



**Asthma and Work:
Facts for Workers in Ontario**

What is asthma?

Asthma is a disease that affects the airways in your lungs. People with asthma suffer attacks that make it hard to breathe. They cough, wheeze and feel tightness in the chest. Sometimes symptoms stop, then come back later. For some people, asthma can be severe, even leading to death.

Occupational asthma is linked to your work. You can get asthma from work when you breathe in (inhale) specific dust and chemical fumes in your workplace that set off attacks. People who work with chemicals, animals, birds or dust can get occupational asthma. (See table below.) Most workers do not get asthma from this kind of work.

People who already suffer from asthma can get work-aggravated asthma. When something at work makes their asthma worse, they have work-aggravated asthma.

There is no cure for asthma. Taking the right medicine and avoiding things that set off asthma attacks help you control it.

Asthma from your work can be prevented. For prevention information, see the section called 'More information'.

Who gets asthma because of work?

In Ontario, 300 to 400 workers report a claim for work-related asthma each year. We cannot give a full list of activities that put you at risk for occupational asthma. Changing work methods or processes may expose you to new materials at your workplace. Studies in the United States and Japan tell us that about 5 to 15% of asthma cases in adults are work-related.

Here are some types of work that can cause asthma in workers:

Materials worked with	Type of worker
Grains, flours, plants and gums	Bakers, millers, coffee bean baggers and handlers, gardeners, cigarette factory workers
Chemicals	Health care workers, aircraft fitters, brewery workers, aluminum cable solderers, electronics workers, fur dyers, laboratory workers
Animals, insects, fungi	Bird fanciers, entomologists, feather pluckers, flour mill workers, bakers, farm workers, snow crab and egg processors, grain handlers, oyster farmers, pigeon breeders
Isocyanates and metals	Boat builders, foam manufacturers, office workers, plastics factory workers, refrigerator manufacturers, toluene diisocyanate [TDI] manufacturers and users, printers, laminators, tanners, toy makers, cement workers, nickel platers, jewellery makers
Drugs and enzymes	Detergent manufacturers, food technologists, laboratory workers, pharmaceutical workers, poultry workers
Wood	Wood finishers, carpenters, timber millers, woodworkers, pattern makers

What are the different types of occupational asthma?

There are two types of asthma: allergic and non-allergic.

Allergic asthma

Allergic asthma has to do with your body's immune system. Your immune system protects you from things that can make you sick.

When you breathe in (inhale) foreign substances, your body creates proteins called antibodies to destroy them. Foreign substances include grain dust, fungus and solvent vapours. Sometimes your body reacts oddly to these antibodies. This makes you sensitive to the material you breathed in. Your airways can swell and the muscles can tighten or contract. These changes make it hard to breathe.

Allergic asthma is the most common kind of occupational asthma. You can become sensitive after only one contact with the material or after many contacts over time. Some substances will set off an asthma attack in workers who already have asthma. Allergic asthma can cause a very serious asthma attack that can lead to death.

Non-allergic asthma

Non-allergic asthma changes the airways in your lungs the same way as allergic asthma. You can get non-allergic asthma after you have contact with an irritant at work that affects your lungs. Irritants include chest infections or flu, exercise, cold air or sudden changes in air temperature.

Non-allergic asthma is the result of a single very high exposure to an irritant. Repeated contact with minor irritants can also lead to asthma.

What happens if you think you may have asthma?

1. Ask yourself these questions:

- do you get a runny or itchy nose, itchy or watery eyes, and sneezing or itchy skin when you are at work?
- did the problems start when you changed jobs?
- do you think any specific material at work is causing your problems?
- if you already had asthma, did it get worse since you started a new job or moved to a new work area?
- does your asthma improve when you are away from your job on weekends or vacations?

If you said yes to any of the questions, your work may be causing or setting off your asthma.

2. Write a list of the things you have contact with that might cause you harm. This list may include fumes, gases, smoke, chemicals and other irritants. Write down if your workplace is very hot, cold or dry, or if you have a hard time breathing. Get copies of the Material Safety Data Sheets (MSDS).

3. Take the list with you when you see your doctor. Tell the doctor if you know about other workers with the same kind of breathing problems. Your doctor or a specialist will send you for pulmonary function tests (PFTs). PFTs help the doctor find if there is damage or disease in your lungs.

Can you still work?

Explain the work you do to your doctor and how it affects your health. If the tests show that you have asthma, talk with your doctor about your choices.

If you have occupational or work-aggravated asthma, talk with your employer and file a claim with the Workplace Safety and Insurance Board (WSIB). The WSIB will write to your doctor for a copy of your medical report to see if you're entitled to compensation. A WSIB adjudicator will make a decision about your claim by talking to you, your employer and your doctor.

If you can still work, you need to be protected from exposure to irritants or things that set off your asthma. Your employer may change your work to protect you. With your doctor's help, you can control your occupational asthma and return to work.

What can your employer do?

Your employer is responsible for taking every reasonable precaution to protect you from exposure.

What can you do?

- Get involved in health and safety activities in your workplace.
- Contact your supervisor, health and safety representative or union for advice.
- Educate yourself about asthma.
- If you smoke, try to quit. Smokers are more likely than non-smokers to get lung problems.

Want more information about occupational asthma?

- Call the Canadian Centre for Occupational Health and Safety (CCOHS), 1-800-668-4284 or go to www.ccohs.ca/oshanswers/diseases/asthma.html on the internet.
- Read the WSIB's Resource Sheet for Workplace Health and Safety. You can get this by calling 1-800-663-6639 or at www.wsib.on.ca
- Look at the website of the Occupational Safety and Health Administration in the United States, at www.osha.gov/oshinfo/priorities/asthma.html
- Read the Ontario Lung Association's website on occupational asthma, at www.on.lung.ca/yourlungs/asthma_types.html#occupational
- Look at the American Lung Association website, www.lungusa.org/asthma/asthma.html

Workplace Safety and Insurance Board

Ontario's Workplace Safety and Insurance Board (WSIB) plays a key role in the province's occupational health and safety system. Funded by employers, the WSIB is one of the top 10 disability insurers in North America. In addition to a strong prevention mandate, the WSIB provides insurance for injuries and illnesses incurred in workplaces covered under the *Workplace Safety and Insurance Act* and supports early and safe return to work for injured workers.

This information is available in several languages by calling our information hotline at 416-344-4999 toll-free 1-800-465-5606 or Telephone Service for the Deaf (TTY): 1-800-387-0050