



How to identify airborne contaminants that can cause harm to agricultural workers

As a person conducting a business or undertaking (PCBU) in the agricultural industry, you must protect your workers from breathing in hazardous air. Agricultural workers can be exposed to hazards from common agricultural products and materials. Exposure to airborne contaminants in agriculture can include:

- dusts from wood, ash, cotton, hemp, flax, animal waste and animal hair
- vapours and fumes from working with pesticides, welding, and adhesives
- exhaust fumes from power equipment such as petrol powered quick-cut saws, chain saws, or working near plant/vehicle exhausts
- working around moulds and fungi and microorganisms
- dusts, fumes and vapours from working with grain, fertilisers and feed produce and during the seed, grain and fruit fumigation process.

The first step to protect workers is to identify where and what these hazards are at your workplace. This is part of your duty of care to minimise health and safety risks at your workplace as much as you reasonably can.



Breathing in airborne contaminants such as dusts, gases, fumes, mists and vapours at work can cause harm. Being exposed to these hazards can lead to conditions like asthma, or diseases like lung cancer and diseases like lung cancer, byssinosis and Q fever.

How to identify hazards:



Look at your workplace

Observe your workplace and how your workers conduct their work to help identify the presence of airborne contaminants. You should look at what and how machinery and equipment are used, what hazardous chemicals are around, and the general state of tidiness/maintenance.

For example, look to see if:

- dusts or residues are on machinery, work surfaces, walls, windows, or the ground
- you can identify what animals are present – including livestock and native species and whether there is contamination which could cause Q fever
- any tools have activated warning lights that indicate the tool or filters are not working
- workers are using control measures appropriately, such as using proper ventilation and wearing suitable respiratory protection equipment.

If you can see or smell something in the air, your workers may also be breathing it in. However, some hazards are invisible and odourless.

It is important to consider other people around the workplace who may be impacted by hazards. This could include tradespeople, suppliers, contractors, visitors, your family or neighbours.



Talk and consult with your workers

Your workers or your health and safety representatives (HSRs) may know what work processes create dusts, gases, fumes, mists and vapours, how much is produced and how often it happens. They may also be able to tell you how work practices could be changed to manage the risk of breathing it in. Your workers can also tell you and the HSRs if certain tasks make them cough, itch or feel unwell.



Read labels and safety data sheets

Some materials used in your workplace may contain or generate a hazardous chemical. Hazardous chemicals are required to have a safety data sheet containing health and physical hazards information. Look for labels on other materials too, as these may also contain health information.

For more information, read our [Using safety data sheets: identifying the hazards that can cause occupational lung disease](#) information sheet.



Talk with your work health and safety (WHS) regulator

Your [WHS regulator](#) is here to help. You can talk with them if you have questions or need guidance. They can provide you with information and advice to help you identify the hazards at your workplace.

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How to identify hazards continued:



Engage a professional

A certified occupational hygienist can help identify hazards in your workplace. You can search for occupational hygienists near you on the [Australian Institute of Occupational Hygienists' website \(aioh.org.au\)](https://aioh.org.au).

Your industry association may be able to help you identify the hazards at your workplace or suggest who can assist you.



Reassess

Managing WHS risks is an ongoing process. When you introduce new materials or processes into the workplace, you must reassess for any new or changed airborne contaminants. Changes in seasonal practices and weather mean that you must regularly inspect your workplace to identify if these changes present a new or changed hazard that may affect the health and safety of your workers.



If a hazard is identified, you should conduct a workplace risk assessment.

For more information, read our checklist '[How to identify airborne contaminants that can cause harm to agricultural workers](https://swa.gov.au/airborne-contaminants)' at swa.gov.au/airborne-contaminants.