emergency is rescinded; transmission, infections and deaths may remain just as high once the public health emergency is no longer in effect.

### Loss of Earnings (LOE)

In the section on Loss of Earnings (LOE) and the period of communicability, there is no mention of disability/impairment. For instance, the period of communicability for an illness may be 5 days. However, the worker may be unable to work for 10 days due to the onset of more severe symptoms.

**Recommendation:** The section should note that LOE can be provided beyond the period of communicability if there is medical evidence stating the worker is unable to work or if they require restrictions that cannot be accommodated by their employer.

This is particularly important because some individuals will experience more intense symptoms for an unknown reason or possibly because of a pre-existing condition.

**Recommendation:** This above-noted section should highlight the thin skull doctrine, which is pertinent to this area of the policy.

#### Prevention of communicable illnesses

In the section on the prevention of communicable illnesses, a worker free of illness who may be told to self-isolate or be sent home would be denied WSIB benefits.

This section is inconsistent with Policy 16-02-17 which states, "Uranium miners and mill workers who have been exposed to the maximum radiation exposure level of 2 Working Level Months (WLM) per quarter and 4 WLM per annum may be entitled to benefits while the workers are obliged to remain out of the radiation exposure environment."

<sup>&</sup>lt;sup>10</sup> WSIB Policy 16-02-17.

Furthermore, this section is also inconsistent with the definition of occupational disease: "(c) a medical condition that in the opinion of the Board requires a worker to be removed either temporarily or permanently from exposure to a substance because the condition may be a precursor to an occupational disease."

**Recommendation:** If a worker is exposed to a communicable illness in the workplace and remains free from said illness, but requires their preventative removal from the workplace for a medical condition, or due to instructions from their employer or because of an order from Public Health, WSIB entitlement should be granted.

## **Appendix**

The Appendix in the Draft policy contains general information and guidelines for a variety of illnesses.

**Recommendation:** There should be a statement explaining that the information contained in the chart is subject to periodic review in order to remain up-to-date with the most contemporary scientific information.

**Recommendation:** There should be a qualifying statement which outlines that the information in the chart is general in nature and that if an individual's symptoms are different or prolonged, that they may still be entitled to WSIB benefits. The concern is that decision-makers will unfairly deny entitlement because the symptoms are not identical to those on the chart or the symptoms last for a prolonged period of time.

**Recommendation:** There should be a statement and information in this chart on Long COVID.

It should be emphasized that the WSIB is mandated to apply the law and its policies in a liberal fashion, per the *Legislation Act*.<sup>12</sup> Based on the way this draft policy is written, it does not appear that the WSIB will abide by its legal obligations.

### 2. Legal Tests and Definitions

The WSIB's legal test for causation is the significant contributing factor test. In the Draft Occupational Disease Framework, the WSIB defines the significant contributing factor in the following terms: "To be a significant contributing factor, the worker's employment need not be the only cause or even the primary cause of the disease, the contribution of the employment only needs to be more than de minimus.<sup>13</sup>

As stated, the Communicable Illnesses draft policy appears to violate this legal test on a number of occasions, thereby increasing barriers for workers to obtain entitlement to benefits. Ultimately, the policy as written will indirectly/unconsciously result in decision-makers using the predominant cause test for causation, which requires a higher threshold.

II WSIA.

<sup>12</sup> Legislation Act.

<sup>&</sup>lt;sup>13</sup> WSIB Draft Occupational Disease Framework.

**Recommendation:** The beginning of the Communicable Illnesses Policy should incorporate the definition of a significant contributing factor test quoted above. This will create clarity for decision-makers and for injured workers. There should be additional statements explaining that scientific certainty is not required for WSIB entitlement and that entitlement can still be granted even if there are multiple non-work-related exposures.

**Recommendation:** For further clarity and making the process more open and transparent, the beginning of the policy should also contain definitions pertaining to the balance of probabilities, the benefit of doubt, and the thin skull doctrine.

#### 3. Framework for Assessing Exposures

**Recommendation:** The Communicable Illnesses policy should focus on individual exposures at work and on an individual's activities of daily living, which is already the case in gradual onset/disablement type injuries. The Board should not be comparing a worker to the general population.

#### 4. Creation of Separate WSIB Policy for COVID-19

**Recommendation:** COVID-19 should be severed from the draft Communicable Illnesses policy and a specific policy for COVID-19 should be created by the Board, open to consultation and review from all stakeholders.

Combining a relatively new illness such as COVID-19 with longstanding illnesses such as the common cold and influenza is problematic, as the science on the former is changing daily, while much of the science on the latter is settled and health outcomes are fairly predictable. With the recent emergence of COVID-19, long COVID remains a widely debated issue as new scientific studies are released on a regular basis, complicating adjudication for the Board.

Furthermore, COVID-19 required multiple partial government shutdowns of the economy and the school system as the virus spread at an alarming rate and led to an unprecedented surge in hospitals. As precautionary measures, masks, testing and vaccines were required for entry into facilities and became a new condition of employment in some workplaces. Other illnesses such as influenza have not required shutdowns and closures, nor has widespread testing, masking and vaccination become required for seasonal influenza, with some exceptions (i.e. vaccination for some health care workers). While influenza can cause severe sickness, hospitalization, and death, in recent times, influenza has had a lower mortality and morbidity rate compared to COVID-19. We would suggest that COVID-19's recent emergence and the evolution of the virus and the science makes it paramount that a separate policy is created. This is also necessary, because it is possible that new strains/mutations may develop that require a re-emergence of precautions due to increased mortality and morbidity rates.

**Recommendation:** We would submit there should be a thorough and comprehensive description of COVID-19 based on the most up-to-date and authoritative medical science, subject to periodic review.

We are in agreement with the submission from Michael Green in which he states on Page 2 that there should be a description of the different characteristics of aerosol vs droplet transmission and the fact that COVID is transmitted through inhalation, which impacts multiple systems throughout the body – neurological, cardiovascular, immunological, gastrointestinal, urological – and that symptoms may emerge soon or long after the infection.<sup>14</sup>

The key takeaway is that while there are general trends with symptoms, transmission and infection, there are often many people whose personal experience differs from the accepted science. Ultimately, it is important that a divergent personal experience with an illness should not be an impediment to entitlement.

**Recommendation:** In both the proposed Communicable Illnesses Policy and our proposed COVID-19 policy, there should be an explicit statement that WSIB entitlement is granted in the event that a vaccination required for employment leads to side-effects causing lost time from work and/or healthcare treatments.

#### Conclusion

In closing, thank you for reviewing our submission. Should you have any questions, please contact me via email: <a href="mailto:chris.grawey@iwc.clcj.ca">chris.grawey@iwc.clcj.ca</a>. We would be more than pleased to meet with you for further discussion.

Sincerely,

Chris Grawey

Community Legal Worker

Injured Workers Community Legal Clinic

Chris Gravey

<sup>&</sup>lt;sup>14</sup> Michael Green Submission, page 2.

From: Noonan, Joanna
To: Consultation Secretariat

Subject: Communicable disease policy consultation- feedback

Date: Wednesday, February 22, 2023 11:45:24 AM

**CAUTION:** This email originated from outside the organization. Do not click any links or open any attachments, unless you recognize the sender and know that the content is safe. If you are unsure or believe that you were the target of a phishing attempt please contact IT Security at ITSecurity@wsib.on.ca as soon as possible.

Hi there,

I have concerns around the incubation period for COVID-19 that is quoted in the policy. We have dealt with thousands of cases of community acquired COVID-19 in our staff over the course of the pandemic and 14 days is well beyond what the incubation period actually is, particularly with the Omicron variant.

We are finding that for Omicron 2-4 days is typical between exposure and symptom onset (or positive test if asymptomatic).

I have engaged Dr. Gerald Evans who is our Medical Director of Infection Prevention and Control at Kingston Health Sciences Centre and the Chair of the Division of Infectious Diseases and a Professor in the Departments of Medicine, Biomedical & Molecular Sciences, and Pathology & Molecular Medicine at Queen's University.

He has provided me with the attached published review showing the **pooled incubation period for** all COVID-19 as being 6.57 days and even shorter (3.42 days) for Omicron.

I hope the WSIB will consider the evidence/research related to COVID-19 incubation period. Having such an extended/inaccurate period will also have the unintended effect of many community acquired absences being considered work related which is inaccurate and places additional burden on employers making them responsible for additional community acquired cases.

Thank you for considering and I'm sure Dr. Evans would be happy to speak with you if you wish for information on this matter.

Sincerely,

Joanna

#### Joanna Noonan

Director, Occupational Health, Safety & Wellness Kingston Health Sciences Centre & Providence Care 613-549-6666 x4145 (KGH site) 613-544-4900 x53558 (PCH) 613-331-4950 (cell) joanna.noonan@kingstonHSC.ca





**Original Investigation** | Infectious Diseases

## Incubation Period of COVID-19 Caused by Unique SARS-CoV-2 Strains A Systematic Review and Meta-analysis

Yu Wu, PhD; Liangyu Kang, MD; Zirui Guo, MD; Jue Liu, PhD; Min Liu, PhD; Wannian Liang, PhD

#### **Abstract**

**IMPORTANCE** Several studies were conducted to estimate the average incubation period of COVID-19; however, the incubation period of COVID-19 caused by different SARS-CoV-2 variants is not well described.

**OBJECTIVE** To systematically assess the incubation period of COVID-19 and the incubation periods of COVID-19 caused by different SARS-CoV-2 variants in published studies.

**DATA SOURCES** PubMed, EMBASE, and ScienceDirect were searched between December 1, 2019, and February 10, 2022.

**STUDY SELECTION** Original studies of the incubation period of COVID-19, defined as the time from infection to the onset of signs and symptoms.

**DATA EXTRACTION AND SYNTHESIS** Following the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) reporting guideline, 3 reviewers independently extracted the data from the eligible studies in March 2022. The parameters, or sufficient information to facilitate calculation of those values, were derived from random-effects meta-analysis.

**MAIN OUTCOMES AND MEASURES** The mean estimate of the incubation period and different SARS-CoV-2 strains.

**RESULTS** A total of 142 studies with 8112 patients were included. The pooled incubation period was 6.57 days (95% CI, 6.26-6.88) and ranged from 1.80 to 18.87 days. The incubation period of COVID-19 caused by the Alpha, Beta, Delta, and Omicron variants were reported in 1 study (with 6374 patients), 1 study (10 patients), 6 studies (2368 patients) and 5 studies (829 patients), respectively. The mean incubation period of COVID-19 was 5.00 days (95% CI, 4.94-5.06 days) for cases caused by the Alpha variant, 4.50 days (95% CI, 1.83-7.17 days) for the Beta variant, 4.41 days (95% CI, 3.76-5.05 days) for the Delta variant, and 3.42 days (95% CI, 2.88-3.96 days) for the Omicron variant. The mean incubation was 7.43 days (95% CI, 5.75-9.11 days) among older patients (ie, aged over 60 years old), 8.82 days (95% CI, 8.19-9.45 days) among infected children (ages 18 years or younger), 6.99 days (95% CI, 6.07-7.92 days) among patients with nonsevere illness, and 6.69 days (95% CI, 4.53-8.85 days) among patients with severe illness.

**CONCLUSIONS AND RELEVANCE** The findings of this study suggest that SARS-CoV-2 has evolved and mutated continuously throughout the COVID-19 pandemic, producing variants with different enhanced transmission and virulence. Identifying the incubation period of different variants is a key factor in determining the isolation period.

JAMA Network Open. 2022;5(8):e2228008.

Corrected on September 16, 2022. doi:10.1001/jamanetworkopen.2022.28008

Open Access. This is an open access article distributed under the terms of the CC-BY License.

#### **Key Points**

**Question** What are the incubation periods of COVID-19 caused by different SARS-CoV-2 strains?

**Findings** In this systematic review and meta-analysis of 141 articles, the pooled incubation period was 6.57 days. The incubation periods of COVID-19 caused by the Alpha, Beta, Delta, and Omicron variants were 5.00, 4.50, 4.41, and 3.42 days, respectively.

Meaning These results suggest that with the evolution of mutant strains, the incubation period of COVID-19 decreased gradually from Alpha variant to Omicron variant.

#### + Supplemental content

Author affiliations and article information are listed at the end of this article.

#### Introduction

In December 2019, multiple cases of novel coronavirus disease (COVID-19), which is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), were reported in Wuhan, China. On March 11, 2020, the World Health Organization (WHO) declared that COVID-19 can be characterized as a pandemic. To date, the transmission of COVID-19 is still difficult to contain, as confirmed and death cases are still increasing. Up to March 16, 2022, 460 280 168 confirmed cases and 6 050 018 confirmed deaths have been reported to the WHO. Rapid spread of COVID-19 has had enormous social, economic, and health care system effects around the world. Effective treatment to block the spread of COVID-19 is not developed yet, so countries have implemented a series of nontreatment interventions such as social distancing, isolation, face mask mandates, and quarantining to reduce its rapid transmission. Existing evidence has shown that most of COVID-19 cases are missed by screening because infected persons are unaware they were exposed and have not developed symptoms yet. 4-6

Incubation period is one of the most important epidemiological parameters of infectious diseases. Knowledge of the disease's incubation period is of great significance for case definition, management of emerging threats, estimation of the duration of follow-up for contact tracing and secondary case detection, and the establishment of public health programs aimed at reducing local transmission. Previous studies have reported that the average serial interval of COVID-19 is shorter than the average incubation period, which suggests a substantial proportion of presymptomatic transmission. For diseases caused by different pathogens, the length of incubation period is the key factor to determine the isolation period of infected persons.

Since the beginning of the COVID-19 epidemic, SARS-CoV-2 has evolved and mutated continuously, producing variants with different transmissibility and virulence. SARS-CoV-2 variants are classified by the WHO into 2 types: variants of concern (VOC) and variants of interest (VOI). According to the US Center for Disease Control and Prevention (CDC), a VOC is a variant that has increased transmissibility, increased virulence, a resistance to vaccine or acquired immunity from previous infection, and has the ability to elude diagnostic detection. Several VOC have emerged from the original wild-type strain isolated in Wuhan since the outbreak first began in December 2019, such as Alpha (B.1.1.7), Beta (B.1.351), Gamma (P.1), Delta (B.1.617.2), and Omicron (B.1.1.529). The Alpha variant was first detected in the UK in September 2020; the Beta variant in South Africa in May 2020; and the Gamma variant in Brazil in September 2020. All 3 quickly became the main virus strains worldwide.

Globally, many studies were conducted to estimate the average incubation period of COVID-19. However, the reported estimates of incubation period in these fragmented studies vary depending on the number of study participants recruited, the type of design employed, the data collection period, and the country in which the study was conducted. In addition, with the spread of the Delta and Omicron variants, the current incubation period of COVID-19 is different from that in the outbreak of Wuhan. This meta-analysis was aimed to determine the overall pooled incubation period of COVID-19 and the incubation period of COVID-19 caused by different SARS-CoV-2 variants using available evidence, so as to adjust prevention and control strategies and better block the transmission of COVID-19.

#### **Methods**

#### **Search Strategy**

We conducted this meta-analysis following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guideline. This review was not registered. This study was exempted from ethics review board at Peking University because it used previously published literature in its analysis. A survey of the literature was implemented between December 1, 2019, and February 10, 2022. Publications on the electronic databases PubMed, Embase and ScienceDirect were searched

#### JAMA Network Open | Infectious Diseases

using the keywords *novel coronavirus*, *SARS-CoV-2*, *2019-nCoV*, or *COVID-19* and either *incubation period* or *incubation* (eTable 1 in the Supplement). No restrictions on language or publication status were imposed so long as an English abstract was available. The initial searches were carried out by 3 of the investigators (Y.W., L.K., R.G.).

#### **Inclusion and Exclusion Criteria**

Inclusion criteria for selecting the studies were that the incubation period was one of the primary outcomes of the study and that, when the incubation periods of multiple groups were reported in the same study, only the group with the largest study population was included. Criteria for exclusion included articles not conducted as studies (ie, editorials, perspective articles, letters to the editor, reviews, article information, or comments), duplicate studies, and articles with overlapping study populations (ie, enrolling the same population in the same region around the same period).

#### **Outcome Measures and Study Selection**

The outcome variable was the mean estimate of the incubation period. Incubation period was defined as the time from when the infection occurred to the onset of signs and symptoms or the first positive test. It was measured with cases of a well-defined period of exposure and symptom onset.

Results of searches were screened in 2 stages. First, titles and abstracts were screened and only relevant articles retained. Next, articles were read in detail—studies were selected for meta-analysis if they reported either results fitting our primary parameters (with Cls) or sufficient information to facilitate calculation of those values.

After screening for inclusion and exclusion criteria, data extraction was carried out from the included studies. The name of the first author, area of study, time period for data collection, characteristics of the study population, strain type, and estimates for the incubation period with 95% CI were extracted from the selected studies. Ninety-five percent CIs were estimated for the studies reporting mean with standard deviation by using the following formula, which is generally used to calculate the 95% CI for any parameter:

95% CI = 
$$\mu \pm 1.96 \times \frac{s}{\sqrt{n}}$$

where  $\mu$  indicates the mean incubation period, s the standard deviation, and n the sample size of the study. Some studies reported only median with interquartile range or range. Mean and the standard deviation were calculated for such studies by using an appropriate approximation for the consistency in synthesizing the results for meta-analysis.  $^{11,12}$ 

#### **Quality Assessment**

Once studies were shortlisted, 2 authors (Y.W., L.K.) independently conducted appraisals of study quality. We used a scale modified from the Newcastle-Ottawa scale<sup>13</sup> by McAloon et al<sup>14</sup> to assess the quality of observational studies in meta-analyses (eTable 2 in the Supplement). This scale consists of 2 parts with a full score of 5 stars. The first part is external validity, with a maximum of 1 star; the second part is internal validity, which includes exposure window (a maximum of 2 stars) and outcomes with (a maximum of 2 stars). Based on the combined score of these 2 parts, each paper was categorized as either weak (1 star or less), moderate (2 to 3 stars), or strong (4 stars or more). After the studies were evaluated by the 2 authors, the results were compared and differences in ratings were resolved by discussion until a consensus rating was agreed upon.

#### **Statistical Analysis**

A meta-analysis of continuous outcomes was employed for this study. We analyzed the data sets for the incubation period. After extracting all essential data using Excel 2O21 (Microsoft Corporation), data were exported to Stata version 14.1 (StataCorp) statistical software for meta-analysis. A random-effect meta-analysis with an estimation of DerSimonian and Laird method was performed. Pooled

3/19

mean estimates with 95% CIs were presented using forest plots. To determine the extent of variation between the studies, we conducted a heterogeneity test using the Higgins method, that was quantified by  $I^2$  value. <sup>15</sup> Publication bias was also assessed using a funnel plot. A 2-sided P < .05 was considered statistically significant.

#### **Results**

#### **Search Results**

We identified 5012 records through PubMed, EMBASE, and Science Direct database searches, and documented the study selection process in a flowchart and showed the total numbers of retrieved references and the numbers of included and excluded studies (**Figure 1**). Based on the inclusion and exclusion criteria, 142 articles (8112 patients) were selected for analysis. <sup>16-157</sup>

#### **Study Characteristics**

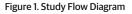
Over the 142 studies, the quality assessment gave 45 strong, 82 moderate, and 15 weak studies (eTable 3 in the Supplement). Most of the studies (93 [65.5%]) were conducted between January and March 2020 and most were conducted in China (108 [76.1%]). One study used case data from multiple countries around the world, <sup>81</sup> 6 studies were conducted in South Korea, <sup>37,46,51,52,59,124</sup> 4 in France, <sup>25,29,35,113</sup> 3 in Japan, <sup>80,105</sup> 2 in Singapore, <sup>87,111</sup> 2 in India, <sup>16,78,83,103</sup> 2 in Vietnam, <sup>21,58</sup> and 2 in Australia. <sup>45,99</sup> One hundred nineteen studies (83.8%) included patients infected with the wild-type strain, 5 (3.5%) with the multiple strains, <sup>17,26,35,80,112</sup> and 11 (7.7%) with an unknown strain <sup>84,93,99,106,116,126,135,142,148,150,157</sup> (eTable 4 in the Supplement).

#### **Pooled Average Estimate of Incubation Period**

The mean incubation period of COVID-19 was 6.57 days (95% CI, 6.26-6.88 days), ranging from 1.80 to 18.87 days (**Table**). There was substantial heterogeneity between the studies ( $I^2 = 98.8\%$ ; P < .001). Our results suggested no potential publication bias in the included studies (eFigure 1 in the Supplement). The standard error for all the included studies in the meta-analysis was very low except for a 2020 study conducted by Xie<sup>134</sup> where the highest standard error was observed.

#### Mean Incubation Periods of COVID-19 Infected by Different Strains

Across a total of 119 studies with data on the wild-type strain, the mean incubation period was 6.65 days (95% CI, 6.31-6.99) (eFigure 2 in the Supplement). For infections caused by the Alpha variant,



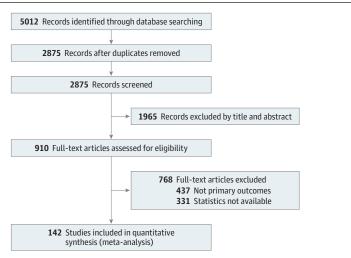


Table. Mean Incubation Period of COVID-19 From In	ciuded Studies	
Author	Mean incubation period (95% CI)	Weight
Areekal et al, <sup>16</sup> 2021	4.22 (3.71-4.65)	0.81
Backer et al, <sup>18</sup> .2020	6.4 (5.6-7.7)	0.75
Backer et al, <sup>17</sup> 2022	3.2 (2.93-3.47)	0.82
Bao et al, <sup>19</sup> 2020	5.4 (4.5-6.3)	0.77
Brandal et al, <sup>20</sup> 2021	3.33 (3.17-3.49)	0.82
Bui et al, <sup>21</sup> 2020	6.4 (4.89-8.5)	0.64
Chen et al, <sup>22</sup> 2020	8 (4.97-11.03)	0.46
Covid-Epidemiology Investigation Team, 23 2021	8.75 (6.95-10.55)	0.64
Dai et al, <sup>24</sup> 2020	6.5 (5.9-7.1)	0.80
Del Águila-Mejía et al, <sup>26</sup> 2022	3.1 (2.82-3.38)	0.82
Deng et al, <sup>27</sup> 2021	8 (6.62-9.38)	0.71
Deng et al, <sup>28</sup> 2021	9.1 (7.86-9.66)	0.77
Denis et al, <sup>29</sup> 2021	4 (3.93-4.07)	0.82
Ding et al, <sup>30</sup> 2020	7.11 (5.24-8.98)	0.63
Dong et al, 31 2020	7.25 (5.86-8.64)	0.70
Du et al, <sup>32</sup> 2020	5.28 (4.75-5.82)	0.80
Gao et al, <sup>34</sup> 2020	11.67 (9.46-13.87)	0.58
Gao et al, <sup>33</sup> 2020	7.33 (3.54-11.13)	0.37
Grant et al, 35 2022	5 (4.95-5.05)	0.82
Guo et al, <sup>36</sup> 2020	9.33 (8.21-10.46)	0.74
Han et al, <sup>37</sup> 2020	6.63 (4.28-8.97)	0.56
Han et al, <sup>39</sup> 2020	7.67 (7.08-8.25)	0.80
Han et al, <sup>38</sup> 2020	5.5 (4.5-6.5)	0.76
Hong et al, <sup>40</sup> 2020	5.7 (4.95-6.45)	0.78
Hua et al, <sup>41</sup> 2020	9.1 (7.99-10.21)	0.74
Huang et al, <sup>43</sup> 2020	8 (7.57-8.43)	0.74
Huang et al, <sup>42</sup> 2020	5.5 (5.08-5.92)	0.81
Huang et al, <sup>44</sup> 2021	7.8 (7.4-8.5)	0.80
Je et al, <sup>45</sup> 2021		
Je et al, 2021 Jeong et al, <sup>46</sup> 2020	4.7 (3.21-6.19)	0.69
Jiang et al, <sup>47</sup> 2020	5 (4.38-5.62)	0.79
	6.73 (5.97-7.48)	0.78
Jiang et al, <sup>48</sup> 2021	7.75 (7.1-7.99)	0.81
Jin et al, <sup>49</sup> 2020	5.33 (4.81-5.86)	0.80
Khonyongwa et al, <sup>50</sup> 2020	6 (5.5-7)	0.78
Ki et al, <sup>51</sup> 2020	5.39 (4.7-6.05)	0.79
Kim et al, <sup>52</sup> 2020	11.86 (7.59-16.13)	0.32
Kong et al, <sup>53</sup> 2020	6.33 (3.14-9.53)	0.44
Kong et al, <sup>55</sup> 2020	8.5 (7.8-9.2)	0.79
Kong et al, <sup>54</sup> 2020	7.25 (7.04-7.46)	0.82
Lai et al, <sup>56</sup> 2020	7.67 (7.02-8.31)	0.79
Lau et al, <sup>57</sup> 2021	4.75 (4.14-5.56)	0.79
Laval et al, <sup>25</sup> 2021	4.61 (3.2-6.02)	0.70
Le et al, <sup>58</sup> 2020	7 (4.87-9.13)	0.59
Lee et al, <sup>59</sup> 2021	4.6 (4.33-4.87)	0.82
Lei et al, <sup>60</sup> 2020	7.57 (3.95-11.19)	0.39
Leung et al, <sup>61</sup> 2020	1.8 (1.63-1.97)	0.82
Li et al, <sup>63</sup> 2020	5.33 (4.82-5.85)	0.80
Li et al, <sup>64</sup> 2022	6.5 (5.86-7.2)	0.79
Li et al, <sup>62</sup> 2020	5.2 (4.1-7)	0.70
Linton et al, <sup>65</sup> 2020	5.6 (5-6.3)	0.79
Liu et al, <sup>66</sup> 2021	13.5 (10.93-16.07)	0.52

(continued)

