South Portland Fire-EMS

Infection Control Plan: SOG 5.159

Updated: March 12, 2024

Contents

SOUTH PORTLAND FIRE DEPARTMENT

STANDARD OPERATING GUIDELINES

Policy #:	5.159	**Effective Date:**	March 12, 2024
Title:	Infection Control Plan	**# of pages:**	31
Category:	Administration	**Classification:**	Red

SPFD SOG 5.159

PURPOSE: To establish procedures to create and maintain a safe working environment for all employees by eliminating and/or minimizing occupational exposure to bloodborne and airborne pathogens.

1. POLICY: All employees are responsible for knowing the attached plan's policies and procedures and for following them as appropriate

2. PROCEDURES: Procedures are detailed in the attached plan titled "South Portland Fire Dept. Infection Exposure Control Plan"

By Order of:

Phil Selberg
Fire Chief

INFECTION EXPOSURE CONTROL PLAN
INTRODUCTION

Purpose

The purpose of this Infection Exposure Control Plan is to provide and maintain a safe working environment for all employees by eliminating and/or minimizing occupational exposure to bloodborne and airborne pathogens, including but not limited to Influenza, COVID, Hepatitis B Virus (HBV), Human Immunodeficiency Virus (HIV) and Tuberculosis (TB). It is the responsibility of the employer to provide and maintain appropriate engineering controls and personal protective equipment, and to develop and promote safe work practices. It is the responsibility of employees to know, practice and follow the guidelines set forth by this plan.

Definitions

See Attachment #9

Scope

This plan covers all employees who may experience an "occupational exposure", as a result of the performance of their job duties, to come into contact with blood or other potentially infectious materials. "Good Samaritan" acts, such as assisting a co-worker with a nosebleed, would not be considered an occupational exposure.

Background

The Center for Disease Control (CDC) has recognized the following as linked to the potential transmission of TB, HBV, HIV, and other blood or airborne pathogens in the occupational setting:

* Blood/blood products or components
* Semen
* Vaginal secretions
* Amniotic fluid
* Synovial fluid
* Saliva (in dentistry)
* Any body fluid visibly contaminated with blood
* Pleural fluid
* Pericardial fluid
* Peritoneal fluid
* Cerebrospinal fluid
* Airborne droplets

AND all body fluids in situations where it may be difficult or impossible to differentiate between body fluids. These substances shall be collectively referred to as blood and "other potentially infections material (**OPIM**) for the remainder of this document.

Plan Maintenance

This document will be reviewed and updated at least bi-annually.

EXPOSURE DETERMINATION

Purpose

In order to protect employees, those at risk must first be identified. An "Exposure Risk Determination" is attached to this document. It specifically lists job classifications with potential occupational exposure without regard to personal protective equipment. In job classifications where only some employees have occupational exposure, the specific tasks will be listed. This exposure determination will be reviewed at least annually, and whenever job classifications or tasks with potential occupational exposure are added or changed. (See Attachment #1)

CONTROL METHODS

Universal Precautions - Definition

Universal precautions (UP) are an approach to infectious disease control. It is the practice of assuming all blood and **OPIM** are potentially infectious regardless of the source.

Universal Precautions shall apply to all human blood, blood products, and **OPIM** as well as any body fluids, tissue, or objects contaminated or potentially contaminated with same.

Universal Precautions shall apply to ALL patient contacts at ALL times.

Universal Precautions requires placing effective barriers between the employee and the blood or **OPIM** in order to interrupt the transmission of air or bloodborne pathogens through parental contact, or contact to the skin, eyes, or mucous membranes.

ENGINEERING CONTROLS

Engineering controls employ mechanical devices designed to remove or reduce exposure hazards. These include, but are not limited to, hand washing sinks, glove boxes, splash guards, eye wash stations, sharps containers, single handed recapping devices, self-sheathing needles, needleless I.V. systems, and air handling systems.

All engineering controls shall be examined and maintained on a regular schedule to ensure effectiveness and proper working order. Attachment #3 contains a list of engineering controls and their maintenance schedule.

When hand-washing facilities are not available, and when emergencies arise, and running water is not available, employees will be provided with an appropriate hand wash substitute such as an antiseptic cleaner or towelette wipes. As soon as hand-washing facilities are available, either at the hospital or upon returning to quarters, the employee must wash their hands.

WORK PRACTICE CONTROLS

All tasks will be performed in a manner that will reduce the risk of exposure. Personnel in areas where exposure hazards exist are expected to adhere to the following:

- Eating, drinking, applying cosmetics, or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable anticipated occupational exposure, such as an incident scene, the hospital after the transfer of a patient, or the rear cabin of the ambulance.

- Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets, or counter tops where blood or **OPIM** are stored or present. Food and drink shall not be transported in the rear of the rescue.

- All specimens shall be placed in leak-proof containers for handling, transport, storage, or shipping. If outside contamination of the primary container occurs or is likely, a second container shall be utilized. This second container shall likewise be leak-proof, puncture resistant and appropriately color coded or labeled.

- Hands will be washed after removing gloves and as soon as possible after contact with blood or OPIM.

- All personal protective equipment will be worn or used by employees as instructed by this document, as outlined during training, and as specified by policy, procedure, or protocol. This would be expected to include, whenever the employee makes the assessment that it is reasonable to anticipate that parenteral, skin, clothing, or mucous membrane contact with blood, or **OPIM** might occur.

