



Office of Environmental Health and Safety
The University of Texas at Austin
Service Building, Suite 202
Austin, Texas 78712
(512) 471-3511; Fax: (512) 471-6918

INFO SHEET

Universal Precautions

The Centers for Disease Control (CDC) has published recommendations for preventing HIV (and other bloodborne pathogens) transmission in health-care settings, commonly called "universal precautions". This approach emphasizes the consistent use of blood and body fluid* precautions for all patients because the infectious potential for blood and other body fluids is not always known. The following recommendations have been developed for use in health care settings. Many of these same recommendations are also applicable in research labs where work with blood or other body fluids is being conducted.

Universal Precautions

1. All workers should routinely use appropriate barrier precautions to prevent skin and mucous membrane exposure when contact with blood or other body fluids is anticipated. Gloves should be worn for touching blood and body fluids, mucous membranes, or non-intact skin of all patients, for handling items or surfaces soiled with blood or body fluids, and for performing venipuncture and other vascular access procedures. Gloves should be changed after contact with each patient. Masks and protective eyewear or face shields should be worn during procedures that are likely to generate droplets of blood or other body fluids to prevent exposure of mucous membranes of the mouth, nose, and eyes. Gowns or aprons should be worn during procedures that are likely to generate splashes of blood or other body fluids.
2. Hands and other skin surfaces should be washed immediately and thoroughly if contaminated with blood or other body fluids. Hands should be washed immediately after gloves are removed.
3. All health-care workers should take precautions to prevent injuries caused by needles, scalpels, and other sharp instruments or devices during procedures; when cleaning used instruments; during disposal of used needles; and when handling sharp instruments after procedures. To prevent needlestick injuries, needles should not be recapped, purposely bent or broken by hand, removed from disposable syringes, or otherwise manipulated by hand. After sharps are used, they should be placed in puncture-resistant containers for disposal; the puncture-resistant containers should be located as close as practical to the use area.
4. Pregnant health-care workers are not known to be at greater risk of contracting HIV infection than health-care workers who are not pregnant; however, if a health-care worker develops HIV infection during pregnancy, the infant is at risk of infection resulting from perinatal transmission. Because of this risk, pregnant health-care workers should be especially familiar with and strictly adhere to precautions to minimize the risk of HIV transmission.

Precautions for Laboratories

To supplement the "universal precautions" listed above the following precautions are recommended:

1. All specimens of blood and body fluids should be put in a well-constructed container with a secure lid to prevent leaking during transport.
2. All persons processing blood and body-fluid specimens, e.g., removing tops from vacuum tubes, should wear gloves. Masks and protective eyewear should be worn if mucous membrane contact with blood or body fluids is anticipated. Gloves should be changed and hands washed after completion of specimen processing.

(over)

3. For routine procedures, such as histologic and pathologic studies or microbiologic culturing, a biological safety cabinet is not necessary. However, biological safety cabinets should be used whenever procedures are conducted that have a high potential for generating droplets. These include activities such as blending, sonicating, and vigorous mixing.
 4. Mechanical pipetting devices should be used for manipulating all liquids in the laboratory. Mouth pipetting must not be done.
 5. Use of needles and syringes should be limited to situations in which there is no alternative, and the recommendations for preventing injuries with needles outlined under universal precautions should be followed.
 6. Laboratory work surfaces should be decontaminated with an appropriate chemical germicide after a spill of blood or other body fluids and when work activities are completed.
 7. Contaminated materials used in the laboratory should be decontaminated before reprocessing or be placed in bags or other containers and disposed of according to The University's procedures.
 8. Equipment that has been contaminated with blood or other body fluids should be decontaminated and cleaned before being repaired in the laboratory or transported to the manufacturer.
 9. All persons should wash their hands after completing laboratory activities and should remove protective clothing before leaving the laboratory.
- * Universal precautions apply to blood and to other body fluids containing visible blood. Universal precautions also apply to semen and vaginal secretions; tissues; and to the following fluids: cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic.

Reference: National Research Council. Biosafety in the Laboratory, Prudent Practices for the Handling and Disposal of Infectious Materials, 1989.

For more information, call (512) 471-3511 or see our Web site at <http://www.utexas.edu/business/oehs>.