Liu et al, 68 2020	Table. Mean Incubation Period of COVID-19 From	Included Studies (continued)	
Liu et al, <sup>50</sup> 2020	Author	Mean incubation period (95% CI)	Weight
Liu et al, 7º 2020	Liu et al, <sup>68</sup> 2020	6.67 (5.38-7.95)	0.72
Liu et al, 71 2020  8.8 (7.33-10.27)  0.69  Liu et al, 72 2020  9 (7.79-10.21)  0.73  Liu et al, 72 2021  8.4 (7.32-948)  0.52  Liu et al, 72 2020  6.35 (6.28-6.42)  0.82  Liu et al, 72 2020  7.67 (6.42-8.91)  0.72  Liu et al, 72 2020  8.67 (5.76-11.58)  0.47  Mao et al, 72 2020  10.3 (8.18-12-42)  Moazzami et al, 72 2021  1.91 (1.24-2.59)  0.79  Ng et al, 72 2021  1.91 (1.24-2.59)  0.79  Ng et al, 72 2021  5.5 (4.99-6.01)  0.80  Ogata et al, 80 2022  3.7 (3.4-4)  0.81  Park et al, 81 2020  6.6 (5.4-7.8)  0.73  Particlar et al, 82 2020  6.11 (4.55-7.67)  0.68  Particlar et al, 82 2020  6.13 (6.11-7.75)  0.78  Paul et al, 82 2021  6.48 (5.58-7.38)  0.77  Paul et al, 82 2021  6.48 (5.58-7.38)  0.77  Paul et al, 82 2020  5.5 (4.69-6.31)  0.78  Partiglar et al, 82 2020  5.5 (4.69-6.31)  0.78  Partiglar et al, 82 2020  5.5 (4.69-6.31)  0.78  Partiglar et al, 82 2020  5.7 (4.89-6.44)  0.78  Qui et al, 82 2020  5.7 (4.89-6.44)  0.78  Qui et al, 82 2020  5.7 (4.89-6.44)  0.78  Ratovoson et al, 82 2020  5.7 (4.89-6.44)  0.78  Ratovoson et al, 82 2020  5.7 (4.89-6.44)  0.78  Sanche et al, 82 2020  5.7 (4.89-6.44)  0.78  Song et al, 92 2020  7.7 (3.61-5.94)  Shen et al,	Liu et al, <sup>69</sup> 2020	6.02 (4.74-7.3)	0.72
Liu et al, 72 2020 9 (7.79-10.21) 0.73 Liu et al, 72 2021 8.4 (7.32-9.48) 0.75 Liu et al, 72 2020 6.35 (6.28-6.42) 0.82 Liu et al, 72 2020 7.67 (6.42-8-91) 0.72 Liaque-Quirioz et al, 73 2020 8.67 (5.76-11.58) 0.47 Man oet al, 72 2020 10.3 (8.18-12.42) 0.59 Moazzami et al, 72 2021 1.91 (1.24-2.59) 0.79 Ng et al, 78 2021 5.5 (4.99-6.01) 0.80 Nie et al, 72 2020 5 (4.84-5.16) 0.82 Ogata et al, 80 2022 3.7 (3.4-4) 0.81 Park et al, 81 2020 6.66 (5.4-7.8) 0.73 Partial et al, 82 2020 6.11 (4.55-7.67) 0.68 Partial et al, 82 2020 6.11 (4.55-7.67) 0.68 Partial et al, 82 2020 6.93 (6.11-7.75) 0.78 Partial et al, 82 2021 6.47 (6.35-7.13) 0.81 Ping et al, 78 2021 6.48 (5.58-7.38) 0.77 Pongpriul et al, 86 2022 5.5 (4.69-6.31) 0.78 Partial et al, 82 2020 5.5 (4.69-6.31) 0.78 Partial et al, 82 2020 5.5 (4.69-6.31) 0.78 Partial et al, 82 2020 5.5 (4.69-6.31) 0.78 Pongpriul et al, 85 2020 5.5 (4.69-6.31) 0.78 Ogi et al, 80 2020 5.5 (4.89-6.44) 0.78 Ogi et al, 80 2020 5.7 (4.89-6.44) 0.78 Ogi et al, 80 2020 5.7 (4.89-6.44) 0.78 Ogi et al, 80 2020 5.7 (4.89-6.44) 0.78 Ogi et al, 80 2020 5.5 (4.69-6.31) 0.78 Sammah et al, 80 2020 5.7 (4.89-6.44) 0.78 Sammah et al, 80 2020 7.7 (3.34-11) 0.36 Shen et al, 80 2020 7.7 (3.61-5.94) 0.73 Shiel et al, 80 2020 7.7 (3.61-	Liu et al, <sup>70</sup> 2020	6 (4.83-7.17)	0.73
Liu et al, <sup>74</sup> 2021	Liu et al, <sup>71</sup> 2020	8.8 (7.33-10.27)	0.69
Liu et al, 67 2020	Liu et al, <sup>72</sup> 2020	9 (7.79-10.21)	0.73
Liu et al, 73 2020	Liu et al, <sup>74</sup> 2021	8.4 (7.32-9.48)	0.75
Llaque-Quiroz et al, 7° 2020 8.67 (5.76-11.58) 0.47 Mao et al, 7° 2021 1.91 (1.24-2.59) 0.79 Moazzami et al, 7° 2021 5.5 (4.99-6.01) 0.80 Nie et al, 7° 2020 5 (4.84-5.16) 0.82 Ogata et al, 8° 2022 3.7 (3.4-4) 0.81 Park et al, 8° 2022 6.61 (4.85-7.67) 0.68 Patrikar et al, 8° 2020 6.11 (4.55-7.67) 0.68 Patrikar et al, 8° 2020 6.93 (6.11-7.75) 0.78 Pant et al, 8° 2020 6.93 (6.11-7.75) 0.78 Pant et al, 8° 2020 6.93 (6.11-7.75) 0.78 Partikar et al, 8° 2020 6.93 (6.11-7.75) 0.78 Partikar et al, 8° 2020 6.93 (6.11-7.75) 0.78 Partikar et al, 8° 2020 6.93 (6.11-7.75) 0.77 Populgriut et al, 8° 2020 5.5 (4.69-6.31) 0.73 Pung et al, 8° 2020 5.5 (4.69-6.31) 0.73 Pung et al, 8° 2020 3.67 (2.87-4.6) 0.75 Qui et al, 8° 2020 3.67 (2.87-4.6) 0.78 Qui et al, 8° 2020 5.67 (4.89-6.44) 0.75 Qui et al, 8° 2020 5.67 (4.89-6.44) 0.78 Qui et al, 8° 2020 5.3 (4.6-6) 0.79 Sarrahe et al, 8° 2021 4.1 (0.7-7.5) 0.41 Ren et al, 8° 2020 5.3 (4.6-6) 0.79 Sarrahe et al, 8° 2020 5.3 (4.6-6) 0.79 Sarrahe et al, 8° 2020 7.77 (3.34-11) 0.36 Shen et al, 8° 2020 7.77 (3.34-11) 0.36 Shen et al, 8° 2020 7.75 (5.41-9.73) 0.59 Shi et al, 8° 2020 7.76 (5.41-9.73) 0.78 Shu et al, 10° 2020 7.75 (5.41-9.73) 0.79 Shong et al, 10° 2020 7.76 (5.41-9.73)	Liu et al, <sup>67</sup> 2020	6.35 (6.28-6.42)	0.82
Mao et al, <sup>76</sup> 2020  Moazami et al, <sup>77</sup> 2021  1.91 (1.24-2.59)  Ng et al, <sup>78</sup> 2020  S (4,84-5.16)  Ogata et al, <sup>80</sup> 2020  S (1,4,55-7.67)  O (88  Partikar et al, <sup>80</sup> 2020  S (4,63-5.7.13)  O (81  Pring et al, <sup>85</sup> 2021  S (4,63-5.7.13)  O (81  Pring et al, <sup>85</sup> 2021  S (4,69-6.31)  O (77  Pongpirul et al, <sup>80</sup> 2020  S (4,69-6.31)  O (88  Pung et al, <sup>85</sup> 2020  S (4,69-6.31)  O (89  Qian et al, <sup>89</sup> 2020  S (6) (4,89-6.44)  O (89  Qian et al, <sup>89</sup> 2020  S (6) (4,89-6.44)  O (78  Qian et al, <sup>89</sup> 2020  S (6) (4,89-6.44)  O (78  Qian et al, <sup>89</sup> 2020  S (6) (4,89-6.44)  O (78  Sanche et al, <sup>92</sup> 2021  S (3,66-6)  O (79  Samrah et al, <sup>92</sup> 2020  S (4,66-6)  O (79  Samrah et al, <sup>92</sup> 2020  S (4,66-6)  S (5,66-6)  S (5,66-6)  S (5,66-6)  S (6,66-6)  S (7,78-7)  S (	Liu et al, <sup>73</sup> 2020	7.67 (6.42-8.91)	0.72
Mozazami et al, 72 2021 1.91 (1.24-2.59) 0.79 Ng et al, 78 2021 5.5 (4.99-6.01) 0.80 Nie et al, 79 2020 5 (4.84-5.16) 0.82 Dagate et al, 80 2022 3.7 (3.4-4) 0.81 Pak et al, 81 2020 6.6 (5.478) 0.73 Pan et al, 82 2020 6.11 (4.55-7.67) 0.68 Patrikar et al, 83 2020 6.93 (6.11-7.75) 0.78 Paul et al, 84 2021 6.74 (6.35-7.13) 0.81 Ping et al, 85 2021 6.48 (5.58-7.38) 0.77 Pongpirul et al, 86 2020 5.5 (4.69-6.31) 0.78 Pung et al, 87 2020 3.67 (2.87-4.46) 0.78 Dug et al, 89 2020 3.67 (2.87-4.46) 0.78 Qian et al, 99 2020 3.67 (2.87-4.46) 0.78 Qian et al, 99 2020 3.67 (2.87-4.46) 0.78 Qian et al, 99 2020 3.67 (2.87-4.46) 0.78 Sammah et al, 91 2021 4.1 (0.77-7.5) 0.41 Ren et al, 92 2020 3.3 (4.6-6) 0.79 Sammah et al, 92 2020 5.3 (4.6-6) 0.79 Sammah et al, 92 2020 7.77 (3.41-11) 0.36 Shen et al, 98 2020 7.77 (3.41-11) 0.36 Shen et al, 99 2020 7.77 (3.41-17) 0.59 Shi et al, 99 2020 7.77 (3.41-17) 0.59 Shi et al, 99 2020 7.77 (3.41-17) 0.78 Shu et al, 100 2020 7.77 (3.41-9.73) 0.59 Shi et al, 99 2020 7.77 (3.41-9.73) 0.79 Shi et al, 109 2020 7.77 (3.41-9.73) 0.79 Shi et al, 109 2020 7.77 (3.41-9.73) 0.79 Shi et al, 109 2020 7.77 (3.41-9.73) 0.7	Llaque-Quiroz et al, 75 2020	8.67 (5.76-11.58)	0.47
Ng et al, 78 2021	Mao et al, <sup>76</sup> 2020	10.3 (8.18-12.42)	0.59
Ng et al, 78 2021	Moazzami et al, <sup>77</sup> 2021	1.91 (1.24-2.59)	0.79
Nie et al, 7° 2020 5 (4.84-5.16) 0.82 Ogata et al, 80 2022 3, 7 (3.4-4) 0.81 Pane et al, 81 2020 6.6 (5.4-7.8) 0.73 Pan et al, 82 2020 6.11 (4.55-7.67) 0.68 Patrikar et al, 83 2020 6.93 (6.11-7.75) 0.78 Paul et al, 84 2021 6.74 (6.35-7.13) 0.81 Ping et al, 85 2021 6.48 (5.58-7.38) 0.77 Pongpirul et al, 85 2020 5.5 (4.69-6.31) 0.78 Pongpirul et al, 85 2020 4.33 (3.25-541) 0.75 Ogi et al, 88 2020 3.67 (2.87-4.46) 0.78 Ogi et al, 89 2020 5.67 (4.89-6.41) 0.78 Ogi et al, 89 2020 1.1.25 (10.06-12.44) 0.73 Ratovoson et al, 91 2021 4.1 (0.7-7.5) 0.41 Ren et al, 92 2020 5.3 (4.6-6) 0.79 Samrah et al, 93 2021 6.33 (5.51-7.15) 0.78 Samrha et al, 95 2020 7.77 (3.34-11) 0.36 Shen et al, 95 2020 7.77 (3.34-11) 0.36 Shen et al, 95 2020 7.75 (3.19-9.3) 0.99 Shi et al, 97 2020 6.13 (2.95-9.32) 0.44 Shi et al, 98 2020 7.75 (5.41-9.73) 0.99 Shi et al, 98 2020 7.75 (5.41-9.73) 0.99 Shi et al, 99 2021 5.33 (4.6-6.07) 0.78 Sho et al, 99 2021 5.33 (4.6-6.07) 0.78 Sho et al, 99 2020 5.17 (2.75-7.59) 0.55 Song et al, 100 2020 5.17 (2.75-7.59) 0.59 Song et al, 100 2020 5.17 (2.75-7.59) 0.55 Song et al, 100 2020 5.17 (2.75-7.59)			0.80
Ogata et al, 80 2022 3.7 (3.4-4) 0.81 Park et al, 81 2020 6.6 (5.4-7.8) 0.73 Pan et al, 82 2020 6.11 (4.55-7.67) 0.68 Partikar et al, 83 2020 6.93 (6.11-7.75) 0.78 Partikar et al, 83 2020 6.93 (6.11-7.75) 0.78 Partikar et al, 85 2021 6.48 (5.58-7.38) 0.77 Pongpirul et al, 86 2020 5.5 (4.69-6.31) 0.78 Pung et al, 87 2020 3.67 (2.87-4.46) 0.78 Qian et al, 89 2020 3.67 (2.87-4.46) 0.78 Samrah et al, 81 2021 4.1 (0.7-7.5) 0.41 Ren et al, 82 2020 3.67 (2.87-4.46) 0.78 Samrah et al, 83 2020 3.3 (4.6-6) 0.79 Samrah et al, 83 2021 4.1 (0.7-7.5) 0.41 Ren et al, 83 2021 5.3 (4.6-6) 0.79 Samrah et al, 83 2021 6.33 (5.51-7.15) 0.78 Samrah et al, 83 2020 7.77 (3.34-11) 0.36 Shen et al, 85 2020 7.77 (3.34-11) 0.36 Shen et al, 85 2020 7.77 (3.34-11) 0.36 Shen et al, 85 2020 7.77 (3.34-11) 0.36 Shen et al, 80 2020 7.77 (3.34-11) 0.36 Shen et al, 80 2020 7.77 (3.61-5.94) 0.73 Shi et al, 80 2020 7.77 (3.61-5.94) 0.79 Shi et al, 100 2020 7.77 (3.61-5.94) 0.79 Shi et		5 (4.84-5.16)	0.82
Pak et al, <sup>83</sup> 2020 6.6 (5.4-7.8) 0.73  Pan et al, <sup>82</sup> 2020 6.11 (4.55-7.67) 0.68  Patrikar et al, <sup>83</sup> 2020 6.93 (6.11-7.75) 0.78  Paul et al, <sup>84</sup> 2021 6.74 (6.35-7.13) 0.81  Ping et al, <sup>85</sup> 2021 6.48 (5.58-7.38) 0.77  Pongpirul et al, <sup>86</sup> 2020 5.5 (4.69-6.31) 0.78  Pung et al, <sup>87</sup> 2020 4.33 (3.25-5.41) 0.75  Qi et al, <sup>89</sup> 2020 3.67 (2.87-4.46) 0.78  Qian et al, <sup>89</sup> 2020 5.67 (4.89-6.44) 0.78  Qian et al, <sup>89</sup> 2020 5.67 (4.89-6.44) 0.73  Qiu et al, <sup>90</sup> 2020 1.125 (10.06-12.44) 0.73  Ren et al, <sup>92</sup> 2020 5.3 (4.6-6) 0.79  Samrah et al, <sup>93</sup> 2021 6.33 (5.51-7.15) 0.78  Sanche et al, <sup>94</sup> 2020 7.77 (3.34-11) 0.36  Shen et al, <sup>95</sup> 2020 7.77 (3.34-11) 0.78  Shi et al, <sup>95</sup> 2020 7.77 (3.51-5.94) 0.73  Shi et al, <sup>96</sup> 2020 7.77 (3.61-5.94) 0.73  Shi et al, <sup>97</sup> 2020 7.77 (3.61-5.94) 0.73  Shi et al, <sup>98</sup> 2021 7.77 (3.61-5.94) 0.73  Shi et al, <sup>108</sup> 2020 7.77 (3.61-5.94) 0.79  Song et al, <sup>109</sup> 2020 7.77 (3.61-5.94) 0.79  Song et al, <sup>109</sup> 2020 7.77 (3.73-77) 0.51  Sugano et al, <sup>109</sup> 2020 7.78 (4.6-11.1) 0.43  Sun et al, <sup>110</sup> 2020 7.78 (4.6-11.1) 0.43  Sun et al, <sup>110</sup> 2020 7.79 (4.6-11.1) 0.43  Wang et al, <sup>115</sup> 2020 7.99 (4.6-11.1) 0.43  Wang et al, <sup>115</sup> 2020 7.99 (4.6-11.1) 0.43  Wang et al, <sup>115</sup> 2020 7.99 (4.6-11.1) 0.43			
Pan et al, 82 2020 6.11 (4.55-7.67) 0.68 Patrikar et al, 83 2020 6.93 (6.11-7.75) 0.78 Paul et al, 84 2021 6.74 (6.35-7.13) 0.81 Ping et al, 85 2021 6.48 (5.58-7.38) 0.77 Pengpirul et al, 86 2020 5.5 (4.69-6.31) 0.78 Pung et al, 87 2020 4.33 (3.25-5.41) 0.75 Qi et al, 89 2020 3.67 (2.87-4.46) 0.78 Qiu et al, 89 2020 5.67 (4.89-6.44) 0.78 Qiu et al, 89 2020 11.25 (10.06-12.44) 0.73 Ratovoson et al, 91 2021 4.1 (0.7-7.5) 0.41 Ren et al, 92 2020 5.3 (4.6-6) 0.79 Samrah et al, 93 2021 6.33 (5.51-7.15) 0.78 Sanche et al, 94 2020 7.77 (3.34-11) 0.36 Shen et al, 95 2020 7.77 (3.41-9.73) 0.59 Shi et al, 96 2020 7.77 (3.61-5.94) 0.73 Shi et al, 99 2021 5.30 (4.6-6.07) 0.78 Shi et al, 90 2020 6.13 (2.95-9.32) 0.44 Shi et al, 90 2020 6.13 (2.95-9.32) 0.45 Shi et al, 90 2020 6.14 (3.6-6.07) 0.78 Shi et al, 90 2020 6.17 (2.75-7.59) 0.55 Song et al, 100 2020 6.18 (3.6-6.07) 0.78 Shi et al, 100 2020 6.19 (2.75-7.59) 0.55 Song et al, 100 2020 6.19 (2.75-7.59) 0.79 Song et			
Patrikar et al, <sup>83</sup> 2020 6.93 (6.11-7.75) 0.78 Paul et al, <sup>84</sup> 2021 6.74 (6.35-7.13) 0.81 Ping et al, <sup>85</sup> 2021 6.48 (5.58-7.38) 0.77 Pongpirul et al, <sup>86</sup> 2020 5.5 (4.69-6.31) 0.78 Ung et al, <sup>87</sup> 2020 4.33 (3.25-5.41) 0.75 Qi et al, <sup>88</sup> 2020 3.67 (2.87-4.46) 0.78 Qian et al, <sup>89</sup> 2020 5.67 (4.89-6.44) 0.78 Qian et al, <sup>89</sup> 2020 11.25 (10.06-12.44) 0.73 Ratovoson et al, <sup>91</sup> 2021 4.1 (0.77-5) 0.41 Ren et al, <sup>92</sup> 2020 5.3 (4.6-6) 0.79 Samrah et al, <sup>93</sup> 2021 6.33 (5.51-7.15) 0.78 Samrah et al, <sup>93</sup> 2020 7.17 (3.34-11) 0.36 Shen et al, <sup>94</sup> 2020 7.75 (5.41-9.73) 0.59 Shi et al, <sup>95</sup> 2020 7.75 (5.41-9.73) 0.59 Shi et al, <sup>95</sup> 2020 7.75 (5.41-9.73) 0.59 Shi et al, <sup>95</sup> 2020 7.77 (3.34-11) 0.36 Shen et al, <sup>95</sup> 2020 7.77 (3.34-11) 0.36 Shen et al, <sup>95</sup> 2020 7.77 (5.41-9.73) 0.59 Shi et al, <sup>97</sup> 2020 6.13 (2.95-9.32) 0.44 Shi et al, <sup>99</sup> 2020 7.75 (5.41-9.73) 0.59 Shi et al, <sup>99</sup> 2020 7.75 (5.41-9.73) 0.73 Shi et al, <sup>190</sup> 2020 7.75 (5.41-9.73) 0.75 Song et al, <sup>105</sup> 2020 7.75 (5.41-9.73) 0.75 Song et al, <sup>105</sup> 2020 7.75 (5.41-9.73) 0.75 Song et al, <sup>105</sup> 2020 7.75 (5.41-9.73) 0.79 Song et al, <sup>105</sup> 2020 7.75 (5.41-9.73) 0.79 Song et al, <sup>105</sup> 2020 7.75 (5.41-9.73) 0.79 Song et al, <sup>105</sup> 2020 7.75 (6.73-9.73) 0.69 Song et al, <sup>105</sup> 2020 7.75 (6.73-9.73) 0.69 Song et al, <sup>105</sup> 2020 7.75 (6.73-9.73) 0.69 Song et al, <sup>105</sup> 2020 7.75 (6.73-9.73) 0.76 Song et al, <sup>105</sup> 2020 7.75 (6.73-9.73) 0.71 Son et al, <sup>105</sup> 2020 7.75 (6.73-9.77) 0.71 Son et al, <sup>105</sup> 2020 7.75 (6.73-9.77) 0.71 Son et al, <sup>105</sup> 2020 7.75 (6.73-9.77) 0.71 Tanaka et al, <sup>111</sup> 2020 7.75 (6.76.07-7.33) 0.79 Tindale et al, <sup>115</sup> 2020 7.79 (6.6-11.1) 0.43 Wang et al, <sup>115</sup> 2020 7.79 (6.6-11.1) 0.43 Wang et al, <sup>115</sup> 2020 7.79 (6.6-11.1) 0.43 Wang et al, <sup>115</sup> 2020 7.79 (6.6-11.1) 0.43		· ,	
Paul et al, 84 2021 6.74 (6.35-7.13) 0.81  Ping et al, 85 2021 6.48 (5.58-7.38) 0.77  Pongpirul et al, 86 2020 5.5 (4.69-6.31) 0.78  Pung et al, 87 2020 4.33 (3.25-5.41) 0.78  Qian et al, 89 2020 3.67 (2.87-4.46) 0.78  Qian et al, 90 2020 11.25 (10.06-12.44) 0.73  Ratovoson et al, 91 2021 4.1 (0.7-7.5) 0.41  Ren et al, 92 2020 5.3 (4.6-6) 0.79  Samrah et al, 93 2021 6.33 (5.51-7.15) 0.78  Samrah et al, 93 2020 7.17 (3.34-11) 0.36  Shen et al, 96 2020 7.17 (3.34-11) 0.36  Shen et al, 96 2020 7.57 (5.41-9.73) 0.59  Shi et al, 97 2020 6.13 (2.95-9.32) 0.44  Shiet al, 98 2020 7.77 (3.61-5.94) 0.73  Shiet et al, 98 2020 7.77 (3.61-5.94) 0.73  Shiet et al, 99 2021 5.33 (4.6-60) 0.79  Song et al, 101 2020 5.17 (2.75-7.59) 0.55  Song et al, 102 2020 5.01 (4.31-5.69) 0.79  Song et al, 102 2020 5.01 (4.31-5.69) 0.79  Song et al, 103 2020 5.01 (4.31-5.69) 0.79  Song et al, 104 2021 5.4 (4.42-6.38) 0.76  Sugano et al, 105 2020 5.9 (3.51-6.47) 0.69  Sun et al, 106 2021 5.33 (1.93-9.47) 0.71  Sun et al, 108 2020 5.4 (4.88-5.92) 0.80  Sun et al, 109 2021 5.33 (1.93-8.73) 0.41  Sun et al, 110 2020 5.54 (5.15-5.9) 0.81  Sun et al, 110 2020 5.54 (5.15-5.9) 0.81  Tanaka et al, 111 2020 5.54 (5.18-5.9) 0.81  Tanaka et al, 111 2020 7.9 (4.6-11.1) 0.43  Wang et al, 115 2020 7.9 (4.6-11.1) 0.43  Wang et al, 115 2020 7.9 (4.6-11.1) 0.43  Wang et al, 115 2020 7.9 (4.6-11.1) 0.43			
Pring et al, 85 2021 6.48 (5.58-7.38) 0.77 Prongpirul et al, 86 2020 5.5 (4.69-6.31) 0.78 Prongpirul et al, 86 2020 5.5 (4.69-6.31) 0.78 Pring et al, 87 2020 4.33 (3.25-5.41) 0.75 Qi et al, 88 2020 3.67 (2.87-4.46) 0.78 Qian et al, 89 2020 5.67 (4.89-6.44) 0.78 Qian et al, 90 2020 11.25 (10.06-12.44) 0.73 Ratovoson et al, 91 2021 4.1 (0.77-5) 0.41 Ren et al, 92 2020 5.3 (4.6-6) 0.79 Samrah et al, 93 2021 6.33 (5.51-7.15) 0.78 Sanche et al, 94 2020 4.2 (3.5-5.1) 0.78 Shen et al, 95 2020 7.17 (3.34-11) 0.36 Shen et al, 95 2020 7.57 (5.41-9.73) 0.59 Shie et al, 96 2020 7.57 (5.41-9.73) 0.59 Shie et al, 98 2020 7.75 (5.41-9.73) 0.59 Shie et al, 99 2021 5.33 (4.6-6.07) 0.78 Shie et al, 99 2021 5.33 (4.6-6.07) 0.78 Shu et al, 100 2020 5.17 (2.75-7.59) 0.55 Song et al, 101 2020 5.01 (4.31-5.69) 0.79 Song et al, 102 2020 8.23 (6.73-9.73) 0.69 Song et al, 103 2020 5.01 (4.31-5.69) 0.79 Song et al, 104 2021 5.4 (4.42-6.38) 0.76 Sugano et al, 105 2020 5.4 (4.42-6.38) 0.76 Sugano et al, 105 2020 5.4 (4.88-5.92) 0.80 Sun et al, 108 2020 5.4 (4.88-5.92) 0.80 Sun et al, 108 2020 5.54 (5.85-8.45) 0.62 Sun et al, 109 2021 5.33 (1.93-8.73) 0.41 Sun et al, 110 2020 5.54 (5.85-8.45) 0.62 Sun et al, 110 2020 5.54 (5.85-8.9) 0.81 Tanaka et al, 111 2020 5.54 (5.85-9) 0.81 Tanaka et al, 111 2020 6.76 (6.07-7.33) 0.79 Tindale et al, 111 2020 6.76 (6.07-7.33) 0.79 Tindale et al, 115 2020 7.9 (4.6-11.1) 0.43 Wang et al, 115 2020 7.9 (4.6-11.1) 0.43			
Prongpirul et al, \$6 2020 5.5 (4.69-6.31) 0.78 Pung et al, \$7 2020 4.33 (3.25-5.41) 0.75 Qi et al, \$8 2020 3.67 (2.87-4.46) 0.78 Qian et al, \$9 2020 5.67 (4.89-6.44) 0.78 Qiu et al, \$9 2020 11.25 (10.06-12.44) 0.73 Ratovoson et al, \$1 2021 4.1 (0.7-7.5) 0.41 Ren et al, \$2 2020 5.3 (4.6-6) 0.79 Samrah et al, \$1 2021 5.3 (4.6-6) 0.79 Samrah et al, \$1 2020 7.71 (3.34-11) 0.36 Shen et al, \$1 2020 7.71 (3.34-11) 0.36 Shen et al, \$1 2020 7.72 (5.41-9.73) 0.59 Shi et al, \$1 2020 7.73 (3.4-13) 0.73 Shi et al, \$1 2020 7.73 (3.4-6.07) 0.78 Shi et al, \$1 2020 7.74 (3.61-5.94) 0.73 Shi et al, \$1 2020 7.75 (5.41-9.73) 0.59 Shi et al, \$1 2020 7.75 (5.41-9.73) 0.59 Shi et al, \$1 2020 7.75 (5.41-9.73) 0.59 Shi et al, \$1 2020 7.75 (5.41-9.73) 0.78 Short et al, \$1 2020 7.75 (5.41-9.73) 0.73 Shi et al, \$1 2020 7.75 (5.41-9.73) 0.73 Shi et al, \$1 2020 7.75 (5.41-9.73) 0.73 Shi et al, \$1 2020 7.75 (5.41-9.73) 0.75 Short et al, \$1 2020			
Pung et al, <sup>87</sup> 2020 4.33 (3.25-5.41) 0.75 Qi et al, <sup>88</sup> 2020 3.67 (2.87-4.46) 0.78 Qian et al, <sup>89</sup> 2020 5.67 (4.89-6.44) 0.78 Qiu et al, <sup>90</sup> 2020 11.25 (10.06-12.44) 0.73 Ratovoson et al, <sup>91</sup> 2021 4.1 (0.7-7.5) 0.41 Ren et al, <sup>92</sup> 2020 5.3 (4.6-6) 0.79 Samrah et al, <sup>93</sup> 2021 6.33 (5.51-7.15) 0.78 Sanche et al, <sup>94</sup> 2020 7.17 (3.34-11) 0.36 Shen et al, <sup>95</sup> 2020 7.17 (3.34-11) 0.36 Shen et al, <sup>95</sup> 2020 7.57 (5.41-9.73) 0.59 Shi et al, <sup>95</sup> 2020 7.57 (5.41-9.73) 0.73 Shi et al, <sup>95</sup> 2020 7.70 (6.13 (2.95-9.32) 0.44 Shi et al, <sup>95</sup> 2020 7.70 (6.13 (2.95-9.32) 0.44 Shi et al, <sup>95</sup> 2020 7.70 (6.13 (2.95-9.32) 0.44 Shi et al, <sup>95</sup> 2020 7.70 (6.13 (2.95-9.32) 0.70 Shi et al, <sup>105</sup> 2020 7.70 (7.75-7.59) 0.55 Song et al, <sup>105</sup> 2020 7.70 (7.75-7.59) 0.75 Song et al, <sup>105</sup> 2020 7.70 (7.75-7.59) 0.70 Song et al, <sup>105</sup> 2020 7.70 (7.75-7.59)		· /	
Qi et al, 88 2020       3.67 (2.87-4.46)       0.78         Qian et al, 99 2020       5.67 (4.89-6.44)       0.78         Qiu et al, 90 2020       11.25 (10.06-12.44)       0.73         Ratovoson et al, 91 2021       4.1 (0.7-7.5)       0.41         Ren et al, 92 2020       5.3 (4.6-6)       0.79         Samrah et al, 93 2021       6.33 (5.51-7.15)       0.78         Sanche et al, 94 2020       4.2 (3.5-5.1)       0.78         Shen et al, 95 2020       7.17 (3.34-11)       0.36         Shen et al, 96 2020       7.57 (5.41-9.73)       0.59         Shi et al, 97 2020       6.13 (2.95-9.32)       0.44         Shi et al, 98 2020       4.77 (3.61-5.94)       0.73         Shi et al, 99 2021       5.33 (4.6-6.07)       0.78         Shu et al, 100 2020       5.17 (2.75-7.59)       0.55         Song et al, 101 2020       5.01 (4.31-5.69)       0.79         Song et al, 102 2020       8.23 (6.73-9.73)       0.69         Song et al, 102 2020       8.23 (6.73-9.73)       0.69         Sugano et al, 104 2021       5.4 (4.42-6.38)       0.76         Sun et al, 105 2020       6.8 (5.57-8.03)       0.73         Sun et al, 105 2020       8.1 (6.73-9.47)       0.71         Sun et			
Qian et al, <sup>90</sup> 2020       5.67 (4.89-6.44)       0.78         Qiu et al, <sup>90</sup> 2020       11.25 (10.06-12.44)       0.73         Ratovoson et al, <sup>91</sup> 2021       4.1 (0.7-7.5)       0.41         Ren et al, <sup>92</sup> 2020       5.3 (4.6-6)       0.79         Samrah et al, <sup>93</sup> 2021       6.33 (5.51-7.15)       0.78         Sanche et al, <sup>94</sup> 2020       4.2 (3.5-5.1)       0.78         Shen et al, <sup>95</sup> 2020       7.17 (3.34-11)       0.36         Shen et al, <sup>96</sup> 2020       7.57 (5.41-9.73)       0.59         Shi et al, <sup>97</sup> 2020       6.13 (2.95-9.32)       0.44         Shi et al, <sup>97</sup> 2020       4.77 (3.61-5.94)       0.73         Shi et al, <sup>98</sup> 2021       5.33 (4.6-6.07)       0.78         Shu et al, <sup>100</sup> 2020       5.17 (2.75-7.59)       0.55         Song et al, <sup>102</sup> 2020       8.23 (6.73-9.73)       0.69         Song et al, <sup>102</sup> 2020       8.23 (6.73-9.73)       0.69         Sue et al, <sup>104</sup> 2021       5.4 (4.42-6.38)       0.76         Sugano et al, <sup>105</sup> 2020       6.8 (5.57-8.03)       0.73         Sun et al, <sup>105</sup> 2020       8.1 (6.73-9.47)       0.71         Sun et al, <sup>105</sup> 2020       8.1 (6.73-9.47)       0.76         Sun et al, <sup>105</sup> 2020       8.1 (6.73-9.47)       0.71			
Qiu et al, 90 2020 11.25 (10.06-12.44) 0.73 Ratovoson et al, 91 2021 4.1 (0.7-7.5) 0.41 Ren et al, 92 2020 5.3 (4.6-6) 0.79 Samrah et al, 93 2021 6.33 (5.51-7.15) 0.78 Sanche et al, 94 2020 4.2 (3.5-5.1) 0.78 Shen et al, 95 2020 7.17 (3.34-11) 0.36 Shen et al, 96 2020 7.57 (5.41-9.73) 0.59 Shi et al, 97 2020 6.13 (2.95-9.32) 0.44 Shi et al, 98 2020 4.77 (3.61-5.94) 0.73 Shiel et al, 99 2021 5.33 (4.6-6.07) 0.78 Shong et al, 100 2020 5.17 (2.75-7.59) 0.55 Song et al, 101 2020 5.01 (4.31-5.69) 0.79 Song et al, 102 2020 8.23 (6.73-9.73) 0.69 Song et al, 103 2020 10 (8.54-11.46) 0.69 Su et al, 104 2021 5.4 (4.42-6.38) 0.76 Sugano et al, 105 2020 6.8 (5.57-8.03) 0.73 Sun et al, 105 2020 5.4 (4.88-5.92) 0.80 Sun et al, 105 2020 5.4 (4.88-5.92) 0.80 Sun et al, 109 2021 5.33 (1.93-8.73) 0.41 Sun et al, 109 2021 5.34 (5.73-9.47) 0.71 Sun et al, 104 2021 5.54 (5.18-5.9) 0.81 Tanaka et al, 112 2020 5.54 (5.18-5.9) 0.81 Tanaka et al, 112 2020 6.7 (6.07-7.33) 0.79 Tinadae et al, 115 2020 8.68 (7.72-9.7) 0.76 Viego et al, 116 2020 7.9 (4.6-11.1) 0.43 Wang et al, 115 2020 7.9 (4.6-11.1) 0.43			
Ratovoson et al, <sup>91</sup> 2021			
Ren et al, <sup>92</sup> 2020 5.3 (4.6-6) 0.79  Samrah et al, <sup>93</sup> 2021 6.33 (5.51-7.15) 0.78  Sanche et al, <sup>94</sup> 2020 4.2 (3.5-5.1) 0.78  Shen et al, <sup>95</sup> 2020 7.17 (3.34-11) 0.36  Shen et al, <sup>95</sup> 2020 7.57 (5.41-9.73) 0.59  Shi et al, <sup>95</sup> 2020 6.13 (2.95-9.32) 0.44  Shi et al, <sup>98</sup> 2020 4.77 (3.61-5.94) 0.73  Shiel et al, <sup>99</sup> 2021 5.33 (4.6-6.07) 0.78  Shu et al, <sup>100</sup> 2020 5.17 (2.75-7.59) 0.55  Song et al, <sup>101</sup> 2020 5.01 (4.31-5.69) 0.79  Song et al, <sup>102</sup> 2020 8.23 (6.73-9.73) 0.69  Song et al, <sup>103</sup> 2020 10 (8.54-11.46) 0.69  Su et al, <sup>104</sup> 2021 5.4 (4.42-6.38) 0.76  Sugano et al, <sup>105</sup> 2020 6.8 (5.57-8.03) 0.73  Sun et al, <sup>106</sup> 2021 6.5 (4.55-8.45) 0.62  Sun et al, <sup>107</sup> 2020 5.4 (4.88-5.92) 0.80  Sun et al, <sup>108</sup> 2020 13 (9.53-16.47) 0.71  Sun et al, <sup>109</sup> 2021 5.33 (1.93-8.73) 0.41  Sun et al, <sup>110</sup> 2020 13 (9.53-16.47) 0.71  Sun et al, <sup>110</sup> 2020 5.4 (5.18-5.9) 0.81  Tanaka et al, <sup>111</sup> 2020 5.54 (5.18-5.9) 0.81  Tanaka et al, <sup>112</sup> 2020 8.87 (2.56-3.17) 0.81  Tanaka et al, <sup>112</sup> 2020 8.68 (7.72-9.7) 0.76  Viego et al, <sup>115</sup> 2020 7.9 (4.6-11.1) 0.43  Wang et al, <sup>115</sup> 2020 7.9 (4.6-11.1) 0.43  Wang et al, <sup>115</sup> 2020 7.9 (4.6-11.1) 0.43			
Samrah et al, <sup>93</sup> 2021 6.33 (5.51-7.15) 0.78 Sanche et al, <sup>94</sup> 2020 4.2 (3.5-5.1) 0.78 Shen et al, <sup>95</sup> 2020 7.17 (3.34-11) 0.36 Shen et al, <sup>95</sup> 2020 7.57 (5.41-9.73) 0.59 Shi et al, <sup>95</sup> 2020 6.13 (2.95-9.32) 0.44 Shi et al, <sup>98</sup> 2020 4.77 (3.61-5.94) 0.73 Shiel et al, <sup>99</sup> 2021 5.33 (4.6-6.07) 0.78 Shu et al, <sup>100</sup> 2020 5.17 (2.75-7.59) 0.55 Song et al, <sup>101</sup> 2020 5.01 (4.31-5.69) 0.79 Song et al, <sup>102</sup> 2020 8.23 (6.73-9.73) 0.69 Song et al, <sup>103</sup> 2020 10 (8.54-11.46) 0.69 Su et al, <sup>104</sup> 2021 5.4 (4.42-6.38) 0.76 Sugano et al, <sup>105</sup> 2020 6.8 (5.57-8.03) 0.73 Sun et al, <sup>106</sup> 2021 6.5 (4.55-8.45) 0.62 Sun et al, <sup>107</sup> 2020 5.4 (4.88-5.92) 0.80 Sun et al, <sup>108</sup> 2020 13 (9.53-16.47) 0.71 Sun et al, <sup>109</sup> 2021 5.33 (1.93-8.73) 0.41 Sun et al, <sup>110</sup> 2020 5.54 (5.18-5.9) 0.81 Tanaka et al, <sup>111</sup> 2020 5.54 (5.18-5.9) 0.81 Tanaka et al, <sup>112</sup> 2022 2.87 (2.56-3.17) 0.81 The SARS-CoV-2 variant with line, <sup>113</sup> 2021 4.5 (1.83-7.17) 0.51 Tian et al, <sup>114</sup> 2020 6.7 (6.07-7.33) 0.79 Tindale et al, <sup>115</sup> 2020 7.9 (4.6-11.1) 0.43 Wang et al, <sup>115</sup> 2020 7.9 (4.6-11.1) 0.43			
Sanche et al, 94 2020			
Shen et al, <sup>95</sup> 2020 7.17 (3.34-11) 0.36 Shen et al, <sup>96</sup> 2020 7.57 (5.41-9.73) 0.59 Shi et al, <sup>97</sup> 2020 6.13 (2.95-9.32) 0.44 Shi et al, <sup>98</sup> 2020 4.77 (3.61-5.94) 0.73 Shiel et al, <sup>99</sup> 2021 5.33 (4.6-6.07) 0.78 Shu et al, <sup>100</sup> 2020 5.17 (2.75-7.59) 0.55 Song et al, <sup>101</sup> 2020 5.01 (4.31-5.69) 0.79 Song et al, <sup>102</sup> 2020 8.23 (6.73-9.73) 0.69 Song et al, <sup>103</sup> 2020 10 (8.54-11.46) 0.69 Su et al, <sup>104</sup> 2021 5.4 (4.42-6.38) 0.76 Sugano et al, <sup>105</sup> 2020 6.8 (5.57-8.03) 0.73 Sun et al, <sup>106</sup> 2021 6.5 (4.55-8.45) 0.62 Sun et al, <sup>107</sup> 2020 5.4 (4.88-5.92) 0.80 Sun et al, <sup>108</sup> 2020 8.1 (6.73-9.47) 0.71 Sun et al, <sup>109</sup> 2021 5.33 (1.93-8.73) 0.41 Sun et al, <sup>110</sup> 2020 13 (9.53-16.47) 0.71 Sun et al, <sup>110</sup> 2020 5.54 (5.18-5.9) 0.81 Tanaka et al, <sup>111</sup> 2020 5.54 (5.18-5.9) 0.81 Tanaka et al, <sup>112</sup> 2022 2.87 (2.56-3.17) 0.81 The SARS-COV-2 variant with line, <sup>113</sup> 2021 4.5 (1.83-7.17) 0.51 Tian et al, <sup>114</sup> 2020 6.7 (6.07-7.33) 0.79 Tindale et al, <sup>115</sup> 2020 7.9 (4.6-11.1) 0.43 Wang et al, <sup>115</sup> 2020 7.9 (4.6-11.1) 0.43 Wang et al, <sup>115</sup> 2020 10.64 (8.08-13.2) 0.52			
Shen et al, <sup>96</sup> 2020 7.57 (5.41-9.73) 0.59 Shi et al, <sup>97</sup> 2020 6.13 (2.95-9.32) 0.44 Shi et al, <sup>98</sup> 2020 4.77 (3.61-5.94) 0.73 Shiel et al, <sup>99</sup> 2021 5.33 (4.6-6.07) 0.78 Shu et al, <sup>100</sup> 2020 5.17 (2.75-7.59) 0.55 Song et al, <sup>101</sup> 2020 5.01 (4.31-5.69) 0.79 Song et al, <sup>102</sup> 2020 8.23 (6.73-9.73) 0.69 Song et al, <sup>103</sup> 2020 10 (8.54-11.46) 0.69 Su et al, <sup>104</sup> 2021 5.4 (4.42-6.38) 0.76 Sugano et al, <sup>105</sup> 2020 6.8 (5.57-8.03) 0.73 Sun et al, <sup>106</sup> 2021 6.5 (4.55-8.45) 0.62 Sun et al, <sup>107</sup> 2020 5.4 (4.88-5.92) 0.80 Sun et al, <sup>108</sup> 2020 8.1 (6.73-9.47) 0.71 Sun et al, <sup>109</sup> 2021 5.33 (1.93-8.73) 0.41 Sun et al, <sup>110</sup> 2020 13 (9.53-16.47) 0.40 Tan et al, <sup>111</sup> 2020 5.54 (5.18-5.9) 0.81 Tanaka et al, <sup>112</sup> 2022 2.87 (2.56-3.17) 0.81 The SARS-CoV-2 variant with line, <sup>113</sup> 2021 4.5 (1.83-7.17) 0.51 Tiian et al, <sup>114</sup> 2020 6.7 (6.07-7.33) 0.79 Tindale et al, <sup>115</sup> 2020 7.9 (4.6-11.1) 0.43 Wang et al, <sup>158</sup> 2021 10.64 (8.08-13.2) 0.52			
Shi et al, <sup>97</sup> 2020			
Shi et al, <sup>98</sup> 2020			
Shiel et al, 199 2021       5.33 (4.6-6.07)       0.78         Shu et al, 100 2020       5.17 (2.75-7.59)       0.55         Song et al, 101 2020       5.01 (4.31-5.69)       0.79         Song et al, 102 2020       8.23 (6.73-9.73)       0.69         Song et al, 103 2020       10 (8.54-11.46)       0.69         Su et al, 104 2021       5.4 (4.42-6.38)       0.76         Sugano et al, 105 2020       6.8 (5.57-8.03)       0.73         Sun et al, 106 2021       6.5 (4.55-8.45)       0.62         Sun et al, 107 2020       5.4 (4.88-5.92)       0.80         Sun et al, 109 2021       5.33 (1.93-8.73)       0.41         Sun et al, 109 2021       5.33 (1.93-8.73)       0.41         Sun et al, 110 2020       13 (9.53-16.47)       0.40         Tan et al, 111 2020       5.54 (5.18-5.9)       0.81         Tanaka et al, 112 2022       2.87 (2.56-3.17)       0.81         Tina et al, 114 2020       6.7 (6.07-7.33)       0.79         Tindale et al, 115 2020       8.68 (7.72-9.7)       0.76         Viego et al, 116 2020       7.9 (4.6-11.1)       0.43         Wang et al, 158 2021       10.64 (8.08-13.2)       0.52			
Shu et al, 100 2020 5.17 (2.75-7.59) 0.55 Song et al, 101 2020 5.01 (4.31-5.69) 0.79 Song et al, 102 2020 8.23 (6.73-9.73) 0.69 Song et al, 103 2020 10 (8.54-11.46) 0.69 Su et al, 104 2021 5.4 (4.42-6.38) 0.76 Sugano et al, 105 2020 6.8 (5.57-8.03) 0.73 Sun et al, 106 2021 6.5 (4.55-8.45) 0.62 Sun et al, 107 2020 5.4 (4.88-5.92) 0.80 Sun et al, 108 2020 8.1 (6.73-9.47) 0.71 Sun et al, 109 2021 5.33 (1.93-8.73) 0.41 Sun et al, 110 2020 13 (9.53-16.47) 0.40 Tan et al, 111 2020 5.54 (5.18-5.9) 0.81 Tanaka et al, 112 2022 2.87 (2.56-3.17) 0.81 The SARS-CoV-2 variant with line, 113 2021 4.5 (1.83-7.17) 0.51 Tian et al, 114 2020 6.7 (6.07-7.33) 0.79 Tindale et al, 115 2020 8.68 (7.72-9.7) 0.76 Viego et al, 116 2020 7.9 (4.6-11.1) 0.43 Wang et al, 158 2021 10.64 (8.08-13.2) 0.52			0.73
Song et al, 101 2020       5.01 (4.31-5.69)       0.79         Song et al, 102 2020       8.23 (6.73-9.73)       0.69         Song et al, 103 2020       10 (8.54-11.46)       0.69         Su et al, 104 2021       5.4 (4.42-6.38)       0.76         Sugano et al, 105 2020       6.8 (5.57-8.03)       0.73         Sun et al, 106 2021       6.5 (4.55-8.45)       0.62         Sun et al, 107 2020       5.4 (4.88-5.92)       0.80         Sun et al, 109 2021       5.33 (1.93-8.73)       0.41         Sun et al, 109 2021       5.33 (1.93-8.73)       0.41         Sun et al, 110 2020       13 (9.53-16.47)       0.40         Tan et al, 111 2020       5.54 (5.18-5.9)       0.81         Tanaka et al, 112 2022       2.87 (2.56-3.17)       0.81         The SARS-CoV-2 variant with line, 113 2021       4.5 (1.83-7.17)       0.51         Tina et al, 114 2020       6.7 (6.07-7.33)       0.79         Tindale et al, 115 2020       8.68 (7.72-9.7)       0.76         Viego et al, 116 2020       7.9 (4.6-11.1)       0.43         Wang et al, 158 2021       10.64 (8.08-13.2)       0.52			0.78
Song et al, 102 2020       8.23 (6.73-9.73)       0.69         Song et al, 103 2020       10 (8.54-11.46)       0.69         Su et al, 104 2021       5.4 (4.42-6.38)       0.76         Sugano et al, 2020       6.8 (5.57-8.03)       0.73         Sun et al, 2021       6.5 (4.55-8.45)       0.62         Sun et al, 2020       5.4 (4.88-5.92)       0.80         Sun et al, 2020       8.1 (6.73-9.47)       0.71         Sun et al, 2020       8.1 (6.73-9.47)       0.71         Sun et al, 2020       13 (9.53-16.47)       0.40         Tan et al, 2020       5.54 (5.18-5.9)       0.81         Tanaka et al, 2020       5.54 (5.18-5.9)       0.81         Tanaka et al, 2022       2.87 (2.56-3.17)       0.81         Tian et al, 2020       6.7 (6.07-7.33)       0.79         Tindale et al, 2020       6.7 (6.07-7.33)       0.79         Tindale et al, 2020       7.9 (4.6-11.1)       0.43         Wang et al, 258 2021       10.64 (8.08-13.2)       0.52		5.17 (2.75-7.59)	0.55
Song et al, <sup>103</sup> 2020 10 (8.54-11.46) 0.69 Su et al, <sup>104</sup> 2021 5.4 (4.42-6.38) 0.76 Sugano et al, <sup>105</sup> 2020 6.8 (5.57-8.03) 0.73 Sun et al, <sup>106</sup> 2021 6.5 (4.55-8.45) 0.62 Sun et al, <sup>107</sup> 2020 5.4 (4.88-5.92) 0.80 Sun et al, <sup>108</sup> 2020 8.1 (6.73-9.47) 0.71 Sun et al, <sup>109</sup> 2021 5.33 (1.93-8.73) 0.41 Sun et al, <sup>110</sup> 2020 13 (9.53-16.47) 0.40 Tan et al, <sup>111</sup> 2020 5.54 (5.18-5.9) 0.81 Tanaka et al, <sup>112</sup> 2022 2.87 (2.56-3.17) 0.81 The SARS-CoV-2 variant with line, <sup>113</sup> 2021 4.5 (1.83-7.17) 0.51 Tian et al, <sup>114</sup> 2020 6.7 (6.07-7.33) 0.79 Tindale et al, <sup>115</sup> 2020 8.68 (7.72-9.7) 0.76 Viego et al, <sup>116</sup> 2020 7.9 (4.6-11.1) 0.43 Wang et al, <sup>158</sup> 2021 10.64 (8.08-13.2) 0.52		5.01 (4.31-5.69)	0.79
Su et al, 104 2021       5.4 (4.42-6.38)       0.76         Sugano et al, 105 2020       6.8 (5.57-8.03)       0.73         Sun et al, 106 2021       6.5 (4.55-8.45)       0.62         Sun et al, 107 2020       5.4 (4.88-5.92)       0.80         Sun et al, 108 2020       8.1 (6.73-9.47)       0.71         Sun et al, 109 2021       5.33 (1.93-8.73)       0.41         Sun et al, 110 2020       13 (9.53-16.47)       0.40         Tan et al, 111 2020       5.54 (5.18-5.9)       0.81         Tanaka et al, 112 2022       2.87 (2.56-3.17)       0.81         The SARS-CoV-2 variant with line, 113 2021       4.5 (1.83-7.17)       0.51         Tian et al, 114 2020       6.7 (6.07-7.33)       0.79         Tindale et al, 115 2020       8.68 (7.72-9.7)       0.76         Viego et al, 116 2020       7.9 (4.6-11.1)       0.43         Wang et al, 158 2021       10.64 (8.08-13.2)       0.52		8.23 (6.73-9.73)	0.69
Sugano et al, <sup>105</sup> 2020 6.8 (5.57-8.03) 0.73 Sun et al, <sup>106</sup> 2021 6.5 (4.55-8.45) 0.62 Sun et al, <sup>107</sup> 2020 5.4 (4.88-5.92) 0.80 Sun et al, <sup>108</sup> 2020 8.1 (6.73-9.47) 0.71 Sun et al, <sup>109</sup> 2021 5.33 (1.93-8.73) 0.41 Sun et al, <sup>110</sup> 2020 13 (9.53-16.47) 0.40 Tan et al, <sup>111</sup> 2020 5.54 (5.18-5.9) 0.81 Tanaka et al, <sup>112</sup> 2022 2.87 (2.56-3.17) 0.81 The SARS-CoV-2 variant with line, <sup>113</sup> 2021 4.5 (1.83-7.17) 0.51 Tian et al, <sup>114</sup> 2020 6.7 (6.07-7.33) 0.79 Tindale et al, <sup>115</sup> 2020 8.68 (7.72-9.7) 0.76 Viego et al, <sup>116</sup> 2020 7.9 (4.6-11.1) 0.43 Wang et al, <sup>158</sup> 2021 10.64 (8.08-13.2) 0.52		10 (8.54-11.46)	0.69
Sun et al, <sup>106</sup> 2021 6.5 (4.55-8.45) 0.62 Sun et al, <sup>107</sup> 2020 5.4 (4.88-5.92) 0.80 Sun et al, <sup>108</sup> 2020 8.1 (6.73-9.47) 0.71 Sun et al, <sup>109</sup> 2021 5.33 (1.93-8.73) 0.41 Sun et al, <sup>110</sup> 2020 13 (9.53-16.47) 0.40 Tan et al, <sup>111</sup> 2020 5.54 (5.18-5.9) 0.81 Tanaka et al, <sup>112</sup> 2022 2.87 (2.56-3.17) 0.81 The SARS-CoV-2 variant with line, <sup>113</sup> 2021 4.5 (1.83-7.17) 0.51 Tian et al, <sup>114</sup> 2020 6.7 (6.07-7.33) 0.79 Tindale et al, <sup>115</sup> 2020 8.68 (7.72-9.7) 0.76 Viego et al, <sup>116</sup> 2020 7.9 (4.6-11.1) 0.43 Wang et al, <sup>158</sup> 2021 10.64 (8.08-13.2) 0.52	Su et al, <sup>104</sup> 2021	5.4 (4.42-6.38)	0.76
Sun et al, 107 2020       5.4 (4.88-5.92)       0.80         Sun et al, 108 2020       8.1 (6.73-9.47)       0.71         Sun et al, 109 2021       5.33 (1.93-8.73)       0.41         Sun et al, 110 2020       13 (9.53-16.47)       0.40         Tan et al, 111 2020       5.54 (5.18-5.9)       0.81         Tanaka et al, 112 2022       2.87 (2.56-3.17)       0.81         The SARS-CoV-2 variant with line, 113 2021       4.5 (1.83-7.17)       0.51         Tian et al, 114 2020       6.7 (6.07-7.33)       0.79         Tindale et al, 115 2020       8.68 (7.72-9.7)       0.76         Viego et al, 116 2020       7.9 (4.6-11.1)       0.43         Wang et al, 158 2021       10.64 (8.08-13.2)       0.52	Sugano et al, <sup>105</sup> 2020	6.8 (5.57-8.03)	0.73
Sun et al, <sup>108</sup> 2020 8.1 (6.73-9.47) 0.71 Sun et al, <sup>109</sup> 2021 5.33 (1.93-8.73) 0.41 Sun et al, <sup>110</sup> 2020 13 (9.53-16.47) 0.40 Tan et al, <sup>111</sup> 2020 5.54 (5.18-5.9) 0.81 Tanaka et al, <sup>112</sup> 2022 2.87 (2.56-3.17) 0.81 The SARS-CoV-2 variant with line, <sup>113</sup> 2021 4.5 (1.83-7.17) 0.51 Tian et al, <sup>114</sup> 2020 6.7 (6.07-7.33) 0.79 Tindale et al, <sup>115</sup> 2020 8.68 (7.72-9.7) 0.76 Viego et al, <sup>116</sup> 2020 7.9 (4.6-11.1) 0.43 Wang et al, <sup>158</sup> 2021 10.64 (8.08-13.2) 0.52	Sun et al, <sup>106</sup> 2021	6.5 (4.55-8.45)	0.62
Sun et al, 109 2021       5.33 (1.93-8.73)       0.41         Sun et al, 110 2020       13 (9.53-16.47)       0.40         Tan et al, 111 2020       5.54 (5.18-5.9)       0.81         Tanaka et al, 112 2022       2.87 (2.56-3.17)       0.81         The SARS-CoV-2 variant with line, 113 2021       4.5 (1.83-7.17)       0.51         Tian et al, 114 2020       6.7 (6.07-7.33)       0.79         Tindale et al, 115 2020       8.68 (7.72-9.7)       0.76         Viego et al, 116 2020       7.9 (4.6-11.1)       0.43         Wang et al, 158 2021       10.64 (8.08-13.2)       0.52	Sun et al, <sup>107</sup> 2020	5.4 (4.88-5.92)	0.80
Sun et al, <sup>110</sup> 2020 13 (9.53-16.47) 0.40 Tan et al, <sup>111</sup> 2020 5.54 (5.18-5.9) 0.81 Tanaka et al, <sup>112</sup> 2022 2.87 (2.56-3.17) 0.81 The SARS-CoV-2 variant with line, <sup>113</sup> 2021 4.5 (1.83-7.17) 0.51 Tian et al, <sup>114</sup> 2020 6.7 (6.07-7.33) 0.79 Tindale et al, <sup>115</sup> 2020 8.68 (7.72-9.7) 0.76 Viego et al, <sup>116</sup> 2020 7.9 (4.6-11.1) 0.43 Wang et al, <sup>158</sup> 2021 10.64 (8.08-13.2) 0.52	Sun et al, <sup>108</sup> 2020	8.1 (6.73-9.47)	0.71
Tan et al, 111 2020 5.54 (5.18-5.9) 0.81 Tanaka et al, 112 2022 2.87 (2.56-3.17) 0.81 The SARS-CoV-2 variant with line, 113 2021 4.5 (1.83-7.17) 0.51 Tian et al, 114 2020 6.7 (6.07-7.33) 0.79 Tindale et al, 115 2020 8.68 (7.72-9.7) 0.76 Viego et al, 116 2020 7.9 (4.6-11.1) 0.43 Wang et al, 158 2021 10.64 (8.08-13.2) 0.52	Sun et al, <sup>109</sup> 2021	5.33 (1.93-8.73)	0.41
Tanaka et al, <sup>112</sup> 2022 2.87 (2.56-3.17) 0.81 The SARS-CoV-2 variant with line, <sup>113</sup> 2021 4.5 (1.83-7.17) 0.51 Tian et al, <sup>114</sup> 2020 6.7 (6.07-7.33) 0.79 Tindale et al, <sup>115</sup> 2020 8.68 (7.72-9.7) 0.76 Viego et al, <sup>116</sup> 2020 7.9 (4.6-11.1) 0.43 Wang et al, <sup>158</sup> 2021 10.64 (8.08-13.2) 0.52	Sun et al, <sup>110</sup> 2020	13 (9.53-16.47)	0.40
The SARS-CoV-2 variant with line, 113 2021 4.5 (1.83-7.17) 0.51 Tian et al, 114 2020 6.7 (6.07-7.33) 0.79 Tindale et al, 115 2020 8.68 (7.72-9.7) 0.76 Viego et al, 116 2020 7.9 (4.6-11.1) 0.43 Wang et al, 158 2021 10.64 (8.08-13.2) 0.52	Tan et al, <sup>111</sup> 2020	5.54 (5.18-5.9)	0.81
Tian et al, 114 2020     6.7 (6.07-7.33)     0.79       Tindale et al, 115 2020     8.68 (7.72-9.7)     0.76       Viego et al, 116 2020     7.9 (4.6-11.1)     0.43       Wang et al, 158 2021     10.64 (8.08-13.2)     0.52	Tanaka et al, <sup>112</sup> 2022	2.87 (2.56-3.17)	0.81
Tian et al, 114 2020     6.7 (6.07-7.33)     0.79       Tindale et al, 115 2020     8.68 (7.72-9.7)     0.76       Viego et al, 116 2020     7.9 (4.6-11.1)     0.43       Wang et al, 158 2021     10.64 (8.08-13.2)     0.52	The SARS-CoV-2 variant with line, 113 2021	4.5 (1.83-7.17)	0.51
Tindale et al, 115 2020       8.68 (7.72-9.7)       0.76         Viego et al, 116 2020       7.9 (4.6-11.1)       0.43         Wang et al, 158 2021       10.64 (8.08-13.2)       0.52	Tian et al, 114 2020		0.79
Viego et al, <sup>116</sup> 2020     7.9 (4.6-11.1)     0.43       Wang et al, <sup>158</sup> 2021     10.64 (8.08-13.2)     0.52	Tindale et al, 115 2020		
Wang et al, <sup>158</sup> 2021 10.64 (8.08-13.2) 0.52	Viego et al, <sup>116</sup> 2020		
	vvang et at, 2021	10.04 (0.00-13.2)	

(continued)

Author	Mean incubation period (95% CI)	Weight
Wang et al, 117 2020	6.5 (5.86-7.14)	0.79
Wang et al, <sup>118</sup> 2020	6.3 (6-6.6)	0.81
Wang et al, 119 2020	4.5 (3-6.4)	0.66
Wang et al, <sup>120</sup> 2020	6 (5.47-6.53)	0.80
Wei et al, <sup>123</sup> 2021	8.8 (6.77-10.83)	0.61
Wei et al, <sup>122</sup> 2020	5.67 (5.14-6.19)	0.80
Won et al, <sup>124</sup> 2021	5.53 (3.98-8.09)	0.60
Wong et al, <sup>125</sup> 2020	5.5 (4.05-6.95)	0.70
Wu et al, <sup>128</sup> 2021	8.75 (7.51-9.99)	0.72
Wu et al, <sup>127</sup> 2020	7 (4.9-9.1)	0.60
Wu et al, <sup>126</sup> 2020	7 (5.78-8.22)	0.73
Wu et al, <sup>129</sup> 2020	6.05 (4.87-7.23)	0.73
Xiao et al, <sup>131</sup> 2020	7.18 (5.84-8.52)	0.71
Xiao et al, <sup>133</sup> 2021	8.58 (7-9)	0.76
Xiao et al, <sup>132</sup> 2020	8.98 (7.98-9.9)	0.76
Xiao et al, <sup>130</sup> 2020	9.25 (8.78-9.72)	0.81
Xie et al, <sup>134</sup> 2020	18.87 (9.01-28.73)	0.09
Xin et al, <sup>135</sup> 2020	6.9 (6.3-7.5)	0.80
Xu et al, <sup>136</sup> 2020	11.67 (9.87-13.47)	0.64
Xu et al, <sup>137</sup> 2020	4 (3.6-4.4)	0.81
Yang et al, <sup>138</sup> 2020	8.75 (8.39-9.11)	0.81
Yang et al, <sup>139</sup> 2021	6.67 (5.64-7.7)	0.75
Yang et al, <sup>140</sup> 2020	4 (1.33-6.67)	0.51
You et al, <sup>141</sup> 2020	8 (7.28-8.72)	0.79
Yu et al, <sup>143</sup> 2022	16.6 (16.22-16.98)	0.81
Yu et al, <sup>142</sup> 2020	6.8 (6.23-7.37)	0.80
Zhang et al, <sup>146</sup> 2021	4.3 (2.73-5.87)	0.68
Zhang et al, <sup>144</sup> 2020	5.2 (1.8-12.4)	0.24
Zhang et al, <sup>145</sup> 2020	6.75 (4.27-9.23)	0.54
Zhang et al, <sup>147</sup> 2021	4.67 (3.92-5.41)	0.78
Zhang et al, <sup>148</sup> 2021	6.1 (5.73-6.47)	0.81
Zhao et al, <sup>151</sup> 2021	6.8 (6.2-7.5)	0.79
Zhao et al, <sup>152</sup> 2020	7 (5.43-8.57)	0.68
Zhao et al, <sup>153</sup> 2021	6.5 (5.6-7.4)	0.77
Zhao et al, <sup>150</sup> 2021	4 (3.52-4.48)	0.80
Zhao et al, <sup>149</sup> 2020	6.67 (4.86-8.48)	0.64
Zhong et al, <sup>154</sup> 2020	6.85 (5.74-7.96)	0.74
Zhu et al, <sup>156</sup> 2021	3.33 (2.81-3.85)	0.80
Zhu et al, <sup>155</sup> 2020	7.27 (6.76-7.78)	0.80
Zhu et al, <sup>157</sup> 2021	11.6 (10.6-12.7)	0.75
Overalla	6.57 (6.26-6.88)	100.00

a  $I^2 = 98.8\%$ ; P < .001.

an incubation period of 5.00 days (95% CI, 4.94-5.06) was reported in a single study.  $^{35}$  One study from France reported the incubation period of 4.50 days (95% CI, 1.83-7.17 days) for COVID-19 caused by the Beta variant.  $^{113}$  Another study reported the incubation period of COVID-19 caused by the Beta/Gamma variant was 5.10 days (95% CI, 4.87-5.33 days).  $^{35}$ 

A total of 6 studies reported the incubation period of COVID-19 caused by the Delta variant, including 2 from China,  $^{63,152}$  2 from Japan,  $^{80,112}$  1 from France,  $^{35}$  and 1 from Spain,  $^{26}$  with a pooled incubation period of 4.41 days (95% CI, 3.76-5.05 days) (**Figure 2**). Five studies reported the incubation period of COVID-19 caused by the Omicron variant—1 each from Norway,  $^{20}$  Spain,  $^{26}$  Japan,  $^{112}$  the Netherlands,  $^{17}$  and South Korea  $^{59}$ —with a pooled incubation period of 3.42 days (95%

CI, 2.88-3.96 days) (Figure 2). With the evolution of the mutant strains, the incubation period of COVID-19 appeared to decrease gradually from the Alpha variant to Omicron variant, but there was no significant difference between the groups.

#### **Subgroup Analysis**

A total of 8 studies reported the incubation period of COVID-19 among older patients (ie, aged 60 years or more). <sup>24,37,38,44,54,68,105,111</sup> The pooled mean incubation period for these studies was 7.43 days (95% CI, 5.75-9.11 days), which was slightly higher than the pooled incubation period of the general population (6.65 days; 95% CI, 6.34-6.96 days), but the difference was not significant (**Figure 3**).

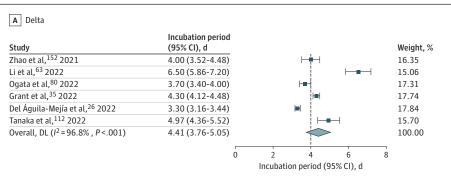
The mean incubation period of COVID-19 among infected children (under ages 18 years) was 8.82 days (95% CI, 8.19-9.45 days) across 8 studies,  $^{36,39,41,44,75,95,102,130}$  which was higher than the pooled incubation period of the general population (6.65 days; 95% CI, 6.34-6.96 days), and the difference was significant (P < .001) (Figure 3).

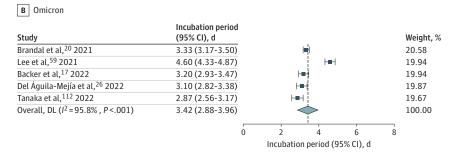
Five studies reported the incubation period in patients with nonsevere illness, <sup>44,70,121,123,139</sup> with a pooled value of 6.99 days (95% CI, 6.07-7.92 days). Five studies analyzed the incubation period of patients with severe disease, <sup>27,70,121,123,139</sup> with a pooled value of 6.69 days (95% CI, 4.53-8.85 days), which was slightly shorter than that of patients with nonsevere illness, but the difference was not significant (**Figure 4**).

#### **Discussion**

Our findings suggested that COVID-19 had a mean incubation period of 6.57 days (95% CI, 6.26-6.88 days), which was similar to the results of Elias et al<sup>159</sup> (6.38 days; 95% CI, 5.79-6.97 days) and McAloon et al<sup>14</sup> (6.5 days, 95% CI, 5.9-7.1 days). COVID-19 seemed to have a longer incubation period than that of other acute respiratory viral infections such as human coronavirus (3.2 days), influenza A (1.43-1.64 days), parainfluenza (2.6 days), respiratory syncytial virus (4.4 days), and rhinovirus (1.4 days). Furthermore, the median incubation period for SARS in 2009 had been estimated as 4.0 days, <sup>160</sup> which was lower than COVID-19. In this study, the shortest mean incubation reported was 1.8

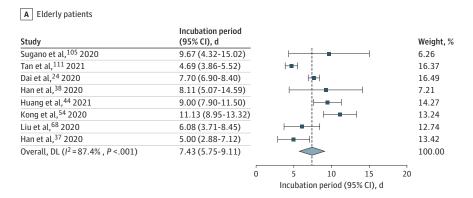
Figure 2. Forest Plot for Studies of Incubation Period of COVID-19 Caused by Different Variants





days and the longest incubation was 18.87 days. At present, based on the assumption that the incubation period of COVID-19 is 1 to 14 days, the WHO still recommends that COVID-19 close contacts be isolated for 14 days. 161

Figure 3. Incubation Period for COVID-19 in Older Patients and Infected Children



#### Incubation period Study (95% CI), d Shen et al, 95 2020 7.17 (3.34-11.00) Song et al, <sup>102</sup> 2020 Xiao et al, <sup>130</sup> 2020 8.83 (6.09-11.57) 9.25 (8.78-9.72) Han et al,<sup>39</sup> 2020 6.25 (3.81-8.69) Hua et al,<sup>41</sup> 2020 9.10 (7.99-10.21) Huang et al,<sup>44</sup> 2021 7.00 (5.60-10.30) Llaque-Quiroz et al,75 2020 8.67 (5.76-11.58) Guo et al.<sup>36</sup> 2020 9.33 (8.21-10.46) Overall, DL $(I^2 = 28.5\%, P = .20)$ 8.82 (8.19-9.45)

Infectious strains were original strains.

Weight, %

2.56

4.76

38.0

5.85

6.25

4.26

18.99

20

15

10 Incubation period (95% CI), d

5

100.00

19.30

Figure 4. Incubation Period for COVID-19 in Patients With Severe and Nonsevere Illness

Study	Incubation period (95% CI), d		Weight, %
Wang et al, <sup>121</sup> 2020	6.33 (5.66-7.01)	<del></del>	22.90
Wei et al, <sup>123</sup> 2020	6.33 (5.35-7.32)	<b>├</b>	20.14
Yang et al, 139 2021	6.00 (5.00-7.00)	<b>⊢</b> ■	20.00
Huang et al, <sup>44</sup> 2021	7.80 (7.40-8.80)	<b>⊢=</b> -∮	22.69
Liu et al, <sup>70</sup> 2020	9.10 (7.45-10.75)	<b>⊢</b> ‡	14.27
Overall, DL (I <sup>2</sup> = 80.3%, P<.001)	6.99 (6.07-7.92)		100.00
	0	5 10 15	20
		Incubation period (95% CI), d	

#### **B** Patients with severe disease

B Children

Study	Incubation period (95% CI), d						Weight, %
Wang et al, <sup>121</sup> 2020	4.33 (3.66-5.00)		H				27.56
Wei et al, <sup>123</sup> 2020	6.67 (4.94-8.39)		-	<b>⊣</b> ¦			23.99
Yang et al, <sup>139</sup> 2021	9.50 (6.90-12.10)		F	<del> </del>			20.09
Deng et al, <sup>27</sup> 2021	6.33 (1.04-8.80)	$\vdash$	-	+			10.51
Liu et al, <sup>70</sup> 2020	7.40 (4.29-10.51)			<del>-    </del>			17.85
Overall, DL (I <sup>2</sup> = 81.4%, P<.001)	6.69 (4.53-8.85)		$\langle$				100.00
		0	5	10	15	20	
			Incubatio	n period (9	95% CI), d		

Infectious strains were original strains.

Our study found that the incubation period of COVID-19 caused by Alpha variant was 5.00 days (95% CI, 4.94-5.06 days), and the incubation period of COVID-19 caused by Beta variant was 4.50 days (95% CI, 1.83-7.17 days), which were similar to that of the wild-type strain in Wuhan, China (5.2 days). 64,145

The Delta variant, which was first reported in India in October 2020, was dominant in the second wave of COVID-19 outbreak in India in May 2021. Our study revealed that the incubation period of COVID-19 caused by Delta variant was 4.41 days (95% CI, 3.76-5.05), which was shorter than the pooled incubation period of COVID-19 (6.26 days), and also shorter than that caused by Alpha variant and Beta variants.

On November 24, 2021, South Africa first discovered and reported a case of Omicron variant infection to the WHO. Since then, this variant has quickly become the main virus strain in South Africa and spread to many countries and regions around the world. The Omicron variant is exceptional for carrying over 30 mutations in the spike glycoprotein, which have been predicted to influence antibody neutralization and spike function. <sup>162</sup> Our study revealed that the incubation period of COVID-19 caused by Omicron variant was 3.42 days (95% CI, 2.88-3.96 days), which was shorter than the Alpha, Beta, and Delta variants. The CDC released new quarantine and isolation policy on March 30, 2022, which stated that people exposed to COVID-19 should stay home and away from other people for at least 5 days. <sup>163</sup> At present, some countries around the world require close contacts to be isolated for 14 days. However, with the shortening of the incubation period of new variants, the isolation period can be adjusted appropriately to reduce the pressure on the health system.

Eight studies reported the incubation period among older patients (ages 60 years and older), and the mean incubation period of older patients was about 7.43 days (95% CI, 5.75-9.11), which was slightly higher than the pooled incubation period among the general population. Although the difference between the incubation periods of older patients and the overall incubation period was not significant, there was still a lot of evidence to support the hypothesis of a longer incubation period in older populations due to a slower immune response among older patients. Cowling et al<sup>164</sup> hypothesized about this in their report on SARS in 2007, where they demonstrated that older patients had longer incubation periods, suggesting that this might have resulted from a delayed immune response. A study by Chen et al<sup>165</sup> revealed that several SARS-CoV nonstructural proteins that were shared by SARS-CoV-2 suppress the type 1 interferon response, and such suppression was shown to lead to poor CD8<sup>+</sup> T-cell response to viral infection. Therefore, age-associated weaker type 1 interferon responses coupled with direct viral suppression could serve as a critical innate immune mechanism that leads to poor cell-mediated immunity and increased vulnerability of older adults to SARS-CoV-2 infection with therapeutic implication. Additionally, older patients were more likely to experience symptom minimization and be more likely to ignore early symptoms and only report later when symptoms become more severe or intolerable. 111 The lack of a fever response in older patients, the nonspecific geriatric presentations in an infectious illness (such as falls and delirium), and multi-comorbidities might result in a delayed awareness of disease onset and its detection by a clinician.54

Additionally, our study also revealed that the mean incubation period for infected children (8.82 days; 95% CI, 8.19-9.45) was also longer than the pooled incubation period among the general population (6.65 days). Infected children tend to present with mild clinical symptoms without the classic phenotype of lung pneumonia, and COVID-19 symptoms are easily confused with other influenza-like illnesses, which renders infected children difficult to identify. <sup>130</sup> Second, previous studies found that children can be a source of transmission during the viral incubation period. Some infected children may have an incubation period of more than 14 days. Indeed, it is difficult for investigators to collect information about the symptoms of very young children because they cannot accurately express their symptoms. <sup>130</sup>

Previous studies on SARS indicated that the incubation period of patients was related to the severity of the disease, and the incubation period of fatal cases was shorter. Virlogeux et al 167 also found that Middle East Respiratory Syndrome patients with a shorter incubation period proceeded

10/19

to have more severe disease. However, there are few studies on the association between the length of COVID-19 incubation period and the severity of infection. Our study found that the incubation period of COVID-19 in patients with severe illness was shorter (6.69 days) than patients with nonsevere illness. Studies have indicated that shorter incubation periods are associated with more serious disease, and this is related to the number of cells initially infected by the virus. 123

This study was the first meta-analysis of the incubation period of COVID-19 caused by SARS-CoV-2 variants. We compared the incubation period of COVID-19 caused by different variants and the wild-type strain, and the results may be helpful in changing public health guidance on duration of quarantine, outbreak investigation, and contact tracing.

#### Limitations

This study had several limitations. First, by definition, the required case data for the determination of individual incubation periods need to include both exposure (window) and onset of symptoms. In most studies, the data were collected retrospectively, resulting in a recall bias (uncertain exact dates of exposure) that would inevitably influence our assessment. Second, the estimate of the incubation period was computed with data with considerable heterogeneity. Possible sources of heterogeneity included difference in study population, data collection period, and method of analysis. Wild-type strain studies were mostly from Chinese patients; while variants studies were not. Population factors, especially those related to public policy and social behavior, may be confounding variables. In this study, we assumed that the incubation period was consistent across populations. Third, there were few studies on the incubation period of COVID-19 caused by SARS-CoV-2 variants. Because of the urgent timeline for data extraction and analysis, these studies have estimated the incubation period in a limited case number in a short period of time, which necessitates the cautious interpretation of the generalizability of our findings. The numbers were too small to detect systematic differences in incubation time in regards to age or sex.

#### **Conclusions**

Although variants such as Alpha, Beta, and Gamma are currently only prevalent in a few countries in Southeast Asia, South America, and Africa, the Delta and Omicron variants have become the dominant strains in many countries around the world. Identifying the incubation period of different variants is a key factor in determining the isolation period. The pooled incubation period of COVID-19 in this study was 6.57 days. The incubation period for COVID-19 caused by the Alpha and Beta variants was approximately 5 days. The incubation period of COVID-19 caused by the Delta and Omicron variants was significantly shorter than that of the other variants.

#### **ARTICLE INFORMATION**

Accepted for Publication: July 6, 2022.

Published: August 22, 2022. doi:10.1001/jamanetworkopen.2022.28008

**Correction:** This article was corrected on September 16, 2022, to fix a word describing study results in the Discussion

**Open Access:** This is an open access article distributed under the terms of the CC-BY License. © 2022 Wu Y et al. *JAMA Network Open*.

Corresponding Author: Min Liu, PhD, Department of Epidemiology and Biostatistics, School of Public Health, Peking University, No. 38, Xueyuan Road, Haidian District, Beijing 100191, China (liumin@bjmu.edu.cn); Wannian Liang, PhD, Vanke School of Public Health, Tsinghua University, Beijing 100084, China (liangwn@tsinghua.edu.cn).

**Author Affiliations:** Department of Epidemiology and Biostatics, School of Public Health, Peking University, Beijing, China (Wu, Kang, Guo, J. Liu, M. Liu); Vanke School of Public Health, Tsinghua University, Beijing, China (Liang).

**Author Contributions:** Drs Wu and Liu had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

Concept and design: Wu, J. Liu, M. Liu.

Acquisition, analysis, or interpretation of data: Wu, Kang, Guo, M. Liu, Liang.

Drafting of the manuscript: Wu, Kang, Guo.

Critical revision of the manuscript for important intellectual content: Wu, J. Liu, M. Liu, Liang.

Statistical analysis: Wu, Guo.

Obtained funding: J. Liu, M. Liu, Liang.

Administrative, technical, or material support: M. Liu.

Supervision: Wu, Guo, J. Liu, M. Liu, Liang.

Conflict of Interest Disclosures: None reported.

**Funding/Support:** National Key Research and Development Program of China (2021ZD0114104, 2021ZD0114105, 2021ZD0114101); National Natural Science Foundation of China (71934002, 72122001).

**Role of the Funder/Sponsor:** The founders had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

#### **REFERENCE**

- 1. Guan W-J, Ni Z-Y, Hu Y, et al; China Medical Treatment Expert Group for Covid-19. Clinical characteristics of coronavirus disease 2019 in China. *N Engl J Med*. 2020;382(18):1708-1720. doi:10.1056/NEJMoa2002032
- 2. World Health Organization. Coronavirus (COVID-19) Dashboard. 2022; https://covid19.who.int/.
- 3. Sanders JM, Monogue ML, Jodlowski TZ, Cutrell JB. Pharmacologic treatments for coronavirus disease 2019 (COVID-19): a review. *JAMA*. 2020;323(18):1824-1836. doi:10.1001/jama.2020.6019
- **4.** Gostic K, Gomez AC, Mummah RO, Kucharski AJ, Lloyd-Smith JO. Estimated effectiveness of symptom and risk screening to prevent the spread of COVID-19. *Elife*. 2020;9:9. doi:10.7554/eLife.55570
- **5**. Tawe Ngi AM, Johnston S, Albayat SS, et al. Pre-symptomatic and asymptomatic transmission of COVID-19: Implications for control measures in Qatar. *Qatar Med J.* 2021;2021(3):59-59.
- **6.** Ganyani T, Kremer C, Chen D, et al. Estimating the generation interval for coronavirus disease (COVID-19) based on symptom onset data, March 2020. *Euro Surveill*. 2020;25(17):2000257. doi:10.2807/1560-7917.ES.2020.25.
- 7. Nishiura H, Mizumoto K, Ejima K, Zhong Y, Cowling B, Omori R. Incubation period as part of the case definition of severe respiratory illness caused by a novel coronavirus. *Euro Surveill*. 2012;17(42):20296.
- **8**. Nishiura H, Linton NM, Akhmetzhanov AR. Serial interval of novel coronavirus (COVID-19) infections. *Int J Infect Dis*. 2020;93:284-286. doi:10.1016/j.ijid.2020.02.060
- 9. World Health Organization. Tracking SARS-CoV-2 variants. Updated July 19, 2022. Accessed April 17, 2022. https://www.who.int/en/activities/tracking-SARS-CoV-2-variants/
- 10. US Centers for Disease Control and Prevention. SARS-CoV-2 Variant Classifications and Definitions. Updated April 26, 2021. Accessed April 17, 2022. https://www.cdc.gov/coronavirus/2019-ncov/variants/variant-classifications.html#anchor 1632158885160
- 11. Wan X, Wang W, Liu J, Tong T. Estimating the sample mean and standard deviation from the sample size, median, range and/or interquartile range. *BMC Med Res Methodol*. 2014;14:135. doi:10.1186/1471-2288-14-135
- 12. Hozo SP, Djulbegovic B, Hozo I. Estimating the mean and variance from the median, range, and the size of a sample. *BMC Med Res Methodol*. 2005;5:13. doi:10.1186/1471-2288-5-13
- 13. Wells G, Shea B, O'Connell D, et al. The Newcastle-Ottawa Scale (NOS) for assessing the quality of nonrandomised studies in meta-analyses. Published 2021. Accessed April 17, 2022. http://www.ohri.ca/programs/clinical\_epidemiology/oxford.asp
- **14.** McAloon C, Collins Á, Hunt K, et al. Incubation period of COVID-19: a rapid systematic review and meta-analysis of observational research. *BMJ Open*. 2020;10(8):e039652-e039652. doi:10.1136/bmjopen-2020-039652
- **15.** Melsen WG, Bootsma MC, Rovers MM, Bonten MJ. The effects of clinical and statistical heterogeneity on the predictive values of results from meta-analyses. *Clin Microbiol Infect*. 2014;20(2):123-129. doi:10.1111/1469-069112494
- **16.** Areekal B, Vijayan SM, Suseela MS. Risk factors, epidemiological and clinical outcome of close contacts of COVID-19 cases in a tertiary hospital in southern India. J Clin Diagn Res. 2021;15(3):LC34-LC37.