- Bending, breaking, or cutting of contaminated needles is prohibited. Single-handed recapping of needles will be allowed in limited circumstances where there exists no other feasible alternative.

These circumstances are specifically outlined in Attachment #4.

Sharps will immediately be placed in approved, puncture proof closable containers provided. These shall be appropriately labeled and color-coded. These containers will be placed in close proximity to areas where needles or sharps are likely to be used or found. They will be routinely inspected and replaced when full. They will be maintained in an upright position at all times. The will be closed prior to removal or replacement. See Attachment #3 for locations and inspection routine.

All procedures shall be performed in such a manner as to minimize splashing and/or spraying of blood or **OPIM.**

PERSONAL PROTECTIVE EQUIPMENT (PPE)

PPE will be provided by the employer and, when used correctly by employees, will eliminate or minimize direct exposure to potentially infectious or contaminated material by providing an appropriate barrier.

PPE available in general includes: gloves, fluid resistant gowns, face shield and masks, protective eye wear and masks, resuscitation bags or pocket masks.

All personnel shall be provided with and annually fit test to both a disposable TB type facemask (NIOSH approved N-95 respirator) and an ENVO style mask. All personnel shall be clean shaven and able to successfully pass the fit test. The exception is a mustache that does not interfere with the seal of the mask.

Not all **PPE** is appropriate to all settings. The type and characteristics of specific protective clothing and equipment will be dependent upon the task being performed and the degree of exposure anticipated. Certain tasks will be outlined during training and in the Universal Precautions guidelines that routinely require minimum items. (I.e.: gloves, whenever blood is present.) It is expected however, that with training the employee will learn to recognize the potential for occupational exposure and wear appropriate **PPE** whenever indicated.

Repair or replacement will be accomplished whenever necessary to maintain effectiveness, such as preventing blood, or **OPIM,** to pass through or reach employees work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes, under normal conditions of use.

Laundering and cleaning of **PPE** will be the responsibility of the employer.

Single-use, disposable gloves shall be worn when it is reasonably anticipated that hand contact with blood or OPIM will occur.

Hypoallergenic gloves, glove liners, or non-powdered gloves will be provided when necessary. Single-use, disposable gloves shall be disposed of after each use and **must never be washed or reused.**

Disposable gloves shall be used for cleaning and decontamination and handling of contaminated laundry. They shall be appropriately disposed of after being used.

Masks, in combination with appropriate eye protection devices such as goggles, glasses with side shields, or chin length face shields, shall be worn whenever splashes, spray, or spatter of blood droplets may be generated. Also, when exposure to OPIM to the eyes, nose, or mouth can be reasonable anticipated. HEPA type protective masks shall be worn when treating a known or suspected COVID, Influenza, TB patient, or anyone experiencing a respiratory viral infection.

All **PPE** shall be removed prior to leaving the work area and shall be placed in an appropriately designated area for storage, washing, or disposal.

In the event of contamination with blood or OPIM of the employee's work clothes or uniform, these shall be left at the work site. Cleaning of these shall be the responsibility of the employee. Clothing contaminated with blood or OPIM shall be laundered at one of the FT Stations, using the commercial cleaning equipment. **Each full - time employee shall have one extra set of uniforms in the station at all times.**

HBV Vaccination & Mantoux Testing

Employees whose jobs may be reasonably anticipated to expose them to potential occupational hazards from bloodborne pathogens will be encouraged to receive the HBV vaccination series. This will be made available, **AT NO CHARGE TO THE EMPLOYEE,** within ten (10) working days of placement in the job classification with potential occupational exposure. The vaccination series will be completed in accordance with the manufacturer's recommendations.

If an employee chooses not to receive HBV vaccination, the employee must sign a letter of declination (See attachment 6). Employees who initially decline vaccination may request it at a future date. Vaccinations will be given according to standard medical practice. Boosters, while not currently required, will be given according to the manufacturer and CDC's recommendations, as they become available.

No prescreening is required in order to be eligible for vaccination.

All personnel shall be offered annual Mantoux skin testing for tuberculosis through the department's occupational health provider.

Post-exposure Reports, Evaluation and Follow-up

A bloodborne exposure incident is defined as a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or OPIM that results from the performance of an employee's duties. An airborne exposure incident to TB is defined as the treatment or transport of a patient with known or suspected TB. Personnel with an airborne or bloodborne exposure shall complete an exposure report. In the event of a bloodborne exposure, employees will be required AT NO COST TO THE EMPLOYEE, to receive a confidential medical evaluation. Specific procedure to follow and what to expect are outlined in Attachment #10.

The report sent to the employee's chosen healthcare professional will include a copy of OSHA's bloodborne pathogen standard, a written summary of the exposure incident including the route of exposure and circumstances, the exposed employee's duties as they relate to the exposure, and results of the source individual's blood tests (if available), and all medical records relevant to the appropriate treatment of the employee including vaccination status.

The employer will, within fifteen (15) days, obtain a copy of the health care professional's written report and provide the employee with a copy. This opinion will be limited to whether Hepatitis B vaccine was indicated and whether it was given, that the employee has been made aware of the results of the evaluation and any medical conditions resulting from exposure to blood or OPIM that may require further treatment. All other findings or diagnoses will remain confidential.

