



# Safety talk

## Work-related asthma

Work-related asthma is caused by breathing in chemical fumes, gases, dust, or other substances on the job. It can result from:

- Exposure to a substance you're sensitive to—causing an allergy-type reaction called sensitization
- Exposure to an irritating toxic substance

### Explain dangers

When you breathe in certain chemicals, known as respiratory sensitizers, nothing may happen at first. But over time, your body may begin reacting to these chemicals and you can develop symptoms similar to those of a cold or mild hay fever. These symptoms include:

- Wheezing
- Chest tightness
- Shortness of breath
- Difficulty breathing
- Coughing

After being exposed to these chemicals over several months or even years, you can become sensitized to the point where even the tiniest trace of the substance will cause you to have a severe asthmatic attack.

If work-related asthma is not correctly diagnosed and steps are not taken to protect yourself or avoid exposure to these chemicals, asthma attacks can occur frequently, resulting in permanent damage to your lungs, a life-altering disability, or even death.

Workers who are most at risk of developing work-related asthma include those who perform these tasks:

- Cut hard wood
- Install foam insulation
- Use epoxy resins or glues
- Solder
- Often work with chemicals that may cause respiratory sensitization

In addition, people with allergies or with a family history of allergies are more likely to develop work-related asthma.

In cases where a person already has asthma, substances in the workplace can make their symptoms worse or increase the frequency of attacks.

Sensitized workers can experience symptoms either as soon as they are exposed to the sensitizer or several hours later—such as at home during the night.

Even if exposure to the sensitizer has stopped, asthma attacks can often continue for years after.

Work-related asthma caused by exposure to a chemical at the workplace can also be triggered by other substances, such as smoke, mould, irritant dust, or even cold weather.

### Identify controls

Read the WHMIS labels and Safety Data Sheets (SDSs) for the substances you work with. An SDS will tell you if a chemical is a respiratory sensitizer.

Some examples of respiratory sensitizers:

- Dusts from certain woods, such as western red cedar
- Isocyanates
- Mould
- Latex
- Polyurethane products

Replace any substance that is identified as a sensitizer with a less harmful substance.

If this is not possible, avoid exposure to workplace substances that may trigger an allergic reaction by doing the following:

- Isolate the work area where the sensitizer is being used or totally enclose the process
- Work outside or in areas that have adequate ventilation
- Set up local exhaust ventilation in the work area
- Use the required respirator as specified in the SDS
- Handle substances with care, such as using good housekeeping techniques to avoid spills

Report any concerns about exposure to sensitizers or any symptoms of workplace asthma to your supervisor. Tell your doctor if you work with respiratory sensitizers and visit them as soon as possible if you suspect you have symptoms related to asthma.

Treatment for workplace asthma is similar to that for other types of asthma and generally includes taking medications to reduce symptoms. For those who already have asthma, treatment for workplace asthma can prevent it from becoming worse.

### Demonstrate

Review the Safety Data Sheet (SDS) for a sensitizing chemical used in your workplace and discuss the hazards related to this chemical and the ways to prevent exposure.