DEPARTMENT OF FIRE AND RESCUE SERVICES

GENERAL ORDER

320.04

Originating From	Issue Date	Revision Date	Attachments
Operations	**01/07/1998**	**N/A**	**A-H**

SUBJECT: Infection Control

APPLICABILITY: All Personnel

POLICY:

The DFRS shall provide protective equipment, education, training and prevention procedures in accordance with **OSHA 29CFR 1910.134** (Proposed) and **29CPR 1910.1030** in order to reduce the risk of exposure from infectious diseases and agents.

1 GENERAL PRECAUTIONS

1.1 On any incident in which DFRS personnel may be exposed to Bloodborne or airborne pathogens proper protective measures set forth in this procedure will be followed. Failure to do so may place the pre-hospital provider at risk.

1.2 Full facial protection shall be utilized when supporting a patient's ventilation. Airway adjuncts and mechanical devices shall be the preferred choice for supporting ventilation. Failure to utilize these may place the pre-hospital provider at risk.

1.3 Each ambulance, medic, paramedic, suppression or first responder unit shall carry onboard hand cleansing products, as approved by the Bureau of Operations, for field utilization. The current approved cleansing products are available from the Quartermaster.

1.4 A personal infection control kit will be issued to DFRS personnel and shall be kept as part of their personal protection equipment. When items are used from this kit it will be the individual's responsibility to replace the items in the kit. The items will be available through the DFRS Quartermaster. The kit will include the following:

1.4.1 Infection control hip pack
1.4.2 Non-sterile exam gloves (1 pair)
1.4.3 Surgical mask with eye shield (1 set)
1.4.4 CPR barrier device
1.4.5 HEPA respirator
1.4.6 Impervious gown

2 BLOODBORNE PATHOGEN CONTROL PLAN

2.1 Possible exposures to infectious Bloodborne pathogens

2.1.1 When it is suspected or known that a patient may have an infectious Bloodborne disease or agent, Fire and Rescue Service personnel must utilize their infection control kit (refer to section 1.4).

2.1.2 Failure to follow the recommended infection control procedures may place the rescuer at risk.

2.2 Cleansing of Ambulance and Equipment for Bloodborne Pathogens.

2.2.1 Daily, clean patient contact area with Cidex or a 100:1 water/sodium hypochlorite mixture (100 parts water to 1 part sodium hypochlorite). Spraying surfaces and air drying is sufficient, wiping is preferred. Change cleaning solutions weekly.

2.2.2 Patient contact areas that have been contaminated with blood or body fluids shall be cleaned with Cidex or a 10:1 water/sodium hypochlorite mixture (10 parts water to 1 part sodium hypochlorite).

2.3 Dispose of infections waste materials in accordance with the DFRS policy, "Infectious Waste Disposal."

2.4 Disposal of Contaminated Needles

2.4.1 Dispose of needles properly; the employee shall use the one-handed technique to avoid a needle stick injury.

2.4.2 Avoid cutting or recapping of needles.

2.4.3 Contaminated needles should be immediately placed in a puncture proof disposal container.

3 REPORTING EXPOSURES TO BLOODBORNE DISEASES OR AGENTS

3.1 The Occupational Safety and Health Administration define an "occupational exposure" as "reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

3.2 Based on the Class of exposure (Class I-III: see attachment A) personnel shall notify the Medical Duty Officer and their Station Officer of any exposure. The Howard County Workman's Compensation-Report of Job Related Injury or Illness shall be completed in accordance with DFRS policy, "Accident/Injury Reporting." The

Medical Duty Officer shall initiate either the Airborne (see Attachment C) or the Blood- borne (see/Attachment D) follow-up procedure form and forward it to the Infection Control Officer.

3.2.1 Class I Exposures

3.2.1.1 Notify the Medical Duty Officer immediately. He/she shall handle the administrative details to include follow up with the hospital and/or patient.

3.2.1.2 The Medical Duty Officer shall notify the Infection Control Officer immediately.

3.2.1.3 The Medical Duty Officer will notify the employee's immediate supervisor and advise them on the action to be taken.

3.2.1.4 The employee shall complete Howard County Workman's Compensation form.

3.2.1.5 Follow directions from the Medical Duty Officer or DFRS Infection Control Officer on follow-up procedures and treatment.

3.2.2 Class II and Class III Exposure

3.2.2.1 Notify the Medical Duty Officer immediately. He/she shall handle the administrative details to include follow up with the hospital and/or patient.

