FREWSBURG FIRE DISTRICT OPERATIONAL POLICY	Section 4	SAFETY AND HEALTH	
	SUBJECT	TUBERCULOSIS INFECTION EXPOSURE CONTROL PLAN	
	Policy 4-07	PAGE 1 OF 7	DATE: 01-01-2023

I. SCOPE

This policy applies to all Frewsburg Fire District members operating at emergency incidents with the potential for tuberculosis exposure.

II. PURPOSE

The intention of this Tuberculosis Infection Control Exposure Plan is as follows:

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

III. APPLICATION

The Frewsburg Fire District 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.

IV. TUBERCULOSIS FACTS

1. 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 Frewsburg Fire District.
2. 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.
3. Normal air currents keep these small particles airborne and can spread them throughout a room or building.
4. When the contaminated air is breathed deep into the lungs, the person becomes exposed to TB.

5. 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.
6. 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.
7. 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.
8. 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.
9. 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.
10. 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.
11. Multiple drug resistant Tuberculosis (MDR-TB) is resistant to antibiotics usually used to fight TB. If personnel are exposed to MDR-TB, his/her 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.

V. SIGNS AND SYMPTOMS OF TUBERCULOSIS

1. The signs and symptoms of 1B that health care workers need to be aware of include, but are not limited to the following:
    A. Persistent cough for 2 weeks or more; abnormal weight loss
    B. Night sweats
    C. Anorexia or loss of appetite
    D. Fever
    E. Possible hemoptysis (coughing up blood)

VI. RISK ASSESSMENT

1. 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:

A. Health care (including EMS)
B. Correctional facilities; homeless shelters
C. Extended care facilities (including nursing homes)
D. Substance abuse treatment centers.

2. 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.
3. 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.

VII. EXPOSURE TASKS

1. The following procedures and actions increase the risk significantly of exposure to TB. They include, but are not limited to:
   A. Airway maintenance; ventilation
   B. Aerosol medications administration
   C. Prolonged exposure to infected areas (e.g., ambulance)

VIII. METHODS OF COMPLIANCE

1. The following is a list of several methods of compliance to reduce or prevent exposure to TB and should be applied as necessary:
   A. 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.
   B. If a patient is exhibiting signs and symptoms as listed in Section V 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.
   C. If possible, isolation of the patient should be performed reducing the number or personnel or people coming in contact with the patient.
   D. 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.

E. A NIOSH certified high efficiency particulate HEPA respirator shall be utilized by all emergency personnel and will be provided by the Frewsburg Fire District.
    1. The respirator used by the Frewsburg Fire Department shall be 3M No. 9970, UVEX No. 3010 or similar.

F. 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 mask may suppress airborne particles and trap them in the mask. If the patient wears a mask, emergency personnel must also utilize protection.

G. 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.

H. 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.

IX. TESTING

1. The following is a list of testing guidelines, which will determine an initial baseline for personnel regarding TB exposure.
    A. When a member joins the Frewsburg Fire District, he/she will be offered a Purified Protein Derivative (PPD) Skin Test at no cost within ten (10) days.
    B. 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.
    C. The initial PPD test will consist of two parts:
        1. The first test will be administered and read within the time indicated by the medical facility.
        2. 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.
    D. After the initial test, all members shall be provided with a single bi-annual PPD test at no cost to the member.

E. 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 Frewsburg Fire District.
    1. The member shall provide official documentation of such testing or procedures and shall sign a waiver declining the test. Refer to Appendix A of this policy for a copy of the declination form.

F. 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.

G. If a member has 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.
    1. 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.

X. EXPOSURE DETERMINATION AND PROCEDURE

1. The following list provides guidelines for determining if an exposure has occurred and the procedures to follow for an exposure:
    A. 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.
    B. If a member has been exposed to TB, all attempts should be made to minimize contact with other people as soon as possible.
    C. Any member who has been exposed to TB must report the exposure immediately or as soon as possible to a Chief Officer.
    D. If a member has an exposure to TB without proper respiratory protection, the member shall have a PPD test performed as soon as possible.
    E. Members who have affected immune system will be better protected if exposure is avoided to patients with possible or confirmed TB disease.
    F. 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.
    G. Consideration for transfer of duties will be undertaken regarding applicable state and federal Jaws including the American with Disabilities Act of 1990.

XI. PROCEDURES FOR A POSITIVE PPD SKIN TEST

1. The following are guidelines to follow if a PPD Skin Test administered and interpreted by the medical facility selected by the Frewsburg Fire District is determined to be positive:
    A. Members who have a positive PPD test for TB 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.

    B. It .is recommended for any member having a positive PPD test to have further evaluation for HIV infection and mv antibody testing performed.
    C. Members who exhibit signs and symptoms of TB shall be referred for medical evaluation and treatment as needed.
    D. All further evaluations and medical treatments shall be provided at no cost to the member.

XII. CLEANING AND DISENFECTING

1. The following are guidelines to follow for cleaning and disinfecting the ambulance and equipment after an exposure or suspected exposure to TB has occurred:
    A. 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.
    B. The ambulance should be cleaned and disinfected according to procedures outlined in the Infectious Disease Exposure Control Plan.

XIII. RECORD KEEPING

1. The following are guidelines to follow for record keeping of testing, medical examinations, treatment, and exposure to TB as required:
    A. Records of exposures, skin testing, medical examinations and treatment are considered member medical records and therefore are confidential.
    B. 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.
    C. 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 Frewsburg Fire District.

D. If TB infection progresses to active TB disease while a member of the Frewsburg Fire District or within 4 years after leaving this department, the results will be recorded on the OSHA 200 log.