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| ***REPLACE WITH YOUR MASTHEAD*** |
| **VFIS logo black JPG** | **SOG Title:** |
| **SOG Number:** |
| **Original Date:** | **Revision Date:** |
| **ABC Fire Department General Operating Guideline** |

**Infectious Disease Exposure Control Plan**

***This is a sample of a standard operating guideline (SOG) on this topic. You should review the content, modify as appropriate for your organization, have it reviewed by your leadership team and if appropriate your legal counsel. Once adopted, make sure the SOG is communicated to members, implemented and performance monitored for effective implementation.***

**Purpose:**

The intention and implementation of the Infectious Disease Exposure Control Plan is as follows:

* To explain how to eliminate or minimize the risk of an exposure
* To identify which fire department personnel are exposed to communicable diseases
* To provide information regarding communicable diseases
* To determine high risk patients
* To determine how an exposure can occur
* To explain how to eliminate or minimize the risk of an exposure
* To provide usable guidelines in the event of an exposure

**Procedure:**

Application

The \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department recognizes the potential exposure of personnel to communicable diseases. Each member, regardless of his/her level of emergency medical training, duty assignment or degree of activity within this department, may find themselves exposed to patients’, body fluids, soiled linen, contaminated medical equipment/supplies, and/or contaminated needles (sharps).

An exposure to a communicable disease while executing duties as a member of the \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department shall be considered an occupational hazard and any communicable disease contracted as a result of a documented workplace exposure shall be considered occupationally related. This objective is accomplished while adhering to the Occupational Health and Safety Administration regulation, 1910.1030 Bloodborne Pathogens.

This Exposure and Control Plan will be accessible to all \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department personnel and will be reviewed and revised, annually or as new or modified procedures become available. Each member will receive a copy. This plan is applicable to all \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department members regardless of the location of the emergency incident and regardless of the transporting ambulance (to include mutual aid).

How Viruses and Bacteria are Dispersed

Viruses and bacteria, which cause communicable diseases, can be spread by the following:

* Direct contact with an infected person as casual as a handshake or as intimate as sexual relations. Venereal diseases such as syphilis and gonorrhea are transmitted through sex. In some cases, the common cold is now thought to be transmitted by direct casual contact.
* Contact with contaminated materials such as human secretions on linens or blankets
* Inhalation of infected droplets when a person coughs or sneezes, aerosolizing the particles
* Bites, human or animal
* Puncture by a contaminated needle or equipment
* Transfusion of contaminated blood products

Refer to Appendix A – Disease Information for Emergency Responders for additional information.

Blood and Body Fluids

1. All patients should be assumed to be infectious for HIV and other blood borne pathogens until otherwise proven. When personnel encounter body fluids under uncontrolled emergency situations in which differentiation of body fluids is difficult, if not impossible, they shall treat all body fluids as potentially dangerous.
2. Body fluids include, but are not limited to, the following:
	1. Blood
	2. Feces
	3. Semen
	4. Nasal secretions
	5. Pericardial fluid
	6. Saliva
	7. Amniotic fluid
	8. Sputum
	9. Cerebrospinal fluid
	10. Sweat
	11. Synovial fluid
	12. Tears
	13. Pleural fluid
	14. Urine
	15. Peritoneal fluid
	16. Vomit
	17. Vaginal fluids (including menstrual blood)

Risk Assessment

It has to be recognized that all medical care providers are at risk of exposure to and contracting a communicable disease. All patients need to be assumed having an infectious disease and necessary precautions must be undertaken. It is not only for the member’s personal protection but for the patients’ protection that this must occur.

Exposure Tasks

Exposure tasks are the duties and activities that are performed during and after emergency situations. The level of emergency medical training is relative to the tasks performed and includes, but is not limited to, the following:

* Airway maintenance (e.g., suctioning, insertion of oropharyngeal airway, esophageal obturator, endotracheal tube or other airway device)
* Ventilation (e.g., mouth-to-mask, bag valve mask, or oxygen-powered sources)
* Wound care
* Patient hygiene (e.g., cleaning of vomitus, feces, or urine)
* Intravenous therapy
* Medication administration
* Assistance given by non-emergency medical personnel
* Clean up of the emergency scene
* Cleaning and disinfecting the ambulance and/or equipment and regulated waste removal

Methods of Compliance

Body Substance Isolation (BSI)

