

# Exposure to Infectious and Environmental Hazards Policy

## Purpose

The purpose of the Medical Student Exposure to Infectious and Environmental Hazards Policy is to promote the health, safety, and well-being of medical students. This policy establishes XUSOM requirements for preparing, preventing, and responding to exposure incidents, and ensures that the MD program meets the following ACCM accreditation standards:

10.2.7. Medical students may be exposed to infectious and environmental hazards during their educational program. The school has a policy in place that informs all students about methods of prevention, the procedures for care and treatment to be followed after potential exposure BEFORE undertaking any educational activities that would place them at risk. The school also informs students who may have an infectious/environmental disease or disability of any implications for their educational activities.

## Principles

XUSOM acknowledges that its faculty, staff, and students can be exposed to infectious and environmental hazards. As such, the development and implementation of this policy is guided by the principles of preparedness and safety.

## Definitions

Exposure Incident: refers to an injury or exposure to an infectious and environmental hazard.

## Scope of this Policy

This policy applies to all students applying to or registered in the MD program, faculty and staff at XUSOM irrespective of the geographically distributed site to which they are currently located.

## Policy and procedures:

### 1.0 Preparedness of students: Education and Training

The faculty will provide education and training to all students in appropriate methods to prevent the transmission of communicable diseases, including blood-borne pathogens, that is consistent with the CDC's guidelines for standard and additional precautions.

Medical students should be introduced to the concepts of infectious and environmental hazard, prevention, and control in their basic science of MD program. Furthermore, medical students should be educated in universal precautions and techniques for infectious and environmental hazards prior to beginning clinical rotations.

The students starting clinical rotations should complete Blood borne Pathogen Certification - Annually

The following are the certifications that students are required to complete:

For OSHA:

[https://www.cprtoday.com/course\\_outline.php](https://www.cprtoday.com/course_outline.php)

For Infection Control:

<https://blxtraining.com/courses/infection-control/>

Additional student self-study is encouraged via the following internet sites:

CDC infection control: Guidelines & Guidance Library

<https://www.cdc.gov/infectioncontrol/guidelines/index.html>

## **2.0 Prevention of Environmental Hazards**

Medical students can be exposed to infectious and environmental hazards. They are expected to take reasonable precautions to avoid environmental hazards and take appropriate preventative measures (Universal precautions) to protect themselves and from infectious disease.

It is the responsibility of all faculty, staff, and medical students to notify the Deans in a timely manner of the existence of any infectious or environmental hazards that might affect the medical students, other faculty or staff.

### **Universal Precautions**

As students enter patient care settings, it is important for students to establish common sense habits to protect themselves and their patients from the spread of infectious agents. The commonly used term for the methods used is universal precautions – universal in that one uses these precautions with all patients, not just those with known or suspected infectious disease. The agents associated with many infectious diseases are transmitted by superficial physical contact; others require intimate contact with blood or other body substances (e.g. Hepatitis B and C, HIV).

All students enrolled in the XUSOM must complete the school's program on universal precautions. The purpose of this program is to ensure that students have been informed of the appropriate handling of blood, tissues, and body fluids during medical school.

Opportunities for training in universal precautions are included as part of a required pre-orientation online session, all clinical courses and experiences, and all required clerkships. As part of professional development, students are responsible for incorporating these into routine practice while in patient care situations, and for being certain they understand what is available at each hospital.

The following precautions are to safeguard both students and patients, and are appropriate for the level of patient contact starting in basic science of the curriculum:

- Immunizations: Required for matriculation into medical school are the vaccine recommendations according to CDC.
- Hep. B vaccine: Students are Obligated to comply with hepatitis B immunization policies and requirements as outlined by the Immunization policy. This policy requires that all students receive the hepatitis B vaccine and test positive on the subsequent quantitative serology titer. Further testing is provided for those students who still do not respond to a second series of the vaccine.
- Students are mandated to comply with the Communicable Disease Protocol according to the most current CDC recommendations.
- Required to use standard precautions and additional practices in order to prevent the spread of blood-borne pathogens and other infections.
- Routine hand washing: Hand washing is performed frequently to protect both patients and health care workers. Hands are washed before and after touching patients, performing invasive procedures, and eating; hands are also washed after glove use, working with bodily substances, using the toilet, and the computer. Skin is a natural barrier to infectious agents, and products that protect and promote skin integrity can be used. It is important to establish the practice of hand washing upon entering a patient's room, before touching the patient, when leaving, and before eating.