A good faith attempt will be made to obtain consent from the source patient to collect and test their blood for the presence of HIV and HBV or for TB screening. The exposed employee is expected to follow employer regulations and applicable laws regarding confidentiality of the source individual.

The exposed employee will be offered serologic HIV/HBV testing and treatment in the manner recommended by the CDC as soon as possible after the incident and the opportunity for retesting as recommended by the CDC. Testing will be performed at an accredited laboratory at no cost to the employee. If the employee initially declines serologic testing, he/she may elect to have the baseline studies drawn and saved for up to ninety (90) days. At any point during this time period, he/she may elect to have the tests performed on the saved blood.

Personnel exposed to a known or suspected TB patient while wearing a TB mask (NIOSH approved N-95 respirator), or not wearing a TB mask (NIOSH approved N-95 respirator), shall seek guidance from the department's occupational health provider regarding follow-up evaluation and treatment.

Employee Health Record Keeping

Each exposure will be documented in accordance with 29 CFR 1919.30, Access to Employee Exposure and Medical Records. Records shall be maintained for at least the duration of employment plus thirty (30) years. The Infection Control Officer will maintain these records.

Each exposure record shall include:

- The name and social security number of the employee.
- A copy of the employee's HBV vaccination including dates and any records relative to the employee's ability to receive the vaccination.
- A copy of the employee's TB testing status.
- A copy of all tests, exams, and follow-up procedures.
- A copy of the information provided to the health care professional.
- These records shall not be disclosed to anyone without the employee's express written consent, except as required by OSHA regulations, or state law.

ALL RECORDS, WHETHER PERTAINING TO THE EXPOSED PERSON OR THE SOURCE INDIVIDUAL WILL BE MAINTAINED IN A SEPARATE, LOCKED, CONFIDENTIAL FILE.

Exposure, including needle stick injuries, shall be recorded on the OSHA 300 form if medical treatment is required, or if duties are restricted, or time lost in accordance with OSHA guidelines.

HBV, HIV and TB infections shall be recorded on the OSHA 300 log if the illness can be traced back to an occupational injury or incident.

Sharps Injury Log

1910.1030(h)(5)(i)

The employer shall establish and maintain a sharps injury log for the recording of percutaneous injuries from contaminated sharps. The information in the sharps injury log shall be recorded and maintained in such manner as to protect the confidentiality of the injured employee.

Bio-hazard Waste Handling

Regulated waste is defined, for the purpose of this standard as liquid or semi-liquid blood or **OPIM**; **contaminated** items that would release blood or OPIM in a liquid or semi-liquid state if compressed; items that are caked with dried blood, or OPIM and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or OPIM.

Methods for Contaminated Sharps

Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:

- Closable
- Puncture resistant
- Leak-proof on the sides and bottom
- Easily accessible to the immediate area where sharps are used or can be reasonable anticipated.
- Maintained upright throughout use.
- Replaced routinely and not allowed to overfill
- Closed immediately prior to removal or replacement
- Placed in a secondary container if leakage is possible.

This secondary container shall be:

- Closable
- Constructed to contain all contents and prevent leakage during transport, handling, storage, and shipping.
- Labeled or color-coded.
- Reusable container shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to risk of percutaneous injury.

Methods for Other Bio-hazard Waste

Biohazard waste shall be placed in containers that are:

- Closable
- Constructed to contain all contents and prevent leakage during transport, handling, storage, and shipping.
- Labeled or color-coded.
- Closed prior to removal to prevent spillage or protrusion of contents during handling, storage or shipping.
- Placed in a secondary container if outside contamination of the required waste container

occurs.

This secondary container shall be:

- Closable
- Constructed to contain all contents and prevent leakage during transport, handling, storage, and shipping.
- Labeled or color-coded.
- Closed prior to removal to prevent spillage or protrusion of contents during handling, storage or shipping.

Disposal of all biohazard waste will be in accordance with applicable regulations of the United States, States and Territories, and political subdivision of States and Territories.

Labels, Tags, and Signs

Tags/labels that comply with 29 CFR 1910.120 (f), Hazard Communication Standard, or 29 CFR 1910.1030 (g) (1) (i) (ii), will be used to identify a biological hazard. They will be fluorescent orange or orange-red or predominantly so, with letters or symbols in a contrasting color.

Tag/labels will contain the word "**BIOHAZARD",** will have the **BIOHAZARD SYMBOL** on them or the substance will be placed in a RED bag or container.

Tags or labels must be attached or affixed so that their loss or unintentional removal is prevented. Employees working in or around biohazards will receive training in accordance with Section X of this plan.

Waste that has been decontaminated need not be labeled or color-coded.

Labels for contaminated equipment shall be in accordance with above specifications, and shall also state which portions of the equipment remain contaminated.

Individual containers or blood or OPIM that are placed in a labeled container during storage, transport, shipment, or disposal, are exempt from the above labeling requirements.

Containers of blood or blood products or components that are labeled as to their contents and have been released for transfusion or other clinical use are exempt from the above labeling requirements.

Housekeeping Practices

Employees will maintain all work areas in a clean and sanitary condition according to the written schedule and methods attached. At all times during housekeeping procedures universal precautions shall be followed. This is to include gloves and all appropriate protective equipment.