3.2.2.2 The Medical Duty Officer will notify the employee's immediate supervisor and advise them on the action to be taken.

3.2.2.3 The employee shall complete Howard County Workman's Compensation forms.

3.2.2.4 Follow directions from the DFRS Infection Control or Medical Duty Officer on follow-up procedures and treatment.

4 REQUEST FOR INFECTIOUS DISEASE TESTING AND TREATMENT

4.1 Upon notification of a Class I exposure, the Medical Duty Officer shall initiate the Request for Infectious Disease Testing/Treatment (see Attachment F). This form shall be immediately hand delivered to the receiving hospital's Emergency Department Attending Physician.

4.2 The Infection Control Officer shall be notified immediately.

5 RECOGNITION AND PREVENTION FOR BLOODBORNE PATHOGENS AND AGENTS

5.1 Hepatitis "B" inoculation shall be mandatory for all operational personnel identified by the respective District Chiefs and Battalion Chiefs. Personnel not participating in the Hepatitis "B" inoculation program must sign a DFRS Waiver/Declination form. Those under the age of 18 must have parental or legal guardian's signature of consent on the Waiver/Declination form.

5.1.1 Funding shall be provided by the Howard County Health Department.
5.1.2 Station Officers, supervisors or Station EMS Officers shall schedule inoculations through the DFRS Infection Control Officer.

5.2 Hepatitis "B" Titer shall be available to all personnel who have had an "occupational exposure" in accordance with section 3.1 of this policy.

5.3 Hepatitis "B" booster vaccinations shall be administered to all personnel in accordance with guidelines set forth by the DFRS Infection Control Officer through recommendations from the Center for Disease Control (CDC), Occupational Safety and Health Administration (OSHA) and Maryland Occupational Safety and Health (MOSH).

6 RECORD KEEPING

6.1 Infection Control Officer shall be responsible for maintaining records of all DFRS personnel Hepatitis B inoculations and exposures.
6.2 All records shall be maintained for the duration of employment plus 30 years.

7 **ALL INFORMATION CONCERNING THE EXPOSURE TO INFECTIOUS DISEASES AND AGENTS OF FIRE SERVICE PERSONNEL OR THE PATIENTS THEY TREAT SHALL BE CONSIDERED PRIVILEGED INFORMATION AND HANDLED CONFIDENTIALLY.**

8 TUBERCULOSIS CONTROL PLAN

8.1 The transmission of tuberculosis is a recognized risk in the pre-hospital environment. The Occupational Safety and Health Administration (OSHA) require a written "Tuberculosis Control Plan." This Policy and Procedure is designed to identify situations for exposure and eliminate or minimize occupational exposure to respiratory pathogens.

8.2 Risk Assessment, Referral and Management of suspected Tuberculosis Patients.

8.2.1 All patients that present with signs and symptoms of Tuberculosis shall be treated as such. A high index of suspicion should be used for all patients that present with respiratory distress **and** a productive cough lasting greater than three weeks.

8.2.2 The DFRS Risk Assessment Form (Attachment B) can be used as an educational tool to assist the provider in determining when to use the required precautions.

8.3 Referral and Management of suspected Tuberculosis Patients

8.3.1 Suspected TB patients shall wear a surgical mask or an oxygen face mask if oxygen administration is indicated.

8.3.2 All personnel in proximity to the patient must wear the DFRS approved HEPA respirator in accordance with the respiratory protection program of this policy and procedure. This includes the driver of the transport vehicle.

8.3.3 During transport of a suspected TB patient, the vehicle windows are to remain open and circulating fans are to be utilized to maximize the circulation of air.

8.3.4 The receiving hospital is to be notified prior to arrival that a suspected TB patient is being transported to their facility.

8.3.5 Following the transport of a suspected TB patient, the vehicle is to remain out of service until its return to quarters or at least one half hour, whichever is longer. During this time, fresh air is to be constantly circulated throughout the vehicle.

8.4 Respiratory Protection Program

8.4.1 All DFRS operational personnel shall wear High Efficiency Particulate Air (HEPA) respirators when:

8.4.1.1 Personnel enter rooms housing patients with confirmed infectious TB.

8.4.1.2 Utilizing the DFRS TB risk assessment procedures and determine that the patient is a TB suspect.

8.4.1.3 Personnel that are treating or transporting a patient with suspected or confirmed TB.

8.5 Personnel must wear respiratory protection during the duration of their exposure to a suspected or confirmed TB patient. Personnel may not refuse to wear respiratory protection when in proximity to a TB suspect in accordance with section 8.4 of these policies and procedures.