1. When there is a reasonable chance of exposure to blood and/or body fluids, the fire department will provide appropriate personal protective equipment (PPE). PPE will be considered “appropriate” only if it does not allow blood or potentially infectious materials to pass through to or reach the members clothing, undergarments, skin, eyes, mouth, or other mucous membranes and for the duration of time the PPE is used.
2. The following infection control garments and equipment shall be provided on each vehicle that responds to emergency incidents:
	1. Latex or equivalent disposable gloves of various sizes
	2. Tyvek or equivalent protective suits
	3. Face masks and eye protection
3. On all emergency scenes, a minimum of disposable gloves and eye protection shall be worn initially whenever contact with and/or cleaning of patients, body fluids, contaminated medical equipment/supplies, soiled linen and sharps. Disposable gloves shall be donned en route to the scene. Structural fire fighting gloves shall be worn by all members in any situation where sharp or rough edges may be encountered (e.g., motor vehicle accidents).
4. Splash garments are recommended to be used as a part of minimum PPE for all patients and may be downgraded as described in paragraph 3 of this section.
5. Evaluation of the emergency scene to determine conditions that may require additional protection shall be performed as soon as possible. Appropriate infection control garments and equipment shall be worn when splashing of blood or body fluids is expected to occur.
6. Situations that require the use of a face mask, eye protection, protective suit and disposable gloves (may require double gloving) include, but are not limited to:
	1. Childbirth
	2. Arterial bleeding
	3. Multi-system trauma
	4. Combative patients (summon for assistance if possible)
	5. Patients with known contagious disease with open wounds, coughing, etc.
	6. Situations where there are copious amounts of any fluid
7. Situations that require disposable gloves, face masks, and eye protection include, but are not limited to the following:
	1. Airway maintenance
	2. Intravenous therapy
	3. Endotracheal intubation
	4. Patients with productive cough
8. If full structural firefighting gear is worn at the emergency scene, it should provide splash protection due to the fact that saturation of the fluid is not likely. Any fire fighting gear that is contaminated with blood or body fluids must be decontaminated or treat as contaminated linen.
9. All personnel shall wear and utilize the appropriate infection control garments and equipment, unless personnel temporarily and briefly declined to use said garments and equipment when, under rare and extraordinary circumstances, it was the personnel’s professional judgment that in the specific instance the delivery of health care or public safety services, would have posed and increased hazard to the safety of the worker or co-worker. When the personnel make this determination, a report shall be made to the chief officer or senior ambulance officer and the occurrence shall be documented to prevent such occurrences in the future.
10. Disposable gloves shall be changed when soiled, prior to touching equipment that is not used for direct patient care and between patients.

Contaminated Sharps Disposal Containers

1. Intravenous catheters, syringes and medication needles are considered to be sharps.
2. All sharps containers shall be:
	1. Closable
	2. Puncture resistant
	3. Leak proof on all sides
	4. Labeled and color coded with proper warnings
	5. Easily accessible for personnel and located as close as possible to the area of use
	6. maintained in an upright position at all times
	7. Replaced routinely and not allowed to overfill
3. All sharp containers are disposable and should not be opened, emptied, or cleaned in any manner to prevent the chance of contact with contaminated sharps.
4. When the sharp container has reached ¾ of its capacity, it shall be brought to the emergency department at the hospital and disposed of properly. A new sharps container will be acquired and installed in the ambulance. Velcro should be available in the supply cabinet.
5. The recapping of any sharps shall be avoided whenever possible. Approved sharp containers are provided in the patient compartment of the fire department ambulance. If it becomes necessary to recap a sharp on the scene (e.g., IV established in a house or in no proximity to a sharps container), all personnel shall use the one handed method, which is while holding the sharp, scoop the sheath onto the sharp. The two handed method of recapping a sharp is **prohibited**.
6. It is the policy of the \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department to bring the sharps container to the sharp to minimize and/or prevent the chance of personnel of inadvertently becoming in contact with a contaminated sharp. The sharps container in the ambulance should be attached to the counter with Velcro to allow this to occur. At any time the sharps container is removed from the ambulance, the container shall be:
	1. Closed immediately to prevent spillage or protrusion of its content
	2. Placed into a secondary container if leakage or puncture is possible (the second container shall meet all requirements for a contaminated sharps disposal container)

Other Regulated Waste Containment.

1. Regulated waste containers shall be:
	1. constructed to contain all contents and prevent leakage and puncture
	2. closable (and kept closed when not in use)
	3. properly labeled and color coded with the Biohazar4 symbol
	4. lined with red bag liners that are properly labeled with the Biohazard symbol
	5. placed into a secondary container if leakage or puncture is possible (this includes the red bag liner and the secondary container shall meet all requirements for regulated waste containers)
2. All regulated waste and/or red bag liners will be disposed of into the properly marked and lined receptacles located in the ambulance, at the fire house or hospital only and the red bag liner replaced. If at all possible, non-regulated waste (e.g., bandage wrappings, boxes, etc.) should not be disposed of into regulated waste containers and may be disposed of into regular trash receptacles only if not soiled with body fluids.
3. The emergency scene shall be policed for any waste and disposed of properly prior to ambulance departure. No waste, regulated or non-regulated, shall remain on any emergency scene.
4. The area in which regulated waste disposal containers are located in the firehouse shall be properly marked with the Biohazard symbol in accordance with OSHA Standard 1910.130.

Personnel and Other Compliance.

