



- 1) **Purpose:** In accordance with the OSHA Blood borne Pathogen Standard, CFR 1910.1030; Florida Administrative Code 64J, NFPA 1581, and the Ryan White Care Act, the following plan has been developed.
- 2) **Scope:** All personnel of St. Johns County Fire Rescue.

**Training Mandated by Florida Department of Health**

- 3) All new personnel will receive an initial in-service training covering HIV/AIDS and other communicable diseases during the orientation program, as mandated by the State of Florida and this Department.
- 4) Each year a mandatory in-service program will be provided for all personnel covering HIV/AIDS and other communicable diseases, including tuberculosis, as mandated by the Florida Department of Health.

**Exposure Determination**

- 5) OSHA standards require employers to perform an exposure determination concerning which departmental personnel may incur occupational exposure to blood or other potentially infectious materials. The exposure determination is made without regard to the use of personal protective equipment, as all personnel are considered to have been potentially exposed even if they wear personal protective equipment. This exposure determination is required to list all job classifications in which all personnel may be expected to incur such occupational exposure, regardless of frequency. The following job classifications are in this category:
  - A. Fire Chief
  - B. Section/Deputy Chiefs
  - C. Battalion Chief
  - D. Captain
  - E. Lieutenant
  - F. Engineer
  - G. Firefighter/EMT/Paramedic
  - H. Marine Rescue Lifeguards (Seasonal and Fulltime)
  - I. Infection Control Officer
  - J. Auxiliary personnel
- 6) In addition, OSHA standards require a list of job classifications in which some personnel may have potential occupational exposure. Because not all of the personnel in these categories would be expected to incur exposure to blood or other potentially infectious materials, tasks or procedures that would cause these personnel to be exposed must also be listed in order to understand clearly which are considered at risk. The job classifications and associated tasks for these categories are as follows:
  - There are currently no job classifications in this category.
- 7) A third category exists in which personnel do not have a risk of occupational exposure. The job classifications included in this category are:

- A. Fire Mechanic
- B. Office Specialists
- C. Office Managers
- D. Billing Employees
- E. Logistics Employees
- F. Communications Employees
- G. Prevention/Inspectors Employees

**Infection Control Officer**

- 8) The infection control officer (ICO) is responsible for maintaining a liaison with the Fire Rescue Physician, the Safety Committee, infection control representatives at local health care facilities, and health care regulatory agencies.
- 9) The ICO will also examine compliance procedures and engineering controls to ensure their effectiveness in accordance with operational requirements.
- 10) The ICO should be knowledgeable and cognizant of issues associated with bioterrorism pathogens. The ICO will also be knowledgeable about emerging infectious diseases.
- 11) The ICO is responsible for coordinating the administration of immunizations and infectious disease screening per the current Centers for Disease Control (CDC) guidelines and ensuring these confidential records are kept on file in the Fire Rescue Physician's office.

**Compliance Methods**

- 12) Transmission of infectious diseases is a major concern for the health care professional. This policy has been established for the protection of Department personnel against communicable diseases. Universal precautions will be observed by all personnel of this Department in order to prevent contact with blood or other potentially infectious materials. All blood and other body fluids will be considered infectious regardless of the perceived status of the source individual.
- 13) Engineering and work practice controls will be used to eliminate or minimize exposure to personnel. Where occupational exposure remains after institution of these controls, personal protective equipment will be used. Training information and updates will be provided as outlined in this policy.
- 14) Department apparatus will be equipped with non-latex gloves and/or nitrile gloves, masks, protective eye wear and disposable gowns.
- 15) Disposable gloves will be worn during ALL patient contact. Including, but not limited to:
  - A. When handling blood or body fluids or equipment that has come into contact with a patient.
  - B. When bedpans, urinals and emesis basins are emptied or stoma care is initiated..
  - C. When cleaning and decontaminating equipment on the apparatus.
- 16) If a glove is torn or punctured, the torn glove should be removed, hands washed with soap and water or



alcohol based waterless hand gel and new gloves applied.