- 17. Backer JA, Eggink D, Andeweg SP, et al. Shorter serial intervals in SARS-CoV-2 cases with Omicron BA.1 variant compared with Delta variant, the Netherlands, 13 to 26 December 2021. *Euro Surveill*. 2022;27(6):2200042. doi:10. 2807/1560-7917.ES.2022.27.6.2200042
- **18**. Backer JA, Klinkenberg D, Wallinga J. Incubation period of 2019 novel coronavirus (2019-nCoV) infections among travelers from Wuhan, China, 20-28 January 2020. *Euro Surveill*. 2020;25(5):2000062. doi:10.2807/1560-7917.ES.2020.25.5.2000062
- **19**. Bao C, Pan E, Ai J, et al. COVID-19 outbreak following a single patient exposure at an entertainment site: an epidemiological study. *Transbound Emerg Dis.* 2021;68(2):773-781. doi:10.1111/tbed.13742
- 20. Brandal LT, MacDonald E, Veneti L, et al. Outbreak caused by the SARS-CoV-2 Omicron variant in Norway, November to December 2021. Euro Surveill. 2021;26(50):2101147. doi:10.2807/1560-7917.ES.2021.26.50.2101147
- 21. Bui LV, Nguyen HT, Levine H, et al. Estimation of the incubation period of COVID-19 in Vietnam. *PLoS One*. 2020;15(12):e0243889-e0243889.doi:10.1371/journal.pone.0243889
- **22**. Chen G, Wu MZ, Qin CJ, et al. Epidemiological analysis of 18 patients with COVID-19. *Eur Rev Med Pharmacol Sci.* 2020;24(23):12522-12526.
- 23. Zhang W; Covid-Epidemiology Investigation Team; Laboratory Testing Team. Local outbreak of COVID-19 in Shunyi District attributed to an asymptomatic carrier with a history of stay in Indonesia—Beijing municipality, China, December 23, 2020. *China CDC Wkly*. 2021;3(10):214-217. doi:10.46234/ccdcw2020.062
- **24**. Dai J, Yang L, Zhao J. Probable longer incubation period for elderly COVID-19 cases: analysis of 180 contact tracing data in Hubei Province, China. *Risk Manag Healthc Policy*. 2020;13:1111-1117. doi:10.2147/RMHP.S257907
- **25**. de Laval F, Grosset-Janin A, Delon F, et al. Lessons learned from the investigation of a COVID-19 cluster in Creil, France: effectiveness of targeting symptomatic cases and conducting contact tracing around them. *BMC Infect Dis*. 2021;21(1):457-457. doi:10.1186/s12879-021-06166-9
- **26**. Del Águila-Mejía J, Wallmann R, Calvo-Montes J, Rodríguez-Lozano J, Valle-Madrazo T, Aginagalde-Llorente A. Secondary attack rate, transmission and incubation periods, and serial interval of SARS-CoV-2 Omicron variant, Spain. *Emerg Infect Dis.* 2022;28(6):1224-1228. doi:10.3201/eid2806.220158
- 27. Deng L, Li Z, Liu Y, et al. Epidemiological and clinical findings of discharge patients infected with the 2019 novel coronavirus (SARS-CoV-2) in Changchun, Northeast China: a retrospective cohort study. *Acta Med Mediter*. 2021;37 (2):1147-1153
- **28**. Deng Y, You C, Liu Y, Qin J, Zhou X-H. Estimation of incubation period and generation time based on observed length-biased epidemic cohort with censoring for COVID-19 outbreak in China. *Biometrics*. 2021;77(3):929-941. doi:10.1111/biom.13325
- **29**. Denis F, Septans AL, Le Goff F, Jeanneau S, Lescure FX. Analysis of COVID-19 transmission sources in France by self-assessment before and after the partial lockdown: observational study. *J Med Internet Res.* 2021;23(5): e26932. doi:10.2196/26932
- **30**. Ding K, Yi B, Chen Y, et al. Epidemic cluster of novel coronavirus disease 2019 in Ningbo city of Zhejiang province. Article in Chinese. *Chin J Publ Health*. 2020;36(04):498-502.
- **31**. Dong XC, Li JM, Bai JY, et al. [Epidemiological characteristics of confirmed COVID-19 cases in Tianjin]. Article in Chinese. *Zhonghua Liu Xing Bing Xue Za Zhi*. 2020;41(5):638-641.
- **32**. Du ZC, Gu J, Li JH, et al. [Estimating the distribution of COVID-19 incubation period by interval-censored data estimation method]. Article in Chinese. *Zhonghua Liu Xing Bing Xue Za Zhi*. 2020;41(7):1000-1003.
- **33**. Gao Y, Hou L, Li Y, et al. Epidemiological investigation and analysis of 137 confirmed cases of COVID-19. Article in Chinese. *Chinese Journal of Critical Care Medicine*. 2020;40(03):232-236.
- **34**. Gao Y, Ma X, Bi J, et al. Epidemiological and clinical differences of coronavirus disease 2019 patients with distinct viral exposure history. *Virulence*. 2020;11(1):1015-1023. doi:10.1080/21505594.2020.1802870
- **35**. Grant R, Charmet T, Schaeffer L, et al. Impact of SARS-CoV-2 Delta variant on incubation, transmission settings and vaccine effectiveness: results from a nationwide case-control study in France. *Lancet Reg Health Eur.* 2022;13: 100278-100278. doi:10.1016/j.lanepe.2021.100278
- **36**. Guo C-X, He L, Yin J-Y, et al. Epidemiological and clinical features of pediatric COVID-19. *BMC Med*. 2020;18(1): 250-250. doi:10.1186/s12916-020-01719-2
- **37**. Han T. Outbreak investigation: transmission of COVID-19 started from a spa facility in a local community in Korea. *Epidemiol Health*. 2020;42:e2020056-e2020056. doi:10.4178/epih.e2020056
- **38**. Han T, Hua L, He S, et al. The epidemiological characteristics of cluster transmission of coronavirus disease 2019 (COVID-19): a multi-center study in Jiangsu Province. *Am J Transl Res*. 2020;12(10):6434-6444.

- **39**. Han YN, Feng ZW, Sun LN, et al. A comparative-descriptive analysis of clinical characteristics in 2019-coronavirus-infected children and adults. *J Med Virol*. 2020;92(9):1596-1602. doi:10.1002/jmv.25835
- **40**. Hong H, Shi HB, Jiang HB, et al. [Epidemic dynamic model based evaluation of effectiveness of prevention and control strategies for COVID-19 in Ningbo]. Article in Chinese. *Zhonghua Liu Xing Bing Xue Za Zhi*. 2020;41 (10):1606-1610.
- **41**. Hua C-Z, Miao Z-P, Zheng J-S, et al. Epidemiological features and viral shedding in children with SARS-CoV-2 infection. *J Med Virol*. 2020;92(11):2804-2812. doi:10.1002/jmv.26180
- **42**. Huang J, Zhao Q, Xu K, et al. Analysis of COVID-19 epidemic characteristics based on network data. Article in Chinese. *Chinese Journal of Disease Control & Prevention*. 2020;24(11):1338.
- **43**. Huang L, Zhang X, Xu A. Effectiveness of interventions as part of the One Health approach to control coronavirus disease 2019 and stratified case features in Anhui Province, China: a real-world population-based cohort study. *One Health*. 2021;12:100224-100224. doi:10.1016/j.onehlt.2021.100224
- **44**. Huang S, Li J, Dai C, et al. Incubation period of coronavirus disease 2019: new implications for intervention and control. *Int J Environ Health Res.* 2021;32(8):1707-1715.
- **45**. Je D, O'Brolchain A, Ulett KB, et al. Demographics, clinical characteristics and outcomes among 197 patients with COVID-19 in the Gold Coast area. *Intern Med J.* 2021;51(5):666-672. doi:10.1111/imj.15260
- **46**. Jeong TH, Pak C, Ock M, Lee SH, Son JS, Jeon YJ. Real asymptomatic SARS-CoV-2 infection might be rare: importance of careful interviews and follow-up. *J Korean Med Sci.* 2020;35(37):e333-e333. doi:10.3346/jkms. 2020.35.e333
- **47**. Jiang G, Wang C, Song L, et al. Aerosol transmission, an indispensable route of COVID-19 spread: case study of a department-store cluster. *Front Environ Sci Eng.* 2021;15(3):46. doi:10.1007/s11783-021-1386-6
- **48**. Jiang Z, Yang B, Qin J, Zhou Y. Enhanced empirical likelihood estimation of incubation period of COVID-19 by integrating published information. *Stat Med*. 2021;40(19):4252-4268. doi:10.1002/sim.9026
- **49**. Jin X, Lian J-S, Hu J-H, et al. Epidemiological, clinical and virological characteristics of 74 cases of coronavirus-infected disease 2019 (COVID-19) with gastrointestinal symptoms. *Gut*. 2020;69(6):1002-1009. doi:10.1136/gutjnl-2020-320926
- **50**. Khonyongwa K, Taori SK, Soares A, et al. Incidence and outcomes of healthcare-associated COVID-19 infections: significance of delayed diagnosis and correlation with staff absence. *J Hosp Infect*. 2020;106(4): 663-672. doi:10.1016/j.jhin.2020.10.006
- 51. Ki HJ, Kim J, Kim S, Park J, Lee J, Kim Y-J. Statistical analysis of estimating incubation period distribution and case fatality rate of COVID-19. *Korean Journal of Applied Statistics*. 2020;33(6):777-789.
- **52.** Kim SE, Jeong HS, Yu Y, et al. Viral kinetics of SARS-CoV-2 in asymptomatic carriers and presymptomatic patients. *Int J Infect Dis.* 2020;95:441-443. doi:10.1016/j.iijid.2020.04.083
- **53**. Kong D, Zheng Y, Wu H, et al. Pre-symptomatic transmission of novel coronavirus in community settings. *Influenza Other Respir Viruses*. 2020;14(6):610-614. doi:10.1111/irv.12773
- **54.** Kong T-K. Longer incubation period of coronavirus disease 2019 (COVID-19) in older adults. *Aging Med (Milton)*. 2020;3(2):102-109. doi:10.1002/agm2.12114
- **55**. Kong W, Wang Y, Hu J, Chughtai A, Pu H; Clinical Research Collaborative Group of Sichuan Provincial People's Hospital. Comparison of clinical and epidemiological characteristics of asymptomatic and symptomatic SARS-CoV-2 infection: a multi-center study in Sichuan Province, China. *Travel Med Infect Dis.* 2020;37:101754-101754. doi:10.1016/j.tmaid.2020.101754
- **56.** Lai C, Yu R, Wang M, et al. Shorter incubation period is associated with severe disease progression in patients with COVID-19. *Virulence*. 2020;11(1):1443-1452. doi:10.1080/21505594.2020.1836894
- **57**. Lau YC, Tsang TK, Kennedy-Shaffer L, et al. Joint estimation of generation time and incubation period for coronavirus disease (Covid-19). *J Infect Dis.* 2021;224(10):1664-1671. doi:10.1093/infdis/jiab424
- **58**. Le TQM, Takemura T, Moi ML, et al. Severe acute respiratory syndrome coronavirus 2 shedding by travelers, Vietnam, 2020. *Emerg Infect Dis*. 2020;26(7):1624-1626. doi:10.3201/eid2607.200591
- **59**. Lee JJ, Choe YJ, Jeong H, et al. Importation and transmission of SARS-CoV-2 B.1.1.529 (Omicron) variant of concern in Korea, November 2021. *J Korean Med Sci.* 2021;36(50):e346-e346. doi:10.3346/jkms.2021.36.e346
- **60**. Lei D, Wang C, Li C, et al. Clinical characteristics of COVID-19 in pregnancy: analysis of nine cases. Article in Chinese. Chinese Journal of Perinatal Medicine. 2020:12:222-228.
- **61**. Leung C. The difference in the incubation period of 2019 novel coronavirus (SARS-CoV-2) infection between travelers to Hubei and nontravelers: the need for a longer quarantine period. *Infect Control Hosp Epidemiol*. 2020; 41(5):594-596. doi:10.1017/ice.2020.81

14/19

- **62**. Li J, Ding J, Chen L, et al. Epidemiological and clinical characteristics of three family clusters of COVID-19 transmitted by latent patients in China. *Epidemiol Infect*. 2020;148:e137-e137. doi:10.1017/S0950268820001491
- **63**. Li L, Han Z-G, Qin P-Z, et al. Transmission and containment of the SARS-CoV-2 Delta variant of concern in Guangzhou, China: a population-based study. *PLoS Negl Trop Dis*. 2022;16(1):e0010048-e0010048. doi:10.1371/journal.pntd.0010048
- **64.** Li Q, Guan X, Wu P, et al. Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. *N Engl J Med*. 2020;382(13):1199-1207. doi:10.1056/NEJMoa2001316
- **65**. Linton NM, Kobayashi T, Yang Y, et al. Incubation period and other epidemiological characteristics of 2019 novel coronavirus infections with right truncation: a statistical analysis of publicly available case data. *J Clin Med*. 2020;9(2):538. doi:10.3390/jcm9020538
- **66**. Liu C-X, Liu Z-H, Sun L-Y, Zhang K-Y, Sun Y-Z. A familial cluster of COVID-19 infection in a northern Chinese region. *J Infect Public Health*. 2021;14(9):1127-1132. doi:10.1016/j.jiph.2021.07.011
- **67**. Liu F, Ji C, Luo J, et al. Clinical characteristics and corticosteroids application of different clinical types in patients with corona virus disease 2019. *Sci Rep.* 2020;10(1):13689-13689. doi:10.1038/s41598-020-70387-2
- **68**. Liu J, Liao X, Qian S, et al. Community transmission of severe acute respiratory syndrome coronavirus 2, Shenzhen, China, 2020. *Emerg Infect Dis*. 2020;26(6):1320-1323. doi:10.3201/eid2606.200239
- **69**. Liu JY, Chen TJ, Hwang SJ. Analysis of community-acquired COVID-19 cases in Taiwan. *J Chin Med Assoc*. 2020;83(12):1087-1092. doi:10.1097/JCMA.000000000000411
- **70**. Liu L, Du Y, Bai J, et al. Analysis of early characteristics of patients with novel coronavirus infection in Kunming City, Yunnan Province, China. Article in Chinese. *Chinese Journal of Zoonoses*. 2020;36(5):424-428.
- **71**. Liu L, Jing L, Li Y, et al. Clustering of 2019 novel coronavirus disease cases in Liaoning province: reported database analysis. Article in Chinese. *Chin J Publ Health*. 2020;36(04):473-476. doi:10.11847/zgggws1128823
- **72.** Liu P, Niu R, Chen J, et al. Epidemiological and clinical features in patients with coronavirus disease 2019 outside of Wuhan, China: special focus in asymptomatic patients. *PLoS Negl Trop Dis.* 2021;15(3):e0009248-e0009248. doi:10.1371/journal.pntd.0009248
- 73. Liu W, Zhou M, Yang S, et al. Epidemiological characteristics of cluster cases of coronavirus disease 2019 (COVID-19) in China. *Acta Medicinae Universitatis Scientiae et Technologiae Huazhong*. 2020;49(02):161-168.
- **74.** Liu Y, Ding N, Zhou S, et al. Comparison of clinical characteristics between patients with coronavirus disease 2019 (COVID-19) who retested RT-PCR positive versus negative: a retrospective study of data from Nanjing. *J Thorac Dis.* 2020;12(11):6435-6445. doi:10.21037/jtd.2020.04.17
- **75**. Llaque-Quiroz P, Prudencio-Gamio R, Echevarría-Lopez S, Ccorahua-Paz M, Ugas-Charcape C. Clinical and epidemiological characteristics of children with COVID-19 in a pediatric hospital in Peru. *Rev Peru Med Exp Salud Publica*. 2020;37(4):689-693. doi:10.17843/rpmesp.2020.374.6198
- **76**. Mao S, Huang T, Yuan H, et al. Epidemiological analysis of 67 local COVID-19 clusters in Sichuan Province, China. *BMC Public Health*. 2020;20(1):1525-1525. doi:10.1186/s12889-020-09606-4
- 77. Moazzami B, Moezedin Javad R, Samie S, et al. Is Computed tomography necessary for the diagnosis of coronavirus disease (COVID-19) in all suspected patients? a case series. *J Kerman Univ Med Sci.* 2021;2:187-193.
- **78**. Ng T-C, Cheng H-Y, Chang H-H, et al. Comparison of estimated effectiveness of case-based and population-based interventions on COVID-19 containment in Taiwan. *JAMA Intern Med.* 2021;181(7):913-921. doi:10.1001/jamainternmed.2021.1644
- **79.** Nie X, Fan L, Mu G, et al. Epidemiological characteristics and incubation period of 7015 confirmed cases with coronavirus disease 2019 outside Hubei Province in China. *J Infect Dis.* 2020;222(1):26-33. doi:10.1093/infdis/jiaa211
- **80**. Ogata T, Tanaka H, Irie F, Hirayama A, Takahashi Y. Shorter incubation period among unvaccinated delta variant coronavirus disease 2019 patients in Japan. *Int J Environ Res Public Health*. 2022;19(3):1127. doi:10.3390/ijerph19031127
- 81. Pak D, Langohr K, Ning J, Cortés Martínez J, Gómez Melis G, Shen Y. Modeling the coronavirus disease 2019 incubation period: impact on quarantine policy. *Mathematics*. 2020;8(9):1631. doi:10.3390/math8091631
- **82**. Pan XX, Chen Y, Wang AH, et al. [Study on transmission dynamic of 15 clusters of COVID-2019 cases in Ningbo]. Article in Chinese. *Zhonghua Liu Xing Bing Xue Za Zhi*. 2020;41(12):2010-2014.
- **83**. Patrikar SR, Kotwal A, Bhatti VK, et al. Incubation period and reproduction number for novel coronavirus 2019 (COVID-19) infections in India. *Asia Pac J Public Health*. 2020;32(8):458-460. doi:10.1177/1010539520956427
- **84**. Paul S, Lorin E. Distribution of incubation periods of COVID-19 in the Canadian context. *Sci Rep.* 2021;11(1): 12569-12569. doi:10.1038/s41598-021-91834-8

- **85**. Ping K, Lei M, Gou Y, et al. Epidemiologic characteristics of COVID-19 in Guizhou Province, China. *J Infect Dev Ctries*. 2021;15(3):389-397. doi:10.3855/jidc.12818
- **86**. Pongpirul WA, Wiboonchutikul S, Charoenpong L, et al. Clinical course and potential predictive factors for pneumonia of adult patients with Coronavirus Disease 2019 (COVID-19): a retrospective observational analysis of 193 confirmed cases in Thailand. *PLoS Negl Trop Dis.* 2020;14(10):e0008806-e0008806. doi:10.1371/journal.pntd.0008806
- **87**. Pung R, Chiew CJ, Young BE, et al; Singapore 2019 Novel Coronavirus Outbreak Research Team. Investigation of three clusters of COVID-19 in Singapore: implications for surveillance and response measures. *Lancet*. 2020; 395(10229):1039-1046. doi:10.1016/S0140-6736(20)30528-6
- **88**. Qi B, Peng H, Shou K, et al. Protecting healthcare professionals during the COVID-19 pandemic. *Biomed Res Int*. 2020;2020:8469560. doi:10.1155/2020/8469560
- **89**. Qian GQ, Yang NB, Ding F, et al. Epidemiologic and clinical characteristics of 91 hospitalized patients with COVID-19 in Zhejiang, China: a retrospective, multi-centre case series. *QJM*. 2020;113(7):474-481. doi:10.1093/qjmed/hcaa089
- **90**. Qiu C, Deng Z, Xiao Q, et al. Transmission and clinical characteristics of coronavirus disease 2019 in 104 outside-Wuhan patients, China. *J Med Virol*. 2020;92(10):2027-2035. doi:10.1002/jmv.25975
- **91**. Ratovoson R, Razafimahatratra R, Randriamanantsoa L, et al. Household transmission of COVID-19 among the earliest cases in Antananarivo, Madagascar. *Influenza Other Respir Viruses*. 2022;16(1):48-55. doi:10.1111/irv.12896
- **92**. Ren X, Li Y, Yang X, et al. Evidence for pre-symptomatic transmission of coronavirus disease 2019 (COVID-19) in China. *Influenza Other Respir Viruses*. 2021;15(1):19-26. doi:10.1111/irv.12787
- 93. Samrah SM, Al-Mistarehi A-H, Kewan T, et al. Viral clearance course of COVID-19 outbreaks. *J Multidiscip Healthc*. 2021;14:555-565. doi:10.2147/JMDH.S302891
- **94**. Sanche S, Lin YT, Xu C, Romero-Severson E, Hengartner N, Ke R. High contagiousness and rapid spread of severe acute respiratory syndrome coronavirus 2. *Emerg Infect Dis.* 2020;26(7):1470-1477. doi:10.3201/eid2607.
- **95**. Shen Q, Guo W, Guo T, et al. Novel coronavirus infection in children outside of Wuhan, China. *Pediatr Pulmonol*. 2020;55(6):1424-1429. doi:10.1002/ppul.24762
- **96**. Shen Y, Xu W, Li C, et al. A cluster of novel coronavirus disease 2019 infections indicating person-to-person transmission among casual contacts from social gatherings: an outbreak case-contact investigation. *Open Forum Infect Dis.* 2020;7(6):ofaa231. doi:10.1093/ofid/ofaa231
- **97**. Shi J-C, Yu Z-J, He G-Q, et al. Epidemiological features of 105 patients infected with the COVID-19. *J Natl Med Assoc.* 2021;113(2):212-217. doi:10.1016/j.jnma.2020.09.151
- **98**. Shi P, Gao Y, Shen Y, et al. Characteristics and evaluation of the effectiveness of monitoring and control measures for the first 69 patients with COVID-19 from 18 January 2020 to 2 March in Wuxi, China. *Sustain Cities Soc.* 2021;64:102559-102559. doi:10.1016/j.scs.2020.102559
- **99**. Shiel E, Miyakis S, Tennant E, et al. Clinical characteristics and outcomes of COVID-19 in a low-prevalence, well resourced setting, Sydney, Australia. *Intern Med J.* 2021;51(10):1605-1613. doi:10.1111/imj.15445
- **100**. Shu Y, Deng Z, Wang H, et al. Epidemiological and clinical characteristics of 32 patients with COVID-19. *Can J Infect Control*. 2020;19(08):679-686.
- **101**. Song Q, Zhao H, Fang L, Liu W, Zheng C, Zhang Y. Study on assessing early epidemiological parameters of coronavirus disease epidemic in China. Article in Chinese. *Chinese Journal of Epidemiology*. 2020;41(4):461-465. doi:10.3760/cma.i.cn112338-20200205-00069
- **102**. Song R, Han B, Song M, et al. Clinical and epidemiological features of COVID-19 family clusters in Beijing, China. *J Infect*. 2020;81(2):e26-e30. doi:10.1016/j.jinf.2020.04.018
- 103. Song YS, Hao YB, Liu WW, Zhang SS, Wang P, Fan TL. Clinical features of 17 patients with 2019-nCoV. *Eur Rev Med Pharmacol Sci.* 2020;24(20):10896-10901.
- **104**. Su YJ, Kuo KC, Wang TW, Chang CW. Gender-based differences in COVID-19. *New Microbes New Infect*. 2021; 42:100905-100905. doi:10.1016/j.nmni.2021.100905
- **105**. Sugano N, Ando W, Fukushima W. Cluster of severe acute respiratory syndrome coronavirus 2 infections linked to music clubs in Osaka, Japan. *J Infect Dis.* 2020;222(10):1635-1640. doi:10.1093/infdis/jiaa542
- **106**. Sun B, Qi Y, Chen H, et al. Epidemiological profile of a cluster of COVID-19 caused by an imported case. Article in Chinese. *Chin J Prev Med*. 2021;22(04):246-249.
- **107**. Sun C, Zhang XB, Dai Y, Xu XZ, Zhao J. [Clinical analysis of 150 cases of 2019 novel coronavirus infection in Nanyang City, Henan Province]. Article in Chinese. *Zhonghua Jie He Hu Xi Za Zhi*. 2020;43(6):503-508.

- **108**. Sun L, Shen L, Fan J, et al. Clinical features of patients with coronavirus disease 2019 from a designated hospital in Beijing, China. *J Med Virol*. 2020;92(10):2055-2066. doi:10.1002/jmv.25966
- **109**. Sun YM, Liu F, Cai W, et al. [Transmission chains of clusters of COVID-19 associated with a market in Beijing]. Article in Chinese. *Zhonghua Liu Xing Bing Xue Za Zhi*. 2021;42(3):427-432.
- 110. Sun Y, Tian L, Du X, Wang H, Li Y, Wu R. Epidemiological and clinical characteristics of a familial cluster of COVID-19. *Epidemiol Infect*. 2020;148:e145-e145. doi:10.1017/S0950268820001521
- 111. Tan WYT, Wong LY, Leo YS, Toh MPHS. Does incubation period of COVID-19 vary with age? a study of epidemiologically linked cases in Singapore. *Epidemiol Infect*. 2020;148:e197-e197. doi:10.1017/S0950268820001995
- 112. Tanaka H, Ogata T, Shibata T, et al. Shorter incubation period among COVID-19 cases with the BA.1 Omicron variant. *Int J Environ Res Public Health*. 2022;19(10):6330. doi:10.3390/ijerph19106330
- 113. SARS-CoV-2 variant with lineage B.1.351 clusters investigation team. Linked transmission chains of imported SARS-CoV-2 variant B.1.351 across mainland France, January 2021. *Euro Surveill*. 2021;26(13):2100333. doi:10.2807/1560-7917.ES.2021.26.13.2100333
- **114.** Tian S, Hu N, Lou J, et al. Characteristics of COVID-19 infection in Beijing. *J Infect*. 2020;80(4):401-406. doi: 10.1016/j.jinf.2020.02.018
- **115.** Tindale LC, Stockdale JE, Coombe M, et al. Evidence for transmission of COVID-19 prior to symptom onset. *Elife*. 2020;9:e57149. doi:10.7554/eLife.57149
- **116.** Viego V, Geri M, Castiglia J, Jouglard E. Incubation period and serial interval of Covid-19 in a chain of infections in Bahia Blanca (Argentina). *Cien Saude Colet*. 2020;25(9):3503-3510. doi:10.1590/1413-81232020259.
- 117. Wang J, Wang S, Yang S, et al. Epidemiological characteristics of 17 coronavirus disease 2019 in Puyang, Henan. Article in Chinese. *Chinese Journal of Disease Control & Prevention*. 2021;25(04):416-420.
- **118.** Wang X, Gao J, Wang X, Hu W, Liu H. Clinical and epidemiological characteristics of patients with COVID. *Can J Infect Control*. 2020;19(03):223-226. doi:10.3389/fpubh.2020.00244
- **119.** Wang X, Pan Y, Zhang D, et al. Basic epidemiological parameter values from data of real-world in mega-cities: the characteristics of COVID-19 in Beijing, China. *BMC Infect Dis.* 2020;20(1):526-526. doi:10.1186/s12879-020-05251-9
- **120**. Wang X, Zhou Q, He Y, et al. Nosocomial outbreak of COVID-19 pneumonia in Wuhan, China. *Eur Respir J.* 2020;55(6):2000544. doi:10.1183/13993003.00544-2020
- 121. Wang Y, Liao B, Guo Y, et al. Clinical characteristics of patients infected with the novel 2019 coronavirus (SARS-Cov-2) in Guangzhou, China. *Open Forum Infect Dis.* 2020;7(6):ofaa187. doi:10.1093/ofid/ofaa187
- **122**. Wei X. Analysis of clinical characteristics of 28 cases of COVID-19. Article in Chinese. *Chinese Journal of Integrated Traditional and Western Medicine*. 2021;28(3).
- **123**. Wei Y, Zeng W, Huang X, et al. Clinical characteristics of 276 hospitalized patients with coronavirus disease 2019 in Zengdu District, Hubei Province: a single-center descriptive study. *BMC Infect Dis.* 2020;20(1):549-549. doi:10.1186/s12879-020-05252-8
- **124**. Won YS, Kim J-H, Ahn CY, Lee H. Subcritical transmission in the early stage of COVID-19 in Korea. *Int J Environ Res Public Health*. 2021;18(3):1265. doi:10.3390/ijerph18031265
- **125.** Wong J, Chaw L, Koh WC, et al. Epidemiological investigation of the first 135 COVID-19 cases in Brunei: implications for surveillance, control, and travel restrictions. *Am J Trop Med Hyg.* 2020;103(4):1608-1613. doi:10. 4269/aitmh.20-0771
- **126.** Wu J, Chen X, Gong L, et al. Epidemiological and clinical features of SARS-CoV-2 cluster infection in Anhui Province, Eastern China. *Int J Infect Dis.* 2021;117:372-377. doi:10.1016/j.ijid.2021.04.064
- **127**. Wu J, Xia J, Yang Q, et al. Clinical characteristics of SARS-CoV-2 infection at early stage. Article in Chinese. *Chinese Journal of Infection and Chemotherapy*. 2020;20(05):521-524.
- **128**. Wu W, Liu Y, Wei Z, et al. Investigation and analysis on characteristics of a cluster of COVID-19 associated with exposure in a department store in Tianjin. Article in Chinese. *Chin J Epidemiol*. 2020;41(4):489-493. doi:10.3760/cma.j.cn112338-20200221-00139
- **129**. Wu Y. Epidemiological and clinical characteristics of 41 patients with COVID-19. Article in Chinese. *Chinese Journal of Integrated Traditional and Western Medicine*. 2020;27(4).
- **130**. Xiao F, Chen B, Xiao T, Lee SK, Yan K, Hu L. Children with SARS-CoV-2 infection during an epidemic in China (outside of Hubei province). *Ann Transl Med*. 2020;8(14):849-849. doi:10.21037/atm-20-2908

- **131.** Xiao M, Hou M, Liu X, Li Z, Zhao Q. Clinical characteristics of 71 patients with coronavirus disease 2019. Article in Chinese. *Zhong Nan Da Xue Xue Bao Yi Xue Ban*. 2020;45(7):790-796. doi:10.11817/j.issn.1672-7347.2020.
- **132.** Xiao Z, Guo W, Luo Z, Liao J, Wen F, Lin Y. Examining geographical disparities in the incubation period of the COVID-19 infected cases in Shenzhen and Hefei, China. *Environ Health Prev Med.* 2021;26(1):10-10. doi:10.1186/s12199-021-00935-3
- **133.** Xiao Z, Xie X, Guo W, et al. Examining the incubation period distributions of COVID-19 on Chinese patients with different travel histories. *J Infect Dev Ctries*. 2020;14(4):323-327. doi:10.3855/jidc.12718
- **134.** Xie S, Zhang G, Yu H, et al. The epidemiologic and clinical features of suspected and confirmed cases of imported 2019 novel coronavirus pneumonia in north Shanghai, China. *Ann Transl Med.* 2020;8(10):637-637. doi: 10.21037/atm-20-2119
- 135. Xin H, Li Y, Wu P, et al. Estimating the latent period of coronavirus disease 2019 (COVID-19). Clin Infect Dis. 2022;74(9):1678-1681. doi:10.1093/cid/ciab746
- **136.** Xu T, Chen C, Zhu Z, et al. Clinical features and dynamics of viral load in imported and non-imported patients with COVID-19. *Int J Infect Dis.* 2020;94:68-71. doi:10.1016/j.ijid.2020.03.022
- **137**. Xu X-W, Wu X-X, Jiang X-G, et al. Clinical findings in a group of patients infected with the 2019 novel coronavirus (SARS-Cov-2) outside of Wuhan, China: retrospective case series. *BMJ*. 2020;368:m606-m606. doi: 10.1136/bmi.m606
- **138.** Yang HY, Xu J, Li Y, et al. [The preliminary analysis on the characteristics of the cluster for the COVID-19]. Article in Chinese. *Zhonghua Liu Xing Bing Xue Za Zhi*. 2020;41(5):623-628.
- **139**. Yang J, Wu K, Ding A, et al. Clinical characteristics, treatment, and prognosis of 74 2019 novel coronavirus disease patients in Hefei: a single-center retrospective study. *Medicine (Baltimore)*. 2021;100(21):e25645-e25645. doi:10.1097/MD.000000000025645
- **140**. Yang N, Shen Y, Shi C, et al. In-flight transmission cluster of COVID-19: a retrospective case series. *Infect Dis* (*Lond*). 2020;52(12):891-901. doi:10.1080/23744235.2020.1800814
- **141**. You C, Deng Y, Hu W, et al. Estimation of the time-varying reproduction number of COVID-19 outbreak in China. *Int J Hyq Environ Health*. 2020;228:113555-113555. doi:10.1016/j.ijheh.2020.113555
- **142**. Yu S, Cui S, Rui J, et al. Epidemiological characteristics and transmissibility for SARS-CoV-2 of population level and cluster level in a Chinese city. *Front Public Health*. 2022;9:799536-799536. doi:10.3389/fpubh.2021.799536
- **143.** Yu X, Sun X, Cui P, et al. Epidemiological and clinical characteristics of 333 confirmed cases with coronavirus disease 2019 in Shanghai, China. *Transbound Emerg Dis.* 2020;67(4):1697-1707. doi:10.1111/tbed.13604
- **144.** Zhang H, Song S, Chen Z, et al. A Cluster transmission of coronavirus disease 2019 and the prevention and control measures in the early stage of the epidemic in Xi'an, China, 2020. *Med Sci Monit*. 2021;27:e929701-e929701. doi:10.12659/MSM.929701
- **145**. Zhang J, Litvinova M, Wang W, et al. Evolving epidemiology and transmission dynamics of coronavirus disease 2019 outside Hubei province, China: a descriptive and modelling study. *Lancet Infect Dis.* 2020;20(7): 793-802. doi:10.1016/S1473-3099(20)30230-9
- **146**. Zhang K, Zhang Y, Li M, Yu M, Cha L, Ruan L. Comparative analysis of clinical characteristics of imported and local family clusters of novel coronavirus pneumonia. Article in Chinese. *Chinese Journal of Integrated Traditional and Western Medicine*. 2020;27(4):385-389.
- **147**. Zhang Q, Zhu J, Jia C, Xu S, Jiang T, Wang S. Epidemiology and clinical outcomes of COVID-19 patients in northwestern China who had a history of exposure in Wuhan City: departure time-originated pinpoint surveillance. *Front Med (Lausanne)*. 2021;8:582299-582299. doi:10.3389/fmed.2021.582299
- **148**. Zhang T, Ding S, Zeng Z, et al. Estimation of incubation period and serial interval for SARS-CoV-2 in Jiangxi, China, and an updated meta-analysis. *J Infect Dev Ctries*. 2021;15(3):326-332. doi:10.3855/jidc.14025
- **149.** Zhao C, Xu Y, Zhang X, et al. Public health initiatives from hospitalized patients with COVID-19, China. *J Infect Public Health*. 2020;13(9):1229-1236. doi:10.1016/j.jiph.2020.06.013
- **150**. Zhao H, Zhang Z, Lun W, et al. Transmission dynamics and successful control measures of SARS-CoV-2 in the mega-size city of Guangzhou, China. *Medicine (Baltimore)*. 2021;100(48):e27846. doi:10.1097/MD. 0000000000027846
- **151**. Zhao S, Tang B, Musa SS, et al. Estimating the generation interval and inferring the latent period of COVID-19 from the contact tracing data. *Epidemics*. 2021;36:100482-100482. doi:10.1016/j.epidem.2021.100482
- **152**. Zhao WH, Ma Y, Wang H, et al. [Epidemiological characteristics of three local epidemics of COVID-19 in Guangzhou]. Article in Chinese. *Zhonghua Liu Xing Bing Xue Za Zhi*. 2021;42(12):2088-2095.

- **153**. Zhao Z, Yin M, Yin S, et al. Analysis of clinical characteristics of 26 cases of COVID-19. Article in Chinese. *Chinese Journal of Disease Control & Prevention*. 2020;24(05):539-542.
- **154**. Zhong S, Lin F, Shi L. Clinical characteristics and outcomes of the patients with COVID-19: a report of 62 cases. Article in Chinese. *Medical Journal of Chinese People's Liberation Army*. 2020;45(04):370-374.
- **155.** Zhu J, Zhang Q, Jia C, et al. Challenges caused by imported cases abroad for the prevention and control of COVID-19 in China. *Front Med (Lausanne)*. 2021;8:573726-573726. doi:10.3389/fmed.2021.573726
- **156**. Zhu N, Chen S, Yang G, et al. Analysis of the path from discovery of novel coronavirus disease 2019 cases to its diagnosis in Shaanxi Province. Article in Chinese. *Xi'an Jiaotong Daxue Xuebao Yixue Ban*. 2020;41(06): 923-926.
- **157**. Zhu W, Zhang M, Pan J, Yao Y, Wang W. Effects of prolonged incubation period and centralized quarantine on the COVID-19 outbreak in Shijiazhuang, China: a modeling study. *BMC Med*. 2021;19(1):308-308. doi:10.1186/s12916-021-02178-z
- **158.** Wang Y, Liao B, Guo Y, et al. Clinical characteristics of patients infected with the novel 2019 coronavirus (SARS-Cov-2) in Guangzhou, China. *Open Forum Infect Dis.* 2020;7(6):ofaa187. doi:10.1093/ofid/ofaa187
- **159**. Elias C, Sekri A, Leblanc P, Cucherat M, Vanhems P. The incubation period of COVID-19: a meta-analysis. *Int J Infect Dis.* 2021;104:708-710. doi:10.1016/j.ijid.2021.01.069
- **160**. Lessler J, Reich NG, Brookmeyer R, Perl TM, Nelson KE, Cummings DA. Incubation periods of acute respiratory viral infections: a systematic review. *Lancet Infect Dis.* 2009;9(5):291-300. doi:10.1016/S1473-3099 (09)70069-6
- **161.** World Health Organization. Coronavirus disease (COVID-19). Updated May 13, 2021. Accessed April 17, 2022. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-adetail/coronavirus-disease-covid-19
- **162**. Cao Y, Wang J, Jian F, et al. Omicron escapes the majority of existing SARS-CoV-2 neutralizing antibodies. *Nature*. 2022;602(7898):657-663. doi:10.1038/s41586-021-04385-3
- **163.** US Centers for Disease Control and Prevention. Quarantine and Isolation. Updated March 30, 2022. Accessed April 17, 2022. https://www.cdc.gov/coronavirus/2019-ncov/your-health/quarantine-isolation.html
- **164.** Cowling BJ, Muller MP, Wong IO, et al. Alternative methods of estimating an incubation distribution: examples from severe acute respiratory syndrome. *Epidemiology*. 2007;18(2):253-259. doi:10.1097/01.ede. 0000254660 07942 fb
- **165**. Chen Y, Klein SL, Garibaldi BT, et al. Aging in COVID-19: vulnerability, immunity and intervention. *Ageing Res Rev.* 2021;65:101205-101205. doi:10.1016/j.arr.2020.101205
- **166.** Virlogeux V, Fang VJ, Wu JT, et al. Brief report: incubation period duration and severity of clinical disease following severe acute respiratory syndrome coronavirus infection. *Epidemiology*. 2015;26(5):666-669. doi:10.1097/EDE.0000000000000339
- **167**. Virlogeux V, Park M, Wu JT, Cowling BJ. Association between severity of MERS-CoV infection and incubation period. *Emerg Infect Dis.* 2016;22(3):526-528. doi:10.3201/eid2203.151437

#### SUPPLEMENT.

- eTable 1. Search Strategies for Meta-analysis of Observational Studies Reporting the Incubation Period of COVID-19
- eTable 2. Quality Assessment Scale
- eTable 3. Quality Assessment of Final Studies Used in the Meta-analysis of Incubation Period
- eTable 4. Characteristics of the Studies Included in the Systematic Review and Meta-analysis
- **eFigure 1.** Funnel Plot with a 95% Confidence Interval for Included Studies in the Meta-analysis
- eFigure 2. Forest Plot for the Meta-analysis of Incubation Period for COVID-19 Caused by Wild-type Strain

L. A. Liversidge, LL.I  Barrister & Solicitor, Professional Corporation		
WSIB Communicable Illnesses Policy		
Consultation		
Presented to: WSIB Policy and Consultation Services		
March 28, 2023		

WSIB Communicable Illness Policy Consultation

## WSIB Communicable Illnesses Policy Consultation

#### A. Opening Commentary

- 1. Thank you to the WSIB Consultation Secretariat for the opportunity to comment on the Board's "**Draft Operational Policy, 15-03-15, Communicable Illnesses**" ("Draft Policy").
- 2. As succinctly set out in the Board's web-based announcement, "Communicable illnesses policy consultation," based on the Board's accumulated institutional experience of dealing with communicable illnesses through SARS (2003), H<sub>1</sub>N<sub>1</sub> (2009) and most notably and recently COVID-19 (2020), the Board has acquired a significant level of institutional expertise.
- 3. The Board's introductory preamble is repeated, with portions highlighted:

The COVID-19 pandemic was an unprecedented event for Ontario's workplace safety and insurance system, both in terms of the speed with which it arrived in Ontario and the spread of the virus in the population. We responded quickly, in part, by implementing steps to support timely, transparent and consistent decision-making in COVID-19 claims. This allowed us to move swiftly to provide people who contracted work-related COVID-19 with wage-loss benefits, health care, and help getting back to work.

Early in the pandemic, we created an adjudicative approach document for initial entitlement in COVID-19 claims and made it available to the public on our website. We have a long history of adjudicating communicable illness claims that includes other previous global outbreaks, such as SARS and H1N1. Our approach with COVID-19 largely reflected our general approach to these claims.

Almost three years has passed since the Ontario government declared a provincial emergency related to the COVID-19 pandemic. In that time, we have adjudicated tens of thousands of COVID-19 claims, overcome numerous adjudicative challenges, and learned many lessons.

Drawing on both our history of adjudicating communicable illness claims and our recent COVID-19 claims' experience, we have developed a draft communicable illnesses policy for consultation. The draft communicable illnesses policy reflects:

- Our current practice, as this policy is not a change in direction, but rather provides detailed and clear guidance about how entitlement in communicable illness claims has been and will continue to be adjudicated.
- Examples of the types of employment settings and employment-activities that may have increased risk (e.g., hospitals, patient care).
- Feedback and questions from stakeholders throughout the COVID-19 pandemic (e.g., immunization status).
- 4. This response to the Board's Draft Policy will assess the legal framework set out, and identify any drafting shortcomings with appropriate and relevant suggestions.

WSIB Communicable Illness Policy Consultation

#### B. A comment on the initial urgency of a WSIB COVID-19 adjudicative template

- 1. In March 2020, with the recognition of a national emergency, the Ontario WSIB acted with appropriate urgency.
- 2. Due to the urgency, the Board was unable to deploy its usual practice of seeking external stakeholder input through consultation on a broad scale. The circumstances simply did not permit the deployment of that normal practice. For this reason, since this is the stakeholder public's first opportunity to engage on this important issue, the Board's current consultative exercise is particularly important.
- 3. At the outset of the development of the WSIB's COVID-19 policy initiative in March 2020, upon direct request, I did have the opportunity to present some advice and commentary. I have included the text of an email sent to (then) WSIB Chair Witmer on March 22, 2020.
- 4. Those comments remain relevant to this exercise, although they were commenting on issues surrounding the then proposed "Adjudicative Approach to 2019 Novel Coronavirus."
- 5. As a result of those comments, the Board adjusted its approach and re-drafted the document, which served as adjudicative guidance during the duration of the COVID-19 emergency.
- 6. I point out that some of the problematic language referenced in my March 22, 2020 email set out in the WSIB March 2020 Draft Document, specifically the requirement for a greater risk of contracting the illness in the workplace than the risk experienced by the general public (March 2020 Draft Policy, page 4, under the heading "Community-acquired communicable illnesses)," reappears in the current (2023) Draft Policy. I will address this element later in this response.
- 7. The text of my March 22, 2020 email follows:

From: L.A. Liversidge

Sent: March 22, 2020 2:18 PM
To: Diane Weber; Elizabeth Witmer

Subject: FW: Adjudicative Approach Document - Covid-19

**Attachments:** Adjudicative Approach to 2019 Novel Coronavirus.pdf

Elizabeth and Diane:

I am writing about the recent pre-release of the WSIB document, **Adjudicative Approach Document: Novel Coronavirus (COVID-19) Claims.** It is my opinion that notwithstanding the directive that decisions will be based "on the merits and justice of the case," it is my opinion that the Board's planned approach may easily be interpreted in a legally incorrect manner and may well serve to deny allowable cases that upon appeal, will be allowed. **In these trying and urgent times, delays in securing individual justice must be avoided at all costs.** If the Board is no make an error, that mistake in my view must be towards extending not denying entitlement. That said, WSIB policy can be developed that ensures fair, swift and just entitlement. I provide this analysis with that objective in mind. I recommend the paper be re-drafted to make it much clearer.

I have concerns with respect to the following elements of the March 20, 2020 document:

WSIB Communicable Illness Policy Consultation

# Guidelines Determining Entitlement Claims for COVID-19 may be considered work-related where the following is established: 1. the nature of the worker's employment created a risk of contracting the disease to which the public at large is not normally exposed; and Where the nature of the worker's employment creates a risk of contracting the

disease to which the public at large is not normally exposed, and the worker's COVID-19 condition is confirmed, this will generally be persuasive evidence that the

work made a significant contribution.

It is the words "to which the public at large is not normally exposed" that are problematic. Since the public at large is at present at great general risk of being exposed to and being infected by COVID-19, this infers that the workplace must represent a special or inordinate risk. This is not legally correct. The correct and exclusive standard is whether the employment represented a significant contributing factor. While the paper mentions this core guiding principle, there is no need to qualify it by concurrently requiring that the employment create a greater risk to which the public is not normally exposed.

#### I will explain.

If somebody in the workplace is a known carrier of COVID-19 and an employee likely had contact with them and then gets COVID-19, WSIB entitlement should be extended, whether or not the employment risk is greater than the general public. The Board must assess the actual and specific risk, not the general risk. If the co-worker is a KNOWN carrier then the worker's exposure at work would be a significant contributing factor. I refer to **W.S.I.A.T.** *Decision No. 2970/16* (February 27, 2017):

- [8] In determining whether a worker has entitlement for an occupational disease, however, the Tribunal generally considers whether the workplace exposures made a significant contribution to the development of the claimed condition. A significant contributing factor is one of considerable effect or importance. It need not be the sole contributing factor. See, for example, Decision No. 280. Whether the risk contribution is more than "beyond that faced in the community at large" is not part of the legal test used by the Tribunal to determine work relatedness of a disease.
- [9] Also of note, the statutory presumption set out in section 13(2) does not apply to an injury by disablement. See, for example, Decisions No. 268 and 42/89.
- [10] The Board's position was that the worker developed a communicable disease such as a cold or flu. The Board's position was that since the worker's symptoms could have developed anywhere the worker could not satisfy the standard of proof noted above. As noted by the ARO, "multiple potential sources of infection may exist at work and at home which creates challenges in establishing when work-relatedness when determining entitlement".
- [23] The employer noted the worker could have been exposed elsewhere outside of work. The employer indicated there was a public outbreak in the community. The worker denied this and the employer was unable to establish she was exposed to an environment other than work which would have exposed her to a similar risk for illness. There is more evidence to support she was exposed to an elevated risk in her workplace environment. Dr. Naidoo agreed and related her illness to her workplace. Therefore, I find the worker has initial entitlement for her respiratory illness. In conclusion, I am satisfied that the worker's exposure at work was a significant factor in her development of a respiratory condition and consequent loss of earnings. I accept Dr. Naidoo's views and find also, there was no other probable cause.

### L. A. Liversidge, LL.B.

#### Barrister & Solicitor, Professional Corporation

#### WSIB Communicable Illness Policy Consultation

Decision No. 58/17 (excerpt below) does indicate that one would need to look at the risk of the workplace versus the risk of the community at large. However, the analysis in Decision No. 58/17 is at odds with that in Decision No. 2970/16 (above) which states that "Whether the risk contribution is more than "beyond that faced in the community at large" is not part of the legal test used by the Tribunal to determine work relatedness of a disease."

However, when we put the principle in *Decision No. 58/17* together with that in *Decision No. 490/99*, i.e., there must be an identifiable injuring process or causal connection, it becomes clear that the standard is an identifiable injuring process or causal connection at work. This is confirmed by *Decision No. 844/17* (**April 6, 2017**), below. Thus, the fact that the worker works in the same building as a person who has COVID-19 is not enough to render the work environment a more significant contributor than the community at large, there must be some direct exposure or causal connection to that person that would make the work environment a more significant contributor (i.e., direct contact). Therefore, it is evidence of direct exposure that is defining.

#### W.S.I.A.T. *Decision No. 58/17* (January 16, 2017)

[13] The Board's Eligibility Adjudicator's decision memo refers to an Adjudicative Support Document entitled "Work-Related Communicable Illness". This document states that everyone is at risk for getting a cold or flu. As such, colds and flus are generally considered community-acquired illnesses that are not due to the nature of any particular employment. The document further states that in order for a communicable disease, such as the cold or flu, to be compensable, it must be established that employment made a significant contribution to the risk of contracting the illness, beyond that faced in the community at large.

#### W.S.I.A.T. Decision No. 490/99 (August 7, 2001) states:

[62] ...The fact that one can catch a disease at work as well as in a non-work environment is not sufficient to trigger entitlement. There must be an identifiable injuring process or causal connection. It is not sufficient to say that a disease could be in a hospital and therefore a possible source of infection for the worker. In fact, we find it less likely that the worker would contract - at random - such a virus at work because it is there she would be practicing structured and institutional hygiene requirements (constant hand washing as well as gowns/gloves where required).

#### W.S.I.A.T. Decision No. 844/17 (April 6, 2017) states:

[17] The Tribunal has considered cases involving colds and exposure for those who work in the health care system on prior occasions. Tribunal Decision No.648/14 allowed a worker's appeal in that regard. Tribunal Decision No. 1365/14, which addressed an employee of a nursing home, also allowed an appeal by a worker, thus granting initial entitlement. Recently released Tribunal Decision No. 58/17 also allowed a worker's appeal in similar circumstances. Again, in these cases, the usual question of causation and/or "significant contribution" was considered. Again, just because the condition involves what is often referred to as the "common cold" does not mean that any different legal principles apply.

I suggest that there is no legal requirement for the employment to represent a special risk beyond that of the general public. If there is such a risk, such as in health care facilities, that can be interpreted in the context of a "more probable than not" analysis, allowing a reasonable conclusion in those cases that there was an employment exposure even in the absence of a specific identified exposure. In other words, in those cases, a general exposure would be sufficient.

I would suggest that the policy document be redrafted to make this clearer.

8. As mentioned, the Board accepted the advice and adjusted the March 2020 document accordingly, officially publishing the revised Adjudicative Approach Document on March 23, 2020. The phrase "the nature of the worker's employment created a risk of contracting the

#### WSIB Communicable Illness Policy Consultation

disease to which the pubic at large is not normally exposed," in the revised (official) document no longer was an essential requirement for entitlement. Instead, such circumstances, when present, were correctly viewed as facts expediting entitlement, particularly where no direct exposure evidence was available. The phrase became in operation a de facto factual presumption (albeit, not a legal presumption as understood in the context of the WSIA). The Board's revised approach was consistent with the normal significant contribution test.

- 9. Of course, we now have exactly three (3) years accumulated experience and expertise in dealing with these cases.
- 10. Through the evolution of the Board's experience, the Board has been able to hone its institutional expertise. This is reflected in the Draft Policy. The Board's outreach is timely. Thoughtful consideration can be applied in a calmer non-emergency environment.
- 11. In this response, I will comment on the Draft Policy section by section. First, I will summarize key legal points which arise from relevant Appeals Tribunal decisions on point, which provide a suitable analytical template to apply in these types of cases.

#### C. The bottom-line legal test for entitlement

- 1. The cases discussed in my March 22, 2020 email (above), along with **WSIAT** *Decision No.* **47/22** (**January 18, 2022**), a recent WSIAT communicable disease case, present a helpful analytical template for these types of cases.
- 2. The eventual Board policy on communicable illness must be consistent with the following core principles and approaches:
  - "In determining whether a worker has entitlement for an occupational disease, however, the Tribunal generally considers whether the workplace exposures made a significant contribution to the development of the claimed condition" (W.S.I.A.T. *Decision No. 2970/16* (February 27, 2017), para. 8).
  - Whether the risk contribution is more than "beyond that faced in the community at large" is not part of the legal test used by the Tribunal to determine work relatedness of a disease (W.S.I.A.T. *Decision No. 490/99* (August 7, 2001) para. 62).
  - The fact that one can catch a disease at work as well as in a non-work environment is not sufficient to trigger entitlement. There must be an identifiable injuring process or causal connection (W.S.I.A.T. *Decision No. 844/17* (April 6, 2017) para. 17).
  - "... the usual question of causation and/or "significant contribution" was considered. Again, just because the condition involves what is often referred to as the "common cold" does not mean that any different legal principles apply" (W.S.I.A.T. Decision No. 47/22 (January 18, 2022), para. 21).

WSIB Communicable Illness Policy Consultation

- 3. Three core principles emerge from these cases.
- 4. *One*, the normal significant contribution test applies to communicable illnesses. *Two*, there must be an identifiable employment related injuring process. *Three*, the requirement for an employment risk beyond that faced in the community at large is not an appropriate part of the legal test upon which entitlement turns.
- 5. With respect to the third point, as noted earlier, the presence of such evidence assists in establishing a significant contribution. The absence of such evidence though is not a bar to entitlement.
- 6. I analyzed available WSIB Appeals Resolution Officer (ARO) decisions available on the legal research website <u>CanLii</u>, notably ARO <u>Decision 20210007</u> (June 21, 2021), ARO <u>Decision 202110015</u> (July 24, 2021), ARO <u>Decision 20220004</u> (December 2, 2021), and ARO <u>Decision 20220059</u> (May 29, 2022). All of these decisions effectively applied the significant contribution test.

#### D. A clause-by-clause analysis of the Draft Policy

- 1. I respectfully present three overriding concerns. *One*, the Draft Policy is somewhat needlessly wordy, which distracts from its potential clarity. *Second*, and relatedly, many redundant phrases are used and repeated, such as "but are not limited to," which offer no adjudicative or policy guidance, and effectively render meaningless the forthcoming list which follows such a statement. *Three*, as set out at the end of this document, I suggest that additional legal analysis on the part of the Board would be beneficial.
- 2. From page 1 of the Draft Policy:

#### **Entitlement criteria**

In deciding whether a worker has initial entitlement to benefits for a communicable illness, a decision-maker determines whether:

- the worker contracted a communicable illness
- $\bullet \quad \text{the worker contracted the communicable illness while in the course of employment, and} \\$
- the communicable illness arose out of the worker's employment, in that the employment made a significant contribution to contracting the communicable illness.

- This is the essence of the policy and is an appropriate set of criteria.
- The Draft Policy is appropriately organized to follow these core elements.

WSIB Communicable Illness Policy Consultation

3. From page 2 of the Draft Policy, with respect to the reasons for an exception to laboratory or clinical evidence of current infection:

Legitimate reasons include, but are not limited to:

- the period of illness is short-lived (i.e., 24 48 hours)
- the worker cannot access or does not qualify for diagnostic testing, and
- laboratory confirmation is not available for the communicable illness.

#### **LAL Comment:**

- The use of "but are not limited to" nullifies the importance of the three bullets which follow.
- The essential point it seems, is this if circumstances render the securing of a test impossible, as opposed for example to being inconvenient, the requirement for a test is waived *by necessity*.
- Clearly, the Board has a sense as to what would constitute a reason that is <u>not</u> legitimate (or else the entire section is redundant and moot).
- It would be helpful if the Board attempted to articulate these illegitimate reasons. Otherwise, little or no adjudicative guidance is presented.
- The point that I believe the Draft Policy is attempting to advance is this: An exception will be granted if a test <u>cannot</u> be obtained. An exception will not be granted if a test <u>could have been obtained</u> but was not.
- 4. From page 2 of the Draft Policy:

In the absence of laboratory or clinical evidence of current infection, a decision-maker will determine whether the worker has or had at the relevant time a specific communicable illness based on the available evidence including, but not limited to:

- a laboratory test to detect a previous infection (e.g., antibody test)
- the worker's presentation (i.e., signs and symptoms) and whether it is compatible with the signs and symptoms of the communicable illness established to exist in the workplace
- the diagnostic criteria for the communicable illness, and
- the advice or opinion of a medical consultant.

- The phrase "but not limited to" as earlier noted, offers no adjudicative guidance.
- Frankly, the list appears quite situationally exhaustive as drafted and need not be qualified with the "but not limited to" proviso.

WSIB Communicable Illness Policy Consultation

5. From page 2 and 3 of the Draft Policy:

Factors to consider when gathering and weighing the evidence related to potential work-related and non-work-related exposures to the communicable illness include, but are not limited to:

- the route of transmission of the communicable illness (e.g., contact, droplet, airborne, oral)
- the opportunities that existed for exposure to and transmission of the communicable illness both inside and outside of the worker's employment, including contact with persons known to have or suspected of having the communicable illness (e.g., coworkers, patients, friends, family members)
- the frequency, duration, and types of potential exposures to the communicable illness (e.g., protected vs. unprotected, direct vs. indirect), and

#### **LAL Comment:**

- I raise issue again with the "but are not limited to" qualifying phrase.
- The list appears quite inclusive and need not be diminished with the qualifier.
- 6. From page 3 of the Draft Policy:

(The key characteristics of a sample of communicable illnesses that occur in Ontario can be found in the Appendix.)

- The Appendix has been reviewed.
- It is recommended that the Board cite the medical source or medical authority for the content of each column for each item of the Appendix.
- Otherwise, upon review or appeal, at the Board or the WSIAT, a party may well question the standards set out with rebuttal medical evidence.
- That rebuttal evidence may acquire a higher than warranted deference if the eventual
  decision-maker is unable to objectively assess the comparative calibre of the Board's
  criteria against any rebuttal evidence.
- Presuming that the Board has sound authority for its list, it is prudent for the Board to establish that demonstrable authority.

WSIB Communicable Illness Policy Consultation

#### 7. From page 3 of the Draft Policy:

The inability to identify a specific work-related contact source for the worker's communicable illness does not mean the worker did not contract the communicable illness from exposure occurring in the course of employment. In the absence of a specific work-related contact source, the decision-maker must determine the issue of whether the communicable illness was contracted by the worker while in the course of employment after weighing all of the available relevant evidence.

