

Oakland Community College EMT Program

Exposure Control Plan

The Oakland Community College EMT program is committed to providing a safe learning environment for our students. In pursuit of this endeavor, the Oakland Community College Emergency Medical Technology Program (referred to hereinafter as “the college”) will implement an exposure control plan to adhere to the guidelines set forth and to remain compliant with the MIOSHA bloodborne pathogens standard 29CFR 1910.1030 “Occupational Exposure to Bloodborne Pathogens”. This plan will include the Needlestick Safety and Prevention Act of 2001 and will be reviewed annually.

A copy will be disseminated to all students entering the program, along with documentation ensuring all information has been covered in the didactic and practical portion of the classroom setting.

The exposure control plan will also be disseminated to all teaching staff, including full and part-time, the program medical director, and program paraprofessional. There will also be a master copy located in the EMT office J-125, which will be accessible at all times when education and training are taking place.

Program Administration

The EMT Department Program Manager is responsible for the implementation of the exposure control plan. A group, made up of current students and the Program Manager, will be formed to review this policy annually.

Revisions will be made annually based on input from currently enrolled students or whenever necessary to include new or modified tasks or procedures. The contact phone number is (248) 232-4092.

All students are required to comply with the policies and work practices outlined in this exposure control plan. Any breach of this plan, either in the classroom setting or at any clinical sites, will result in immediate removal from the EMT Program.

During classroom activities, the lead instructor will be responsible for strict adherence to the exposure control plan. For the student involved in the clinical experience, adherence will fall on the clinical proctor or the designated individual in charge of the assigned student.

The Program Manager will be responsible for seeing that students are properly trained, documenting that said training takes place, and making the exposure control plan available to all employees who fall into category "A", all EMT students, OSHA, MIOSHA, and NIOSH representatives.

Definitions

Blood: Human blood, human blood components, and products made from human blood.

Bloodborne Pathogens: Pathogenic microorganisms that are present in human blood, and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV), and human immunodeficiency virus (HIV).

Contaminated: The presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

Contaminated Laundry: Laundry that has been soiled with blood or other potentially infectious materials or may contain sharps.

Contaminated Sharps: Any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

Decontamination: The use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles on the surface and the item is rendered safe for handling, use, or disposal.

Engineering Controls: Controls (e.g., sharps disposal containers, self sheathing needles, safer medical devices etc.) that isolate or remove the bloodborne pathogens hazard from the workplace.

Exposure Incident: A specific eye, mouth, or other mucous membrane, non- intact skin, or parenteral contact with blood or other potentially infectious materials that results from the students' or employees' duties.

Hand washing Facilities: A facility providing an adequate supply of running portable water, soap, and single use towels or hot air drying machines.

HBV: Hepatitis B virus.

HIV: Human immunodeficiency virus.

Needleless Systems: A device that does not use needles for:

(1) the collection of bodily fluid or withdrawal of body fluids after initial venous or arterial access is established; (2) the administration of medication or fluids, or; (3) any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

Occupational Exposure: The reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious material (OPIM) that may result from the performance of the employee or student duties.

Other Potentially Infectious Materials (OPIM): (1) the following human body fluids;

semen	vaginal secretions	cerebral spinal fluid
synovial fluid	pleural fluid	pericardial fluid
peritoneal fluid	amniotic fluid	saliva

Or any body fluid that is visibly contaminated with blood, and all body fluids where it is difficult or impossible to differentiate between body fluids (2) any unfixed tissue or organ (other than intact skin) from a human (living or dead); (3) HIV containing cell or tissue cultures, organ cultures, and HIV or HBV containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

Parenteral: Piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.

Personal Protective Equipment (PPE): Specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts, or blouses) not included to function as protection against a hazard are not considered to be personal protective equipment.

Regulated Waste: Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials (OPIM).

Sharps with Engineered Sharps Injury Protections: A non-needle sharp or a needle device used for withdrawing bodily fluids, accessing a vein or artery, or administering medications or other fluids, with a built in safety feature or mechanism that effectively reduces the risk of an exposure incident.