8.6 The use of HEPA filter respirators is imperative to protect personnel from acquiring TB infection. TB infectious droplets tend to remain suspended in the air for many minutes after they are expelled during coughing.

8.7 Disposable HEPA respirators will be used by all DFRS personnel. The specific mask provided to the employee will be approved by the Infection Control Officer. This mask must be an approved HEPA respirator by the National Institute of Occupational Safety and Health (NIOSH) that meets the Center for Disease Control (CDC) guidelines against tuberculosis. This respirator is a one time use only. Respirators may not be shared.

8.8 Self-Contained Breathing Apparatus (SCBA) with positive pressure may be substituted in the event that facial hair or deformities prevent the use of a properly fitted respirator.

9 EVALUATION FOR HEPA USE AND TRAINING

9.1 The Infection Control Officer or designee shall evaluate each person for any medical conditions which might interfere with the use of a HEPA respirator.

10 TRAINING AND FIT TESTING

10.1 All Operational Members will receive training regarding TB infection control within one month of employment or acceptance into a DFRS volunteer program or Corporate Volunteer Department and annually there after. The training curriculum shall be established by the DFRS training division in conjunction with EMS Operations following required federal and state guidelines. Personnel shall also receive training on the reasons for wearing HEPA filter respirators, the potential risk of non-compliance, and the disciplinary measures associated with failing to comply with this policy.

10.2 Initial and annual fit testing shall be carried out by the Infection Control Officer or designee in accordance with the manufacturer's recommendations. This will be done for all personnel who are required to wear a HEPA filter respirator. (See Attachment H - Fit Test Record)

10.3 A fit check (breathing in to check the face seal of the respirator) shall be performed by the wearer prior to each use.

11 ISSUANCE AND USE OF HEPA RESPIRATORS

11.1 Each employee required to wear a respirator once fit tested, shall use the appropriate size. The employee shall check the respirator for functional and structural damage before each use.

11.2 A replacement HEPA mask shall be secured under the following conditions.

11.2.1 When the mask shows signs of damage or deterioration, including loss of shape.
11.2.2 When the mask is damaged round the seal.
11.2.3 When the mask is torn or damaged.
11.2.4 When there is increased difficulty in breathing while wearing the respirator.

11.2.5 When the mask becomes soaked with blood or body fluids.

11.3 Discarded masks shall be placed in an infectious waste container for proper disposal.

12 PERIODIC EVALUATION OF THE RESPIRATORY PROTECTION PROGRAM

12.1 The Infection Control Officer shall evaluate the respiratory Protection Control Program annually. Written operating procedures and program administration shall be modified as necessary. Elements of the program that should be evaluated include work practices and acceptance of masks, including comfort and interference with duties.

13 MEDICAL SURVEILLANCE (NO COST TO PERSONNEL)

13.1 Replacement Evaluation

13.1.1 All operational DFRS personnel shall receive a Mantoux tuberculin (2 step) skin test unless written documentation can be obtained of:

13.1.1.1 A previously positive reaction.

13.1.1.2 Documentation of a negative Mantoux tuberculin skin test within the last three (3) months.

13.1.1.3 Completion of adequate preventive therapy.

13.1.1.4 Completion of adequate therapy for active disease.

13.2 At the time of the administration of the purified protein derivative (PPD), personnel shall complete and sign a personnel skin test form. (See Attachment E) All paperwork is to remain confidential and be forwarded to the Infection Control Officer.

13.2.1 DFRS paramedics that have completed the training on the TB Administration Program will be administering the test and interpreting the results. At this time personnel shall be informed about the results of the tuberculin skin test, whether positive or negative.

13.2.2 A positive reaction for health care workers is 10 or more millimeters of induration.

13.2.2.1 Personnel shall be referred to the DFRS Health Center.

13.2.2.2 A recent exposure may not react to tuberculin skin test. The test should be repeated in 1-3 months.

13.2.2.3 HIV infection and those who have received BCG vaccine may not get accurate test results, other tests are available.

13.3 Only induration (raised or hardness) is measured, erythema (redness) is not included in the measurement. Tests will be read 48-72 hours (the following shift) by DFRS paramedics who have completed the TB Administration Program. If there is no palpable reaction after 72 hours, repeat the test on the opposite arm in 1-3 weeks and read within 48-72 hours. Results are reported in millimeters of induration.