#### **LAL Comment:**

- Respectfully, the above statements offer no adjudicative direction and are effectively redundant, and of no value in a policy directive document.
- The statements add nothing to the overarching instructions set out on page one under the heading "Entitlement criteria."
- It is recommended that this paragraph be excised from the Draft Policy.
- 8. From page 3 of the Draft Policy:

## Determining whether the communicable illness arose out of employment

A worker's employment will have made a significant contribution to contracting a communicable illness when the decision-maker is satisfied that:

- the employment placed the worker at an increased risk (i.e., increased likelihood) of
  contracting the communicable illness as compared to the risk experienced by the general
  public during ordinary or routine activities of daily living, and
- the communicable illness was contracted by the worker from exposure that occurred in the course of their employment as a result of the identifiable increase in risk.

The worker's employment will generally not have made a significant contribution to contracting the communicable illness when these conditions are not met.

- This element, which is the core eligibility element, is problematic for either lack of clarity, an incorrect expression of the proper legal test, or arguably both.
- As written, it appears that the adjudicative direction is that an essential condition precedent is that the employment must present a greater risk than the risk experienced by the general public.
- If this is the intended rendering, respectfully, for the reasons earlier cited, it is an incorrect reading of the law.

WSIB Communicable Illness Policy Consultation

- Moreover, and significantly, these conditions are at odds with the general "**Entitlement criteria**" (Draft Policy, page 1).
- Yet, it is unclear if it is the intent of the Board to require a special eligibility for communicable illness beyond the significant contribution test.
- The next section of the policy (also from page 3) reads:

In determining whether the worker's employment made a significant contribution to the contraction of the communicable illness, the decision-maker considers both the risk factors that are associated with the worker's occupation or job as well as the individual circumstances that led to the worker contracting the communicable illness.

#### **LAL Comment:**

- This is an appropriate legally correct criterion, but one that appears to be at conflict with the earlier requirement for an employment risk greater than the community risk.
- As I set out earlier:

Three core principles emerge from these cases.

*One*, the normal significant contribution test applies to communicable illnesses. *Two*, there must be an identifiable employment related injuring process. *Three*, the requirement for an employment risk beyond that faced in the community at large is not an appropriate part of the legal test upon which entitlement turns.

With respect to the third point, as noted earlier, the presence of such evidence assists in establishing a significant contribution. The absence of such evidence though is not a bar to entitlement.

- It is recommended that if the Board <u>does not intend</u> to establish a higher threshold for entitlement than the significant contribution test, that this section be reworked.
- If the Board <u>does intend</u> to establish a higher threshold for entitlement than the significant contribution test, it is recommended that this section be reconsidered for the reasons set out.

WSIB Communicable Illness Policy Consultation

9. From page 4 of the Draft Policy:

#### Community-acquired communicable illnesses

Communicable illnesses, such as influenza, the common cold, and COVID-19 are highly transmissible and can be prevalent in the general population. In-person interactions that can easily spread these communicable illnesses are a part of everyday life and occur both inside and outside of employment (e.g., in the home, community, and public settings). Outside of a public health emergency, in-person interactions at work with colleagues, customers, clients, or others, generally do not place the worker at a greater risk of contracting one of these communicable illnesses than the risk experienced by the general public. Therefore, a worker who contracts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increased their risk of contracting the communicable illness in some additional way. For example, the worker contracts the communicable illness while performing a job duty that subjected them to an exposure risk in excess of the norm, such as delivering health care to a person known to have the communicable illness.

- This section is the difficult part.
- I respectfully present that the legal test set out in the body of this section, i.e., the need for a greater risk than the general public, is not a correct reading of the application of the significant contribution test.
- As written, the Draft Policy will be subject to review and likely will be held to be contrary to the WSIA.
- The WSIB lacks the administrative authority to *de facto* over-ride the eligibility requirements set out in the WSIA. In effect, this section purports to do this.
- Instead of a requirement of a greater risk than the general public, the Board should focus on guidance to assist in establishing the presence or absence of an employment related injuring process. This is clearly the intent of Appendix A.
- It is also respectfully presented that the presence or absence of a public health emergency, in the context of this section, does not change the basic eligibility criteria under the WSIA, unless statutorily prescribed. Of note, the WSIA was not amended during the COVID crisis. Cases were decided through the basic significance contribution entitlement test. They will continue to be so decided.
- The Board is aware however that during COVID there was an active and influential political campaign taken to the floor of the Ontario legislature for distinctive legal treatment for COVID cases. A special COVID presumption amendment was often suggested (see for example, Private Members' Bill, Bill 191 introduced May 19, 2020).
- As the Board established a reputation for fairly deciding COVID cases, this bud did not bloom.

#### WSIB Communicable Illness Policy Consultation

- In the event that Board policy curtails otherwise allowable communicable diseases, introduction of a broader communicable disease presumption amendment is foreseeable if not certain.
- It is respectfully suggested that the Draft Policy be reconsidered with a renewed focus on establishing clearer guidance on establishing an employment related injuring process in a manner consistent with the WSIA as currently drafted and the significant contribution test as currently understood and applied.

## E. The need for a more comprehensive legal analysis to be developed and presented by the WSIB

- 1. The Draft Policy process would have benefitted from the development and public release of a comprehensive legal analysis containing a review of the historical adjudicative and policy treatment of communicable disease cases.
- 2. While the Board asserts its acquired expertise through SARS, H<sub>1</sub>N<sub>1</sub> and COVID, the fruits of that experience have not been articulated and have not been shared.
- 3. This academic level paper would be an essential companion piece to the Draft Policy, and provide authority and analysis for the positions the Board advanced.
- 4. As the pubic emergency has passed, and as the exigent circumstances of COVID-19 no longer exist, the Board has the luxury of time, an extravagance it lacked three years ago.
- 5. It is strongly recommended that the process commence afresh with the development and release of an academic level legal analytical paper addressing the meaning and application of the significant contribution test as it has been applied to communicable illness claims. This paper would assess the law, the policy and most importantly, the plethora of Appeals Tribunal cases that have considered this issue.
- 6. I consider this to be an essential albeit so far missing component to this exercise.

I would be pleased to discuss this paper with the Board.

#### ALL OF WHICH IS RESPECTFULLY SUBMITTED

L.A. Liversidge March 28, 2023



March 3, 2023.

WSIB
Consultation Secretariat
Consultation Secretariat@wsib.on.ca

Consultation Subject: Communicable illnesses, Document Number 15-03-15.

TO WHOM IT MAY CONCERN:

Please find attached our response to the draft WSIB Operational Policy Manual, Document Number 15-03-15, "Communicable Illnesses".

#### Disclaimer

The WSIB is advised that this response, in full and in part, represents the opinion of Mandlowitz Consulting and Paralegal Services (MCPS) and does not reflect the opinion of our clients or any other agent or organization.

#### Introduction

The WSIB is to be applauded for taking the step to develop a policy addressing communicable illneses especially given our experience with COVID and the anticipated long-haul COVID environment.

Subject - Communicable Illnesses

MCPS recognizes the Workplace Safety and Insurance Act, 1997 provides the WSIB with exclusive jurisdiction and wide ranging authority to decide matters and questions under the Act and toestablish policies and procedures.

In reviewing the draft Policy we start with a question. Why has the WSIB chosen to adopt a policy entitled "Communicable Illnesses"? Why has the policy title not included "Infectious Illnesses/Diseases?

A further question is whether "Communicable Illnesses" are to be adjudicated as occupational diseases. We not that the draft policy section entitled References, lists Section 2 of the Act. Section 2 defines "occupational disease".

We are left with some confusion.

The term "communicable illness" is not defined in Section 2 of the Act. Equally, infectious illness or agent is not defined in the Act. However, Section 2 of the Act defines occupational disease and Section 15 provides the WSIB authority to award benefit entitlement for occupational disease.

Both Section 2 and 15 are included in the References section of the draft policy.

It is recommended that the draft policy should explicitly address this matter. Specifically, WSIB should indicate whether communicable illnesses will be adjudicated under Section 15 of the Act and, if so, reference Schedule 3 and Sections 22(1)(7)(8) in the draft policy.

Other Canadian jurisdictions take a fairly consistent approach in this regard.

The WCB of Alberta has consulted on a draft policy. Under Alberta WCB Policies & Information, Policy: 03-01 PART II, communicable/infectious illnesses are considered an occupational disease. To clarify, stakeholders are provided with a Worker Fact Sheet entitled "Infectious diseases" which references the policy.

The WorkSafe BC approach involves defining communicable/infectious illnesses in the draft policy, OHS Guideline G-P2-21. The draft policy states that a communicable disease is an illness caused by an infectious agent or its toxic product that can be transmitted in a workplace form person to person. Examples are COVID-19, norovirus and seasonal influenza. Occupational diseases may include the contraction of a contagious disease such as hepatitis B.

The WCB of PEI approach involves proceeding by way of definition: "A communicable disease is an illness caused by an infectious agent, or its toxic product, that can be transmitted in a workplace from one person to another. Examples of communicable disease that may circulate in a workplace include COVID-19, norovirus and seasonal influenza."

Given this context, it is recommended that the draft policy clarify the intended meaning and relationship between occupational illness/disease, communicable illness/disease, infectious disease and contagious disease. These seemingly related issues could be addressed in a Definitions section (also missing from the draft Policy) or, alternatively, through an Adjudicative Guideline.

What would be appreciated is a clear statement addressing whether the WSIB's intents is to establish and adjudicate what is referred to as "communicable illnesses" as an occupational disease under Section 15 of the Act or under other general policies in the OPM?

Associated Health and Safety measures

The Workplace Safety and Insurance Act, 1997, in Section 1, Purpose, intends for the WSIB to "To promote health and safety in workplaces." There is no question that the communicable illnesses listed in the Appendix to the draft policy are workplace health and safety challenges.

Other Canadian jurisdictions have recognized both the role of the workers' compensation system and challenges facing workplaces.

The WorkSafe BC has issued a useful document entitled "Communicable disease prevention" which identifies the fundamentals of prevention together with ongoing measures for the workplace and for public health compliance.

The WCB of PEI has recently prepared and made public the "Guide for Communicable Disease Prevention" which provides a 4-step prevention framework and planning template.

While not part of the draft policy, but as part of the WSIB legislated purpose, it is recommended that the WSIB and Ministry work together to provide workplaces with strategic planning and implementation resources for communicable illness prevention.

### **Definitions**

It is fairly typical to find in WSIB established policies a separate section entitled "Definitions". It is recommended that in order to clarify the meaning of a number of terms in the draft policy that a Definitions section should be established and include, but may not be limited to:

Communicable Illnesses
Period of communicability
Infectious disease/ agent
Contagious disease
Transmission directly/indirectly
Mode of transmission
Health professional
Clinical assessment
Public health emergency
Essential worker

#### Guidelines

The Guidelines section of the draft policy states that a communicable illness can arise due to transmission from person to person or animal to person: either directly or indirectly? Additional clarification is provided in the Appendix: Mode of Transmission.

It is recommended that the draft policy establish a separate section entitled "Determining whether the worker contracted a communicable illness directly or indirectly".

What is required are the conditions and evidence (including the expertise required to provide the WSIB with opinion/evidence of indirect transmission) to be considered by the decision maker in validating direct and indirect transmission.

It should be noted that other Canadian jurisdictions with policies on communicable illness/disease and/or infectious illness do NOT include indirect transmission as a condition for benefit entitlement.

#### **Entitlement Criteria**

The draft policy establishes three (3) criteria for initial entitlement.

It is recommended that this section should be reorganized but not rewritten and that four (4) criteria should be established.

It is recommended that in order to be consistent with the legislative presumption in Section 15 of the Act that the first and separate criterion should be "the worker contracted a communicable illness".

To reflect Section 15(2) of the Act, the next two (2) criteria should state "the worker contracted the communicable illness while in the course of employer" OR "arose out of the worker's employment".

Finally, a fourth and separate criterion should be "the employment made a significant contribution to contracting the communicable illness."

Determining whether the worker contracted a communicable illness

The second factor in this section of the draft policy requires "a diagnosis by a treating health professional qualified to provide such a diagnosis based on a clinical assessment of the worker during the period of illness."

The very nature a communicable illness, especially if it established as part of a public health emergency, is that the worker may not be able to undergo an in-person clinical assessment. This was typically the case during COVID-19 which gave life to telehealth and teletherapy medical services.

It is recommended the draft policy should define the meaning of clinical assessment. This should clarify what the WSIB will accept as a clinical assessment for the purposes of obtaining evidence which a decision maker must use to adjudicate entitlement.

Specifically, is a clinical assessment limited to an in-person assessment or would the WSIB accept a diagnosis provided in an alternative form such as through telemedicine or teletherapy?

#### But are not limited to:

In several of the sections of the draft policy the WSIB has indicated the factors considered when gathering and weighing evidence by a decision maker are "indicative" but may not be "exhaustive".

For example, in the section Determining whether the communicable illness was contracted in the course of employment the draft policy provides four (4) bullet points (pages 2, 3 of 7) and holds "but are not limited to".

In other sections of the draft policy this does not occur. For example, in the section Determining whether the communicable illness arose out of employment (page 3 of 7) only two (2) factors are provided. There is no statement: "but are not limited to".

It is recommended that the draft policy should be reviewed to adopt a consistent approach to the use of the term "but are not limited to". The WSIB should be clear that where the statement "but are not limited to" is not part of the draft policy that the WSIB intends to limit the scope of the section.

LOE benefits and periods of communicability

The draft policy addresses when a claim is allowed for LOE entitlement.

It is recommended that the policy provide references to applicable Board policy. Specifically, this would include: Lost time 11-02-02; No Lost time 15-02-02; Secondary conditions 15-05-01; and WSIB Requested health examination 17-04-03.

What appears missing in the draft policy is the treatment of a recurrence of a communicable illness. In the case of COVID-19 this would involve what is being referred to as "long COVID". It is recommended that the draft policy should identify the criteria for decision makers for communicable illness recurrences and, accordingly, reference WSIB policy on Aggravation 15-02-04; Pre-existing Conditions (15-02-03); and Second Injury and Enhancement Fund (14-05-03).

#### Immunization status

The draft policy states that entitlement to benefits will not be denied solely because a worker is not immunized against the particular communicable illness for which there is a claim for benefits.

It is recommended that the WSIB reconsider this position by taking the position that entitlement to benefits will not be denied, in this circumstance, unless the worker's behaviour is non-compliant with public health legislation and/or is serious and wilful misconduct as per Section 17 of the Workplace Safety and Insurance Act.

Assignment of Claims Costs during a public health emergency

While the COVID-19 situation has proven to be unique and has resulted in unprecedented government policy, it is recommended that because the draft policy in the section "Community-acquired communicable illnesses" (page 4 of 7) chose to address the situation "Outside of a public health emergency..", and because the draft policy in the section "Prevention of communicable illnesses" (page 5 of 7) chose to address when "a worker subsequently develops symptoms or tests positive for a communicable illness" the question is raised regarding employer claim costs assignments both during and apart from a public health emergency (pages 4, 5 of 7).

Again, references to the Act and WSIB policy would be helpful.

If the WSIB determines there is an absence of appropriate policy or gaps exist in existing policy then it is recommended that the WSIB work on its' own or with the Ministry to address such concerns.

### **Application Date**

It is recommended that a WSIB policy, whether it is entitled Communicable Illnesses", should not apply retroactively. Accordingly, to be consistent with the current approach taken by the WSIB in this regard, the Application Date should apply as decisions made on or after the date the final policy is approved by the Board of Directors.

The WSIB Operational Policy Manual and website have newly introduced a number of amended policies dated January 3, 2023, with an effective date of January 1, 2023. In these cases, the application date was established as decisions made on or after January 1, 2023.

**Retroactivity and Transition Rules** 

If, however, the decision is taken that a new policy will have retroactive effect then the draft policy should be explicit.

Policy review schedule

It is recommended that this section be deleted from the policy.

The WSIB has amble legislative authority to undertake for policy updates and modernization. Future WSIB reviews and changes to policy should not be guided by a time frame. This should be determined by changes in science and based on recommendations from the WSIB's occupational disease consultations and expert resources.

#### **APPENDIX**

The Appendix to the draft policy makes the case for the inclusion of a Definitions section in the final policy. The Appendix introduced, but fails to define, communicable illness, infectious agent, and infectious organism.

The Appendix raises additional questions pertaining to the sources of information provided for the six (6) communicable illnesses. The question arises whether there is complete agreement in the medical community/literature/research for modes of transmission, incubation period and period of communicability.

To avoid detracting from the remainder of the draft policy, it is recommended that the Appendix be removed from the final policy. A more appropriate location may be a WSIB Adjudicative Guideline or Fact Sheet.

Submitted respectfully.

Yours very truly,

Jason Mandlowitz President

Mandlowitz Consulting and Paralegal Services/Mandlowitz Training Inc.

SUBMISSIONS ON THE DRAFT POLICY ON COMMUNICABLE DISEASES- OP 15-03-15

### INTRODUCTION

I am a retired lawyer, with over 40 years experience representing injured workers. I represent no one but myself in this.

I am making submissions on this draft policy despite my retirement, because it is the most important policy to be released by the WSIB in my career and indeed in my lifetime. The number of workers who have died or will die, or who have suffered or will suffer from serious health consequences, as a result of exposure to the COVID-19 virus at work will exceed the number for any other disease with the possible exception of occupational cancer. And COVID-19's consequences have afflicted, and will afflict, much younger workers than occupational cancers, and the work-acquired infections will also affect their families because of its communicability.

It is jarring to read in the draft policy COVID-19 lumped in with influenza, which has much less mortality and morbidity particularly among young and middle-aged adults, and the common cold, for which I have never seen a claim made in my career. COVID-19 deserves its own policy. It has had no real comparison since perhaps the so-called "Spanish flu" over 100 years ago. With that caveat, I will turn to the specific provisions in the draft policy- what is there and what is missing. I will not comment on the policy as it relates to other communicable diseases.

# WHAT IS COVID-19?

The draft policy does not contain a description of COVID-19 (nor any other communicable disease), but does contain a summary of some of its characteristics in the Appendix at page 7 of the draft policy. The signs and symptoms of infection are listed as: "fever and/or chills, cough, shortness of breath, decrease or loss of taste or smell,

runny nose/nasal congestion, headache, extreme fatigue, sore throat, muscle aches or joint pain, gastrointestinal symptoms (i.e. vomiting or diarrhea)". This is a fair description of initial signs and symptoms. The mode of transmission is listed as: "inhalation of infectious respiratory particles of varying sizes-aerosols (smaller particles) and droplets". This is very good, with the only criticism being that it would be helpful to have a description of the different characteristics of aerosol vs. droplet transmission. The most important differences are:

- aerosol transmission can occur up to 8 hours between when the infected person is in the space and the exposure to the non-infected person in the space, whereas droplet transmission requires that the infected person and the non-infected person be in the same space at the same time
- aerosol transmission can occur over much greater distances within the same space than droplet transmission<sup>i</sup>

This description does not necessarily have to be in the policy, and could be found in a medical paper made widely accessible to decision-makers with reference to the medical paper in the policy. The incubation period is listed as 1-14 days, which is accurate. The period of communicability is listed as "two days before symptom onset to ten days following symptom onset". This is usually accurate.

The key point about this portion of the draft policy is that it does not say what medical science now understands COVID to be. It is an infection spread through inhalation which on a regular basis afflicts multiple systems throughout the body (neurological, cardiovascular, immunological, gastrointestinal, urological), and these consequences can appear soon or long after the initial infection<sup>ii</sup>. People who have been infected or reinfected with COVID have significantly increased risk of neurological conditions (mostly described as long COVID), heart attack and stroke and diabetes, among other conditions, and this increased risk persists for at least a year after infection or reinfection<sup>iii</sup>.

## **DIAGNOSIS OF COVID-19**

The draft policy's provisions with respect to proof of the communicable disease, including COVID 19, are as follows:

In addition to other relevant evidence gathered during the adjudication of a claim, one or both of the following will generally be necessary to establish the worker has or had at the relevant time a specific communicable illness:

- laboratory confirmation of current infection (e.g., positive laboratory or diagnostic test result), or
- a diagnosis by a treating health professional qualified to provide such a diagnosis based on a clinical assessment of the worker during the period of illness.

Exception to laboratory or clinical evidence of current infection

A claim for a communicable illness may be adjudicated in the absence of laboratory or clinical evidence from the relevant time indicating the existence of a current infection in the worker if the worker has or had a legitimate reason for not seeking health care or laboratory testing during the period of illness.

Legitimate reasons include, but are not limited to:

- the period of illness is short-lived (i.e., 24 48 hours)
- the worker cannot access or does not qualify for diagnostic testing, and
- laboratory confirmation is not available for the communicable illness.

In the absence of laboratory or clinical evidence of current infection, a decision-maker will determine whether the worker has or had at the relevant time a specific communicable illness based on the available evidence including, but not limited to:

- a laboratory test to detect a previous infection (e.g., antibody test)
- the worker's presentation (i.e., signs and symptoms) and whether it is compatible with the signs and symptoms of the communicable illness established to exist in the workplace
- the diagnostic criteria for the communicable illness, and
- the advice or opinion of a medical consultant.

COVID-19 presents a fairly unique problem for adjudication. The initial symptoms are usually mild or even unnoticeable. Due in part to its prevalence, testing is not routinely done at the time or if it is done, it is usually done at home by Rapid Antigen Test where

the rate of false negatives is extremely high iv. The one exception to this is the health care industry where testing is common and there is a higher frequency of PCR testing. Workers with mild and decreasing respiratory symptoms are regularly back at work by 5 days, except in the health care industry where 10 days is the norm. It is entirely common for workers to not see a health care practitioner during this time. The serious non-respiratory effects of COVID are regularly seen weeks or months later, and can often be seen by other forms of testing.

In these circumstances, the exception to laboratory or clinical evidence at the relevant time should read "the worker is asymptomatic at the time of initial infection or the period of illness is short-lived (i.e. 1-10 days)" rather than the 24-48 hour time frame. A medical paper that accompanies the policy should provide examples of the subsequent conditions and tests that are indicative of COVID infection. Any medical paper ought to note that our understanding of COVID continues to be evolving at a fairly rapid pace and it ought to be subject to review at least once per year and perhaps more frequently.

WHEN DOES COVID-19 INFECTION ARISE OUT OF AND IN THE COURSE OF EMPLOYMENT?

# 1. In the course of employment

The draft policy in general terms attempts to ascertain whether the worker has a significantly increased risk from work exposures as opposed to other exposures in daily life. This approach is correct. The policy states in relation to the course of employment:

Infectious agents that are capable of causing communicable illnesses in humans are widespread in the environment and multiple sources of infection may exist inside and outside of the workplace. In determining whether a worker contracted a communicable illness while in the course of employment, as opposed to outside of that employment, the decision-maker must gather and weigh the evidence related to potential work-related and non-work-related exposures to the communicable illness.

Factors to consider when gathering and weighing the evidence related to potential work-related and non-work-related exposures to the communicable illness include, but are not limited to:

- the route of transmission of the communicable illness (e.g., contact, droplet, airborne, oral)
- the opportunities that existed for exposure to and transmission of the communicable illness both inside and outside of the worker's employment, including contact with persons known to have or suspected of having the communicable illness (e.g., coworkers, patients, friends, family members)
- the frequency, duration, and types of potential exposures to the communicable illness
   (e.g., protected vs. unprotected, direct vs. indirect), and the compatibility of the
   incubation period for the communicable illness with the interval between the onset of the
   worker's symptoms or a positive diagnostic test result and the opportunities for
   transmission found to exist.

(The key characteristics of a sample of communicable illnesses that occur in Ontario can be found in the Appendix.)

The inability to identify a specific work-related contact source for the worker's communicable illness does not mean the worker did not contract the communicable illness from exposure occurring in the course of employment. In the absence of a specific work-related contact source, the decision-maker must determine the issue of whether the communicable illness was contracted by the worker while in the course of employment after weighing all of the available relevant evidence.

The reference to frequency, duration and types of potential exposures to the communicable illness is a particularly important factor for a communicable illness with aerosol transmission (such as COVID 19). Potential exposures are not only those in a particular defined indoor space at the same time as the worker, but those who were in the space up to the previous 4-8 hours depending on the ventilation and filtration of the space. The significance of frequency and duration of exposure in the context of a communicable illness with aerosol transmission should be the subject of a paper from microbiologists, occupational hygienists and engineers with the benefit of their combined specialties. It is very difficult for decision-makers for instance to understand about what air transfers mean and their significance for risk.

# 2. Arising out of employment

The policy in relation to arising out of employment is problematic as it relates to COVID and any disease transmitted by aerosols. The draft policy is also unique among disease policies in making a distinction between arising out of and in the course of employment, and unique among all policies in describing inconsistent ways of adjudicating in the course of and arising out of issues. The policy provides:

# Determining whether the communicable illness arose out of employment

A worker's employment will have made a significant contribution to contracting a communicable illness when the decision-maker is satisfied that:

- the employment placed the worker at an increased risk (i.e., increased likelihood)
  of contracting the communicable illness as compared to the risk experienced by
  the general public during ordinary or routine activities of daily living, and
- the communicable illness was contracted by the worker from exposure that occurred in the course of their employment as a result of the identifiable increase in risk.

The worker's employment will generally not have made a significant contribution to contracting the communicable illness when these conditions are not met.

In determining whether the worker's employment made a significant contribution to the contraction of the communicable illness, the decision-maker considers both the risk factors that are associated with the worker's occupation or job as well as the individual circumstances that led to the worker contracting the communicable illness.

## **Employment risk factors**

A worker's employment will generally place the worker at an increased risk of contracting a communicable illness as compared to the risk of contracting the communicable illness through ordinary or routine activities of daily living when:

the rate of the communicable illness is significantly higher in the worker's place
of work than in the general population (e.g., widespread outbreak in the
workplace, treatment or care of populations with a significantly higher rate of the
illness, or travel to a region with a significantly higher rate of the illness),

 and/or the worker's employment activities create opportunities for exposure to and transmission of the communicable in excess of the opportunities associated with ordinary or routine activities of daily living.

Employment-related activities that may create opportunities for exposure to and transmission of a communicable illness in excess of the norm include, but are not limited to:

- activities that require a worker to have direct and prolonged close contact with one or more person(s) known to have or suspected of having the communicable illness in the context of delivering health care, personal care, emergency aid, custody, or transport to these persons
- activities that require the worker to have direct contact with infectious substances, such as the body fluids of persons known to have or suspected of having the communicable illness, and
- staying in employer-provided accommodations with one or more person(s) known to have or suspected of having the communicable illness, such as accommodations in remote mining camps or accommodations provided to temporary foreign agricultural workers.

Direct and prolonged close contact with one or more person(s) known to have or suspected of having the communicable illness is not a reasonable marker of increased workplace risk in the context of a disease transmitted by aerosols. Numbers of contacts of people who may or may not be carriers and the quality of ventilation and filtration (as well as masking frequency, duration and quality) is what is important<sup>v</sup>.

# 3. "Community-acquired communicable illnesses"

This portion of the policy is factually incorrect and inconsistent with the remainder of the document. It is, in a word, poppycock. It provides:

Communicable illnesses, such as influenza, the common cold, and COVID-19 are highly transmissible and can be prevalent in the general population. In-person interactions that can easily spread these communicable illnesses are a part of everyday life and occur both inside and outside of employment (e.g., in the home, community, and public settings). Outside of a public health emergency, in-person interactions at work with colleagues, customers, clients, or others, generally do not place the worker at a greater risk of contracting one of these communicable illnesses than the risk experienced by the general public. Therefore, a worker who contracts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increased their

risk of contracting the communicable illness in some additional way. For example, the worker contracts the communicable illness while performing a job duty that subjected them to an exposure risk in excess of the norm, such as delivering health care to a person known to have the communicable illness.

# The absurd logic- an example

A simple example will suffice to illustrate the faulty logic of this provision of the draft policy. Compare the 25 year old who works in a busy coffee shop for 8 hours a day and lives alone, with a 65 year old retired person who buys a coffee at that same shop early in the morning once a day and lives alone. The 65 year old and the 25 year old see two separate friends two times per week for 2-3 hours. Assume that both wear a surgical mask that can be acquired cheaply. The mask provides some but not good protection against transmission. Assume that 40% of customers in the shop wear masks. The ventilation and filtration in the coffee shop is, sadly, of the typical poor quality with CO2 levels running between 1000-1500 ppm over the day. If the 65 year old customer spends 10 minutes in the coffee shop, their risk is 1/48<sup>th</sup> of the risk of the 25 year old worker associated with the coffee shop assuming risk is constant over a day (which it may not be- aerosol transmission of COVID will cause increased risk to workers and customers later in the day from all the customers and workers who have been there during the previous 8 hours). And in both cases, it is likely the single riskiest thing that they do in a week.

In one study<sup>vi</sup>, the following comment (reference) was made:

For the customers (in Fig. 8(a)), the risks drop to  $1.33 \times 10^{-6}$ - $2.49 \times 10^{-6}$  and  $5.33 \times 10^{-6}$ - $2.73 \times 10^{-5}$  in supermarkets and small shops. The infection probabilities are similar in different types of small shops. The median values of the mean infection probability of the customers are respectively  $1.14 \times 10^{-5}$ ,  $1.17 \times 10^{-5}$ ,  $9.86 \times 10^{-6}$ ,  $1.93 \times 10^{-5}$  and  $1.91 \times 10^{-5}$ , for the convenience store, vegetable and meat shop, bakery, fruit shop and the grain, oil & fast food shop. Meanwhile, the infection probability of the late-shift staff in the small shops is over one order of magnitude higher than that of the customers. This is due to the great

difference of dwell time, with 8h working hours of the staff and 0.06h average dwell time of customers. It is noticeable that 95<sup>th</sup> percentile value of the mean infection probability is approximately 3 orders of magnitude higher than the 5<sup>th</sup> percentile value. It shows that the value ranges of the virological properties of SARS-CoV-2 play an important role in the infection risks.

"In-person interactions that can easily spread these communicable illnesses are a part of everyday life and occur both inside and outside of employment (e.g., in the home, community, and public settings)"

Of course that is true, but for other conditions the WSIB has no difficulty in looking at the frequency of the risk at work and outside work, and assessing the significance of the work risk accordingly. For instance, workers who use hammers repetitively are at risk of developing shoulder disablement conditions. The WSIB has no difficult in drawing distinctions between workers who use hammers occasionally at work and occasionally at home, and those who use hammers regularly at work and occasionally at home when attempting to assess whether a particular shoulder conditions is related to work exposures. The logic for communicable diseases is the same.

"Outside of a public health emergency, in-person interactions at work with colleagues, customers, clients, or others, generally do not place the worker at a greater risk of contracting one of these communicable illnesses than the risk experienced by the general public"

As I said, this is manifestly wrong. The suggestion that risks "outside of a public health emergency" are less than one inside a public health emergency is simply bizarre for COVID-19. During the public health emergency, public-facing workers such as those in retail, public transit and the education sector were much more likely to encounter colleagues, customers, clients and others wearing masks due to mask mandates. Their work is more risky now with the lifting of the mask mandates. It cuts the other way.

# 4. Fixing The Arising Out of Employment and Community-Acquired Communicable Illness Sections for COVID

What the current practice since June, 2022 has done and the proposed policy would do is essentially transfer all of the huge risk of COVID onto workers. The one exception is in the health care field. This has meant that employers who have significant control of the workplace- including ventilation and filtration, and sick leave and masking policies- have not been held accountable for the long-term illnesses and deaths that have been and will be sustained by their workers. In any fashion. This must stop.

In relation to COVID, the "In the Course of Employment" section of the draft Policy should be renamed the "Arising out of and in the course of employment" section. The current Arising out of Employment and Community-Acquire Communicable Illness sections of the Policy should be deleted.

Michael S. Green

Long Covid: major findings, mechanisms and recommendations, Davis, H.E. et. al, Nature Reviews microbiology, January 2023, v. 21, pp. 133-146, <a href="https://www.nature.com/articles/s41579-022-00846-2">https://www.nature.com/articles/s41579-022-00846-2</a>

Long-term cardiac pathology in individuals in individuals with mild initial COVID-19 illness, Puntmann V.O. et. al, Nature Medicine, <u>www.nature.com/naturemedicine</u>, October 2022, v.28, pp. 2117-2129

Long COVID after breakthrough SARS- COV 2 infection, Al-Aly A et.al., Nature Medicine, <a href="https://www.nature.com/naturemedicine">www.nature.com/naturemedicine</a>, July 2022, v. 28, pp. 1461-7

<sup>&</sup>lt;sup>i</sup> Transmission of SARS CoV 2 through Floors and Walls of Quarantine Hotel, Taiwan 2021, Wei, H-Y et al in Emerging Infectious Diseases, <u>www.cdc.gov/eid</u>, December, 2022, v. 28, no. 12

ii Extrapulmonary Manifestations of COVID-19, Gupta, A, et. al., Nature Medicine, <a href="https://www.nature.com/naturemedicine">www.nature.com/naturemedicine</a>, July 2020, v. 26, pp. 1017-1032

Long-term cardiovascular outcomes of COVID-19, Xie Y. et. al, Nature Medicine, www.nature.com/naturemedicine, March 2022, v. 28, pp. 548-590

Long-term neurologic outcomes of COVID-19, Xu et. al., Nature Medicine, www.nature.com/naturemedicine, November 2022, v. 28, pp. 2406-2415

Post-acute COVID-19 syndrome, Nalbandian A. et. al, Nature Medicine, <a href="www.nature.com/naturemedicine">www.nature.com/naturemedicine</a>, April 2021, v.27, pp.601-615

Risks and burdens of incident diabetes in long COVID: a cohort study, Xie, Y et. al., Lancet Diabetes Endocrinal, March 2022, v. 10, pp. 311-21, <a href="https://doi.org/10.1016/S2213-8587(22)00044-4">https://doi.org/10.1016/S2213-8587(22)00044-4</a>

iii Ibid

iv Impact of SARS-CoV-2 Omicron on Rapid Antigen Testing Developed for Early-Pandemic SARS-CoV-2 Variants, Leuzinger K. et. al., Microbiology Spectrum, August, 2022, v. 10-4, <a href="https://journals.asm.org/doi/epub/10.1128/spectrum.02006-22">https://journals.asm.org/doi/epub/10.1128/spectrum.02006-22</a>

<sup>&</sup>lt;sup>v</sup> A review on indoor airborne transmission of COVID-19 Modelling and Mitigation Approaches, Raeggan, S. et. al., Journal of Building Engineering, April 2023, v. 64, https://www.sciencedirect.com/science/article/pii/S2352710222016059

vi Comparison of COVID-19 Infection Risks Through Aerosol Transmission in Supermarkets and Small Shops, Chungying L. et.al, Sustainable Cities and Society, January 2022, v. 76, https://www.sciencedirect.com/science/article/pii/S2210670721006971?via%3Dihub



Occupational Centres de Health Clinics santé des for Ontario travailleurs (ses)

Workers Inc. de l'Ontario Inc.

Submission / comments from the Occupational Health Clinics for Ontario Workers (OHCOW) Inc on Draft for Consultation Purposes Document Number 15-03-15. Operational Policy on Communicable illnesses.

28 March 2023.

Thank you for the opportunity to comment.

Our primary concern is that creating a broad-brush policy that treats widespread illness as a public health (not occupational health) issue, could disenfranchise workers and potentially dilute employer responsibility to keep everyone safe in the spaces and activities they control.

The Chief Scientist of Canada has called the pandemic a mass disabling event, and workplaces have had, and continue to have, a significant role in transmission and should be recognized and held accountable for such.

The policy should focus on weighing the evidence regarding an individual's workplace and personal exposures to determine whether an infection is work-related or not.

Workplace protections, (eg. an existing Covid safety plan) can be taken into consideration, but it is the real time environment, activities and experience that are most relevant.

The key concern with this proposed policy is found in the section "Community-acquired communicable illnesses":

"Outside of a public health emergency, in-person interactions at work with colleagues, customers, clients, or others, generally do not place the worker at a greater risk of contracting one of these communicable illnesses than the risk experienced by the general public. Therefore, a worker who contracts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increased their risk of contracting the communicable illness in some additional way." (page 4 of 7)

This basically states that if a disease is endemic, you don't get compensated for catching it at work unless you're at a much higher risk than the general community, which runs against the principles of the WSIA. For example, if an education worker who has no interaction with children with colds outside of their workplace, catches a cold at work and must take time off, especially if they don't want to spread it to others at work - won't be compensated. Due to financial and workload pressures they will most likely go to work and spread the disease further. OHCOW has noted that workplaces with poor Indoor Air Quality (IAQ) (as determined through our <a href="StressAssess">StressAssess</a> survey) has identified these concerns about biological exposure (i.e., sick colleagues coming to work because of financial and workload pressures).

Not recognizing this dynamic will exacerbate the spread. Thus, this policy (along with the lack of sick day employment policies, and the lack of any legal requirements to limit workloads that do not allow for absences) will have the effect of worsening workplace outbreaks of "community-acquired" diseases.

In the context of incident/infection investigation, the focus has been on contact tracing which most likely misses essential elements related to the chain of transmission such as: evaluating ventilation systems.

The assessment of exposure and adjudication of claims should take an evidence-based approach, contrary to during the current pandemic. For example, there has been an ongoing misinterpretation of transmissibility and infectivity, such as limiting case acceptance by applying an artificial 6' rule or a minimum (e.g. "15 minute") contact time and/or assuming those wearing surgical masks were adequately protected.

Lessons from the pandemic that should inform the policy include the critical impact of "airborne transmission", the fallibility of personal protective equipment (PPE), and the importance of evaluating air flow patterns and ventilation rates.

We also have concerns about the method(s) outlined for determining work-relatedness which are "inordinate" compared to the common ways of managing an infectious disease. No doctor is going to ask for a PCR test to determine whether someone who is otherwise healthy has a common cold, let alone do genome testing of all the people at work to trace the disease.

There are techniques (including paper based) that would assist in the determination of work relatedness. Such as, but not limited, to:

- a worker with no exposures outside work (i.e., no kids/grandchildren at home),
- limited social interactions,
- wearing PPE when in public places, etc.) and
- the tracking of time patterns of illness/absences in the workplace would also provide evidence of a work-related infection,

However, this proposed policy requires a high standard of proof, essentially presuming "community-acquired", requiring rebuttal, rather than weighing evidence and applying the benefit of the doubt to the worker.

Unless the new policy is more fairly worded it may "fan the flames" of "community" transmission by putting financial pressure on workers to go to work sick.

High-risk jobs / settings, should be clearly defined using an evidence-based approach. The <u>Institute of Work and Health</u> have conducted research in this area which could be incorporated into policy strategy. In the US, OSHA (resources under Coronavirus Disease (<u>COVID-19</u>)) have also categorised the level of risk for different workers which could be incorporated as well.

The policy places undue reliance on PCR testing, which we have found to be inaccessible to workers, unless in high-risk situations or settings. For example, those in mining and manufacturing, at least from the start of the pandemic were not considered high risk. Therefore, meeting the purview of laboratory testing will exclude many workers.

## Specific comments pertaining to each section.

Section	Comments
Policy	
A worker is entitled to benefits for a	
communicable illness arising out of and in	
the course of the worker's employment.	
Purpose	
The purpose of this policy is to provide	
entitlement guidelines for claims for	
communicable illnesses.	
Guidelines	
For the purposes of this policy, a	Can an aerosol transmissible disease (ATD) as well as
"communicable illness" means an illness	droplet / contact-spread and vector-borne infectious
due to a specific infectious agent (e.g.,	disease be clearly defined.
viruses, bacteria) that arises through	
transmission of that agent from person to	
person or from animal to person; either	
directly or indirectly.	
Entitlement criteria	
In deciding whether a worker has initial	
entitlement to benefits for a	
communicable illness, a decision-maker	
determines whether:	
the worker contracted a	
communicable illness	
the worker contracted the	
communicable illness while in the	
course of employment, and	
the communicable illness arose	
out of the worker's employment,	
in that the employment made a	
significant contribution to	
contracting the communicable	
illness.	

#### Immunization status

Entitlement to benefits will not be denied solely because the worker is not immunized against the particular communicable illness for which there is a claim for benefits.

# Determining whether the worker contracted a communicable illness.

In addition to other relevant evidence gathered during the adjudication of a claim, one or both of the following will generally be necessary to establish the worker has or had at the relevant time a specific communicable illness:

- laboratory confirmation of current infection (e.g., positive laboratory or diagnostic test result), or
- a diagnosis by a treating health professional qualified to provide such a diagnosis based on a clinical assessment of the worker during the period of illness.

This is an overly restrictive approach.

We now know there are many cases of COVID-19 with classic signs / symptoms but no laboratory confirmation - this should be worded so that these cases are considered. At least with a time dated recording of an antigen test with medical follow-up within 7-10 days or proof of inability to do so.

For this reason, retrospective diagnosis by a medical professional should be on an equal footing.

There should also be acknowledgment about access to a medical doctor - given the significant shortage and long wait time.

# Exception to laboratory or clinical evidence of current infection.

A claim for a communicable illness may be adjudicated in the absence of laboratory or clinical evidence from the relevant time indicating the existence of a current infection in the worker if the worker has or had a legitimate reason for not seeking health care or laboratory testing during the period of illness.

Legitimate reasons include, but are not limited to:

- the period of illness is short-lived (i.e., 24 48 hours)
- the worker cannot access or does not qualify for diagnostic testing, and
- laboratory confirmation is not available for the communicable illness.

In the absence of laboratory or clinical evidence of current infection, a decision-maker will determine whether the worker has or had at the relevant time a specific communicable illness based on the available evidence including, but not limited to:

- a laboratory test to detect a previous infection (e.g., antibody test)
- the worker's presentation (i.e., signs and symptoms) and whether it is compatible with the signs and symptoms of the communicable illness established to exist in the workplace
- the diagnostic criteria for the communicable illness, and
- the advice or opinion of a medical consultant.

Treating this as an exception creates an unfair and unbalanced approach based on recent experience with very limited access to testing as well as medical appointments.

Creates an unfair onus on a sick worker to go out and mix with the public and healthcare professionals to be able to access benefits to which they should already be entitled. A worker does not need an "excuse" to act reasonably.

The retrospective opinion of the regular treating medical doctor should be considered as an equal form of evidence since often the only possibility and does not require an "exception".

# Determining whether the communicable illness was contracted in the course of employment

A communicable illness will generally have been contracted in the course of employment when the decision-maker is satisfied, based on all of the relevant evidence, that the worker was exposed to and contracted the communicable illness while at the workplace or during working hours, or while performing a work-related duty or an activity reasonably incidental to employment. For more information on the application of the criteria of place, time, and activity, see 15-02-02, Accident in the Course of Employment.

Infectious agents that are capable of causing communicable illnesses in humans are widespread in the environment and multiple sources of infection may exist inside and outside of the workplace. In determining whether a worker contracted a communicable illness while in the course of employment, as opposed to outside of that employment, the decision-maker must gather and weigh the evidence related to potential work-related and nonwork-related exposures to the communicable illness. Factors to consider when gathering and weighing the evidence related to potential work-related and non-work-related exposures to the communicable illness include, but are not limited to:

- the route of transmission of the communicable illness (e.g., contact, droplet, airborne, oral)
- the opportunities that existed for exposure to and transmission of the communicable illness both inside and outside of the worker's employment, including contact with persons known to have or suspected of having the

Where the evidence of exposure both inside and outside the workplace has equal weight, then the benefit of the doubt should go to the worker.

Establishment of a "self assessment checklist" and possibly a workplace illness experience and controls checklist by the WSIB would be useful to determine work relatedness.

- communicable illness (e.g., coworkers, patients, friends, family members)
- the frequency, duration, and types of potential exposures to the communicable illness (e.g., protected vs. unprotected, direct vs. indirect), and
- the compatibility of the incubation period for the communicable illness with the interval between the onset of the worker's symptoms or a positive diagnostic test result and the opportunities for transmission found to exist.

(The key characteristics of a sample of communicable illnesses that occur in Ontario can be found in the Appendix.)

The inability to identify a specific work-related contact source for the worker's communicable illness does not mean the worker did not contract the communicable illness from exposure occurring in the course of employment. In the absence of a specific work-related contact source, the decision-maker must determine the issue of whether the communicable illness was contracted by the worker while in the course of employment after weighing all of the available relevant evidence.

Incubation and diagnosis timing should keep current with the ever-changing nature of a virus, as well as individual symptomatic susceptibility to it. Otherwise, there is the potential for misinterpretation.

# Determining whether the communicable illness arose out of employment.

A worker's employment will have made a significant contribution to contracting a communicable illness when the decision-maker is satisfied that:

worker at an increased risk (i.e., increased likelihood) of contracting the communicable illness as compared to the risk experienced by the general public during ordinary or routine activities of daily living, and

The issue should not be weighing worker risk in their workplace against a hypothetical member of the public. The issue should be what are the exposure risks inside and outside the workplace for this individual, and is it likely that those inside significantly contributed to their infection.

Transmission risks for members of the public riding mass transit or attending rock concerts are not relevant to assessing a worker who does neither.

 the communicable illness was contracted by the worker from exposure that occurred in the course of their employment as a result of the identifiable increase in risk.

The worker's employment will generally not have made a significant contribution to contracting the communicable illness when these conditions are not met.

In determining whether the worker's employment made a significant contribution to the contraction of the communicable illness, the decision-maker considers both the risk factors that are associated with the worker's occupation or job as well as the individual circumstances that led to the worker contracting the communicable illness.

Adjudication should depend on understanding the transmission risk in terms of source exposure volume, intensity and time, community infection levels, existing protections including administrative, engineering and individual controls, as well as any confounding or contributing circumstances (eg. living with school-age children)

There also should be clear recognition of the possibility of asymptomatic or pre-symptomatic transmission which occurs in a high percentage of cases.

# **Employment risk factors**

A worker's employment will generally place the worker at an increased risk of contracting a communicable illness as compared to the risk of contracting the communicable illness through ordinary or routine activities of daily living when:

- the rate of the communicable illness is significantly higher in the worker's place of work than in the general population (e.g., widespread outbreak in the workplace, treatment or care of populations with a significantly higher rate of the illness, or travel to a region with a significantly higher rate of the illness), and/or
- the worker's employment activities create opportunities for exposure to and transmission of the communicable in excess of the opportunities associated with ordinary or routine activities of daily living.

"Widespread" outbreak vs just "outbreak" - creates a higher standard for acceptance. Widespread should be changed to outbreak.

Sector and historic risks should also be considered in the absence of current outbreak data, recognizing varied exposure and susceptibility scenarios, including the possibility of asymptomatic or pre-symptomatic transmission and/or claim suppression.

There could be a list of "higher risk workers" possibly developed in collaboration with the <u>Institute for Work and Health</u> (IWH) and/or an updated version of OSHA's Protecting Workers: <u>Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace</u>, would assist in identifying a benchmark.

Employment-related activities that may create opportunities for exposure to and transmission of a communicable illness in excess of the norm include, but are not limited to:

- activities that require a worker to have direct and prolonged close contact with one or more person(s) known to have or suspected of having the communicable illness in the context of delivering health care, personal care, emergency aid, custody, or transport to these persons
- activities that require the worker to have direct contact with infectious substances, such as the body fluids of persons known to have or suspected of having the communicable illness, and
- staying in employer-provided accommodations with one or more person(s) known to have or suspected of having the communicable illness, such as accommodations in remote mining camps or accommodations provided to temporary foreign agricultural workers.

Direct and prolonged "test" discounts the risk of airborne transmission. Level of enclosure, population density and especially Ventilation/filtration should be factored in assessments.

Various diseases have different exposure periods and different levels of transmissibility / infectious dose. For airborne viruses like Covid, transmission can happen in seconds in a space recently vacated by others so understanding the real-time exposure risks is critical.

# Community-acquired communicable illnesses.

Communicable illnesses, such as influenza, the common cold, and COVID-19 are highly transmissible and can be prevalent in the general population. In-person interactions that can easily spread these communicable illnesses are a part of everyday life and occur both inside and outside of employment (e.g., in the home, community, and public settings). Outside of a public health emergency, in-person interactions at work with colleagues,

This section avoids the real question of an individual worker's actual exposures inside and outside the workplace which should be the basis of adjudication.

By virtue of the requirement to interact with others beyond one's control, being in a workplace definitely elevates the risk of transmission in almost every circumstance. Full consideration must be given to the comparable circumstances of work environment, interactions and controls vs. personal experience, activity and accommodation risk.

This interpretation looks away from the facts of the situation, and not only denies compensation to those

customers, clients, or others, generally do not place the worker at a greater risk of contracting one of these communicable illnesses than the risk experienced by the general public. Therefore, a worker who contracts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increased their risk of contracting the communicable illness in some additional way. For example, the worker contracts the communicable illness while performing a job duty that subjected them to an exposure risk in excess of the norm, such as delivering health care to a person known to have the communicable illness.

deserving, but it also erodes Employer incentives to take responsibility to prevent infection.

Employers have a duty of care to take every precaution reasonable in the circumstances to protect workers, which should include protection from communicable disease risk where transmission is possible.

The task is the weighing of evidence in individual circumstances, not only searching for an "excess of norm".

Where the evidence of exposure both inside and outside the workplace has equal weight, then the benefit of the doubt should go to the worker.

### **Public health emergency**

During a government-declared public health emergency related to a communicable illness, a worker's employment-related risk of contracting that communicable illness may be increased when:

- the public health emergency results in the implementation of public health measures to control or prevent the spread of the communicable illness in the general public (e.g., stay-athome orders), and
- the worker is employed as an essential worker at a workplace that remains open during the public health emergency and has in-person interactions as part of their job duties.

# Loss of earnings (LOE) benefits and period of communicability

When a claim for a communicable illness has been allowed, a worker may be entitled to LOE benefits for the period of communicability, even if the worker is asymptomatic or only has mild symptoms, if the communicability of the worker prevents or limits their ability to return to work, see 18-03-02, Payment and Reviewing LOE Benefits (Prior to Final Review).

In this section, " period of communicability" means the time during which an infectious agent may be transferred directly or indirectly from an infected person to another person. During this period, a worker with a communicable illness poses a risk of transmitting it to others in the workplace.

This seems reasonable, as long as adjudicators recognize the wide range of infectivity of different communicable diseases eg. Covid can go beyond 10d for some people. Two consecutive days of Antigen testing clearance is a better standard.

#### Prevention of communicable illnesses

A worker who is exposed to a communicable illness in the workplace, but free of illness (i.e., symptom-free and no laboratory confirmation or clinical diagnosis), may be legally required to selfisolate or may be sent home by the employer. Workers who are free of illness do not have entitlement to benefits under the Workplace Safety and Insurance Act, 1997 for the period of time in which they are required to remain out of the workplace on a precautionary basis. However, if a worker subsequently develops symptoms or tests positive for a communicable illness, they may be entitled to benefits.

### **APPENDIX**

The defining features of a sample of communicable illnesses that occur in Ontario are provided in the table below.

The key characteristics described for each communicable illness include:

- 1. Signs and symptoms the main clinical features;
- 2. Mode of Transmission the mechanisms by which the infectious agent is spread to humans;
- 3. Incubation Period the time interval between initial contact with the infectious organism and the first appearance of symptoms associated with the infection; and
- 4. Period of Communicability the time during which an infectious agent may be transferred directly or indirectly from an infected person to another person; or from an infected animal to humans.

Table 1. Determining entitlement - General characteristics illustrated with examples of common communicable illnesses

Communicable Illness	Signs and Symptoms	Mode of Transmission	Incubation Period (Range)	Period of Communicability
Norovirus infection	nausea, vomiting, fever, watery diarrhea, abdominal pain	fecal-oral, direct person-person and indirect or airborne transmission	1-2 days	highest during acute stage and up to 72 hours after symptoms resolve
Scabies	intense itching, papules, vesicles or tiny linear burrows and lesions	prolonged directl contact with infested skin	2-6 weeks	until mites and eggs are destroyed
Influenza	fever, cough, headache, muscle aches and pain	primarily transmitted by droplets and spread through coughing or sneezing may also be transmitted through direct or indirect contact with infected respiratory secretions	1-4 days	1 day before the first symptoms until 5 days after first symptoms

COVID-19	fever and/or chills, cough, shortness of breath, decrease or loss of taste or smell, runny nose/nasal congestion, headache, extreme fatigue, sore throat, muscle aches or joint pain, gastrointestinal symptoms (i.e. vomiting or diarrhea)	inhalation of infectious respiratory particles of varying sizes - aerosols (smaller particles) and droplets (larger particles)	1-14 days	two days before symptom onset and can last until ten days following symptom onset
Hepatitis B	asymptomatic, fatigue, loss of appetite, joint pain, abdominal pain, nausea, vomiting, fever, and dark urine, jaundice	direct or indirect transmission via inanimate objects, blood and blood products, body fluids	45-180 days	weeks before onset of first symptoms and remain infective through acute clinical course
Lyme disease	fever, headache, muscle and joint pain, fatigue and an expanding red rash, neurological and cardiac abnormalities	tick-borne; bite of an infected blacklegged tick	3-30 days after tick exposure	no evidence of person-to-person transmission

### Comments on table 1.

We recommend that mode of transmission should more clearly state whether the communicable illness is an aerosol transmissible disease (ATD) which would mean that **airborne precautions** are required in addition to droplet / contact precautions.

## Office of the Employer **Adviser**

505 University Avenue, 20th Floor Toronto ON M5G 2P1

Toll Free: 1-800-387-0774 Tel: 416-327-0020 Fax: 416-327-0726

## Bureau des conseillers des employeurs

505, avenue University, 20e étage Toronto (Ontario) M5G 2P1

Sans frais: 1-800-387-0774 Tél: 416-327-0020 Téléc: 416-327-0726



# Office of the Employer Adviser

Bureau des conseillers des

employeurs

March 23, 2023

**WSIB** Consultation Secretariat Consultation Secretariat@wsib.on.ca

Dear WSIB Consultation Secretariat,

Re: Communicable Illnesses Policy Consultation

The Office of the Employer Adviser (OEA) appreciates the opportunity to provide feedback on the WSIB's draft Communicable Illnesses policy as part of the WSIB's policy consultation.

### General comments

The draft policy is quite broad and is intended to cover various types of illnesses with different modes of transmission. The OEA suggests that the WSIB consider whether there would be a benefit to splitting this policy into two or more policies.

Having separate policies may help to address the different types of communicable illnesses more clearly. For example, having a separate policy for COVID-19 could give the WSIB an opportunity to provide additional clarity on how COVID-19 claims, including long COVID-19, will be adjudicated by the WSIB. Additionally, it would provide an opportunity to clarify whether the WSIB will accept the results of rapid tests for COVID-19 claims (which is not something that would apply to all the other communicable illnesses mentioned in the policy).

# Comments on the "Community-acquired communicable illnesses" section of the draft policy

The OEA would like to note the following regarding the "Community-acquired communicable illnesses" section of the draft policy:

1. The OEA suggests that the current wording of the draft policy be clarified to be more specific about what types of situations the WSIB would view as increasing the worker's "risk of contracting the communicable illness in some additional way." For convenience, the full paragraph from the draft policy is set out below [emphasis added]:

Communicable illnesses, such as influenza, the common cold, and COVID-19 are highly transmissible and can be prevalent in the general population. In-person interactions that can easily spread these communicable illnesses are a part of everyday life and occur both inside and outside of employment (e.g., in the home, community, and public settings). Outside of a public health emergency, in-person interactions at work with colleagues, customers, clients, or others, generally do not place the worker at a greater risk of contracting one of these communicable illnesses than the risk experienced by the general public. Therefore, a worker who contracts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increased their risk of contracting the communicable illness in some additional way. For example, the worker contracts the communicable illness while performing a job duty that subjected them to an exposure risk in excess of the norm, such as delivering health care to a person known to have the communicable illness.

The OEA suggests that the policy could be more specific in explaining what is meant by "in some additional way", to give more clarity about when such claims will be allowed or not allowed, and to enhance consistency in the WSIB's decision-making on this point. We believe that it would also be helpful if the WSIB could provide additional examples in the policy.

