



# Occupational Asthma

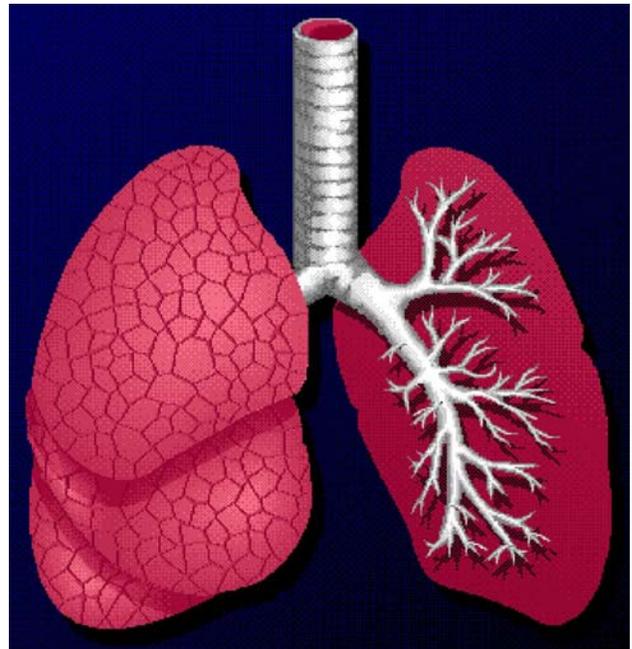
Occupational asthma is asthma that is caused by a substance inhaled at work. Although the contribution of workplace exposures to asthma may not always be clear, occupational asthma is considered to be the most common occupational lung disease.

## Who is at risk?

Many different substances encountered at work can stimulate a hypersensitive response in a worker and cause asthma. Exposure in the workplace to a sensitizer substance such as certain chemicals, wood dust or animal antigens can cause a previously healthy worker to develop symptoms of asthma after a period of time.

## What are the health effects?

The sensitizer substance can narrow the airway and reduce the air passage to the lungs. This is known as bronchial hyper-responsiveness due to workplace irritation. The sensitizer substance may have been previously tolerated by the worker and may not provoke that sort of reaction in others who are similarly exposed. For example, tobacco smokers are at a bigger risk to occupational asthma than non-smokers.



Some common sensitizer agents and groups of workers who may be exposed to them are listed in Table 1.

**Table 1**

Sensitisers	Occupations
Isocyanates	Spray painters, foam producers, insulation workers
Animal antigens	People who work with laboratory animals
Anhydrides Paper dust	
Fluxes	Plastic industry workers
Metals Flour	Librarians, bookkeepers, post office clerks
Wood dust Drugs	People who work in the electronics industry
	Welders, metal plating workers
	Bakers, millers
	Carpenters, saw mill workers
	Pharmaceutical workers

## Symptoms of occupational asthma

Symptoms include coughing, shortness of breath, wheezing and a tight chest. These symptoms occur during the working week and improve during absences from work, at weekends or during holidays.

## How to prevent occupational asthma

### 1. Provide information

There is sufficient knowledge available about occupational asthma to recognise and prevent the disease. Education in the workplace is important. Workers need to know about the disease and quickly identify any potential workplace causes for their symptoms.

Workers also need clear information about sensitiser substances and respiratory irritants encountered at work. Information on chemicals and other substances used at work should include any known sensitiser effects

## 2. Control exposures at work

Workplaces can prevent occupational asthma by eliminating potential sensitisers or by minimising exposure to them. This will not only prevent workers from developing asthma from exposures at work but can also provide a safe work environment for those who have preexisting asthma.

Some specific approaches that can be taken are:

- Minimise exposure to dust particles, vapour or aerosol and to excessive cold or hot temperature that can trigger occupational asthma.

- If elimination is not possible, try to substitute with a substance that is not a known sensitiser.
- Provide well-maintained ventilation systems to remove dust and other inhalable hazards.
- Ensure that adequate facilities for personal hygiene are provided at work.
- If exposures cannot be minimised, provide adequate protection to workers with suitable respiratory protective equipment.

## Further information

The Asthma Foundation in each State and Territory provides information, resources, guidance and support to the community regarding asthma. A trained asthma adviser will answer specific queries (telephone 1800 645 130).

The **Asthma Foundation of NSW** can be contacted by phone on 02 9906 3233.

**For further information and advice contact the Workers Health Centre**



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