13.3.1 Self-reading of skin tests are not accepted.

13.4 Personnel who do not receive the Mantoux TB skin test due to any or all of the criteria outlined in 13.1.1, are to be referred to the approved DFRS Health Center for further diagnostic evaluation. Chest x-rays will be done once and not repeated unless the patient becomes symptomatic or as part of the current annual physical.

13.5 Administration of TB Mantoux Skin Test

13.5.1 Tuberculin skin testing is the standard method of identifying persons infected with Mycobacterium Tuberculosis.

13.5.2 Selected DFRS paramedics will administer, interpret and document TB skin tests for all operational personnel.

13.5.3 Selected paramedics shall receive a minimum of three (3) hours of training from DFRS on the TB Administration Program. The training shall be in the following areas:

13.5.3.1 (1.5) hours in administration, interpretation and record keeping of TB skin testing.

13.5.3.2 (1.5) hours in TB program course presentation.

13.5.3.3 Selected paramedics and paramedics who are Level II instructors will participate in the Tuberculosis Training Program Train the Trainer. Paramedics who are Level II instructors may instruct the TB Program. All paramedics who complete the Train-the-Trainer can perform the HEPA fit testing and TB skin test.

13.6 The following procedures should be utilized for testing and test interpretation. The test is not a vaccine and will not cause a TB related illness.

13.6.1 Injection site - anterior forearm

13.6.2 Intradermal injection

13.6.3 0.1cc of Mantoux Purified Protein Derivative administered

13.7 Periodic Evaluation

13.7.1 Annual retesting of skin test-negative personnel shall be conducted as part of

the annual physical to identify persons whose skin tests convert to positive.

13.7.2 Personnel with a documented history of a positive PPD, a negative chest x-ray, adequate treatment for disease, or adequate preventive therapy for infection, should be exempt from further screening unless they develop signs or symptoms suggestive of tuberculosis.

13.8 Record keeping

13.8.1 The Infection Control Officer is responsible for maintaining records of employee tuberculosis screening. This database shall include:

13.8.1.1 Name, date, all skin test results in millimeter (mm) of duration (0 if no induration).

13.8.1.2 A record of skin test conversions as well as chest x-ray results.

13.8.1.3 All records pertaining to a single individual will be filed in the individuals infection control file. This will be maintained for the duration of their employment plus thirty years.

13.9 **ALL INFORMATION CONCERNING THE EXPOSURE TO INFECTIOUS DISEASES AND AGENTS OF FIRE SERVICE PERSONNEL OR THE PATIENTS THEY TREAT SHALL BE CONSIDERED PRIVILEGED INFORMATION AND HANDLED CONFIDENTIALLY.**

13.9.1 An OSHA approved record keeping system and Summary of Occupational Injuries and Illness entry must be made for each individual skin test conversion or individual case of tuberculosis. This shall be completed annually and sent to Maryland Occupational Safety and Health (MOSH) via the Epidemiology and Disease Control Program, Department of Mental Health and Hygiene, by January 15th each year.

14 EVALUATION AND MANAGEMENT OF PERSONNEL WITH TUBERCULOSIS (NO COST TO PERSONNEL).

14.1 Personnel with a positive skin test or skin test conversion.

14.1.1 Personnel with positive initial skin tests or skin test conversions on repeat testing or after exposure should be promptly evaluated for clinically active tuberculosis. The initial evaluation should include a thorough history, physical examination, and chest x-ray. (In the absence of TB symptoms, documentation of prior clear chest x-ray is acceptable). Other diagnostic procedures (e.g., sputum examination) may be indicated based on the initial evaluation. If chest x-ray is negative, repeat chest x-rays are not needed unless symptoms develop that suggest tuberculosis. (Attachment G)

14.1.2 Personnel who have positive initial tuberculin skin tests or skin test conversions but do not have clinical tuberculosis should be evaluated for preventive therapy according to published guidelines.

14.1.3 Personnel with a confirmed diagnosis of TB should be counseled about the increased risks posed by HIV infection. Personnel will be referred for annual counseling and HIV-antibody testing should be implemented.

14.1.4 If an employee's skin test converts to positive (see 13.5.1), a history of possible exposures should be obtained in an attempt to determine the potential source of tuberculosis exposure.

14.1.5 Other personnel who may have had similar exposure shall receive skin tests to determine if there is additional evidence of transmission.