Furthermore, the OEA suggests that this section of the draft policy be updated to indicate that in determining entitlement for a community-acquired communicable illness the WSIB will consider whether opportunities existed for exposure to and transmission of the communicable illness both inside and outside of the worker's employment. While this is indicated more broadly earlier on in the policy, since the policy addresses these community-acquired illnesses differently than other communicable illnesses we believe it would be helpful to clarify that this factor will be considered even if the worker's employment increased their risk of contracting the communicable illness in some additional way.

2. The OEA suggests that the reference to the common cold be removed from this policy.

Due to the potential prevalence of the common cold in the community generally, in our view it would be a rare circumstance where it could be established that the common cold arose out of and in the course of a worker's employment. By contrast, according to WSIB statistics<sup>1</sup> there have been over 55,000 allowed COVID-19 claims since the start of the COVID-19 pandemic.

Furthermore, unlike COVID-19 and influenza, the common cold is not tracked by Public Health Ontario, nor are outbreaks declared by public health officials. In reviewing

 $<sup>^{1}\,\</sup>underline{\text{https://safetycheck.onlineservices.wsib.on.ca/safetycheck/explore/additional/provincialDownloads?lang=en}$ 

influenza cases that have been before the Workplace Safety and Insurance Appeals Tribunal (WSIAT), in a number of those cases<sup>2</sup> there was a declared outbreak in the worker's workplace, and this appears to have factored into the WSIAT's decision to allow the claim.

By including an illness such as the common cold in the draft policy in this manner, the current wording could be interpreted to suggest that claims for the common cold could be broadly allowed by the WSIB for workers working in certain settings (e.g., health care). Furthermore, this wording may encourage workers to file a claim for the common cold with the WSIB if they:

- feel their employment increased their risk of contracting illness in some way,
- have some symptoms of respiratory illness (such as a cough, sore throat and runny nose),
- need to isolate at home due to the current public health guidance that is in place regarding staying home when sick<sup>3</sup>, and
- cannot work from home due to the nature of their work.
- 3. The OEA suggests that the WSIB provide guidance to employers regarding when they are required to file a Form 7 for a worker who has COVID-19, influenza, or the common cold (if it remains in the policy). Such guidance would preferably be included in policy or, in the alternative, in an Administrative Practice Document that is released concurrently with this policy.

In the absence of such guidance, it is likely that some employers will be unclear or confused about when a Form 7 is required if their worker has COVID-19, influenza, or the common cold as these illnesses can be prevalent in the general population. Since the WSIB may levy penalties or charge employers with an offence for not meeting their reporting obligations, it is important that employers clearly understand how those obligations apply in this context.

We hope the WSIB will find the above comments helpful. Please let us know if you wish to discuss.

Best regards,

S Adams

Susan Adams
Director, Office of the Employer Adviser
416-314-8735

Cc. Robin Senzilet, General Counsel (A)

<sup>&</sup>lt;sup>2</sup> For example, see WSIAT Decision 47/22, Decision 58/17, Decision 1365/14.

<sup>&</sup>lt;sup>3</sup> <a href="https://www.ontario.ca/page/protection-covid-19-and-other-respiratory-illnesses#:":text=If%20you%20have%20symptoms%20of%20COVID%2D19,have%20not%20developed%20additional%20symptoms">https://www.ontario.ca/page/protection-covid-19-and-other-respiratory-illnesses#:":text=If%20you%20have%20symptoms%20of%20COVID%2D19,have%20not%20developed%20additional%20symptoms</a>

# COMMUNICABLE ILLNESSES POLICY CONSULTATION SUBMISSIONS OF THE OFFICE OF THE WORKER ADVISER

These submissions are in response to the invitation to provide feedback on the draft communicable illnesses policy, issued on February 14, 2023. Thank you for the opportunity to provide submissions.

### 1. Overview

Overall, we see serious problems with the draft communicable illnesses policy. The draft policy creates entitlement criteria contrary to the *Workplace Safety and Insurance Act* and established law. Specifically, it is not sufficient for the worker to show that they contracted a communicable illness at work; they must meet an additional requirement that the nature of their work carried an increased risk of infection. This test for entitlement is contrary to established legal principles and is vague and unfair.

To bring the policy in line with the established legal principles of entitlement under Ontario's workers' compensation law, the policy ought to be revised to include an accurate statement of the test for work-relatedness: whether it is more likely than not that workplace exposures made a significant contribution to the worker's illness or disease.

We have further recommendations to strengthen the policy:

- Given the seriousness and unique characteristics of Covid-19, there should be a Covid-19-specific policy;
- The Board should review or commission research by epidemiologists, infectious disease specialists and occupational hygienists in order to create an evidence-based resource for policy-makers and decision-makers; and
- The policy should include a direction that, if a case does not meet the guidelines for initial entitlement, it should be decided on its own merits.

#### 2. Test for entitlement under the Act

The WSIA grants entitlement for compensation to workers who suffer personal injuries by accident arising out of and in the course of employment. Communicable illnesses are generally adjudicated as disablements under the Act.

The general test for causation under the Act is whether, on a balance of probabilities, workplace exposures made a significant contribution to the occurrence of injury or disease. As has been well established in the case law, the workplace exposures need not be the sole or predominant cause.

The cold and flu cases decided by the WSIAT follow the established rules. For example, in *Decision No. 2970/16*, the Tribunal considered the case of a personal support worker, working in a long-term care home, who contracted the flu. The Vice-Chair considered the case to be a disablement and held that the test for entitlement was "whether the workplace exposures made a significant contribution to the development of the claimed condition." The employer had argued that there must be an increased risk of infection at the workplace before entitlement would be allowed. The Vice-Chair rejected this argument as it is not a part of the legal test to determine work-relatedness.

As described in *Butterworths Workers Compensation in Ontario Service*, the test for work-related disease is described below:

### § 8.42.2

The general approach to establishing causation in the Ontario workers' compensation setting is to determine whether or not workplace exposures made a significant contribution to the occurrence of the disease. The proof that is required is proof on the balance of probabilities (i.e., more likely than not). However, where the evidence for and against entitlement is approximately equal in weight the issue to be resolved is to be resolved in favour of the worker in accordance with the statutory benefit of the doubt principle.

# 3. The test for work-relatedness set out in the draft policy

The draft policy sets out 3 entitlement criteria:

- Whether the worker contracted a communicable illness
- Whether the worker contracted the communicable illness while in the course of employment
- Whether the communicable illness arose out of the worker's employment, in that the employment made a significant contribution to contracting the communicable illness

We agree that for entitlement to flow, the illness must arise out of and in the course of the worker's employment.

# 4. Draft policy: "in the course of employment"

In the section, "Determining whether the communicable illness was contracted in the course of employment," the policy directs decision-makers to weigh evidence of work-related and non-

work-related exposures. We agree that this is the correct way to adjudicate whether the worker's infection arose out of and in the course of employment.

# 5. Draft policy: "arising out of employment"

The policy's description of what it means to "arise out of" employment adds entitlement criteria to the usual test for work-relatedness that are vague and unfair and fail to follow established legal principles. While this section purports to describe the "arising out of" branch of the test for work-relatedness, it goes well beyond the accepted legal test and adds additional criteria.

The draft policy's test for "arising out of employment" has two parts:

- The employment placed the worker at increased risk as compared to the general public and
- The worker was infected as a result of the identifiable increase in risk

The first problem with this new test is the vagueness of the "general public." Since March 2020, the general public has faced a wide range of risk of contracting Covid-19, depending on the level of precautions taken by individuals. Some people continued to gather, indoors, with other people while others strictly followed public health recommendations. There is no one level of risk faced by the "general public."

Secondly, what does it mean to be infected "as a result of" an increase in risk? A person becomes infected with Covid-19 as a result of exposure to the virus, not an increase in risk of exposure. A person is more likely to be infected when risk of infection is higher, but no one gets sick because of an increased risk of sickness. Accordingly, this sentence makes no sense.

The draft policy further explains what evidence is required to show an increase in risk of infection: there is a higher rate of the illness in the worker's workplace than in the general population and the worker's employment activities create opportunities for exposure.

We know that Covid-19 spreads through direct contact with an infected person or indirectly through inhalation of airborne droplets and aerosols. It is now well-established that spending time with other people in poorly ventilated places greatly increases the risk of transmission of infection.

Given that knowledge, it would be logical to conclude that working with others in indoor spaces would pose an increased risk. Instead of acknowledging that fact, the policy explicitly denies it:

Outside of a public health emergency, in-person interactions at work with colleagues, customers, clients, or others, generally do not place the worker at a greater risk of contracting one of these communicable illnesses than the risk experienced by the general public.

The draft policy characterizes this notion of an increased level of risk as the test for "arising out of" employment. The worker must first prove that they were infected with "in the course of" employment by showing that it is more likely that they were exposed during occupational activities rather than non-occupational activities. The worker then has to prove that their workplace had an increased level of risk for Covid-19 and that they were infected as a result of that risk.

This formulation has no basis in the law of workers' compensation in Ontario. "Arising out of employment" does not mean that the workplace created a risk of injury or illness beyond what is faced by the general public in the course of the ordinary activities of daily living.

In case of an injury by chance event, if a worker falls off a ladder at work and is injured, the worker is entitled to compensation. The worker does not have to show, in addition to proving the accident, that, in their workplace, workers were more likely than the general public to fall off ladders. For disablements, the worker has to show that their work duties likely caused their injury. They do not have to show an increased risk of suffering a disablement.

In occupational disease cases, the worker must show that workplace exposures likely caused the worker's development of illness or disease. For entitlement, there must be evidence that the worker was exposed to substances and that those substances made a significant contribution to the worker's development of disease. They do not have to show that their workplace has a higher incidence of certain cancers than occurs in the general population.

The legal test for entitlement is whether it is more likely than not that the workplace exposures made a significant contribution to the worker's development of illness or injury. There has never been a requirement that a worker also show that their workplace had an increased risk for illness or injury. The policy should be amended to remove the entitlement criteria that the worker's employment created an increased risk. The policy should reflect the correct legal test for work-relatedness.

#### 6. Significance of evidence of increased risk of infection

Evidence that the workplace did create an increased risk, while not part of the legal test for entitlement, amounts to evidence supporting that it is more likely than not that the worker's injury or disease was work-related. Indeed, the *Act* and Board policy accept this logic in a number of areas:

- Schedule 3 rebuttable presumptions of work-relatedness for various diseases if the worker was employed in a particular process;
- Schedule 4 irrebutable presumptions of work-relatedness for asbestosis, mesothelioma and nasal cancer when employed in the listed industries;
- Presumptions for firefighters for heart conditions and cancers in s. 15.1; and
- Presumptions for first responders for PTSD in s. 14.

We would welcome the Board creating a policy that offers a presumption of work-relatedness for workers who contracted Covid-19 while employed in a workplace where workers were at a significantly increased risk of contracting covid. The draft policy describes such workplaces:

- There is a widespread outbreak;
- Workers are caring for populations with a significantly higher rate of the illness;
- Workers travel to a region with a significantly higher rate of the illness; or
- Workers' job duties create opportunities for exposure to and transmission of the disease in excess of those opportunities in the ordinary activities of daily living.

The draft policy provides some examples of job duties that would create excess risk:

- Having direct and prolonged close contact with a person known to have the illness in the context of delivering health care, personal care, emergency aid, custody or transport to these persons;
- Having direct contact with infectious substances; or
- Staying in employer-provided accommodations with one or more persons known to have the illness.

These examples describe cases with a near certainty that the worker contracted Covid-19 at work. Workers employed in these situations should have the benefit of a presumption of work-relatedness, as even if they might have been exposed elsewhere, it is more likely that they were infected at work.

Instead of offering a presumption of work-relatedness, the draft policy limits entitlement to only those workplaces where there is a high risk of exposure, even if it is shown that the worker contracted the infection at work.

# 7. Whether s. 159(2.1) gives the Board the legal authority to change the meaning of "arising out of employment"

It is our position that s. 159(2.1) does not give the Board the authority to change the meaning of "arising out of employment" found in s. 13(1) and s. 15 of the Act.

The "significant contributing factor" test was adopted by the Tribunal in its early decisions and has been followed in thousands of decisions since then. It accords with the "material contribution" test for causation in tort cases endorsed by the Supreme Court of Canada in *Athey v. Leonati*. To apply a different test for work-relatedness, one with no grounding in the legislation or jurisprudence, would exceed the Board's jurisdiction and be unlawful.

#### 8. Create a policy specifically for Covid-19

The Covid-19 pandemic has been an historic event, unlike any previous outbreak of respiratory illness since the 1918 influenza pandemic. Given its significance and its evolving characteristics,

it makes sense to have a policy specific to Covid-19, rather than trying to have a policy dealing with communicable diseases generally.

A policy exclusively for Covid-19 could then include that evidence of a positive result on a home rapid-antigen test could be used to support a finding that a worker had contracted Covid-19. It would also change the advice in the policy of what constitutes a "short-lived" infection. In the draft policy, a "short-lived" illness is described as one lasting 24 to 48 hours, whereas a "short" Covid-19 infection would be better described as 7 to 10 days.

#### 9. In the alternative

In the event that we have failed to persuade the Board to abandon the increased risk analysis for Covid-19 entitlement, we request that the Board base its determinations of increased risk on actual evidence. The types of workplaces that have an increased risk of Covid-19 transmission should be identified based on the epidemiological evidence. Research from Ontario shows substantial increase in risk of infection in food manufacturing, transportation and warehousing, in addition to the healthcare and agriculture sectors identified in the draft policy.<sup>1</sup>

In addition, the Board should also consult occupational hygienists and infectious disease specialists to determine the physical characteristics of high-transmission workplaces, not just the high-risk occupational sectors. This would include risk assessments based on the size of indoor work spaces, the number of people within those spaces, the amount of close contact they have and the quality of ventilation.

We recommend that the Board consult with Covid-19 researchers and commission literature reviews and additional research if necessary to determine the types of workplaces that have an increased risk of transmission of Covid-19. This research should identify both the occupational sectors and workplace characteristics that have high rates of Covid-19 transmission.

#### 10. Each case decided on its merits

Finally, like other policies that contain guidelines for granting initial entitlement, the communicable illnesses policy should contain a paragraph directing decision-makers to decide cases that do not fit within the guidelines on their own merits.

#### 11. Summary of Recommendations

Here is the summary of our recommendations:

The policy should be revised to clearly state the test for work-relatedness:

<sup>&</sup>lt;sup>1</sup> Buchan, Sarah A. et al, "Incidence of outbreak-associated COVID-19 cases by industry in Ontario, Canada, 1 April 2020—31 March 2021, *Occup Environ Med* 2022; **79**:403-411 (attached)

- If it is more likely than not that workplace exposures made a significant contribution to the worker's development of illness or disease, the worker is entitled to benefits under the *Act*;
- The section entitled "arising out of employment" should be rewritten to make clear that this section sets out the criteria for a presumption of work-relatedness, not the test for work-relatedness;
- Covid-19 should have its own policy;
- The WSIB should review and commission scientific research on the transmission of Covid-19 in workplaces in order to develop evidence-based policy and make evidence-based decisions regarding initial entitlement; and
- Any policy creating adjudicative guidelines for infectious disease should direct decision-makers to consider each case on its own merits.

All of which is respectfully submitted,

Margaret Keys Legislative Interpretation Specialist Office of the Worker Adviser

March 28, 2023

Original research

# Incidence of outbreak-associated COVID-19 cases by industry in Ontario, Canada, 1 April 2020–31 March 2021

Sarah A Buchan, <sup>1,2</sup> Peter M Smith , <sup>2,3</sup> Christine Warren, <sup>4</sup> Michelle Murti , <sup>1,5</sup> Cameron Mustard , <sup>2,3</sup> Jin Hee Kim, <sup>5,6</sup> Sandya Menon, <sup>1</sup> Kevin A Brown, <sup>1,2</sup> Trevor van Ingen, <sup>7</sup> Brendan T Smith , <sup>2,4</sup>

▶ Additional supplemental material is published online only. To view, please visit the journal online (http://dx.doi. org/10.1136/oemed-2021-107879).

<sup>1</sup>Health Protection, Public Health Ontario, Toronto, Ontario, Canada <sup>2</sup>Epidemiology, Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada <sup>3</sup>Institute for Work & Health, Toronto, Ontario, Canada <sup>4</sup>Health Promotion, Chronic Disease and Injury Prevention, Public Health Ontario, Toronto, Ontario, Canada <sup>5</sup>Clinical Public Health, Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada <sup>6</sup>Environmental and Occupational Health, Public Health Ontario, Toronto, Ontario, <sup>7</sup>Analytic Services, Public Health

#### Correspondence to

Canada

Ontario, Toronto, Ontario,

Dr Saran A Buchan, Health Protection, Public Health Ontario, Toronto, ON M5G 1M1, Canada; sarah.buchan@oahpp.ca

Received 7 July 2021 Accepted 5 December 2021 Published Online First 12 January 2022



© Author(s) (or their employer(s)) 2022. No commercial re-use. See rights and permissions. Published by BMJ.

**To cite:** Buchan SA, Smith PM, Warren C, et al. Occup Environ Med 2022;**79**:403–411.

#### **ABSTRACT**

**Objectives** The objective of our study was to estimate the rate of workplace outbreak-associated cases of COVID-19 by industry in labour market participants aged 15–69 years who reported working the majority of hours outside the home in Ontario, Canada.

Methods We conducted a population-based cross-sectional study of COVID-19 workplace outbreaks and associated cases reported in Ontario between 1 April 2020 and 31 March 2021. All outbreaks were manually classified into two-digit North American Industry Classification System codes. We obtained monthly denominator estimates from the Statistics Canada Labour Force Survey to estimate the incidence of outbreak-associated cases per 100 000 000 hours among individuals who reported the majority of hours were worked outside the home. We performed this analysis across industries and in three distinct time periods.

**Results** Overall, 12% of cases were attributed to workplace outbreaks among working-age adults across our study period. While incidence varied across the time periods, the five industries with the highest incidence rates across our study period were agriculture, healthcare and social assistance, food manufacturing, educational services, and transportation and warehousing. **Conclusions** Certain industries have consistently increased the incidence of COVID-19 over the course of the pandemic. These results may assist in ongoing efforts to reduce transmission of COVID-19 by prioritising

resources, as well as industry-specific guidance,

vaccination and public health messaging.

#### INTRODUCTION

Understanding the role of workplace exposure to COVID-19, and differential risk by industry, is critical to reducing morbidity and mortality. Occupational risk is an important source of COVID-19 exposure and transmission. <sup>1 2</sup> Elevated risk of COVID-19 has been documented among health-care workers, <sup>3</sup> given direct contact with patients with COVID-19 . <sup>4</sup> However, workplace outbreaks of COVID-19 have consistently been observed across many industries beyond healthcare, especially in essential services where work is unable to be done from home. <sup>5</sup> A comprehensive analysis

#### Key messages

#### What is already known about this subject?

- ⇒ Work is an important source of COVID-19 exposure and transmission, yet significant gaps exist in occupational surveillance for COVID-19.
- ⇒ Healthcare is an industry of primary concern; however, workplace outbreaks of COVID-19 have consistently been observed across many industries beyond healthcare.
- ⇒ An improved understanding of workplace outbreaks of COVID-19 is essential to designing equitable public health measures for reducing COVID-19-related risk.

#### What are the new findings?

- ⇒ This study examines a population-based sample of all workplace outbreaks (N=5759) and their associated cases (N=35 168) across all industries between April 2020 and March 2021 in a working population aged 15–69 years.
- ⇒ Workplace outbreak-associated cases accounted for 12% of all cases and 7% of hospitalisations during the study period.
- ⇒ The incidence of COVID-19 was consistently higher in agriculture, healthcare and social assistance, food manufacturing, educational services, and transportation and warehousing over the three time periods examined in our study.
- Our findings were restricted to individuals reporting the majority of hours were worked outside the home, adding to the current literature by accounting for work disruption due to public health measures.

# How might this impact on policy or clinical practice in the foreseeable future?

Our study highlights industries where additional protections and public health measures may be required to reduce workplace outbreaks of COVID-19, as well as industries where rates of COVID-19 transmission were lower than those observed at the population level. Improved occupational surveillance may enhance the ability to effectively respond to COVID-19 and future pandemics.



of the distribution of workplace outbreaks across industries is important to understand the effectiveness and limitations of workplace infection prevention and control practices, as well to ensure equitable public health measures to reduce risk in workplaces and prevent ongoing spread in the community.

The location and frequency of workplace outbreaks will vary by region, depending on the prevalence of industries and community incidence of COVID-19.6 A number of occupational characteristics have been observed to increase COVID-19 risk at work, including physical proximity to others, exposure to disease<sup>8</sup> and indoor ventilation; furthermore, protections in the workplace may vary by industry. In Ontario, an analysis of workplace outbreaks early in the pandemic (January-June 2020) found that 68% of outbreaks and 80% of cases belonged to manufacturing, agriculture and transportation warehousing after excluding hospital, congregate living, and education and childcare settings. 10 Since this period, Ontario has experienced additional waves of COVID-19, accompanied by adjustments to public health measures that restricted operations at worksites in some industries. As such, it is critical to use accurate denominator data to estimate the risk of COVID-19 through work. Surveillance systems are often limited in their capture of occupational data<sup>11</sup>; however, outbreak data present an opportunity to explore cases associated with reported outbreaks within workplaces to mitigate this limitation.

Understanding differences in COVID-19 incidence among workers in industries is required to understand risk and inform prevention practices. The objective of our study was to estimate the rate of workplace outbreak-associated cases of COVID-19 by industry in labour market participants aged 15–69 years who reported working the majority of hours outside the home in Ontario, Canada. We also aimed to estimate the proportion of cases in this age group that were associated with a workplace-associated outbreak.

#### **METHODS**

We conducted a population-based cross-sectional study of COVID-19 workplace outbreaks and associated cases reported in Ontario between 1 April 2020 and 31 March 2021. All outbreaks and cases in Ontario are entered into the Public Health Case and Contact Management Solution (CCM), the provincial reportable disease surveillance system, by one of Ontario's 34 local public health units (PHUs). We used monthly data from Ontario respondents to Statistics Canada's Labour Force Survey (LFS) to estimate the size of the Ontario workforce to quantify the population at risk from April 2020 through March 2021. 13 The LFS is a monthly household survey that uses a rotating panel sample design consisting of six representative panels, where one panel is replaced each month allowing for efficient estimation of monthly changes in the Canadian labour force, including shifts in employment across industrial sectors, hours worked, labour force participation and unemployment rates. LFS respondents are representative of 98% of non-institutionalised Canadians aged 15 years and above, excluding persons living on reserves and other indigenous settlements, full-time members of the Canadian Armed Forces and institutionalised populations. <sup>13</sup> In response to the COVID-19 pandemic, an LFS supplement was introduced in April 2020 to collect information on working arrangements, including working remotely and site-based work. Specifically, 'the location where the respondent worked the most hours in the previous week' was assessed, with potential responses being at home, at the worksite, outside of the home but not in a particular location and absent from work. We

excluded respondents who reported having worked the most hours at home and those who were absent from work for the full week, to better represent the population at risk of outbreak-associated COVID-19 at work. Questions in the LFS supplement are only asked of respondents aged 15–69 years, so we further restricted our sample to COVID-19 cases aged 15–69 years to focus on labour market participants. The Public Health Ontario Ethics Review Board determined that this project did not require research ethics committee approval as the activities described were considered public health practice and not research.

#### Outbreak definition and industry assignment

In Ontario, PHUs are responsible for declaring COVID-19 outbreaks based on provincial guidance regarding the assessment of risk of acquisition and transmission in a workplace. The outbreak definition varied by industry setting, 14 with individual cases constituting an outbreak in long-term care homes (and childcare settings until 9 November 2020) or two cases occurring within 14 days with an epidemiological link in other settings.<sup>1</sup> For hospitals, long-term care homes and education settings, outbreaks were classified on PHU entry using existing lookup tables available in CCM. All other outbreaks were reviewed retrospectively based on locations (address and outbreak name as entered by the PHU) to ensure consistency with data entry across PHUs and to assign two-digit (ie, sector) North American Industry Classification System (NAICS) industry codes based on a manual lookup. 16 Classification was done by a single coder and reviewed by a secondary coder with discrepancies resolved through consensus. Based on reported outbreaks, 13 categories were examined in our study: agriculture, forestry, fishing and hunting; mining and utilities; construction; manufacturingfood; manufacturing-other; wholesale trade; retail trade; transportation and warehousing; educational services; healthcare and social assistance; accommodation and food services; public administration; and other service industries. Other service industries comprise other service industry groups which were unlikely to provide stable estimates due to the size of the workforce working outside of the home. Additional details on the NAICS and classification of industries are available in online supplemental appendix 1.

#### Workplace outbreak-associated cases

We restricted our primary sample to only include workplace outbreak-associated cases. All laboratory-confirmed (ie, those meeting provincial case definition<sup>17</sup>) COVID-19 cases and hospitalisations were obtained from CCM. For healthcare and congregate care/living settings, we included outbreak-associated cases in workers indicated by an occupational flag in CCM to exclude patients or residents. For the education industry, we included all non-students aged above 18 years or had an educational staff flag who were linked to a childcare, elementary or secondary school outbreak. Outbreak-associated cases from industries where public health measures restricted interactions with the public during the study period (eg, cancelling indoor dining in the food service industry, or curb-side pick-up only for retail stores) were retained as the workplace was the most likely source of acquisition for outbreak-associated cases All other cases among the working-age population, defined as 'non-workplace outbreakassociated cases', were retained as a comparison group, but were not included in the primary analyses. This group included cases in the community, as well as outbreak-related cases in residents of congregate care/living and outbreak-related cases in settings where working status data were not available and transmission

was unlikely to be restricted to workers only—these included recreational fitness settings (eg, gyms), other recreational settings (eg, visual arts class) and places of worship.

#### Hours worked outside the home

We estimated person-time at risk of exposure to a workplace COVID-19 outbreak based on the number of hours worked outside the home in the past week at their main job as reported by LFS respondents. The actual weekly hours of work were multiplied by 52 and divided by 12 to estimate the monthly number of hours. Industry-specific total monthly hours worked outside the home were assessed according to 13 industry sectors (grouped based on NAICS codes collected in the LFS), matching the sectors described above. Estimates were generated using individual sample weights, provided by Statistics Canada with each monthly LFS. Weighting enables tabulation of hours worked that are population representative of Ontario, correcting for the stratified multistage design of LFS, including inverse probability of selection and accounting for non-response. <sup>13</sup>

#### **Covariates**

We distinguished dates of cases, outbreaks and hours worked outside the home across three time periods: 1 April–31 August 2020 (period 1), 1 September–31 December 2020 (period 2) and 1 January–31 March 2021 (period 3). These time periods coincided with changes to public health measures (ie, stay at home order)<sup>18</sup> and the rise of prevalence of variants of concern, and allowed for adequate sample size to be obtained from the LFS based on the survey's sampling strategy.<sup>13</sup> Demographic information on outbreak-associated cases included gender, age (10-year categories) and diagnosing PHU. Furthermore, quintiles of neighbourhood material deprivation and diversity (measured using the ethnic concentration dimension) were measured using the Ontario Marginalization Index.<sup>19</sup>

#### Statistical analyses

We examined COVID-19-related cases and hospitalisations across characteristics of workplace and to non-workplace-associated cases. Furthermore, we aggregated these outcomes by industry across three time periods. For each period, we estimated industry-specific incidence rates per 100 000 000 work hours and per 100 000 workers who reported that the majority of hours were worked outside the home.

We calculated SIR, and 95% CIs,<sup>20</sup> as the ratio of the work-place outbreak-associated COVID-19 incidence rate to the overall incidence rate in Ontarians aged 15–69 years (including both workplace outbreak and non-workplace outbreak cases), for each industry and time period. We estimated the overall rate by summing the number of COVID-19 cases in Ontario among those aged 15–69 years and dividing it by the sum of waking hours (assuming 16 hours of awake time per person per day multiplied by the Ontario population aged 15–69 years (N=10 724 408 persons) estimated from projection data for 2020 sourced from IntelliHEALTH Ontario).

We performed sensitivity analyses to (1) include an estimate of temporary foreign workers in agricultural settings who are captured in the case data but not in the LFS denominator, <sup>21</sup> and (2) reclassify the hours of those self-employed (with employees) on farms to working outside the home (ie, to ensure their exposure to others was enumerated).

All analyses were conducted in R-Studio (V.1.2.5019).

#### **RESULTS**

Between 1 April 2020 and 31 March 2021, there were 282 539 COVID-19 cases reported in Ontarians aged 15–69 years.

Of these, 247 371 were excluded as they were non-workplace outbreak-associated cases (ie, cases not associated with an outbreak, residents of congregate care/living or not meeting workplace-associated outbreak definition; online supplemental appendices 2 and 3). Our final study population included 35 168 cases associated with 5759 workplace outbreaks.

The number of COVID-19 cases and hospitalisations across sociodemographic characteristics by workplace outbreak and non-workplace outbreak-associated cases are presented in table 1. Overall, 12% of cases and 7% of hospitalisations were attributed to workplace outbreaks among working-age adults, with 2% and 3% workplace and non-workplace outbreakassociated cases requiring hospitalisation, respectively. Despite an increase in COVID-19 cases and hospitalisations occurring in periods 2 and 3 compared with period 1 overall, a lower percentage of workplace compared with non-workplace outbreak-associated cases and hospitalisation were observed. The proportion of workplace outbreak-associated cases was higher among females (14%) compared with males (11%), but hospitalisations were similar across gender. The proportion of workplace outbreak-associated cases differed by geography (ie, PHU), ranging from approximately 5% of all cases among the working population to 27% of all cases. An increasing number of workplace-associated cases and overall cases were observed with increasing neighbourhood diversity and deprivation. However, no differences were observed in the proportion of cases due to workplace outbreaks across different levels of deprivation, while the proportion of workplace outbreak cases was lowest among areas with the highest levels of diversity.

The number of workplace outbreak-associated COVID-19 outbreaks, cases and hospitalisations, and SIRs by industry and time period are presented in table 2. An SIR greater than 1.0 indicates that there was a higher rate of COVID-19 cases per hour exposed in a given industry compared with what was observed in the overall working-age population, while an SIR less than 1.0 indicates a decreased rate. The majority of workplace-associated cases were attributed to select industries; these industries were consistent over time, but the distribution varied between periods and was impacted by public health measures. In period 1, excess workplace outbreak-associated cases (SIR) were observed in agriculture (24.9), healthcare and social assistance (9.3) and food manufacturing (5.0) industries. Similar trends were observed in periods 2 and 3, although to a lesser extent, with cases 2.4 and 4.3 times higher in agriculture, 2.6 and 2.2 times higher in healthcare and social assistance, and 2.6 and 2.4 times higher in food manufacturing industries. In addition, excess cases were observed in transportation and warehousing (period 2: 1.1; period 3: 1.5) and education (period 1: 1.2; period 3: 1.1) industries. The incidence of workplace outbreak-associated COVID-19 cases per 100 000 000 hours worked by industry and time period is presented in figure 1.

The incidence of workplace outbreak-associated COVID-19 cases per 100 000 workers (as opposed to hours exposed) by industry and time period is presented in online supplemental appendix 4. The distribution of COVID-19 incidence rates was consistent across industries using both the number of workers and hours worked as denominators.

#### Sensitivity analyses

When we updated our results to account for the seasonal variation of temporary foreign workers in agricultural settings and for the home also being the work setting for self-employed agriculture workers, the incidence in the agricultural setting decreased

**Table 1** Sociodemographic characteristics of COVID-19 cases and hospitalisations among those aged 15–69 years, reported 1 April 2020–31 March 2021 in workplace and non-workplace outbreak-associated cases in Ontario, Canada

	Cases				Hospitalisations				
	Workplace outbreak	Non- workplace outbreak	Proportion related to workplace outbreak	Proportion related to non-workplace outbreak	Workplace outbreak	Non- workplace outbreak N	Proportion related to workplace outbreak	Proportion related to non-workplace outbreak	
	N		%	%					
Total (Ontario)	35 168	247 371	12%	88%	557	7376	7%	93%	
Time period							. , .		
Period 1 (1 Apr–31 Aug 2020)	6648	22 721	23%	77%	187	1881	9%	91%	
Period 2 (1 Sep–31 Dec 2020)	12 995	105 125	11%	89%	130	2205	6%	94%	
Period 3 (1 Jan–31 Mar 2021)	15 525	119 525	11%	89%	240	3290	7%	93%	
Gender									
Female	19 534	119 207	14%	86%	243	3050	7%	93%	
Male	15 397	126 882	11%	89%	311	4305	7%	93%	
Other*	237	1282	16%	84%	3	21	13%	88%	
Age (in years)	251	1202	1070	04 /0		21	15 /0	00 /0	
15–24	4245	52 581	7%	93%	9	239	4%	96%	
25–34	8400	58 002	13%	87%	48	629	7%	93%	
35–44	7544	43 380	15%	85%	72	839	8%	92%	
45–54	8089	42 887	16%	84%	183	1567	10%	90%	
55–64	6023	38 679	13%	87%	206	2593	7%	93%	
65–69	867	11 842	7%	93%	39	1509	3%	97%	
Material deprivation quintile †									
1—low	4419	36 358	11%	89%	57	831	6%	94%	
2	5800	38 690	13%	87%	110	965	10%	90%	
3	6765	45 369	13%	87%	115	1129	9%	91%	
4	7424	49 634	13%	87%	115	1345	8%	92%	
5—high	8607	58 644	13%	87%	145	2235	6%	94%	
Missing	2153	14 284	13%	87%	15	369	4%	96%	
Diversity quintile†									
1—low	2700	11 893	19%	81%	36	391	8%	92%	
2	4045	17 161	19%	81%	74	532	12%	88%	
3	4445	26 572	14%	86%	75	786	9%	91%	
4	6550	48 028	12%	88%	116	1299	8%	92%	
5—high	15 275	125 041	11%	89%	241	3497	6%	94%	
Missing	2153	14 284	13%	87%	15	369	4%	96%	
Public health unit									
Algoma District	16	179	8%	92%	1	1	50%	50%	
Brant County	187	1609	10%	90%	1	30	3%	97%	
Chatham-Kent	295	1021	22%	78%	2	22	8%	92%	
City of Hamilton	1344	8733	13%	87%	23	328	7%	93%	
City of Ottawa	1703	11 312	13%	87%	37	383	9%	91%	
Durham Region	1592	9729	14%	86%	31	284	10%	90%	
Eastern Ontario	275	2099	12%	88%	4	80	5%	95%	
Grey Bruce	81	557	13%	87%	4	11	27%	73%	
Haldimand-Norfolk	448	846	35%	65%	11	24	31%	69%	
Haliburton, Kawartha, Pine Ridge		698	15%	85%	3	19		86%	
	126						14%		
Halton Region	909	7381	11%	89%	15	152	9%	91%	
Hastings and Prince Edward Counties	82	345	19%	81%	3	8	27%	73%	
Huron Perth	186	837	18%	82%	1	15	6%	94%	
Kingston, Frontenac, Lennox and Addington	121	618	16%	84%	3	7	30%	70%	
Lambton County	235	1966	11%	89%	2	28	7%	93%	
Leeds, Grenville and Lanark District	193	634	23%	77%	7	23	23%	77%	
Middlesex-London	896	4978	15%	85%	7	174	4%	96%	
Niagara Region	1748	5579	24%	76%	31	155	17%	83%	
North Bay Parry Sound District	16	221	7%	93%	0	18	0%	100%	

continued

Table 1 continued

	Cases	Cases				Hospitalisations				
	Workplace outbreak	Non- workplace outbreak	Proportion related to workplace outbreak	Proportion related to non-workplace outbreak	Workplace outbreak	Non- workplace outbreak	Proportion related to workplace outbreak	Proportion related to non-workplace outbreak		
	N	N	%	%	N	N	%	%		
Northwestern	26	506	5%	95%	1	26	4%	96%		
Southwestern	498	1655	23%	77%	6	48	11%	89%		
Peel Region	7272	51 759	12%	88%	74	933	7%	93%		
Peterborough County-City	61	647	9%	91%	0	17	0%	100%		
Porcupine	43	206	17%	83%	1	13	7%	93%		
Renfrew County and District	85	233	27%	73%	0	5	0%	100%		
Simcoe Muskoka District	1123	5150	18%	82%	35	171	17%	83%		
Sudbury and District	203	865	19%	81%	3	34	8%	92%		
Thunder Bay District	216	2029	10%	90%	3	95	3%	97%		
Timiskaming	22	80	22%	78%	0	8	0%	100%		
Toronto	7933	80 016	9%	91%	158	3013	5%	95%		
Waterloo Region	1445	8221	15%	85%	16	237	6%	94%		
Wellington-Dufferin-Guelph	852	3377	20%	80%	11	94	10%	90%		
Windsor-Essex County	2724	8481	24%	76%	25	282	8%	92%		
York Region	2212	24 804	8%	92%	38	638	6%	94%		

<sup>\*</sup>Includes individuals for whom gender was not reported or missing, as well as individuals reporting transgender or non-binary gender.

†Individuals residing in congregate care were not assigned to a quintile (4392 cases and 502 hospitalisations). Quintile 5 represents the highest quintile of deprivation or diversity. The material deprivation measure combines information on income, quality of housing, educational attainment and family structure characteristics to assess the ability of individuals and communities to access and attain basic material needs. The ethnic concentration dimension is based on the proportion of non-white and non-Indigenous residents and/or the proportion of immigrants who arrived in Canada within the past 5 years.

in all time periods (online supplemental appendix 5). However, the ranking of incidence compared with other industries did not change.

#### **DISCUSSION**

In a population-based study including all workplace outbreaks and their associated cases in Ontario, Canada, between April 2020 and March 2021, we observed that workplace outbreak-associated cases accounted for 12% of all cases and 7% of all hospitalisations in the working-age population. When broken down by industry, incidence rates were highest in healthcare and social assistance, food manufacturing, agriculture, other manufacturing, educational services, and transportation and warehousing. This reflects only cases linked to identified and reported workplace outbreaks and does not account for non-outbreak cases in workers or further spread within households related to index cases associated with workplace outbreaks; as such, the total number of cases resulting from workplace outbreaks is likely to be larger than what is presented in this study. 10 22

Our work expands on previous estimates for Ontario's first wave, <sup>10</sup> for which denominator data were not available. In our updated results, we found a high incidence of outbreak-related cases in manufacturing (including food), agriculture, and transportation and warehousing industries as before, as well as in the education industry during periods that included time frames when schools had reopened for in-person learning. The overall COVID-19 incidence rate across industries was highest in the third period of our study, which encompassed the peak of the second wave and beginning of the third wave of COVID-19 in Ontario, driven by the rapid rise of the Alpha variant. This period also coincided with the roll-out of COVID-19 vaccines to all hospital and other congregate setting (ie, long-term care homes, retirement homes) staff, which may explain the

comparatively smaller increase in rates of healthcare and social assistance between periods 3 and 2 relative to other industries. Vaccines to other individuals aged 15–69 years were not broadly available in our study period.

The majority of published estimates report on occupations <sup>23–25</sup> or specific industries of interest, particularly healthcare<sup>4</sup> and food processing. <sup>26–27</sup> Other studies have focused on ecological comparisons of rates in neighbourhoods by the proportion of 'essential workers', <sup>28</sup> but were unable to assess risk across occupations or industries. Few other papers have comprehensively estimated incidence across all industries, but those results have consistently identified food manufacturing, other manufacturing, and transportation and warehousing. <sup>29–31</sup>

These studies excluded a combination of healthcare, congregate-living and education settings and included denominator data from 2019 or prior to estimate incidence within their industry classifications, which are unlikely to accurately reflect labour force participation during the pandemic period, given workplace closures and remote work (which varies by industry). However, similar to these studies, we identified manufacturing industries as having some of the highest rates of COVID-19, but separated food manufacturing from other manufacturing. Our results demonstrate higher incidence of outbreak-associated COVID-19 in food manufacturing relative to all other manufacturing and align with other studies that have identified outbreaks in food processing facilities.<sup>26</sup> Factors that relate to a higher risk of COVID-19, including high-density settings, close proximity and prolonged duration of contact, may be particularly prevalent in manufacturing settings.<sup>32</sup>

Comparisons to other studies are challenging due to differences in study methodology and data sources (eg, compensation claims, 33 time frames, use of occupational vs industry data<sup>23–25</sup> and geography-specific restrictions). Furthermore, industry,

**Table 2** COVID-19 cases and hospitalisations of workplace outbreak-associated cases and SIR for cases, by industry and period among workers aged 15–69 years in Ontario, Canada, reported 1 April 2020–31 March, 2021

	Workplace outbreaks	Cases		Hospitalisations		SIR in cases*	
Time period and industry	N	N %†		N %†		SIR (95% CI)	
Period 1 (1 Apr–31 Aug 2020)							
Accommodation and food service	16	49	1%	4	2%	0.4 (0.3 to 0.5)	
Agriculture	29	1339	20%	21	11%	24.9 (23.5 to 26.3)	
Construction	11	43	1%	0	0%	0.1 (0.1 to 0.2)	
Education	17	45	1%	0	0%	1.2 (0.9 to 1.6)	
Healthcare and social assistance	549	4050	61%	130	70%	9.3 (9.0 to 9.6)	
Manufacturing—food	32	474	7%	17	9%	5.0 (4.6 to 5.5)	
Manufacturing—other	63	313	5%	6	3%	0.8 (0.7 to 0.9)	
Mining and utilities	1	21	0%	1	1%	0.5 (0.3 to 0.7)	
Other service industries	19	70	1%	1	1%	0.1 (0.1 to 0.2)	
Public administration	5	32	0%	3	2%	0.2 (0.2 to 0.3)	
Retail trade	16	42	1%	0	0%	0.1 (0.1 to 0.1)	
Transportation and warehousing	29	164	2%	4	2%	0.8 (0.7 to 0.9)	
Wholesale trade	3	6	0%	0	0%	0.1 (0 to 0.1)	
Period 2 (1 Sep-31 Dec 2020)						, ,	
Accommodation and food service	114	528	4%	6	5%	0.6 (0.6 to 0.7)	
Agriculture	26	532	4%	4	3%	2.4 (2.2 to 2.6)	
Construction	58	192	1%	2	2%	0.1 (0.1 to 0.1)	
Education	445	923	7%	8	6%	0.8 (0.8 to 0.9)	
Healthcare and social assistance	1113	5862	45%	60	46%	2.6 (2.6 to 2.7)	
Manufacturing—food	72	861	7%	5	4%	2.6 (2.4 to 2.8)	
Manufacturing—other	214	1577	12%	15	12%	0.8 (0.7 to 0.8)	
Mining and utilities	6	19	0%	0	0%	0.1 (0.1 to 0.1)	
Other service industries	100	457	4%	7	5%	0.2 (0.2 to 0.2)	
Public administration	31	130	1%	1	1%	0.3 (0.2 to 0.3)	
Retail trade	96	528	4%	7	5%	0.3 (0.3 to 0.3)	
Transportation and warehousing	64	1153	9%	12	9%	1.1 (1.0 to 1.1)	
Wholesale trade	32	233	2%	3	2%	0.5 (0.4 to 0.5)	
Period 3 (1 Jan–31 Mar 2021)							
Accommodation and food service	88	391	3%	9	4%	0.5 (0.5 to 0.6)	
Agriculture	78	705	5%	9	4%	4.3 (4.0 to 4.6)	
Construction	118	562	4%	6	3%	0.3 (0.3 to 0.4)	
Education	484	1138	7%	20	8%	1.1 (1.1 to 1.2)	
Healthcare and social assistance	1011	5471	35%	51	21%	2.2 (2.2 to 2.3)	
Manufacturing—food	65	991	6%	27	11%	2.4 (2.2 to 2.5)	
Manufacturing—other	267	2450	16%	56	23%	1.1 (1.0 to 1.1)	
Mining and utilities	14	75	0%	1	0%	0.3 (0.2 to 0.4)	
Other service industries	146	688	4%	19	8%	0.3 (0.3 to 0.3)	
Public administration	53	376	2%	5	2%	0.7 (0.6 to 0.8)	
Retail trade	128	718	5%	11	5%	0.3 (0.3 to 0.3)	
Transportation and warehousing	106	1739	11%	22	9%	1.5 (1.4 to 1.5)	
Wholesale trade	39	221	1%	4	2%	0.4 (0.3 to 0.4)	

<sup>\*</sup>SIR was estimated by the ratio of workplace outbreak-associated COVID-19 incidence rate (per 200 000 work hours) to the overall incidence rate (per 200 000 hours awake) in Ontarians aged 15–69 years.

occupation and other sociodemographic data on cases and contacts are limited in surveillance data. For example, we were unable to disentangle industry-specific risk from other factors in our data, such as occupational risk, socioeconomic and racial inequities, household size and financial barriers to isolate, all of which may be associated with an increased risk of COVID-19. Improved occupational surveillance for COVID-19, along with the collection of other socioeconomic determinants, so would enhance capabilities to inform interventions that mitigate

infection transmission risk while addressing inequities among individuals, groups and industries disproportionately affected by non-pharmaceutical public health interventions.  $^{5\,6\,36}$ 

#### Strengths and limitations

Our study is not without limitations. We restricted our analyses to workplace outbreak-associated cases; as a result, these should not be interpreted as overall rates of COVID-19 among

<sup>†</sup>The proportion (%) of cases and hospitalisations represent the share of outcomes from each two-digit North American Industry Classification System 2017 industry within the designated time period.

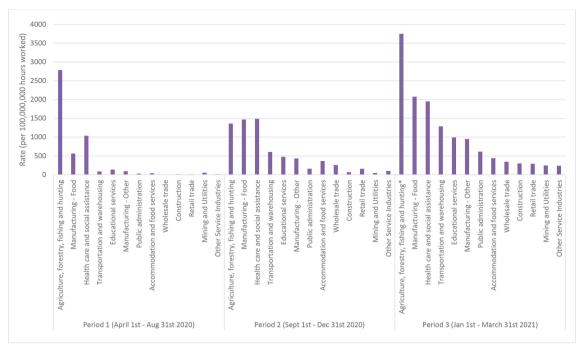


Figure 1 Cumulative case rate (per 100 000 000 hours worked outside the home) of COVID-19 among Ontario workers aged 15–69 years by industry and period.

workers. In addition, not all included outbreak-associated cases were acquired in the workplace, or while on duty, we were unable to distinguish risks incurred in work areas versus work-related circumstances (eg, carpooling or breaks). There were also likely differences in declaring/managing outbreaks across the study period (eg, due to contact tracing capacity, access to testing for outbreaks) and by PHU. This would have impacted the overall number of cases linked to workplace outbreaks and their proportion of total cases. In addition, not all individuals will seek testing, which would result in underdetection; this behaviour could vary across industries.

Workplace outbreak guidance was issued in June 2020 and updated in February 2021 to a lower threshold for identifying contacts for testing and quarantine related to variants of concern; as such, there may be additional inconsistency across periods in our study. 15 Furthermore, there may be differential identification of outbreaks across industries. First, enhanced testing initiatives (including funded testing programmes<sup>37</sup>) implemented in some industries (ie, healthcare, education) may have increased case and outbreak identification. Second, outbreak definitions were not consistent across industries and some changed over time. For example, a single case constituted an outbreak in long-term care settings which may have inflated outbreak-associated cases in the healthcare relative to other industries, whereas an outbreak required two epidemiologically linked cases. Furthermore, in the agriculture industry, we were unable to distinguish infections acquired in the workplace from those due to co-habitating workers as many staff reside in provided accommodation. This factor may be a significant driver of the high incidence in this industry and may impact the generalisability of these results. We have underestimated the incidence in industries where settings were excluded, such as gyms and places of worship, where outbreaks were less likely to have been restricted to staff only based on what is known about transmission dynamics in these settings. 38 39 Third, public health measures and interventions (eg, school closures, stay at home orders) changed over the study

period<sup>40</sup> and would have impacted the likelihood of transmission in the workplace.

In addition, the LFS is only reflective of an individual's selfreported main job, which may have resulted in COVID-19 rates being overestimated in industries where part-time work is more prevalent. If an individual worked across industries, their case was assigned to the industry related to the outbreak, but this may not have aligned with the denominator data as they only reflect time in the main occupation. There may have been some misclassification related to outbreaks being classified manually into industry; however, as we reported outbreaks at the twodigit level, we believe this is minimal. Finally, to calculate the SIRs, we used 16 hours per day to estimate the number of hours a person may have been at risk of contracting COVID-19, assuming the risk is zero while sleeping (8 hours per day). Our estimate acknowledges that the risk of COVID-19 transmission across settings is a continuum, with few settings posing zero risk. Reducing the time (ie, 10 hours per day) would lead to smaller SIRs across industry groups than reported.

Our study also has several strengths. First, we were able to estimate the incidence of all workplace outbreak-associated cases, a limitation to previous studies that use general population cohorts (less representative and higher SES<sup>12</sup>) or only include information on specific settings. While this approach may not have captured all workplace- associated cases, declaration of an outbreak is an indication that workplace transmission was considered reasonable.<sup>15</sup> By using a combination of risk factors in the provincial surveillance system, along with the manual classification of settings and industry, we created a comprehensive dataset of all workplace outbreak-associated cases. This has allowed us to examine industry-specific incidence, including comparisons between non-healthcare and healthcare industries, responding to the stated need to quantify the COVID-19 burden on all workers.<sup>5</sup> Second, our analyses incorporate denominator data from 2020/2021 and are more reflective of the changes in the number of individuals actually employed and working

#### Workplace

outside of the home within an industry during the pandemic than those who rely on older estimates. This stratification mitigates concerns in comparing incidence by restrictions on certain industries, as we have estimated incidence in those individuals who worked outside the home and could therefore be considered 'at-risk'.

Our results demonstrate that cases associated with workplaceoutbreaks contributed to the burden of COVID-19 in working-age populations in Ontario, although a considerable proportion of COVID-19 cases in this group were not associated with workplace outbreaks. We have also shown that under varying circumstances of changing restrictions and policy guiding outbreak declaration/management, certain industries consistently had increased incidence of COVID-19 over the course of the pandemic. Given the variation in SIRs across industry groups, with many industry groups having SIRs less than one, there may be important findings across different industries with various levels of COVID-19 incidence which may help inform future interventions to reduce burden and transmission in these workplace settings. For instance, identification of higher risk industries can inform prioritisation of public health and labour interventions, such as the enforcement of hierarchy of control standards for reducing COVID-19 risk. Our results suggest the potential utility of field investigation data from outbreaks in these industries to further hone current guidance on infection prevention and control measures. These data may also help target industries at increased risk of outbreaks for inspections and enforcement of measures. As such, our results may assist in ongoing efforts to reduce transmission of COVID-19, by prioritising resources, as well as industry-specific guidance, vaccination and public health messaging.

**Acknowledgements** We thank the staff at the Statistics Canada's Toronto Research Data Centre for their assistance in accessing the data to the LFS and vetting the output for this project.

**Contributors** SAB, PMS and BTS designed the study. SAB, SM and TVI extracted surveillance data on cases from CCM and classified outbreaks by industry, while PMS extracted denominator data from the Labour Force Survey. CW conducted all the data analysis. SAB, CW and BTS drafted the manuscript. SAB, PMS, CW, MM, CM, JHK, SM, KAB, TVI and BTS all contributed to the interpretation of the data, revising the manuscript and final approval. SAB is responsible for the overall content as the quarantor of this work.

**Funding** This study was supported by Public Health Ontario. The Institute for Work & Health is supported through funding from the Ontario Ministry of Labour, Training and Skills Development (MLTSD).

Competing interests None declared.

Patient consent for publication Not applicable.

**Ethics approval** The Public Health Ontario Ethics Review Board determined that this project did not require research ethics committee approval as the activities described were considered public health practice and not research.

Provenance and peer review Not commissioned; externally peer reviewed.

**Data availability statement** No data are available. Public Health Ontario (PHO) cannot disclose the underlying data. Doing so would compromise individual privacy contrary to PHO's ethical and legal obligations. Restricted access to the data may be available under conditions prescribed by the Ontario Personal Health Information Protection Act, 2004, the Ontario Freedom of Information and Protection of Privacy Act, the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2 (2018)) and PHO privacy and ethics policies. Data are available for researchers who meet PHO's criteria for access to confidential data. Information about PHO's data access request process is available on-line at https://www.publichealthontario.ca/en/data-and-analysis/using-data/data-requests. Access to the anonymised microdata for the Labour Force Survey Supplement is available through Statistics Canada to accredited researchers and government employees for research purposes.

**Supplemental material** This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those

of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

This article is made freely available for personal use in accordance with BMJ's website terms and conditions for the duration of the covid-19 pandemic or until otherwise determined by BMJ. You may download and print the article for any lawful, non-commercial purpose (including text and data mining) provided that all copyright notices and trade marks are retained.

#### ORCID iDs

Peter M Smith http://orcid.org/0000-0001-8286-4563 Michelle Murti http://orcid.org/0000-0003-4649-6913 Cameron Mustard http://orcid.org/0000-0002-0747-8870 Brendan T Smith http://orcid.org/0000-0003-2785-1246

#### **REFERENCES**

- United Kingdom Office for National Statistics. Statistical bulletin: Coronavirus (COVID-19) related deaths by occupation, England and Wales: deaths registered up to and including 20 April 2020, 2020.
- 2 Burdorf A, Porru F, Rugulies R. The COVID-19 (coronavirus) pandemic: consequences for occupational health. Scand J Work Environ Health 2020;46:229–30.
- 3 Schwartz KL, Achonu C, Buchan SA, et al. Epidemiology, clinical characteristics, household transmission, and lethality of severe acute respiratory syndrome coronavirus-2 infection among healthcare workers in Ontario, Canada. PLoS One 2020;15:e0244477.
- 4 Gholami M, Fawad I, Shadan S, et al. COVID-19 and healthcare workers: a systematic review and meta-analysis. *Int J Infect Dis* 2021;104:335–46.
- 5 Carlsten C, Gulati M, Hines S, et al. COVID-19 as an occupational disease. Am J Ind Med 2021;64:227–37.
- 6 Sim MR. The COVID-19 pandemic: major risks to healthcare and other workers on the front line. Occup. Environ. Med. 2020:77:281–2
- 7 European Centre for Disease Prevention and Control. COVID-19 clusters and outbreaks in occupational settings in the EU/EEA and the UK, 2020. Available: https://www.ecdc.europa.eu/en/publications-data/covid-19-clusters-and-outbreaks-occupational-settings-eueea-and-uk [Accessed 23 Jun 2021].
- 8 Baker MG, Peckham TK, Seixas NS. Estimating the burden of United States workers exposed to infection or disease: a key factor in containing risk of COVID-19 infection. PLoS One 2020;15:e0232452.
- 9 Smith PM, Smith BT, Warren C, et al. The prevalence and correlates of workplace infection control practices in Canada between July and September 2020. Health Rep 2021:37:16–77
- Murti M, Achonu C, Smith BT, et al. COVID-19 workplace outbreaks by industry sector and their associated household transmission, Ontario, Canada, January to June, 2020. J Occup Environ Med 2021;63:574–80.
- 11 De Matteis S. COVID-19: are not all workers 'essential'? Occup Environ Med 2021;78:305–6.
- 12 Kromhout H. Learning from a global pandemic. Occup Environ Med 2020;77:587–8.
- 13 Statistics Canada. Guide to the labour force survey 2020. statistics Canada, 2020. Available: https://www150.statcan.gc.ca/n1/pub/71-543-g/71-543-g2020001-eng. htm [Accessed 23 Jun 2021].
- 14 Ministry of Health. COVID-19 guidance for the health sector. Toronto, ON, 2021. Available: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/ 2019 guidance.aspx [Accessed 23 Jun 2021].
- 15 Ministry of Health. COVID-19 guidance: workplace outbreaks. Toronto, ON, 2020. Available: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/2019\_workplace\_outbreak\_guidance.pdf [Accessed 23 Jun 2021].
- 16 Statistics Canada. North American industry classification system (NAICS) Canada 2017 version 3.0, 2021. Available: https://www23.statcan.gc.ca/imdb/p3VD.pl? Function=getVD&TVD=1181553 [Accessed 23 Jun 2021].
- 17 Ministry of Health. Case definition coronavirus disease (COVID-19). Toronto, on, 2021. Available: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/2019\_case\_definition.pdf [Accessed 23 Jun 2021].
- 18 Government of Ontario. Ontario Declares second provincial emergency to address COVID-19 crisis and save lives, 2021. Available: https://news.ontario.ca/en/release/ 59922/ontario-declares-second-provincial-emergency-to-address-covid-19-crisis-and-save-lives
- 19 Matheson FI, van Ingen T. 2016 Ontario marginalization index. Toronto, ON: St. Michael's Hospital, 2018. https://www.publichealthontario.ca/en/data-and-analysis/health-equity/ontario-marginalization-index
- Rothman KJ, Greenland S, Lash TL. Modern epidemiology. Third edition. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins, 2008.
- 21 Statistics Canada. COVID-19 disruptions and agriculture: temporary foreign workers, 2020. Available: https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/ 00002-eng.htm [Accessed 23 Jun 2021].