1. Eating, drinking, smoking, applying cosmetics and lip balm, handing contact lenses and the storage of food and/or beverages is prohibited in the ambulance and work areas where there is a reasonable likelihood of exposure to body fluids.
2. Personnel with open lesions, wounds, or weeping sores on their hands and arms shall refrain from direct patient contact.
3. Hands and other exposed parts of the body shall be washed as soon as possible after the termination of the emergency incident (most preferably, prior to departing the hospital). Gloves shall be removed and the hands washed, even if gloves appear to be intact. Soap and warm water shall be used when the facilities are available. If facilities are not available such as in the field, antiseptic towelettes shall be made available and used with clean paper towels. Hands then shall be properly washed when the facilities become available.
4. Mouth to mouth resuscitation shall not be performed by any personnel. The use of bag-valve mask, oxygen powered resuscitator, pocket mask (w/non-rebreather valves) or other ventilatory equipment is the only allowable method of patient ventilation. The suctioning of blood or body fluids by mouth is prohibited.
5. Needles will not be bent, sheared or inserted into mattresses, linens, or seats. It is the responsibility of the person using the needle to assure of its safe disposal. All needles are disposable and are not to be used from patient to patient.
6. Vacutainer blood tubes are use to acquire venous blood in the field shall be placed into properly marked plastic biohazard bags and sealed. Vacutainer tubes shall not be taped to the IV bags to prevent the possibility of breakage in case they become loose and fall.
7. Personnel that may respond to emergency incidents in their personal vehicles will be supplied with the appropriate PPE and equipment so as not to delay medical treatment, with a focus of protecting the pre-hospital care provider.
8. Any personal contaminated clothing shall be:
	1. Removed as soon as possible (if necessary, the hospital can supply “scrub” clothing)
	2. Placed into the properly marked red bags
	3. Be taken to an approved laundry for decontamination
	4. Be cleaned, laundered, decontaminated and/or be disposed of at no cost to the member
9. No contaminated clothing shall be taken home for cleaning.
10. The chief officer and/or the ambulance supervisor shall be informed of any clothing that is soiled and requires decontamination.

Laundry

1. All linens, regardless of cleanliness, shall be replaced after each patient use.
2. All linens shall be considered contaminated laundry, placed into properly marked red bags for transport to the hospital and shall be handle utilizing the necessary BSI techniques and shall be placed into the proper receptacle at the hospital, regardless if the patient is transported or not transported. If the soiled linen has the potential for soaking or leaking through a red bag liner or container, the linen shall be placed into a secondary (or more if required) red bag liner or container.

Cleaning of Ambulance, Equipment and the Regulated Waste Area

1. For the purpose of this section of the Exposure Control Plan, the regulated waste area at the fire house will include the designated area for cleaning and decontamination of equipment.
2. Decontamination will be performed utilizing appropriate BSI.
3. An approved decontamination solution shall be 1 part sodium hypochlorite *(5.25%* household bleach) to 10 parts water (1:10 mixture) or other approved disinfectant that may be acquired from the hospital. The disinfecting solution shall be carried on the ambulance and located in the regulated waste area.
4. All areas that have been decontaminated with the 1:10 solution shall be flushed with water to prevent the corrosion of metallic equipment or surfaces.
5. Any equipment that is not compatible with the 1:10 solution (e.g., electronic equipment) shall be decontaminated with and appropriate disinfectant, which is recommended by the manufacturer.
6. All members shall ensure that the ambulance, equipment, and regulated waste area at the fire house is maintained in a clean and sanitary condition and all members shall adhere to the decontamination policy and procedures within this plan.
7. To guarantee that the ambulance and all equipment is in a sanitary condition for use at any time, all equipment shall be considered contaminated regardless of cleanliness and shall be decontaminated after each use.
8. The ambulance decontamination shall be considered a priority at the hospital after every emergency call and is considered out of service until complete.
9. If the ambulance and/or equipment has been exposed to large amounts of blood or body fluids and cannot be decontaminated at the hospital, the ambulance and/or equipment is considered out of service until an appropriate decontamination is completed.
10. All portable equipment exposed to blood or body fluids should be decontaminated at the hospital if possible.
11. Any equipment that is decontaminated at the firehouse shall be completed in the designated area used for disinfecting medical equipment.
12. Decontamination, storage of contaminated PPE or disposal of regulated waste shall not occur in kitchen, living, or bathroom facilities or meeting areas of the firehouse at any time.
13. Broken glassware shall not be picked up directly with hands. It shall be cleaned up using (mechanical means, such as brush and dustpan, tongs, or forceps. Vacuum cleaners shall not be used for cleaning up glassware to prevent contamination of the vacuum cleaner. Broken glass shall be deposited into the sharps container to prevent puncture of the red bag liner.
14. All regulated waste or linens used to decontaminate the ambulance or equipment shall be disposed of using the methods previously described in this plan.
15. Refer to Appendix D for information regarding decontamination of protective clothing.