14.2 Personnel who exhibit symptoms of Tuberculosis

14.2.1 Any individual with a productive cough which has lasted three weeks or more shall be assessed for other symptoms of tuberculosis, utilizing the TB symptoms shall be referred to the DFRS Health Center to be evaluated promptly for tuberculosis. The individual shall not return to work until tuberculosis is excluded or the individual is on therapy and or documented to be non-infectious.

14.2.2 If tuberculosis is diagnosed, appropriate therapy shall be instituted by the Health Department. Employees diagnosed with active tuberculosis shall be offered counseling and HIV-antibody testing.

14.2.3 If tuberculosis is diagnosed, a contact investigation shall be performed. This will include employees and patients who had significant exposure to the employee.

14.2.4 Work restrictions for employees with Tuberculosis

14.2.4.1 Employees who are determined to be TB suspects or confirmed TB patients will have appropriate work restrictions imposed by the DFRS and/or the individual's personal physician.

14.2.5 Personnel who experience a Tuberculosis exposure incident

14.2.5.1 Unless a negative skin test has been documented within the preceding three months, each exposed individual (except those already known to be positive reactors) should receive a PPD test as soon as possible after exposure. If the initial test is negative, a second test should be administered 12 weeks after the exposure.

14.2.5.2 Exposed personnel with a positive skin test who had a previous negative skin test or an increase in induration of greater than or equal to(≥) 10mm

or with symptoms suggestive of tuberculosis, should be referred to the DFRS Health Center to be evaluated clinically and receive a chest x-ray.

14.2.5.3 Personnel with previously known positive skin tests who have been exposed to an infectious patient do not require a repeat skin test or a chest x-ray, unless they have symptoms suggestive of tuberculosis.

14.2.6 Personnel Referrals

14.2.7 Any individual referrals to the DFRS Health Center for treatment, therapy, or diagnostic assessment are to be documented and distributed to: (1) Occupational Safety and Health Officer, (2) DFRS Health Center, and (3) Howard County Health Department.

Approved:

Joseph A. Herr
Fire Chief

Kevin G. Seaman, M.D.
Medical Director

Attachment A

HAVE YOU BEEN EXPOSED????

Exposure Type	Immediate Management	Follow-up/ Risks	
Class I Direct Contact with Blood, Semen, Vaginal Secretions, Wound Airborne Exposure w/o Precautions	Through the skin (Percutaneous)	Allow to bleed freely Clean thoroughly. Apply disinfectant	Possible risk of HIV Infection (<1%). Medical follow-up, HIV counseling recommended. Possible risk of Hepatitis B infection. Hepatitis B vaccine/ Prophylaxis.
	Contact with Eyes, Nose or Mouth (Mucocutaneous)	Thoroughly flush eyes, nose or mouth with water as soon as possible	
	Contact with an Open Wound	Clean thoroughly Apply disinfectant	Possible Tetanus Toxoid/ booster
Class II Direct contacts with other body fluids (urine, tears, saliva, sputum, vomitus feces).	Through the Skin (Percutaneous)	Allow to bleed freely Clean thoroughly. Apply disinfectant	Extremely low risk of HIV infection. Follow-up HIV Testing is optional. Follow-up HIV counseling to answer questions & address or concerns. Possible risk of Hepatitis B infection. Hepatitis B vaccine/ Prophylaxis. Possible Tetanus Toxoid/booster.
	Contact with Eyes, Nose or Mouth (Mucocutaneous)	Thoroughly flush eyes, nose or mouth with water as soon as possible	
	Contact with an Open Wound	Clean thoroughly Apply disinfectant	
Class III Contact with any body fluids. Airborne Exposure w/ Precautions	Clothing over healthy unbroken skin comes in contact with blood or any	Wash area with soap & water or hand degermer. Change soiled clothing.	No evidence of risk of HIV or Hepatitis B infection. Counseling to answer questions. Follow-up HIV testing not necessary. (Personnel may be tested if they desire).

PERCUTANEOUS: exposures occur through the skin (needle stick or other contaminated sharp object).
MUCOCUTANEOUS: exposures occur through splashes of contaminants onto mucous membranes (eyes, nose, mouth...)
OPEN WOUND: exposures occur when you have open wounds, burns or other openings in the skin that come in contact with potentially infectious blood or body fluids.

REPORT ALL POSSIBLE EXPOSURE TO YOUR SUPERVISOR!!