Source Individual: Any individual, living or dead, whose blood or other potentially infectious material may be a source of occupational exposure to the employee. Examples include, but are not limited to, hospital and clinic patients, clients in institutions for the developmentally disabled, trauma victims, clients of drug and alcohol treatment facilities, residents of hospices and nursing homes, human remains, and individuals who donate or sell blood or blood components.

Sterilize: The use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

Universal Precautions: An approach to infection control. According to the concept of Universal Precautions, all human blood and certain human blood fluids are treated as if they were known to be infectious for HIV, HBV, and other bloodborne pathogens.

Work Practice Controls: Controls that reduce likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting the recapping of needles by a two-handed technique).

Exposure Determination

The following classifications at the College are considered potential for occupational exposure to blood or other potentially infectious material (OPIM) regardless of the frequency. The exposure determination is made without regard to the use of personal protective equipment.

<u>Employee/Student Classification</u>	<u>Rationale/Task</u>
Classroom – Lab Setting	IV catheterization, blood draws, bleeding control, etc.
Emergency Room Clinicals	bleeding control, CPR, airway maneuvers, IV catheterization, suctioning, splinting, medication administration, etc.
Field Experience Municipal Fire Department Private Ambulance Company	bleeding control, CPR, airway maneuvers, suctioning, splinting, IV catheterization, invasive procedures, medication administration, etc.
Respiratory Therapy	suctioning, nebulizer treatments, airway maneuvers, etc.

Operating Room	airway maneuvers, intubation, suctioning, etc
Obstetrical	bleeding control and splashing of blood or body fluids, delivery of newborns, etc.
Morgue	splashing of blood, body fluids, etc.
Cardiac Catheterization	bleeding control, airway maneuvers, CPR, etc
Pediatric ICU/CCU	IV catheterization, bleeding control, airway maneuvers, etc
Adult intensive Care	IV catheterization, medication administration, bleeding control, airway maneuvers, CPR, etc

Compliance Methods

Universal Precautions is an approach to infection control considering all human blood and certain body fluids are treated as if they are known to be infectious for HIV, HBV, and other bloodborne pathogens. All students attending the OCC EMT Program who have even a remote possibility of coming in contact with blood or OPIM either in the classroom lab setting or during their clinical field experience will utilize universal precautions at all times.

OPIM will be considered infectious regardless of the perceived status of the source individual.

Engineering and work practice controls reduce the likelihood of exposure by altering the manner in which a task is performed. There will be no recapping of needles. All medical equipment will be decontaminated using an appropriate germicide of what the college or clinical site deems necessary.

Other areas of this document will refer to the engineering and workpractice controls and they include hand washing facilities.

Hand washing facilities: Hand washing will be conducted after all patient contact or whenever the student deems necessary. When conventional handwashing is not an option due to the environment of the clinical experience, anti-microbial wipes will be provided by the clinical site and utilized until traditional hand washing facilities are available.

After removal of personal protective gloves, students will wash their hands or any other area which has become potentially contaminated immediately or as soon as feasible with soap and water.

If a student incurs an exposure to their skin or mucous membrane, those areas will be flushed with water as appropriate as soon as feasible following contact and cleaned with an antimicrobial soap if appropriate.

Needles

The college will adopt a “needleless” system in the lab portion of the classroom setting. The “needleless” system will employ engineering controls that include:

Syringes with a sliding sheath that will protect the student after use

IV medication systems that administer medications through a needleless catheter port

IV catheters that self-sheath after the needle is withdrawn from the patient

Clinical sites will be responsible for ensuring students are afforded the protections under the OSHA Bloodborne Pathogens Act which include the Needle Stick Safety and Prevention Act. The college will interface with these clinical sites to ensure compliance.

Work Area Restrictions

Work areas are areas in which patient care is practiced and there is a potential for blood or OPIM to be present or have a reasonable likelihood of becoming present. Some examples would include the following:

- The patient compartment of an ambulance
- Auburn Hills campus Bldg. J Room 115
- An Emergency Department exam room
- An obstrectrical room where deliveries of infants are performed

In work areas where there is a reasonable likelihood of exposure to blood or OPIM, students are not allowed to eat, drink, apply cosmetics or lip balm, smoke or handle contact lenses.