Exposure Procedures

1. An exposure incident is defined as “specific eye, mouth, or other mucous membrane, non-intact skin, or parenteral contact with blood or potentially infectious materials that results from the performance of duties”. This can occur through, but not limited to, a needle stick, failure of PPE or the failure of utilizing PPE.
2. Any member who is exposed to blood or body fluids must report the exposure immediately or as soon as possible to the chief officer and/or ambulance supervisor.
3. If an exposure were to occur through the puncture or wound contamination, the member shall squeeze the affected area to promote bleeding for 2 to *5* minutes. The exposure site should be washed with warm water and soap as soon as possible. If the exposure occurred through mucous membranes, they shall be irrigated with clean water as soon as possible.
4. It is the policy of the \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department to utilize the “Guidelines for Needlestick and Body Fluid Exposure in Hospital and Non-Hospital Personnel provided by a Hospital. Foe example, Danbury (CT) Hospital policy guideline is available in Appendix B of this Exposure Control Plan.
5. An Infectious Exposure Form and/or Incident Report shall be completed for \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department records. Refer to Appendix C for a copy of the exposure form.
6. All incidents reports and medical records pertaining to an exposure incident are considered confidential and shall be retained by the \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department for thirty (30) years after a member leaves the department.

Immunizations and Vaccinations

1. It is recommended that all members have a tetanus vaccination every ten (10) years.
2. It is recommended that any member born after 1957 should have the status of their measles, mumps and rubella (MMR) immunization checked.
3. All members of the \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department shall be offered the Hepatitis B vaccination series at no cost to the member within ten (10) days of initially performing duties.
4. All members have the following options regarding the Hepatitis B vaccination series and shall require a signed acknowledgement:
	1. Acceptance of the vaccination series
	2. Declination of the vaccination series (for any reason)
	3. Previously reception of the vaccination series (suggest antibody testing)
5. If any member initially refuses the Hepatitis B vaccination series, he/she may elect to have the vaccination series at a later date and will be provided at no cost to the member and within ten (10) days of the request.
6. If a member has previously had the vaccination series and an antibody test reveals a booster is indicated, the booster shall be provided at no cost to the member and within ten (10) days of notification if the member so chooses to do so.
7. If the member chooses not to accept the vaccination series or routine booster as determined by an antibody test, the member shall sign a declination form in accordance with OSHA Standard 1910.1030. Refer to Appendix 1) for a copy of the Vaccination Series Declination Form.

Attached Documents

Appendix A

Disease Information for Emergency Responders

Appendix B

Guidelines for Needlestick and Body Fluid Exposure in Hospital and Non-Hospital Personnel

Appendix C

Fire Department Infectious Exposure From

Appendix D

Hepatitis B Vaccination Series Declination Form

Appendix E

Tuberculosis Infection Control Plan

Appendix F

PPD Skin Test Declination Form

Appendix G

Ryan White Care Act

**Appendix A**

Disease Information for Emergency Responders

|  |  |  |  |
| --- | --- | --- | --- |
| **Disease/Infection** | **Mode of Transportation** | **Vaccine** | **Signs/Symptoms** |
| AIDS/HIV (Human Immunodeficiency Virus) | Needlestick, blood splash into mucus membranes (e.g. mouth/eyes) or contact with open wound | NO | Fever, night sweats, weight loss, cough |
| Chicken Pox | Respiratory secretions and/or contact with moist Vesicles | NO | Fever, Rash, cutaneous vesicles (blisters) |
| Diarrhea (Campylobactor, cryptosyporidium, giardia, salmonella, shigella, viral, Yersinia) | Fecal/Oral | NO | Loose, watery stool |
| German Measles (Rubella) | Respiratory droplets and contact with respiratory secretions | YES | Fever, rash |
| Hepatitis A (Infectious Hepatitis) | Fecal/Oral | YES | Fever, loss of appetite |
| Hepatitis B (Serum Hepatitis) | Needlestick, blood splash | NO | Jaundice, fatigue, fever, loss of appetite, nausea, headache |
| Hepatitis C | Same ad Hepatitis B | NO | Same ad Hepatitis B |
| Hepatitis D | Same ad Hepatitis B, dependent on HBV (past or present) to cause injection | NO | A complication of HBV infection and can increase the severity of the HBV infection |
| Other non-A, non-B Hepatitis | Severe virus with different modes of transmission (these are called non-A, Non-B because there are no tests for identification) | NO | Fever, headache, fatigue, jaundice |
| Herpes Simplex (Cold Sores) | Contact of mucous membranes with moist lesions, fingers are at particular risk for becoming infected | NO | Skin lesions located around mouth |
| Herpes Zoster (Shingles localized disseminated, see Chickenpox) | Contact with moist lesions | NO | Skin lesions |
| Influenza | Airborne | YES | Fever, fatigue, loss of appetite, nausea, headache |
| Haemophilus Influenza (usually seen in small children) | Contact with respirator secretions | NO | Same as above |
| Lice (head, body, pubic) | Close head to head contact. Both body and pubic lice require intimate contact (usually sexual) or sharing of intimate clothing. | NO | Severe itching and scratching often with secondary infection. Scalp and harry portions of body may be affected. Eggs of head lice (nits) attach to hairs as small, round, gray lumps. |
| **Disease/Infection** | **Mode of Transportation** | **Vaccine** | **Signs/Symptoms** |
| Measles | Respiratory droplets and contact with nasal or throat secretions, highly communicable | YES | Fever, rash, bronchitis |
| Meningitis Meningococcal | Contact with respiratory secretions | NO | Fever, severe headache, stiff neck and sore throat |
| Viral Meningitis | Fecal/Oral | NO | Same as above |
| Mononucleosis | Contact with respiratory secretions or saliva, such as with mouth to mouth resuscitation | NO | Sore throat, fatigue |
| Mumps (Infectious Parotitis) | Respiratory droplets and contact with saliva | YS | Fever, swelling of salivary glans (paratid) |
| Salmonellosis | Foodborne | NO | Sudden onset of fever, abdominal pain, diarrhea, nausea and frequent vomiting |
| Scabies | Close body contact | NO | Itching, tiny linear burrows or “tracks’, vesicles, usually around fingers, wrists, elbows and skin folds |
| Syphilis | Primary sexual contact | NO | Genital and cutaneous lesions, never degeneration (late) |
| Tuberculosis (pulmonary) | Airborne | NO | Fever, night sweats, weight loss, cough |
| Whooping Cough (Pertussis) | Airborne, direct contact with oral secretions | YES | Violent cough at night, whooping sound when coughing subsides |

