

Standard Operating Procedures (SOP) and Body Substance Precautions (BSP)

1. Standard Universal Precautions

- Standard Universal Precautions are observed throughout the laboratory to prevent contact with blood and other potentially infectious materials.
- All body fluids are considered potentially infectious.
- All procedures involving blood or other moist body substances shall be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances.
- Blood and other body fluid spills should first be soaked up with absorbent material (e.g., paper towels). The area should then be cleaned using 10% bleach solution.
- Work surfaces/laboratory bench tops shall be cleaned and decontaminated after contact with blood or other potentially infectious materials or after completion of laboratory procedures.
- Broken glassware which may be contaminated with blood/body fluids shall not be picked up directly with the hands. It shall be cleaned up using mechanical means such as a brush and dust pan, tongs or forceps. Contaminated broken glass will be placed in a puncture-resistant container and disposed of as biohazardous waste.
- Needles, syringes, razor blades, and other sharp items shall be placed in an UMHHC-approved puncture resistant container without recapping.
 - Used needles must not be cut, bent, broken or recapped by hand before disposal due to increased chance for injury when needles are manipulated. In the case of vacutainer needles, the "one-handed recapping technique" should be used. (Lay the needle cap on a flat surface. Insert the needle [attached to the vacutainer holder] into the cap with one hand. Do not hold the sheath with your other hand.)
 - Sharps containers shall be located in all areas where needles and sharps are used and shall be secured so they will not be knocked over and their contents spilled.
 - Safe needle devices shall be used when available.
- Each laboratory must follow the procedures within this manual and establish specific procedures related to this policy as needed.

2. Prohibited Activities

- The following activities are **prohibited** in all areas or work areas where biological specimens are present:
 - Eating
 - Drinking
 - Applying cosmetics or lip balm
 - Manipulation of contact lenses
 - Mouth pipetting
- The recapping, purposeful bending, breaking, removing from disposable syringes, or other manual manipulations of needles is strictly **prohibited**.

3. Hand Washing

- Employees must wash their hands immediately or as soon as possible after removal of gloves or other personal protective equipment and after hand contact with blood or other potentially infectious materials.
- Hands are washed between all patient contacts, before eating, drinking, applying cosmetics or lip balm, or manipulating contact lenses and after using lavatory facilities.
- Antiseptic hand cleaner or towelettes are used whenever clean running water is not readily available; however, they are not used as a substitute for hand washing and hands are washed with soap and water as soon as feasible.
- Wearing gloves does NOT mean you do not have to wash your hands!

4. Food and Drink

- Food and drink are not permitted within the laboratory and must be stored in areas designated break areas in refrigerators and freezers marked "for food and drink only."

5. Visitors to the Laboratory

- Only authorized personnel are allowed in the laboratory. Casual visitors (e.g., family members, tour groups, etc.) are discouraged.
- Non-laboratory personnel are to be closely supervised and use appropriate protective measures (e.g., clothing, etc.) to ensure that they do not cause a hazard to themselves or to the laboratory staff.
- Service and maintenance personnel are not permitted to enter a biohazard area until the laboratory's safety requirements are reviewed, instrument to be serviced is decontaminated, and appropriate personal protective equipment is issued and worn.

6. Personal Protective Equipment (PPE)

- Personal protective equipment (PPE) will appropriately be utilized in all laboratories as assigned based on the task assessment, which does not allow blood or other potentially infectious materials to pass through to or otherwise reach the employee's work clothes (e.g., scrubs), street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time the protective equipment is used. The types of barriers used will depend on the task involved and the potential for contact with moist body substances.
- All PPE is removed immediately upon leaving the work area, or as soon as possible, and placed in an appropriately designated area or container for storage, washing, decontamination, or disposal within each individual laboratory.
- Knee-length fluid-repellant lab coats or cover gowns with long sleeves are to be worn only in the work area and are to be closed (e.g., completely snapped/buttoned) so as to protect the employee's clothing. Aprons are worn in addition to the lab coat when the lab coat cannot provide adequate protection (e.g., when the employee is pregnant) or when fluid contamination is likely. Aprons **do not** substitute for lab coats, but they serve as additional protection.
- Lab coats are worn only in the work area and are not worn on meal or rest breaks or in any public areas (e.g., cafeteria, lobby, gift shop). Soiled lab coats are removed immediately upon leaving the work area.
- Where the use of respirators is necessary to maintain exposure below permissible exposure limits, the employer provides, at no cost to the employee, the proper respiratory equipment. The respirators shall be selected and used in accordance with [29 CFR 1910.134](#).
- Eyewear will meet OSHA standards and come in various sizes to accommodate the wearer. Lenses are optically correct, anti-fog, and scratch-resistant in either plain or prescription, and temples and nose pads are adjustable. Side shields may be attached permanently or may be detachable. Eyewear is provided by the employer upon employment at no cost to the employee. Replacement and repair due to normal wear and tear are also the employer's responsibility. The employer will provide prescription eyewear via the Kellogg Eye Center. Eyewear should be appropriately cleaned prior to use and whenever splashes or contamination are visible. When not in use, eyewear should be contained in a sanitizing cabinet or decontaminated and in an individual case in the employee's locker or other dedicated space provided by the laboratory.