- 22 Tibebu S A, Brown K, Daneman N. Household secondary attack rate of COVID-19 by household size and index case characteristics. medRxiv2021:2021.02.23.21252287.
- 23 Mutambudzi M, Niedzwiedz C, Macdonald EB, et al. Occupation and risk of severe COVID-19: prospective cohort study of 120 075 UK Biobank participants. Occup Environ Med 2021;78:307–14.
- 24 Chen Y-H, Glymour M, Riley A, et al. Excess mortality associated with the COVID-19 pandemic among Californians 18-65 years of age, by occupational sector and occupation: March through November 2020. PLoS One 2021;16:e0252454.
- 25 Nafilyan V, Pawelek P, Ayoubkhani D. Occupation and COVID-19 mortality in England: a national linked data study of 14.3 million adults. medRxiv2021.
- 26 Dyal JW, Grant MP, Broadwater K, et al. COVID-19 among workers in meat and poultry processing facilities 19 states, April 2020. MMWR Morb Mortal Wkly Rep 2020;69:mmwr.mm6918e3.
- 27 Waltenburg MA, Rose CE, Victoroff T, et al. Coronavirus disease among workers in food processing, food manufacturing, and agriculture workplaces. Emerg Infect Dis 2021:27:243–9
- 28 Rao A, Ma H, Moloney G, et al. A disproportionate epidemic: COVID-19 cases and deaths among essential workers in Toronto, Canada. Ann Epidemiol 2021;63:63–7.
- 29 Bui DP, McCaffrey K, Friedrichs M, et al. Racial and Ethnic Disparities Among COVID-19 Cases in Workplace Outbreaks by Industry Sector - Utah, March 6-June 5, 2020. MMWR Morb Mortal Wkly Rep 2020;69:1133–8.
- 30 Contreras Z, Ngo V, Pulido M, et al. Industry sectors highly affected by worksite outbreaks of coronavirus disease, Los Angeles County, California, USA, March 19-September 30, 2020. Emerg Infect Dis 2021;27:1769–75.
- 31 Chen Y, Aldridge T, et al, UK COVID-19 National Core Studies Consortium, COVID-19 outbreak rates and infection attack rates associated with the workplace: a descriptive epidemiological study. medRxiv2021:2021.05.06.21256757.

- 32 Center for Disease Control and Prevention. Manufacturing workers and employers interim guidance from CDC and the occupational safety and health administration (OSHA), 2021. Available: https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-manufacturing-workers-employers.html#exposure-risk [Accessed 23 Jun 2021].
- 33 Marinaccio A, Boccuni F, Rondinone BM, et al. Occupational factors in the COVID-19 pandemic in Italy: compensation claims applications support establishing an occupational surveillance system. Occup Environ Med 2020;77:818–21.
- 34 van Ingen T, Akingbola S, Brown KA. Neighbourhood-level risk factors of COVID-19 incidence and mortality. medRxiv2021:2021.01.27.21250618.
- 35 Khalatbari-Soltani S, Cumming RC, Delpierre C, et al. Importance of collecting data on socioeconomic determinants from the early stage of the COVID-19 outbreak onwards. J Epidemiol Community Health 2020;74:620–3.
- 36 Klein A, Smith E. Explaining the economic impact of COVID-19: core industries and the Hispanic workforce. 1-18, 2021. Available: https://digitalscholarship.unlv.edu/ brookings\_policybriefs\_reports/2 [Accessed 12 Oct 2021].
- 37 Government of Ontario. Ontario deploys rapid tests to more essential workplaces and settings, 2021. Available: https://news.ontario.ca/en/release/60337/ontario-deploysrapid-tests-to-more-essential-workplaces-and-settings [Accessed 23 Jun 2021].
- 38 Groves LM, Usagawa L, Elm J, et al. Community Transmission of SARS-CoV-2 at Three Fitness Facilities - Hawaii, June-July 2020. MMWR Morb Mortal Wkly Rep 2021;70:316–20.
- 39 Katelaris AL, Wells J, Clark P, et al. Epidemiologic evidence for airborne transmission of SARS-CoV-2 during church singing, Australia, 2020. Emerg Infect Dis 2021:27:1677–80.
- 40 Canadian Institute for Health Information. *COVID-19 intervention scan data tables*. Ottawa, ON: CIHI, 2021.

Ian Cunningham, Chair

Lisa-Beech Hawley, Vice-Chair

**Dave Wells, Treasurer** 

Maria Marchese, Secretary/Secretariat

Association of Canadian Search, Employment and Staffing Services

Business Council on Occupational Health and Safety

Canadian Fuels Association

Canadian Manufacturers & Exporters

Canadian Vehicle Manufacturers' Association

Council of Ontario Construction Associations OBC Secretariat 67 Yonge Street, Ste. 1400 Toronto ON M5E 1J8

Phone: 416-254-8673 E-mail: maria.marchese@cme-mec.ca

# **ONTARIO BUSINESS COALITION (OBC)**

**Vision:** an Ontario workplace compensation system that is sustainable, that serves the needs of the employers that participate in the system and their workers and that contributes to the Province's competitiveness. **Mandate:** to advocate on behalf of employers with regard to issues of importance concerning the Workplace Safety

and Insurance Board and workplace injury and sickness prevention.

**OBC** Priorities

- OBC Relationship Building- communication/consultation with WSIB President, Chair, Minister of Labour, Prevention Division and MLTSD Senior Management Level
- WSIB Surplus Funding Distribution Model
- Rate Framework Implementation
- > WSIB Operational Review Implementation
- > WSIA Legislative Reform
- Maintenance of Current Benefit Levels (including 72-month lock-in)
- > OBC Membership Expansion / Alignment of Efforts with Other Associations
- Occupational Disease Policy

March 28, 2023

Workplace Safety & Insurance Board Consultation Secretariat

Sent Via Email: Consultation Secretariat@wsib.on.ca

By way of some background information on our association, the Ontario Business Coalition (OBC) was established 17 years ago with a mandate to advocate for an Ontario workplace compensation system that is sustainable, that serves the needs of the employers and workers that participate in the system, and that contributes to the province's competitiveness. We are mandated to work with senior officials at the Workplace Safety & Insurance Board (WSIB) and in government to make sure Ontario's workplace compensation system meets the needs of the province's employers, and compensates injured workers in a fair and efficient manner. OBC has a diverse membership base with employer organizations focused exclusively on workplace compensation issues. Our members represent employers in the manufacturing, auto assembly, construction, fuels, and temporary staffing services industries.

Thank you for providing the opportunity to provide comments to your "Communicable Illnesses Policy Consultation". OBC appreciates, and supports, the WSIB's objective of clarifying the adjudication parameters for determining the work relatedness of communicable illnesses in the development of this policy.

At its March 16, 2023 meeting, the OBC received a detailed presentation from the Office of the Employer Adviser (OEA) about their submission and, after a full discussion, agreed to endorse and support the OEA submission. We have attached the OEA submission dated March 23, 2023 for ease of reference. We believe that the OEA submission thoroughly responds to the critical points which will maintain the integrity of a workplace compensation system, which is to provide income replacement for confirmed work-related injuries or diseases/illnesses.

Please feel free to contact us should you have any questions regarding our comments.

Yours truly, San luminghou

Chair

Ontario Business Coalition

#### Office of the Employer **Adviser**

505 University Avenue, 20th Floor Toronto ON M5G 2P1

Toll Free: 1-800-387-0774 Tel: 416-327-0020 Fax: 416-327-0726

#### Bureau des conseillers des employeurs

505, avenue University, 20e étage Toronto (Ontario) M5G 2P1

Sans frais: 1-800-387-0774 Tél: 416-327-0020 Téléc: 416-327-0726



#### Office of the Employer Adviser

Bureau des conseillers des

employeurs

March 23, 2023

**WSIB** Consultation Secretariat Consultation Secretariat@wsib.on.ca

Dear WSIB Consultation Secretariat,

Re: Communicable Illnesses Policy Consultation

The Office of the Employer Adviser (OEA) appreciates the opportunity to provide feedback on the WSIB's draft Communicable Illnesses policy as part of the WSIB's policy consultation.

#### General comments

The draft policy is quite broad and is intended to cover various types of illnesses with different modes of transmission. The OEA suggests that the WSIB consider whether there would be a benefit to splitting this policy into two or more policies.

Having separate policies may help to address the different types of communicable illnesses more clearly. For example, having a separate policy for COVID-19 could give the WSIB an opportunity to provide additional clarity on how COVID-19 claims, including long COVID-19, will be adjudicated by the WSIB. Additionally, it would provide an opportunity to clarify whether the WSIB will accept the results of rapid tests for COVID-19 claims (which is not something that would apply to all the other communicable illnesses mentioned in the policy).

## Comments on the "Community-acquired communicable illnesses" section of the draft policy

The OEA would like to note the following regarding the "Community-acquired communicable illnesses" section of the draft policy:

1. The OEA suggests that the current wording of the draft policy be clarified to be more specific about what types of situations the WSIB would view as increasing the worker's "risk of contracting the communicable illness in some additional way." For convenience, the full paragraph from the draft policy is set out below [emphasis added]:

Communicable illnesses, such as influenza, the common cold, and COVID-19 are highly transmissible and can be prevalent in the general population. In-person interactions that can easily spread these communicable illnesses are a part of everyday life and occur both inside and outside of employment (e.g., in the home, community, and public settings). Outside of a public health emergency, in-person interactions at work with colleagues, customers, clients, or others, generally do not place the worker at a greater risk of contracting one of these communicable illnesses than the risk experienced by the general public. Therefore, a worker who contracts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increased their risk of contracting the communicable illness in some additional way. For example, the worker contracts the communicable illness while performing a job duty that subjected them to an exposure risk in excess of the norm, such as delivering health care to a person known to have the communicable illness.

The OEA suggests that the policy could be more specific in explaining what is meant by "in some additional way", to give more clarity about when such claims will be allowed or not allowed, and to enhance consistency in the WSIB's decision-making on this point. We believe that it would also be helpful if the WSIB could provide additional examples in the policy.

Furthermore, the OEA suggests that this section of the draft policy be updated to indicate that in determining entitlement for a community-acquired communicable illness the WSIB will consider whether opportunities existed for exposure to and transmission of the communicable illness both inside and outside of the worker's employment. While this is indicated more broadly earlier on in the policy, since the policy addresses these community-acquired illnesses differently than other communicable illnesses we believe it would be helpful to clarify that this factor will be considered even if the worker's employment increased their risk of contracting the communicable illness in some additional way.

2. The OEA suggests that the reference to the common cold be removed from this policy.

Due to the potential prevalence of the common cold in the community generally, in our view it would be a rare circumstance where it could be established that the common cold arose out of and in the course of a worker's employment. By contrast, according to WSIB statistics<sup>1</sup> there have been over 55,000 allowed COVID-19 claims since the start of the COVID-19 pandemic.

Furthermore, unlike COVID-19 and influenza, the common cold is not tracked by Public Health Ontario, nor are outbreaks declared by public health officials. In reviewing

 $<sup>^{1}\,\</sup>underline{\text{https://safetycheck.onlineservices.wsib.on.ca/safetycheck/explore/additional/provincialDownloads?lang=en}$ 

influenza cases that have been before the Workplace Safety and Insurance Appeals Tribunal (WSIAT), in a number of those cases<sup>2</sup> there was a declared outbreak in the worker's workplace, and this appears to have factored into the WSIAT's decision to allow the claim.

By including an illness such as the common cold in the draft policy in this manner, the current wording could be interpreted to suggest that claims for the common cold could be broadly allowed by the WSIB for workers working in certain settings (e.g., health care). Furthermore, this wording may encourage workers to file a claim for the common cold with the WSIB if they:

- feel their employment increased their risk of contracting illness in some way,
- have some symptoms of respiratory illness (such as a cough, sore throat and runny nose),
- need to isolate at home due to the current public health guidance that is in place regarding staying home when sick<sup>3</sup>, and
- cannot work from home due to the nature of their work.
- 3. The OEA suggests that the WSIB provide guidance to employers regarding when they are required to file a Form 7 for a worker who has COVID-19, influenza, or the common cold (if it remains in the policy). Such guidance would preferably be included in policy or, in the alternative, in an Administrative Practice Document that is released concurrently with this policy.

In the absence of such guidance, it is likely that some employers will be unclear or confused about when a Form 7 is required if their worker has COVID-19, influenza, or the common cold as these illnesses can be prevalent in the general population. Since the WSIB may levy penalties or charge employers with an offence for not meeting their reporting obligations, it is important that employers clearly understand how those obligations apply in this context.

We hope the WSIB will find the above comments helpful. Please let us know if you wish to discuss.

Best regards,

S Adams

Susan Adams
Director, Office of the Employer Adviser
416-314-8735

Cc. Robin Senzilet, General Counsel (A)

<sup>&</sup>lt;sup>2</sup> For example, see WSIAT Decision 47/22, Decision 58/17, Decision 1365/14.

<sup>&</sup>lt;sup>3</sup> <a href="https://www.ontario.ca/page/protection-covid-19-and-other-respiratory-illnesses#:":text=If%20you%20have%20symptoms%20of%20COVID%2D19,have%20not%20developed%20additional%20symptoms">https://www.ontario.ca/page/protection-covid-19-and-other-respiratory-illnesses#:":text=If%20you%20have%20symptoms%20of%20COVID%2D19,have%20not%20developed%20additional%20symptoms</a>

# Communicable Illnesses Policy Consultation Workplace Safety and Insurance Board



Ontario Federation of Labour Submission

March 2023

#### Introduction

The Ontario Federation of Labour (OFL) is the central labour organization in the province of Ontario. The OFL represents 54 unions and speaks for more than a million workers from all regions of the province in the struggle for better working and living conditions.

With most unions in Ontario affiliated, membership includes nearly every job category and occupation. The OFL is Canada's largest provincial labour federation. The strength of the labour movement is built on solidarity and respect among workers.

We commit ourselves to the goals of worker democracy, social justice, equality, and peace. We are dedicated to making the lives of all workers and their families safe, secure, and healthy. We believe that every worker is entitled, without discrimination, to a job with decent wages and working conditions, union representation, free collective bargaining, a safe and healthy workplace, and the right to strike.

Organized labour, as the voice of working people, promotes their interests in the community and at national and international forums. We speak out forcefully for our affiliates and their members to employers, governments, and the public to ensure the rights of all workers are protected and expanded.

## **Proposed WSIB Communicable Illnesses Policy**

The Ontario Federation of Labour is not supportive of the policy in its current restrictive state. On the whole, we do not believe it reflects the legal principles of the Workplace Safety and Insurance Act (WSIA), nor the scientific evidence that has developed around COVID-19 over the past three years or what could emerge – specifically around the airborne nature of the illness, and its multiplying impact on workers in the workplace.

While the policy purports to be based on a significant contribution test, the details that follow mimic a predominant cause test; completely ignoring the balance of probabilities, benefit of doubt and thin skull tests or principles. Quite simply, the way that this policy is framed now is that the WSIB is looking for fault outside of the workplace, within the framework of a no-fault system. As a result, we believe that workers would be better off without this policy in general, especially in light of favourable decisions by the Tribunal around acknowledgements of work-relatedness of many COVID-19 cases. We fear that given the entitlements granted to workers for COVID-19 related illnesses and deaths, the policy has only been created to do the reverse of what the compensation Board is meant to do: compensation workers for work-related illnesses.

A greater fear we have is that similar to the Chronic Mental Stress Policy, the denial of COVID-19 related claims will lead to a chilling effect where workers do not see a point in filing for compensation in the first place. Many will simply not file for compensation, and with no provincial paid sick days legislated, most will miss out on income (especially

precarious workers who are most impacted). Also, given the growing scientific research around COVID-19 sequalae, also known as 'long-COVID' on the Health Canada website, if workers are not compensated for their initial claim by virtue of this restrictive policy, they will surely be denied rightful compensation for long-COVID – a well-known condition that is not even considered by the policy.

In a broader context, we are concerned about the message that this restrictive policy sends to frontline workers: that the government and employer require you to work in a hazardous setting, but that if you get sick, the worker is on their own. That is the last message that should be sent right now, when there is a significant possibility of a new surge and/or variant of COVID-19 or a completely new pandemic virus. We were warned of the possibility before with the Archie Campbell Commission post-SARS, and we are not immune to the threat of a communicable disease spreading like wildfire again. The WSIB should be sending a strong message of support to workers instead after all they have endured.

We will use the example of COVID-19 to outline the glaring issues with the policy and how it will impact workers if implemented.

Upon first glance, the **guidelines** could capture the airborne nature of a communicable illness, by the mention of 'directly or indirect' contact from person to person, or from animal to person. The **entitlement criteria** might also even work if there was mention of balance of probabilities. The **immunization status** is also appreciated – where entitlement to benefits will not be denied because the worker is not immunized – although we would ask that it go further to compensate using the same principles if they develop side effects, either short or long term, from the vaccine if historically or currently required for their employment.

The **determination section** is where the policy starts to go awry and continues to worsen as it unfolds. The first flaw is that it mentions that 'one or both' of the determination criteria will be necessary to establish. That distinction is incredibly confusing and could be applied differently for different cases. The second flaw is that most treating health professionals will not see you in person if you are experiencing symptoms of COVID-19 (even when the symptoms mimic some of the other conditions listed in the policy, and even if you take a rapid at-home test), and Polymerase Chain Reaction (PCR) tests are not available in pharmacies if you are symptomatic. Therefore, it would be near impossible to receive a diagnosis by a treating health professional – regardless of the burden that requirement would be placing on our already overworked system. The third major flaw is that even with the **exception to laboratory or clinical evidence of current infection** in cases where workers cannot access or does not qualify for diagnostic testing (which is most of the population at this current time), the policy does not clarify whether or not a take-home antibody test (also known as a Rapid Antigen Test, or RAT) qualifies as acceptable evidence. When the PCR testing was

made unavailable by the province – and prohibitive with their high cost – workers exposed to COVID-19 at work had to resort to at-home RATs, marking the date and time themselves. Will this be accepted by the Board for communicable illnesses? It also remains to be seen or discussed in the policy if the worker will be reimbursed for any PCR test they are required to take and pay for, if their claim is later acknowledged as work-related. We recommend that workers be able to take a RAT at home to indicate their status; any other method would be burdensome for either the worker, the healthcare system, or could lead to greater infection either at work or in the community.

The section on determining whether the communicable illness arose out of employment is where the policy completely warps the intentions, principles, and laws of the compensation system and Act, specifically with the **employment risk factors**. The nature of viruses like COVID-19 is that they run rampant throughout workplaces, where people spend the majority of their waking time. The policy mentions the significant contribution test two or three times but in the way that the risk factors are discussed, where the risk has to be significantly higher or in excess of the community, that language is more in line with predominant cause. If the WSIB is stipulating that the 'risk' has to be 'significantly higher' in the workplace than in the community, they are adding additional hoops that workers must jump through in order to be eligible. The employment risk factors state that employment activities must create opportunities for exposure more than those outside of work. Anyone who has lived through these last three years knows that the sheer act of being at work can lead to mass outbreaks, regardless of your employment activities – by virtue of the airborne nature of the virus. Yes, frontline workers, manufacturing workers, farm workers and other precarious workers, healthcare, transit, and food industry workers are more likely to be the centre of outbreaks, but that should not discount others from receiving compensation for workrelated outbreaks. All workers should be eligible for compensation for work-related communicable illnesses in the past and going forward.

The section on **community-acquired communicable illnesses** intensifies our concerns around the application of this policy and its contradiction with science and law. Specifically, it states that 'outside of a public health emergency, in-person interactions at work with colleagues, customers, clients or others, generally do not place the worker at a greater risk of contracting one of these illnesses than the risk experienced by the generally public. Therefore, a worker who contracts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increased their risk of contracting the communicable disease in some additional way.' This statement makes no sense. When you compare a worker allowed to work at home versus a worker required to be in the workplace, the one working at home will have much lower levels of daily exposure to different people; and will have much more significant control over the exposure situations which do arise. Moreover, it is an extremely dangerous statement, where the WSIB is relying on the

political whims of whoever is in power to determine when a public health emergency is called. We saw as the current Ford government denied science by calling off the emergency, to the point where workers are technically allowed to come into work if they are sick with COVID-19, because Ford did not want to institute sick days or acknowledge the ongoing pandemic.

The WSIB policy cannot mimic the whims of unstable government by only acknowledging workers' eligibility for compensation if the government of the day deems their lives worthy of declaring a public health emergency. That is possibly one of the most dangerous aspects of the draft policy and with the current irresponsible government, would mean that hardly any workers would be eligible for COVID-19 related claims. The only example the policy provides for an exception is if a worker contracts an illness while performing a job duty that subjected them to an exposure risk in excess of the norm. How does the WSIB determine the norm? Many migrant farmworkers died before it was accepted by the government and our system that it was due to COVID-19 outbreaks in cramped, unsafe, and deplorable conditions. Who determines workers' value? It shouldn't be the government, nor the WSIB.

The Loss of Earnings (LOE) benefits and period of communicability section is also a let down, as the policy should only take its orders from section 43 of the Act. The policy currently only talks about the period of communicability – unclear in the table the WSIB provides – and does not consider long-COVID which is a proven potential side effect that can be extremely debilitating. It also does not allow for burgeoning science which is constantly emerging with COVID-19, along with many new virus variants.

Finally, we have concerns with how the general characteristics are captured for COVID-19. As mentioned, long-COVID is not captured here which we now know one in ten people suffer from; perhaps even more as more research develops. We have also learned that there is a continuum of droplet spread and we would encourage the WSIB to consult with the Canadian Airborne Transmission Coalition (CATC) and the Occupational Health Clinics for Ontario Workers (OHCOW) to reflect the science properly. We are also confused by the timeline provided by the WSIB: the incubation period is mentioned as 1-14 days, when the period of communicability is listed as two days before symptom onset until ten days after, adding up to 12 days and not 14. It may seem nit picky, but we are wary of any details that could work against a worker's entitlement to work-related COVID-19, or to the unequal application of the proposed policy between workers.

For all of the reasons outlined above, we vehemently oppose the policy in its current form. Given COVID-19 is its own beast, we perhaps suggest COVID-19 has its own policy or better yet, that the claims are adjudicated based on the occupational disease law and principles, where the general eligibility clause should be the same as the legal test for causation (whether or not, on a balance of probabilities, the workplace was a

# **Communicable Illnesses Policy Consultation Workplace Safety and Insurance Board**

significant contributing factor to the disease). Whatever the way, this policy is not it. Policy design is meant to be a quick way to say 'yes' to a worker, but we see the communicable illnesses draft policy as another quick way to say 'no' policy by the WSIB. And in its current form, workers will be doomed to suffer the same fate as with the CMS policy – one where invisible illnesses are not compensated, and workers suffer both physically and mentally as a result.

cj/COPE343



March 28, 2023

Submitted via email to: Consultation\_Secretariat@wsib.on.ca

The Workplace Safety and Insurance Board (WSIB)
Policy and Consultation Services
Head Office
200 Front Street West
Toronto, Ontario M5V 3J1

#### **RE:** WSIB Communicable Illnesses Policy Consultation

The OGCA represents 200 of the safest and most innovative general contractors throughout Ontario, with our members accounting for over \$12 Billion dollars of construction each year in the industrial, commercial and institutional sectors (ICI). Our membership includes small, medium and large firms representing both union and open-shop contractors. Our members are focused on supplying the infrastructure needed to support Ontario's growing communities.

We thank the WSIB for the ability and opportunity to provide input into this consultation on the proposed Communicable Illness Policy. In our submission, we would like to highlight the support that the OGCA places with the submission from Les. A. Liversidge, LL.B.

His submission can be found here.

The OGCA holds a similar position and our suggestions regarding the draft Communicable Illness Policy are as follows:

- **Legal analysis:** This consultation process should commence afresh after the development and release of an academic level legal paper addressing the meaning and application of the significant contribution test as it applies to communicable illness claims.
- **Entitlement assessment:** The policy should be consistent with that significant contribution test analysis and focus on guidance to establish an identifiable employment related injuring process.
- **Policy language:** The Draft Policy could be more succinct. There are many redundant phrases which offer little adjudicative or policy guidance and leaves the application and assessment of the policy unclear.

The OGCA is open to further discussion on this draft language in order to ensure that the proposed policy is appropriate for all stakeholders affected by this proposed policy.

Should you have any questions regarding our submission, please contact me directly at Giovanni@ogca.ca.

Sincerely

Giovanni Cautillo

President

Ontario General Contractors Association



## Response to the WSIB Draft Communicable Illness Operational Policy

Thank you for the opportunity to provide feedback on proposed operational policy that will provide entitlement guidelines for WSIB claims for communicable illnesses.

The Ontario Long Term Care Association is the largest association of long-term care providers in Canada, and the only association that represents the full mix of long-term care operators — private, not-for-profit, municipal and First Nations. We represent 70% of Ontario's 626 long-term care homes located in communities across the province.

The COVID-19 pandemic had devastating affects on Ontario's health care system and was significantly more acute for those working in long-term care. Throughout the pandemic, where community spread was highest, long-term care homes faced extensive outbreaks that increased risk for residents and staff. Since 2020, homes have enhanced and expanded their infection prevention and control protocols and procedures, meaning today many cases in our homes were acquired in community first. As COVID-19 becomes endemic, many other typical respiratory illnesses will continue to spread in community and thus potentially in our health care settings.

This policy is an important tool for capturing the unique cases where workers are exposed to a significant and specific risk of communicable illness in any workplace, but for health care settings, this risk is inherent in their routine work day. This policy does not take into account the nature of health care workplaces, nor the important balance long-term care homes must make between extensive IPAC protocols and the need to ensure residents have a high quality of life in their homes.

Further, as the province moves towards a normalized approach to pandemic measures, there are less protections in community to limit spread. Most cases are now difficult to trace, and there is a risk the workplace will take on an undue burden due to increased community spread without appropriate surveillance testing in community. This will make it challenging to determine the source of transmission and may create a burdensome process for long-term care homes to attempt to do so.

Additionally, long-term care is extensively regulated and governed by Ministry and public health guidance. Homes have very limited individual control over the IPAC requirements in their homes. This, combined with the removal of active screening measures and pandemic specific funding and measures, will mean that homes will need to treat COVID-19 with similar measures as other respiratory illnesses.

More importantly, as we learned throughout the pandemic, there needs to be targeted WSIB policies in the case of a public health emergency that ensures our staff teams have access to benefits if they are affected while ensuring our health care organizations can support the needs of their communities. Taking a collectivised approach to premiums for health care settings, and long-term care, in particular will help minimize the impact on organizations while supporting staff. While collectivisation may be a useful policy outside of a pandemic, at minimum, it should be leveraged in public health emergencies.

Finally, this policy now formalizes claims for a number of endemic illnesses like influenza. The impact on health care settings could be quite significant for these illnesses that are quite prevalent in the community. It will be important to ensure that all adjudication of claims takes into account the significant risk to illness outside of our workplaces. Additionally, this will add significant reporting burden on long-term care homes, who are in the midst of a global staffing crisis and have limited resources to support extended reporting and claims requirements.

Thank you for the opportunity to comment. The OLTCA looks forward to working with the WSIB on a solution to tailoring this policy to the unique needs of the health care system, and particularly to the unique needs of long-term care homes.

--

For more information or questions, please contact:

Chris Pugh, Manager of Policy and Quality – cpugh@oltca.com



March 28, 2023

Workplace Safety & Insurance Board (WSIB) Consultation Secretariat 200 Front Street West Toronto, Ontario M5V 3J1

Submitted by email to: Consultation Secretariat@wsib.on.ca

<u>Re</u>: Ontario Mining Association comments on the WSIB's policy consultation on communicable illnesses, Document number 15-03-15 <u>draft communicable illnesses policy</u>

The Ontario Mining Association and our members review public sector consultations to prepare submissions that reflect our industry's perspective and experience. **Ontario Mining Association member companies** (see the <u>complete list</u>) represent the range of mining operations in Ontario. In 2021, mining direct employment in Ontario totaled approximately 29,000, with more than \$3.7 billion paid in total worker compensation. Mining in Ontario directly contributes an estimated annual total of \$8.0 billion to gross domestic product, \$2.9 billion in wages and salaries, and approximately 75,000 jobs in the province via direct and indirect channels.

The Ontario Mining Association was established in 1920 to represent the mining industry of the province and is one of the longest serving industry organizations in Canada. We have a long history of working constructively with governments and communities of interest to build consensus on issues that matter to our industry and to the people of Ontario.

#### OMA comments on the WSIB's draft operational policy on communicable illnesses

**Policy:** A worker is entitled to benefits for a communicable illness arising out of and in the course of the worker's employment.

**Purpose:** The purpose of this policy is to provide entitlement guidelines for claims for communicable illnesses.

#### **OMA Comments and Recommendations:**

**General comment:** As drafted, the operational policy creates a potential for claims to be submitted and established without there being a confirmed diagnosis. These sections of the draft should be rewritten with an emphasis on defined and suitable entitlement guidelines.

# Ontario Mining Association comments on the WSIB draft operational policy on communicable illnesses, 28 March 2023

### 1. Ref. page 1, Exception to laboratory or clinical evidence of current infection

#### OMA comments and recommendations:

- A worker who is making a WSIB claim regarding a communicable illness should be required to seek and obtain a confirmed diagnosis from a medical professional. If an illness is serious enough to result in a claim, then it is a matter that merits medical diagnosis and treatment.
- O While the circumstances of the COVID global pandemic led to the WSIB employing exemptions (e.g. allowing individuals to submit a photo of a rapid test result as proof of COVID), this approach lacks rigor and should not become standard Board practice for establishing claims related to communicable illnesses. A variety of medical services are widely available (e.g. Health Units, Tele Health, pharmacies, testing facilities) and so the WSIB's operational policy related to entitlement guidelines should ensure that there is a threshold maintained for requiring a proper diagnosis that is conducted by a medical professional.

# 2. Ref. page 2, Determining whether the communicable illness was contracted in the course of employment

#### **OMA** comments and recommendations:

• With regard to the transmission of an illness, the relevant factor should be whether there has been an influx of the illness at the workplace (i.e. not just that a co-worker has also had the illness). An exception to this requirement may exist at a workplace in which health care providers are continuously / periodically exposed to various communicable diseases and so the source of transmission may be a patient rather than a coworker. The draft text on page 4 ("Employment-related activities") appears to be more clearly defined.

# 3. Ref. Appendix, Table 1. Determining entitlement - General characteristics illustrated with examples of common communicable illnesses

#### **OMA** comments and recommendations:

- The operational policy should <u>not</u> include entitlement to claims related to influenza.
- Influenza, similar to the common cold, may be easily transmitted and contracted in a wide number of settings. Influenza has existed long before COVID and has not previously been a source of WSIB claims entitlement. Including influenza in the communicable illnesses operational policy is unnecessary and highly problematic.

# Ontario Mining Association comments on the WSIB draft operational policy on communicable illnesses, 28 March 2023

o If the WSIB's operational policy includes influenza and COVID (other than for health care workers), then it should become part of the Occupational Disease formulas and not be charged back to employers in Ontario. When an individual develops influenza or COVID, the person has already been exposed a number of days before its onset and most likely has come into contact with a number of people within the past one to five days. It would be unfair to employers in Ontario to have them bear the costs of these types of claims.

The OMA appreciates the WSIB's initiative to consult and seek feedback on its draft operational policy on communicable illnesses. Enquiries and responses regarding this submission may be addressed to:

President Ontario Mining Association

T. <u>416-364-9301</u> Web: oma.on.ca

Email: info@oma.on.ca

Contact link

## **ONTARIO NURSES' ASSOCIATION**

#### **SUBMISSION**

ON

## **WSIB's Communicable Illnesses Policy**

March 28, 2023



## **ONTARIO NURSES' ASSOCIATION**

85 Grenville St., Toronto, ON M5S 3A2 Phone: 416-964-8833 Fax: 416-964-8864

www.ona.org

#### Introduction

The Ontario Nurses' Association (ONA) is the union representing 68,000 front-line registered nurses and health-care professionals, and more than 18,000 nursing student affiliates. Our members provide care in Ontario hospitals, long-term care facilities, public health, the community, clinics, and industry.

#### **Executive Summary**

ONA appreciates the opportunity to provide stakeholder submissions on the Workplace Safety and Insurance Board's (WSIB) Communicable Illnesses Policy. We are pleased to see adjudicative principles codified for entitlement to communicable illnesses, such as, influenza, Lyme disease, Hepatitis B, the COVID-19 pandemic, and previous global outbreaks such as SARS and H1N1. These illnesses, pandemics, and outbreaks disproportionately impact our members. As such, we have specific feedback on what should be included in the policy to ensure it represents a fair adjudicative approach consistent with the most up to date medical/scientific knowledge.

It is especially important to ONA that the codified adjudicative principles reflect the urgent nature with which our members require access to WSIB benefits for communicable illnesses during public health emergencies. Our dedicated members have worked on the front lines through the current COVID-19 global pandemic and throughout prior public health emergencies such as SARS. When these emergencies hit, our members are at high risk of work-related exposures, given that they are often providing care for infected patients right at the outset. As we saw with the COVID-19 pandemic, it took months before it was posited that COVID-19 was transmitted by aerosol. During that time, many of our members acquired COVID-19 at work, partly because they could not access the appropriate level of PPE. Considering the risks that our members are forced to take at work in a public health emergency, it is crucial that they have access to WSIB benefits for communicable illnesses without any adjudicative complications.

It is equally important to ONA that comprehensive adjudicative principles specific to COVID-19 are codified in policy going forward. While COVID-19 is no longer considered a public health emergency, it continues to be a concerning and complex public health issue, where health-care workers remain at significant risk of contracting the virus at work and suffering from its long-term effects. This risk exists notwithstanding access to PPE and vaccines, due to COVID-19's high infectiousness rate, the potential for aerosol transmission, the high false negative rate in testing for the presence of the virus, and the constantly evolving nature of the virus. Furthermore, of great concern to our members is the development of post-COVID conditions, which have a wide range of symptoms that can include disabling long-lasting health complications affecting multiple body systems. In light of the above, it is very important to us that comprehensive and frequently reviewable adjudication principles are put in place for these complicated and evolving claims as soon as possible.

With all of the above in mind, we are providing the following recommendations concerning

the draft communicable illnesses policy:

- 1. We request that the WSIB create a rebuttable presumption for entitlement to infectious diseases contracted by high-risk workers, including all health-care workers, during public health emergencies, so that these workers are afforded adequate protection for present and future pandemics.
- 2. We request that the communicable illnesses policy include a section on secondary conditions that can arise from contracting a communicable illness.
- 3. We request that a separate adjudicative policy be drafted to cover the adjudication of COVID-19 claims. This policy:
  - a. cannot exclude the possibility of COVID-19 infection based on a negative test result, especially if the other criteria considered as an exception are met;
  - b. must allow for expert and comprehensive guidance on the risk of transmission of COVID-19 in various work environments, and in the absence of that guidance, must default to merits and justice principles; and
  - c. must provide specific guidance on the adjudication of long-COVID / post-COVID conditions.
- 4. In the alternative, if a separate COVID-19 policy is not developed, a separate section dedicated to COVID-19 is necessary within the Communicable Illnesses Policy. This section must address the issues set out in our recommendations above.

#### **Background**

#### Communicable Illnesses: risk to Health-Care Workers

Health-care workers are at high risk of contracting communicable illnesses due to the nature of their work. This is because, to state simply, health-care workers are under moral, ethical, and professional requirements to provide medical care to the sick. The consequence is that health-care workers are in contact with a greater population of sick people than the average worker. In addition, in providing medical care to the sick, health-care workers have frequent interaction with the substances through which communicable illnesses are transmitted, such as: blood, feces, urine, respiratory droplets, and infectious aerosols, including when health-care workers are engaged in aerosol-generating medical procedures, like intubation.

\_

<sup>&</sup>lt;sup>1</sup> Nienhaus, A. et al., (2012), Infectious diseases in healthcare workers an analysis of the standardized data set of a German compensation board, Journal of Occupational Medicine and Toxicology 2012, 7: 8, page 1 [Infectious diseases in healthcare workers].

<sup>&</sup>lt;sup>2</sup> Sepkowitz KA, Eisenberg L. (2005) Occupational deaths among healthcare workers. Emerg Infect Dis. Jul;11(7) [Occupational Deaths].

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> *Ibid*; Government of Canada: Infection prevention and control for COVID-19: Interim Guidance for Acute

Due to the high risk of contracting communicable illnesses at work, health-care workers are also at high risk of developing secondary conditions associated with communicable illnesses. For example, the Centre for Disease Control (CDC) in the United States estimates that in 1983, 10,000 health-care workers became infected with Hepatitis B.<sup>5</sup> The natural course of Hepatitis B is that 5-10% of those infected will go on to develop chronic Hepatitis B infection, and of those with chronic infection, within twenty years of contracting Hepatitis B, 15-25% will die from secondary conditions associated with the infection, like cirrhosis or hepatocellular carcinoma.<sup>6</sup>

Finally, the threat to health-care workers is heightened when a new communicable illness emerges, wherein detection of the illness at the outset of its spread is limited to non-existent, and appropriate infection control measures are lacking.<sup>7</sup> For example, SARS was diagnosed by WHO physician Dr. Carlo Urbani, who later died from the virus, himself.<sup>8</sup> In addition, during the SARS outbreak in Toronto in 2003-2004, 51% of infections occurred among health-care workers.<sup>9</sup>

#### **COVID-19: risk to Health-Care Workers**

COVID-19 is a great risk to health-care workers for the reasons indicated above. In this instance, the WSIB and the Government of Canada's statistics support that our members and the health-care industry are at high risk of contracting COVID-19 at work.

The WSIB's COVID-19 claim statistics demonstrate that Ontario's health-care workers have been significantly exposed to COVID-19 infections at much greater levels than workers from other industries. Three of the top seven industries reported in the data from 2020 to present (as of March 4, 2023) were health-care sectors, including nursing and residential care facilities, hospitals and ambulatory health-care. As of March 4, 2023, these sectors have 214 claims allowed, with other industries registering <5 claims or zero claims. In addition, Statistics Canada also produced a workplace risk index that confirms the health-care sector is the most at-risk sector in the country. The health-care and social assistance sector received the highest score of 60 on this index.

## **Complications of COVID-19 Impacting the Adjudication of Claims**

Of particular concern with COVID-19, is that its spread, detection, and long-term outcomes are poorly understood at present. It is a rapidly evolving virus that spreads in

Healthcare Settings, <a href="https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/infection-prevention-control-covid-19-second-interim-guidance.html">https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/infection-prevention-control-covid-19-second-interim-guidance.html</a>.

<sup>&</sup>lt;sup>5</sup> Occupational Deaths, supra. note 2, pg. 1005.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Suwantarat, N. and Apisarnthanarak, A. (2015), Risks to healthcare workers with emerging diseases: lessons from MERS-CoV, Ebola, SARS, and avian flu, Current Opinion on Infectious Diseases, 28(4): 349-361.

<sup>&</sup>lt;sup>8</sup> Infectious diseases in healthcare workers, Supra, note 1, p. 1.

<sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> https://www.wsib.ca/en/covid-19-related-claims-statistics

<sup>11</sup> https://www150.statcan.gc.ca/n1/pub/36-28-0001/2021004/article/00006-eng.htm

part by aerosol, and testing for its presence is not 100% reliable. It can also cause poorly understood long-term and debilitating impacts. All of these factors make it a uniquely challenging illness to adjudicate fairly. We will elaborate on some of these complicating factors, below.

First, COVID-19 can be spread by asymptomatic carriers. The Ontario Divisional Court has recognized asymptomatic transmission in *Ontario Nurses' Association v. Chief Medical Officer of Health (Ontario), 2021 ONSC 5999.* <sup>12</sup> In particular, at paragraph 34 of this decision, the court finds: "The other fact is one about which there is no difference of opinion: the possibility of transmission of the virus by asymptomatic individuals. According to Dr. Fisman, the viral loads of people infected with COVID-19 peak immediately before the onset of symptoms. According to Dr. Leis, 40 percent of infections are asymptomatic." It stands to follow that a high number of symptomatic infections result from transmission through an asymptomatic source. In the absence of constant, consistent, and widespread testing, it is therefore exceedingly difficult to establish point of transmission for many cases of COVID-19.

In addition, even if testing were widely and constantly available, research supports that the reliability of testing for the presence of COVID-19 is variable. According to the CDC, "Proper specimen collection is the most important step in the laboratory diagnosis of infectious diseases. A specimen that is not collected correctly may lead to false or inconclusive test results 13". Studies have shown that the false negative results (FNR) for SARS-COV-2 RT PCR tests can range from 2% up to 40% for various reasons, including too early/late in the disease, incorrect anatomical site of specimen collection, incorrect method (too quick), untrained collector, lab processing errors, inappropriate storage/transport temperature and poor-quality assays 14.

With respect to the reliability of testing and long-COVID / post-COVID conditions, the Government of Canada has acknowledged that people may still experience physical or psychological symptoms more than 12 weeks after getting COVID-19, where they may be testing negative for the virus. The government also states that post-COVID conditions may occur in some people weeks or months after their initial infection, people who were hospitalized or needed intensive care are at greater risk of experiencing longer-term effects, and that the conditions are also observed in people who were asymptomatic or had mild symptoms. Post-COVID conditions can arise in cases where workers are not formally tested and diagnosed with COVID-19<sup>15</sup>.

A further complication to adjudication of COVID-19 claims, is that post-COVID

https://www.acpjournals.org/doi/full/10.7326/M20-1495

http://www.efaidnbmnnnibpcajpcglclefindmkaj/https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0242958&type=printable

https://www.sciencedirect.com/science/article/pii/S0196655320306933#bib0011

<sup>&</sup>lt;sup>12</sup> https://www.canlii.org/en/on/onscdc/doc/2021/2021onsc5999/2021onsc5999.html

<sup>13</sup> https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html#previous

<sup>&</sup>lt;sup>14</sup> https://www.clinicalkey.com/#!/content/medline/2-s2.0-33422083

<sup>&</sup>lt;sup>15</sup> https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/symptoms/post-covid-19-condition.html

conditions are highly variable, can impact both physical and mental body symptoms and many of the symptoms of post-COVID conditions are subjective in nature (fatigue, coughing, cognitive issues and weakness)<sup>16</sup>, which has historically been a challenge for WSIB adjudication. The CDC specifically states that "people with post-COVID conditions may develop or continue to have symptoms that are hard to explain and manage. Clinical evaluations and results of routine blood tests, chest x-rays and electrocardiograms may be normal. The symptoms are similar to those reported by people with myalgic encephalomyelitis/chronic fatigue syndrome and other poorly understood chronic illnesses that may occur after other infections. People with these unexplained symptoms may be misunderstood by their health-care providers, which can result in a long time for them to get a diagnosis and receive appropriate care or treatment<sup>17</sup>." Clear guidance on the adjudication of these complicated and wideranging symptoms is required.

In addition, post-COVID conditions can also cause secondary conditions. The CDC also states that "some people, especially those who had severe COVID-19, experience multiorgan effects or autoimmune conditions with symptoms lasting weeks, months, or even years after COVID-19 illness. Multi-organ effects can involve many body systems, including the heart, lung, kidney, skin and brain. As a result of these effects, people who have had COVID-19 may be more likely to develop new health conditions such as diabetes, heart conditions, blood clots or neurological conditions compared with people who have not had COVID-19<sup>18</sup>." Considering all of the difficulties with diagnostics from initial contracting of the virus to the onset of post-COVID conditions, to new secondary conditions, adjudicating entitlement to secondary conditions is exceedingly difficult.

Finally, post-COVID conditions are common. The government of Canada surveyed a random sample of Canadian adults between April 1 and August 31, 2022, which found that 14.8% of adults with a confirmed or suspected infection experienced long COVID symptoms, 47.3% of those experienced the symptoms for a year or longer and 21.3% stated that their symptoms often or always limited their daily activities<sup>19</sup>. Considering the high numbers of workers who will go on to develop complex post-COVID conditions, clear guidance from the WSIB on adjudicating these issues is required.

# Recommendations for Improving the WSIB's Draft Communicable Illnesses Policy

#### 1. Public Health Emergency Presumption

ONA proposes that WSIB create a rebuttable presumption for infectious diseases

https://www.cdc.gov/coronavirus/2019-ncov/long-term-effects/index.html#:~:text=Health%20conditions&text=Some%20people%2C%20especially%20those%20who,kidney%2C%20skin%2C%20and%20brain.
17 Ibid.

<sup>&</sup>lt;sup>16</sup> Ibid

<sup>19</sup> https://health-infobase.canada.ca/covid-19/post-covid-condition/

contracted by high-risk workers, including all health-care workers, during public health emergencies, so they are afforded adequate protections for present and future pandemics.

During the COVID-19 pandemic, ONA members and other high-risk workers continue to be exposed to a high degree of risk, and many have succumbed to illness from a virus about which very little is known, including its long-term effects. A rebuttable presumption for infectious diseases would assure high-risk workers that their rights will be protected should they be infected on the job.

The province of BC has already taken proactive measures in response to the COVID-19 pandemic by including infectious diseases in their Occupational Disease Schedule. <sup>20</sup> We recommend that Ontario workers be given similar rights. This is important not only now with COVID-19, but it will also help in the likely event of future public health emergencies where health-care workers would once again be most at risk on the front lines. If a rebuttable presumption is created similar to what BC workers have, then high-risk workers in Ontario can continue to do their important work while confronting risk and have some degree of mental comfort knowing their rights will be better protected in the event they are infected while on the job. For example, a nurse who has been working on the front lines and is infected during a newly identified public health emergency should not have to worry that their claim may be denied while scientific evidence and studies are being conducted to understand a new disease better.

In a future global pandemic, as it stands, Ontario high-risk workers would have to undergo a more rigorous claims process than BC workers. At a time when industries such as the nursing industry are facing serious staffing issues, giving high-risk workers additional protections that are extremely relevant to their occupational risks is a good idea for the workers and the public at large.

## 2. Secondary Conditions to be addressed in Communicable Illnesses Policy

We submit that the communicable illnesses policy should also consider secondary conditions acquired following infection from a communicable illness. As the Hepatitis B example set out above illustrates, communicable illness can result in debilitating and at times deadly secondary conditions. It is therefore incumbent on the communicable illnesses policy to provide adjudication guidance on entitlement in the instance of communicable illness leading to secondary conditions. In addition, secondary conditions known to arise following infection with a communicable illness should be included in the Appendix to the policy to assist adjudicators in determining entitlement when these secondary conditions onset.

### 3. COVID-19 Specific Policy

We submit that a separate policy specific to COVID-19 is the only adequate response to

-

<sup>&</sup>lt;sup>20</sup> https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/workers-compensation-act/schedules

this virus's complex array of decision-making challenges. A separate policy on COVID-19 can be routinely reviewed and updated to reflect the changing nature of this illness and our evolving understanding of the long-term impacts of COVID-19. A separate policy will allow for detailed and comprehensive guidance on the many challenges of diagnosing COVID-19, determining where it was contracted, and establishing the onset of post-COVID conditions as well as potential secondary conditions arising from COVID-19. Considering the widespread nature of post-COVID conditions and its ongoing high infectiousness rate, the WSIB would be failing a significant number of injured workers by leaving these complicated adjudication decisions to a policy vacuum.

Below, we elaborate on the specific policy recommendations that need to be considered concerning COVID-19 regardless of whether there is a separate policy for COVID-19 or a COVID-19 specific section within the Communicable Illnesses Policy.

#### Policy Recommendations specific to COVID-19

Determining whether the worker contracted a communicable illness

The policy provides two criteria to establish whether a worker has (or had) a communicable illness: laboratory confirmation by way of a positive laboratory or diagnostic test result or a diagnosis by a treating health professional qualified to provide such a diagnosis based on their clinical assessment of the worker at the time of illness.

We are pleased to see that there are exceptions to these criteria, noting the challenges in obtaining testing and also the ability to seek health-care treatment. However, we are concerned that the policy relies heavily on positive laboratory or diagnostic confirmation. Given that the False Negative Results (FNR) are so variable on PCR tests, we would argue that the more accessible rapid antigen test is just as prone (if not more so) to FNR, given that it is not administered by a medical professional. Based on this evidence, we submit that the policy needs to acknowledge the possibility of FNR and cannot exclude the possibility of COVID-19 infection based on a negative test result, especially if the other criteria considered as an exception are met.

Determining whether the communicable illness arose out of employment: considerations specific to COVID-19 in health-care work environments

As set out above, the transmission of COVID-19 is not easy to track. In light of this, many health-care providers may be caring for a patient infected with COVID-19 and not know it, due to its incubation period, capacity for asymptomatic transmission, varying degrees of severity, lack of sufficient/effective testing, and/or other complicating factors like its rapid evolution.

As the Communicable Illness policy stands now, it does not provide specific guidance on how decision-makers should weigh evidence in consideration of the complicated manner in which COVID-19 transmission occurs. This could in turn lead to the unfair denial of many work-related COVID-19 claims where evidence of when and where transmission occurred

is not available due to the nature of this particular illness. This is particularly concerning in healthcare work environments, which are considered to be high risk for the transmission of COVID-19.

In light of this, we submit that a COVID-19 policy should have expert-led and frequently reviewable adjudicative principles specifically guiding decision-makers on how to navigate the complexities of determining likelihood of transmission in varying workplaces. In the absence of this information, merits and justice principles should be codified in the COVID-19 policy to account for difficulties that arise in adjudicating transmission arising from work specific to this virus.

Adjudicative Considerations for post-COVID-19 conditions (long COVID)

We request a separate policy concerning COVID-19 because of the unique adjudicative issues that have arisen because of this illness, specifically, post-COVID-19 conditions or Long COVID.

Since post-COVID-19 conditions pose challenges concerning the subjective nature of symptoms and the potential lack of objective medical information to support entitlement, there needs to be policy guidance that can be relied on for the purposes of adjudicating claims and appeals.

Given that the research is evolving on these conditions, we submit that entitlement should be considered on a case-by-case basis based on the merits and justice of the case, taking into account all of the facts and circumstances relating to the case. Similarly, new health conditions arising from COVID-19 infection should also be considered in accordance with OPM 15-05-01 "Resulting from Work-Related Disability/Impairment".

#### 4. In the alternative: COVID-19 section

If the WSIB does not accept that a stand-alone COVID-19 policy is required, we submit that it must include a section in its Communicable Illnesses Policy dedicated to the common issues that arise with COVID-19, as set out above.

#### Conclusion

The policy for communicable illnesses is a good start to codify the adjudicative principles of entitlement to diseases of this nature for workers of Ontario. The statistics confirm that certain occupational groups, including nurses and health-care workers, are at much greater risk during pandemics caused by infectious diseases such as COVID-19. These diseases develop rapidly, spread quickly and put our members at immense and immediate risk without the time to study their effects. We therefore request that Ontario follow the lead of BC and create a rebuttable presumption for infectious diseases contracted by high-risk workers so they are afforded adequate protection for present and future pandemics. We also request that the communicable illnesses policy specifically

consider secondary conditions that result from infection with a communicable illness.

In addition, given the significant impact of the COVID-19 pandemic on all workers, especially those in health-care, we submit that a separate policy is necessary to adjudicate the issues uniquely posed by this illness. A stand-alone policy is crucial for efficient and frequent review as research is rapidly updated concerning the disease and its long-term effects. This policy should also be comprehensive, specifically speaking to the prevalence of false negative results, the complexities surrounding transmission, especially in health-care environments, and post-COVID conditions. In the alternative, COVID-19 needs to be specifically considered in the Communicable Illnesses Policy. This section should speak to the issues raised in the above paragraph. Ultimately, COVID-19 is an unprecedented risk to the health and safety of workers in Ontario. It demands a specific, comprehensive, and considered response from the WSIB.

Page 10

From: PHUNG Jackie -ENV H&S

To: Consultation Secretariat

Subject: WSIB Communicable Illnesses Policy Consultation

**Date:** Tuesday, March 28, 2023 8:46:38 AM

**CAUTION:** This email originated from outside the organization. Do not click any links or open any attachments, unless you recognize the sender and know that the content is safe. If you are unsure or believe that you were the target of a phishing attempt please contact IT Security at ITSecurity@wsib.on.ca as soon as possible.

Dear whomever it may concern,

Ontario Power Generation will be submitting comments based on our further review of the WSIB communicable illnesses policy draft. We would like further clarification on these following items:

- 1. In the "Guidelines" section, can WSIB provide a more comprehensive list for "communicable illnesses"? We would like to review it for the possibility that certain cases may be allowed if the communicable illness is not listed in the schedules/policy. The WSIB will gather/use other information to support entitlement to compensation in order to determine that the workplace exposure contributed significantly to the development of the communicable illness. Perhaps the list should include those listed within O.Reg. 558/91 Specification of Communicable Diseases to narrow the scope.
- 2. In the "Determining whether the communicable illness was contracted in the course of employment" section, it lists the factors to consider when gathering and weighing the evidence related to potential work related/non-work related exposure to the communicable illness. For the second bullet, "the opportunities that existed" should have more definition to this statement around the "suspected incident(s) of exposure that contributed to infection of the claimant." This would make more sense as it relates to things like tick bites or exposure to animal scat/biological agents. For example, there would be an expectation that an incident happened that contributed to workplace exposure to a biological agent that led to infection. If there was no incident, you can't claim work-relatedness. There should be evidence required when employees report to their employer.
  - a. WSIB should also include measures, procedures, and personal protective equipment in use within the workplace. In the 3<sup>rd</sup> bullet, it does say protected vs unprotected but the policy should indicate that an organization's measures should be required so it can help assess risk for these claims.
- 3. In the "Employment Risk Factors" section, include more details on the type of employment/work as this can help determine if there is particularly higher risk in that line of work in relation to communicable illnesses.

#### General comments:

- 4. Difficult to trace: Unlike workplace injuries or recognized occupational diseases, it is often challenging to pinpoint the source of common communicable diseases. The flu and common cold can be contracted from various environments, including public transportation, social gatherings, or at home, making it difficult to prove or even reasonable believe that the infection was acquired specifically in the workplace.
- 5. Prevalence and frequency: Common communicable diseases such as the flu and the

- common cold are widespread, endemic and occur frequently in the general population. If the WSIB were to cover these illnesses, it would add an unavoidable financial burden and could strain resources, making it difficult to provide adequate support for other workplacerelated injuries and illnesses.
- 6. Short duration and self-limiting nature: Common communicable diseases like the flu and common cold are typically short-lived and self-limiting, meaning that they resolve on their own without medical intervention and they could be considered a normal and inevitable occurring aspect of human existence. Including them in workers' compensation might encourage unnecessary medical treatment or time off work, putting an additional burden on the system.
- 7. Existing sick leave policies: Many employers have established sick leave policies that provide employees with paid time off for short-term illnesses like the flu and common cold. Workers can utilize these benefits without having to rely on workers' compensation coverage.

