University and NHS Trust fined for death of worker

A scientist working alone in the evening was asphyxiated while decanting liquid nitrogen into smaller flasks at a medical laboratory in London. It was unknown that the extraction system had been switched off.

The scientist worked for Chelsea & Westminster NHS trust, he was using a facility that Imperial College was renting from the Trust.

Both the trust and Imperial College London pleaded guilty to breaching Sections 3 (1) and 2 (1) of the Health and Safety at Work etc. Act and were fined £80,000 and £70,000 respectfully. Click here for more detail.

The case found that the risk assessment was inadequate and responsibilities were not clearly defined for shared spaces.

What can we learn from this incident?

Those who are responsible for a space must ensure that the infrastructure and any systems installed for safety are fit for purpose and are correctly maintained. All those who are required to work in the space or work on any infrastructure that affects the space must be trained in the correct operation of the systems. Where failure or isolation of a system can cause a risk to health and safety, then emergency arrangements must be prepared and shared with all interested parties. This could include Estates, Security, anyone needing access to work in the area.

Persons responsible for space must:

- Ensure that liquid cryogen dispensing points are secure and can only be accessed by persons who have been trained in the correct operation and also trained in the actions to take in the event of an emergency and the response required to any alarms;
- Establish additional precautions where the risk of the work activity increases when working alone, or working outside normal hours. Ensure these precautions are communicated and understood by those carrying out the activity;
- Clearly define responsibilities where space is shared between research groups and
  - Ensure good communication between all interested parties
  - Ensure all facilities provided are suitable and maintained appropriately
- Ensure suitable risk assessments are carried out for all high hazard activities and suitable engineering controls are installed developed and used, via procedures, local rules etc.

Where there is the potential for oxygen levels to be depleted suitable detection systems must be installed and maintained. All users of the space must understand what actions to take when the alarm is activated.

The civil claim by the family against the NHS trust and Imperial College is likely to very high. These costs cannot be recovered via insurance.

Useful links:

Report all incidents and near misses          Health & Safety webpages          Need advice on health & safety