

Policy for Prevention of and Response to Educational Exposures to Blood Borne Pathogens and Tuberculosis

I. Purpose

The purpose of this document is to (1) list the required and recommended immunizations for University of Minnesota Academic Health Center (AHC) students; (2) prevent/manage blood borne and respiratory infections; (3) delineate the management if exposure to blood-borne pathogens should occur to AHC students while they are in the educational setting; and (4) describe the procedure for fit tested mask requirements for AHC students who rotate through areas at high-risk for tuberculosis.

As freshman and sophomore medical students at the Medical School Duluth Campus, when reference is made to Boynton Health Center located on the University of Minnesota campus in Minneapolis, you should instead refer to the UMD Health Services on the UMD campus. The exception to this is the Protocol for Exposure to Blood Borne Pathogens During Educational Experiences (Section VII below), which should be followed as written. As third and fourth year students in Minneapolis, you will then use Boynton Health Services instead.

II. Definitions

For the purpose of this policy, *AHC students* are defined as those current and visiting students who are required in their academic program to have responsibilities in clinical settings and/or community environments with significant exposure to human patients/clients.

An educational exposure to blood-borne pathogens is defined as a percutaneous injury (e.g., a needlestick or cut with a sharp object), contact with mucous membranes or contact with skin (especially when the exposed skin is chapped, abraded, or afflicted with dermatitis or the contact is prolonged or involving an extensive area) with blood, tissues, or other potentially infectious body fluids, which occurs in the educational setting.

The dean of the school, in consultation with Boynton Health Service, will determine whether the school's students are at risk of *significant educational exposure* to patients with blood borne pathogens is defined as actual contact with blood or other potentially infectious body fluids. Significant exposure to patients with tuberculosis is defined as five-minute face-to-face contact with patients who could have active pulmonary tuberculosis disease.

III. Health Insurance Coverage

It is expected that AHC students carry health insurance coverage to cover emergency medical situations. All AHC will be automatically enrolled in the University Sponsored Health Benefit Plan (SHBP). This plan provides easy, affordable coverage for the unique needs of AHC students. Each AHC student should carry insurance information at all times on clinical and community educational rotations to have available in emergency situations. For more information on the SHBP, visit the Boynton Health Service website, <http://www.bhs.umn.edu/insurance/ahc/index.htm> or the UMD Health Services website: <http://www.bhs.umn.edu/insurance/duluth/index.htm>.

IV. Immunizations

Required student immunizations and vaccinations are to comply with Minnesota State law and Occupational Safety and Health Administration regulations. Students may be expected to have other requirements by individual schools.

IMPORTANT!

- To register for the academic year, you must have the appropriate immunizations.
- Your failure to have all required immunizations and vaccinations may influence the University's ability to place you in clinical rotations.
- You must carry documentation of immunizations to early practice/shadowing experience, service-learning and clinical rotations sites.

Upon admission to the AHC academic programs, students are required to submit proof of the following immunizations and vaccinations:

Required

- **Measles/mumps/rubella** documentation or positive titre
- **Tuberculosis Skin Test (Mantoux)**
 - AHC students are required to provide documentation of a **two-step** Mantoux test when matriculating into the Academic Health Center. Once enrolled in a school, evidence of an annual Mantoux test or a statement from a provider attesting that the student does not have active tuberculosis (TB) is required.
 - Students who have a positive Mantoux test will be required to complete a chest x-ray. For students not followed by Boynton Health Service, a documented treatment plan will need to be submitted to Boynton Health Service to assure that there is not a risk of transmission to students, faculty or patients.
- **Hepatitis B series** (3 doses) or documented immunity.
- **Past DTP or diphtheria/tetanus** within the last 10 years should be recorded.
- **Varicella Zoster**, positive history, or positive titre (2 doses of vaccine)

An annual influenza immunization and a completed polio series (3 doses) are strongly recommended.

If contraindicated for medical reasons, some of these vaccine requirements will be waived. Students will be required to file a waiver documenting medical contraindication.

If a student declines an immunization for conscientiously held beliefs (e.g., religious or cultural), he/she must submit a vaccine declination form.

Boynton Health Services is designated as the central data repository for AHC student immunization data and annual Mantoux testing. Students who are noncompliant will not be able to register for an academic year without the appropriate immunizations. Students must carry documentation of immunizations to early practice/shadowing experience, service-learning and clinical rotations sites.

