



Asthma in the workplace

Information about identifying and managing asthma in the workplace.

**ASTHMA
FOUNDATIONS**
AUSTRALIA

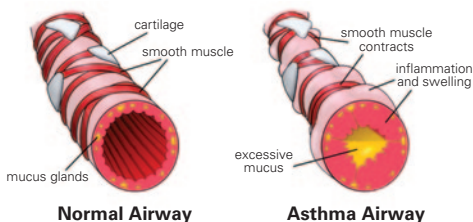
Disclaimer: Information in this brochure is not intended to replace professional medical advice. Any questions regarding a medical diagnosis or treatment should be directed to a medical practitioner.

Asthma in the workplace - you can do something about it

This brochure provides information about identifying and managing asthma in the workplace.

What is asthma?

People with asthma have sensitive airways in their lungs. When exposed to certain triggers their airways narrow, making it hard for them to breathe.



Three main factors cause the airways to become narrow:

- The inside lining of the airways becomes red and swollen (inflammation)
- Extra mucus (sticky fluid) may be produced
- The muscle around the airways tightens (bronchoconstriction)

Occupational asthma is the most prevalent occupational lung disease in developed countries, and can be severe and disabling.



There are varying forms of asthma in the workplace. They are:

1. Occupational asthma
2. Work aggravated asthma
3. Reactive Airways Dysfunction Syndrome (RADS)

1. Occupational asthma

Many substances in the workplace may cause asthma to develop in a previously healthy person; these substances are called sensitisers (see page 6). Exposure to a sensitiser at work may cause the airways to become sensitive, leading to the development of asthma. This usually occurs as a result of repeated exposures to a sensitiser over a period of time. The time taken before symptoms appear may vary from weeks to years. Symptoms do not usually appear after the first exposure.

Once the airways are sensitised:

- Continued exposure to the same sensitiser, even in very small amounts, can produce symptoms. It may result in more severe symptoms and perhaps permanent asthma
- Exposure to other triggers (e.g. cigarette smoke) may also produce symptoms
- Occupational asthma is hard to tell apart from other forms of asthma except that it may first appear in adulthood. Occupational asthma may be indicated by symptoms that:
 - vary during the working shift or week.
 - occur at night, in the morning after significant exposure, or during the working day.
 - improve over weekends or holidays.

Failure to detect occupational asthma early enough may lead to the development of permanent asthma, even after the person leaves the industry or the workforce. If you think you have occupational asthma, see your doctor or contact your local Asthma Foundation.

2. Work aggravated asthma

If a person already has asthma, triggers in the workplace may make their symptoms worse. This is called work aggravated asthma.

Workplace triggers may include:

- Tobacco smoke
- Exercise/activity
- Inhaled allergens (e.g. pollens, moulds, animal dander or dust mites)
- Changes in the temperature and weather
- Chemicals (e.g. isocyanates)
- Strong smells (e.g. perfumes, cleaners)
- Emotional factors (e.g. distress, excitement)
- Foods, preservatives, flavourings and colourings

Every person's asthma is different. Not all people will have the same triggers, nor will they react to every trigger listed above. You may not always know what triggers your asthma. It is helpful to identify triggers in order to avoid them however this is not always possible (e.g. colds and flu). Your doctor or local Asthma Foundation will assist you.



3. Reactive Airways Dysfunction Syndrome (RADS)

When inhaled, some substances may cause severe irritation in the airways. These substances are called irritants. They may cause symptoms similar to those of asthma. This is known as reactive airways dysfunction syndrome (RADS). This is usually the result of a single high exposure to a known irritant. Irritants may cause wheeze and shortness of breath in people who already have asthma. Symptoms usually appear within 24 hours of exposure.

Some known irritants include:

- Solvent vapours
- Corrosive mists (e.g. acid mist)
- Irritant gases (e.g. hydrogen chloride, ammonia, chlorine, sulphur dioxide, nitrogen dioxide)
- Irritant particles (e.g. dust, smoke)
- Some perfumes
- Cleaning agents

Irritants may also be found at home (e.g. cleaning agents). When using these products it is important to follow the directions on the container. Make sure there is adequate ventilation and use a mask if necessary.

Preventing asthma in the workplace

In contrast with usual forms of asthma, taking action early may prevent the problem.

1. Reduce exposure to sensitisers, triggers and irritants

Avoiding exposure to known asthma triggers and irritants can prevent workplace aggravated asthma and RADS. To prevent development of occupational asthma, exposure to sensitisers must also be prevented.

There are three common groups of sensitiser – substances of plant, animal and chemical origin. Some common examples are listed in the table below.