- 17) Immediately wash with soap and water if contaminated with blood or body fluids, between every patient contact, after touching contaminated objects, and after removal of gloves every time.
- 18) Wear additional appropriate barrier precautions (mask, gown, respirator, eye covering) when the possibility of extensive exposure of blood or body fluids exists, such as:
  - A. During resuscitation of trauma patients.
  - B. During emergency childbirth, especially when handling the placenta and infant until all blood and amniotic fluid has been removed from the infant.
  - C. When caring for a patient who has, or has the potential for having tuberculosis, a N95 respirator provided for each member must be worn. A paper facemask is NOT sufficient.
  - D. When tolerable, place a facemask on patient. with the exhaust fan on, A/C off, and if possible, rear windows open during transport.
  - E. Notify receiving facility of possible infectious patient and recommend a negative pressure room, if available.
- 19) Always use artificial airways and resuscitative devices rather than performing mouth-to-mouth rescue breathing.
- 20) Needles will not be recapped, bent or broken after use, as these actions increase the risk of unintentional needle stick injury. During emergency procedures take extra precautions to place needles in puncture-proof needle container immediately after use.

#### **Contaminated Equipment**

- 21) Personnel providing indirect care or those performing decontamination with the subsequent possibility of indirect contact will adhere to the following policy:
  - A. Eye protection and disposable latex gloves and aprons will be worn.
  - B. Reusable equipment will be scrubbed of all debris and blood and then disinfected with a EPA-approved tuberculocidal. Note, generally all solutions require an aqueous state of a minimum of 10 minutes to disinfect before being wiped down.
  - C. Ambulance work areas and emergency stretchers that have been contaminated with blood or body fluids will be wiped with absorbent toweling as a gross decontamination to remove materials and then cleaned with a EPA- approved tuberculocidal.
  - D. Monitoring equipment will be cleaned with isopropyl alcohol after being wiped down.
  - E. Absorbent cleaning material will then be sealed in bio-hazardous waste bag (red) and properly

disposed of in the station's bio-hazardous waste bins.

- 22) Utility sinks located at each station are for the sole purpose of cleaning contaminated equipment.

#### **Work Area Restrictions**

- 23) In work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, personnel are not to eat, drink, smoke, apply cosmetics or lip balm, or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, and cabinets or on counter or bench tops where blood or other potentially infectious materials are present; this is to include the cabs of all apparatus.
- 24) All procedures will be performed in a manner to minimize splashing, splattering, spraying and generation of droplets of blood or other potentially infectious material. When starting an IV, dropping the IV catheter on the floor of the ambulance or other surface will cause splattering of blood. When possible, immediately place the IV catheters in the needle containers.

#### **Personal Protective Equipment**

- 25) All personal protective equipment (PPE) used by the Department will be provided without cost to personnel. PPE will be chosen based on the anticipated exposure to blood or other potentially infectious material. This equipment will be considered appropriate only if it does not permit blood or other potentially infectious material to pass through or reach the clothing, skin, eyes, mouth or other mucous membranes under normal conditions of use and for the duration of time that the PPE is used.
- 26) Protective clothing will be provided to each appropriate Department member. A complete set of turnout gear, including helmet with face shield, bunker coat and pants with moisture barrier, will be issued before permitted to respond to an emergency incident:
  - A. Fire Chief
  - B. Section/Deputy Chief
  - C. Battalion Chief
  - D. Captain
  - E. Lieutenant
  - F. Engineer
  - G. Firefighter/EMT/Paramedic
  - H. Auxiliary member
- 27) In addition, N95 Particulate Respirators will be provided on every ambulance and fire apparatus.
- 28) Examples of types of protective clothing required for specific procedures are:
  - A. Gloves only: examining and treating a patient with a medical emergency whom is not bleeding, but has non-intact skin; treating a patient who has



minor bleeding not likely to be splashed onto the responder's clothing, skin, or face.

- B. Gloves, facemask with eye shield or glasses, and gown: treating a patient who is bleeding profusely or who has spurting blood.
  - C. Pocket mask or bag-valve-mask: providing rescue breathing to a patient in respiratory or cardiac arrest.
  - D. Bunker gear: during extrication procedures where blood is present or where there is a strong possibility of either a patient or rescuer being cut on sharp metal or glass.
- 29) For situations involving potential splash or spray of blood or other potentially infectious material, the standards will accept a face shield as adequate protection only if it is chin length. If facial protection is required, commonly used 6-inch face shields are an acceptable substitute for a facemask.
- 30) The face mask portion of the SCBA will serve as an acceptable substitute for eye and face protection.
- 31) A gown, apron or bunker coat and pants will be worn whenever splashes, spray, splatter, or droplets of blood or other potentially infectious material may be generated and contamination of skin or clothing would otherwise be reasonably anticipated.
- 32) All PPE will be cleaned, laundered and/or disposed of by the employer at no cost to the member. All repairs and replacements will be made by the employer at no cost to the member.
- 33) All garments that are penetrated with blood or other body fluids will be removed as soon as feasible and placed in a red plastic bag that displays the universal biological waste symbol. Garments will then be taken to an approved commercial laundry. Under no circumstances will contaminated clothing or bunker gear be taken home for cleaning or washed in a station washer.
- A. Contaminated laundry will be handled as little as possible and will not be sorted or rinsed.
  - B. Any employee who handles contaminated laundry will use appropriate PPE to prevent contact with blood or other potentially infectious material.
- 34) All contaminated disposable equipment will be placed in a red bag before leaving the scene of an incident. The bag will then be placed in a secure location on the vehicle to prevent other equipment from becoming contaminated.