**Appendix B**

**EMERGENCY PRIMARY CARE DEPARTMENT MANUAL**

**SUBJECT:** Needle Stick and Body Fluid – Exposure in Hospital Employees and Non-Hospital Personnel – Guidelines For

**EFFECTIVE DATE**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **AUTHORITY**: Infectious Control Committee

Exposed employee should have wound treated, tetanus vaccination and gamma globulin, as necessary.

Instruct employee to go to Corporate Health for lab work on the next day that Corporate Health is open. (Monday – Friday 8 AM – 4:30 PM)

Employee should go directly to Corporate Health for Corporate Health for entire treatment (Monday – Friday 8 AM – 4:30 PM).

Make out Incident Report in ED and place in Corporate Health folder in Medical Records Room.

The patient who is the source of the needle stick exposure should have blood drawn for HBsAG and one extra red-top tube of blood drawn for possible HIV analysis. Lab requisitions should be marked “Dr. \_\_\_\_\_\_\_ - Health Services” so report will be sent to Personnel Health and so patient will not be charged.

For non-hospital personnel who have been exposed to a needle stick, e.g. Police officers, fire department personnel, EMTs etc. follow the following procedure: Treat wound, give tetanus vaccination and gamma globulin, as necessary.

If source is high risk for HIV, get immediate telephone consultation from Infectious Disease at time of patient visit. Query Infectious Disease on any treatment to be given in the Emergency Department and when the patient should follow up with consultation in Infectious Disease.

The patient who is the source of the needle stick exposure should have blood drawn for HBsAG and one extra red-top tube of blood drawn for possible HIV analysis. Lab requisitions should be marked “Dr. \_\_\_\_\_\_\_ - Infectious Disease, so report will be sent to Infectious Disease section.

FOR SIGNIFICANT BODY FLUID EXPOSURES – E.G BLOOD ON MUCUS MEMBRANES OR ON A SEVERE DERMATITIS – All hospital employees should be treated with tetanus and/or gamma globulin, as necessary, and referred for follow-up to

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ EMERGENCY MEDICAL SERVICES**

**COMMUNICABLE DISEASE EXPOSURE FORM**

This form must be completed at the time of the communicable Disease Exposure and lefty at the EMS Coordinator’s Office.

YOUR NAME:

TELEPHONE:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ WORK:

DATE OF EXPOSURE:

EMS/FIRE/POLICE DEPT.:

PATIENT’S NAME:

TYPE OF EXPOSURE: \_\_\_\_\_NEEDLE STICK \_\_\_\_\_ OTHER EXPOSURE

DESCRIPTION OF EXPOSURE:

**……………………………………………………………………………………………………………………………………………………….…….**

**OFFICE USE ONLY**

**……………………………………………………………………………………………………………………………………………………….…….**

**\_\_\_\_\_ SOURCE PATIENT BLOODS DRAWN**

**HIV:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ HBsAG:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ OTHER:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

\_\_\_\_\_ INFECTIOUS DISEASE CONSULT IF APPLICABLE

REFERREL

\_\_\_\_\_ PMD \_\_\_\_\_ INFECTIOUS DISEASE \_\_\_\_\_ OTHER

COMMENTS:

**Appendix C**

Infectious Exposure Form

Date of Report:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Telephone No.:

Exposed Member’s Name:

Address:

Date of Birth:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Social Security Number:

Patient’s Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date of Birth:

Address:

Suspected/Confirmed Disease:

Hospital Destination:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Transported By:

Exposure Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exposure Time:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Incident No.:

Incident Type (e.g. medical MVA, trauma):

Type of Exposure (e.g. needle stick) & Body Fluid Exposed To:

Which parts of your body exposed? Be specific:

Any open wounds, sores, rashes exposed? Be specific:

How did the exposure occur? Be specific:

Was medical treatment sought? \_\_\_\_\_ Yes \_\_\_\_\_ No

If so, where and when (date):

Chief Officer & Ambulance Lieutenant Notified? Yes \_\_\_\_\_ No \_\_\_\_\_ When?

