

GAP Tool Box Talk: Dust



Dust

- Activities such as grinding, cutting and or heating of materials all have the potential to create hazardous dust and fumes
- Where there is a risk of exposure to DUST or FUMES to its employees, the employer must control or minimise these risks
- Failure to do so could result in the employee developing a range of illnesses, which could include bronchial problems, skin conditions and potentially cancer
- Around 13,000 deaths each year from occupational lung disease and cancer are estimated to have been caused by past exposure, primarily to chemicals and dust at work

COSHH

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

Hazardous substances include:

- Hardwood dust
- Silica dust
- Lead fumes



Sources of dust & fumes

- Cutting, sanding and grinding of some materials
- Welding and glass cutting may create harmful fumes
- Heating metals such as lead will create harmful fumes
- Working with old lead can expose you to lead oxide dust
- Burning off old lead-based paints can create harmful fumes
- Stripping out work which involves fibrous insulation such as asbestos or fibre glass
- Dust produced during cleaning i.e. sand-blasting
- Environmental or background dusts i.e. combustion of fuels, sweeping of floors

Risks from breathing in dust or fumes:

- Silica dust from cutting, scabbling concrete can cause lung cancer
- Dust from cutting or sanding hard wood can cause nasal cancer
- Asbestos dust can cause cancer of the lungs or lining of the chest cavity
- Welding fumes can result in 'metal fume fever' which has flu like symptoms
- Breathing in fumes from solvents and paint can lead to nausea, drowsiness and headaches

These are just some examples of what could happen when you are exposed to dust



Control Measures

There are important aspects in the selection of dust control measures that should be considered:

- The type of dust i.e. particle size, weight, density and toxicity
- The source of dust in the particular process
- Who, how many and duration of exposure
- What methods are to be used to monitor
- The efficiency of cleaning procedures
- The efficiency of dust arrestment equipment

All controls methods should look to a preference in arrestment plant, rather than the use of respiratory and other protection

Control Measures

- Replacement or substitution should always be considered first i.e. toxic for non toxic materials
- Suppression by using a wet process as opposed to a dry process, which maybe sufficient to reduce the dust hazard
- Local Exhaust Ventilation (LEV) plant should be considered
- Cleaning and housekeeping should be maintained to a high standard where workers are exposed to a 'dusty' process

Personal Protection Equipment

This can be split in to different areas:

- Medical supervision i.e. health screening, occupational health nurses
- The supply and maintenance of PPE:
 - Respiratory protection
 - Caps
 - Gloves
 - Clothing
 - Goggles



REMEMBER

- PPE should not be used as an alternative to equipment that can eliminate the hazard of DUST
- Supply well maintained welfare areas, such as showers and work wear storage areas
- Make regular training available for the management and operators

