



# Appendix E of the Swannanoa Volunteer Fire Department's Standard operating Guidelines INFECTION CONTROL PROCEDURES

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## 1.0 Purpose, Scope and Application:

The purpose of this plan is to limit occupational exposure to blood and other potentially infectious materials for the employees of the Swannanoa Fire Department. This includes firefighters and EMS personnel.

Infection control policy and procedures require strict compliance by all personnel to maintain a safe environment for patients, the general public and for each employee and their families.

1910.1030 Blood borne Pathogens applies to all occupational exposure to blood or other potentially infectious materials as defined by the following definitions. Infection control policies and procedures require strict compliance by all personnel to maintain a safe environment for patients, the general public and for each employee and their families.

## 2.0 Definitions:

**Blood:** means human blood, human blood components, and products made from human blood.

**Bloodborne pathogens:** means 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).

**Clinical laboratory:** means a workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.

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

**Contaminated laundry:** means laundry which has been soiled with blood, potentially infectious materials or may contain sharps.

**Contaminated sharps:** means 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 etc.

**Decontamination:** means 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 and the surface or item is rendered safe for handling, use, or disposal.

**Engineering controls:** means controls ( sharps disposal containers, self sheathing needles) that isolate or remove the Bloodborne Pathogens hazards from the workplace.

**Exposure incident:** means 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.

**Handwashing facilities:** means a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

**Licensed healthcare professional:** is a person whose legally permitted scope of practice allows him or her to independently perform the activities required by paragraph (f) 1910. 1030 Hepatitis B Vaccination and post-exposure evaluation and follow-up.

**HBV:** means Hepatitis B Virus.

**HIV:** means Human Immunodeficiency Virus.

**Occupational exposure:** means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of the employee's duties.

### Other potentially infectious materials:

(1) the following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations 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, 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:** means piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.

**Personal Protective Equipment:** is specialized equipment or clothing worn by an employee for protection against a hazard. Latex gloves, eye, nose or mouth shields. General work clothes (uniforms, pants, shirts, or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

**Production facility:** means a facility engaged in industrial scale, large-volume or high concentration production of HIV or HBV.

**Regulated waste:** means 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 material and are capable of releasing these materials during handling of contaminated sharps and pathological and microbiological wastes containing blood or other potentially infectious materials.

**Research laboratory:** means a laboratory producing or using research laboratory scale amounts of HIV or HBV. Research laboratories

may produce high concentrations of HIV or HBV but not in the volume found in production facilities.

**Sharps Container (Approved):** closable, puncture resistant, leakproof on sides and bottom, labeled and color-coded container for needles, epi-pens etc.

**Source individual:** means any individual, living or dead, whose body or other potentially infectious materials 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:** means the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

**Universal precautions:** is an approach to infection control. According to the concept of universal precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other Bloodborne Pathogens.

**Work practice controls:** means controls that reduce the likelihood of exposure by altering the manner in which a task is performed (prohibiting recapping of needles by a two handed technique).

### 3.0 Exposure determination:

(A). **Rescue personnel:** All EMTs & first responders that are in direct contact with patients or bodies during medical treatment, extrication, or the rescue of trapped patients in structure fires.

(B). **Fire personnel:** All fire personnel that are involved with extrication, rescue of trapped subjects, or the loading of patients or bodies.

(C). **Fire & rescue:** All personnel involved with the cleaning of equipment after a call.

### 4.0 Exposure task's:

(A). **Medical care:** All personnel being exposed to any type of body fluids, sharps, or contaminated material while attending to patient.

(B). **Patient loading:** All personnel being exposed to any type of body fluids, sharps, or contaminated material while assisting with loading of patient's.

(C). **Rescue:** All personnel being exposed to any type of body fluids, sharps, or contaminated material during extrication, or rescue operations.

(D). **Clean up:** All personnel being exposed to any type of body fluids, sharps, or contaminated material during the clean up of equipment used during the call.

### 5.0 Exposure protection equipment:

(A). Safety glasses

(B). Rubber gloves (one time use only, disposable)

(C). Face masks (one time use only, disposable)

(D). Emergency isolation kit: face mask (2) Safety glasses (2) disposable stethoscope (1) coveralls (2pr) shoe covers (2pr) surgeon' s gloves (2pr)

(E). Small emergency isolation kit: face mask (1) disposable stethoscope (1) gloves (1pr) coveralls (1)

### 6.0 Work practices & procedures:

(A). All of the above listed exposure equipment will be used on all calls where body fluids are present, with the exception of the isolation kits. Isolation kits are utilized when a patient is known or suspected of carrying a communicable disease, or when splashed body fluids are likely to occur.

(B). Personnel should anticipate and choose appropriate equipment for given situations and assume that an exposure is highly likely in any of these responses to the public or from a "walk-in" patient to either station. On any call or while at either station, on or off duty, personnel will wear a fully enclosed shoe or boot. Flip-flops, perforated or other open toe shoes will expose an individual to contaminants during an incident. (Exception) - After a long immersion during a water rescue or training session, being in neoprene shoes for period of time or wet socks after a fire and feet need to dry and recover. After showering and wearing open toe shoes in the shower area.

(C). All personnel involved with patient care will be required to remove contaminated equipment and replace it with new equipment before working on another patient at the scene. Using the same equipment may transfer a contaminant or infection from one patient to another.

(D). All contaminated material will be disposed of by placing material into fluorescent orange or orange-red plastic bags and sealed, with biohazard clearly marked on the outside. This material will then be transported to the hospital disposal facility.