SENSITISER	OCCUPATIONS MOST AT RISK
Substances of plant origin	
Grain dust, wheat/rye dusts and flour	Food processors, grain handlers, millers, bakers
Colophony resin	Electronics workers
Western red cedar dust and other woods	Woodworkers
Latex	Health care workers, sex workers
Tea and coffee dusts	Packing workers, food process workers
Flowers (e.g. Gypsophila)	Florists, gardeners
Hay	Farm and produce workers
Cotton	Cotton ginnery workers
Substances of animal origin	
Laboratory animal dust	Animal carers, laboratory workers
Bird products	Poultry farmers, farmers
Shellfish and crustaceans (e.g. lobsters, crabs)	Shellfish processors
Detergent enzymes (e.g. alcalase)	Detergent manufacturers
Insects (e.g. silkworms)	Silkworm farmers
Cockroaches	Entomologists, laboratory workers



Substances of chemical origin	
Glutaraldehyde	Nurses, pathology assistants
Di-isocyanates	Spray painters, polyurethane foam manufacturers
Acid anhydrides (epoxy and alkyd resins)	Spray painters, polyurethane foam manufacturers
Aluminium pot room fumes	Smelter workers
Metal salts, platinum, cobalt, nickel	Metal platers, processors

2. Occupational health and safety procedures

Employers are obliged to ensure the health and safety of their employees at work. Employees are obliged to follow the safety instructions given by their employer and to wear any protective equipment or clothing provided by the employer.

Hazard identification

It is the role of your employer to:

- Identify substances in the workplace that may be harmful and inform employees about them (Material Safety Data Sheet)
- Have safety measures in place that lessen the risk of being exposed to sensitisers and irritants in the workplace (e.g. provide protective clothing)
- Carry out regular employee health checks if exposure to these substances cannot be removed or controlled. Make sure employees are properly trained and supervised in the use of these substances
- Check with the local Occupational Health & Safety Authority to assess the risks to employees being exposed to these substances

What should you do if you think you have occupational or work aggravated asthma?

If you think you have developed asthma or if your asthma symptoms are worse at work, it is essential that you seek medical advice. It could be dangerous to your health to ignore asthma symptoms and to continue being exposed to substances to which you are reacting. Management of occupational or work aggravated asthma does not always mean leaving your place of work. Strategies can be developed to reduce your exposure to triggers/irritants. Your doctor or an occupational physician can advise and assist you.

Asthma aware workplace guidelines

Workplaces that are asthma aware have policies and procedures that eliminate or at least minimise exposure to sensitisers, irritants and triggers.



Information on hazard management may be obtained from the Occupational Health and Safety Commission in your State or Territory.

The guidelines below serve as a checklist to determine whether your workplace is asthma aware:

- Is your workplace smoke free?
- Are dusts and other chemical agents controlled?
- Do workers use substances that are thought to be safe?
- Does your work area have adequate ventilation systems?
- Are ventilation systems well maintained?
- Are control systems regularly monitored and maintained?
- Are staff trained to respond to an asthma emergency?
- Does your workplace provide Asthma Emergency Kits?
- Are the hygiene facilities in accordance with OH&S regulations?
- Are workers educated about asthma?
- Do workers with asthma have a written Asthma Action Plan?
- Does your workplace have effective health reporting/hazard identification and consultation mechanisms?
- Do workers know that there are systems in place regarding dealing with asthma in your workplace? (Training opportunities, asthma emergency kits, policies, guidelines and procedures)

Further information

For further information about asthma or to receive an Asthma First Aid poster contact your local Asthma Foundation.

Occupational health and safety authorities:

New South Wales WorkCover NSW Telephone: 13 10 50 www.workcover.nsw.gov.au	Victoria WorkSafe Victoria Telephone: 1800 136 089 www.workcover.vic.gov.au
Queensland WorkCover Queensland Telephone: 1300 362 128 www.workcoverqld.com.au	South Australia Safe Work SA Telephone: 1300 365 255 www.safeworksa.sa.gov.au
Tasmania WorkCover Tasmania Telephone: 1300 366 322 www.workcover.tas.gov.au	Northern Territory NT WorkSafe Telephone: 1800 019 115 www.worksafe.nt.gov.au
Western Australia WorkSafe WA Telephone: 1300 307 877 www.worksafe.wa.gov.au	Australian Capital Territory WorkCover Telephone: 02 6207 3000 www.workcover.act.gov.au

What to do in an asthma emergency

If the person's condition suddenly deteriorates or you are concerned at any time call an ambulance immediately (Dial 000) and state that the person is having an asthma attack.

In an asthma emergency follow the Asthma First Aid Plan located opposite.

If a person has difficulty breathing and is not known to have asthma, call an ambulance immediately and follow the Asthma First Aid Plan. No harm is likely to result from giving a blue reliever puffer.

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Asthma First Aid

1

Sit the person upright, be calm and reassuring.

Do not leave them alone.



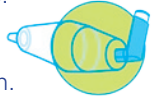
2

Give 4 separate puffs of a blue reliever*

The medication is best given one puff at a time via a spacer device.

Ask the person to take 4 breaths from the spacer after each puff of medication.

If a spacer is not available, use the blue reliever puffer on its own.



3

Wait 4 minutes.



4

If there is little or no improvement repeat steps 2 and 3.

If there is still no improvement call an ambulance immediately (DIAL 000).

Continue to repeat steps 2 and 3 while waiting for the ambulance.



If the person's condition suddenly deteriorates or you are concerned at any time call an ambulance immediately (DIAL 000).

For further information:

1800 645 130

(office hours)

www.asthmaaustralia.org.au

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AUSTRALIA



*A Bricanyl Turbuhaler may be used in first aid treatment if a puffer and spacer is unavailable.

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for professional, confidential and
independent information about asthma

www.asthmaaustralia.org.au