A student's failure to have all required immunizations and vaccinations may influence the University's ability to place the student in clinical rotations.

V. General Information Regarding Prevention and Exposure to Blood Borne Pathogens During Educational Experiences

All AHC students in contact with patients or potentially infectious bodily fluids will receive information annually about standard precautions, blood borne pathogens, appropriate basic first aid, and the response procedure portion of this policy. This information will be appropriate to the

student's educational level and the area of professional education. The educational office of the colleges and programs, or a designee will provide the required training.

Effective management of educational exposure to blood-borne pathogens requires coordination among multiple units of the University, Academic Health Center, and rotation sites. It requires training in prevention of injury and in the management of injuries when they occur. While students are not covered by OSHA regulations, the AHC policy is that OSHA regulations will serve to guide decisions regarding student during clinical and community rotations. Therefore, directives will be the same as those provided to employees with occupational injuries and will be developed by the AHC Student Educational Exposure to Blood-Borne Pathogens Task Force.

Experiential educational coordinators in each college and program will assure with the rotation site that students have access to care and first-response prophylactic medication by becoming familiar with facilities and pharmacies in the area of experiential rotations. Students and the BHS will be informed of the access to treatment and prophylactic medications. Preceptors should be familiar with this information and the AHC policies.

Upon arrival at a rotation site, AHC students will seek the information regarding site-specific protocols for managing exposure to blood borne pathogens and be familiar with the AHC protocols for managing education exposure to blood borne pathogens.

AHC students should follow the current protocol for response to educational exposure to blood borne pathogens, listed below.

VI. Prevention of Tuberculosis During Educational Rotations

In accordance with OSHA regulations for health care workers, AHC students will be required to complete mask fit testing. Students will carry documentation of testing and the mask requirements during rotations.

Properly fitted face masks offer protection against inhalation of airborne pathogens. Place a mask before entering a room where there is a risk of respiratory exposure. In the hospital, an isolation card posted at the doorway lists protective clothing and other precautions to prevent exposure to a patient's disease.

Health care workers are required to follow OSHA regulations in caring for persons with active tuberculosis. As a student, you will not be allowed to care for a patient with tuberculosis without proper mask fit testing. Your individual rotation site will provide you with instructions in how to handle this specific situation when it arises. If you have completed mask-fit testing, you should carry documentation of testing and the mask requirements during rotations.

VII. Protocol for Exposure to Blood Borne Pathogens During Educational Experiences

If you are exposed to bloodborne pathogens during an educational rotation, the response time is important—you must be seen by a health professional as soon as possible to determine risk factors. When you are on clinical or community educational rotations, you have support from three sources of help in case of exposure:

- Your preceptor at the site
- Boynton Health Services/UMD Health Services
- Your college or program experiential education director.

On the first day of your rotation at a new site, make sure you become familiar with the site-specific protocols for managing exposure to bloodborne pathogens. Your preceptor can assist you with this information.

The protocol steps listed below should be followed if you are exposed to bloodborne pathogens during an educational experience. We recommend that you carry a protocol quick-reference, wallet-sized card with these steps for exposure information with you during educational rotations. These cards are available in your school.

1. Perform basic first aid immediately as instructed in the student orientations prior to rotations. These instructions are:

- Clean the wound, skin or mucous membrane immediately with soap and running water. Allow blood to flow freely from the wound. Do not attempt to squeeze or “milk” blood from the wound.
- If exposure is to the eyes, flush eyes with water or normal saline solution for several minutes.

2. All students on an educational rotation in the State of Minnesota will contact the Boynton Health Service (BHS) 24-Hour Triage Nurse immediately by calling (612) 625-7900 and notify his/her preceptor at the site. **The student will identify him/herself as having a blood-borne pathogen exposure.**

- The BHS Triage Nurse will take the student through a rapid assessment about risk status and direct the student where to seek treatment.
- Students will be expected to contact BHS immediately because of the need for rapid assessment about prophylactic medications, rapid prescribing of medications, if indicated, and the limited capacity of a student to assess his/her own injury.
- Notify your preceptor at the site.
- With assistance of the BHS 24-Hour Triage Nurse and the student’s preceptor or other designated person, the student will attempt to secure pertinent information about the source patient information for discussion during the risk assessment.

