Medical Student Exposure to Infectious and Environmental Hazards
Policy

Policy Statement and Purpose

The Liaison Committee on Medical Education (LCME) has established a standard regarding medical schools to have defined policies in place to address medical student exposure to infectious and environmental hazards. The standard requires these policies to include information related to the education of students about methods of prevention, procedures for care and treatment after exposure(s), delineation of financial responsibility for post-exposure treatment, the effects of these hazards on medical student learning activities, and methods of distribution of these policies to ensure all students receive the information. The VCU School of Medicine has established this policy to address these identified areas and educate medical students on procedures to mitigate potential exposures and steps to take if an exposure occurs.

Stakeholders

The faculty, staff, and students of the VCU School of Medicine are responsible for knowing this standard operating procedure, its contents, and provisions.

Definitions

VCU SOM: Virginia Commonwealth University School of Medicine.

LCME: Liaison Committee on Medical Education. The group with authority to accredit medical education programs leading to the MD degree in the United States and Canada.

OME: Office of Medical Education.

CD: Course/Clerkship Director.

Blood Borne Pathogens: Blood Borne Pathogens as defined by the Occupational Health and Safety Administration are pathogenic microorganisms that are present in human blood that can cause disease in humans and include, but are not limited to:

- Human Immunodeficiency Virus (HIV)
- Hepatitis B Virus (HBV)
- Hepatitis C Virus (HCV).

OPIM: Other Potentially Infections Materials (OPIM) as defined by the Occupational Health and Safety Administration, include, but are not limited to:

- Semen and vaginal secretions,
- Cerebrospinal fluid, synovial fluid, pleural fluid pericardial fluid
- Peritoneal fluid, amniotic fluid
- Saliva in dental procedures
- Any bodily fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids
- Any unfixed tissue or organ (other than intact skin) from a human (living or dead)
- HIV-containing cell or tissue cultures, organ cultures, and HIV or HBV-containing culture media or other solutions
- Blood, organs, or other tissues from experimental animals infected with HIV or HBV

**Occupational Exposure:** Occupational Exposure as defined by the Occupational Safety and Health Administration includes reasonably anticipated skin, eye, mucous membrane, or parenteral contact with human blood or OPIM’s that may result from the performance of an individual’s work duties.

**USHS:** University Student Health Services.

**Responsibilities**

**Students:** Students are responsible for reading this policy annually so they will be informed on best practices to prevent and/or minimize injury/illness from occupational exposures.

**OME:** OME is responsible for ensuring students comply with annual training requirements and provides guidance/support to any student who experiences an occupational exposure.

**CD:** CD’s are responsible for ensuring all distribution of this policy and any related procedures regarding occupational exposures to students during orientation for their course/clerkship.

**General Considerations**

Students in Health Sciences educational programs may experience blood and body fluid exposures in the educational environment. Guidelines for evaluation and treatment of students are maintained to assure timely and comprehensive management of such exposures. These guidelines outline the procedure that a student who is an enrollee in University Student Health Services (USHS) should follow. If the student is not eligible for services at USHS or cannot get to USHS, these guidelines can be followed at the student’s own expense. These guidelines cover post-exposure care for hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus (HIV).

Diagnosing blood-borne infections in a patient whose blood or body fluid is the source of an occupational exposure is a prerequisite to the provision of optimal post-exposure care. Unnecessary testing should be avoided when the probability of infection is remote. In the majority of cases, serological testing of the source patient is the most reliable method to assess the risk of exposure and would be strongly encouraged.
Prevention Measures to Mitigate Exposure(s)

**Required Annual Training**

- All Students are required to read the policy as part of the annual review of the student handbook
  - Students must complete an attestation indicating they have completed this annual review, and are reminded of this requirement during each of the Transition courses
  - Students who fail to complete the required annual training will not be allowed to participate in clinical activities until the required training is complete
- Students in the Practice of Clinical Medicine bootcamp are provided with training on how to properly utilize personal protective equipment in order to minimize potential exposures. This training includes proper use of items including, but not limited to:
  - Face masks
  - Face shields
  - Goggles
  - Gowns
  - Gloves
  - Shoe covers
  - Hand washing techniques
- Students rotating at the Richmond VA Medical Center facility must complete the “Mandatory Training for Trainees: Resources for Health Professional Trainees Coming to VA” prior to be granted facility access
  - This online module includes, but is not be limited to, the following topics:
    - VA’s Safe and Healthful Work Environment
    - Blood and Body Fluid Exposure
    - Fire and Other Emergencies: RACE & PASS
    - Procedures in the Case of an Injury, Illness or Exposure
    - Safety in the Magnetic Resonance (MR) Environment for Non-Lab Staff (Level 1)
    - Radiation Safety

**Dissemination of Educational Documents**

- This policy and any related procedures regarding blood borne pathogens, OPIM’s and other occupational exposures are distributed to students at multiple timepoints within the curriculum, including, but not limited to:
  - Transition to M1 and M2 year programs
  - Practice of Clinical Medicine orientation
  - Clerkship specific orientations
  - Transition to M3 year program
  - Transition to M4 year program
• M3 students receive an Occupational Exposure pocket card during the Transition to M3 course
  o This card is a quick reference for what to do in the event of an occupational exposure and is meant to be worn with the student’s badge
• Visiting students receive a copy of this policy and an Occupational Exposure pocket card as part of the Visiting Student Handbook upon their acceptance into the rotation

Process for Handling Post-Occupational Exposure(s)

Initial Treatment of an Exposure Site

• Wounds and skin sites that have been in contact with blood or body fluids should be washed with soap and water for 3-5 minutes
• Small wounds and punctures may be cleansed with an antiseptic such as an alcohol-based hand hygiene agent, since alcohol is viricidal to HIV, HBV, and HCV. Patients should be warned that alcohol may sting
• Mucous membranes should be flushed with water for 15 minutes, preferably at an eye wash station. Contacts should be removed and discarded
• The application of caustic agents (e.g. bleach) or the injection of antiseptics or disinfectants into the wound is not recommended
• No evidence exists that expressing fluid by squeezing the wound further reduces the risk of blood borne pathogen transmission; however, the use of antiseptics is not contraindicated.

