

AB02-19

Construction Dust – Dry Sweeping



Construction dust is not just a nuisance, it can seriously damage your health and some types can eventually kill you. Regularly breathing in these dusts over a long period of time can cause life-changing lung diseases.

Construction dust is a general term used to describe different dust risks. There are 3 main types:

- Silica dust – created when working on silica containing materials like concrete, mortar and sandstone (also known as respirable crystalline silica or RCS)
- Wood dust – created when working on softwood, hardwood and wood-based products like MDF and plywood
- Lower toxicity dusts – created when working on materials containing very little or no silica. The most common include gypsum (e.g. in plasterboard), limestone, marble and dolomite

What you must do

Pay particular attention to the following things:

Assess

- **Identify and assess:** Dry sweeping concrete dust and other building debris can produce high levels of dust. The risk will depend on how much material you are removing and what it contains. It will be higher risk if it contains silica or wood dust. Anyone breathing in this dust cloud will be affected. You will be at particularly risk if you are dry brushing for longer periods in an enclosed space. Follow the control steps below.



Control

Prevent: Think about limiting the risks before work starts by:

- Limiting waste materials and how they are produced during design / planning
- Considering where waste material is created and how frequently it needs removing
- Using the correct dust controls when making dust / rubble /debris
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Control: Even if you minimise some of the dust this way, you may still need to do some clearing up. Control the risk by:

- **Hand Tools:** damp down and use a brush, shovel and bucket for minor / small amounts. For regular removal / site cleaning use a water spray for damping down and a rake / shovel and bucket / wheelbarrow to remove larger pieces
- **On-tool Extraction:** for finer material use vacuum attachments
- **Respiratory Protective Equipment:** you may also need RPE depending on the location, duration and type of work you are doing. Select RPE with an assigned protection factor of 20 (e.g. FFP3 disposable mask or half mask with a P3 filter)
- **Fit testing:** is needed for tight fitting masks

Review

Supervise: ensure controls are properly used and RPE is worn correctly. Anyone using tight fitting masks also needs to be clean shaven and fact-fit tested

Maintain: check the extraction unit is correctly working at least on a weekly basis. Change the filters as recommended by the supplier

Health Risks

Anyone who breathes in these dusts should know the damage they can do to the lungs and airways. The main dust related diseases affecting construction workers are:

- Lung cancer
- Silicosis
- Chronic obstructive pulmonary disease (COPD)
- Asthma

