# "DUST"

## Toolbox Talk

### Group Managing Director Message

For me there always needs to be much greater emphasis placed on the human impact of health and safety and I'm therefore asking you to have this specific aspect in your mind at all times when on a site, in the office or whilst travelling in your role, maintaining your own personal safety, those of your colleagues and those beyond the boundaries of the workplace.

As the video you hopefully have already seen highlights, we must all recognise the importance and impact a serious incident would have on all our lives.

With the above in mind please try to be aware of what is going on in and around your work environment.

Our 'Don't Walk By' initiative encourages everyone to highlight any health and safety concerns they may have or report any hazards they may see.

Thank you for working with us to maintain the safety of everyone.

## Outline

"Various activities such as cutting, grinding, sanding and or heating materials all have the potential to cause hazardous dusts and fumes. Where there is a risk of exposure to dust to employee(s), the employer must control or minimise these risks. Regularly breathing construction dust can cause diseases such as, lung cancer, asthma, COPD (Chronic Obstructive Pulmonary Disease) and silicosis.

Construction workers have a high risk of developing these diseases because many common construction tasks can create high dust levels. These diseases can cause permanent disability and early death. Over 500 construction workers are believed to die from exposure to silica dust every year.

## Toolbox Talk - Introduction

The Control of Substances Hazardous to Health Regulations 2002 (COSHH) requires a risk assessment to be completed and updated at regular intervals by the employer.

Those hazardous substances include but are not limited to;

- Wood dust
- Silica dust
- General Dust - Created when working on other materials containing very little or no silica. The most common include gypsum (e.g. plasterboard), limestone, marble and dolomite.

**Sources of Dust**

Many common construction activities can produce high levels of dust. It is paramount that activities exposing employees to dust are adequately controlled to prevent exposure, these activities include;

> Cutting paving blocks, kerbs
> Chasing concrete and raking mortar
> Environmental / Background dusts i.e. sweeping of floors
> Demolition works can expose you to asbestos or fibre glass
> Sanding taped and covered plastering joints
> Cutting and sanding wood
> Cutting roofing tiles

**Risk of exposure to dust or fumes**

Below are just some examples of what could happen when individuals are exposed to dust;

- Silica dust from cutting, scabbling concrete can cause lung cancer
- Dust from cutting or sanding timber can cause nasal cancer
- Asbestos dust can cause cancer of the lungs or lining of the chest cavity

**Control the Risk**

Stop or reduce the dust

Before work starts, look at ways of stopping or reducing the amount of dust you might make. Use different materials, less powerful tools, or other work methods. For example, you could use;

- The right size of building materials to avoid / reduce need for cutting/preparation works
- Silica-free abrasives
- Less powerful tools e.g., block cutter over cut-off saw
- Alternative method of work altogether e.g., a direct fastening system

Control the dust

Even if you stop some dust being produced on site, you may do other works that could still produce high levels of dust. In these circumstances the most important action is to stop the dust getting into the air. There are two main ways of controlling dust at source of emittance;

Water Suppression

Water Suppression dampens down dust clouds, although it needs to be installed and used correctly. Water supplied should be enough for the whole duration the task is undertaken. Just simply wetting the materials prior to cutting is not sufficient.

On-Tool Extraction

Removes dust at source. It is a type of Local Exhausts Ventilation (LEV) that is fitted directly onto the tool. On-tool extraction consists of several components – the tool, capturing hood, extraction unit and hosing. Various extraction units are available with a specific Class Filter Unit i.e. (H (High) M (Medium) L (Low)) the Class Filter required depends on the task at hand. General commercial vacuums may not provide sufficient cover.

Respiratory Protective Equipment (RPE)

Water suppression and on-tool extraction may not always be sufficient or may not reduce exposure enough. Often RPE has to be provided to further prevent exposure. You will need to make sure that the RPE is;

- Adequate for the amount and type of dust
- Suitable for the works – RPE can become uncomfortable to wear for long periods.
- Compatible with other item of protective equipment
- Fits the user. Face fit testing is required to ensure a tight fitting is achieved.

Depending on works being undertaken you may combine these measures with others, such as;

- Limiting the number of people near the work area; rotating those doing the works
- Enclosing the works to stop dust escaping. Temporary sheeting / partitions.

**Other Controls**

Depending on the works being undertaken you may need to combine these measures with other measure, such as;

- Limiting the number of people near the work area; rotating those doing the works
- Enclosing the works to stop dust escaping. Temporary sheeting / partitions.

**Review the Controls**

Check the control measures work, by;

- Implementing procedures to ensure process are being adhered to and followed
- Check controls are affective (Does the work still seem dusty?)
- Involving worker by encouraging feedback, who can identify problems and help find solutions
- Maintaining equipment, ensuring tools are used in accordance with the manufacture's information. (On-tool extraction units to be subject to a thorough examination and test every 14 months)
- Supervising Works; make sure workers use controls provided, follow the correct working method, and attend any health surveillance where required.

**Training**

You must train workers, ensuring workers are doing the job correctly and using control properly.

Training should include:

- Risk associated with risk of dust and how it can harm their health
- How to use dust controls and check that they are working
- How to maintain and clean equipment
- How to use and look after RPE and other personal protective equipment (PPE)
- What to do if something goes wrong.

## Action

Now as a group, discuss:

- What human factors might apply:
  - Poor decision making
  - Lack of skill/training
  - Lack of perception of risk (including lack of experience)
- Might anything have changed the outcome:
  - Be fit for work: considering general health and wellbeing, stress, mental health and other medical conditions, and impact of drugs and alcohol
  - Always receive a Safety Briefing: being not just competent but also familiar with the RAMS for each activity and aware of daily site hazards
  - Stop work if something changes: awareness of surrounds and daily site hazards
  - Speak up about safety: considering others and not just self.
- What is the most important thing you can do for the site owner?

**Further Information**

- Construction Dust (HSE CIS 36 – Revision 3)
- Controlling construction dust with on-tool extraction (HSE CIS 69)
- Respiratory protective equipment at work: HSG53 COSHH Regulations
- HSE COSHH ACOP - INDG479
- HSE - Construction Dust information sheet
- HSE Workright campaign - Construction Dust