

**Renton Fire and Emergency Services Department**  
**Standard Operating Procedure**

<b>Subject:</b> Exposure Control	<b>Number:</b> 2108
<b>Effective Date:</b> March 1, 2008	<b>Revised:</b>

**1.0 Statement of Policy**

- 1.1. Being that the Fire and Emergency Services Department has determined Members are at risk of occupational exposure to infectious diseases, personnel will use accepted recognized safe practices when dealing with patients.
- 1.2. Members will follow guidelines of Infectious Disease Prevention as outlined in Seattle King County Patient Care Protocols.
- 1.3. The Fire and Emergency Services Department will provide all personal protective clothing appropriate for EMS work.
- 1.4. The Fire and Emergency Services Department shall maintain members' personnel health files during the duration of employment plus thirty years.
- 1.5. All members expected to perform EMS duties in emergency situations will be offered the HBV vaccine at no cost to the member:
  - 1.5.1. If the member declines to receive the vaccine, s/he will sign a declination statement.
  - 1.5.2. If the member decides to receive the vaccine at a later date, the vaccine shall be given at no charge to the member.
  - 1.5.3. Booster shots shall be made available, if needed.

**2.0 Objectives**

- 2.1. To maximize protection against communicable diseases including bloodborne pathogens.

**3.0 Responsibility**

- 3.1. All members are responsible for:

- 3.1.1. Utilizing universal precautions by donning medical garments and emergency face protection prior to any patient care during which splashes of body fluids can occur.
- 3.1.2. Notifying the Deputy Chief of Safety and Support Services of inoculations and other health history updates.
- 3.2. The Lieutenant assigned to the Safety/Training Division shall be the Exposure Control Officer and shall:
  - 3.2.1. Review and update the Exposure Control Plan annually or when new tasks or job assignments affect member exposure.
  - 3.2.2. Be in charge of the HBV vaccine program.
- 3.3. The Deputy Chief of Safety and Support Services has overall responsibility for the Bloodborne Pathogens Exposure Control Plan.

#### **4.0 Procedures**

- 4.1. General Precautions:
  - 4.1.1. Medical gloves and eye protection shall be donned prior to initiating patient care.
  - 4.1.2. A particulate respirator should be used when operating around patients with confirmed or suspected tuberculosis.
  - 4.1.3. If possible, the rear windows of the aid car transporting patients with known or suspected tuberculosis should be kept open, and the heater or air conditioner set on a non-circulating cycle.
  - 4.1.4. Hand washing and the washing of any other contaminated body surfaces shall be done as soon as practical after patient care. In the event that washing facilities are not available, antiseptic towelettes or antiseptic cleaners shall be used.
  - 4.1.5. Equipment and working surfaces will be decontaminated immediately or as soon as possible after contamination.
- 4.2. Restrictions of Personal Activity in the Work Area
  - 4.2.1. Where there is a likelihood of occupational exposure, activities such as eating, drinking, or applying contact lenses are prohibited.
  - 4.2.2. Foodstuffs shall be kept separate from biohazards.
- 4.3. Training

- 4.3.1. All Members shall receive annual training on infectious diseases including bloodborne pathogens.
- 4.3.2. Training records shall be maintained for three (3) years from the date on which the training occurred.
- 4.4. Record Keeping
  - 4.4.1. The Exposure Control Officer is responsible for maintaining an accurate record for each member with occupational exposure in accordance with WAC 296-62-08001.
  - 4.4.2. The Exposure Control Officer shall ensure the confidentiality of member exposure records. Records will not be made accessible without the member's written consent or as required by law.
  - 4.4.3. Records shall be maintained for the duration of employment plus thirty (30) years.
- 4.5. Contamination of clothing or bunkers.
  - 4.5.1. Before handling contaminated laundry, wear gloves and appropriate protective equipment.
  - 4.5.2. If a house uniform or other non-disposable piece of clothing is inadvertently contaminated, it will not be taken home.
  - 4.5.3. Make sure all articles of clothing are marked with the member's name.
  - 4.5.4. Place in a red biohazard bag, tagged with the member's name and the word "CLEANING".
- 4.6. Decontamination of Equipment or Working Surfaces.
  - 4.6.1. Use household bleach and water mixture of one part bleach to ten parts water.
  - 4.6.2. This mixture will be usable for 24 hours; after that time the bleach solution loses its potency.
  - 4.6.3. The manufacturer's recommendation for cleaning will be followed for items potentially damaged by bleach (Example: Bunker Gear).
- 4.7. The handling of biohazards shall be performed in such a manner as to minimize splashing, spraying, spattering and generation of droplets.
- 4.8. Needles and Sharps

- 4.8.1. Contaminated needles and other sharps will be disposed of in a sharps container.
- 4.8.2. Sharps containers shall be located in all aid vehicles and in all medical kits and shall be stored in the upright position.
- 4.8.3. If a contaminated needle must be recapped, it shall be recapped by the one-handed technique or through the use of a mechanical device.
- 4.8.4. Broken glass that is contaminated will be treated as a sharps.
- 4.9. Disposal of Biohazards
  - 4.9.1. Contaminated disposable materials shall be transported in sealed red biohazard bags and placed in biohazard containers located in each station.
  - 4.9.2. Handle the top of the bag only; the bag is not to hit the body.
  - 4.9.3. When sharps containers are 75% full, place them in the biohazard container.
  - 4.9.4. Sharps containers shall not be reused.
  - 4.9.5. When biohazard containers are 75% full, notify the EMS Coordinator, who shall make arrangements for pick up.
- 4.10. EMS Exposure Protocol
  - 4.10.1. If a percutaneous or mucotaneous exposure has occurred, the following steps will be taken using the Exposure Packet as a detailed guide. Note that the on-duty MSO can begin drug therapy immediately if there was a significant exposure from a high-risk person.
  - 4.10.2. The member will initiate self-care. Limit exposure by promptly washing the wound with disinfectant soap and water. Flush eye, nose or mouth exposures with water or saline.
  - 4.10.3. The member shall report the exposure to their supervisor and initiate the Exposure Control Packet.
  - 4.10.4. If the worksheet in the Exposure Control Packet determines that there was some risk of exposure, continue following the Exposure Control Packet and call the on-duty Battalion Chief/Safety Officer and the Exposure Control Officer.

