

## **COSHH**

COSHH stands for Control of Substances Hazardous to Health, and these regulations were implemented in 1988. They were then updated in 1999 and 2002. There are essentially seven steps quoted in the COSHH guidelines, which the employer must follow. These are:

- assess the risks any substances may pose
- provide suitable and effective protective measures
- reduce exposure to zero or a level that is reasonably practicable
- enforce the control measures
- monitor employees who may be exposed
- carry out appropriate health surveillance
- inform, train and supervise staff.

In any workplace, there may be substances present that can be damaging to health. The key point is that your employer must identify all potentially hazardous chemicals present in the workplace. Failure to do so leading to workers being exposed to risk is an offence under the Health and Safety at Work Act 1974.

It may be that there is an element of risk involved in any process because of the substances used. Once that risk has been identified (risk assessment), it is up to the employer to assess that level of risk. If the risk is high then alternative methods must be examined with a view to reducing the risk. If there is no alternative then any changes in practice that might lessen the risk must be investigated. This might mean introducing control measures or maintaining any instruments used in the process, monitoring the workers' exposure or limiting the time a worker is exposed. Perhaps the most important aspect is that the workers must be adequately trained to carry out the processes and be informed of the risk and the reasons that precautions have to be taken.

All areas of risk as identified under COSHH should be included in the Standard Operating Procedures. It is essential that workers are familiar with the potential risk and take responsibility for following all recommended procedures. It may be necessary to wear gloves or a face mask for certain jobs and these must be available to use.

Before starting a task, it is advisable to find out if there are any hazardous chemicals present in the test protocol. Then, you should find out how to take suitable precautions and prevent accidents, and how to clean up if there is one. Remember that some reagents only use one chemical but others may use a 'cocktail' of many chemicals, some of which may be hazardous.

There should be methods in place to enable staff to handle hazardous substances safely. For example, there should be fume cupboards for handling volatile substances whose fumes can be dangerous. There should be gloves, goggles, face masks and other specialist protective clothing available, as well as respirators. In some areas, such as those using radioisotopes, there should be monitoring systems in place to ensure staffs are not overexposed to radiation. There should be special measures such as trays or designated areas for working with hazardous chemicals, and there should be 'spill kits' available to safely clean up any spillages.