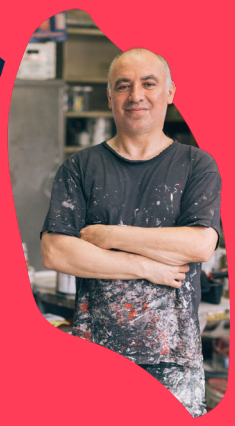

How to manage the risks that can cause occupational lung diseases in

CONSTRUCTION WORKERS

PHASE 1
Identify hazards & assess risks

PHASE 2
Manage risks

PHASE 3
Monitor & review

Working with dusts, gases, fumes, or vapours? Put in place control measures to eliminate or manage your workers' exposure to hazardous substances that can cause occupational lung diseases.

Work Health and Safety (WHS) laws require you, as the person conducting a business or undertaking (PCBU), to eliminate and minimise risks to the health and safety of your workers as much as you reasonably can.

To manage the risk of lung diseases in the construction industry, you must first identify when and where workers may be exposed to dusts, gases, fumes, or vapours. For more information read our information sheet information sheet How to identify the risks that can cause occupational lung diseases in construction workers.

How to manage or control the risks

Once identified, the hierarchy of control measures can be used to manage risks. The hierarchy of control measures are:

Elimination

The most effective way to manage a risk is to completely remove the hazard from your workplace. This means eliminating the generation of dusts, gases, fumes, and vapours.

If this is not possible, so you must minimise the risks of workers' exposure to dusts, gases, fumes, and vapours as much as you reasonably can.

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Not all workplace hazards are visible.

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MANAGE

How to manage or control the risks (continued):

Elimination (continued)

This could include:

- removing the need to cut concrete by precasting it into concrete construction panels
- using an element connection system instead of relying on welding to minimise vapours and fumes.

Substitution

Substitution controls involve replacing products and materials or tasks and methods with ones that are less hazardous. On a construction site this could include:

- using score and snap fibre cement sheeting instead of using a circular saw
- using battery operated power tools such as chain saws to reduce exposure to petrol fumes
- replacing high toxicity paints, glues, and varnishes with lower toxicity or non-toxic alternatives
- suggesting to clients they choose engineered stone with a lower silica content
- replacing asbestos-containing materials with non-asbestos materials.

Isolation

Isolation controls place barriers or distance between a hazard and your workers. Physical barriers that remove the worker from contact with dusts, gases, fumes, and vapours are the most effective. Isolation controls include:

- restricting access and isolating work processes which generate dusts, fumes and vapours within an enclosed room. Restrict access to the room, use a suitable ventilation system and ensure all workers within the space are wearing appropriate personal protective equipment (PPE) and or respiratory protective equipment (RPE)
- creating physical barriers and exclusion zones around tasks and between workers to prevent workers breathing in dusts, gases, fumes, and vapours
- distancing work processes from other workers, such as when using concrete grinders
- using suitably filtered positive pressure cabins on earthmoving plant
- having a separate room or area away from the work area for other tasks such as changing or eating.

Engineering

Engineering controls use physical devices to change the characteristics of a task. In the construction industry, applying engineering controls will depend on the tasks your workers carry out. Engineering controls in construction can include using:

- water when cutting, drilling, and grinding concrete materials to minimise dusts becoming airborne
- plant that is designed to cut and completely encapsulate dusts, gases, fumes and vapours
- power tools fitted with local exhaust ventilation or dust extraction systems
- industrial vacuum cleaners with appropriate filtration during clean-up of dusts – that are appropriately rated for the material being collected and can help to clean up waste water/slurry that needs to be disposed of correctly
- nozzles that limit the spray direction of chemicals to avoid the workers' breathing zone.

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How to manage or control the risks (continued):

Administrative

Administrative controls provide additional protection after you have implemented substitution, isolation, and engineering controls.

Administrative controls may include:

- shift rotation policies to minimise the time workers spend in an exposure area
- laundering contaminated work clothes at work
- designated areas for changing out of personal protective equipment (PPE) and dusty work clothes
- decontamination procedures for asbestos removal or asbestos-related work
- policies for storing, cleaning, and maintaining equipment
- signs to alert workers to a potential hazard
- safe work method statements (SWMS) which are required for certain tasks
- policies and procedures for keeping work areas clean.

You must have administrative policies in place and instruct and train your workers (and retain records of training) to help them understand and manage the risks of exposure to hazardous dusts, gases, fumes or vapours that can cause occupational lung diseases. You also need to supervise your workers to make sure they understand and follow your administrative policies, control measures and procedures.

Personal protective equipment

Personal protective equipment (PPE), including respiratory protective equipment (RPE), should only be used if higher-level control measures are not reasonably practicable to implement or to supplement higher-level control measures. It is important to make sure the PPE:

- is suitable for the task and to protect against the risk
- fits the worker who will be wearing it
- is clean and in good working order.

You also need to provide training on using and maintaining PPE, including RPE, and make sure workers are using it correctly. Depending on the risk, RPE may need to be fit tested by a competent person such as a certified occupational hygienist. You can search for occupational hygienists near you on the Australian Institute of Occupational Hygienists' website (aioh.org.au).

Talk with your work health and safety 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 – including hazards that can cause lung diseases.

Download and use the 'How to manage the risks that can cause occupational lung diseases in construction workers – checklist' to help you further.

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