All equipment and environmental and working surfaces shall be cleaned and decontaminated after contact with blood and OPIM. They shall be cleaned with an

appropriate disinfectant:

- After completion of procedures
- Immediately or as soon as possible when surfaces are overtly contaminated or after any spill of blood or OPIM.
- At the end of the work shift, if the surface may have become contaminated since the last cleaning.

Protective coverings, such as plastic wrap, aluminum foil, of imperviously backed absorbent paper used to cover equipment and environmental surfaces, shall be removed and replaced as soon as feasible when they become overtly contaminated or at the end of the work shift if they may have become contaminated during the shift.

Reusable equipment contaminated with blood or OPIM will be cleaned or decontaminated after each use and prior to repair or scheduled maintenance.

All bins, pails, cans, and similar receptacles intended for reuse which have a reasonable likelihood for becoming contaminated with blood or OPIM shall be inspected on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as feasible upon visible contamination (See Attachment #8). To include long boards, head blocks, BVM, suction units, straps, and all other equipment that may be possibly contaminated.

Broken glassware, which may be contaminated, shall not be picked up by hand. It shall be cleaned up by using mechanical means. (Ex: a brush and dustpan) and disposed of in a sharps container.

All contaminated linen/laundry shall be bagged at the place of use with minimal agitation. It shall be placed in bags or container labeled or color-coded. When laundry is wet and presents a reasonable likelihood of soaking through or of leakage from the bag or container, the laundry shall be placed and transported in bags or containers that prevent leakage and/or soak through to the exterior.

Employees who have contact with contaminated laundry will wear gloves and other personal protective equipment as necessary.

Laundry bags or containers shall be appropriately labeled or color-coded.

Training and Education

All employees performing tasks that have been determined to have a potential for exposure are required to participate in a training and education program prior to initiating the tasks. **This training will be updated annually.**

The EMS Coordinator shall coordinate training and applicable records

Training will be provided at no cost to the employee and during reasonable normal

working hours.

Employees will receive additional training when changes or modification of tasks occur, and/or when new procedures are added. This additional training will be limited to the new procedures or modifications.

Training shall be conducted by instructors knowledgeable on the subject matter as it relates to the control of bloodborne pathogens and to the specific tasks being performed.

Training will contain the following elements:

- Explanation and location of 29 CFR 1910.1030, Bloodborne Pathogens Standard.
- Explanation and location of this plan.
- General explanation of the epidemiology and symptoms of air and bloodborne disease.
- Modes of transmission of air and bloodborne pathogens.
- Explanation of the use and limitations of the methods of control, i.e. universal precautions, engineering controls, PPE, and work practice controls.
- Explanation of the basis for selection, use, removal, decontamination, and/or disposal of PPE.
- Information on the HBV vaccine, including its efficacy, safety, and benefits of being vaccinated, and that the vaccination is offered free of charge to the employee.
- Explanation of the procedure to follow if an exposure occurs, including post exposure evaluation and follow-up.
- Explanation of signs, labels, tags, and/or color-coding used to denote biohazards.
- Opportunity for interactive questions and answers with the person conducting the training session.

Training records shall be maintained for three years from training date. They shall include: the date of training, the contents or summary of the training, the names and qualifications of the persons conducting the training, and the names and job classifications of the persons attending the training.

The availability and transfer of these training records will be in accordance with 29 CRT 1910.1930, The Bloodborne Pathogens Standard.

REFERENCES:

CODE OF FEDERAL REGULATIONS, 29 CFR 1910, SUBPART Z, AMENDED FOR .1030, FEDERAL REGISTER 56, 64175-64182, DECEMBER 6, 1991

CODE OF FEDERAL REGULATIONS, 29 CFR 1910.120, HAZARD COMMUNICATIONS; REVISED AS OF JULY 1, 1990, 257-372.

CODE OF FEDERAL REGULATIONS, 29 CFR 1910.1020, ACCESS TO EMPLOYEE EXPOSURE AND MEDICAL RECORDS; REVISED JULY 1, 1990, 82-91.

U.S. DEPARTMENT OF LABOR, ASSISTANT SECRETARY FOR OCCUPATIONAL SAFETY AND HEALTH, D.C. 20210, OSHA, INSTRUCTION CPL 2-3,44A, AUGUST 15, 1988.

CENTERS FOR DISEASE CONTROL, MMWR SUPPLEMENT, RECOMMENDATIONS FOR PREVENTION OF HIV TRANSMISSION IN HEALTH CARE SETTINGS, VOL. 36/NO 25, AUGUST 21, 1987

Attachment 1 – Exposure Risk Determination

- Potential contact with non-intact skin or skin contaminated with blood or other potentially infectious material. (Patient placement, assistance, transport, general patient care, etc.)
- Exams with non-intact skin or with mucous membrane contact.
- Vascular access procedures (intravenous lines & phlebotomy)
- Handling or cleaning of contaminated instruments. (blunt or sharp)
- Finger sticks
- Handling (includes labeling) of laboratory (body fluid or tissue) specimens containing blood or other potentially infections material.
- Dressing wounds.
- Handling or collection of culture material/swabs/media contaminated or possibly contaminated with blood or other potentially infectious material.
- Cleaning areas after procedures, exams, or patient contact where contamination of surfaces or linens with blood or OPIM might have occurred.
- Handling contaminated re-usable instruments or linens.
- Controlling hemorrhage and burn care.
- Participating in resuscitation activities.
- Potential exposure to blood or other potentially infectious material by accidental or intentional trauma. (I.e. potential contact with violent or uncooperative individuals)
- Potential exposure to patients with airborne infectious diseases such as Tuberculosis, COVID-19, flu, RSV, or other common respiratory viral illnesses.