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Tuberculosis Risk Assessment Form
(Educational Purposes)
Attachment B

Directions: Use this form as a guideline only. Ask all questions. The Tuberculosis risk assessment is most effective when the patient answers are reliable. Precautions can be taken even if the criteria is not satisfied. Follow your instinct!

A **Critical diagnosis criteria of active TB**

Y	N	
__	__	Productive cough/Respiratory complaint
__	__	Physician diagnosed TB positive chest x-ray
__	__	Physician diagnosed TB positive sputum smear
__	__	Physician diagnosed TB positive sputum culture

B **High Risk Factors**

Y	N	
__	__	Night sweats
__	__	Patient is HIV positive (immunosupressed)
__	__	Diagnosis of latent TB within 2 years
__	__	First positive PPD skin test within 2 years
__	__	Known latent TB infection

C **Risk Factors**

Y	N	
__	__	Crowded living conditions (jail, hospitals, nursing etc.)
__	__	Severely malnourished
__	__	Under 12 or over 65 years old
__	__	Patient has very poor general health or severe chronic illness
__	__	Patient undergoing current chemotherapy
__	__	Recent weight loss
__	__	Cough has lasted more than three weeks
__	__	Fever, malaise, and/or fatigue

D **Treatment regimen**

Y	N	
__	__	Streptomycin
__	__	Pyrazinamide
__	__	Isoniazid (INH)
__	__	Rifampin
__	__	Ethambutol

Take Precautions if "YES" Answers are:
2 from A
1 from A + 1 from B
1 from A + 3 from C
1 from A + 2 from D

TB Transport Precautions

___ Surgical, oxygen, or valveless HEPA mask on patient

___ HEPA mask on all providers having patient contact

___ Provider latex gloves, gown & goggles

___ Ambulance cab, side, and rear windows open (if possible)

___ Ambulance ventilation fan on

___ Ambulance climate control fan on (A/C on "norm", not "max")

___ Limit nebulization treatment

Unit Decontamination

___ Provider PPE worn during decontamination process, if inside unit

___ Air unit out for 30 minutes (fan on, doors open, out of service)

___ Notification of the Medical Duty Officer

___ Double bag infected linens in red biohazard bags

___ Clean surfaces of gross contaminated material

___ Disinfect all surfaces with **FRESH** 1:10 bleach and water mixture
(If a hospital disinfectant is used, it must state that it is "tuberculocidal")

Documentation

___ Care providers having patient contact

___ Time interval of patient contact for each care provider

___ Environment of patient contact for each care provider (outdoors, ambulance module, in a room, etc.)

___ Precautions taken by each care provider

Airborne Exposure Follow- Up Procedure Form
Attachment C

Name_____ Date _____

Last Name First Name M.I.

Social Security No. _____ - _____ - _____ Job Title / Position _____ EID No. _____

Follow up procedure

___ Provider PPD test if none in last 3 months

___ Provider counseled regarding symptoms, need for careful self-monitoring, and follow up procedure

___ Follow up procedure initiated per **SOP 220.06**

Patient status Date ____/____/____ Incident # _____-_____ MIR #_____

___ Patient determined to have been contagious per physician

___ Type of disease or virus: _____

___ Prophylactic antibiotic regimen recommended

___ Positive PPD test ___ Positive chest x-ray

___ Positive sputum smear ___ Positive sputum culture

___ Positive other _____

Provider care

___ Provider directed to professional counseling

___ Provider became symptomatic within _____ weeks

Immune Status of Provider

Last TB Test Type_____ Date _____ Result _____

Immediate Test Type _____ Date _____ Result _____

___ Prophylactic antibiotics initiated Date _____ Physician _____

___ Results of 12 week post-exposure PPD test Type _____ Date _____ Result _____

To be Completed by the Medical Duty Officer and Forwarded to the Infection Control Officer

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To be completed by the Infection Control Officer

☐ Exposure with precautions ☐ No exposures

☐ Exposure with no precautions ☐ Other

Comments: _____

Date reviewed:_____ By whom:_____ EID#_____

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Bloodborne Follow- Up Procedure Form
Attachment D

Name_____ Date _____
Last Name First Name M..I.

