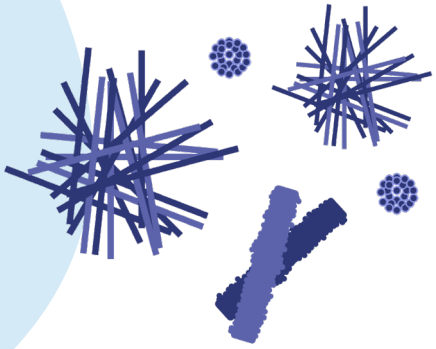
General Dust Exposure



What is Dust?

Dust is simply small solid particles - the particles can range from dirt and sand to pollen and mould through to dryer lint or even human skin flakes. Once airborne, these particles are often too small to be seen.

Dust is a Hazard

Outside of office-based work, dust is considered a significant risk in most workplaces. This is because dust can be more than just a nuisance – it has the potential to cause serious health effects. Small airborne particles can bypass our body's natural defence mechanisms to build up in the lungs. Activities such as grinding, moving, cutting and or heating of materials all have the potential to create hazardous dust.

Health Risks

The health risk associated with any dusty job depends on multiple factors including; type of dust, the concentration of dust, and the duration of exposure.

The resulting health effects may only become obvious after long-term and repeat high exposures; this is often the case with lung disease such as silicosis.

Control Measures

Selecting an appropriate control often involves completing a risk assessment to identify, evaluate, and prioritize the hazards and risks.

With the exception of eliminating the source of dust, preventing dust from becoming airborne is the most effective control. Other options may include substitution (i.e. using a vacuum instead of a broom), isolation (i.e. using a pressurised cabin) or engineering controls (exhaust ventilation).

Health and Exposure Monitoring

Based on the risk to workers, personal exposure monitoring (air sampling) and/or health monitoring (medicals) may be required under Regulations to demonstrate that the risk is controlled. A competent person (Occupational Hygienist / Occupational Physician) will undertake the monitoring. Results must be communicated to relevant workers.

How to Protect Yourself

Using specified controls is critical to reduce your exposure (as well as to your teammates). Doing the small things, like housekeeping and moving away from dusty tasks, all help to reduce your risk.

Personal protective equipment can be effective, but it should be used as a last resort and in conjunction with other control measures.

For respirators, an inappropriate fit can reduce the protection provided and leave workers exposed to unsafe levels of airborne contaminants. Important considerations include:

- Select the right respirator for the task. Use it as instructed.
- Ensure it fits each worker correctly. Including clean shaven (for close face fitting respirators)
- Workers are trained on how to use, clean, maintain and store PPE.
- Fit tests are carried out and recorded for each worker, annually as a minimum.

Summary

Exposure to dust has the potential to cause a range of health effects, some as severe as lung cancer. The risk to worker health is dependent on the type of dust and the amount of exposure. Using the hierarchy of control, workplace exposures can be adequately controlled.

Questions

1. What common tasks do we perform that can cause exposure to dust?
2. What critical controls are in place to prevent exposure to dust?
3. What is important to remember when using PPE?