Attachment 2 – Universal Precautions

In order to provide a consistent approach to managing exposure to body substances from all patients, and reduce the risks of exposure to airborne as well as bloodborne pathogens, the practice of Universal Precautions shall be followed by all employees at all times regardless of patient diagnosis.

Universal Precautions shall apply to all blood and OPIM as specified in the Bloodborne & Airborne Exposure Control Plan.

Each Company Officer or Officer Candidate in charge, shall monitor compliance with Universal Precautions. In the event that employee work practice is not in compliance with Universal Precautions, disciplinary action will be taken.

1. Hand washing

Hand washing continues to be an important means of interrupting disease transmission to both patients and employees.

A. Wash hands often and thoroughly, with soap and water.
B. Wash hands after each patient contact.
C. Wash hands after removing gloves or other personal protective equipment.
D. Wash hands after contact with blood or OPIM.
E. In the event that hand washing facilities are not immediately available, a substitute antiseptic hand cleaner or towelette wipe will be used. Hands shall be washed with soap and water as soon as possible, either at the hospital or upon returning to quarters.

2. Gloves

A. Gloves shall be worn when there is reasonably anticipated or potential contact with blood or OPIM or when touching a patient's non-intact skin.
B. Gloves shall be worn when the employee has non-intact skin. (Cuts abrasions, dermatitis, etc.)
C. Gloves shall be worn when performing any vascular access procedure.
D. Gloves shall be worn when collecting, handling, manipulating or transporting any patient specimen.
E. Gloves shall be worn when performing any invasive exam, instrumentation or procedure.
F. Gloves shall be worn when transporting or handling soiled linen and red bag waste.

G. Gloves shall be worn when cleaning any surface or area

soiled with blood or body fluids.

H. Gloves shall be worn when handling/cleaning patient care

items or areas/surfaces soiled with blood or body fluids.

I. Gloves shall be changed between patient contacts.
J. Gloves shall be changed when visibly soiled or damaged.
K. Gloves shall not be washed or decontaminated for reuse.
L. Gloves shall be considered appropriate on all calls

3. Masks/Protective Eyewear/Face Shields

Masks, in combination with eye protection devices, shall be worn during procedures where splashes, spray, splatter, droplets of blood or OPIM may be generated and contact with the eyes, nose or mouth can reasonably be anticipated.

A. Appropriate masks shall also be worn when in contact with patients suspected or known to be carrying airborne infectious diseases.

4. Gowns

Fluid impervious gowns or cover jackets shall be worn when there is potential for blood or OPIM to penetrate clothing.

Regular uniforms and/or work clothes should be periodically examined for blood or OPIM splashes to ascertain if additional protection is necessary.

5. Needles and Sharps

A. Needles shall not be recapped, bent, broken, removed from disposable syringes or otherwise manipulated by hand.

B. One-handed recapping or recapping devices will only be allowed in limited circumstances as outlined in Attachment 4.

6. Linen

All linen shall be considered as potentially infectious and Universal Precautions shall be followed including gloves and if necessary, appropriate use of leak-proof containers.

7. Blood or Body Fluid Spills

All visible organic matter must be removed and disposed of as biohazard waste. The area

must be cleaned and decontaminated according to Attachment 8. Gloves are to be worn during cleaning and decontamination.

8. Resuscitation Equipment

Resuscitation devices such as pocket masks or BVM's shall be strategically located to provide personnel with immediate access for use. These devices shall be used in place of mouth to mouth resuscitation. After use they shall be properly decontaminated or disposed of according to Attachment 8.

9. Exposure Incidents

All exposure incidents must be reported to the Company Officer or Officer Candidate within one (1) hour of occurrence. An Exposure Incident Report must be completed and forwarded to the Deputy Chief of Personnel.

10. Non-Compliance

Any incident of non-compliance shall be reported to the Company Officer or Officer Candidate.

Attachment 3 – Engineering Controls

Engineering controls are a vital first step in reducing airborne and bloodborne pathogen hazards in the work place. In order to function appropriately they must be inspected and maintained on a routine as well as needed basis.

This document serves to establish locations for engineering controls and a schedule for maintenance.

Examples of engineering controls include hand washing facilities, sharps containers and glove boxes.

Item	Location	Responsible Party/Discard
Sharps Container	Ambulances	Ambulance crew, 3/4 full
Sharps Shuttle	ALS Jump Kit	User - after each use
BVM & Airway	Each O2 Kit & Rescues	Assigned crew - each use
Self-Sheathing Needles	ALS Jump Kit & Rescues	User - after each use
BioHazard Bags	Ambulances, Supply Cabinets	Assigned crew- each use
Laundry Hamper	Decon area, Apparatus bay	Assigned crew-3/4 full
BioHazard Trash Container	Apparatus bay	Ambulance crew - 3/4 full
Pocket masks	Jump Kits, Personnel	User - after each use
Eyewash station	Decon Area, Apparatus bay	Ambulances crew- after use
Emesis basin	Ambulances	Ambulances crew- after use
Gloves	Apparatus, Jump kits	Assigned crew-after use

Attachment 4 – One-Handed Recapping

Needles and sharps are **never** to be recapped by a traditional two handed recapping method.

