SSERC and Biology

Biology is less obviously hazardous than chemistry from a Health and Safety point of view but there can still be issues and SSERC can still help.

Human remains

Most skulls and skeletons found in schools are artificial but from time to time we come across genuine human remains.

Usually this is in the form of bones or a complete skeleton but we have heard of other samples – even in one case a human foetus preserved in formaldehyde!

There is no requirement to dispose of these but if you are going to, it needs to be done properly. The appearance of a human skull at the local recycling centre could spark a major police incident.

If you find something, contact SSERC and we can put you in touch with the right people.



Fieldwork

This is certainly not unique to biology. Indeed many other subjects make use of the educational opportunities available away from school premises.

Many of these activities, particularly those taking place at relatively remote sites, contain risks not present in normal school life.

In addition to our classroom-based risk assessments, SSERC has numerous risk assessments covering a variety of other activities that may take place on and off the school premises: from school fairs to river studies. And, as with all other areas we cover, if you need more specific advice, we are on hand to help.



Microbes

Studying micro-organisms is an important part of any biological studies but one that is not without dangers. If samples are taken from the wrong places (e.g. manure) or cultured at high temperatures (especially approaching human body temperature) or grown anaerobically, then there is the possibility of dangerous pathogens being accidentally cultured.

SSERC's Safety in Microbiology Code of Practice gives extensive guidance on what to do, and more importantly what not to do. If there is any doubt then we are available by telephone or email to advise.

Plant and animal material

On a larger scale, a lot of other biological work involves studying living organisms, or more often material extracted from them.

- **Human studies** most commonly these involve non- invasive studies on things like heart rate or breathing; though studies can be carried out on saliva, cheek cells and blood. Some studies however, particularly at Advanced Higher, raise ethical issues.
- Animal studies any studies on live animals also raise ethical issues as well as health and safety ones but dissection and examination of animal organs (eyes, hearts, lungs etc.) are commonly carried out and, as long as SSERC guidance is followed, are quite safe.
- **Plant studies** In general, these are less problematic. The main hazards are likely to involve either plant toxicity or allergies.