#### Housekeeping

- 35) The standard requires that work sites be maintained in a clean and sanitary condition, and requires a written schedule for cleaning and method of decontamination. The area of each station used to decontaminate reusable equipment, as well as areas used to store bio-hazardous waste bags with contaminated items in stations and ambulances will be cleaned and decontaminated monthly. A log will be maintained at

each station showing the date of each months cleaning and initials of person performing task.

- 36) Wednesday: Bay Day: All bio-hazardous storage and decontamination areas (including utility sinks) will be disinfected with an EPA approved tuberculocidal solution. Areas will be cleaned and disinfected after each use.
- 37) Thursday: Station Day: In an effort to decrease communicable diseases, all areas of the station will be thoroughly cleaned. Common areas where germs are likely to be present and multiply, include, but not limited to: kitchen surfaces, appliance handles, bathrooms, door handles, chair armrests, remotes, light switches, phones, and computer equipment. Special attention should be taken to ensure these areas are thoroughly cleaned.
- 38) Friday: All apparatus will be thoroughly decontaminated. All compartments, bags, stretchers, medical equipment, and other items on the apparatus where transmission of pathogens, blood borne or otherwise should be decontaminated according to this policy. Furthermore, all rescue units should be decontaminated after each transport on a daily basis.
- 39) Decontamination will be accomplished using the following:
- A. A solution of one part household bleach and nine parts water, or EPA-approved tuberculocidal provided by the Department.
  - B. Personal protective gear will be worn while cleaning equipment and/or reusable supplies. This may include gloves, eye protection and a disposable apron.
- 40) All contaminated work surfaces will be decontaminated after completion of procedures immediately, or as soon as feasible after any spill of blood or other potentially infectious material, and again at the end of the shift if surfaces have again become contaminated since last cleaning.
- 41) All bins, pails, cans and similar receptacles will be inspected and decontaminated monthly.
- 42) Any broken glassware that may be contaminated is not to be picked up with bare hands. Personnel will first bring a needle container next to the spill area. Broken glass will then be swept onto a square point shovel or dustbin, and dumped directly into the container.

#### Employee Exposure to Blood, Body Fluids, Needle Sticks

- 43) Exposure to HIV/AIDS, hepatitis B virus (HBV), hepatitis C virus (HCV) and/or syphilis is primarily by percutaneous or permucosal exposure to blood and/or body fluids.
- 44) A "significant" exposure, as defined by Florida Statute 381.004, is exposure to blood or body fluids through a needle stick, instruments, or sharps; exposure of mucous membranes to visible blood or body fluids; or exposure of skin to visible blood or body fluids when



the exposed skin is chapped, abraded, or afflicted with dermatitis or the contact is prolonged or covers an extensive body surface area.

- 45) Following exposure to blood or body fluids, personnel involved will immediately report the incident per **SOP Department Vehicle Accidents/On the Job Injuries** for treatment and documentation procedures. The ICO will be notified immediately of the exposure. The following information will be provided to the ICO by the investigating officer: member's name, location (receiving medical facility) and name of the source patient.
- 46) If the treating physician deems the exposure significant, the source patient will be tested for blood borne pathogens. Based on presence of specific viral loads, treatment options will be provided to the member at no cost.
- 47) Since drug therapy is most effective if initiated within 24 hours of the exposure, the investigating officer will not delay in having the employee evaluated.
- 48) The ICO will coordinate source patient testing at the appropriate facility (hospital, medical examiner's office/morgue, etc). The ICO is responsible for notification, verification, treatment, and medical follow-up for exposed personnel.
- 49) The member will receive counseling services and follow-up testing/care from the Department designated treatment facility. The member will comply with follow-up counseling and appointments. Additionally, the employee will comply with **SOP-Department Vehicle Accidents /OTJ injuries** as it relates to personnel responsibilities.