Contaminated needles are to be routinely disposed of in appropriate sharps containers immediately after use.

In certain procedures or unusual circumstances, it may be necessary to recap contaminated needles.

In these situations, one handed recapping will be allowed with the use of a mechanical recapping device such as a hemostat or commercial recapping device.

The one handed “scoop” method is to be utilized as a last resort when no sharps container or mechanical recapping device is available.

Attachment 5 – Personal Protective Equipment

Purpose

Personal protective equipment (PPE) is intended to provide a barrier between the occupational biohazard and the employee. In order to be useful it must be available for convenient use.
Locations for PPE storage for use are outlined below.

Additionally, PPE must be removed and disposed of properly to prevent the spread of contamination. Proper procedures for removal and disposal are covered in training, Universal Precautions-Attachment #2 and in Biomedical Waste Handling-Section VII.

PPE includes but is not limited to: gloves, gowns, face shields, masks, pocket masks and other ventilation devices. PPE is considered "appropriate" if it does not permit blood or other OPIM to pass through or reach the employee's uniform, work clothes, undergarments, skin, eyes, mouth or other mucous membranes under normal working conditions and for the duration of time the PPE will be used.

General Tenets

PPE will be available at all times in appropriate sizes for all employees.

Hypoallergenic gloves, glove liners, powder less gloves or other similar alternatives shall be readily accessible to employees who are allergic to the gloves normally provided.

The employer is responsible for providing appropriate PPE and cleaning or disposing of PPE at no cost to the employee.

Soiled PPE is to be removed as soon as possible prior to leaving the work area and placed in appropriate disposal bags or cleaning areas.

Storage Locations & Types of PPE

- Jump Kits - Gloves of various sizes and types, TB Masks.
- Oxygen Kits - BVM's and/or Pocket Masks
- Intubation Kits -Face Mask & Eye Protection
- Ambulances - Gloves in various sizes, types and locations BVM's, Pocket Masks, Isolation Kits, Face Shields & Eye Protection, TB Masks in various locations
- Engine & Ladder Companies - Gloves in various sizes, types and locations. TB Masks, Isolation Kits
- Service Trucks - Gloves and Pocket Mask in Jump Kit

Attachment 6 - HBV Immunization Waiver Forms

I understand that due to my potential occupational exposure to blood and other potentially infectious materials I may be at risk of acquiring Hepatitis B Virus (HBV) infection. I have been offered to be vaccinated against HBV at no charge to myself. At this time, I decline the Hepatitis B vaccine. I understand that by declining the vaccine I continue to be at risk of acquiring Hepatitis B Virus, a serious and potentially fatal disease. I also understand that if in the future I continue to have potential occupational exposure to blood or other potentially infectious materials and want to be vaccinated against HBV, I can receive the vaccination at no charge to me.

_____ _____

Employee Name (printed) Employee signature

_____ _____

Date Witness

HBV TITER WAIVER FORM

I understand that due to my potential occupational exposure to blood and other potentially infectious materials I may be at risk of acquiring Hepatitis B Virus (HBV) infection. I have been offered a titer to see if I am immune at no charge to myself. At this time, I decline the HBV titer. I understand that by declining the titer I continue to be at risk of acquiring Hepatitis B Virus, a serious and potentially fatal disease. I also understand that if in the future I continue to have potential occupational exposure to blood or other potentially infectious materials and want to be tested for HBV immunity, I can receive the titer at no charge to me.

_____ _____

Employee Name (printed) Employee signature

_____ _____

Date Witness

Attachment 7 – Approved Decontamination Chemicals

The following is a list of approved cleaning and disinfecting chemicals for use at the South Portland Fire Department:

- Sud'N Kleen surface cleaner
- Decon 7
- Sani Guard dry sanitizing surface spray disinfectant
- PDI-Sani Cloth Plus wipes

- For floor cleaning of ambulances, use a 1:10 ratio of bleach is recommended. This solution should not be pre-mixed because it has a short shelf life. Make this solution up as needed.

- PAWS hand wipes and Vionex gel are the approved soap-free hand disinfectants. Remember to always wash hands vigorously with warm soap and water as soon as practical after patient contact.

Follow the manufactures directions for use of the above approved cleaning products. Instructions are clearly marked on the containers.

Universal protection controls are to be used during all decontamination activities.

Attachment 8 – Ambulance and Equipment Cleaning Schedule

Stretcher: Clean after every patient use. Wipe all surfaces that may have come into contact with the patient with detergent wipes (PDI Sani-Cloth Plus). Pay particular attention to the side handles and mattress.

Any Equipment including but not limited to:

- Stair Chair
- Laryngoscope handle
- Pulse oximeter probe
- Long boards
- Scoop stretcher
- Stethoscope
- Vacuum splints
- Vehicle patients seats
- BP Cuffs
- Collars
- Straps
- Head blocks
- Vehicle seat belts

Clean after every patient use, wipe all surfaces with detergent wipes or approved foam spray cleaner. All parts should be visibly clean with no blood or body substances, dust, dirt, debris or spillages.

