

THE UNIVERSITY OF WESTERN ONTARIO

OCCUPATIONAL HEALTH AND SAFETY

Laboratory Procedures to Be Followed When Handling Unfixed Human Blood, Tissues or Body Fluids (HBBF)

All human source material can potentially transmit infection. The agents of primary concern are hepatitis viruses, a, b and c and HIV(the virus that causes aids). However, any infectious disease present can be transmitted by handling infected material. Blood represents the body fluid of highest risk but all body fluids and tissues should be handled as if they have the potential to transmit disease.

N.B. These guidelines are equivalent to Health Canada/MRC Laboratory Biosafety Level 2.

- 1.ALWAYS WEAR GLOVES WHEN HANDLING HUMAN SOURCE MATERIAL.
- 2.Change gloves between patients . Do not wash and reuse gloves. Know the correct procedure for removing used gloves
- 3.WASH YOUR HANDS THOROUGHLY WITH SOAP AND WATER WHEN CHANGING OR DISCARDING GLOVES OR WHEN WORK IS COMPLETED.
- 4.Wear safety glasses or face shield if there is any danger of splash or splatter.
- 5.Wear a long sleeved lab coat (fastened). A plastic apron may also be necessary if large volumes of blood are to be handled.
- 6.Use special care when handling sharps - needles, scalpels, glassware- to avoid cuts and stab wounds.
- 7.All materials in contact with or contaminated by blood must be disposed of into designated biohazard containers.
- 8.NO HUMAN SOURCE MATERIAL OR ANYTHING CONTAMINATED BY IT IS TO BE DISCARDED INTO IN THE REGULAR GARBAGE.
- 9.All equipment and work surfaces must be disinfected after use : Bleach diluted 1:10 with water is recommended. Equipment may require a less corrosive disinfectant.
- 10.NO MOUTH PIPETTING.
11. NO FOOD OR DRINK IN THE LAB AREA
- 12.Use leak proof containers and secondary containers if necessary for transportation between labs.
13. If blood is spilled it must be cleaned up immediately.

SMALL SPILLS: Wearing gloves, wipe up spill with paper towel soaked in disinfectant and discard into a designated container. Discard gloves and wash hands thoroughly.

LARGE SPILLS: Wearing gloves cover the spill with paper towel or other absorbent material and gently pour bleach onto the spill being careful not to splash. Allow 10 minutes for inactivation then scoop up absorbed blood and disinfectant and discard into a designated container. Remove and discard gloves and wash hands thoroughly.

14. If you cut or stab yourself with items contaminated with blood, wash the wound with soap and running water immediately and continue for 5 minutes. Squeeze or scrub the wound to induce bleeding if possible.

GET MEDICAL ADVICE IMMEDIATELY BY REPORTING TO STUDENT OR STAFF/FACULTY HEALTH SERVICES IN UCC, ROOM 11 or 25.

For eye exposures, flush eyes under eyewash for 10 minutes and get medical assistance.

If the source of the contaminating blood is known take this information with you to the medical office.

15. Personnel must receive biosafety training before starting laboratory procedures

Look at the OHS training page for the date of the next HBBF training session

16. Hepatitis B immunization is recommended. (see UWO Hepatitis B Policy)
17. Procedures generating aerosols* must be carried out in a biological safety cabinet or the procedure enclosed. Centrifugation should be carried out in closed containers.

* Procedures generating aerosols:

Pipetting liquids
Centrifugation
Sonicating, blending or grinding tissues
Vortexing uncapped tubes
Opening pop-top micro-tubes
Penetrating rubber septum-closed vials by needle
Reconstituting lyophilized cultures

many electronic devices e.g. cell counter, plate washers, multiwell analyzers