Additional precautions that may be required in specific clinical settings include:

- Barrier protection
- Gloves are worn for anticipated contact with all body substances and are changed between patients.
- Gowns and/or plastic aprons are used to cover areas of the skin or clothing that are likely to become soiled with body substances.
- Facial barriers, including masks, glasses/goggles and face shields are worn whenever splashing or splatter of body substances into the mouth, nose, or eyes is likely to occur. Specialized masks and individual respiratory devices are also used for certain airborne diseases such as meningococcal meningitis and tuberculosis.

- Other barriers such as hair covers, shoe covers, and boots may be used when extensive exposure to body fluids may occur. (e.g., cystoscopy, vaginal delivery, multiple trauma).
- Sharps management: Sharps management refers to safe use of sharp agents such as needles, scalpel blades, etc. Dispose of them in appropriate rigid, impervious containers, and learn to handle them safely.

The healthcare environment may cause students to be exposed to airborne infectious conditions. Students receive training during orientation and annually thereafter regarding the use of particulate respirator masks to decrease the likelihood of exposure.

### **Radiation Precautions**

- Ionizing radiation is produced during the performance of many diagnostic imaging studies. Students should make an effort to minimize their exposure to ionizing radiation through time, distance and shielding.
- Time: Seek to minimize the amount of exposure to ionizing radiation. Pay special attention to exposure during procedures using fluoroscopy.
- Distance: When ionizing radiation is in use, stay as far away from the source as practical.
- Shielding: Always make use of any physical barriers (lead glass, lead aprons) that are available.
- Ionizing radiation presents special hazards to developing fetuses. Pregnant students should consult with the Deans for further guidance.

### **3.0 Exposure to Environmental Hazards**

Medical students in basic science who experience an exposure incident should notify the Deans in a timely manner. Further as suggested by the deans, a timely follow-up has to be done directly to the deans.

Medical students in clinical rotations who experience an exposure incident should follow the reporting and follow-up requirements of the relevant hospital environmental health and safety policies then in effect.

#### **Protocol**

This serves to instruct students about what to do in case of a bodily substance (blood, tissue, or body fluids) exposure, e.g. a needle stick, or an environmental exposure (e.g., a spill, solvents, radiation), including how to receive appropriate counseling and prophylactic treatment:

#### **Exposure Instructions:**

- DO NOT PANIC: Needle stick and other types of exposures are common, and risks can be appropriately mitigated.
- Time matters so proceed swiftly as follows.
- Remove all soiled clothing.
- Wash wounds and skin with soap and water (>5 minutes).
- Flush mucous membranes copiously with water (>2 minutes).
- Write down the following information on “source patient:” Name, hospital or clinic number, date of birth, and patient location.
- Notify supervising physician/clinical preceptor/Program director, deans, and CAO.
- Report to Occupational Health/Emergency Department for blood/body fluid exposure for:
  - Risk assessment of exposure
  - Baseline laboratory work
  - Occupational health evaluation of “source” patient
  - Institution of post-exposure prophylaxis (PEP) if appropriate (within one to two hours of exposure).

Students should follow up as directed by their treating healthcare provider. Ongoing follow up may take place at the initial treating facility or the student may be referred to a healthcare provider with expertise in infectious disease.

All students who experience an injury or exposure at a clinical site must submit appropriate documentation to the Office of Student Affairs as soon as possible. Students should not delay prompt evaluation and treatment to complete paperwork.

#### **4.0 Reporting of Environmental Hazards**

Medical students are required to disclose, as per school policy, if they are potentially exposed to a blood-borne pathogen in a clinical setting and provide a blood specimen if indicated.

In addition to the complying with the local authority reporting requirements, medical students who experience an exposure incident should also submit an Incident Report the Clinical chairs, Deans, and the CAO. The students at the clinical rotation should follow the reporting requirements of the respective hospitals.

#### **Contact:**

- Dr. Prasad, Dean of Student affairs: [nvijaayshankarmd@xusom.com](mailto:nvijaayshankarmd@xusom.com)
- Dr. Richard Pestell, Dean of Clinical Sciences: [rpestellmd@xusom.com](mailto:rpestellmd@xusom.com)
- Dr. Ahmad Abazid, Assistant Dean of Clinical Sciences: [abazidmd@xusom.com](mailto:abazidmd@xusom.com)
- Dr. Dubey, CAO: [dubeymd@xusom.com](mailto:dubeymd@xusom.com)

Students are ethically and professionally responsible for knowing their serological status with respect to blood-borne pathogens and to inform the Deans if they are positive for a blood-borne pathogen infection.