If Velcro becomes contaminated with blood or OPIM, equipment must be disposed of as contaminated waste. Notify EMS Coordinator so that the items can be replaced.

Non-patient contact equipment:

- Radio equipment
- Equipment bags
- Glucometer
- Mobile phone
- Computer
- Pulse Ox unit
- Scissors
- Suction units
- Defibrillator and cables

The above should be cleaned at least daily and if contaminated. Wipe items with approved

detergent wipes or spray foam.

Vehicle Interior-Patient Compartment:

- Ceiling, sides
- Cupboards
- Brackets
- Grab rails
- Communications equipment
- Work surfaces

Wipe all surfaces with approved detergent wipes or spray foam. Should be performed at least daily and if contaminated.

Floor:

Mop with 10% bleach water solution (¾ cup bleach per 1 gallon of water). Floor shall be clean prior to going off tour of duty.

Vehicle Interior-Drivers Compartment:

Steering wheel cleaned at least daily and if contaminated using approved detergent wipes. Vehicle cab should be vacuumed and all surfaces wiped down with detergent wipes on Sunday.

DO NOT EXIT THE PATIENT COMPARTMENT AND DRIVE THE VEHICLE FROM THE SCENE WEARING LATEX GLOVES WHICH WERE WORN IN THE PATIENT COMPARTMENT.

USE HAND SANITIZER OR HAND WIPES UPON ENSTERING AND AFTER EXITING THE PATIENT COMPARTMENT

Attachment 9 - Decontamination for Linens

OBJECTIVE: TO PROVIDE ALL PERSONNEL A STANDARDIZED PROCEDURAL FORMAT TO FOLLOW WHEN DECONTAMINATING LINENS.

SAFETYPRECAUTIONS:

1. UNIVERSAL INFECTION CONTROL PRECAUTIONS ARE TO BE UTILIZED DURING ALL DECONTAMINATION PROCEDURES.
2. ONLY SOUTH PORTLAND FIRE DEPARTMENT APPROVED DECONTAMINATION CHEMICALS ARE TO BE USED FOR THIS PROCEDURE.
3. THIS PROCEDURE IS TO BE ACCOMPLISHED AT THE DECONTAMINATION AREA.
4. ALL BIO-HAZARD WASTE IS TO BE PROPERLY DISPOSED OF IN ACCORDANCE WITH THE SOUTH PORTLAND FIRE DEPARTMENT BIO-HAZARD WASTE DISPOSAL PROCEDURE.

PROCEDURE:

1. IF THE CONTAMINATED LINEN IS A HOSPITAL EXCHANGE ITEM, IT WILL BE HANDLED AS MINIMALLY AS POSSIBLE; RED BAGGED AND TAKEN TO THE ASSIGNED HOLDING AREA AT THE HOSPITAL. IF THERE IS A POSSIBILITY OF LEAKAGE OF THE PRIMARY CONTAINER THEN AN APPROPRIATE SECONDARY CONTAINER WILL BE UTILIZED.

Attachment 10 – Bio-Hazard Waste Disposal

OBJECTIVE: TO PROVIDE SOUTH PORTLAND FIRE DEPT. PERSONNEL WITH A STANDARDIZED PROCEDURAL FORMAT TO FOLLOW TO PROPERLY DISPOSE OF BIO-HAZARD WASTE.

SAFETYPRECAUTIONS:

1. UNIVERSAL INFECTION CONTROL PRECAUTIONS ARE TO BE UTILIZED DURING THE COLLECTION AND DISPOSAL OF ALL BIO-HAZARD WASTE.
2. BIO-HAZARD WASTE **WILL ONLY** BE DISPOSED OF IN RED BIO-HAZARD

LABELED BAGS.

Procedure

1. THE INCIDNET COMMANDER SHALL ENSURE THAT BIO-HAZARD WASTE IS BE COLLECTED FROM AN INCIDENT SCENE AND PLACED IN THE APPROPRIATE BIO-HAZARD BAGS. THE IC WILL ENSURE THAT THE ASSIGNED PERSONNEL WILL HAVE THE APPROPRIATE EQUIPMENT TO PROPERLY ACCOMPLISH THE TASK.
2. THE WASTE WILL THEN BE DEPOSITED IN THE DESIGNATED AREA OF THE HOSPITAL EMERGENCY DEPARTMENT. THE LEAD TECHNICIAN WILL ENSURE THAT THE TASK HAS BEEN SATISFACTORILY ACCOMPLISHED BEFORE PUTTING THE VEHICLE BACK IN SERVICE.
3. IF BIO-HAZARD WASTE IS GENERATED DURING DECONTAMINATION PROCEDURES AT SOUTH PORTLAND FIRE DEPARTMENT THE WASTE WILL BE RED BAGGED AND PLACED IN THE INFECTIONS WASTE CONTAINER IN THE DECONTAMINATION AREA. THE ON DUTY CREW WILL ENSURE THAT THE CONTAINER DOES NOT EXCEED THREE-QUARTERS (3/4) FULL. AT THAT TIME, THE ON DUTY AMBULANCE CREW WILL NOTIFY THE OFFICER FOR PROPER DISPOSAL OR TRANSPORT THE PROPERLY CONTAINED BIO-HAZARD WASTE TO A HOSPITAL DURING THE NEXT PATIENT TRANSPORT TO THE HOSPITAL.