- 4.10.4.1. Notify Harborview Medical Center and transport the exposed member there for treatment.
- 4.10.4.2. The exposed member should not be left alone during this time.
- 4.10.4.3. The Battalion Chief/Safety Officer shall designate the Exposure Control Officer or another Department member to accompany him/her to Harborview and stay with him/her through the treatment period.
- 4.10.5. The Exposure Control Officer shall contact the hospital where the patient was sent and will make arrangements for the patient to be tested for HIV, HCV and HBV.
- 4.10.6. If the source person refuses testing, the Exposure Control Officer shall contact Seattle King County Health Department for assistance.
- 4.11. Individuals are encouraged to protect themselves and their families from contracting Hepatitis B through prevention.
  - 4.11.1. Hand washing is a must after returning from a fire or medical call for personal hygiene. Washing should be thorough and it is recommended that an antimicrobial handwash with residual activity be used (Example: 4% chlorhexide).
  - 4.11.2. Bathing after work is the best means of preventing infection and transmission.
  - 4.11.3. Jewelry or metal objects that are close to the skin can harbor germs. It is recommended that rings, including wedding bands, bracelets and necklaces, be removed during working hours. If a watch must be worn, it should be covered with gloves.
  - 4.11.4. Vehicle washing should be done by supplementing the soap and water with disinfecting agents. This can make vehicles virtually free of pathogens. All patient transport areas should be cleaned daily.
  - 4.11.5. Face masks, eye protection and gloves are encouraged as protection against infection.
  - 4.11.6. Vaccination is the best form of protection against viral infection. A barrier can fail and permit germs to reach your skin. Even a vigorous scrubbing may not kill all of the germs.

4.11.7. Contact the Exposure Control Officer for vaccination information.  
The vaccination process is a series of three shots:

- 4.11.7.1. Initial - Day 1
- 4.11.7.2. 2nd shot -Day 1 + 30 days
- 4.11.7.3. 3rd shot - Day 1 + 60 months
- 4.11.7.4. Booster - Day 1 + 5 years

## **5.0 Reference**

- 5.1. WAC 296-305-02501
- 5.2. The Bloodborne Pathogens Standard (WAC-296-62-08001) is accessible to members at <http://www.leg.wa.gov/wac/index.cfm?fuseaction=title&title=296>.

## **6.0 Appendix**

- 6.1. Recommended Personal Protective Equipment
- 6.2. Hepatitis B Vaccination Declination Form

**Appendix A**  
**Recommended Personal Protective Equipment**

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**MMWR**

Table 4. Example of Recommended Personal Protective Equipment for Worker Protection Against HIV and HBV Transmission<sup>1</sup> in Prehospital<sup>2</sup> Settings.

<b>Task or Activity</b>	<b>Disposable Gloves</b>	<b>Gown</b>	<b>Mask</b>	<b>Protective Eyewear</b>
Bleeding control with spurting blood	Yes	Yes	Yes <sup>3</sup>	Yes
Bleeding control with minimal bleeding	Yes	No	No	No
Emergency childbirth	Yes	Yes	Yes, if splashing is likely	Yes, if splashing is likely
Blood drawing	At certain times	No	No	No
Starting an intravenous (IV) line	Yes	No	No	No
Endotracheal intubation, esophageal obturator use	Yes	No	No, unless splashing is likely	No, unless splashing is likely
Oral/nasal suctioning, manually cleaning airway	Yes <sup>4</sup>	No	No, unless splashing is likely	No, unless splashing is likely
Handling and cleaning instruments with microbial contamination	Yes	No, unless soiling is likely	No	No
Measuring blood pressure	No	No	No	No
Measuring temperature	No	No	No	No
Giving an injection	No	No	No	No

<sup>1</sup> The examples provided in this table are based on application of universal precautions. Universal precautions are intended to supplement rather than replace recommendations for routine infection control, such as hand washing and using gloves to prevent gross microbial contamination of hands (*e.g., contact with urine or feces*).

<sup>2</sup> Defined as setting where delivery of emergency health care takes place away from a hospital or other health-care facility.

<sup>3</sup> Refers to protective masks to prevent exposure of mucous membranes to blood or other potentially contaminated body fluids.

<sup>4</sup> While not clearly necessary to prevent HIV or HBV transmission unless blood is present, gloves are recommended to prevent transmission of other agents (*e.g. Herpes simplex*).

**Appendix B**  
**Hepatitis B Vaccination Declination Form**

If you do not wish to have the vaccination against the Hepatitis B Virus at this time, **PLEASE READ AND SIGN** the following statement/form (*Page 24*). You are signing that you have been informed of the following information. You are not signing that you may never receive the vaccine at some future point.

If you have been vaccinated with a complete series of three (3) Hepatitis B Vaccine doses in the deltoid muscle (arm) in the past and you do not wish any further doses, you may **EITHER** provide your past vaccine records **OR** indicate on this form that you are vaccinated and sign that you have read the following information.