Additionally, all procedures involving blood or OPIM shall be performed in such a manner as to help minimize splashing, spraying, spattering, and generation of droplets of these substances.

All practical procedures which may involve the risk of exposure to blood or OPIM will be performed in the classroom will take place in room J 115 on or over the tile floor. I

Invasive techniques are only to be performed under the direct supervision of the instructor or a qualified individual designated by the instructor, which will include the EMT department parapro or adjunct faculty member who has had the training and is familiar with policies and procedures outlined in this document.

All equipment used to conduct these procedures will conform to the Needle Stick Safety and Prevention act of 2001.

Personal Protective Equipment

PPE used shall be provided at no cost to the student. Personal protective equipment will be chosen based on the anticipated exposure to blood or OPIM and will be considered appropriate only if it does not permit blood or OPIM to pass through or reach the student's clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

Classroom laboratory setting: The student will be provided with the personal protective equipment by the college. The student will not perform any activity in which the proper personal protection has not been taken.

The student will not be required to retain their HEPA mask in the classroom setting due to the absence of actual patients.

The following Personal Protective Equipment shall be provided by the college:

<u>Personal Protective Equipment</u>	<u>Task</u>
Examination gloves	IV starts, blood draws, IM injections, SQ injections, or any procedure where blood or OPIM is present.

Mask with fluid shield (goggles)

IV venipuncture, blood draws, IM injections, SQ injections, bronchoscopy, suctioning of the intubated patient, or any procedure where blood or OPIM is present

Gowns

Any procedure where the soiling of clothing with blood or OPIM is likely.

Any object considered “sharps” (refer to the definitions area) is to be placed in a puncture resistant, leak-proof sharps container, which will be located either in the lab equipment room or in the practical area J115.

If any student were to have another person’s blood or OPIM splash or soak their clothing, they are to make arrangements to remove the contaminated clothing as soon as possible.

The clothing will be placed in a designated “red bag”. Because the student is not an employee of the college, the student will be responsible for taking the contaminated articles to a site approved by the college for laundering these items. See the EMT Department Paraprofessional, Secretary, or Program Manager for approved sites.

Clinical setting: The student will be provided with personal protective equipment that the clinical site deems acceptable. The exception to this rule is the HEPA particulate mask, which is provided to the student prior to the start of the clinical and will be kept on his/her person throughout the clinical experience. The student will not perform any procedure in the clinical setting in which proper protection has not been taken.

If at any time the clinical site has policies that either meet or exceed this standard, the student will comply with the standard and equipment which best protects the student from exposure.

Because it is impossible for the college to be familiar with the personal protective equipment at every clinical site, it is incumbent on the student to familiarize him or her self with both the personal protective equipment provided by the site and the location of said equipment.

All personal protective equipment will be cleaned and/or disposed of by the college or clinical site where the student is participating. All personal protective equipment will be removed prior to leaving work area.

If visibly contaminated, the equipment shall be placed in an appropriately designated area or container for storage, washing, decontamination, or disposal. The following procedure has been developed to facilitate leaving the equipment at the work area.

Gloves shall be worn where it is reasonably anticipated that students may have hand contact with blood or OPIM, non-intact skin, and mucous membranes. Gloves will be available in the rear of room 115 mounted to the wall. They will also be available at all clinical sites the college contracts with.

Disposable gloves used by students are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their availability to function as a barrier is compromised.

Utility gloves will not be utilized as a barrier device when conventional disposable gloves are available. If a student feels for any reason they are allergic or potentially allergic to latex, non-latex barrier devices will be provided to the student by the college.

Housekeeping

Areas of the classroom involved in procedures including blood draws, IV starts, or where there is any potential exposure to OPIM, will be decontaminated utilizing a bleach and water solution of 1 part bleach and 10 parts water (1:10). It will be prepared on an as needed basis due to the efficacy of the bleach solution decreasing over time.

All contaminated work surfaces will be decontaminated after the completion of procedures and immediately or as soon as a spill of blood or OPIM materials occurs as well as at the end of the class period where blood or OPIM had the potential to contaminate these surfaces.