Attachment 11 – Definitions

AIRBORNE PATHOGENS: pathogenic microorganisms that are present in human respiratory gases or droplets and can cause disease in humans.

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 contaminated sharps.

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

ENGINEERING CONTROLS: controls that isolate or remove the airborne or bloodborne pathogen hazard from the work place. (e.g. sharps containers and self-sheathing needles)

EXPOSURE INCIDENT: 1) a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties. 2) A specific same room exposure to a person with a suspected or confirmed airborne disease such as Tuberculosis, with or without respiratory protection.

HAND WASHING FACILITIES: facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machine.

LICENSED HEALTHCARE PROFESSIONAL: person whose legally permitted scope of practice allows him or her to perform the activities required for Hepatitis B vaccination, post exposure evaluation and follow-up. **HBV:** hepatitis B virus

HIV: human immunodeficiency virus

OCCUPATIONAL EXPOSURE: an exposure incident resulting from the performance of an employee's job duties.

OTHER POTENTIALLY INFECTIOUS MATERIALS (OPIM): see Page 1, Section I of Infection Exposure Control Plan for listing.

PARENTERAL: piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts and abrasions.

PERSONAL PROTECTIVE EQUIPMENT (PPE): specialized equipment or clothing worn by an employee for protection against a hazard or hazards. In this context includes but not limited to gloves, fluid resistant gowns, face masks, and eye shields.

REGULATED WASTE: see Section VII of the Infection Exposure Control Plan

SHARPS: any contaminated object that can penetrate the skin including, but not limited to needles, scalpels and broken glass.

SOURCE INDIVIDUAL: any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to an employee.

STERILIZE: the use of a physical or chemical procedure to destroy all microbial life, including highly resistant bacterial endospores, on an item or surface.

WORK PRACTICE CONTROLS: controls that reduce the chance of exposure by altering the manner in which a task is performed.

Attachment 12 – Post Exposure Procedure

Despite dedicated use of engineering and work practice controls and proper use of PPE, exposures can and do occur. The purpose of this attachment is to outline procedures to follow and to give the employee some idea of what to expect from the post exposure follow-up.

Post Exposure Procedure

1. Provide wound care/first aid including
   - Clean wound w/ soap & water
   - Flush mucous membranes w/ water/saline
   - Other treatment as determined by wound severity

2. Contact immediate supervisor. The supervisor shall then contact the Duty Chief and Infection Control Officer (EMS Coordinator).

3. Medical attention must be initiated as soon as possible following a documented exposure. If you have transported a patient to the emergency room, then work with staff from the facility and begin the process of post-exposure as soon as you are properly decontaminated as described in step #1. If you do not transport a patient to a hospital (i.e. unattended death), proceed to the City's designated occupational health office for follow-up after decontamination procedures).

4. As soon as feasible, complete the Infectious Exposure Report Form. The supervisor shall also complete the first report of injury and fax/deliver this to human resources. The first report of injury has to be received by HR within 24 hours of exposure.

5. Each exposure incident presents different levels of risk for the employee and different treatment responses. The health care provider will work with the employee to develop an appropriate response to each exposure incident.

6. It is the responsibility of the employee to promptly report an exposure incident and initiate treatment.

7. It is the responsibility of the employer to provide appropriate post exposure follow-up at no cost to the employee.

8. No information concerning the medical status or treatment of an employee shall be released to anyone without the consent of the employee except for information required and authorized under OSHA regulations or applicable state and federal law.

Attachment 13 – Infectious Exposure Form

South Portland Fire Department Infectious Exposure Form
Complete & Return to EMS Coordinator

Exposed Employee's Name: Run#: _____

SSN:_____Shift:_____Company:_____

Home Phone:_____Supervisor: _____

Patient:_____Sex:_____DOB:_____

Address:_____

Suspected/ Confirmed Infectious Disease: _____

Hospital Transported to:_____Transported by (unit): _____

Date of Exposure:_____Time of Exposure: _____

Type of Incident (Auto Accident, Trauma etc.): ____

Protective Equipment Used: _____

What were you Exposure to? Blood ◯ Tears ◯ Feces ◯ Urine ◯ Saliva ◯

Vomit ◯ Sputum ◯ Sweat ◯ Other_____

What part(s) of your body became exposed?

_____

_____

Did you have any open cuts, sores or rashes that became exposed? Be specific:

_____

_____

How did the exposure occur? Be specific

_____

_____

_____

Did you seek medical attention? : Yes ◯ No: ◯ If so, where?:_____Date:_____

Contact of EMS Coordinator/ Duty Chief: Date:_____Time:_____

Supervisor Signature:_____Date:_____

Employee's Signature:_____Date _____

Attachment 14 – Sharp Injury Log

Sample Sharps Injury Log Year 2____

Date	**Case/ Report No.**	**Type of Device** (e.g., syringe, suture needle)	**Brand Name of Device**	**Work Area where injury occurred** [e.g., Geriatrics, Lab]	**Brief description of how the incident occurred** [i.e., procedure being done, action being performed (disposal, injection, etc.), body part injured]