Regards, Jackie

Jackie Phung (she/her)
Assistant Environmental Advisor | Corporate EHS (416) 986-1787 | jackie.phung@opg.com

THIS MESSAGE IS ONLY INTENDED FOR THE USE OF THE INTENDED RECIPIENT(S) AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, PROPRIETARY AND/OR CONFIDENTIAL. If you are not the intended recipient, you are hereby notified that any review, retransmission, dissemination, distribution, copying, conversion to hard copy or other use of this communication is strictly prohibited. If you are not the intended recipient and have received this message in error, please notify me by return e-mail and delete this message from your system. Ontario Power Generation Inc.



# ORCA SUBMISSION Communicable Illnesses Policy Consultation March 2023

**Workplace Safety and Insurance Board** 

200 Front Street West Toronto, Ontario M5V 3J1





## ABOUT THE ONTARIO RETIREMENT COMMUNITIES ASSOCIATION

Since 1977, the Ontario Retirement Communities Association (ORCA) has been the voice of Ontario's retirement communities and we remain committed to setting a standard for operational excellence in the sector.

ORCA represents over 90 per cent of all licensed retirement community suites in Ontario, employing 30,000 front line workers caring for nearly 60,000 seniors who choose to call retirement communities their home.

Retirement communities are regulated by the *Retirement Homes Act*, 2010 (RHA) and are licensed and inspected by the Retirement Homes Regulatory Authority (RHRA). Each retirement community can offer up to thirteen care services, including but not limited to assistance with dressing, assistance with personal hygiene, medication management, and provision of a meal.

Caring for seniors is the most important job of our members and they take that responsibility very seriously. Retirement home operators have worked tirelessly to put the safety and protection of our seniors first throughout the COVID-19 pandemic. Almost 100 per cent of retirement home residents are fully vaccinated and have received the third booster shot, and over 79 per cent have received the Bivalent booster as of March 14, 2023.

Retirement homes are private sector businesses. Aside from the special COVID-19 emergency support funding and unlike the long-term care sector, retirement homes do not receive public funding. Our sector is 100 per cent funded by the seniors who choose to call retirement communities their home.

This submission has been prepared on behalf of ORCA's membership.

#### **CONTACT INFORMATION**

**Cathy Hecimovich** 

Chief Executive Officer cathy@orcaretirement.com 1 (905) 403-0500 ext. 222

#### Lise Jolicoeur

Vice-President, Corporate & Public Affairs lise@orcaretirement.com 1 (647) 226-6278

#### **Grant Gonzales**

Manager, Government Relations grant@orcaretirement.com 1 (647) 637-7589



#### **EXECUTIVE SUMMARY**

The Ontario Retirement Communities Association (ORCA) appreciates the opportunity to participate in this consultation and submit feedback on the Workplace Safety and Insurance Board's (WSIB) draft Communicable Illnesses Policy (the Policy).

Licensed retirement homes in Ontario may choose public insurance through the WSIB or private insurance, depending on various factors including specific needs, whether the home is colocated with long-term care, or according to the home's collective bargaining agreement. Approximately 45 per cent of licensed retirement homes in Ontario are insured through the WSIB, with the remaining choosing private insurance.

Ontario Regulation 175/98 under the *Workplace Safety and Insurance Act*, 1997, excludes "residential care facilities operators by a private employer" (e.g., licensed retirement homes) from mandatory coverage under the WSIB. To ensure that retirement communities remain affordable for seniors and that employees have access to the best supports, **this choice between public and private insurance must remain intact**.

ORCA members who are currently insured through the WSIB have expressed concerns that the draft Communicable Illnesses Policy, as currently written, places significant burdens on licensed retirement homes and generally implies a presumption against the employer with respect to the determination of whether a communicable illness arose out of employment.

Based on the concerns and the feedback received on the draft Policy, ORCA recommends that:

- **Recommendation #1**: A worker not seeking a laboratory test, if the period of illness is short-lived, should only be accepted as a legitimate reason if the nature of the illness physically prevented the workers from seeking laboratory testing.
- Recommendation #2: To help reduce the administrative burdens that may be placed on licensed retirement homes as a result of this Policy, that the WSIB's existing Program for Exposure Incident Reporting (PEIR) be expanded to include the reporting of communicable illnesses with high transmissibility and prevalence in the community in the following circumstances:
  - When an outbreak is declared and required to be reported to other authorities, like Public Health and the RHRA, it would also trigger a PEIR submission.
  - When the illness requires medical treatment (e.g., diagnostic tests, prescribed medication, or ongoing treatment), it would trigger a Form 7: Employer's Report of Injury/Disease submission.
- Recommendation # 3: To make the Policy more explicit, we recommend that the decision-maker is required to investigate and analyze all available public health information through the relevant Public Health Unit related to the communicable illness to measure and determine the likelihood that the communicable illness was contracted in the course of employment vs. in the general population.

ORCA would welcome the opportunity to provide additional information with respect to our feedback and recommendations, as well as any feedback to inform any amendments to the draft prior to finalizing the Communicable Illnesses Policy.



#### **POLICY FEEDBACK**

**Policy Excerpt:** "A claim for a communicable illness may be adjudicated in the absence of laboratory or clinical evidence from the relevant time indicating the existence of a current infection in the worker if the worker has or had a legitimate reason for not seeking health care or laboratory testing during the period of illness.

Legitimate reasons include, but are not limited to:

- the period of illness is short-lived (i.e., 24 48 hours)
- the worker cannot access or does not qualify for diagnostic testing, and
- laboratory confirmation is not available for the communicable illness."

ORCA is concerned that the exceptions to laboratory or clinical evidence of current infection – i.e., the legitimate reasons for a worker to not seek health care or laboratory testing – are too broad.

We recognize that access to testing may be an issue, such as difficulties accessing a PCR test during the height of the COVID-19 pandemic or being directed by Public Health to stay at home and not seek medical attention if an individual did not have severe symptoms.

However, a short period of illness should not alone be a legitimate reason for not seeking laboratory testing. Like the other legitimate reasons listed, a worker should demonstrate barriers in accessing testing.

**Recommendation #1**: A worker not seeking a laboratory test, if the period of illness is short-lived, should only be accepted as a legitimate reason if the nature of the illness physically prevented the workers from seeking laboratory testing.

Policy Excerpt: "The inability to identify a specific work-related contact source for the worker's communicable illness does not mean the worker did not contract the communicable illness from exposure occurring in the course of employment. In the absence of a specific work-related contact source, the decision-maker must determine the issue of whether the communicable illness was contracted by the worker while in the course of employment after weighing all of the available relevant evidence."

ORCA is concerned that this provision of the Policy provides wide latitude to the decision-maker, despite the absence of clear data or evidence for a work-related contact source.

It places significant record-keeping burdens on licensed retirement homes to demonstrate all steps – big and small – implemented within the home to mitigate the transmission of the communicable disease. Furthermore, this provision may require increased document-sharing and coordination between Infection and Prevention Control (IPAC) and Care teams, above what is typically required among other regulatory agencies.



In addition to documenting, tracking, and reporting illnesses – for both residents and employees, and whether required to by law/regulation or not – this Policy implies the need for steps like contact tracing and investigation by a home for any illness, a process that most licensed retirement homes do not have the resources to implement, nor are they required by other oversight agencies.

These administrative burdens take precious human resources away from their core mandate to deliver excellent care to seniors living in retirement homes. This is a concern for our sector given the significant human resources challenge we are facing.

**Recommendation #2:** To help reduce the administrative burdens that may be placed on licensed retirement homes as a result of this Policy, that the WSIB's existing Program for Exposure Incident Reporting (PEIR) be expanded to include the reporting of communicable illnesses with high transmissibility and prevalence in the community in the following circumstances:

- When an outbreak is declared and required to be reported to other authorities, like Public Health and the RHRA, it would also trigger a PEIR submission.
- When the illness requires medical treatment (e.g., diagnostic tests, prescribed medication, or ongoing treatment), it would trigger a Form 7: Employer's Report of Injury/Disease submission.

**Policy Excerpt**: "A worker's employment will have made a significant contribution to contracting a communicable illness when the decision-maker is satisfied that:

- the employment placed the worker at an increased risk (i.e., increased likelihood) of contracting the communicable illness as compared to the risk experienced by the general public during ordinary or routine activities of daily living, and
- the communicable illness was contracted by the worker from exposure that occurred in the course of their employment as a result of the identifiable increase in risk."

The Policy states that "communicable illnesses, such as influenza, the common cold, and COVID-19 are highly transmissible and can be prevalent in the general population" and that "therefore, a worker who contracts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increased their risk of contracting the communicable illness in some additional way."

The Policy then speaks to the heightened risk in settings where health care services are delivered. ORCA challenges this presumption by the Policy that by virtue of the type of workplace and type of work, i.e., delivering health care services, our sector is at higher exposure of risk. While we understand that this remains a consideration for decision-makers, we must stress that all cases must be assessed based on all contextual information and relevant data.

In fact, the RHRA found that during the second wave of the COVID-19 pandemic, "community spread had a direct impact on the likelihood of outbreak in homes (with a few exceptions)."



Furthermore, the RHRA noted that during the third wave, retirement homes did not experience the same spike of transmission as the general population.

In the case of licensed retirement homes, our sector places the health and well-being of residents first by implementing strict measures to limit spread (e.g., masks, gloves, and other Personal Protective Equipment), increased use of portable HEPA filtration units, and following public health guidelines (e.g., cohorting). The successful rollout of vaccinations also played a significant part in driving positive outcomes; the RHRA reported that "vaccination had an impact on reducing the likelihood of outbreaks and severity in homes."

With all these considerations in mind, any determination by a decision-maker with respect to a claim must be driven by and informed by clear data and evidence.

**Recommendation # 3**: To make the Policy more explicit, we recommend that the decision-maker is required to investigate and analyze all available public health information through the relevant Public Health Unit related to the communicable illness to measure and determine the likelihood that the communicable illness was contracted in the course of employment vs. in the general population.

#### CONCLUSION

ORCA is concerned that the draft Communicable Illnesses Policy, as currently written, places significant administrative burdens on licensed retirement homes and generally implies a presumption against the employer with respect to the determination of whether a communicable illness arose out of employment, without further consideration of available public health evidence.

Currently, the retirement homes sector (as many other healthcare sectors) is experiencing human resources challenge and any additional administrative burdens takes time away from their most important mandate of caring for seniors. We encourage the WSIB to align and coordinate with regulatory oversight bodies, namely the RHRA and Public Health Units, to ensure consistency and avoid reporting duplication.

We appreciate the opportunity to participate in this consultation, and we are available to further engage with the WSIB should you require more information.

From: George Maniatogiannis
To: Consultation Secretariat

Subject: Communicable illnesses policy consultation

Date: Thursday, February 23, 2023 10:48:16 AM

Attachments: image001.png

**CAUTION:** This email originated from outside the organization. Do not click any links or open any attachments, unless you recognize the sender and know that the content is safe. If you are unsure or believe that you were the target of a phishing attempt please contact IT Security at ITSecurity@wsib.on.ca as soon as possible.

Dear Sir/Madam

Please find below my comments regarding this new legislation

This legislation should be limited to those professions that have a high risk of communicating the respiratory infection (hospitals etc.) and not to all workplaces. Therefore, the section *Determining* whether the communicable illness was contracted in the course of employment, should be eliminated. It would be extremely difficult to determine the above in a workplace setting as the recent experience has indicated.

Determining whether the worker contracted a communicable illness

Both conditions should apply (lab test AND a diagnosis by a treating health professional).

Exception to laboratory or clinical evidence of current infection

There should be NO exceptions. In the absence of evidence WSIB should refrain from adjudicating such a case

The inability to identify a specific work-related contact source for the worker's communicable illness does not mean the worker did not contract the communicable illness from exposure occurring in the course of employment.

If unable to identify a contact source, this should be a unqualified rejection of the claim.

During a government-declared public health emergency related to a communicable illness, a worker's employment-related risk of contracting that communicable illness may be increased when:

• the public health emergency results in the implementation of public health measures The criterion above may not lead to increased risk, on the contrary.

Thank you

George Maniatogiannis, CRSP Health & Safety Manager 207 Queens Quay West, Suite 500 | Toronto, ON M5J 1A7 | Canada

**T**: 416-863-2061 | **C**: 416-678-6720 | **E**: GManiatogiannis@portstoronto.com

From: Emma Thompson
To: Consultation Secretariat

Subject: Communicable Disease Policy Feedback

Date: Friday, February 17, 2023 9:05:40 AM

Attachments: <u>image004.pnq</u>

image005.png image001.png image003.png

**CAUTION:** This email originated from outside the organization. Do not click any links or open any attachments, unless you recognize the sender and know that the content is safe. If you are unsure or believe that you were the target of a phishing attempt please contact IT Security at ITSecurity@wsib.on.ca as soon as possible.

Hello,

It would be nice to see more emphasis on a illness being not work-related when full PPE measures are in place, or at least a more thorough review of the mechanism of transmission if being considered for allowance if PPE in place. Although a workplace may be in outbreak, sometimes this only requires 1-2 people for this to be declared by public health. During outbreaks, we increase PPE measures and require all staff to don PPE while in the workplace. The PPE measures include fit-tested N95 masks, as well as, gowns, gloves, etc. Although the policy does indicate PPE should be a consideration, many adjudicators advise for communicable disease claims that as PPE is not 100% effective, if there is an outbreak and the person worked in the outbreak unit, the claim will be allowed. It would be nice to see, not just that the employee worked with a resident who was ill, but what was the means of transmission. For example, did the resident pull off the employee's N95 mask and then increase the employee's risk by sneezing or, was there a bodily fluid exposure to the eyes, nose, or mouth due to a PPE failure. Even with COVID, many individuals do not wear even surgical masks when out in the general public performing their normal duties of daily living (i.e. groceries, doctor's visits, etc.). How is a person wearing full PPE at greater risk to a known exposure (that they can take greater care with), than a person wearing no PPE during outbreak season out in the public with multiple unknown exposures.

The draft policy has many references and/or implies, that just being around a known exposure in a health care/long term care setting will be enough (see examples below). It would be nice to see added to these statements something that also indicates "due to a failure in the PPE in place".

Employment-related activities that may create opportunities for exposure to and transmission of a communicable illness in excess of the norm include, but are not limited to:

- activities that require a worker to have direct and prolonged close contact with one or more person(s) known to have or suspected of having the communicable illness in the context of delivering health care, personal care, emergency aid, custody, or transport to these persons
- activities that require the worker to have direct contact with infectious substances, such
  as the body fluids of persons known to have or suspected of having the communicable
  illness, and
- staying in employer-provided accommodations with one or more person(s) known to have or suspected of having the communicable illness, such as accommodations in remote mining camps or accommodations provided to temporary foreign agricultural workers.

#### Community-acquired communicable illnesses

Communicable illnesses, such as influenza, the common cold, and COVID-19 are highly transmissible and can be prevalent in the general population. In-person interactions that can easily spread these communicable illnesses are a part of everyday life and occur both inside and outside of employment (e.g., in the home, community, and public settings). Outside of a public health emergency, in-person interactions at work with colleagues, customers, clients, or others, generally do not place the worker at a greater risk of contracting one of these communicable illnesses than the risk experienced by the general public. Therefore, a worker who contracts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increased their risk of contracting the communicable illness in some additional way. For example, the worker contracts the communicable illness while performing a job duty that subjected them to an exposure risk in excess of the norm, such as delivering health care to a person known to have the communicable illness.

Thank you,



#### **Emma Thompson | Coordinator, Workplace Safety & Insurance**

The Regional Municipality of Durham Emma.Thompson@durham.ca|905.668.7711 extension 2185|durham.ca

#### Seeking Disability Management Resources?

Non-Occupational Disability Management - Please refer to: <u>Disability Management - Durham Insider</u> Occupational Disability Management - Please refer to: <u>Incident Reporting - Durham Insider</u>

Please note, although I have sent this at a time that is convenient for me, it is not my expectation that you read, respond or follow up on this email outside of your hours of work.

THIS MESSAGE IS FOR THE USE OF THE INTENDED RECIPIENT(S) ONLY AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, PROPRIETARY, CONFIDENTIAL, AND/OR EXEMPT FROM DISCLOSURE UNDER ANY RELEVANT PRIVACY LEGISLATION. No rights to any privilege have been waived. If you are not the intended recipient, you are hereby notified that any review, re-transmission, dissemination, distribution, copying, conversion to hard copy, taking of action in reliance on or other use of this communication is strictly prohibited. If you are not the intended recipient and have received this message in error, please notify me by return e-mail and delete or destroy all copies of this message.







March 26, 2023

Sent via email

WSIB 200 Front Street W – 21<sup>st</sup> Floor Toronto ON M5V 3J1

Re: Draft for Consultation Purposes – Document # 15-03-15

Dear Madam / Sir:

Please consider this feedback on the above Communicable Illnesses Policy changes. My group represents 140 members in the WSIB H & S Excellence program. Each company is dedicated to the health and safety of their employees and has specific interests around this proposal for change.

#### **FEEDBACK:**

With the understanding that:

- It will be impossible to determine the cause of origin of communicable diseases and
- Many of the identified communicable illnesses are very much 'at large' within community settings e.g.: daycare, schools and
- There are no medical tests for some of the communicable diseases: scabies, influenza, Norovirus and
- All symptoms can be easily found via an easy internet search

#### We are providing comments:

- How does a business control this? The Government dropped masking and other mandates. A company who enforces the continuation of these mandates have found employees leaving for less-compliant workplaces.
- How will a case be adjudicated when the employer <u>continues</u> to enforce mandates (masking, distancing, cleaning, sanitizing etcetera). What is the balance of probabilities that the claim will be accepted?
- We support the use of medical confirmation however how will the WSIB ensure that the medical documentation is not based upon the employee's relationship with the medical practitioner?
- WSIB only accepts a claim based upon medical for all other claims so are exceptions being considered for communicable illnesses?
- What about repeat claimants? Will there be a limit on how many times an employee can claim this?
- What about individuals who do not take responsibility for their personal health, thereby increasing the susceptibility to viruses? (E.g.: smokers, people with bad eating habits)
- Are we able to offer modified work?
- Will these claims be calculated at the same value as other workplace injuries with regard to employer premium impact?







- The paper indicates:
  - Immunization status Entitlement to benefits will not be denied solely because the worker is not immunized against the particular communicable illness for which there is a claim for benefits.

How does this support the MHLTC's messaging on vaccines and boosters?

- What paperwork would the employee need to complete to substantiate their opinion that they contracted the illness in the workplace?
- Is there any consideration for extending benefits for complicated cases and a delay in recovery?
- How much is the WSIB taking into consideration that vaccinations, medication changes and food poisoning all have similar symptoms to influenza?
- Are there any communicable illnesses that would be declined based upon the employee's work? E.g.: those who travel out of Province for business?
- Will the adjudication process deny claims for those who have recently travelled?

To be clear, this could be a disincentive to employers who currently provide paid 'sick days' for things like influenza. Many businesses experienced an issue when the government brought in 10 days of sick pay. Each business was impacted by this paid leave. Some employees had already taken their 10 days by the end of January (no proof required) and many employees feel that this is time that they are 'owed'.

Taking into consideration that both Norovirus and Influenza are on the list, we are left with the opinion that this is being proposed to support the lack of a Provincial mandatory paid sick pay.

As an employer in Ontario, it is impossible, without Government mandates returning, for us to implement sufficient precautionary measures. We could go to disciplinary action for employee non-compliance, however, we would then be faced with grievances and a mass exodus to non-compliant employers. An exodus of employees would result in the employer not meeting their contractual obligations and finding employees in today's climate is a huge challenge.

To amend the current policy on Communicable Diseases would result in increased WSIB premiums, and, for small businesses, this has the potential to be crippling.

Yours truly

Ellaline J. Davies P.GSC, CHSO, CHSR, Exemplar Global: ISO45001 Lead Auditor,

Exemplar Global: ISO45001Lead Management Consultant,

Exemplar Global ID. 115238

President

Safety Works Consulting Inc

#### SCHEDULE 2 EMPLOYERS' GROUP

#### Via email Consultation Secretariat@wsib.on.ca

March 24, 2023

Consultation Secretariat - WSIB 200 Front St. West Toronto, Ontario MSV3J1

#### Re: Draft Communicable Illnesses Policy

On behalf of the Schedule 2 Employers' Group (S2Eg), we appreciate the opportunity to provide feedback on the draft Communicable Illness policy. The Schedule 2 Employers' Group Executive is pleased to provide our input.

We agree that a policy and guideline is advisable and will assist in fair and consistent determination of entitlement to a suite of benefits and services intended to mitigate the impact of a work-related exposure, improve function, quality of life, and restore the preinjury earnings profile. As Schedule 2 employers, who pay full costs plus and Administrative Fees to the WSIB, this must be done in a financially responsible manner (as required by the Workplace Safety and Insurance Act (WSIA) purpose clause). It must be equitable and objectively based as a determinant for benefit entitlement.

Overall, the S2Eg Executive and members-at-large were favourably inclined to most of the provisions. However, several suggested improvements or changes are set out below.

#### Formatting

A definition of terms should be included at the start of the policy document, followed by "Entitlement Criteria" and Guidelines".

#### **Definitions**

"Significant Contribution", as referenced on Page 2 of the draft, needs be defined, including risk factors considered.

"Essential worker", referenced on page 4 of the draft document needs to be defined.

#### **Employment Risk Factors**

With reference to Page 4, it is our position that the term "suspected of having" is problematic as it is too vague and broad, especially in reference to illnesses such as cold & influenza. We recommend that this phrase be deleted from the policy. We note that the process of submitting a PEIR form in cases of "suspected" exposure, already exists.

Also, on Page 4 "Staying in employer-provided accommodations..." and "...in remote mining camps or accommodations provided to temporary foreign agricultural workers." needs to be amended to "employer-required communal accommodations or transportation" as this part of the policy has to do with group environments and not accommodations. Examples should read "communal housing or transportation such as, but not limited to...".

#### Re: Communicable Illnesses Policy Consultation

#### Public Health Emergency

Essential Worker needs to be clearly defined, as it pertains to the policy with clear distinction between frontline and essential workers.

Using COVID as an example, the draft policy does not, but should, reference information or direction from Public Health from the various levels of government. Reference to best practices of Public Health under its own heading.

The word "directive" should be added to "public health measures".

We strongly oppose the inclusion of the APPENDIX, at least in its current form with the information proposed.

While practice documents are not part of the policy document, it may be helpful to either incorporate or make reference to current, more comprehensive resources, for example the WSIB's **Work-Related Communicable Illness**, **Adjudicative Support Document**, **Occupational Disease Policy and Research Branch**, **March 2011**. It would be of great assistance to WSIB staff, system partners and stakeholders (healthcare providers, worker and employer groups) to have this document updated and reissued during this consultation/review period.

Yours truly,

Laura Russell

Jama Kussell

Chair, Schedule 2 Employers' Group



March 27, 2023

## Consultation Secretariat, WSIB Workplace Safety and Insurance Board (WSIB) Consultation secretariat@wsib.on.ca

Subject: Spectrum Health Care's Response to WSIB Communicable Illness Policy Consultation

The WSIB Ontario has launched a consultation process for feedback related to their draft communicable illness policy. Spectrum Health Care (SHC) appreciates the opportunity to comment on some potentially broader issues stemming from the policy as written. Although WSIB states the policy is "not a change in direction" and the policy "provides detailed and clear guidance about how entitlement in communicable illness claims has been and will continue to be adjudicated", SHC believes that additional clarity is required around key points as outlined below. Specifically, our concerns address three topics:

- 1. The process for confirmation of the illness
- 2. Clarity around where and how the claimant was exposed
- 3. The length of time communicable illness claims will impact company insurance premiums

The policy requires that all claimants document their illness either through confirmation from a laboratory test or from a formal diagnosis given by a qualified health professional. We believe that taken in isolation, this requirement is insufficient to prove communicable disease illness. For example, there are no laboratory tests available for common communicable illnesses such as influenza or the common cold. Further, in the absence of laboratory validation, doctors or other health professionals will not be able to confirm an illness just based on symptoms alone since many illnesses exhibit common symptoms. There will also be instances where doctors, asked to write medical notes by a patient to support a claim, will write these notes without sufficient clinical evidence. Unless there is a laboratory test that can be administered with high results accuracy, confirmation of a communicable illness will be unreliable. *We recommend that WSIB identify what tests are acceptable for confirmation of specific diseases.* 

Communicable illnesses, by their very definition, are highly contagious and spread easily throughout the community. How would it be possible for anyone to truly determine whether someone was infected with influenza while taking the bus to work or whether it happened in their place of work, perhaps a third-grade classroom or the emergency department at a hospital? Leaving this decision to an assessor invites variability to the process if their only data inputs include transmission routes, opportunities for exposure, and frequency of potential exposure.







Our recommendation specifically related to communicable illnesses is to apply the criteria in very specific circumstances such as:

- 1. Declaration of a Public Health Emergency related to a communicable illness
- 2. Declaration of a confirmed outbreak in a place of work
- 3. Exposures limited to remote or confined workspaces (such as agricultural workers who live together)
- 4. Illness from communicable diseases not commonly found in the community

Where these conditions do not exist, there will never be sufficient evidence of transmission in a specific work setting.

Lastly, if exposures and claims occur during a Public Health Emergency, it is likely that this emergency condition will be time-limited in nature. Claims processed for a specific year will impact premiums for the following eight years (6 years with actual financial impact), even if the emergency condition or illness transmission no longer exist. We recommend that WSIB revisit or amend this policy to contain the time period for which an impact to premiums occur – possibly 12 months following the end of an Emergency Order condition. In addition, since many of these exposures will be beyond the control of an employer, we recommend keeping the costs collectivized for this period of time, or alternately report these costs on a standalone basis and implement plans to offset this cost for employers.

Thank you very much for the opportunity to provide feedback on this policy. Should you have any questions related to the above, please do not hesitate to contact me directly.

Sincerely,

Sandra Ketchen President & CEO

Spectrum Health Care

Simbledel







Certified Specialist
Workplace Safety and Insurance Law

**WSIB Consultation Secretariat** 

RE: Draft communicable illness policy 15-03-15

In response to the draft policy on communicable illnesses I feel that there are a few gaps in this policy.

One would be that HIV is a communicable illness that can be acquired in a workplace by health care professionals and first responders via needle stick injuries and blood airborne particles.

Secondly is tuberculosis being an illness which can effect again health care professionals and also migrate workers in their workplaces

Thirdly would be hepatitis C is an illness which can be acquired in the workplace by health care professionals and first responders via needle stick injuries and blood airborne particles

Also regarding Table 1 in the appendix of the policy is this a definitive list of illness or is it just an example to be used in determining entitlement of a communicable illness

I have attached the addendum to table 1 of the above-mentioned illnesses.

Sincerely yours,

Suzanne M. Dajczak Barrister and Solicitor

SMD/at enclosures.

Communicable Illness	Signs and Sympotms	Mode of Transmission	Incbation Period (Range)	Period of Communicability
HIV	fever, A tired feeling, Swollen lymph nodes (also called lymph glands), Swollen tonsils (also called tonsillitis), A sore throat, Joint and muscle aches, Diarrhea, A rash	parenteral route (needle stick), via the exchange of a variety of body fluids from infected people, such as blood, breast milk, semen and vaginal secretions	1- 3 months	Infectivity is presumed to be lifelong
Tuberculosis (TB)	Coughing for three or more weeks, Coughing up blood or mucus, Chest pain, or pain with breathing or coughing, Unintentional weight loss, Fatigue, Fever, Night sweats, Chills, Loss of appetite	Airborne	3-9 weeks	Pulmonary TB - contagious for about 2 to 3 weeks - Latent T also called inactive TB or TB infection, isn't contagious. Late TB can turn into active TB, so treatment is important.  Active TB. Also called TB disease this condition makes you sick and, in most cases, can spread others. It can occur weeks or years after infection with the T bacteria.

	Bleeding easily,	parenteral route (needle stick),	2 weeks to 6	1 or more weeks before the
	Bruising easily,	blood to blood (direct contact	months. Following	onset of symptoms, and during
	Fatigue,	with an infected person), blood	initial infection,	the acute clinical stage of HCV
	Poor appetite,	drolets and aersoled blood	approximately	infection.
	Yellow discoloration of the skin		80% of people do	
	and eyes (jaundice),		not exhibit any	
	Dark-colored urine,		symptoms	
	Itchy skin,			
Hepatitis C	Fluid buildup in your abdomen			
	(ascites),			
	Swelling in your legs,			
	Weight loss,			
	Confusion, drowsiness and			
	slurred speech (hepatic			
	encephalopathy),			
	Spiderlike blood vessels on your			
	skin (spider angiomas)			



Document Number 15-03-15

Section

In the Course of and Arising Out of

Subject

Communicable illnesses

#### **Policy**

A worker is entitled to benefits for a communicable illness arising out of and in the course of the worker's employment.

#### **Purpose**

The purpose of this policy is to provide entitlement guidelines for claims for communicable illnesses.

#### **Guidelines**

For the purposes of this policy, a "communicable illness" means an illness due to a specific infectious agent (e.g., viruses, bacteria) that arises through transmission of that agent from person to person or from animal to person; either directly or indirectly.

Input from Tillsonburg District Chamber of Commerce members: Our comments apply specifically to the adjudication of COVID-19 Claims specifically due to the WSIB Changes to COVID-19 Claims as of July 1, 2022, costs and counts associated with your COVID-19 related claims will be applied in the calculation of your rates as a Schedule 1 business.

It is our belief that this policy **NOT** include pandemic illnesses such as COVID-19.

#### **Entitlement criteria**

In deciding whether a worker has initial entitlement to benefits for a communicable illness, a decision-maker determines whether:

- the worker contracted a communicable illness
- the worker contracted the communicable illness while in the course of employment, and
- the communicable illness arose out of the worker's employment, in that the employment made a significant contribution to contracting the communicable illness.
- Input from Tillsonburg District Chamber of Commerce members: We believe the language is too broad in this section and could be clearer and more direct. As worded now, it could be interpreted in a liberal manner by individual adjudicators/decision-makers. Perhaps including the words 'proof beyond reasonable doubt' or more substantive wording somewhere in this section that would prevent misinterpretation. Or consider the words such as "ALL 3 elements must be present and beyond a reasonable doubt".

#### **Immunization status**

Entitlement to benefits will not be denied solely because the worker is not immunized against the particular communicable illness for which there is a claim for benefits.

#### Determining whether the worker contracted a communicable illness

In addition to other relevant evidence gathered during the adjudication of a claim, one or both of the following will generally be necessary to establish the worker has or had at the



#### **Draft for Consultation Purposes**

Document Number 15-03-15

Section

In the Course of and Arising Out of

Operational Policy

Subject

#### Communicable illnesses

relevant time a specific communicable illness:

- laboratory confirmation of current infection (e.g., positive laboratory or diagnostic test result), or
- a diagnosis by a treating health professional qualified to provide such a diagnosis based on a clinical assessment of the worker during the period of illness.

#### Exception to laboratory or clinical evidence of current infection

A claim for a communicable illness may be adjudicated in the absence of laboratory or clinical evidence from the relevant time indicating the existence of a current infection in the worker if the worker has or had a legitimate reason for not seeking health care or laboratory testing during the period of illness.

Input from Tillsonburg District Chamber of Commerce members: Further to the above two sections: "Determining whether the worker contracted a communicable illness"; and "Exception to laboratory or clinical evidence of current infection", we suggest this be changed and that proof with a laboratory / clinical evidence of illness is absolutely mandatory and a minimum requirement to make a claim.



**Policy** 

#### **Draft for Consultation Purposes**

Document Number 15-03-15

Section

In the Course of and Arising Out of

Subject

#### Communicable illnesses

Legitimate reasons include, but are not limited to:

- the period of illness is short-lived (i.e., 24 48 hours)
- the worker cannot access or does not qualify for diagnostic testing, and
- laboratory confirmation is not available for the communicable illness.

In the absence of laboratory or clinical evidence of current infection, a decision-maker will determine whether the worker has or had at the relevant time a specific communicable illness based on the available evidence including, but not limited to:

- a laboratory test to detect a previous infection (e.g., antibody test)
- the worker's presentation (i.e., signs and symptoms) and whether it is compatible with the signs and symptoms of the communicable illness established to exist in the workplace
- the diagnostic criteria for the communicable illness, and
- the advice or opinion of a medical consultant.

## Determining whether the communicable illness was contracted in the course of employment

A communicable illness will generally have been contracted in the course of employment when the decision-maker is satisfied, based on all of the relevant evidence, that the worker was exposed to and contracted the communicable illness while at the workplace or during working hours, or while performing a work-related duty or an activity reasonably incidental to employment. For more information on the application of the criteria of place, time, and activity, see 15-02-02, Accident in the Course of Employment.

Infectious agents that are capable of causing communicable illnesses in humans are widespread in the environment and multiple sources of infection may exist inside and outside of the workplace. In determining whether a worker contracted a communicable illness while in the course of employment, as opposed to outside of that employment, the decision-maker must gather and weigh the evidence related to potential work-related and non-work-related exposures to the communicable illness.

Factors to consider when gathering and weighing the evidence related to potential work-related and non-work-related exposures to the communicable illness include, but are not limited to:

- the route of transmission of the communicable illness (e.g., contact, droplet, airborne, oral)
- the opportunities that existed for exposure to and transmission of the communicable illness both inside and outside of the worker's employment, including contact with persons known to have or suspected of having the communicable illness (e.g., coworkers, patients, friends, family members)
- the frequency, duration, and types of potential exposures to the communicable illness (e.g., protected vs. unprotected, direct vs. indirect), and



**Policy** 

#### **Draft for Consultation Purposes**

Document Number 15-03-15

Section

In the Course of and Arising Out of

Subject

#### Communicable illnesses

 the compatibility of the incubation period for the communicable illness with the interval between the onset of the worker's symptoms or a positive diagnostic test result and the opportunities for transmission found to exist.

(The key characteristics of a sample of communicable illnesses that occur in Ontario can be found in the Appendix.)

The inability to identify a specific work-related contact source for the worker's communicable illness does not mean the worker did not contract the communicable illness from exposure occurring in the course of employment. In the absence of a specific work-related contact source, the decision-maker must determine the issue of whether the communicable illness was contracted by the worker while in the course of employment after weighing all of the available relevant evidence.

Input from Tillsonburg District Chamber of Commerce members: We believe the use of the words "performing a work-related duty or an activity reasonably incidental to employment" opens a HUGE array of potential claim situations and should be changed. Consider activities such as 'after hours networking' or 'traveling through an airport / on an airplane, or a train' for work. These activities are often 'work related' but are also places where large masses of people gather and are in close contact.

## Determining whether the communicable illness arose out of employment

A worker's employment will have made a significant contribution to contracting a communicable illness when the decision-maker is satisfied that:

- the employment placed the worker at an increased risk (i.e., increased likelihood) of contracting the communicable illness as compared to the risk experienced by the general public during ordinary or routine activities of daily living, and
- the communicable illness was contracted by the worker from exposure that occurred in the course of their employment as a result of the identifiable increase in risk.

The worker's employment will generally not have made a significant contribution to contracting the communicable illness when these conditions are not met.

In determining whether the worker's employment made a significant contribution to the contraction of the communicable illness, the decision-maker considers both the risk factors that are associated with the worker's occupation or job as well as the individual circumstances that led to the worker contracting the communicable illness.

Input from Tillsonburg District Chamber of Commerce members: This area is more clear about how to determine that it's an employer issue by using the words "the employment placed the worker at increased risk compared to the risk experienced by the general public". However, this could still be very liberally interpreted. For example, if a person going out to shop at the grocery store is a 50% risk of catching a disease, and the risk goes up to 55% for some reason while at work, does that justify a need for the employer to shoulder the financial responsibility for this? Again, can this area be tightened up with more clarity.



#### **Draft for Consultation Purposes**

Document Number 15-03-15

Section

In the Course of and Arising Out of

Subject

Communicable illnesses

### General Comments and Recommendations from Tillsonburg District Chamber of Commerce Members:

- 1. Remove COVID-19 pandemic related disease compensation from allowable WSIB claims or occupation disease benefits.
  - a. Additionally, in anticipating future pandemics, COVID-19 should not be deemed a compensable condition arising out of, and in the course of employment. It should be treated as the common cold or flu and other similar diseases that are considered global and community-driven, and not workplace issues. (The default is that these are generally not compensable).
- 2. If recommendation #1 cannot be accommodated, and a WSIB claim is allowed, then the WSIB claim costs should be pooled under employer collective liability, not the individual employer account liability.
- 3. Amend the WSIB Policy manual to provide a clear test for when COVID-19 claims should be filed and will be allowed, but only if it applies to collective liability.
- 4. Amend the WSIA to, in addition to limiting year-over-year premium increases, also restrict total claims-related costs shouldered by the employer because of lifetime claims.
- Make the WSIA and WSIB Policy Manual more user-friendly and transparent to all stakeholders.
   WSIA Section 15 Occupational Disease needs to identify the worker's claim standard of proof evidence.

We recognize this public stakeholder policy consultation is a positive step; however, a major challenge still exists after the legislative change of July 1, 2022. As of that date it is even more challenging to prove the initial point of original COVID-19 disease contact with standard of proof. One of the major issues is the potential of significant cost impact to many employers. This is where it becomes very difficult to look at the scope of an individual employer's liability over the life cycle of a claim.

We recommend that WSIB adjudication at the front end of claims be communicated in a more transparent manner to avoid employer appeals and a potential tribunal process. It is proven through the WSIB statistics where the employer has a <25% success rate of overturning a poor claim decision at major cost to the employer which can take years to navigate. Also, as per WSIB statistics, approximately 25% of COVID-19 claims (80k/20k) are allowed and compensable. In the new prospective system, this could have major impact to the employer community for up to 11 years on some claims. Allowable WSIB decisions on the COVID-19 employee permanent disabilities, lost time, NEL awards, pension/benefits offset, fatality claims, and survivor benefits can have impact into the six figure dollar amounts. WSIB claims are now moving 85% of workers net income to 90%. This new change will compound the problem even further.

There have already been some significant employer exposures since the July 1, 2022



#### **Draft for Consultation Purposes**

Document Number 15-03-15

Section

In the Course of and Arising Out of

Operational Policy

Subject

#### Communicable illnesses

implementation date; and this exposure is on something that is very much outside of the Employers control because of updated and reduced Public Health guidelines for managing COVID-19 – essentially now accepting it as part of normal, everyday life.

We appreciate the opportunity to participate in this consultation process.

On behalf of the Tillsonburg District Chamber of Commerce members, thank you.

Suzanne Renken
CEO
Tillsonburg District Chamber of Commerce
suzanne@tillsonburgchamber.ca
519-688-3737
20 Oxford Street
Tillsonburg, Ontario
N4G 2G1

#### **Employment risk factors**

A worker's employment will generally place the worker at an increased risk of contracting a communicable illness as compared to the risk of contracting the communicable illness through ordinary or routine activities of daily living when:

the rate of the communicable illness is significantly higher in the worker's place of work
than in the general population (e.g., widespread outbreak in the workplace, treatment or
care of populations with a significantly higher rate of the illness, or travel to a region with
a significantly higher rate of the illness), and/or



Operational

**Policy** 

#### Draft for Consultation Purposes

Document Number 15-03-15

ARIO

In the Course of and Arising Out of

Subject

Section

#### Communicable illnesses

the worker's employment activities create opportunities for exposure to and transmission
of the communicable in excess of the opportunities associated with ordinary or routine
activities of daily living.

Employment-related activities that may create opportunities for exposure to and transmission of a communicable illness in excess of the norm include, but are not limited to:

- activities that require a worker to have direct and prolonged close contact with one or more person(s) known to have or suspected of having the communicable illness in the context of delivering health care, personal care, emergency aid, custody, or transport to these persons
- activities that require the worker to have direct contact with infectious substances, such as the body fluids of persons known to have or suspected of having the communicable illness, and
- staying in employer-provided accommodations with one or more person(s) known to have or suspected of having the communicable illness, such as accommodations in remote mining camps or accommodations provided to temporary foreign agricultural workers.

#### Community-acquired communicable illnesses

Communicable illnesses, such as influenza, the common cold, and COVID-19 are highly transmissible and can be prevalent in the general population. In-person interactions that can easily spread these communicable illnesses are a part of everyday life and occur both inside and outside of employment (e.g., in the home, community, and public settings). Outside of a public health emergency, in-person interactions at work with colleagues, customers, clients, or others, generally do not place the worker at a greater risk of contracting one of these communicable illnesses than the risk experienced by the general public. Therefore, a worker who contracts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increased their risk of contracting the communicable illness in some additional way. For example, the worker contracts the communicable illness while performing a job duty that subjected them to an exposure risk in excess of the norm, such as delivering health care to a person known to have the communicable illness.

#### Public health emergency

During a government-declared public health emergency related to a communicable illness, a worker's employment-related risk of contracting that communicable illness may be increased when:

- the public health emergency results in the implementation of public health measures to control or prevent the spread of the communicable illness in the general public (e.g., stayat-home orders), and
- the worker is employed as an essential worker at a workplace that remains open during the public health emergency and has in-person interactions as part of their job duties.



**Policy** 

#### **Draft for Consultation Purposes**

Document Number 15-03-15

Section

In the Course of and Arising Out of

Subject

Communicable illnesses

#### Loss of earnings (LOE) benefits and period of communicability

When a claim for a communicable illness has been allowed, a worker may be entitled to LOE benefits for the period of communicability, even if the worker is asymptomatic or only has mild symptoms, if the communicability of the worker prevents or limits their ability to return to work, see 18-03-02, Payment and Reviewing LOE Benefits (Prior to Final Review).

In this section, "period of communicability" means the time during which an infectious agent may be transferred directly or indirectly from an infected person to another person. During this period, a worker with a communicable illness poses a risk of transmitting it to others in the workplace.

#### Prevention of communicable illnesses

A worker who is exposed to a communicable illness in the workplace, but free of illness (i.e., symptom-free and no laboratory confirmation or clinical diagnosis), may be legally required to self-isolate or may be sent home by the employer. Workers who are free of illness do not have entitlement to benefits under the *Workplace Safety and Insurance Act, 1997* for the period of time in which they are required to remain out of the workplace on a precautionary basis. However, if a worker subsequently develops symptoms or tests positive for a communicable illness, they may be entitled to benefits.

#### **Application date**

This policy applies to all claims for a communicable illness with an accident date on or after [TBD]

#### **Document history**

This is a new document.

#### Policy review schedule

This policy will be reviewed within two years of the application date.

#### References

#### Legislative authority

Workplace Safety and Insurance Act, 1997, as amended Sections 2, 13, 43, 159

#### Minute



#### Draft for Consultation Purposes

Document Number 15-03-15

Section

In the Course of and Arising Out of

Operational Policy

Subject

Communicable illnesses

#### **APPENDIX**

The defining features of a sample of communicable illnesses that occur in Ontario are provided in the table below.

The key characteristics described for each communicable illness include:

- Signs and symptoms the main clinical features;
- 2. Mode of Transmission the mechanisms by which the infectious agent is spread to humans;
- 3. Incubation Period the time interval between initial contact with the infectious organism and the first appearance of symptoms associated with the infection; and
- 4. Period of Communicability the time during which an infectious agent may be transferred directly or indirectly from an infected person to another person; or from an infected animal to humans.

Table 1. Determining entitlement - General characteristics illustrated with examples of common communicable illnesses

Communicable Illness	Signs and Symptoms	Mode of Transmission	Incubation Period (Range)	Period of Communicability
Norovirus infection	nausea, vomiting, fever, watery diarrhea, abdominal pain	fecal-oral, direct person-person and indirect or airborne transmission	1-2 days	highest during acute stage and up to 72 hours after symptoms resolve
Scabies	intense itching, papules, vesicles or tiny linear burrows and lesions	prolonged direct contact with infested skin	2-6 weeks	until mites and eggs are destroyed
Influenza	fever, cough, headache, muscle aches and pain	primarily transmitted by droplets and spread through coughing or sneezing; may also be transmitted through direct or indirect contact with infected respiratory secretions	1-4 days	1 day before the first symptoms until 5 days after first symptoms



#### **Draft for Consultation Purposes**

Document Number

15-03-15

Operational

Policy

Section

In the Course of and Arising Out of

Subject

#### Communicable illnesses

COVID-19	fever and/or chills, cough, shortness of breath, decrease or loss of taste or smell, runny nose/nasal congestion, headache, extreme fatigue, sore throat, muscle aches or joint pain, gastrointestinal symptoms (i.e. vomiting or diarrhea)	inhalation of infectious respiratory particles of varying sizes - aerosols (smaller particles) and droplets (larger particles)	1-14 days	two days before symptom onset and can last until ten days following symptom onset
Hepatitis B	asymptomatic, fatigue, loss of appetite, joint pain, abdominal pain, nausea, vomiting, fever, and dark urine, jaundice	direct or indirect transmission via inanimate objects, blood and blood products, body fluids	45-180 days	weeks before onset of first symptoms and remain infective through acute clinical course
Lyme disease	fever, headache, muscle and joint pain, fatigue and an expanding red rash, neurological and cardiac abnormalities	tick-borne; bite of an infected blacklegged tick	3-30 days after tick exposure	no evidence of person-to-person transmission



1900 Yonge Street, Toronto, ON M4S 1Z2 416-393-4000

March 27, 2023

The Workplace Safety & Insurance Board Consultation Secretariat

#### RE: Response to WSIB Draft policy - Communicable Illness

On or about February 17, 2023 the Workplace Safety and Insurance Board ("WSIB") released a Draft Communicable Illness Policy ("Draft Policy") document number 15-03-15 for consultation. The WSIB has stated that the Draft Policy reflects their current practice, it is not a change in direction but rather it provides detailed and clear guidance about how entitlement for communicable illness claims have been and will be adjudicated. It further provides examples of the types of employment settings and activities that may have increased risk. In response to the request for feedback, the Toronto Transit Commission ("TTC") provides the following comments on the WSIB's proposed Draft Policy.

#### 1. TTC

The TTC employs approximately 15,000 employees and operates a public transit system consisting of conventional services (bus, streetcar, subway, light rail and rapid transit line) and specialized service (Wheel-Trans) in and around the City of Toronto. A majority of its employees perform front line customer service related duties independently in various work locations. The TTC is a Schedule 2 employer that pays dollar for dollar for every benefit received by an employee pursuant to the *Workplace Safety and Insurance Act, 1997* ("WSIA") plus an administration fee.

#### 2. Communicable Illnesses

The TTC recognizes that a worker could contract a communicable illnesses while at work and may be considered an occupational illness under the WSIA benefit entitlement. The Draft Policy in its current form will have significant cost implications for the TTC as the TTC experienced during the COVID-19 pandemic. Although the Provincial Government provided some cost relief, the TTC is still incurring significant costs due to approved claims for COVID-19. The TTC's costs would have been considerably higher had the Provincial Government not offered COVID-19 reimbursement for the set period of time.

A fair and balance policy considering the nature of communicable illnesses, protect and unprotected exposures and the complex issues of causation is necessary. The goal of the TTC's comments on the Draft Policy is to ensure that the WSIB's approach to determining entitlement for communicable illnesses is objective, reasonable, fair and proactive. Reasoned decisions regarding a worker's entitlement for communicable illness must be made at

the initial entitlement stage by a qualified WSIB assessor based on:

- A policy that establishes clearly defined objective and identifiable entitlement criteria;
- A policy that is consistently applied;
- A competent WSIB assessor with knowledge in the areas of transmission, exposures and the nature of the specified communicable illness;
- A competent WSIB assessor who understand the nature of the worker's job duties and the workplace measures in place to prevent the transmission and/or contraction of communicable illnesses in the workplace;
- A WSIB assessor who conducts a documented thorough review of the worker's other possible sources of contraction of the communicable illness;
- Timely, fair, reasonable, strong and documented thorough investigation by the WSIB
  assessor to determine whether the evidence significantly supports that the
  communicable illness was contracted while at work and not through other means
  including but not limited to the broader community or through personal/social activities
  outside of work;
- A proper objective and clearly documented requirement to accurately diagnose the communicable illness through laboratory confirmatory tests when one exists; and
- Clear objective evidence of the workplace contact or incident where the worker was directly or indirectly infected by the communicable illness.

#### 3. Communicable Illness Guidelines:

Presently, the WSIB does not have an Operational Policy on communicable illnesses but has been assessing, adjudicating and determining entitlement for occupational illness claims for communicable illnesses. Given the difficulties of assessing sources of transmission and exposure, general guidelines should be established to guide and direct assessments of how a worker contacted a communicable illness and whether it was contracted at work or the community at large.

#### 4. Determining whether the worker contracted a communicable illness in the Workplace:

To determine whether a worker contracted a communicable illness in the workplace, the Draft Policy provides that "other relevant evidence" will be gathered during the adjudication of a claim.

The Draft Policy does not set out or clearly identify what "other relevant evidence" is to be gathered during the adjudication process. The generalized reference in the Draft Policy to "other relevant evidence" is subjective and ambiguous which will lead to varying interpretations, inconsistencies in adjudication of claims, and potential inaccurate entitlement decisions. The Draft Policy at a minimum should specify different type(s) of relevant information including examples that must be obtained from all relevant parties to ensure a fair fulsome investigation and adjudication process and proper decision of entitlement to benefits under the WSIA.

The Draft Policy allows: "...one or both of the following will generally be necessary to establish the worker has or had at the relevant time a specific communicable illness: laboratory confirmation of current infection (e.g. positive laboratory or diagnostic test result), or a diagnosis by a treating health professional qualified to provide such diagnosis based on a clinical assessment of the worker during the period of illness." The Draft Policy ought to adopt stricter

language that makes this an absolute requirement and not merely generally necessary suggestion which can be interpreted as optional. The Draft Policy must set out clear and objective criteria to ensure accurate diagnoses of communicable illnesses are made.

The second option presented in the Draft Policy "a diagnosis by clinical assessment" must only be used in cases where a laboratory test or an objective diagnostic test does not exist. There are many communicable illnesses that cannot be accurately diagnosed by clinical assessment alone. Many viral illnesses such as COVID-19, influenza, RSV and other respiratory illnesses have similar presentation and symptoms and a healthcare professional will not be able to accurately determine which communicable illness the worker has based on presentation alone. The WSIB assessor cannot determine entitlement to benefits in the absence of an actual confirmed diagnosis. Proper and accurate diagnoses based on objective testing is essential to determine if the worker actually had or has a communicable illness. It would be unjust to the employer to deem a communicable illness occurred in the workplace without an objective and properly supported diagnosis.

#### 4.1 Exception to laboratory or clinical evidence of current infection:

The TTC does not dispute that an exception may be reasonable in the specific circumstance when there is no laboratory or diagnostic test for the communicable illness or the worker is not eligible for a laboratory test. In such limited circumstances, the WSIB should vigorously and consistently apply established criteria while considering the specified nature of a worker's job duties and protective measures in place to protect a worker from contracting the communicable illnesses.

The TTC has great concern that a test will not be required for a short lived illness. Laboratory testing will in many cases still likely be positive for some time even after the acute phase has ended. The reliance of antibody testing is problematic and flawed. The assessor will not be able to determine if there was previous infection with an antibody test or if it was from a prior exposure to the illness or related to a vaccine induced antibody if a vaccine exists.

The WSIB is strongly urged to consider removing the ability to approve benefits for a communicable illness in the absence of both laboratory confirmation tests and clinical evidence/evaluation of a health practitioner all together. In the absence of this evidence the WSIB would be relying solely on the word of the worker thereby inappropriately providing the worker the benefit of the doubt as there would be no objective evidence available to support that the communicable illness in fact occurred and/or was contracted in the workplace.

#### 4.2 Timeliness of worker claims

The Draft Policy does not address the implications for the worker's claim for entitlement to benefits when he or she fails to report alleged communicable illness in a timely manner.

While entitlements to benefits under the WSIA are based on no fault system, there must still be objective evidence that the alleged communicable illness was actually contracted at work. The failure to report alleged communicable illness in a timely manner denies both the WSIB and the employer the ability to fully investigate and assess entitlement to benefits under the WSIA. In addition, delayed reporting directly impacts the worker's ability to obtain proper confirmatory tests. In the case of communicable illnesses, time is of the essence and clear directions should be provided to workers to immediately report their illnesses on the first day of absence.

Otherwise delayed reporting by a worker could result in claims being approved by the WSIB inappropriately. The TTC further notes that investigations into the contraction of alleged communicable illness in the workplace can be substantial and should include: contact tracing; reviewing and considering a worker's job duties; reviewing and considering workplace safety measures; interviewing witnesses at work and personal; medical evidence; etc. Given the scope of an appropriate and fair investigation and how much evidence and records must be considered, weighed and assessed by the WSIB, the TTC would recommend that the WSIB be sure it is prepared to fairly conduct these investigations where the worker has failed to report alleged communicable illness in a timely manner.

In the absence of confirmation testing and medical evidence, a clear determination that the alleged communicable illness occurred cannot be made; and should not made based on a workers self-report when there is no objective evidence. The TTC asserts that a mere verbal claim by a worker that they had a communicable illness based on self-report of symptoms and self-report of where they may have contracted the alleged communicable illness is simply not sufficient for the purposes of establishing that an alleged communicable illness in fact occurred and arose out of the course of employment. It is easy to verbally repeat symptoms of a widely publicized illness to improperly obtain benefits under the WSIA. The failure to properly conduct a timely investigation and establish that alleged communicable illness occurred could result in the WSIB approving claims for workers who actually have no entitlement to benefits.

#### 5. Determining whether the communicable illness was arose out of employment

To determine entitlement for communicable illness, the Draft Policy provides that a worker will generally be entitled to benefits for communicable illness if the communicable illness arose out of the worker's employment in that the employment made a "significant contribution" to contracting the communicable illness. The Draft Policy goes on to accept that if the worker was at increased risk and exposure to an identifiable increased risk then this would be accepted as a "significant contribution".

First, there is no clear definition of what is considered to be a "significant contribution." It is crucial that a clear definition is provided to ensure consistency in the application and interpretation of the Policy. More specific criteria including examples are necessary to ensure that correct and consistent decisions regarding entitlement are made by WSIB assessors. The Draft Policy is unclear in regards to what specific factors and weights will be applied in order to make a determination that the illness arose out of the course of employment. The Draft Policy does not specifically outline how the WSIB will address instances where there is an inability to identify a specific work-related contact source. The TTC asserts that the WSIB should not be using a low standard of proof as balance of probabilities or providing the claimant the benefit of the doubt where the evidence does not predominantly support workplace transmission.

Second, it is unclear how the WSIB intends to determine through adjudication process the frequency, duration and types of potential exposures to the communicable illness. It is also unclear how the WSIB assessor will weigh protected and unprotected contact and how that is weighed into the decision. TTC asserts that guidelines for each communicable illness ought to be developed to ensure consistent and objective criteria is followed in the adjudication process. Guidelines at minimum should include specific personal protective equipment (masks, gloves, protective eye wear, clothing, and hand sanitizer), safety rules and measures that were in place (physical distancing, occupancy maximums, daily sanitization of the workplace, etc, cohorts,

etc.).

Third, the Draft Policy low threshold of a mere "increased risk" is exceptionally subjective and is based on an insufficient threshold of proof.

#### **5.1 Employment Risk Factors:**

The Draft Policy sets out very general criteria of workplace factors that will place the worker at increased risk compared to the risk of the general public. The Draft Policy does not address mitigating factors that the employer has in place to protect workers' Health and Safety in accordance with the Ontario *Occupational Health and Safety Act*. The TTC asserts that where an employer has supplied appropriate personal protective equipment and safety process and procedures into place, this would mitigate the risk of their workforce. Arguably the workers may be at less risk than the general public based on these enhanced safety precautions, equipment and protocols however this consideration is not in the Draft Policy.

Additionally, the employment-related activities that may create opportunities for exposure and transmission only considers exposure and does not consider whether it was protected or unprotected exposure. Risk factors of protected or unprotected exposure are vastly different and thus should be separated within the Draft Policy to ensure the distinction is made that protected exposure whereby the proper protections are used should not automatically mean there is increased risk.