Regulated waste disposal

All receptacles for regulated waste disposal shall be appropriately colored and labeled as containing bio-hazards and shall be inspected, emptied, and decontaminated on a regularly scheduled basis. The EMT Program Paraprofessional will adhere to this responsibility.

A puncture resistant “sharps container” will be located in immediate access to the students performing any procedure in the classroom including, but not limited to, the following: IV starts, blood draws, SQ and IM injections.

A regulated waste bin will be located in the lab equipment room of J – 115. All regulated waste generated as per the definition will be disposed of in the container. All sharps containers will be sealed and disposed of when the container reaches the maximum fill capacity as specified by the unit.

The regulated waste bin will be taken by a company licensed to haul and dispose of medical waste. This will be done on an as needed basis with discretion being left up to the EMT Program Paraprofessional who has received the training on this subject.

Hepatitis B Vaccine

A series of 3 injections will be provided by the student’s physician to meet the EMT Program requirements. All students who enter the EMT Program are strongly encouraged to obtain the Hepatitis B vaccine. A physician’s certification is required verifying your status and will become part of your file.

The start of the vaccination process is recommended prior to the beginning of the clinical experience if the student enters the program as a Basic EMT (EMT 1411) or before the student begins the laboratory portion of the Paramedic I - IV and Intubation class (EMT 2602).

Because the student is not employee of the college, he or she will be responsible for the entire cost of the inoculations.

If the student has had the entire vaccine previously, his or her physician may require a titer to be drawn to see if a booster is needed, since documentation is required prior to the start of the clinical or classroom experience.

The student may also choose to decline the vaccination if he or she is proven to be allergic to the vaccination or a medical evaluation shows that the vaccination is contraindicated. A waiver can be obtained in the EMT Department office and must be signed and returned declining the vaccination.

Information about the different forms of Hepatitis will be covered in the students’ lecture period dealing with communicable diseases. Reference the textbook or contact an EMT instructor for further information.

Exposure Incident

When a student incurs an exposure as defined previously, he or she will follow the following procedure:

Classroom setting: The student will cease all activity and immediately notify the lead instructor. The student will then be immediately sent for a confidential medical evaluation at a site designated by the college. The source individual will also accompany the exposed student to the medical facility to determine the source individual's HBV and HIV infectivity. The source individual's blood shall be tested and the results documented with strict confidentiality.

The EMT Department Program Manager will ensure the health care professional evaluating a student after an exposure incident receives the following:

- Description of the student's activities relevant to the exposure incident
- Routes of exposure
- Circumstances of the exposure
- If possible, results of the source individual's blood test

The student will be offered a post exposure prophylaxis in accordance with current recommendations of the US Public Health Service in consultation with a licensed physician treating the exposed student.

If the student does not give the consent for HIV, HBV, or HCV testing, during the collection of blood for baseline testing, the medical facility will preserve the blood for at least 90 (ninety) days. If the exposed student elects to have the baseline sample tested during the waiting period, the facility will perform the testing as soon as feasible.

All costs relating to this matter will be the responsibility of the student.

The student will be given the appropriate, confidential counseling concerning precautions to take during the period after the exposure incident. This will be the responsibility of the medical facility performing the post-exposure evaluation.

If the exposure occurs at a clinical site, the student will immediately transfer care of the patient to another qualified caregiver and cease all activity. He or she is to immediately notify the clinical proctor to which he or she has been assigned.

Exposure control policies of the clinical agency will be strictly adhered to.

The student will notify the EMT department as soon as feasible for a college incident report to be filled out. The post exposure follow up procedure as defined above will be adhered to.

Training

Training for all students and staff will be conducted prior to their initial assignment of tasks where exposure incidents may occur.

Training of students will take place primarily in the classroom during the 4 hour lecture period in Basic EMT 1(EMT 1541). Updates to this training will take place in the clinical classes prior to the student reporting to their first scheduled clinical rotation.