Chief Officer/Ambulance Lieutenant Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:

Member’s Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:

**Appendix D**

**Hepatitis B Vaccine Declination Form**

I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk at acquiring the Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with the Hepatitis B vaccine at no charge to myself. However, I decline the Hepatitis B vaccination at this time. I understand that by declining this vaccination, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I decide to have the Hepatitis B vaccine, I can receive the vaccine within ten (10) days of the request at no charge to me. All elements of this declination also apply if it is determined by an antibody test that I require a routine booster of the Hepatitis B vaccine and I decide to decline the booster vaccine this time.

Member’s Name:

Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:

Chief Officer’s Name:

Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:

Designated Officer’s Name:

Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:

**Copy to**: Member

 Chief Officer

 Designated Officer

**Appendix E**

**Tuberculosis Infection Exposure Control Plan**

**Objective**

The intention and implementation of the Tuberculosis Infection Control Exposure Plan is as follows:

* To identify which fire department personnel may be exposed to Tuberculosis
* To provide information regarding Tuberculosis
* To determine high risk patients
* To determine how an exposure can occur
* How to eliminate or minimize the chance of exposure, and
* To provide usable guidelines in the event of an exposure

**Application**

The \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department recognizes the potential exposure of personnel to the Tuberculosis (TB) infection. Each member, regardless of his or her level of emergency medical training, assignment, or degree of activity within this department, may find himself or herself exposed to patients infected with TB or who have active cases of TB. An exposure to TB while executing duties as a member of this department shall be considered an occupational hazard and if the TB infection is contracted as a result of a workplace exposure, it shall be considered occupationally related.

**Tuberculosis.**

Since the early 1980's, there has been substantial increase in the number of persons affected by TB, with over 26,000 new cases reported annually. Persons infected with the Human Immunodeficiency Virus (HIV) are at increased risk for TB, and the number of deaths attn1mted to TB has also increased dramatically with the spread of the HIV infection. TB is at epidemic proportions in New York City and other metropolitan areas, placing healthcare workers at risk. Under Section 5 (a) (1) of the Occupational Health and Safety Administration Act (General Duty Clause), this Tuberculosis Infection Exposure Control Plan has been voluntarily implemented by the \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department.

Tuberculosis is spread through airborne particles, by the bacterium called Mycobacterium Tuberculosis. The infectious droplets nuclei produced by infected persons become airborne through talking, coughing, sneezing, laughing, etc. Normal air currents keep these small particles airborne and can spread them throughout a room or building. When the contaminated air is breathed deep into the lungs, the person becomes exposed to TB. The chances of becoming infected with TB basically depend on the concentration of infectious particles in the air, the length of exposure, the use of personal protective equipment (PPE) and engineering controls and the exposed persons state of health.

TB infection begins in the lungs, but can spread throughout the body. Within 2 to l0 weeks after infection, the body's immune system limits any further spread. TB infection is different from active TB cases. Those persons infected with TB do not exhibit any symptoms and are not considered infectious if they do not have symptoms of active TB. Approximately l0% of TB infected persons will develop symptom.5 of active TB at some point unless preventative treatment is initiated. Active TB symptoms may not develop for several months, years, or decades after exposure.

It is imperative that the initial exposure of TB be known so appropriate treatment measures can be started to prevent TB infection from becoming active TB and to identify and prevent any outbreaks of TB. The risk of TB transmission is greatest from persons who are not aware, diagnosed and/or treated for TB. EMS personnel who constantly and extensively have contact to 1B cases, without precautions or protection, are at high risk for exposure to TB infection.

Multiple drug resistant Tuberculosis (MDR-TB) is resistant to antibiotics usually used to fight TB. If personnel are exposed to MDR-TB, his/hers infection may also be of the MDR-TB strain and as resistant as the source TB patient. Due to MDR-TB, patients remain infectious for longer periods; therefore, infecting a greater number of exposed people. As a result, the number of infected health care workers that succumb to MDR-TB is expected to increase.

**Signs and Symptoms of Tuberculosis**

The signs and symptoms of 1B that health care workers need to be aware of include, but are not limited to the following:

* Persistent cough for 2 weeks or more; abnormal weight loss
* Night sweats
* Anorexia or loss of appetite
* Fever
* Possible hemoptysis (coughing up blood)

**Risk Assessment**

Transmission of TB is recognized in health care settings, including Emergency Medical Services. The Centers for Disease Control (CDC) have concluded that workers (not necessarily limited to health care providers) at high risk for TB exposure include, but are not limited to, the following types of settings:

* Health care (including EMS)
* Correctional facilities; homeless shelters
* Extended care facilities (including nursing homes)
* Substance abuse treatment centers.

