

BIOSAFETY AND INFECTIOUS AGENTS CONTROL PLAN

PURPOSE:

This policy establishes minimum requirements for the handling, storage and disposal of biohazardous materials used in the teaching laboratories located in Marieb Hall. It is applicable to all faculty/staff and students with direct or potential access to biohazardous materials in the facility.

Biohazardous materials include blood and all of its components, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, amniotic fluid, saliva, urine and any body fluid contaminated with blood, unfixed tissue and feces. Additionally, all biological materials, e.g. biological controls, reagents and human tissue even if certified as free from HIV and Hepatitis B virus, are to be treated as biohazards.

POLICY:

Laboratory safety is reviewed on the first day of the laboratory session of each laboratory course. It is the responsibility of the Department to present and review this policy with students prior to the commencement of laboratory activities. It is also the responsibility of the individual using the laboratory to review and adhere to this policy during laboratory sessions. **(Refer to the Environmental Health and Safety Policy regarding Employee training: <http://admin.fgcu.edu/ehs/manual.htm>)**

SAFETY, PERSONAL HYGIENE, PROTECTIVE CLOTHING AND EQUIPMENT

- Eating, drinking, smoking, applying cosmetics, changing contact lenses is strictly prohibited in the laboratories.
- Food or drink is not kept in refrigerators, freezers, shelves, and cabinets or on countertops or benchtops where blood or other potentially infectious materials may be placed or stored.
- Disposable latex and non-latex gloves are provided at all laboratory sessions and shall be worn when contact with infectious materials, mucous membranes and non-intact skin is anticipated and always when performing vascular access procedures such as phlebotomy and skin punctures. These gloves must be replaced when they become contaminated, torn or punctured.
- Masks, eye protection, face and bench shields are provided and are worn whenever there is a potential for generating splashes and aerosols of infectious material that may contaminate the eye, nose or mouth.
- Laboratory jackets are provided by students and must be worn when working with infectious material. These are not worn outside of the laboratory.
- All students, faculty and visitors remove their protective clothing and equipment and wash their hands before leaving the laboratory. Under no circumstances should protective clothing be worn to the cafeteria, lounge or vending area.
- Personal items and any books or papers not being used in the laboratory session must be left in the locker/cubby area prior to entering the laboratory or working with biological specimens.

- Work surfaces are disinfected after each laboratory session and whenever a potentially infectious material is spilled. Commercial disinfectants or 10% bleach solution are provided for this purpose. Cover the contaminated surface with the disinfectant and let sit or air dry for at least 10 minutes.
- Contaminated broken glassware must never be picked up by hand. Mechanical devices such as a brush and dustpan, tongs or forceps will be used and fragments placed in puncture resistant sharps container in the laboratory.
- Immediately following use, scalpel blades and needles are disposed of in appropriate puncture resistant sharps container. Needles and blades are not reused.
- Contaminated needles and other sharps are not recapped and only removed from the syringe or needle holder using a mechanical device that would facilitate a one-handed technique.
- During use, contaminated sharps containers are maintained in an upright position. Containers are sealed prior to their removal or replacement in order to prevent spillage of their contents during storage or shipment, and discarded in closable, puncture resistant, leak proof containers.
- Immediately following use, contaminated supplies are placed in the appropriate receptacles. Disposable supplies are placed in leak proof containers in the laboratory and reusable supplies are placed in the labeled, puncture resistant, leak proof containers provided, for decontamination.
- All contaminated disposable waste is placed in durable leak proof boxes. These boxes are stored in room 267 Whitaker Hall. Contaminated disposable waste from the Department Practice Laboratories and Anatomy Lab in Marieb Hall, is transported to and placed in the boxes located in Whitaker Hall room 267, per the Environmental Health and Safety Policy on Management and Disposal of Biohazardous Waste <http://www.fgcu.edu/EHS/BioHazardousWaste.html>.

COMMUNICATION OF HAZARDS

The entrance(s) to areas where biological materials are used and stored are posted with orange signs stating "Biohazard" and showing the biohazard symbol in black. Biohazard warning labels are posted on all refrigerators, freezers and containers used to store or transport biological material and on all equipment that may be potentially contaminated with biohazardous or infectious materials (e.g. centrifuges, incubators, biosafety cabinets, vortexes, telephones, keyboards, etc.).

- Laboratory safety is reviewed on the first day of the laboratory session of each laboratory course. It is the responsibility of the Department to present and review this policy with students prior to the use of the laboratory. It is also the responsibility of the individual using the laboratory to review and adhere to this policy during laboratory sessions.

STORAGE OF BIOLOGICAL MATERIALS

- Biological materials are stored in designated freezers, refrigerators and cabinets in the laboratories and preparatory room. The contents of these units are clearly indicated by posted signs and labels on their doors.
- No food or drinks are stored in these units.

UNIVERSITY CHEMICAL POLICY

Please refer to the university website at: <http://www.fgcu.edu/EHS/ChemicalHygiene.html> for information on chemical hygiene.

SPILLS

- Small spills of contaminated or biological materials are covered with disinfectant-soaked paper towels for 10- 15 minutes before being cleaned up. Blood spills should be covered with a 10% bleach solution for 15 minutes and then cleaned up. The contaminated paper towels are then disposed of in the biohazardous waste containers. Please insure when working with any type of spill protective personal equipment (Gloves) should be worn at all times.
- Spill kits, located in Marieb Hall, Room 212 should be used for larger chemical spills. Special care must be taken when broken glassware is present. Contaminated, broken glassware must never be picked up by hand. Mechanical devices such as a brush and dustpan, tongs or forceps, kept in the preparatory room of the laboratory, should be used. Fragments are placed in puncture resistant containers for broken glassware after decontamination.
- When cleaning up spills, the appropriate personal protective equipment must be used.
- Hand washing follows the cleanup procedure.

