



**GL238 Top 10 hazards found in Science audits**

CLEAPSS carries out many audits of Science departments. Through these we have identified hazards which are common across a range of schools. For more information about how to fully audit the health and safety of your Science department have a read of Guide G271.

| Image   | Issue  | Action required / recommendations   |
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|   | <p>Eye wash bottles are not suitable for Science labs. A standard eye wash bottle will last less than a minute in use. CLEAPSS advises that eyes should be irrigated for a minimum of 10 mins when a chemical is found in the eye.</p> | <p>Eye wash bottles should be replaced with a length of rubber tubing stored in a sealed, clear plastic bag, labelled <i>eye wash</i> and kept near an accessible sink in each lab and prep room.</p>   |
|  | <p>Lab benches where either the worktop is loose and/or the whole unit can move a large amount. With fixed gas taps on the benches this could easily lead to damage to the gas supply pipe. This could in turn lead to a gas leak.</p> | <p>All benches should be checked for excessive movement, and where needed repairs should be made to ensure the worktops are securely fixed down. Once this is done, then the gas pipe work should be checked by a <i>Gas Safe</i> engineer. Until this work is carried out the gas should not be used in the affected labs.</p> |



Biology specimens where the preservative level has dropped. This can create a biohazard risk.

Re-fill or dispose of the samples. Contact the *CLEAPSS Helpline* for more information about how to do this.



Storage cabinets which are very rusty, which could lead to shelves breaking and a large chemical spill.

Check all cabinets for rust. Replace any which are severely rusted. Contaminated cabinets may need to be hosed down before disposal. Check your chemical store ventilation: 2 ach (air changes per hour).

Apart from statutory flammable cabinets, avoid metal cupboards for chemical storage.



Gas piping is made of copper, which is a soft metal and thus needs to be given mechanical protection (boxing in). Exposed gas pipes made of cast iron with screw type connections are fine.

Audit all gas piping in labs, and box in all copper pipe work to give it mechanical protection to meet the gas regs: IGEM UP/11.

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|    | <p>Mains electrical sockets are damaged or loose. These present an electrocution risk.</p>  | <p>Audit all sockets in labs and replace/repair as necessary.</p>   |
|   | <p>Cut-off switches which are not obvious or labelled. Cut-off switches (gas and electricity) should be clearly, and visibly labelled. They should also be easily accessible, and not be located in, for example, another room or hidden under a bench.</p> | <p>Install suitable signs in all labs and prep rooms, templates can be found in guide E232.</p>   |
|  | <p>There is no provision of ventilation to meet the CLEAPSS / DfE recommended rate of 5 ach (air changes per hour) for labs and prep roomsthrs. Note: windows do not constitute ventilation, as they won't be opened in cold weather.</p>                   | <p>Fit suitable ventilation to achieve 5 ach in all labs and prep rooms. Provision for make-up air (fresh air to replace that being extracted) should also be considered.</p> |

