

TOOLBOX TALK NO.17

COSHH – Control of Substances Hazardous to Health



Since this was introduced, the Control of Substances Hazardous to Health Regulations have probably been among the most poorly understood pieces of legislation. However the regulations are based on very simple principles. The intention of the regulations is to protect human health from exposure to hazardous substances by either totally preventing exposure or, where that is not reasonably practicable, controlling the level of exposure to safe values, by appropriate means. Two dangerous substances, asbestos and lead, are not covered by the COSHH Regulations because they have their own regulations. The COSHH Regulations deal with harmful substances in relation to their health effects. However the regulations do not cover any flammable or explosive properties that the substances might also possess.

The major element that must be considered when working with substances hazardous to health is:

1. Injuries or ill health resulting from the use of chemicals without the correct procedures being followed and the correct precautions taken.
2. Your manager will arrange to carry out a COSHH assessment. Following this assessment, your manager will issue you with a set of working instructions advising you of the precautions necessary to handle the particular substances safely.
3. Never use any product for which you have not received work instructions without first referring to your manager or supervisor.
4. Always follow the work instructions issued to you by your manager when exposed to, or working with, chemicals or hazardous substances.
5. Always wear the personal protective equipment supplied to you and specified in the work instructions when handling potentially dangerous substances.
6. Look after your PPE and report any defects to your supervisor.
7. Before use, know where your washing and first aid facilities are.
8. Wash your hands regularly, especially before eating, drinking, smoking or using the toilet.
9. Do not eat, drink or smoke when handling substances.
10. Take immediate action to make safe any spillage. Follow the procedure written in the work instructions. If in doubt, seek advice from your supervisor or manager.
11. Store chemicals and hazardous substances in accordance with the label's instructions, and away from traffic routes and walkways. Where a secure compound is provided for the storage of chemicals, always return all containers to this store at the end of any working period.
12. Your plant, tools or equipment, may have various items of equipment installed to help protect you from hazardous substances (e.g. water sprays or extraction systems to control airborne dust). Always ensure that this equipment is in use before you start work. If any of this equipment is faulty, report it to your supervisor immediately.
13. Always seek advice from your supervisor or manager before disposing of part-full or empty containers.
14. Make sure you understand what actions should be taken if you are accidentally exposed to a hazardous substance.
15. DO NOT use solvents to remove paint, grease etc. from your skin.

What are the substances hazardous to health?

- a. Substances listed as very toxic, toxic, harmful, corrosive or irritant
- b. Substances listed as having a workplace exposure limit (WEL)
- c. Anything else that produces similar effects to the above.

**SAFETY AS
STANDARD**

Material Safety Data Sheets (MSDS) are NOT COSHH Assessments

Manufacturers and suppliers have a legal obligation to provide the information. By law the data sheets must contain:

Identification of the substance or preparation and the company or undertaking providing the substance	Physical and personal protection
Composition and information on ingredients	Physical and Chemical properties
Hazard identification	Stability and reactivity
First Aid measures	Toxicological information
Firefighting measures	Ecological information
Accidental release measures	Disposal considerations
Handling and Storage	Transport information
Exposure controls and personal protection	Regulatory information










Any substance with a hazard warning label has the potential to cause harm – the risk must be assessed before it is used.

Personal Protective Clothing

Obtaining appropriate PPE for hazardous substances that can affect the skin might be as simple as identifying the correct type of gloves, however, where there is a need for respiratory protection, selecting the correct type of RPE is critical.

COSHH

KNOW YOUR SAFETY SYMBOLS / HAZARD PICTOGRAMS

 <p>Harmful to the Environment – Hazardous to the environment & causes aquatic toxicity.</p>	 <p>Harmful / Irritant – Means: Acutely toxic; Causes skin sensitisation, skin & eye irritation; Respiratory irritant; Narcotic (causes drowsiness or dizziness); or Hazardous to the ozone layer.</p>
 <p>Highly Flammable – Gases, aerosols, liquids and solids, such as: Self-heating substances & mixtures; Pyrophoric liquids and solids that may catch fire when in contact with air; Substances which in contact with water emit flammable gases; Self-reactive substances that may cause fire when heated.</p>	 <p>Gas Under Pressure – Means: Gas under pressure, may explode when heated; Refrigerated gas, may cause cryogenic burns or injuries; or, Dissolved gases.</p>
 <p>Explosive – Self-reactive substances & organic peroxides that may cause explosion when heated.</p>	 <p>Longer Term Health Hazards – With one or more of the following: Carcinogenic; Affects fertility & unborn child; Causes mutations; Respiratory sensitiser, which may cause allergy, asthma or breathing difficulties when inhaled; Toxic to specific organs; or, May be fatal or harmful if swallowed or if it enters airways.</p>
 <p>Oxidising – Gases, solids & liquids, which can cause or intensify fire and explosion.</p>	
 <p>Toxic / Very Toxic – Handling a chemical that is acutely toxic in contact with skin, if inhaled or ingested, may be fatal.</p>	
 <p>Corrosive – Corrosive & can cause severe skin burns and eye damage. It is also corrosive to metals.</p>	

Risk Assessment

Management must carry out a risk assessment to find out whether:

- Exposure to a substance can be eliminated?
- Alternative work methods can reduce exposure?
- A less hazardous substance can be used?

Question: Before using a substance, what should you consider?

Hazards

How you could be affected by a hazardous substance:

- Ingestion – eating contaminated food.
- Inhalation – breathing harmful; dust or fumes.
- Absorption – chemicals entering through cuts, etc.
- Injection – chemicals entering through open cuts and grazes or any break of the skin.

Examples of hazardous substances on construction sites:

- Contaminated ground
- Concrete ad-mixtures
- Cement
- Solvent fumes
- Hard wood dust
- Resins
- Epoxy-based paints
- Welding fumes
- Asbestos

Don't mix chemicals or substances.

Question: Name four ways a substance can enter your body

Question: Where should substances be put at the end of a shift?

Accidental releases of paint and chemicals from construction sites make up a large number of pollution incidents that occur each year. Many spillages can be prevented. It is important that everyone on site knows how to control a spill to minimise its impact. **Spills spread very quickly and lead to environmental harm.**

Water-based paints are more environmentally friendly than solvent based alternatives, and so wherever possible should be given serious consideration.

- X** Never pour leftover paint down the drain.
- X** Never put left over liquid paint in with your other waste.

For accidental release, refer to specific COSHH Assessments.