General safety information

We have attempted to ensure that all recognised hazards have been identified and appropriate strategies to reduce the risk to acceptable levels are suggested. Where possible, the proposed protocols are in accordance with commonly adopted model (general) risk assessments.

However, Wellcome Trust can take no responsibility for the safety of any activity that has been altered from the original printed version. **Before doing any practical activity, schools and colleges should always carry out their own risk assessment.** In particular, any local rules issued by your employer must be obeyed, regardless of what is recommended here. Where students are required to write their own risk assessments they must always be checked by the teacher and revised, as necessary, to cover any issues the students may have overlooked. The teacher should have the final control as to how practical work is conducted.

Laboratory policy and practice

It is assumed (unless the context dictates otherwise) that the following general precautions apply:

- Practical work is conducted in a properly equipped and maintained laboratory.
- Eye protection is worn by both students and teachers/lecturers whenever the risk assessment requires it.
- Other protective control equipment (e.g. safety screens, efficient fume cupboard to the standard of at least *Fume Cupboards in Schools*, Building Bulletin 88) is used when the risk assessment requires it.
- Long hair is tied back and ties, scarves, and cardigans are not allowed to hang freely.
- Containers of chemicals are clearly labelled with an appropriate name and any hazards. All chemicals are handled according to good laboratory practice.
- Eating, drinking, and chewing gum are not permitted in laboratories.
- Whenever students are themselves the subject of an investigation, they do not feel any under pressure to take part, and areas such as body measurements are dealt with sensitively.
- Electrical and other equipment is well maintained and subject to regular checks.
- Students at particular risk (for example asthmatics, those with allergies, and those with known disabilities) are identified by the teacher and catered for.
- Science staff have received appropriate training in the activities, including hazard identification and risk assessment.
- Students using a computer must take a break every 20 minutes and staff must ensure that any Internet use is supervised appropriately.

Various regulations, but especially the COSHH Regulations 1999 and the Management of Health and Safety at Work Regulations 1999, require that before any activity involving a hazardous procedure is carried out, or hazardous chemicals are used or made, the employer must make a risk assessment. Guidance on managing health and safety in science, including risk assessment, can be found in *Topics in Safety* (3rd edition, ASE, 2001) and *Safeguards in the School Laboratory* (11th edition, ASE, 2006). *Materials of Living Origin – A Code of Practice for Scottish Schools* (SSERC, 2005) covers activities where pupils are subjects of experiment or investigation. For CLEAPSS members, detailed guidance is contained in their Science Publications CD-ROM. This includes the L196 guide, *Managing Risk Assessment in Science and Student Safety Sheets*, to teach students about risk assessment, together with many helpful examples of actual practical activities.

CLEAPSS members can find HazCard information relating to use of chemical substances, their safe disposal, and treatment of equipment between use at www.cleapss.org.uk.