Employees of the college will receive annual training along with any updates to the exposure control plan. Training will be conducted in the following manner:

Training for all students and employees will include the following information:

- A copy of the College exposure Control Plan
- An accessible copy of the MIOSHA exposure control plan (located on the web site)
- A general explanation of the epidemiology and symptoms of bloodborne diseases
- An explanation of the modes of transmission of bloodborne and airborne diseases
- Procedures which may cause exposure to blood or OPIM at the college or EMT clinical sites
- Control methods which will be used at this facility to control exposure to blood of OPIM
- Personal protective equipment available at this facility and who to contact concerning its use
- Information on the types, proper use, location, removal, handling, decontamination, and disposal of personal protective equipment.
- An explanation of the basis for selection of personal protective equipment

- Information on the appropriate action to take and persons to contact in an emergency involving blood or OPIM.
- An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow up that will be made available.
- An opportunity for interactive question and answers with the person conducting the training session

The training will include practical sessions for supervised practice of both proper handwashing techniques and with the personal protective equipment used at the college to reduce the likelihood for exposure to blood, airborne pathogens, or OPIM.

All students will sign the college release form noted here as “Appendix A”

Recordkeeping

All employees and students will have a file established which will be maintained by the department. The file will be maintained by the EMT department and include the following information:

- Name and Social Security Number
- Copy of the student/employee Hepatitis B vaccination status
- A copy of all results of examinations, medical testing, and follow up procedures as required
- A copy of both the college incident report and the incident report used by the facility where the student is performing clinical rotations
- A Hepatitis B declination waiver if applicable

The medical records of both students and employees shall be kept strictly confidential. These records shall not be disclosed or reported without the employee’s or student’s express written consent to any person within or outside the college except as required by law.

These records will be kept and maintained by the college for no less than 30 years.

Tuberculosis Addendum

Since medical history and examination cannot reliably identify all infected persons with TB or other airborne pathogens, airborne droplet precautions should be consistently used with all patients where the chances of exposure to TB or other airborne pathogens are great. The use of proper ventilation, respiration protection, and patient management to prevent contamination by TB/Airborne pathogens from airborne droplets should become routine practice for all emergency responders.

All students will be supplied with a HEPA respirator mask. All students who are active in treating patients as part of their clinical experience will carry the mask on their person.

The HEPA mask shall be fit tested to the individual student in accordance to specifications set forth by the manufacturer. The student will also be required to fill out the Respirator Medical Evaluation Questionnaire part A section 1 and 2.

Both the Medical evaluation and the fit testing will be performed by an outside agency and paid for by the student.

The respirator will be worn when handling, treating, transporting, or in the vicinity of any person who is confirmed or suspected of infection with TB/Airborne pathogens by word, physical condition, action, or appearance.

It will also be worn during all cough producing procedures or when transporting a suspect patient in the patient compartment of a transporting ambulance. The ventilation exhaust fan shall be run on "high" when transporting a suspected or confirmed TB/airborne pathogen patient.

EMT PROGRAM

STUDENT RELEASE FORM

**FOR COMMUNICABLE DISEASES, HEPATITIS B
AND RELATED VACCINE INFORMATION**

I _____, hereby acknowledge that I have received and reviewed information provided to me by Oakland Community College's Health Programs regarding communicable diseases, Hepatitis B, and the Hepatitis B vaccines I further represent that all questions I have regarding these diseases and the vaccines available have been satisfactorily answered for me.

I agree, acknowledge and understand that receiving the Hepatitis B vaccine is required for people that have contact with blood and body secretions, such as health care workers, and that receipt of the Hepatitis B vaccine is entirely voluntary and is not a condition for being a student within Oakland Community College's Health Programs.

I agree, acknowledge and understand that I am responsible for all medical costs and bills associated with contracting any communicable disease (including but not limited to, human immuno-deficiency virus (HIV) and Hepatitis B) during my education and participation in Oakland Community College's Health Programs or functions and that Oakland Community College has no obligation to pay any such medical costs or bills.

I release and waive any claims I may have, nor or in the future, against Oakland Community College, its employees, teaching affiliates associated with Oakland Community College, and the members of Oakland Community College's Board of Trustees from any type of liability, whatsoever, in the event that I become infected with any communicable diseases including, but not limited to, human immuno-deficiency virus (HIV) or Hepatitis B.

I also acknowledge I have received a copy of the Oakland Community College EMT Program exposure control plan and all questions relating to bloodborne pathogens have been answered to my satisfaction.

Student's Name (Printed)

Student Signature

Date _____