**HAZARDOUS SUBSTANCES**

**COSHH Assessments**

This is a brief guide on carrying out a COSHH assessment. Its overriding objective is to help you use hazardous substances safely.

**What is COSHH?**

COSHH refers to the Control of Substances Hazardous to Health Regulations 2002: dangerous substances generally.

It covers is a very broad topic, relating to dust/fumes that might be inhaled or materials that may cause a reaction when a person comes into contact with them. The Health and Safety Executive (HSE) splits these into 5 categories:

* very toxic,
* toxic,
* corrosive,
* harmful or
* irritant.

COSHH also applies to other substances that are not harmful in themselves, but may be flammable and therefore potentially dangerous to have around.

**Do I need to carry out a COSHH assessment?**

To decide whether you need to perform a COSHH assessment, simply answer these questions:

* Do you or your employees use chemicals at work (including cleaning materials)?
* Does a label on any of your products say it is hazardous? (Suppliers of hazardous substances must provide information to users, including safety data sheets and proper labelling; so always check labelling.)
* Is there any dust and/or are there any fumes in your workplace?
* Do you have any water systems which could be colonised by legionella?
* Do you or your employees work with animals or their products? These may cause skin or respiratory sensitisation or be infected with bacteria or viruses.

If the answer to any of the above questions is yes you will need to carry out a COSHH assessment.

**How to carry out a COSHH Assessment**

COSHH sets out eight basic measures that employers, and sometimes employees, must take:

1. Assess the risks
2. Decide what precautions are needed
3. Prevent or adequately control exposure
4. Ensure that control methods are used and maintained
5. Monitor exposure
6. Carry out appropriate health surveillance
7. Prepare plans and procedures to deal with accidents, incidents and emergencies
8. Ensure employees are properly informed, trained and supervised

**1. Undertake a risk assessment considering:**

* How much of the substance is used or produced?
* How could people be exposed? This not only applies to employees but to third parties as well – for example members of the public.
* Could the substance be absorbed through the skin or accidentally be swallowed due to contaminated hands.

To help businesses in considering whether there are any hazardous substances in their workplace, the HSE also outlines several ways a substance can come into contact with or enter the body:

1. Breathing in – e.g. fumes or dust in the air
2. Skin contact – e.g. by direct contact, splashes, airborne dust landing on skin, or contact with a contaminated surface
3. Swallowing – e.g. transferring substances from hands to mouth when eating, smoking, etc.
4. Eyes – e.g. irritating fumes or dust in the air
5. Skin puncture – e.g. through contact with sharp, potentially contaminated objects, in the workplace

**2. Decide what precautions are needed**

If you identify serious risks, decide on the action you must take to remove or reduce them to acceptable levels. When doing so, you may wish to refer to good practice guidance, the results of monitoring, industry standards and chemical manufacturer advice.

Even if you decide that your current control measures are suitable and fully manage the risks, you should complete this assessment in its entirety to ensure compliance.

If you have more than 5 employees you must record the main findings of the assessment. This should contain sufficient information to explain decisions you have made.

The assessment should be reviewed regularly and if circumstances change.

**3. Prevent or adequately control exposure**

The HSE suggests seven types of control measure. The measure(s) most appropriate for your business will depend on the risk identified as well as on the practicality of the measure(s). The HSE’s suggested control measures are:

* Elimination in favour of safer substance
* Use of a safer form – powder is often more dangerous than paste because it can diffuse into the air
* Change of the process to emit less
* Enclosing the process so the substance is controlled and does not affect the whole workplace
* Extraction of emissions near to the source
* Having as few workers affected as possible
* Provision of protective equipment

In cases where it is impossible to eliminate a particular fume or dust, it will normally be necessary to monitor levels in the exposed workforce and act accordingly. However, you should always put control measures in place before monitoring.

Contracting someone who is competent, qualified and experienced may be necessary initially in order to implement the above measures.

**4. Ensure that control measures are used and maintained**

After assessing risks and implementing any safety mechanism(s) inspired by the above suggestions, you will need to ensure that the risk remains low. Both employers and employees have a duty to ensure control measures are maintained. It is a good idea to appoint someone to keep a check on the processes and make sure that the control measures remain effective.

Training is as important as any mechanism. Workers should be trained appropriately and told how important it is that their protective clothing remains in good condition. Training staff is essential for any business in which its workforce may come into contact with dangerous substances.

Depending on the scale of your business, you may need to have someone with suitable training employed constantly to make sure your company processes are maintained in good order. Alternatively, following initial implementation and training, it may be sufficient to just appoint someone from within your workforce.

**5. Monitor exposure**

You have a duty to measure and monitor the concentration of hazardous substances in the air breathed by workers. This applies to any areas that your assessment concludes that there could be serious risk to health if control measures fail, exposure limits may be exceeded or control measures might not be working properly.

**6. Carry out appropriate health surveillance**

Health surveillance is required wherever an employee is exposed to a Schedule 6 substance and is working in one of the related processes or wherever employees are exposed to a substance linked to a particular disease or adverse health effect AND there is a reasonable likelihood, under the conditions of the work, of that disease or effect occurring AND it is possible to detect the condition.

**7. Prepare plans and procedures to deal with accidents, incidents and emergencies**

This applies wherever employees are exposed to hazardous substances well beyond the risk associated with normal day-to-day work. Warning and communications systems should be set up to ensure appropriate response in the event of such, and information on your arrangements should be available at all times. Necessary safety drills should also be undertaken.

If any accident, incident or emergency occurs, you must ensure immediate steps are taken to reduce the harmful effects, restore normality and inform employees who may be affected.

The requirement for these procedures does not apply if the quantity of the substance only poses a slight risk and your measures in step 3 are sufficient to control that risk.

**8. Ensure that employees are properly informed, trained and supervised**

You are required to provide employees with suitable and sufficient information, instruction and training to include:

* The names of the substances being used, the risk of exposure and access to applicable safety data sheets
* The main findings of your risk assessment
* The precautions to be taken
* Training and guidance as necessary to ensure proper use of PPE and clothing provided
* The results of monitoring and health surveillance
* Emergency procedures

All of the above must reviewed regularly and if circumstances or individuals change.

**Further reading:**

* HSE online leaflet on the matter in 2012 that can be found [here](http://www.hse.gov.uk/pubns/indg136.pdf).
* HSE publication [EH40](http://www.hse.gov.uk/pubns/priced/eh40.pdf) (Workplace exposure limits)

**Other relevant regulations:**

* Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), a European Union regulation dated 18 December 2006.