

European Safety Week – Dangerous Substances:

The management of chemicals is a priority for all workplaces and none more than in a healthcare setting. In many of our workplaces, workers are exposed to dangerous substances, which are a major occupational safety and health (OSH) issue. There is a great deal of legislation on this issue as well as numerous guidance and support documents and tools; nevertheless, awareness and knowledge are often insufficient, and easily applicable preventive measures could be taken in many more cases. Taking action to eliminate or reduce exposures to dangerous substances helps to protect workers from a range of accidents (such as fire and explosion) and health problems (including skin diseases, allergies, respiratory illnesses and cancers). Furthermore, it makes good business sense to address the risks: organisations will reap the benefits in terms of, for example, increased productivity and reduced sickness leave. Our campaign has the following objectives:

- to raise awareness of the importance and relevance of managing dangerous substances in our healthcare settings
- to promote risk assessment, elimination and substitution, as well as the hierarchy of prevention measures
- to raise awareness of the risks linked to exposure to carcinogens at work
- to target groups of workers with specific needs and increased levels of risk (e.g pregnant employees and young people)
- to increase awareness of policy developments and the current legislative framework.



Campaign introduction



In all sectors there are typical working tasks that often involve exposure to dangerous substances, such as cleaning and maintenance. However, no sector is completely free of dangerous substances, and it is vital that employers assess the risks that their workers may face. THE NHSF have developed a comprehensive programme to assist you to manage this risk.

To effectively manage this risk you first need to know what are dangerous substances?

For the purposes of this campaign, a dangerous substance is any substance in gas, liquid or solid form, including aerosols, fumes and vapours, that poses a risk to workers' health or safety (biological agents, however, are not included in the scope of the campaign topic.)

Chemical Exposure Routes:

Dangerous substances can cause many different types of harm, some of which are potentially very serious. Harm from dangerous substances can arise from a single short exposure, from long-term exposure or from the long-term accumulation of substances in the body. It includes:

- long-term health effects, for example respiratory diseases (e.g. asthma, rhinitis, asbestosis and silicosis), harm to inner organs, including the brain and the nervous system, and occupational cancers (e.g. leukaemia, lung cancer, mesothelioma and cancer of the nasal cavity);
- health effects that can be acute or long term, such as poisoning, skin diseases, reproductive problems and allergies.

There are different 'pathways' through which workers can be exposed to dangerous substances. Some substances can be breathed in or 'inhaled', while others can also be absorbed through the skin. Workers who do 'wet work' (i.e. using water or solvents that can break down the skin's natural defence barrier) are at particular risk from this exposure pathway. Dangerous substances may also penetrate the body through ingestion, for example when workers eat or drink in their workplace, although it is prohibited, when their workplace is contaminated or when they breathe in particles of dust and swallow them.

The STOP principle
a hierarchy of prevention measures:



Hazardous Chemicals in the Workplace:

We are exposed to chemicals daily, some hazardous. The prevalence of chemicals in our workplace requires the awareness of the hazards, how best to manage them and the necessary steps to ensure the effective control of risks.

There is a great variety of guidance available to support workplaces in managing dangerous substances. However, the volume of material and the range of sources can leave those responsible for managing the risks uncertain about where best to look for guidance. Therefore, the HSE's campaign aims to improve access to and awareness of the most relevant and widely applicable practical solutions based on the experience in healthcare. We have developed a easy to follow step by step process to assist you to manage chemical risks in the workplace called the [Chemical Risk Assessment Overview](http://www.hse.ie/safetyandwellbeing) on www.hse.ie/safetyandwellbeing for more information.

Chemical Risk Assessment Overview (click on the **BUTTONS** below for more information on each stage).