7. Specimen Transport

- Samples will be transported in a manner to prevent contamination of

workers, patients, and environment.

- Samples must be transported in a secondary container to prevent accidental spillage and breakage.
- All specimens should be collected or transferred into a leak-proof primary container with a secure closure. Care should be taken by the person collecting the specimen not to contaminate the outside of the primary container.
- All specimen processing will be performed wearing appropriate PPEs.
- Laboratory requisitions slips should be protected from contamination and separated from the primary container.
- Personnel who transport specimens must be trained in safe handling practices and in decontamination procedures in case of a spill.
- Within the laboratories, gloves **will be** worn when removing specimens from the primary container and for all manipulations of the primary container.
- If specimens are transported via a pneumatic tube system, the primary and secondary containers should be tested and shown to be leak-proof under the conditions present in the pneumatic system. If a spill occurs, it should be decontaminated according to laboratory procedure.

8. Equipment Cleaning, Transporting, and Servicing

- Equipment, including computer and network equipment from the laboratories, which is contaminated with body substances, will be cleaned / decontaminated if possible prior to transport. If this is not possible, place equipment in containers or bags and label as biohazardous.
- If equipment cannot be cleaned / decontaminated, the receiving department of individual will be notified of that contamination so that adequate precautions can be taken.

9. HBV Vaccination

- An employee's risk of exposure to blood or body fluids will be assessed at the first visit to EHS upon hiring. Those whose jobs involve any risk will be provided information regarding the nature of that risk, the efficacy of vaccines (including Hepatitis B vaccine), and the possible contraindications or adverse effects of the vaccine.
- Personnel working in or transferring into an exposure-prone area or reporting to EHS because of a potential body substance exposure shall also be provided this information. Supervisors are responsible for sending all transferred employees in exposure-prone occupations to EHS for a reassessment of their exposure risk.
- UMHHC personnel who work in exposure-prone occupations who are

not vaccinated against HBV and not known to be immune shall be reminded of the availability and possible benefit of vaccine during visits to EHS. Hepatitis B vaccine shall be administered without charge to any hospital employee who wants it. For additional information, refer to the IC Policy for Managing Employee Exposures and Infections.

10. Employee Education and Training

- All employees and volunteers of the University of Michigan Hospitals and Health Centers shall receive SP/BSP information as part of the Orientation Program.
- Employees whose work includes potential exposure to blood/body fluids will receive additional training prior to assuming work duties. The training program shall include: 1) The epidemiology and clinical presentation of bloodborne pathogens; 2) Location, indications for and proper use of personal protective equipment (PPE); 3) Area specific workplace practices to prevent exposure to bloodborne pathogens; 4) Infectious medical waste handling; 5) Hepatitis B vaccination program; 6) Blood/body fluid exposure protocol and follow-up; 7) Explanation of the signs and labels; 8) A mechanism for questions to be answered by trained staff.
- Employees whose work includes potential exposure to blood/body fluids are identified by supervisors.
- Employees whose work includes potential exposure to blood/body fluids shall receive annual retraining to include the above information.
- All orientation and annual training must be documented and maintained by each department. It must be available upon request by IC&E or any regulatory or accrediting agency.


References

[UMHHC Policy 62-02-004 Standard Precautions/Body Substance Precautions Policy – IC&E Policy VI-53](#)

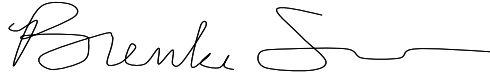
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