Social Security No. _____ - _____ - _____ Job Title / Position _____ EID No. _____

Follow up procedure

___ Provider Hepatitis Titer if none in last 3 months Results _____ miu/ml

___ Provider Tetanus if none in the last 5 years

___ Provider HIV testing

___ Provider counseled regarding symptoms, need for careful self-monitoring, and follow up procedure

___ Follow up procedure initiated per **SOP 220.06**

Patient blood test results Date ___/___/___ Incident # _____-_____ MIR #_____

___ Type of disease or virus: _____

___ Positive Hepatitis

___ Positive HIV

___ Positive Tetanus

___ Positive Meningitis

___ Patient determined to have been contagious per physician

___ Prophylactic antibiotic regimen recommended

Provider care

___ Provider directed to professional counseling

___ Provider became symptomatic within _____ weeks

Immune Status of Provider

Last Hepatitis Titer Date _____ Result _____ miu/ml

Last Tetanus Booster Date _____

___ Prophylactic antibiotics initiated Date _____ Physician _____

___ Results of post-exposure testing Type _____ Date _____ Result _____

Type _____ Date _____ Result _____

To be Completed by the Medical Duty Officer and Forwarded to the Infection Control Officer

To be completed by the Infection Control Officer

☐ Exposure with precautions ☐ No exposures
☐ Exposure with no precautions ☐ Other

Comments: _____

Date reviewed:_____ By whom:_____EID#_____

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Tuberculosis Screening Form
Attachment E

Name: _____ Date: _____
Last Name First Name M.I.

CONSENT TO BE TESTED: _____
SIGNATURE

Social Security No. _____-____-_____ Job Title/Position: _____ EID# _____

(check one): ☐ Career ☐ Part-time ☐ County Vol. ☐ Corporate Vol.

Current Station/Shift Assignment:_____ Date of Birth:_____/_____/_____

Reason for Screening: (check one):
☐ Annual ☐ Exposure Baseline ☐ Exposure Follow-up
☐ Pre-employment (Circle one) Step 1 or 2

Date/Time Administered: _____/_____/_____@_____am./pm.

Tuberculin Purified Protein Derivative (Mantoux) Manufacturer:_____

Expiration date:_____ Lot #_____

Site of Administration: ☐ L ☐ R FOREARM Amount Administered:_____

Date/time Site to be Read: Between _____/_____/_____ _____hrs

_____/_____/_____ _____hrs
(circle) Mon Tues Wed Thurs Fri Sat Sun

Paramedic Administering the test:_____ EID#_____

RESULTS (48 TO 72 HOURS AFTER ADMINISTRATION OF PPD)

Description of site: _____
_____

Induration: _____ mm Date: _____/_____/_____ Time:_____hrs

Paramedic Signature:_____ EID#_____

Forward all completed forms to the Infection Control Officer

CWC 4/97 MRF 10/97

Howard County

Internal Memorandum

***SUBJECT**: Request for Infectious Disease Testing/Treatment*
(Attachment F)

***To**:* _____

***From**:* *Medical Director, Howard County Department of Fire and Rescue Services*

***Date**:* _____

Reference: *(1) Update: Provisional Public Health Service recommendations for Chemoprophylaxis after Occupational Exposure to HIV-Infected Blood, MMWR 1996; 45 (22): 468-472.*

(2) Case-Control Study of HIV Seroconversion in Health Care Workers after Percutaneous Exposure to HIV-Infected Blood, MMWR 1995; 44(50): 929-933.

1. *The medical personnel listed below have sustained a significant exposure to a possible infectious disease during the performance of their duties.*

2. *As the Medical Director of this individual, I request patient testing in accordance with Annotated Code of Maryland, Health and Occupation Code (ACM,HOC) 18-213, and the Center for Disease Control per reference (1) for the following: Human Immunodeficiency Virus (HIV), Hepatitis A (HAV), Hepatitis B (HBV) including anti-Hepatitis B antibody titer, Hepatitis C (HCV).*

3. *Based upon ACM, HOC 18-213, the individual(s) name below should be informed of any disease transmittable to and from personnel including but not limited to:*

   (A) Acute diarrhea (Samonela, Shigella, and Campylobacter, etc.), (B) Herpes Simplex Virus (HSV), (C) Staphlococcus aureus and Streptococcus species, (D) Mycobacterium tuberculosis (TB) and (E) Varicella Zoster Virus (VZV).

4. *Based upon ACM, HOC 18-213, the individual(s) name below should be informed of any disease transmittable to and from personnel including but not limited to:*

   (A) Cytomegalovirus (CMV), (B) Meningococcal disease (Neisseria meningitidis), (C) Pertussis (Bortedella pertussis), (D) Scabies.

