



TOOLBOX TALK- Dust Part 1

October 2021

Introduction

DUST is not just a nuisance; it can seriously damage your health and some types can eventually even kill.

An estimated 2.2 million workers could be at risk of aggressive respiratory diseases, including silicosis, cancer and other respiratory illnesses, in the construction industry alone.

It is believed that 500 UK construction workers die each year just from silicosis and linked to an estimated 4000 deaths a year from chronic obstructive pulmonary disease (COPD).

This month's safety campaign is all about dust, the affects to your health, the risks and the control measures to reduce the risk.

There are three main types of dust found on construction sites:

- Silica dust found in materials like concrete, mortar and sandstone.
- Wood dust from softwoods, hardwoods and wood-based products like plywood and MDF
- General dust like plasterboards, limestone, plaster etc

So, what are the Health Risks

Anyone who breaths in dusts from construction sites should be aware of the damage they can do to their airways and lungs. The most common diseases related to dust include:

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

These diseases take a long time to develop and are not immediately obvious. By the time you notice any symptoms the damage may already be done and be potentially life changing.

How to prevent exposure to dust

This can be done using the hierarchy of control.

1. Eliminate the source of dust. Can the work be carried out in such a way to stop dust being emitted?
2. Control the dust at source using extraction and water suppression systems
3. Respiratory protection is the last resort such as disposable masks and reusable half masks. You will need training to fit these and face fit testing to ensure the mask is effective.

It is important that if you believe there is an issue or a better working method that you speak up to your Supervisor. Observation cards can also be used.

In the next toolbox talk we will look at specific tasks and how we can reduce the risks by implementing suitable control measures that are needed to protect all of us from the consequences of inhaling dust.

Dust Toolbox Talk Part 2 –

In part two of the toolbox talk we are going to be talking about specific tasks that create dust and are hazardous to your health. We look at the control measures we can implement to reduce the risks.

Many of our construction and demolition projects produce large amounts of dust. These include sweeping, grit blasting, soft-strip and demolition. However, the most common involve the use of power tools such as cut-off saws, grinders, breakers and hammer drills. These can create very high dust levels, especially if the work is indoors or in an enclosed or poorly ventilated area.

So, what control measures can we put in place to eliminate or reduce the risk?

Dust suppression - Water can be used with some tasks to effectively damp down the dust. Most modern cut-off saws can be attached to a water supply. The water can come directly from the mains or a portable source such as a hand pressurised freestanding container. Other devices, such as moto fogs or dust cannons can be used when carrying out large demolition works. Water suppression is not suitable for controlling all dust risks. Avoid use around electric tools and systems also where wood dust or other material can create slurry, particularly in an occupied building.

Extraction equipment - Extraction is the preferred option. This sucks the dust away at source as it is being created, storing it until the dust collection unit until it is emptied. Extraction vacuums should also be used for general cleaning instead of dry sweeping.

Respiratory Protective Equipment (RPE) - is often used to protect against dust risks. It takes two main forms: a disposable mask or half mask with filters. It should be used as a back-up measure to water suppression or extraction. It should not be used as a replacement for those controls.

When worn and used correctly, RPE can prevent serious lung conditions caused by inhaling dust and other contaminants.

In order to ensure that a specific make, model and size of mask is able to achieve a good fit to an individual wearer, a face fit test should be conducted by a competent person. The wearer must have no facial hair in the region of the face seal. Facial hair can prevent the mask from forming a good seal, by creating gaps around the edges of the mask. This allows contaminants into the mask and breathed in by the wearer.

If you need a face fit test ask your supervisor. You may need to renew this if your facial features have changed or it has not been carried out within the last two years.

What else can you do to help?

- Use on-tool extraction systems
- Check on-tool extraction systems regularly for effectiveness
- Use water suppression if appropriate
- Follow the procedures and risk assessments/method statement
- Ensure you have up to date face fit testing and follow the training provided
- Speak with your supervisor if issues.
- Replace disposable masks as required.
- Properly clean, store and maintain non-disposable RPE.

Remember dust can cause harm over a period of time and you may not notice until it is too late.
Ensure you protect your lungs at all times and if you have concerns raise with your Supervisor.