The chance of exposure increases due to performing their duties in enclosed areas and/or repeated contact with unhealthy and/or institutionalized people, including the elderly residing in nursing homes.

An ambulance is a hazardous location for exposure to TB. The patient compartment is a confined and enclosed space where personnel to patient contact is ultimately face-to-face. An active TB patient that is producing airborne particles will place all personnel, including anyone in the cab of the ambulance, at high risk of exposure.

**Exposure Tasks**

The following procedures and actions increase the risk significantly of exposure to TB. They include, but are not limited to:

* Airway maintenance; ventilation
* Aerosol medications administration
* Prolonged exposure to infected areas (e.g., ambulance)

**Methods of Compliance**

The following is a list of several methods of compliance to reduce or prevent exposure to TB and should be applied as necessary:

* A mandatory fit test of all personnel shall be performed to determine the appropriate size and to demonstrate the donning of a HEPA respirator. This should be an annual test 'to assure adequate protection.
* If a patient is exhibiting signs and symptoms as listed in Section D of this plan, is suspected o:t: or bas a past medical history of TB, precautions should be initiated to prevent or minimize exposure. Determination should be made as quickly as possible.
* If possible, isolation of the patient should be performed reducing the number or personnel or people coming in contact with the patient.
* Universal precautions as established in the Infectious Disease Exposure Control Plan are applicable to this section. Surgical masks will not filter out airborne particles and do not provide a tight facial seal and are not approved for emergency personnel use.
* A NIOSH certified high efficiency particulate HEPA respirator shall be utilized by all emergency personnel and will be provided by the \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department. The respirator used by the \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department shall be 3M No. 9970, UVEX No. 3010 or similar.
* If not detrimental to patient care, a patient may don an approved face or surgical mask to minimize contamination. If a mask cannot be tolerated by the patient, a towel or similar covering may be used. A surgical may suppress airborne particles and trap them in the mask. If the patient wears a mask, emergency personnel must also utilize protection.
* Actual face-to-face contact, contact with exhaled air and/or direct exposure to patient coughing should be prevented if not detrimental to patient care.
* If possible, ventilation (e.g., opening of windows or utilizing vent funs in ambulance compartments in ambulance) of the area should be performed to expedite the elimination of contaminated air. Air conditioning shall not be used on the maximum setting due to the chance of recirculating contaminated air.

**Testing**

The following is a list of testing guidelines, which will determine an initial baseline for personnel regarding TB exposure.

* When a member joins the \_\_\_\_\_\_\_\_\_\_\_\_\_ Fire Department, he/she will be offered a Purified Protein Derivative (PPD) Skin Test at no cost within ten (10) days.
* A test consists of injecting the PPD in the subcutaneous skin, usually in the forearm and with the directions of when to return to the testing facility to have the test interpreted. This direction must be followed for accurate testing.
* The initial PPD test will consist of two parts:
	+ The first test will be administered and read within the time indicated by the medical facility
	+ The second part will be administered within 1 to 3 weeks after the first test and read within the time determined by the medical facility, the results of the second test will be used as determination for a positive reaction
* After the initial test, all members shall be provided with a single bi-annual PPD test at no cost to the member.
* If a member has previously had a PPD test or has completed an adequate preventive procedures fur TB performed, he/she may decline the test provided by the \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department. The member shall provide official documentation of such testing or procedures and shall sign a waiver declining the test. Refer to Appendix G for a copy of the declination form.
* A member at any time may decline to have the PPD test performed and that member shall sign a mandatory waiver indicating declination of the test.
* If a member bas received a BCG vaccination, which is available in other countries and is not recognized by the United States, the member shall have a PPD test performed regardless unless the member declines with a signed waiver. The member shall only be exempted if a recent PPD test or preventive procedures for TB have been performed. Written documentation must be provided for such testing or procedures.

**Exposure Determination and Procedures**

The following list provides guidelines for determining if an exposure has occurred and the procedures to follow for an exposure:

* An exposure incident is defined as "direct contact to the area in which the patient is located without utilizing proper respiratory protection". The area includes, but is not limited to, the ambulance, the patient's residence, etc.
* If a member has been exposed to TB, all attempts should be made to minimize contact with other people as soon as possible.
* Any member who has been exposed to TB must report the exposure immediately or as soon as possible to the Chief Officer and Ambulance Lieutenant.
* An Infectious Exposure Form (refer to Appendix C) shall be completed.
* If a member has an exposure to TB without proper respiratory protection, the member shall have a PPD test performed as soon as possible.
* Members who have affected immune system.5 will be better protected if exposure is avoided to patients with possible or confirmed TB disease. Members with documented immune system deficiency may request to perform duties or activities, which do not involve TB exposure if such duties or activities exist.
* Consideration for transfer of duties will be undertaken regarding applicable state and federal Jaws including the American with Disabilities Act of 1990.