5. *All confidential information gathered through this process will be maintained under ACM, HOC 18-213, and pursuant to state statutes.*

6. *This initial evaluation shall be covered by the provider's mandatory health insurance. Follow-up care should be arranged with the provider's physician or consultant as indicated.*

Names of exposed personnel (Print)

_____

_____

_____

_____

_____

_____

Kevin G. Seaman, M.D.
Medical Director

Exposure Documentation

(Attachment F)

I hereby certify that the personnel listed on the previous page of this document have been interviewed and it has been determined that they have met the criteria for significant exposure as defined by the Centers for Disease Control (CDC) and the Howard County Department of Fire and Rescue Services Infection Control Policy and Procedure 220.06 as noted below:

1.) *Exposure to blood or body fluids through needle stick, instruments or sharps.*

2.) *Exposure of mucous membranes to visible blood or body fluids.*

3.) *Exposure of skin to visible blood or body fluids when skin is chafed, abraded, affected with dermatitis or contact is prolonged or extensive.*

Medical Duty Officer's signature _____

Date of Notification: _____ *Time of Notification:* _____ *AM /PM*

Patient Information

Patient Name: _____

Date of exposure: _____ *Incident Number:* _____-_____

Time of Exposure: _____ *AM / PM*

Receiving Hospital: _____ *Chart Number:* _____

Requesting Agency Information

Requesting Agency: Howard County Department of Fire & Rescue Services

Contact Person: Infection Control Officer -

Mailing Address: 6751 Columbia Gateway Drive, Suite 402

City: Columbia *State:* Maryland *Zip Code:* 21046

Phone Number: 410-313-6020

Positive Tuberculin Skin Test Reactors Questionnaire - Attachment G

Name: _____ Date: _____ EID No. _____
Last Name First Name M.I.

Social Security No. _____-____-_____ Date of Birth:_____/_____/_____

Job Title/Position: _____ Current Station/Shift Assignment:_____

(check one): ☐ Career ☐ Part-time ☐ County Volunteer ☐ Corporate Volunteer

Reason: (check one):

☐ Annual ☐ Pre-employment ☐ Exposure Baseline ☐ Exposure Follow-up

Part I

Have you had any of the following symptoms in the past year? (circle YES or NO)

Weight Loss	YES	NO
Persistant cough	YES	NO
Chest Pain	YES	NO
Sweating during sleep	YES	NO
Fever in the late afternoon or evening	YES	NO
Spitting up green or yellow sputum	YES	NO
Coughing up blood streaked sputum	YES	NO

Do you smoke? ☐ Yes ☐ No If yes, how much per day? _____Your Present weight _____lbs

Do you have any current health problems? ☐ Yes ☐ No If yes, please explain: _____

_____

_____

_____ _____
Signature Date

Part II --- to be completed by Infection Control Officer

___ Asymptomatic for Tuberculosis

___ Chest x-ray ordered

___ Referred to physician for evaluation

Comments:_____

_____

_____ _____
Infection Control Officer Date

Completed forms shall be placed in the employee's pesonnel file

CWC 4/97 MRF 10/97

Personal Respirator Fit Test Record
(HEPA Mask) - Attachment H

Name: _____ EID#_____
Last Name First Name M.I. Date:_____

Social Security No._____- ____ - _____ Job Title/Position:_____

Conditions which would affect respirator fit: _____

Personal Respirator Information: _____

Mask Type: ☐ Uvex/Protech 4010 - N95 Particulate ☐ Racal N95 Particulate

Mask Size: ☐ x-small ☐ small ☐ medium ☐ large

Comments:_____
_____

Negative Pressure Test: ____ successful ____ unsuccessful

Saccharin Fit Test: ____ successful ____ unsuccessful

This test is to be conducted with the employee in a well ventilated area. The employee should frequently move his/her head from side to side, up and down, and talk while this portion of the test is being conducted. The employee should be briefly exposed to the saccharin taste solution before the test is initiated so that he/she is familiar with the saccharin taste and could recognize a leak if present.

Comments: _____
_____
_____

Fit Testing and usage review conducted by:_____

I feel that I have been adequately trained in the use of the HEPA filter mask and acknowledge the fit test results above. Upon a **successful** fit test I also acknowledge that I can wear it safely and appropriately.

_____ _____
Signature Date

Forward completed form to the Infection Control Officer

CWC 6/97 MRF 10/97