MANCHESTER 1824
The University of Manchester

SafetyMatters

Issue 6, June 2017

Chemicals causing concern

There have been a number of incidents reported recently to Safety Services involving people who have been exposed to or harmed by hazardous chemicals.

Those harmed have included colleagues (staff and students) in research and teaching laboratories, support staff in other parts of the building and visiting contractors.

Many of the incidents had a number of things in common:

- The risk assessment was inadequate and failed to identify the correct PPE selection and use.
- The person responsible took insufficient steps to protect themselves and others.
- Inadequate labelling of chemical containers.

All adverse events, whether a person is injured or not, must be promptly reported to your local Safety Advisor who will, where necessary, inform Safety Services and assist with the investigation.

The purpose of an investigation is not to find someone to blame but to learn from the findings and share important lessons with others so as to prevent it happening again.

Thank you...

to those people who remain anonymous but who reported the events referred to in this issue of SafetyMatters.

They have provided a valuable opportunity for other people to learn from them and not suffer the same injury or other loss as they have done.

Incorrect waste management led to harm

There have been a number of accidents where stores personnel have been exposed to hazardous substances while handling waste chemicals.

Many incidents have had the same causes:

- The lid on a bottle containing waste acid was too big and the contents spilled onto the arm of stores staff when the bottle was moved.
- Lids on solvent bottles were left loose to prevent pressure build up. However, they also allow the contents to leak onto those who handle them.

We all have a responsibility not only to take care of ourselves, but not to harm others by what we do or fail to do.

Therefore what could you do to protect others when you are disposing of chemicals?

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Mind the gap!

A number of accidents have been reported to Safety Services where people working in laboratories have failed to 'Mind the gap' and paid insufficient attention to ensuring there was no gap between the personal protective equipment (PPE) they were wearing.

As a result, people have been splashed in the face or sprayed in the eyes with chemicals which have run down the gap between their safety glasses and their face.

In other instances people have suffered chemical exposure to their arms when there has been a gap between their protective gloves and lab coat sleeves and been exposed to the very chemicals they needed to protect themselves from.

Both these examples should remind us of the importance of thinking about *all* aspects of the tasks you are planning to do when you carry out a risk assessment, so you can identify where any gaps in PPE protection might arise.

Wearing your lab coat correctly will protect your arms. Tasks involving stretching or reaching might influence the length of protective gloves needed, or, whether the gloves should be worn over your lab coat cuff.

Your eyes are precious - protect them

Take a moment to think about the tasks you plan to do.

Is there a risk that hazardous chemicals could splash round your safety glasses and into your eyes? Do you need a different design?

Could chemicals spray from a syringe and enter your eye or spray onto your face if the needle becomes loose under pressure ?

In the workshop, is there a risk that fragments of material being cut or ground might be ejected and get behind loose fitting eye protection? Do you need a face visor?

If these or other similar risks exist, carefully consider which is the most effective PPE to protect your eyes.

If you are unsure what type of PPE to use, or are concerned you are not using your PPE correctly, seek the advice of your supervisor, local safety advisor or PPE supplier.

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- Ensure you always use the correct size lid for the container you are using.

- If pressure build up is a potential risk, consider using a vented cap or ensure you know how to safely cap the bottle, leaving it sufficiently loose to enable pressure release but sufficiently tight to avoid leakage of contents.

For more information on chemical safety visit http://www.healthandsafety.manchester.ac.uk/toolkits/chemicals/

Importance of labelling

Two recent incidents resulted in exposure to harmful chemicals because their containers have been either unlabelled or unclearly labelled.

In one, a student mixed chemicals from two unlabelled flasks and a violent reaction occurred spraying chemicals in their face. Why? One of the flasks was confused with a third unlabelled flask nearby.

In the second incident a waste contractor was exposed to harmful chemicals following confusion about the contents of a bottle of unwanted legacy chemicals.

The owner passed it on for disposal without documentation or clear labelling of the containers. This resulted in a misunderstandings of the contents and led to a full scale emergency services alert when the contents were spilled

If you have chemicals you need to dispose of, it is ***your responsibility*** to ensure they are correctly labelled and packaged to prevent harm to those who will handle them.