



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

This checklist will help persons conducting a business or undertaking (PCBU) in the manufacturing industry to identify airborne contaminants that can cause harm to their workers.

Have you had a look at your workplace to assess the potential hazards? For example, have you checked the product assembling areas, mixing rooms or areas where you store chemicals or waste, workshops, lunchrooms and administration areas for any hazards?

Regularly looking at your workplace and how your workers conduct their work will help you to identify when things change, such as cleaning up more dusts than usual, or if gases, fumes, mists or vapours are present.



Identification is the first step in managing work, health and safety (WHS) risks. If you identify a hazard by using the checklist below, you should do a [workplace risk assessment](#).



Look at your workplace

Yes

No

Do you use materials, machinery or equipment or a work process that generates airborne contaminants, such as dusts, gases, fumes, mists or vapours?

Materials, chemicals, tools and equipment used in manufacturing can create dusts, gases, fumes, mists or vapours when used by workers. Some of these are not always visible.

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Do you use hazardous chemicals?

Inhaling fumes or vapours from chemicals such as adhesives, paints, stains and varnishes can damage the lungs.

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Is work done inside or in an enclosed space?

Working inside or in an enclosed space may mean there is less ventilation and airborne contaminants are more likely to be present.

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Can you see anything in the air, such as dust plumes or vapours? For example, when using machinery, or when mixing chemical products or ingredients.

If you can see substances in the air, such as dusts or chemicals, they have the potential to cause harm.

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Can you smell anything when walking around your workplace?

Not all hazards can be seen or smelled. Hazards like vapours and fumes can be invisible. If you can smell it though, you're also breathing it in.

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Can you see any build-up of dusts or residue or any unexpected corrosion or wear on machinery, equipment, benchtops, windows or desks?

Looking at how clean machinery, the work floor and administration areas are can help identify the presence of dusts, gases, fumes, mists and vapours – even if you can't see them in the air.

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Are your workers getting covered in dusts while working?

Exposure to dusts can cause irritation, allergies and even lung diseases. If workers are covered in dusts it could indicate that your work practices are not controlled, and their risk of exposure is higher. If so, it's important to stop work, identify the hazards, and re-assess the task applying appropriate control measures.

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Do certain work tasks make your workers cough, itch or complain of feeling unwell? For example, when working with chemicals, flour or wood?

If workers cough during specific tasks, it might mean that they are breathing in hazardous substances. It's important to stop work and identify the hazard and assess the risk if your workers experience any symptoms or feel unwell.

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Talk and consult with your workers

Yes

No

When you consult with your workers, are they telling you that they see, smell, or feel the effects of airborne contaminants, such as dusts, gases, fumes, mists or vapours? Do they know the risks of breathing it in?

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Your workers may be able to tell you if their work produces airborne contaminants. You must then manage work processes to eliminate or reduce the risk of exposure.

Do you consult with your workers and listen to their concerns about their work processes to help you change how they conduct work to eliminate or minimise their exposure?

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As a person conducting a business or undertaking (PCBU), you have a duty of care to ensure workers are not exposed to health and safety risks. Listening to your workers can provide valuable information about hazards and risks in the workplace which you can then manage appropriately.

Have you completed a risk assessment in consultation with workers and your health and safety representative (HSR) to help identify the risks and controls required to reduce workplace exposure?

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Consultation with workers and HSRs is required at each step of the risk management process. By drawing on their knowledge and experience, you can identify hazards and choose effective control measures.



Check labels & safety data sheets

Yes

No

Have you checked product labels for health hazard information?

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Labels contain information about the health hazard classification and can help identify a hazard at your workplace. Find out more at: swa.gov.au/topic/labelling-chemicals

Have you checked the safety data sheets or product information sheets and understood the health information in them?

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A safety data sheet or product safety sheet provides detailed information on a hazardous chemical or product. It is important to read and understand this information before directing any work with a hazardous chemical so that it can be safely stored, used or disposed of at the workplace.

Read our [Using safety data sheets: identifying hazards that can cause occupational lung diseases information sheet](#).

Are there workplace exposure limits for anything you use or generate at your workplace?

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Exposure to substances or mixtures in the workplace can occur through inhalation, absorption through the skin or ingestion. Regulatory agencies set the limits on exposure to hazards. These are known as "[Workplace Exposure Limits](#)". PCBUs must aim to limit exposure to as low as reasonably practicable, even if they meet the workplace exposure limits.

Specialist equipment or training by an occupational hygienist may be needed to determine the difference between safe levels of dusts, gases, fumes, mists or vapours and levels that are harmful to workers.



Contact your WHS regulator

Yes

No

Have you looked for guidance on your WHS regulator's website?

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Your [WHS regulator](#) is responsible for regulating and enforcing WHS laws in their jurisdiction. Contact them if you have any questions specific to your workplace.



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