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**The University of Texas Health Science Center at Houston**  
**Universal/Standard Blood and**  
**Body Fluid Precautions**

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Healthcare personnel are at risk for occupational exposure to bloodborne pathogens including hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV). Exposures can occur through needlesticks or cuts from other sharp instruments contaminated with an infected patient's blood or through contact of the eye, nose, mouth, or skin with a patient's blood.

**All personnel who work with blood, blood products, or other potentially infectious materials must be trained in bloodborne pathogens on an annual basis as required by the OSHA Bloodborne Pathogens Standard (29 CFR 1910.1030). The required training is available on-line at <http://www.uth.tmc.edu/safety/biosafety/biotrain.htm> (must have a valid UTHSC-H user name and password) or training may be scheduled with the Biological Safety Program at 713-500-4193.**

1. Routinely use barrier protection to prevent skin and mucous membrane contamination with blood or body fluids of all patients and specimens.
2. Wear gloves when engaged in the following:
  - Touching blood and body fluids, including during routine laboratory work and phlebotomy.
  - Touching all laboratory specimens and tissues.
  - Touching mucous membranes and non-intact skin of all patients.
  - Handling items contaminated with blood or body fluids, including specimen containers, laboratory instruments, counter tops, etc.
  - Performing venipuncture, arterial puncture, skin puncture, and other vascular access procedures.

Note: All skin defects (cuts, abrasions, ulcers, areas of dermatitis, etc.) should be covered with an occlusive bandage.

3. Change gloves between each patient.
4. Wear a mask and eye covering, or preferably a face shield, during procedures that are likely to generate droplets of blood or body fluids to prevent exposure to the mucous membranes of the mouth, nose, and eyes.
5. Wear a gown, apron, or other covering when there is a potential for splashing or spraying blood or body fluids.
6. Wash hands or other skin surfaces thoroughly and immediately if contaminated with blood or body fluids.
7. Wash hands immediately after gloves are removed.

8. Take extraordinary care to avoid accidental injuries caused by needles, scalpel blades, laboratory instruments, etc. when performing procedures, cleaning instruments, handling sharp instruments, and disposing of used needles.
9. Place used needles, skin lances, scalpel blades, and other sharp items into a puncture-resistant biohazard sharps container for disposal. The container should be located as close as possible to the work area in a convenient location. Phlebotomists should carry puncture-resistant containers with them.
10. To prevent needlestick injuries, needles should not be recapped, purposely bent, cut, broken, removed from disposable syringes, or otherwise manipulated by hand.
11. When possible the use of safety devices, such as self-sheathing needles and retractable syringes, should be employed to reduce the likelihood of needlestick or sharps injury.
12. Place large-bore reusable needles (e.g., bone-marrow needles and biopsy needles) and other reusable sharps into a puncture-resistant container for transport to the reprocessing area.
13. Minimize the need for mouth-to-mouth emergency resuscitation procedures. Mouth pieces, resuscitation bags, or other ventilation devices should be used routinely.
14. Take care to minimize the formation of droplets, spatters, splashes, and spills of blood or body fluids.
15. Clean all surfaces exposed to blood and body fluids with a 10% bleach solution for a minimum contact time of fifteen minutes, or with an appropriate EPA-registered chemical disinfectant for a contact time recommended by the manufacturer.

Laboratory workers with exudative lesions or weeping dermatitis should refrain from all patient contact and from handling patient-care equipment and patient specimens until the condition resolves. Skin lesions should be covered with an occlusive bandage to prevent contamination.

Pregnant women are not known to be at greater risk of contracting blood-borne infections than other laboratory workers. However, if HIV infection develops during pregnancy, the infant is at risk of infection by perinatal transmission. Therefore, pregnant laboratory workers should be especially aware of universal/standard precautions.

### **Special Precautions for Laboratories**

1. Laboratory space should be allocated to minimize crowding which may contribute to laboratory accidents.
2. Laboratory surfaces, counters, and floors should be made of impervious materials to facilitate disinfection.
3. Good laboratory practices should be followed at all times, and eating, drinking, and applying cosmetics are not permitted in the laboratory.
4. Adequate and convenient locations for biohazard sharps containers for disposal of all sharps (contaminated or otherwise) should be provided.

5. Adequate decontaminating containers for reusable supplies should be provided.
6. Written decontamination, disinfection, and sterilization protocols should be developed for processing reusable supplies, laboratory equipment, laboratory waste, machine effluent, and environmental surfaces.
7. Hand washing facilities should be provided in each laboratory area.
8. Only authorized personnel should be allowed in the laboratory when procedures with infectious or potentially infectious materials are being conducted. Non-laboratory personnel should be closely supervised and should use appropriate protective measures to ensure that they do not cause a hazard to themselves or to the laboratory staff.
9. Monitoring compliance is a major responsibility of the management of the laboratory.

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