**Procedures for a Positive PPD Skin Test.**

The following are guidelines to follow if a PPD Skin Test administered and interpreted by the medical facility selected by \_\_\_\_\_\_\_\_\_\_\_\_ Fire Department is determined to be positive:

* Members who have a positive PPD test for IB shall be referred for further medical evaluation and treatment if needed. Further evaluation may include chest X-rays. If TB is diagnosed preventative treatment will be provided. Further activities will be on the advice of the medical facility providing the testing and treatment.
* It .is recommended for any member having a positive PPD test to have further evaluation for HIV infection and mv antibody testing performed.
* Members who exhibit signs and symptoms of TB shall be referred for medical evaluation and treatment as needed.
* All further evaluations and medical treatments shall be provided at no cost to the member.

**Cleaning and Disinfecting**

The following are guidelines to follow for cleaning and disinfecting the ambulance and equipment after an exposure or suspected exposure to TB has occurred:

* After transportation of a patient with confirmed or suspected TB disease, the ambulance doors and windows should be left open for several minutes to allow circulation of air. This will help minimize or eliminate the amount of infectious airborne particles. (Official documentation regarding the effectiveness of this procedure is unavailable.
* The ambulance should be cleaned and disinfected according to procedures outlined in the Infectious Disease Exposure Control Plan.

**Record keeping**

The following are guidelines to follow fur record keeping of testing, medical examinations, treatment and exposure to TB bas required:

* Records of exposures, skin testing, medical examinations and treatment are considered member medical records and therefore are confidential.
* Confidential records will be maintained separately from other member files or records and shall be kept for 30 years after the member leaves the department.
* Positive skins tests at the time the member join the department will not be recorded on the OSHA 200 log. At any other time a test is positive, confirmed TB infections or active TB occurs, the results will be recorded on the OSHA 200 log, unless they are occurred from exposure other than from duties performed as a member of the \_\_\_\_\_\_\_\_\_\_\_\_\_ Fire Department.
* If TB infection progresses to active TB disease while a member of the \_\_\_\_\_\_\_\_\_\_\_\_ Fire· Department or with.in 4 years after leaving this department, the results will be recorded on the OSHA 200 log.

**Appendix F**

**PPD Skin Test Declination Form**

I understand that due to my occupational exposure to potentially infectious airborne materials, I may be at risk at acquiring the Tuberculosis (TB) infection. I understand that the TB infection can lead to active TB disease, which can cause death.

I have attended the Tuberculosis Awareness training program provided by the West Redding Volunteer Fire Department. I have been given the opportunity to be tested with the Purified Protein Derivative (PPD) Skin Test to detect the TB infection, at no charge to myself. However, I decline the PPD Skin Test at this time. I understand that by declining this test, I continue to be at risk of acquiring IB. If in the future I continue to have occupational exposure to potentially infectious airborne materials and I decide to have the PPD Skin Test, I can receive the test within ten (l0) days of the request at no charge to me.

Member’s Name:

Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:

Chief Officer’s Name:

Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:

Designated Officer’s Name:

Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:

**Copy to**: Member

 Chief Officer

 Designated Officer

**Appendix G**

**Ryan White Care Act**

In 1994, the Centers for Disease Control (CDC) issued the final notice for the Ryan White Care Comprehensive AIDS Resource Emergency Act (CARE). This federal mandate applies to all fifty states and establishes procedures by which all emergency personnel (firefighters, emergency medical technicians and police officers) can determine if they have been exposed to infectious diseases while performing their duties.

The Ryan White Care Act identifies a list of potentially life threatening, infectious, and communicable disease to which EMS providers are exposed. This list includes infectious pulmonary tuberculosis, HIV/AIDS, Hepatitis B, hemorrhagic fevers, plague, diphtheria and meningococcal diseases and rabies.

The Ryan White Care Act requires that "every state public health officer must designate an official employee of all EMS providers in the state who will be notifying personnel of exposures". This person, known as the Designated Officer (DO), will be responsible for gathering all information regarding an exposure to an airborne or bloodborne infectious disease and reporting to the receiving medical facility to request determination of exposure.

There are two separate notification procedures, one for airborne exposure and one for bloodborne exposure. The reason for two separate procedures is because exposure to airborne disease, such as tuberculosis, may not be evident until well after the patient is transported to a medical facility. However, the provider will know immediately if an exposure to potential bloodborne diseases bas occurred.

The Designated Officer of the \_\_\_\_\_\_\_\_\_\_\_\_\_ Fire Department is as follows:

Name:

Telephone No.:

***This is a sample guideline furnished to you by VFIS. Your organization should review this guideline and make the necessary modifications to meet your organization’s needs. The intent of this guideline is to assist you in reducing exposure to the risk of injury, harm or damage to personnel, property and the general public. For additional information on this topic, contact your VFIS Risk Control representative.***

**References:**

West Redding (CT) VFD – GOG 3-S-302 Developed/Revised/Reviewed by VFIS ETC

National Fire Protection Standard No. 1581 – Fire Department Infection Control Program