Student safety sheets 3

Human body fluids and tissues

includes **cheek cells, blood, saliva, sweat & urine**

Source	Hazard	Comment
Cheek cells	 BIOHAZARD	There is a very tiny risk of transmission of HIV or hepatitis virus but only if contact is made with samples other than your own. Sampling may be banned in some schools although this is now very unlikely.
Blood	 BIOHAZARD	There is some risk of transmission of HIV or hepatitis virus if contact is made with blood other than your own. Taking blood samples is possible if stringent precautions are taken but may not be permitted in a few schools. Never share hypodermic needles or become 'blood brothers'.
Saliva	LOW HAZARD	There is negligible risk of transmission of HIV or hepatitis virus even if you come into contact with saliva other than your own. Kissing is rarely banned for reasons of hygiene!
Sweat	LOW HAZARD	There is negligible risk of transmission of diseases even if you come into contact with sweat other than your own but this is no excuse for poor hygiene!
Urine	 BIOHAZARD	There is a very tiny risk of transmission of various diseases if you come into contact with urine other than your own, although urine is normally sterile. In investigations involving urine, take care when obtaining and transporting samples. Wash hands after using the toilet.

Typical control measures to reduce risk

- Only handle samples from your own body.
- After use, hygienically dispose of samples, disinfect contaminated containers by immersion for 30 minutes in a solution of sodium chlorate(I) (hypochlorite, eg, Milton) or Virkon (for 10 minutes); treat benches for a sufficient length of time with a suitable disinfectant (Virkon is preferred) and wash hands. Any swabs, slides or other equipment contaminated with blood should be collected in a suitable container, then autoclaved. If necessary, use a 'sharps' container (eg, a sturdy box, clearly labelled and sealed and wrapped before disposal).
- Treat clinical thermometers, mouthpieces, etc in Milton for 30 minutes before and after use (unless disposable).
- In first aid, minimise contact with blood by wearing disposable surgical gloves or by asking the casualty to carry out her/his own treatment, eg, by applying pressure to a wound using a pad of cloth.

Assessing the risks

- ***What are the details of the activity to be undertaken? What are the hazards?***
- ***What is the chance of something going wrong?***
  eg, could somebody else come into contact with samples from your body, or vice versa?
  If first-aid treatment was ***not*** *applied, could the casualty's condition put his or her life at risk?*
- ***How serious would it be if something did go wrong?***
  eg, could HIV or hepatitis virus or other pathogens be transmitted?
- ***How can the risk(s) be controlled for this activity?***
  eg, can it be done safely? Does the procedure need to be altered?

Emergency action

- **Spilt on the floor, bench, etc** — For spills of most body fluid samples, place paper towels over the spill, pour disinfectant (eg, *Virkon*) on top and leave for at least 15 minutes. For blood, wear disposable gloves, wet paper towels or cloth with freshly-prepared sodium chlorate(I) (hypochlorite, bleach) containing at least 10 000 ppm chlorine or 1% *Virkon*. Add more disinfectant to soak area and leave for 15-30 minutes. Still wearing gloves rinse towels or cloth under running water Wash hands thoroughly with soap and water.
- **Disposal of bloody tissues, etc** — Avoid skin contact with tissues etc contaminated with blood. In school, place in a container for sanitary towels, etc. Then incinerate or use a clinical waste-collection service. At home, flush down the toilet or wrap carefully and place in the refuse.