- (E). All sharps shall be disposed of in an approved "Sharps" container. All sharps containers will be easily accessible to personnel and located as close as feasible to the area that the sharps are being used. (No sharps will be bent or Broken.)
- (F). Handwashing Procedures
1. Hand washing after calls or any suspect exposure incidents shall not be done in the food preparation area. The only hand washing allowed in that area would be related to food preparation such as in between or after handling of foods.
  2. Stand away from the sink to avoid contamination of clothing.
  3. Use warm running water and antiseptic soap.
  4. Work up lather and rub for at least 15 seconds.
  5. Rinse with flowing water.
  6. If hand washing facilities are not available, a water-less, alcohol-based cleaner should be used.
- (G). Upon completion of the assignment all personnel, with any possible exposure, will wash their hands on scene with an antiseptic hand cleanser and paper towels. The towels will be disposed of with the contaminated material in a fluorescent orange or orange-red plastic bag marked biohazard.
- (H). Upon returning to the station all personnel will repeat the hand washing process with either an antiseptic cleanser or bleach. All other areas of the body that may be contaminated will be washed by showering or other means of decontamination.
- (I). All personal protective equipment will be removed prior to leaving the scene or work area. It will then be placed into a storage container or designated area for decontamination or disposal.
- (J). All on-duty personnel (Part time or full time) will be required to keep one extra uniform at the station due to the possibility of contamination.
- (K). After being suspect of any exposure, any member should:
1. Not leave the scene, station or be transported in a personal vehicle until full decontamination procedures have occurred. (*Contamination of POV*)
  2. Limit exposure to other persons until full decontamination procedures have occurred.
  3. Take any items, clothing, shoes, keys, hats etc. that have any suspicion of exposure to your home, in a POV or any other location until full decontamination procedures have occurred.
- (J). Equipment clean-up will be accomplished by using the proper personal protective equipment and cleaning solutions.
- (K). Contaminated laundry shall be handled as little as possible. It will be placed into a fluorescent orange or orange red plastic bag and sealed, with Biohazard clearly marked on the outside. It will then be transported to Reynold's Fire Department, Buncombe County Sheriff's Department or Swannanoa Cleaners to be cleaned.
- (L). All contaminated equipment transported by EMS to the hospital should be cleaned at the hospital before being returned to the fire station. All contaminated equipment that is not transported to the hospital will be cleaned at the station using proper cleaning solutions and personal protective equipment before being placed back into service.

## **7.0 Exposure to body fluids:**

- (A). Will be reported to the Officer in Charge of the incident immediately.
- (B). Supervisor in charge of incident will make a written report (*SOG Appendix J1 Incident Exposure Form & SOG Appendix J2 Incident Safety Report*) of the circumstances of the incident and submit it to a Chief Officer or the Safety Officer.
- (C). All personnel, if exposed will be required to be evaluated at Occu-Med (828-213-0878).
- (D). The Supervisor will notify EMS Supervisor and Mission St. Joseph's Hospital of personnel exposed.

## **8.0 Hepatitis B Vaccination**

- (A). Hepatitis B vaccinations are required by departmental policy and OSHA at no cost to the employee.
- (B). Hepatitis B vaccinations will be under the supervision of a licensed physician or licensed healthcare professional.

- (C). Hepatitis B vaccinations will be available to the employee immediately after gaining membership and the first shot of the series must be completed before beginning responses.

### **9.0 Post-exposure evaluation and follow-up:**

- (A). The officer in charge of the incident will file a report (*SOG Appendix J1 Incident Exposure Form & SOG Appendix J2 Incident Safety Report*) on the incident submitted to the Chief and a copy of the report will be placed into the employee's file for future references if a medical problem arises.
- (B). The officer in charge, in the above mentioned report will be required to document the circumstances under which the exposure occurred.
- (C). When the department is notified of a possible infection they will immediately notify the employee or employee's that were in contact with the patient.
- (D). The department shall insure that the healthcare professional evaluating an employee does have the following information.
  1. A copy of OSHA1910.1030 Bloodborne Pathogens
  2. A description of the exposed employee's duties as related to the exposure incident.
  3. Documentation of the routes of exposure & circumstances under which the exposure occurred.
  4. All medical records relevant to the appropriate treatment of the employee, including vaccination status which is the employer's responsibility to maintain.

### **10.0 Healthcare professional's written opinion:**

- (A). The department shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the evaluation.
- (B). The employee will be advised of any needed follow-up treatment, and will be advised of the healthcare professional's follow-up opinion.

### **11.0 Medical records.**

- (A). The department will maintain accurate records for each employee of the department.
- (B). Medical records will be made available to the employee at the employee's written request.
- (C). Medical records are confidential & will not be disclosed without written consent of the employee.

### **12.0 Training:**

- (A). The department shall insure that each employee receives annual training on how to deal with infectious disease and the precautions that can be taken to prevent infection.
- (B). The department shall train all personal who are not experienced with the treatment of patients and the handling of human pathogens.
- (C). Training records are required to be up to date and on file for 3 years, with the following listed.
  1. Dates of training
  2. Summary of training
  3. Names & qualifications of persons instructing
  4. Names of all attending employees
- (D). Training records will be made available at the request of the employee.

### **13.0 Communication of hazards to employee's:**

Labels: warning labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or potentially infectious material and other containers used to store, transport or ship blood or other potentially infectious materials, except as provided in paragraph (g) (1) (i) (e) (f) of 1910. 1030.

These labels shall be fluorescent orange or orange-red or predominantly so, with the lettering or symbols in a contrasting color. (Biohazard)