The faculty and administration should maintain confidentiality to the greatest extent possible regarding information disclosed by students concerning their serological status and disclose relevant information only with appropriate consent.

The deans/CAO may set up an Expert Review Panel for guidance, keeping the name of the student confidential. Disclosure may be necessary if there is reason to believe that the infected individual has declined or has failed to follow the provisions of this policy in regards to personal notification of appropriate personnel or fails to respond within a reasonable amount of time to a recommendation that they personally notify the person in charge of a particular clinic or department.

## **5.0 Effects on Medical Student Learning Activities**

Students are expected to be in a state of health such that they may participate in the academic programs, including patient care, without posing a risk to themselves or others.

Medical students whose learning activity is interrupted as a result of an exposure incident should contact the Deans as soon as possible. Upon verification, the Chair in collaboration with the Deans should communicate with related faculty regarding the medical student's absence and, where necessary, to accommodate an alternative educational or clinical activity.

### **Fitness for Clinical Contact**

Students are professionally and ethically obligated to inform the deans of any blood-borne infection.

The opportunity to participate in direct patient care carries with it the responsibility to ensure that patients are not placed at risk due to a student's mental illness, physical illness, or impairment from drugs or alcohol.

It is the responsibility of faculty, residents, medical students, and XUSOM staff members who know of or observe student behavior that has the potential to place a patient, other medical students, staff or the student him/herself at risk to immediately report the concern to the course or clerkship director and the Deans.

XUSOM educates future physicians while adhering to procedures established by the Centers for Disease Control to maintain the health and safety of patients while protecting the personal rights of students with contagious infections and/or diseases. The School, in consultation with the clerkship directors, monitors, and, when appropriate, modifies

clinical activities of infected students who may pose unwarranted risks to patients. Infections that must be reported to the clerkship director and the deans include, but are not limited to: viral hepatitis, HIV/AIDS, varicella, rubeola, mumps, rubella, influenza, acute bacterial conjunctivitis, pertussis, tuberculosis and scabies. In all instances, every effort is made to maintain the integrity and equivalency of the student's modified educational experience.

### **Medical students infected with blood-borne pathogens:**

May pursue their studies only as long as their continued involvement does not pose a health or safety hazard to themselves or others. It is expected that all students can be accommodated as needed with some modification to their program of study to reduce the risks of blood-borne pathogen transmission.

Will have their condition reviewed and monitored by an Expert Review Panel at the request of the Deans/CAO.

May have clinical duties or clinical exposure modified, limited or abbreviated based on recommendations from an Expert Review Panel as outlined in the CDC guidelines – particularly as it relates to the performance of exposure prone procedures and the status of the blood borne infection (e.g. viral loads etc.).

Required to immediately disclose if they accidentally expose a patient to their blood-borne pathogen in a clinical setting. Pre-notification to patients is neither suggested nor required.

Must be offered advice and counseling that will assist them regarding clinical practice and career choices.

Have the right to appeal decisions made by the Deans or Expert Panel by submitting, in writing to the Grievances Committee, a proposed amendment to the decision and the rationale supporting such amendment. The student may submit additional documentation from their personal physician or other health care provider in support of their appeal. In the case where the student's appeal is denied by the Grievances Committee, the student may appeal to CAO.

## **6.0 Financial Responsibility**

Financial costs for investigations, post-exposure prophylaxis, and ongoing treatment should the consulting Infectious Diseases physician deem it warranted, will be covered via the health insurance plan or borne by the student.

## **7.0 Administration Responsibilities**

The Deans and CAO, are responsible for providing oversight to the overall administration of the Medical Student Exposure to Infectious and Environmental Hazards Policy at XUSOM. They are also responsible for the implementation, monitoring, maintenance, and evaluation of the Medical Student Exposure to Infectious and Environmental Hazards Policy. This includes the development and stewardship of the standard operating procedures associated with this policy.

Handbook and By-laws Committee is responsible for evaluating, reviewing, and updating this policy every three years.

## **8.0 Non-compliance**

Instances or concerns of non-compliance with the Medical Student Exposure to Infectious and Environmental Hazards Policy should be brought to the attention of the Deans and the CAO.

**Policy Contact:** Dean of Student Affairs

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