#### 6. Standard of Proof and Causation:

To qualify for benefits under the Draft Policy, the significant contribution the workplace must have caused or contributed to the communicable illness. The standard of proof set out in the Draft Policy is on a balance of probabilities.

Given the nature of communicable illnesses, a significant contribution test in cases of communicable illness is too low of a standard for entitlement especially based on the general and subjective criteria set out in the Draft Policy. The causation model is more appropriate. In cases involving significant contribution test has a greater probability of resulting in a worker receiving compensation under WSIA for non-compensable communicable illnesses. Other provinces use the pre-dominant cause test when determining entitlement for benefits and the TTC asserts this is the standard of proof that ought to be applied to the Draft Policy.

#### 7. Pre-Existing Conditions:

The Draft Policy does not make any reference to WSIB Operational Policy 15-02-03, Pre-Existing Conditions with respect to the effect, if any a pre-existing condition on a worker's claim for benefits that may cause the communicable illness to cause more severe illness, complications or even death. As seen with COVID-19, individuals who were immunocompromised due to a pre-existing illness were at increased risk of serious COVID-19, hospitalization or death. The WSIB has not effectively set out in the Draft Policy when it will seek relevant medical records from treating physicians to ensure that workers are not granted entitlement to benefits for non-compensable pre-existing or co-existing conditions. The TTC asserts that the WSIB needs to consider all factors including pre-existing medical conditions to determine entitlement to all available benefit entitlements.

#### 8. Ongoing Adjudication of Approved Claims

TTC has significant concerns regarding regular reviews and assessments of ongoing entitlement to benefits under the WSIA for communicable illnesses. There are no set criteria for evaluating ongoing entitlement claims by workers for reported ongoing symptoms that were not consistent with the known acute phases of the illness.

#### Conclusion

We thank the WSIB for the opportunity to review the Draft Policy and to set out its concerns via this consultation process. The TTC hopes that its comments above will be some of some assistance in the development of a reasonable and objective policy and that a fair, consistent and diligent adjudicative process for entitlement to benefits for communicable illnesses under the Draft Policy

Sincerely,

Kathy Cuschieri

Kathy Cuschieri

Director, Occupational Health & Employee Wellbeing

**Human Resources Department** 

People Group





March 28, 2023

To: WSIB Consultation Secretariat, Consultation Secretariat@wsib.on.ca

Re: Draft Communicable Illnesses Policy

From: Victoria Arrandale, PhD, ROH
Marianne Levitsky, MES, CIH, FAIHA

Thank you for the opportunity to submit comments on the draft Communicable Illnesses Policy. We have two comments related to the criteria for determining whether a communicable illness is work-related.

#### 1. Mode of transmission:

Page 2 of the draft policy states: "Factors to consider when gathering and weighing the evidence related to potential work-related and non-work-related exposures to the communicable illness include, but are not limited to:

the route of transmission of the communicable illness (e.g., contact, droplet, airborne, oral)"

This point is supplemented by Table 1 in the Appendix which, among other diseases, lists influenza as a disease transmitted by the droplet route, while COVID-19 is listed as being transmitted by both the droplet and aerosol routes.

The debates surrounding transmission of COVID-19 suggest that mechanisms of disease transmission may be ambiguous or controversial. For example, the distinction between droplet and aerosol is thought by many in the scientific community to be an artificial one, as respiratory infections may be transmitted by a range of particle sizes, both through ballistic impact (spray) and inhalation. Therefore, we submit that the policy, including the Appendix, should be modified so that it does not prevent the decision-maker from considering the best scientific evidence related to the specific agent and exposure circumstance.

Page 1 of 2



#### 2. Workplace risk relative to non-workplace risk:

Page 3 of the draft policy states: "A worker's employment will have made a significant contribution to contracting a communicable illness when the decision-maker is satisfied that:

 the employment placed the worker at an increased risk (i.e., increased likelihood) of contracting the communicable illness as compared to the risk experienced by the general public during ordinary or routine activities of daily living"

We submit that this criterion restricts determination of whether, on the balance of probabilities, the disease was actually transmitted in the workplace, regardless of whether workplace risk is higher than the risk experienced by the general public during routine activities. For example, it is possible that an individual worker could control their non-workplace risk to below that of the general public, so that workplace risk is much higher than the individual experiences outside of work. The determination of work-relatedness should be based on an investigation of the likelihood of workplace transmission for the individual, regardless of the level of risk to the general public. We therefore recommend revision of the policy so that it does not prevent such determination.

Thank you again for the opportunity to present our views on this policy.

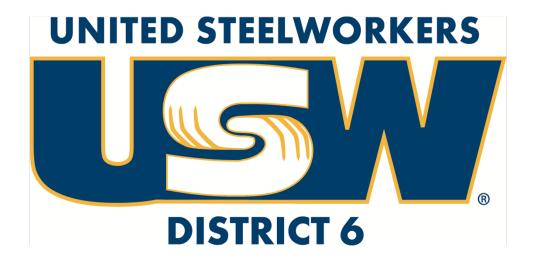
Victoria Arrandale, PhD ROH

M. Levitsky

Assistant Professor, Dalla Lana School of Public Health, University of Toronto

Marianne Levitsky, MES, CIH, ROH, FAIHA

Adjunct Lecturer, Dalla Lana School of Public Health, University of Toronto



# WSIB Communicable Illnesses Policy Consultation Submission

Sylvia Boyce, USW D6 Health, Safety and Environment Coordinator & Andy LaDouceur USW Local 2251 WSIB Committee

#### **Introductory remarks:**

The United Steelworkers (USW) is the largest private sector union in both Canada and North America, representing approximately 1.2 million active and retired workers. USW District 6 is the largest of United Steelworkers' 13 districts with over 74, 000 members and approximately 50, 000 retirees located in Ontario, New Brunswick, Newfoundland and Labrador, Nova Scotia, and Prince Edward Island. Our union represents workers in every sector the Canadian economy.

It has been a long-standing practice in Ontario to consult the public regarding proposed legislative or regulatory changes, as well as policy and we appreciate the opportunity to participate in this process. While the opportunity is appreciated, we have concerns regarding the potential inspiration for this consultation as well as some of the content of the draft policy. We sincerely hope that the WSIB will recognize that this policy requires redrafting and an additional consultation to insure compliance with all applicable pieces of legislation and legal principles.

#### **Background:**

On Valentine's Day the WSIB decided that their gift to stakeholders would be to announce a consultation regarding a draft policy for communicable illnesses. It was noted in this announcement that the policy reflects the WSIB's standing adjudicative approach to these types of claims. A deadline for comments was set for March 28, 2023.

#### **Comments:**

There are some positive notes regarding the draft policy. For example, we are pleased to see the section on immunization status being consistent with a no-fault system and respecting individual autonomy. Additionally, the statement regarding transmission involving direct or indirect contact under the 'Guidelines' allows for multiple exposure routes without having to get specific. Lastly, and perhaps the most important positive section is found in the last paragraph under the heading 'Determining whether the communicable illness was contracted in the course of employment' stipulating that the lack of ability to identify a specific work-related contact doesn't mean that the claim should be denied and essentially stating that the balance of probabilities test should be employed to determine entitlement.

Some statements aren't objectionable, but they could include more detail such as the sentence under the first heading of 'Policy'. That statement lacks specificity as to whether the communicable illnesses are being considered as an accident or occupational disease



under the WSIA. The 'Legislative authority' section indicates that communicable illnesses are being adjudicated as a disablement given the reference to s.13 of the WSIA, and that the definition of accident includes "a disablement arising out of and in the course of employment" as the only applicable example. However, the definitions for both accident and occupational disease are inclusive lists, and therefore not exhaustive in the examples provided in the WSIA which would easily allow these claims to be considered occupational diseases.

Even with the current examples provided in the definition of occupational disease, communicable illnesses could easily be viewed as a disease resulting from exposure to an infectious agent relating to working in proximity to said infectious agent. Meaning that proximity and contracting the disease from the infectious agent (whether direct or indirect contact) would the particular process for the trade or occupation consistent with example (a) listed in s.2 of the WSIA. Decision-makers should consider and apply all relevant sections of the WSIA even if WSIB Policy omits an applicable section.

Another section that could use additional clarification is the exceptions to laboratory confirmation for the disease. It does list a laboratory test for antigens but isn't specific as to whether such tests done at home like the COVID-10 rapid test would be acceptable. Given that rapid tests are listed on the WSIB's COVID-19 questionnaire<sup>1</sup>, then it would be logical to include it as an example in the policy.

There are sections that conflict with previous statements made in the policy and with the fact that the WSIA provides no-fault insurance. As noted above, the statement regarding direct or indirect contact is good but the draft policy has other information that conflicts with that since it emphasizes direct contact (under the heading 'Employment risk factors' in the last paragraph, see the first two bullets). In that same section, in the last bullet it looks for known exposures, or even suspected exposures, which seems to conflict with the statement regarding the inability to identify a specific work-related contact source. The first three bullets in the last paragraph on page 2 of the draft policy seek to find fault or assign blame and should have no bearing on entitlement. The last bullet of that paragraph on page 3 conflicts with not requiring an identifiable source to consider entitlement. Policy shouldn't conflict with itself and certainly shouldn't depart from the provisions of the WSIA or accepted legal principles.

While s. 159(2)(a.1) provides the WSIB with the authority to interpret the Act and establish policies, nothing in the WSIA permits the WSIB to redefine the WSIA or any applicable legal principles. The definition of arising out of and in the course of employment has been traditionally interpreted as requiring that the workplace be, on a balance of probabilities, a significant contributing factor to the injury/disease/disablement and that there's an employment nexus. Arising out of the course of employment has traditionally

<sup>&</sup>lt;sup>1</sup> WSIB COVID-19 initial contact screening questionnaire <a href="https://www.wsib.ca/sites/default/files/2022-01/10433a">https://www.wsib.ca/sites/default/files/2022-01/10433a</a> fs 01 22 1.pdf



meant while at work and in the course of employment would involve a work-related activity.

An example lacking an employment nexus would be a worker who works from home contracts COVID-19 from their spouse through interactions that are personal in nature with no connection to their employment (e.g., Bob has a home office, and his wife Sally works as a nurse at their local hospital and Sally contracts COVID-19 from working with infected patients. Bob's only exposure is Sally, and it occurs during their personal interactions unrelated to the performance of Bob's job; therefore, while Sally's COVID-19 should be considered work-related Bob's would be non-occupational even though it did happen at this place of work because he wasn't in the course of employment). The test proposed in the draft policy seeks to redefine the already established definition for arising out of an in the course of employment provided in WSIAT Decisions as well as WSIB Policy 15-02-02.

The draft policy also seeks to redefine the term significant contributing factor by equating it with predominant cause. WSIAT Decisions have provided a definition for significant contributing factor that has been used by the Occupational Disease Advisory Panel and the WISB. One of the most detailed explanations for significant contributing factor is contained in WSIAT Decision No. 820/95 at paragraph 58 stating that,

"As long as it can be said, after a meticulous review of all the evidence, that the workplace exposure is, on a balance of probabilities, "a", but not necessarily "the" significant precipitating factor, the entitlement is in order."

The sentence prior to that in the same paragraph stipulates that,

"... competing significant factors are not graded by their level of importance, nor does one cancel out another."<sup>2</sup>

This is the proper definition of significant contributing factor, and a similar definition was recently employed by the WSIB prior to the release of this draft policy.

In the consultation regarding WSIB's occupational disease policy framework the WSIB provided the following definition of significant contributing factor,

"To be a significant contributing factor, the worker's employment need not be the only cause or even the primary cause of the disease, the contribution of the employment only needs to be more than de minimus."

 $\frac{\text{https://www.canlii.org/en/on/onwsiat/doc/1997/1997canlii13243/1997canlii13243.html?autocompleteStr=Decision%20No.%20820%2F95&autocompletePos=1$ 

<sup>&</sup>lt;sup>3</sup> Draft Occupational Disease Policy Framework – for consultation purposes (footnote 1) https://www.wsib.ca/en/draft-occupational-disease-policy-framework-consultation-purposes



2

<sup>&</sup>lt;sup>2</sup> WSIAT Decision No. 820/95

This was not a new definition for the WSIB as it had previously adopted a similar definition in their document titled 'Taking ODAP into the future, A protocol for occupational disease policy development and claims adjudication'. At pages 34 & 35 it provides the following definition,

"Significant contribution" is a test used by WSIAT and "material contribution" is a test used by the courts. WSIB considers "significant contribution" and "material contribution" as the same thing, which ends any speculation that there are two tests and that one might mean more than the other. A factor is considered to be significant if it falls outside the de minimis (trifling) range.

The commonly known meaning of the word "significant" and the legal definitions of the concept of de minimis make it clear that the connection must not be trifling, to ensure that entitlement is not based on a tenuous or merely speculative workplace connection.

The common meaning of the word "significant" is "having or likely to have influence or effect: important, weighty." "Significant" cannot be equated with a percentage, as any chosen number would be arbitrary and unhelpful."

It should be obvious that the definition regarding work-relatedness in the draft policy is not the proper test since it is essentially a predominant cause test using the term significant contributing factor incorrectly.

We acknowledge that s. 159(2.1) permits policies to have different evidentiary requirements or adjudicative principles for claims but that doesn't mean that a worker's rights are set aside or that the proposed policy for communicable illnesses is properly authorized by the WSIA. That section could easily be seen as solidifying the approach used for claims afforded a presumption prescribed by either s. 13(2), 15(3), or 15(4). It could also be viewed as boosting the approach for claims where s. 119(2) of the WSIA applies. There is only one exception to Human Rights noted in the WSIA and it has to do with loss of earnings benefits ending at age 65 as stipulated in s. 2.1. No other Human Rights exemptions are noted and therefore s. 159(2.1) cannot be used to discriminate based on a worker's type of disability.

WSIB's Chronic Mental Stress Policy has similar contentious issues that have yet to be tested with respect to Human Rights violations, but the primacy of the Human Rights Code or the Charter would most likely serve to void the predominant cause test employed therein. A challenge of that nature was recently avoided because the claim in question was

<sup>&</sup>lt;sup>4</sup> Taking ODAP into the future, A protocol for occupational disease policy development and claims adjudication <a href="https://www.wsib.ca/sites/default/files/2019-03/protocoldraft05.pdf">https://www.wsib.ca/sites/default/files/2019-03/protocoldraft05.pdf</a>



allowed by the Tribunal<sup>5</sup>. However, we submit that the WSIB should be avoiding any violations of a worker's human rights prescribed by either the Code or the Charter.

Human rights legislation isn't the only other piece of legislation that applies to WSIB Policy, as previously noted the WSIB has the authority to interpret the WSIA which would naturally trigger their responsibility to apply the rule of liberal interpretation as prescribed by s. 64 of the Legislation Act. That rule stipulates that,

"An Act shall be interpreted as being remedial and shall be given such fair, large and liberal interpretation as best ensures the attainment of its objects."

The objects of the WSIA are stated in the purpose clause (s. 1) and one of the four objects of the Act is to provide compensation. Therefore, WSIB Policy ought to be written in a manner that provides compensation for work-related injuries instead of restricting entitlement in the fashion proposed in this draft policy and other current WSIB Policies.

In addition, to other pieces of legislation having rules about interpretation or application of the WSIA and/or WSIB Policy, there are rules regarding administrative justice. An applicable rule that wasn't followed in the draft policy is the rule against fettering discretion given the strict requirement that there be a public health emergency to attract entitlement for a communicable illness. The WSIB acknowledged this rule in their occupational disease protocol document at page 43 (see footnote 4) stating that,

"The courts have commented often on the legal doctrine against "fettering discretion" (DeSmith 1995, Craig 1993, Jones 1989, Foulkes 1986). They have ruled that a public body that has discretionary powers cannot adopt a policy or rule that allows it to dispose of a case without considering the merits of the individual applicant before it. A factor may be taken into account in exercising discretion without becoming a general rule. Such a general rule might result in the pursuit of consistency at the expense of the merits of individual cases.

This principle against over-rigid adherence to a policy is part of the statutory obligation to make a decision on the "merits and justice" of a case. An adjudicator cannot exercise discretion by mechanically applying the predetermined policy without being willing to consider any special circumstance of the case that might warrant departure from the usual policy."

Denying a claim simply due to the lack of a public health emergency being declared, despite the communicable illness having arisen out of and in the course of employment as described

<sup>&</sup>lt;sup>6</sup> Legislation Act, 2006 <a href="https://www.ontario.ca/laws/statute/06l21">https://www.ontario.ca/laws/statute/06l21</a> UNITED STEELWORKERS



<sup>&</sup>lt;sup>5</sup> WSIAT 2021 Annual Report (last paragraph on page 12 continuing on page 13) https://www.wsiat.on.ca/en/publications/AnnualReport2021.pdf

#### USW D6 SUBMISSION RE. COMMUNICALBE ILLNESSES DRAFT POLICY

in the draft policy (third and fourth sentences under the heading 'Community-acquired communicable illnesses') is fettering discretion.

This draft policy lacks legal foundation for denying claims on the basis that a public health emergency wasn't declared, and quite frankly to suggest that as a requirement is absurd. If you applied that type of reasoning to injuries by saying that breaking your leg due to a fall from a ladder can happen at home and the use of a ladder at work is no different so your claim is denied, or cutting a finger with a knife, etc. is just as absurd as denying a workrelated communicable illness outside of a public health emergency. Nothing in the WSIA or any other applicable piece of legislation or rule of law permits the WSIB to adjudicate in the manner proposed in the draft communicable illnesses policy.

WSIAT Decisions regarding claims for communicable illnesses have consistently held that the legal test used by the WSIB for those claims wasn't the proper legal standard to apply. Examples of this type of decision can be found in WSIAT Decision Nos. 1365/14<sup>7</sup>. 58/178, 844/179, and 648/1410 which the WSIB would be aware of, yet they still try to use the wrong test for causation. We believe that it is worth noting there is a reference to an adjudicative support document Work-Related Communicable Illness mentioned in paragraph 13 of WSIAT Decision No. 58/17 (see footnote 8 below). This document represents the adjudicative approach mentioned in the policy consultation notice online and provided via email by WSIB's Consultation Secretariat. Holding a claim to a higher standard than required by the WSIA simply because of the type of injury, disease, or disability it causes is a failure to properly administer the Act.

The decisions cited above reflect the long-standing application of the proper legal standard recognizing common law principles in the worker's compensation context. WSIAT Decision No. 915 states on page 99 that,

"the Panel is satisfied to conclude at this point that at least the Legislature cannot have intended to provide workers with less coverage for disabling consequences of an industrial injury than the common law provides for disabling consequences of negligent injuries.

Furthermore, that the plain-meaning of the words leads to that conclusion should come as no surprise. There is nothing in the historical record to suggest that in giving up the right to sue and the right to damages for pain and suffering in exchange for the no-fault

https://www.canlii.org/en/on/onwsiat/doc/2014/2014onwsiat1767/2014onwsiat1767.pdf

https://www.canlii.org/en/on/onwsiat/doc/2017/2017onwsiat160/2017onwsiat160.pdf

https://www.canlii.org/en/on/onwsiat/doc/2017/2017onwsiat1024/2017onwsiat1024.pdf

https://www.canlii.org/en/on/onwsiat/doc/2014/2014onwsiat805/2014onwsiat805.pdf



<sup>&</sup>lt;sup>7</sup> WSIAT Decision No. 1365/14

<sup>&</sup>lt;sup>8</sup> WSIAT Decision No. 58/17

<sup>9</sup> WSIAT Decision No. 844/17

<sup>&</sup>lt;sup>10</sup> WSIAT Decision No. 648/14

#### USW D6 SUBMISSION RE. COMMUNICALBE ILLNESSES DRAFT POLICY

protection, it was intended that workers would accept, as well, a reduced breadth of protection in respect of consequential damages." (2<sup>nd</sup> last and last paragraphs)<sup>11</sup>.

This decision was cited in WSIAT Decision No. 1963/99 demonstrating that despite any changes in the Act, common law doctrines still apply to compensation decisions and provides an excellent summary of the application of common law principles in the workplace safety and insurance scheme beginning at paragraph 114. The most applicable for the purpose of communicable diseases is noted in paragraph 115 stating that,

"The law does not excuse a defendant from liability merely because other causal factors for which he is not responsible also helped produce the harm: Fleming, *supra*, at p. 200. It is sufficient if the defendant's negligence was <u>a</u> cause of the harm: *School Division of Assiniboine South, No. 3* v. *Greater Winnipeg Gas Co.*, <u>1971 CanLII 959 (MB CA)</u>, [1971] 4 W.W.R. 746 (Man. C.A.), at p. 753, aff'd <u>1973 CanLII 1313 (SCC)</u>, [1973] 6 W.W.R. 765 (S.C.C.), [1973] S.C.R. vi; Ken Cooper-Stephenson, *Personal Injury Damages in Canada* (2nd ed. 1996), at p. 748."

Excusing the employer of their liability under the WSIA for a work-related disease because there isn't a public health emergency declared defies logic and the law.

A natural course for justice to follow is from a lower court to an upper court to hear any appeal; the lower courts don't have the authority to direct or restrict the jurisdiction of the upper court. The application of s. 126 of the WSIA combined with this draft policy defies that course or even rule of natural justice. Policy 11-01-02 dictates that,

"The WSIB's decisions and practices must be consistent with the provisions of the Act and the rules of natural justice."

The proposed policy for communicable illnesses isn't consistent with either the provisions of the Act or the rules natural justice.

Previous consultations, KPMG audits, ODAP Final Report, and external reviews have all encourages the WSIB to review its practices in light of WSIAT Decisions that overturn their decisions. Not once was it suggested that the WSIAT should be in line with the WSIB's adjudicative approach, or that the WSIB should implement a policy to bind the Tribunal to an approach that was soundly rejected due to it being an improper legal test. This clearly indicates that the WSIB is abusing the authority granted to it by the WSIA.

 $\frac{\text{https://www.canlii.org/en/on/onwsiat/doc/1987/1987canlii1258/1987canlii1258.html?searchUrlHash=AAAAAQA}{\text{MY2hyb25pYyBwYWluAAAAAAE\&resultIndex=2}}$ 

<sup>&</sup>lt;sup>12</sup> WSIAT Decision No. 1963/99



<sup>&</sup>lt;sup>11</sup> WSIAT Decision No. 915

Another departure from the provisions of the WSIA found in the draft policy is under the heading 'Prevention of communicable illnesses'. The definition for occupational disease includes.

"a medical condition that in the opinion of the Board requires a worker to be removed either temporarily or permanently from exposure to a substance because the condition may be a precursor to an occupational disease."

S. 15(2) of the WSIA states that workers who have an occupational disease are entitled to the same benefits as a worker who suffers a work-related injury. A worker who is removed from work due to an exposure or condition that is a precursor to an occupational disease would therefore be entitled to loss of earnings and other benefits prescribed under the WSIA. The departure from this, as suggested in the draft policy, is an injustice.

The above interpretation isn't novel, and in fact, the WSIB has a Policy that addresses this type of situation for workers exposed to radiation. Policy 16-02-17 *Removal of Workers from Radiation Exposure* provides an example of how the above noted definition for occupational disease should result in benefits when the worker is removed from the exposure and no alternate suitable work is found. There is no justification to depart from the WSIA or the example of its application as provided in Policy 16-02-17.

Prior to the passing of the first workers' compensation act, injured workers had no recourse but to try to sue their employer. The courts at that time dismissed the vast majority of cases based on what is now referred to has the unholy trinity of defenses, all of which remain specifically inapplicable in s. 116 of the WSIA. As previously cited, the WSIA provides presumptions in sections 13(2), 15(3), 15(4), and in addition to those presumptions it provides firefighters with a rebuttable presumption for certain diseases through regulation. The benefit of doubt is also unique to the workers' compensation system, and all of this would suggest that the WSIA intends for injured workers to have access to justice that is more lenient than provided at common law in exchange for giving up the right to sue with limited prescribed benefits available.

An issue with the administration of that system was identified in the early 1980s and as a recommendation of a government commissioned review the Tribunal was formed. This provided workers with an independent administrative justice agency to hear their appeals of WSIB decisions. This attempt to bind the Tribunal to an ill-conceived and poorly written policy will undo all the progress made over the last century. The very agency charged with administering the WSIA shouldn't be the one responsible for its demise.

#### **Conclusion:**

Our position is that this policy isn't authorized by the WSIA, and it conflicts with accepted legal principles including the rules of natural justice. We ask that the WSIB

#### USW D6 SUBMISSION RE. COMMUNICALBE ILLNESSES DRAFT POLICY

recognize the errors made by scrapping this draft policy and developing one that applies the proper legal test for causation as well as complies with all applicable legislation.

We would be happy to provide any assistance with this type of endeavour and welcome a renewed consultation process that starts with a policy described herein.

Respectfully submitted on behalf of USW District 6 on March 28, 2023, by

Sylvia Boyce and Andy LaDouceur





#### Viana Roofing & Sheetmetal Ltd.

74 Advance Rd, Toronto, ON M8Z 2T7
Tel: 416.763.2664/Fax: 416.763.5195
info@vianaroofing.com
www.vianaroofing.com



March 28, 2023

Consultation Secretariat, Policy and Consultation Services Workplace Safety & Insurance Board 200 Front Street West Toronto, Ontario M5V 3J1

Re: WSIB Communicable Illness Policy Consultation

Dear Consultation Secretariat:

I am writing to provide comment on the Board's "Draft Operational Policy, 15-03-15, Communicable Illnesses" ("Draft Policy") as outlined on the Board's webpage "Communicable illnesses policy consultation". The CEC is in general agreement with the submission of L.A. Liversidge on this matter.

**Legal analysis:** It is strongly recommended that this consultation process commence afresh after the development and release of an academic level legal paper addressing the meaning and application of the significant contribution test as it applies to communicable illness claims.

**Entitlement assessment:** The policy should then be consistent with that analysis and focus on guidance to establish an identifiable employment related injuring process.

**Policy Language:** It is respectfully suggested that the Draft Policy could be clearer and more succinct. There are many redundant phrases which offer little adjudicative or policy guidance and leaves the application and assessment of the policy unclear.

I would be pleased to discuss this matter at your request.

Yours truly,

Viana Roofing & Sheet Metal Ltd.

MartuelloaCosta, Arch. Tech

#### **Ontario Legal Clinics'**

#### **WORKERS' COMPENSATION NETWORK**

## Réseau d'échange des cliniques juridiques de l'Ontario sur la loi des accidentés du travail

Reply c/o: Injured Workers' Community Legal Clinic, 815 Danforth Avenue, Ste. 411, Toronto, ON M4J 1L2 Tel: 416 461-2411 Fax: 416 461-7138

28 March 2023

WSIB Consultation Secretariat Consultation Secretariat@wsib.on.ca

Dear Consultation Secretariat:

Re: Communicable illnesses policy consultation

The Ontario Legal Clinics' Workers' Compensation Network is comprised of legal workers who handle workers' compensation cases from Ontario's 71 community legal aid clinics. Our members are involved in individual representation, continuing public legal education, and development of law and policy reforms. Many of our members have practiced workers' compensation law for several decades and the Network is a group of the most highly experienced workers' compensation advocates in the Ontario Legal Clinics.

#### A separate Policy for COVID-19

We have reviewed the comments by Michael Green and other colleagues who make the case for a separate policy on COVID-19. We agree that a policy specifically on COVID-19 is one of most important policies the WSIB could make. The number of workers who have died or will die, or who have suffered or will suffer from serious health consequences, as a result of exposure to the COVID-19 virus at work will exceed the number for any other disease with the possible exception of occupational cancer. COVID-19's consequences have afflicted, and will afflict, much younger workers than occupational cancers, and the work-acquired infections will also affect their families because of its communicability. COVID-19 is significantly different from the common cold and influenza and we agree that it deserves its own policy.

#### "Determining whether the worker contracted a communicable illness"

This section provides that entitlement is on order if "one or both" of 2 pieces of evidence are provided but that evidence may not be necessary in 3 or more circumstances in which case there are 4 or more alternative pieces of evidence that may support entitlement.

This is confusing and prone to misinterpretation which may result in inappropriate claim denials. In addition, the WSIB is required to decide each claim on the evidence provided. The question of whether the WSIB feels the worker has a legitimate reason for not having a clinical or laboratory test is not relevant to the criteria for entitlement in the legislation.

The same criteria could be restated more clearly as follows:

In addition to other relevant evidence gathered during the adjudication of a claim, one of the following will generally be necessary to establish the worker has or had at the relevant time a specific communicable illness:

- 1. laboratory confirmation of current infection (e.g., positive laboratory or diagnostic test result), or
- 2. a diagnosis by a treating health professional qualified to provide such a diagnosis based on a clinical assessment of the worker during the period of illness.
- 3. In the absence of laboratory or clinical evidence, decision-maker will consider the diagnostic criteria for the communicable illness and the available evidence such as:
  - o a laboratory test to detect a previous infection (e.g., antibody test)
  - o the worker's presentation (i.e., signs and symptoms)
  - o the advice or opinion of a medical consultant.

#### "Determining whether the communicable illness was contracted in the course of employment"

Decision makers must be guided by the evidentiary principles of workers compensation law. In our experience many operating level decisions do not apply, or do not understand the legal test of causation or the statutory requirement to decide in favour of the claimant when the evidence is evenly balanced.

The draft policy provides that "The inability to identify a specific work-related contact source for the worker's communicable illness does not mean the worker did not contract the communicable illness from exposure occurring in the course of employment." This is a helpful expression of the WSIB's obligation to make a decision for or against an issue based on whatever evidence there is.

In addition, the policy should explain that it is not an acceptable decision to conclude that 'I am not satisfied that the claimant has provided evidence that the illness was work related.' A negative decision must explain the reasons why the decision maker has concluded that the work related exposure did not make a significant contribution to the development of the illness.

The draft policy continues "In the absence of a specific work-related contact source, the decision-maker must determine the issue of whether the communicable illness was contracted by the worker while in the course of employment after weighing all of the available relevant evidence."

This is correct but too vague to properly guide decision makers. This is where the policy should specifically restate and explain in detail, with examples, the "significant contributing factor" test for causation and the application of s.119(2) of the WSIA regarding when "the issue shall be resolved in favour of the person claiming benefits."

#### "Determining whether the communicable illness arose out of employment"

The draft policy provides

"A worker's employment will have made a significant contribution to contracting a communicable illness when the decision-maker is satisfied that:

- the employment placed the worker at an increased risk (i.e., increased likelihood) of contracting the communicable illness as <u>compared to the risk experienced by the general</u> public during ordinary or routine activities of daily living, and
- the communicable illness was contracted by the worker from exposure that occurred in the course of their employment as a result of the identifiable increase in risk.

The worker's employment will generally not have made a significant contribution to contracting the communicable illness when these conditions are not met."

This wording does not accurately reflect the significant contributing factor test of causation. It would be reasonable to state:

A worker's employment is presumed to have made a significant contribution to contracting a communicable illness when the decision-maker is satisfied that:

• the employment placed the worker at an increased risk (i.e., increased likelihood) of contracting the communicable illness as compared to the risk experienced by the worker during their ordinary or routine activities of daily living,

The question is not whether the workplace placed the worker at greater risk than the general public. The question is whether the workplace was a greater risk than the activities of this individual. An injured worker may take strict precautions outside work, leaving little or no risk compared to the general public who goes shopping, eats out in public restaurants, takes public transit, etc.

Whatever examples you provide here to illustrate the significant contribution test, they will not be an exhaustive list of all possible examples of the significant contribution test. Therefore it is overly restrictive and inappropriate to state that the "worker's employment will generally not have made a significant contribution to contracting the communicable illness when these conditions are not met."

The draft policy goes on to provide that there is an increased risk of contracting the illness in the workplace if "the rate of the communicable illness is significantly higher in the worker's place of work than in the general population." "Significantly higher" is a limitation on claims that is not defined and will create obstacles for initial entitlement. The word "significant" should be deleted.

The second example of increased risk is "the worker's employment activities create opportunities for exposure to and transmission of the communicable in excess of the opportunities associated with ordinary or routine activities of daily living." In keeping with the revised wording in italics above, this should be clarified "in excess of the opportunities associated with ordinary or routine activities of daily living" of this worker.

The draft policy states "Employment-related activities that may create opportunities for exposure to and transmission of a communicable illness in excess of the norm include, but are not limited to:
- activities that require a worker to have direct <u>and prolonged</u> close contact with one or more person(s) <u>known to have or suspected</u> of having the communicable illness in the context of delivering <u>health care</u>, <u>personal care</u>, <u>emergency aid</u>, <u>custody</u>, <u>or transport to these persons</u>"

Where there is evidence that worker got the illness after direct and prolonged close contact with one or more person(s) known to have or suspected of having the illness, entitlement is obvious and one does not need a policy to explain that. The medical science does not require "prolonged" exposure, a brief exposure is sufficient to transmit the illness, so the word "prolonged" should be deleted. The list of occupations is unnecessary. If a list of occupations is to be included it should be evidence based. From the experience with COVID-19, other examples of direct, repeated close contact with coworkers, customers and clients includes workers in manufacturing settings, meatpacking plants, taxi drivers, retail and grocery stores, and restaurants.

#### "Community-acquired communicable illnesses"

It is correct that many communicable illnesses are highly transmissible and can be prevalent in the general population. However, we disagree with the policy generalization that "Therefore, a worker who contracts one of these communicable illnesses in the course of employment is generally not entitled to benefits unless the worker's employment increased their risk of contracting the communicable illness in some additional way." We are concerned that this section creates a presumption against entitlement that is inconsistent with the legislation. Each claim must be decided on the basis of the evidence available. Entitlement should not be denied because the worker's employment did not increase their risk of contracting the communicable illness. The decision maker must consider the workers actual employment exposure and explain why nothing in that exposure could have made a significant contribution to the development of the illness.

#### **Public health emergency**

The policy provides that "During a government-declared public health emergency related to a communicable illness, a worker's employment-related risk of contracting that communicable illness may be increased ..." This can assist with entitlement decisions but should be carefully worded so as not to imply that the adjudication should be different in the period leading up to or following a government declared emergency. The fact that these are "government" declarations confirms that they are political decisions not based solely on medical science. The rates of transmission, infection, hospitalization and death may be just as high before and after the public health emergency.

#### Loss of earnings (LOE) benefits and period of communicability

This section does not mention disability related impairment. The worker may be unable to work beyond the period of communicability due to the onset of more severe symptoms. The policy should note that LOE can be provided beyond the period of communicability if there is medical evidence stating the worker is unable to return to work or if they require restrictions that cannot be accommodated by their employer. The duration of entitlement must be decided on the evidence of each claimant, not on the basis of usual healing times.

This can be an example of the "thin skull principle" and that principle should be explained in detail, with examples, in this section of the policy. This is particularly important because some individuals will experience more intense symptoms and medical complications for unknown reasons or possibly because of an asymptomatic pre-existing condition.

#### Prevention of communicable illnesses

The draft policy says "A worker who is exposed to a communicable illness in the workplace, but free of illness (i.e., symptom-free and no laboratory confirmation or clinical diagnosis), may be legally required to self-isolate or may be sent home by the employer. Workers who are free of illness do not have entitlement to benefits under the Workplace Safety and Insurance Act." This is not consistent with the definition of "occupational disease" in s.2 of the WSIA which includes "a medical condition that in the opinion of the Board requires a worker to be removed either temporarily or permanently from exposure to a substance because the condition may be a precursor to an occupational disease."

An example of the correct policy approach may be found in the WSIB's treatment of uranium miners who have reached their maximum allowable level of exposure to radiation. They are removed from the workplace and receive compensation for lost earnings. Policy 16-02-17 states, "Uranium miners and mill workers who have been exposed to the maximum radiation exposure level of 2 Working Level Months (WLM) per quarter and 4 WLM per annum may be entitled to benefits while the workers are obliged to remain out of the radiation exposure environment." The same should apply to workers sent home by their employer as a result of a work related communicable disease.

#### **APPENDIX**

An appendix like this can be helpful in claims adjudication. There should be a commitment that the information contained in the chart will be subject to periodic review in order to remain up-to-date with the most contemporary scientific information. There should also be a qualifying statement which outlines that the information in the chart is general in nature and that if an individual's symptoms are different or prolonged, they may still be entitled to WSIB benefits.

Thank you very much for considering our views on the draft policy. We would be pleased to meet with you if further discussion would be of assistance.

Yours truly,

Ontario Legal Clinics Workers Compensation Network

Per:

John M. Kumon

John McKinnon

Co-chair



#### **WORKERS' HEALTH AND SAFETY LEGAL CLINIC**

180 Dundas Street West, Suite 2000, Box 4, Toronto, Ontario M5G 1Z8 Tel: 416-971-8832 • Toll free: 1-877-832-6090 • Fax: 416-971-8834 www.workers-safety.ca

28 March 2023

Via Electronic Mail

Communicable Illnesses Policy Consultation Workplace Safety and Insurance Board 200 Front Street West Toronto Ontario M5V 3J1

**RE:** Draft Communicable Illnesses Policy

To Whom It May Concern:

I am writing to provide submissions with respect to the above referenced consultation.

#### Who We Are

By way of background, the Workers' Health and Safety Legal Clinic ("the Clinic") is a community legal clinic funded by Legal Aid Ontario. Our mandate is to provide legal advice and representation to non-unionized low wage workers in Ontario who face health and safety problems at work. We have appeared before the Ontario Labour Relations Board on behalf of workers who were fired for raising occupational health and safety concerns. We have also assisted federally regulated workers with unlawful reprisal complaints before the Canada Industrial Relations Board.

The Clinic represents workers who are injured on the job with respect to their workers compensation claims before the Ontario Workplace Safety and Insurance Board ("the WSIB" or "the Board") and the Ontario Workplace Safety and Insurance Appeals Tribunal, workers who have reprisal claims under the Ontario *Employment Standards Act, 2000*, workers who have been discriminated against because of the workers' compensation claim, and workers who have been wrongfully dismissed.

#### Pandemic Related Policies

It is submitted that the Policy be reconsidered. This policy would (theoretically) cover entitlement for the common cold and the Covid-19 Pandemic. As a result of the pandemic, as a society we have seen lock-downs, unresolved complaints in the form of "long Covid", secondary conditions, and health and safety concerns that can impact a worker's entire family. Such scenarios should be covered more fully in a separate policy.

-1-

#### A Broader Approach to Determining Entitlement Is Necessary

The proposed approach to determining entitlement is unduly restrictive and should be broadened. Given that this policy attempts to span the entire gambit of communicable diseases from the relatively minor to one where a worker may be ordered to stay at home, determining entitlement should be simplified.

The WSIB should not be required to determine the legitimacy of not seeking health care or laboratory testing during the period of illness. There could be many reasons and their legitimacy should not be left to individual Case Managers. Policing a worker's action or inaction is not the purpose of the compensation scheme. It would also have the added benefit of simplifying the policy by removing this step.

It is therefore proposed that the heading "Exception to laboratory or clinical evidence of current infection" and the next two paragraphs be removed from the policy. This would be more succinct as it move from the bulleted criteria to a discussion of what happens in the absence of that information.

#### Determining Entitlement vs. Determining Disentitlement

Consider the scenario where two separate workers, who both live alone, work in the same office where a third worker was found to be positive for an airborne illness. One of the two workers drives to work alone. The second worker travels by public transit for one hour each way. The wording of the policy makes it likely that only one of these workers would be granted entitlement based on the "opportunities that existed for exposure to and transmission of the communicable illness both inside and outside of the worker's employment" bullet point. The policy, as worded, should not put workers into a position that they are required to disprove a fact or supposition. The above referenced bullet point should be removed from the policy.

#### The Significant Contribution Test Applies

Everything under the headings "Determining Whether the Communicable Illness Arose out of Employment" and "Community-Acquired Communicable Illnesses" should be deleted in favour of a recitation of the significant contributing factor test.

While the intent of the proposed deleted portions is understood, it is overly broad in application. A parallel comparator would be the policy related to heart conditions. Having a heart attack at work does not make it work related, one must look at the nature of the work. With respect to communicable illnesses it isn't a question of work-related illness but rather work-related infection. An illness that potentially can be from a cause outside of the workplace does not justify creating a fictionally high bar that alleges workplaces are not a place of greater risk.

#### Issues Not Covered – Reconsideration on New Data

The policy should address reconsiderations as it relates to new information. The policy does not cover what happens if changing data informs new methods of infection. With respect, the WSIB should not download reconsideration requests to workers. The policy should contemplate or enshrine that the WSIB will take responsibility for keeping current with scientific data. As part of that responsibility the WSIB should undertake to reconsider decisions where new information can potentially change entitlement decisions.

#### Issues Not Covered – Work Transition Considerations

As a service provider, the WSIB is bound to follow the *Human Rights Code*. There may, like with Covid-19, be illnesses that disproportionately affect specific groups (e.g. the elderly or the young). When Work Transition Plans are considered by the WSIB, it should be made clear that Work Transition Plans are to take into account the individual circumstances of workers. For example, a sales job or cashier job during a pandemic would not be suitable for a worker who lives with a particularly susceptible group of individuals.

Thank you for your attention to this matter. I look forward to the publication of a revised policy taking into account stakeholder concerns.

Yours truly,

John Bartolomeo

John Bartolomeo Lawyer/Co-Director

# WSIB CONSULTATION: COMMUNICABLE ILLNESSES POLICY



Response to Workplace Safety & Insurance Board (WSIB) Consultation

Respectfully submitted by
WSPS Advisory Committees,
Representing Ten Ontario Subsectors

In response to the WSIB's call for written feedback March 2023





#### INTRODUCTION

The employer members of the advisory committees of Workplace Safety and Prevention Services (WSPS) appreciate the opportunity to respond to the Workplace Safety & Insurance Board's (WSIB) consultation on the draft Communicable Illnesses policy.

The material in this submission has been developed by the volunteer members serving on ten WSPS advisory committees, representing agriculture, manufacturing and service industries.<sup>1</sup>

The industries we represent collectively serve more than four million Ontarians.

The WSPS advisory committee mandate is advisory in nature. We serve as the voice of the industry in providing WSPS with sector-specific insight and expertise to help eliminate workplace injuries, illnesses, and fatalities, and in representing our industries in Ministry of Labour, Immigration, Training and Skills Development (MLITSD), Workplace Safety & Insurance Board (WSIB) and Ontario Prevention System stakeholder consultations.

Our volunteer role falls into three categories:

- 1. Strategy: Contribute to the development of injury prevention strategies.
- 2. Solutions: Support development of new health and safety initiatives, tools, and solutions.
- 3. Advocacy: Engage in problem-solving dialogue with the prevention system, Ontario ministries, and the research community.

Thank you for this opportunity to provide feedback.

We are pleased to lend our consolidated voice to this consultation.

<sup>&</sup>lt;sup>1</sup>It is important to emphasize that the comments and recommendations in this submission were authored by the WSPS advisory committee members, not WSPS itself.

COVID-19 brought to light a real issue with contagious illnesses and pandemics in our society. There are obvious and good reasons for supporting public policy measures to encourage and enable workers to stay home when ill. Containing and reducing the spread of communicable diseases is a necessity to the wellbeing of our society and to reduce stresses on an overburdened health care system.

Illness was previously typically exposure to chemicals or biological agents related to the work process. Illnesses such as the flu and common colds are widespread and common in everyday life. Employers do not "cause" communicable illness. It is almost impossible to control the risk, given personal hygiene habits (such as hand washing) are not truly something employers can enforce.

Much has been learned from the pandemic. Employers have learned, as has all of society, that distancing, handwashing, sanitizing, and communication is an important prevention activity to help prevent prevalent communicable illness from spreading. However, these illnesses are quite prevalent in society. Children in school and daycare settings are most frequently infected, then sharing with families who then may carry the illness to co-workers.

Employers simply cannot control the risky activities engaged in by workers outside of work. To hold employers accountable when it can be obtained and spread through so many mechanisms dilutes the resources of employers in the prevention of industrial accidents and occupational disease.

The policy acknowledges that communicable illnesses such as the common cold are highly transmissible and prevalent throughout the general population. If communicable illness becomes an allowed entitlement under the WSIB insurance scheme and impacts employer premiums, it may increase employer objections to claims allowed and employee appeals for claims denied. There will be a requirement for more adjudicators and increased volumes of appeals. Proving where a worker contracted an illness will not be easy. Although the policy speaks to rates of infection broadly in the community, tracking whether a workplace was the cause, verses being exposed in any public setting, to children, travel, etc., will be a challenging task.

The policy does propose some limits, though they are not sufficient to address the potential for abuse of the benefits, the increase in claims, costs, and appeals, as well as the added strain upon an already overburdened medical system.

The policy is generally clear and easy to understand for people with a middle level of technical knowledge when evaluating what to report. For those who are not very familiar with technical concepts, practical examples would be helpful, such as those provided for employment risk factors. Overall, the policy could benefit from being more accessible to those who may not have a high level of technical knowledge.

There are a few areas where further clarification would be helpful. Below are a few comments, recommendations and questions submitted by members of the ten subsector advisory committees:

#### A. QUESTIONS

- 1. The policy should include definitions and provide more clarity on the following:
  - Significant contribution
  - In person interaction
  - o Diagnostic criteria
  - Trivial contributing factors
  - o Excess of the norm
- 2. Can WSIB's definition align with public health definitions of Communicable disease? The current "definition" could include a cold, flu, strep throat etc.
- 3. How would the WSIB define "out of the course of work"- i.e. if one is having lunch with someone who is sick but do not work together would that meet the decision threshold? It is going to be very hard to track ALL illnesses back to the workplace without tighter definitions.
- 4. Not clear how this is to be reported by medical, employer and employee. Will reporting use the same forms 6,7, 8 and if so, will the forms be modified to capture different/additional information?
- 5. What are the metrics used for determining whether the risk is higher or lower Workplace vs general population?
- 6. How will these cases be reviewed by WSIB? Will there be additional manpower?
- 7. Will pharmacists be considered a professional opinion in determination of the illness?
- 8. Will other communicable diseases be allowed if they are not listed in the Appendix?

#### **B. COMMENTS & RECOMMENDATIONS**

#### **ENTITLEMENT CRITERIA**

- It would be useful to provide guidance on how workplaces can demonstrate due diligence in not being a significant contributor to contracting a communicable illness, or what evidence they can provide during the claim process.
- How will the WSIB medically determine whether a significant contribution was made to contracting the communicable illness? i.e. employees who take the bus but work alone and contracted COVID.
- Include assessment of non occ conditions.
- This section should include an explanation of significant contribution as entitlement should be based on pandemic vs. work related. As we cover the cost of benefits, the employer should score significantly higher than the pandemic and evidence cannot be weighted as 50-50. Evidence in total must be compatible with occupational conditions (80-20, employer, rather that 50-50). Simply providing employment should not make it work related. WSIB COVID questionnaire Q7 should be answered as Yes or NO, and unknown cannot be a factor of being work related.

#### **IMMUNIZATION STATUS**

- This implies that the policy was written for COVID. This puts a significant burden on employers. Everyone has a part to play - employers MUST still make the workplace safe, however if a worker is not going to take steps to protect themselves, why should someone else be responsible. Safety is everyone's responsibility.
- There is a clear statement that entitlement to benefits will not be denied solely because they are not immunized. Reflecting on the scenario in Fall of 2021, when requiring vaccination was our best control measure for the hazard of COVID-19 in the workplace. There needs to be an element of engaging in measures to protect oneself and others i.e. in the case of COVID, it was vaccination and self-screening and masking and distancing and HVAC and handwashing... etc. all of our measures in the hierarchy of control. This ought to reflect in the "Eligibility" section an acknowledgement that to be eligible for WSIB benefits there must have been a good faith effort on the individual's part to comply with all measures of control put in place by the employer. An individual's failure to comply with control measures implemented by the employer needs to be weighed into the eligibility requirements.

#### DETERMINING WHETHER THE WORKER CONTRACTED A COMMUNICABLE ILLNESS

For the second criteria, suggestion would be to add the following: "a diagnosis by a treating health professional qualified to provide such a diagnosis based on a clinical assessment of the worker during the period of illness where laboratory or at-home testing confirmation is not possible". Without this added provision there might be a lot of presumptive COVID cases and the definition of "laboratory confirmation" could be a barrier as there are doctors who will not see someone if they are COVID positive but rapid testing remains available. This additional provision could remove the ambiguity.

#### **EXCEPTION TO LABORATORY OR CLINICAL EVIDENCE OF CURRENT INFECTION**

- This exception requires a more definitive explanation.
- "laboratory confirmation is not available for the communicable disease" is an acceptable exception. A new communicable disease may be difficult to test for, similar to COVID.
- If applicable, it may be worth mentioning other types of laboratory testing besides clinical evidence.
- Clinical evidence saying that the infection is work related should not be considered by itself.
   Timely testing/ timely medical is as important here as it is in other compensable incidents.
   During the occurrence of a pandemic, medical testing is required without exception.
- Concerns that it may be hard to argue that the communicable illness did not "arise in and out of the course of employment"
  - a. Policy should be adjudicated similarly to a gradual onset claim, where the presumption does not apply, however reading this policy it seems to attach an automatic presumption. This limits the employer's ability to provide contrary evidence. It does not seem like it is being adjudicated on a balance of probabilities. For example: how does mandatory PPE requirements enforced by the employer play into this? This is still and likely will remain prevalent in many

- healthcare settings. As we know, if it is not prevalent in the community, it is unfair to presume it occur in the course of employment.
- b. "laboratory testing requirement" This should not count as a medical document. This can be falsified, as it is not specifically attached to a worker's name and completed in a healthcare setting.
- Additional clarification if supporting medical information is required and if these bullet points are stand alone factors.
- "A claim for a communicable illness may be adjudicated in the absence of laboratory or clinical evidence from the relevant time indicating the existence of a current infection in the worker if the worker has or had a legitimate reason for not seeking health care or laboratory testing during the period of illness". If they cannot seek healthcare, it contradicts WSIB Operational Policy 11-01-10, i.e., proof of accident and compatibility to diagnosis. How do they propose to adjudicate if there is no evidence? If there is no test for the type of the virus/bacterial infection, then specifically state this. This should not be a catch all and leaves it very vague.
- "the worker's presentation (i.e., signs and symptoms) and whether it is compatible with the signs and symptoms of the communicable illness established to exist in the workplace" Perhaps referring to the "standard incubation and recovery periods" may be beneficial so that, if this is exceeded by the worker, ongoing entitlement should not be warranted on this subjective element (i.e. similar to pain component).
- Suggestion is to amend the first criteria to state "the illness does not have an incubation period of more than four days as noted in the Appendix". A norovirus or flu case seems to be a bit more obvious compared to COVID and it would be good for workers to rapid test at minimum.
- Suggestion to amend the second criteria to state "the worker cannot reasonably access or does not qualify for diagnostic testing that is not otherwise available to the public". Public transit issues or lack of PCR testing should not be considered legitimate reasons.

### DETERMINING WHETHER THE COMMUNICABLE ILLNESS WAS CONTRACTED IN THE COURSE OF EMPLOYMENT

- This section needs to be more specific it would be helpful to outline what relevant evidence can be considered from the employer.
- Consider the inclusion of CDC as a factor in determining diagnostic criteria.
- "Suspected" is vague and not a conformation, therefore this should be changed to "confirmed" i.e. outbreak or confirmed case
- "The inability to identify a specific work-related contact source for the worker's communicable illness does not mean the worker did not contract the communicable illness from exposure occurring in the course of employment. In the absence of a specific work-related contact source, the decision-maker must determine the issue of whether the communicable illness was contracted by the worker while in the course of employment after weighing all of the available relevant evidence"

This section again leads to a presumption element but makes it very difficult for the employer to rebut as they are relying on subjective evidence (i.e. confirming actual cases in the worker's family or confirming if they do in fact in wear PPE while in the community).

 This policy needs to be based on science, this entire clause can be another open ticket to allowing claims that are questionable and unfairly penalizing employers time and expense to have to appeal claims with no evidence to show one way or another.

#### **EMPLOYMENT RISK FACTORS**

- These factors need to be assessed on a trivial vs. non-trivial basis. Defining trivial & non-trivial factors will help to quantify risk.
- Increased risk factors should be taken into consideration but cannot be a deciding factor. Similar to Chronic MSD issues just because someone works in a high risk setting does not mean that their injury occurred in the workplace it really needs to be investigated properly. COVID exposed employers to these similar issues where a worker working during lockdowns was at greater risk but on many occasions, claims were allowed despite the workers level of risk being exponentially low. Instances of claims being allowed because someone had COVID in a 40,000 square foot facility and because another worker contracted it, their claim was allowed even though both workers never interacted and worked at alternate parts of the facility.
- Add "direct contact" information including definition and how frequency and duration can be a factor for applicable diseases such as COVID. Example, taken from Ontario's Covid Case Management document: were in close proximity (less than 2 meters) for at least 15 minutes or for multiple short periods of time without measures such as masking, distancing, and/or use of personal protective equipment depending on the nature of contact.

#### **COMMUNITY-ACQUIRED COMMUNICABLE ILLNESSES**

- It is good to note that the policy discusses community acquired communicable illness however when keeping COVID 19 in mind, it was very hard to pinpoint when an exposure occurred.
- While the policy provides good examples of situations in the healthcare sector, it would be useful to include examples from other contexts.

#### **PUBLIC HEALTH EMERGENCY**

- It is unclear whether workplaces are expected to take extra measures during a public health emergency. The policy should possibly indicate that ongoing updates through a public health emergency may impact entitlement up to 6 months from the period of communicability.
- We note that in-person interactions when appropriate PPE is worn, does not necessarily increase risk. If the exposure criteria that is outlined in the previous paragraphs is still utilized to make entitlement decisions this statement is fine. Consideration should be given to the safety parameters that have been put into place by the Employer, and the claim should not be auto adjudicated based on 'essential worker' status.

#### **COMMUNICABLE DISEASE CHART**

Will there be consideration on working nationally or setting a standard on compensable vs non-compensable? Ontario's incubation period is 1-14 days whereas other provinces may be up to 7 or 10 days. It would be ideal for national employers.

- Perhaps identify what the policy does not cover or consider farm workers who may be subject to avian flu (and sporadic cases). This could impact several workplaces.
- The examples provided in the document could include some other communicable diseases such as rabies, Tuberculosis or Q-fever. i.e. individuals who work in Biosafety laboratories and CAF, where there would be an inherent occupational risk.
- Hepatitis B is listed, but why not Hepatitis A and B?
- Perhaps conjunctivitis should be listed.

#### **ADDITIONAL COMMENTS**

- If not carefully worded, this policy may dilute safety budgets and ability to prevent catastrophic injury.
- Companies have sick policies where employees are paid so many sick days assuming it becomes a WSIB case – then employees would be paid by WSIB and not use their sick days. We wouldn't want them to double dip.
- Employees that come to work sick workplaces have a policy to keep people home if they are sick

   but if an employee doesn't follow it and then gets others sick that can result in WSIB claims for all the other employees.
- If a company has a good policy to stay away from work and they aren't interacting with the public —it would be hard for an employee to show they got sick at work. Would this be a consideration? Would WSIB consider this in determining a workplace exposure? If so, perhaps it can be included in the policy.
- Can some workplaces even be excluded from the policy? for example those that have no interaction with the public and would be at reduced risk.

#### **CLOSING REMARKS**

COVID-19 has taught us a great deal and we do recognize the real and pressing need to ensure individuals can stay home when they contract a communicable illness. There are employees that cannot afford a day without pay, which forces people to go to work, putting others at risk. There are employers who cannot afford a generous paid sick day plan.

Additional financial burdens placed on employers during an already unstable post COVID period carries the risk of business closures. There needs to be a balance to ensure workers can stay home and not infect others, while ensuring businesses can sustain operations with the costs being proposed. A thorough review is needed to do this in a manner that ensures all parties are adequately protected. Essential businesses need support to recover from the financial impact of COVID-19. It is significant that some smaller businesses will not be able to afford paid sick time for employees and could be forced out of business. It is critical to determine what type of minimum sick benefits should be mandated in all businesses.