**“Good Samaritan” Blood or Body Fluids Exposure**

- 50) If the on-scene Fire Rescue crew encounters a “Good Samaritan” rendering medical care to a patient, the company officer should determine if the “Good Samaritan” may have suffered a significant exposure to blood or body fluids. The definition of a significant exposure is located in this policy.
- 51) If it is determined that the exposure is not significant, the company officer will recommend proper decontamination and will assist the citizen if necessary.
- 52) If it is determined that the exposure is significant, the Battalion Chief will be notified while at the scene. A Good Samaritan exposure form will be filled out prior to leaving the scene.
- 53) The company officer will obtain the following information: exposed person's name, address, phone number, and Emergency Department they are going to; in addition they will obtain the name of the source patient, the receiving medical facility; and the type of exposure.
- 54) The “Good Samaritan” will be referred to seek medical treatment for the exposure at the nearest Emergency Department due to the time constraints for

medication initiation, and advised that the department ICO will contact them for follow-up.

- 55) The ICO will be contacted by the Battalion Chief and given the information on both the exposed person and the source patient. The Battalion Chief will complete a Department Investigation Report (DIR), which will include the information about the exposed person, type of exposure, and source patient.
- 56) The medical treatment of the exposed person will be coordinated through the ER physician and/or their primary care physician. All results will be given to the exposed person only in order to maintain confidentiality.

**Communicable Disease Testing and Prevention**

- 57) Tuberculin skin testing: Tuberculin skin testing will be required on all personnel at the time they are hired or within 2 weeks of their starting date unless they have documentation of having had a PPD within the last six months.
- 58) Annual skin testing will be required on all personnel, which will be provided by the Department at no cost.
- 59) If the initial skin test is positive, the member must have a chest x-ray as proof he or she is not infected. An approved tuberculosis questionnaire must be completed on an annual basis as proof that the member is not exposed.
- 60) Immunizations- Immunizations will be offered at no charge to personnel according to CDC recommendations. These immunization guidelines will be updated as needed.
- 61) Personnel who choose to decline offered immunizations will be required to sign a written declination. Personnel can recant their declination at any time and elect to receive the immunization

**Presumptive Eligibility, Ch. 112.181, Florida Statutes**

- 62) Personnel will be offered the hepatitis B vaccine (series of three) and the hepatitis A (series of two) at the time of employment.
- 63) Florida is a “Presumptive Eligibility” state which reflects special provisions for firefighters, EMTs, paramedics and law enforcement officers.
  - A. “Any emergency or rescue worker who suffers a condition or impairment of health caused by hepatitis, meningococcal meningitis, or tuberculosis that requires medical treatment, and results in total or partial disability or death will be presumed to have a disability suffered in the line of duty, unless the contrary is shown by competent evidence; however, in order to be entitled to the presumption, the worker must, by written affidavit, verify he or she:..”
    - Has not been exposed to hepatitis or meningitis outside the scope of employment;



- Has not received blood or blood components since last undergoing medical tests for hepatitis;
  - Has not engaged in unsafe sexual practices;
  - Has not used IV drugs not prescribed by a physician;
  - Has not, since his or her last TB skin test, been exposed to anyone with tuberculosis outside his or her employment.
- B. Whenever any standard, medically accepted immunization or prophylaxis exists for the prevention of a communicable disease for which a presumption is granted under this law, an emergency rescue worker may be required by his or her employer to undergo immunization unless the worker's physician determines in writing it would pose a significant risk to the worker's health. Absent such written declaration, failure or refusal by a worker to undergo such immunization or prophylaxis disqualifies the worker from the benefits of the presumption."
- 64) All personnel are required by federal law to be skin, blood or chest x-rayed for the presence of the tuberculosis bacteria.
- 65) Personnel are also required to take all immunizations offered by the Department. By refusing to do so, the member acknowledges and understands he or she may be disqualified from the benefits of the presumption he or she has or will have a disability suffered in the line of duty.