After Initial Post-Exposure Actions are Taken

• Report the injury to a supervisor as soon as possible
• Follow the VCU University Student Health Services Clinical Guidelines for Blood and Body Fluid Exposure (see Attachment C) including the following steps:
  o The student should work with his/her resident or attending physician and the charge nurse to assure that appropriate labs are drawn on the source patient. If the student encounters difficulty in getting the source patient’s labs performed, they should contact the USHS clinician on call
  o Determine Significance of an Exposure: The exposure should be evaluated for the potential to transmit HBV, HCV, and HIV based on the type of body substance involved and the route and severity of the exposure
  o Contact VCU Student Health Services at (804) 828-9220 or report to their office located at 1000 East Marshall Street, Room 301 as soon as possible
    ▪ VCU Student Health Services will always have a care provider available for consultation during office hours
    ▪ Students rotating at locations more than fifteen (15) minutes away from the VCU Health campus should receive initial evaluation and testing at their away location.
Reporting an Exposure

For students who are enrolled in University Student Health Services and the source patient is **IN THE VCU MEDICAL CENTER** or affiliated ambulatory clinics:

- In the event of an exposure to blood or body fluids during regular office hours (8:00am - 4:30pm Monday through Thursday or 10:30am - 4:30pm Friday), the student should call (804) 828-9220 or report to the University Student Health Services (USHS) clinic on the third floor of the VMI Building, 1000 E. Marshall Street. Summer hours for USHS are 8:00-4:30 Monday through Thursday and 10:30 to 4:30 Friday.
- Students rotating at locations more than 15 minutes away from USHS should receive initial evaluation, testing, and treatment at the away-site via arrangements per contract made prior to the rotation by the Clerkship Director or as outlined in the affiliation agreement.
- If the exposure occurs after-hours or on the weekend, the student should use the hospital paging system (804-828-0951) to activate the PEP Team pager (4508). The clinical administrator pager is 6105. A member of the PEP Team will call the student back, assess the injury, and provide over-the-phone counseling to assess the need to start PEP meds.
- When USHS is closed and the Post-Exposure Prophylaxis (PEP) Team is not available, the student should call USHS (804-828-9220) and follow the recorded directions to receive assistance from the practitioner on-call. (e.g. he student should call USHS if an exposure occurs before USHS opens on Friday or after USHS closes on weekdays, but before the PEP Team assumes call.)

Notification to the OME

- Students experiencing an occupational exposure must report the incident to the OME within two (2) calendar days of the exposure by sending an email to vcuome@vcuhealth.org.
  - An associate/assistant dean from the OME will contact the student to ensure they are receiving appropriate medical care and address any barriers they may be facing

Responsibility for Cost of Treatment

- VCU Student Health Services covers the costs for initial evaluation and treatment for medical students related to occupational exposures that occur at VCU Health facilities with the following exceptions where students will be responsible for the cost of testing and/or treatment:
USHS cannot be responsible for the costs of post-exposure testing and prophylaxis for VCU students who are working at out-of-area sites and cannot return to USHS

- Students will be responsible for the cost of HBV hyperimmune globulin and the Hepatitis B vaccine if indicated
- Students will be responsible for the cost of any medications (e.g. ondansetron) which might be needed to treat side effects of PEP medications given after exposure to HIV
- In the event that prophylactic treatment for Hepatitis C becomes available, students will be expected to assume the cost of this treatment

- Students are responsible for all medical costs related to occupational exposures that occur at sites away from VCU Health facilities
- Students are responsible for all costs of any follow-up evaluation and treatment that might be required
- Students are required to maintain active health insurance coverage while enrolled in the VCU SOM.

Return to Educational Activities

- Students are allowed to return to educational activities following an exposure or illness once cleared by a USHS provider based on current professional (CDC) guidelines
  - The SOM, in conjunction with USHS, will provide reasonable accommodations whenever possible to facilitate a return to educational activities
  - In the event that students are unable to return or are not cleared by USHS to return to educational activities, the ADSA in conjunction with USHS will meet with the student to discuss alternative options and provide resources and support

Compliance Monitoring

- The OME is responsible for monitoring compliance with established training requirements outlined in this policy
  - The OME will track completion of required annual training to ensure all students remain compliant
  - Students who fail to complete the required annual training will not be allowed to participate in clinical activities until the required training is complete

Related Policies

Student Health and Disability Insurance Requirements Policy

Review Cycle and Revision History

The policy is reviewed and may be revised by the Curriculum Council as necessary, but at least every three years.
Applicable Laws, Regulations & Standards

LCME Standards for Accreditation of Medical Education Programs Leading to the MD Degree:

- LCME Standard 12, Element 8