3. Standard employee procedures of the institution where exposure occurs will be used for initial assessment of the source patient (permission form, what blood assays to draw, etc.) The standard procedures typically include the following information:

- When: Approximate time of exposure
- Where: Location of exposure (e.g., hospital, office, clinic, etc.)
- What: Source of the exposure (e.g., blood, contaminated instrument, etc.)
- How and How Long: Skin, mucous membrane, percutaneous; and how long (e.g., seconds/minutes/hours), exposure time
- Type of device
- Status of the patient: negative, positive, unknown HIV/Hepatitis B/Hepatitis C status
 - a. Whether or not patient is at risk for HIV, Hepatitis B or Hepatitis C infection
 - b. Multiple blood transfusions (1978-1985)
 - c. IV Drug User
 - d. Multiple sexual partners, homosexual activity
 - e. Known HIV positive/and/or have symptoms of AIDS
 - f. Significant blood or body fluid exposure

4. If the student is assessed at high risk for HIV infection following rapid assessment, the student should seek prophylactic medication treatment immediately. HIV post-exposure prophylactic medication should ideally be instituted, (i.e., first dose swallowed), within two hours. During the evaluation, the BHS Triage Nurse will assist students in selecting the most appropriate location for initial treatment.

5. All students (high risk and low risk) with an exposure should complete a follow-up assessment at Boynton Health Services within 72 hours of exposure. This appointment can be scheduled during the initial assessment with the BHS Triage Nurse (612) 625-7900. The costs of prophylactic medications and follow-up treatment will be covered at Boynton Health Services by

student fees. Off-campus treatment will be the student's personal responsibility or covered by the student's insurance coverage.

6. All students will complete a Boynton Health Service Reportable Educational Exposure Form and Occupational Exposure Forum and mail or carry these completed forms to the BHS for their scheduled follow-up appointment. These forms will be available for the BHS Triage Nurse.

Students must know that blood-borne pathogen exposure and the possible subsequent treatment are treated as an OSHA incident, requiring documentation in a separate restricted access medical record. Confidentiality is assured.

7. In accordance with the Needlestick Safety Law, the exposed student will receive prevention discussions, counseling and follow-up on the exposure.

VIII. Mantoux testing (tuberculosis screening):

The University of Minnesota Medical School requires all entering (matriculating) students to have recorded the result of a Mantoux test at the time of entering medical school or within the past six months, or, in the case of known or identified Mantoux positive individuals, a chest X-ray which indicates the absence of active tuberculosis.

Before beginning full time clinical work, in the third year for most students, the Medical School requires that Mantoux testing again be performed and results recorded. Known or identified Mantoux positive individuals must have a chest X-ray which indicates the absence of active tuberculosis.

IX. Other Infections and Illnesses:

At times students who become ill with diseases which could be transmitted to patients are not permitted by many hospital protocols to participate in patient care. Examples may include infectious conjunctivitis, active cellulitis, streptococcal pharyngitis, diarrhea from enteric bacteria or active herpes zoster or varicella. Some diseases require additional care to avoid transmission, such as the use of a mask with mild acute respiratory infections, and participation in care is not proscribed. In some circumstances, work with certain classes of patients is not permitted, such as with bone marrow transplant patients when herpes simplex is present. In fact, active herpes simplex ("cold sores") is cause for exclusion by some hospitals from participation in a number of clinical activities, including surgery. Students who experience an illness while on rotation should check with their preceptors for further clarification.

Students who become ill during the course of clinical activities should make certain, through the supervising faculty or, if referred, the employee health department of the institution, that they do not pose an infection hazard to the patients with whom they are in contact.

X. The Seropositive Student:

Students who have positive serologic tests which signify potential for transmission of a disease to another, such as Hepatitis B, have the responsibility to assure that no action or activity on their part will jeopardize the health and well-being of patients or fellow workers. This assurance will at times include wearing protective clothing and may at times require the student to request reassignment of patient care responsibilities. At Fairview-University Medical Center, certain personnel with potentially transmissible viral diseases are excluded from patient care activities until the Medical Center epidemiologist determines that they understand the mechanisms of disease transmission and will take the steps necessary to prevent such transmission.