#### **"Bio-hazardous" Waste Disposal**

- 66) Bio-hazardous waste is defined as any solid or liquid waste that may present a threat of infection to humans. The term includes, but is not limited to, non-liquid human tissue and body parts; lab waste which contains human disease-causing agents; discarded sharps; human blood, blood products and other body fluids.
- 67) Procedure for the handling and segregation of waste:
- A. Bio-hazardous waste will be identified and segregated from other solid waste as close to the point of origin as possible.
  - B. Bio-hazardous waste, except sharps, will be packaged in impermeable, red, polyethylene or polypropylene plastic bags provided on all Department apparatus and at all stations. Bags will have the physical properties as specified in 381.80, F.S.
  - C. Contaminated sharps will be segregated from all other waste and placed directly into a rigid, leak resistant, puncture resistant container designed specifically for contaminated sharps and located on all apparatus and in all stations.
- 68) Procedure for labeling bio-hazardous waste:
- A. All sharps containers will be labeled with the international bio-hazardous symbol.

- B. All plastic bags containing bio-hazardous waste for on-site disposal will be labeled as stated above.
- 69) Procedure for the storage of bio-hazardous waste:
- A. No bio-hazardous waste will be stored at the generating facility, e.g. fire-rescue station, for a period greater than 30 days.
  - B. Bio-hazardous waste, when stored, will be in a designated area, accessible only to authorized personnel.
  - C. The storage area will be conspicuously marked with the international biological hazard symbol.
- 70) Procedure for the transportation of bio-hazardous waste:
- A. Packages of waste will not exceed 25 pounds.
  - B. All packages of waste will be handled and transferred in a manner that does not impair the integrity of the packaging. Packages will remain intact until disposal.
  - C. There will be neither recycling efforts nor intentional removal of waste from its packaging prior to disposal.
- 71) Procedure for the decontamination of contaminated surfaces and equipment:
- A. Follow appropriate areas of this policy.
  - B. Surfaces contaminated with spilled or leaked bio-hazardous waste will be cleaned with a solution tuberculocidal.

#### **Equipment Mailing**

- 72) Any and all equipment sent for repairs must be cleaned well and disinfected prior to shipping.
- 73) The following disclaimer must accompany the equipment:

##### **To Whom It May Concern:**

The enclosed patient care equipment has been cleaned and disinfected prior to packaging for repairs. Be aware this equipment may be contaminated with human blood or other body fluids despite every effort on our part to eradicate it. A likelihood of bio-hazardous exposure exists during handling and repair. For this reason, please apply the appropriate personal protective equipment during handling and repair.

Thank you,  
St. Johns County Fire-Rescue Management

#### **Training**

- 74) Training for all personnel will be conducted prior to initial assignment to tasks where occupational exposure may occur. Thereafter, training will be conducted on an annual basis.
- 75) Training will include, but not be limited to: OSHA Standard for Blood borne Pathogens
- A. Epidemiology and symptomatology of blood borne and other communicable diseases



- B. Modes of transmission of blood borne and other communicable diseases
- C. Department Exposure Control Plan
- D. Control methods to be used by this Department and who should be contacted concerning exposure to blood and other potentially infectious material.
- E. Procedures that place personnel at risk for exposure to blood or other potentially infectious material
- F. Post-exposure evaluation and follow-up
- G. Signs and labels used in the Department
- H. Immunizations provided by the Department

### **Record Keeping**

- 76) All records required by the OSHA Standard and the Florida EMS office will be maintained by the Department.

### **AeroClave**

- 77) To help minimize exposure risk from airborne and non-airborne diseases/illness, the AeroClave RDS 3110 will be used on a routine basis.
- 78) The AeroClave's main use shall be for decontaminating vehicles yet it can be used for facilities and equipment. The AeroClave is a great tool for decontamination; however it does not take the place of routine decontamination procedures on apparatus, facilities, or equipment.
- 79) There are 3 ways to distribute the AeroClave solution. The first is via the port on the side of the ambulance. Be sure all outer doors are shut and all personnel are outside the vehicle before beginning procedure. The second is via a wand. This can be used similar to a paint sprayer when attempting to decon a large area. If the area is not ventilated, insure anyone who operates this wand in a poorly ventilated area is wearing a SCBA. The third way is the fixed head operation (set it and forget it method). No one should enter the area until the unit has completed deconning.
- 80) Each rescue unit shall use the AeroClave on a monthly schedule or more often as needed.  
First Friday of the month (R2, R17, R12) Second Friday of the month (R14, R5, R16) Third Friday of the month (R10, R18, R8) Fourth Friday (R11 and R7). Crews should also AeroClave any spares and Engines that are located in the district. Each AeroClave application takes 20 minutes to complete.
- 81) Instructions on how to use the AeroClave are located on the machine itself.