ACCIDENTAL EXPOSURE TO BLOOD AND BODY FLUID PROCEDURE

INTRODUCTION:

Blood and certain body fluids are considered potentially infectious for Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV) and other blood borne pathogens. Universal Precautions must therefore be consistently used for all clinical specimens in the above-mentioned category. Therefore, whenever contact with blood and other body fluids is anticipated, appropriate barriers such as gloves, gowns, masks and eyewear must be worn to prevent exposure of the skin and mucous membranes.

PURPOSE:

To provide immediate response for the treatment of accidents in the student laboratory resulting in percutaneous (needle stick/sharp object) injury, non-intact skin exposure or mucous membrane exposure to blood and or body fluids.

Immediate post-exposure procedure:

- Percutaneous/parenteral exposure (needle stick/sharp object) injury:
 - Briefly induce bleeding from the wound
 - Wash the wound for 10 minutes with soap and water or a disinfectant with known activity against HIV (10% iodine solution or chlorine compounds).
 - Remove any foreign materials that may be embedded in the wound.
- Cutaneous/non-intact skin exposure (blood/body fluid contact with broken skin):
 - Wash with soap and running water
 - Disinfect with a 10% iodine or chlorine solution.

- Mucous membrane exposure (blood/body fluid contact with eyes, mouth, nasal membranes):
- Irrigate with copious amounts of tap water, sterile saline or sterile water for 10 -15 minutes. This is done at the eye wash station in laboratory or sink in the Practice Center.

Following these procedures, secure the offending sample for future testing and report immediately to Student Health Services for assessment of the injury.

POST-EXPOSURE EVALUATION AND FOLLOW-UP

Following exposure and immediate treatment, the faculty/staff must complete and submit the **ACCIDENTAL EXPOSURE FORM** to the office of Human Resources. Students should report to Student Health Services immediately and notify the department Chair of the exposure. Forms are located at <http://admin.fgcu.edu/ehs/expd.htm>. This form must be completed within 24 hours of exposure with documentation of the following:

- Date and time of the exposure.
- Procedure being performed when the incident occurred. A brief account of the incident.

Exposure is defined as a parenteral (e.g., needlestick or cut) or mucous membrane (e.g., splash to the eyes, nose or mouth) exposure to blood or body fluids, or cutaneous exposure involving large amounts of blood especially if the skin is cut, chapped, abraded or affected with dermatitis.

Following an accidental exposure as defined above, a sample of the source will be saved and coded for possible testing, anonymously.

University procedures governing employee/student accidental exposure surveillance are outlined in the Environmental Health & Safety Policy.
<https://www2.fgcu.edu/EHS/>

FLORIDA GULF COAST UNIVERSITY DEPARTMENT OF REHABILITATION SCIENCES CHEMICAL HYGIENE PLAN

The following general rules apply to all laboratory work with chemicals.

ACCIDENTS AND SPILLS

- Eye contact: Promptly flush eyes with tepid water for 15 minutes, and seek medical attention.
- Skin contact: Promptly flush the affected area with water and remove any contaminated clothing. **Report to Student Health Services for evaluation of the affected area.**
- Clean-up: Promptly clean up spills using appropriate apparel and equipment and proper disposal. Refer to the applicable Material Safety Data Sheet (MSDS) for specific clean-up recommendations located in Marieb Hall, Room 212.

AVOIDANCE OF EXPOSURE

- Unnecessary exposure to chemicals by any route must be avoided at all costs.
- Chemicals used in the student laboratories are compatible with the quality of the ventilation system used in the laboratory.
- Eating, smoking, drinking or applying cosmetics is strictly prohibited in areas where laboratory chemicals are present.
- Damaged glassware must never be used. Equipment must be used for its designed purpose only.
- Always wash areas of exposed skin before leaving the laboratory.
- Never engage in horseplay, practical jokes or any behavior that may startle, confuse or distract others at work.
- Appropriate eye protection must be worn by all present, including visitors, when chemicals are being handled.
- Appropriate gloves are worn when the potential for contact with toxic materials exists. These gloves must be inspected before each use, washed before removal and replaced when needed.
- Laboratory coats must be removed immediately when significantly contaminated. Long hair and loose clothing should always be confined. Leather shoes should be worn to laboratory sessions, avoid open toed shoes.
- The work areas are kept clean and uncluttered with chemicals and equipment. Tubes and containers are properly labeled.
- Fume hoods are used for operations which may result in the release of toxic chemical vapors or dust. Adequate hood performance should be verified before use, the hood should be kept closed during the experiment except when adjustments within the hood are being made. Fume hoods are left "on" when toxic substances are stored in them.
- Students, faculty and staff are aware of the location of safety showers, eyewash stations, first-aid equipment and exits. Prominent signs will indicate the location of safety equipment.

CHEMICAL STORAGE AND WASTE DISPOSAL

- Toxic substances are stored in compliance with FGCU's policy as outlined in the Environmental Health & Safety Policy and Procedure Manual, <http://admin.fgcu.edu/ehs/manual.htm>. Material Safety Data Sheets for chemicals are located in Marieb Hall, Room 212B.
- Amounts of chemicals stored are as small as practical.
- NEVER dispose of concentrated acid or base, highly malodorous, lachrymatory substances, or any substances which might interfere with the biological activity of wastewater treatment plants, create a fire/explosion or corrosion hazards down the drain. Such chemicals will be disposed of in accordance with FGCU's policies as outlined in the Environmental Health and Safety Policy and Procedures Manual, <http://admin.fgcu.edu/ehs/manual.htm>

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