

INFECTION CONTROL POLICY

FOR THE

WASHINGTON TOWNSHIP FIRE DEPARTMENT

PART ONE

Bloodborne Pathogen Policy

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- A. OSHA Consulting Officers
- B. Final Rule "Occupational Exposure To Bloodborne Pathogens"
- C. Immunization Recommendation for Health-Care Workers
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PART ONE

BLOODBORNE PATHOGEN

PROGRAM

SECTION I

PURPOSE OF THE PLAN

PURPOSE OF PLAN

One of the major goals of the Occupational Safety and Health Administration (OSHA) is to regulate facilities where work is carried out, to promote safe work practices in an effort to minimize the incidence of illness and injury experienced by employees. Relative to this goal, OSHA has enacted the Bloodborne Pathogens Standard, codified as 29 CFR 1910.1030. The purpose of the Bloodborne Pathogens Standard is to "*reduce occupational exposure to Hepatitis B Virus (HBV), Human Immunodeficiency Virus (HIV) and other blood borne pathogens*" that employees may encounter in their workplace.

Washington Township Fire Department believes that there are a number of "*good general principles*" that should be followed when working with bloodborne pathogens. Including the following:

- It is prudent to minimize all exposure to bloodborne pathogens.
- Risk of exposure to bloodborne pathogens should never be underestimated.
- Our group should institute as many work practice and engineering controls as possible to eliminate or minimize employee exposure to bloodborne pathogens.

Washington Township has implemented this Exposure Control Plan to meet the letter and intent of the OSHA Bloodborne Pathogens Standard. The objective of this plan is:

- To protect the employees from the health hazards associated with bloodborne pathogens.
- To provide appropriate treatment and counseling should an employee be exposed to bloodborne pathogens.

SECTION II

GENERAL PROGRAM MANAGEMENT

GENERAL PROGRAM MANAGEMENT

A. RESPONSIBLE PERSONS

There are four major "*Categories of Responsibility*" which are essential to the effective implementation of our **Exposure Control Plan**. These are:

- The "Exposure Control Officer".
- Department Officers and Supervisors.
- Education/Training Instructors.
- Our Employees.

The following sections define the roles played by each of these groups in carrying out our plan. (Throughout this written plan, employees with specific responsibilities are identified.) If, because of promotion or other reasons, a new employee is assigned any of these responsibilities, Deputy Chief of Operations is to be notified of the change, so records can be updated.

EXPOSURE CONTROL OFFICER

The "*Exposure Control Officer*" will be responsible for overall management and support of the departments Bloodborne Pathogens Compliance Program. Activities which are delegated to the Exposure Control Officer typically include, but are not limited to:

- Overall responsibility for implementing the **Exposure Control Plan** for the entire operation.
- Working with management and other employees to develop and administer any additional bloodborne pathogens related policies and practices needed to support the effective implementation of this plan.
- Looking for ways to improve the **Exposure Control Plan**, as well as to revise and update the plan when necessary.
- Collecting and maintaining a suitable reference library on the Bloodborne Pathogens Standard and bloodborne pathogens safety and health information.
- Knowing current legal requirements concerning bloodborne pathogens.
- Acting as our group's liaison during OSHA inspections.
- Conducting periodic audits to maintain an up-to-date **Exposure Control Plan**.

A career Captain assigned by the Deputy Chief of Operations will be Washington Township Fire Department's **Exposure Control Officer**.

It has been determined that the **Exposure Control Officer** will require assistance in fulfilling the responsibilities. To assist in carrying out these duties, we have created an **Exposure Control Committee** composed of the following people.

Exposure Control Committee

- All Department Medical Advisors (Doctors)
- EMS Officers
- Training Officers
- Fire Chief
- IAFF Union President
- Deputy Fire Chief Operations
- Exposure Control Officer

DEPARTMENT OFFICERS AND SUPERVISORS

Department Officers and Supervisors are responsible for exposure control in their respective areas. They work directly with the **Exposure Control Officer** and our employees to ensure that proper exposure control procedures are followed.

EDUCATION/TRAINING COORDINATOR

Our Education/Training Coordinator (Department Training Officer) will be responsible for providing information and training to all employees who have the potential for exposure to bloodborne pathogens.

The Fire Department Officer responsible for Training has been selected to be the Department's Education/Training Coordinator.

Activities falling under the direction of the Coordinator include:

- Maintaining an up-to-date list of group personnel requiring training (in conjunction with management).
- Developing suitable education/training programs.
- Scheduling periodic training seminars for employees.
- Maintaining appropriate training documentation such as "Sign-in Sheets", Quizzes, etc.
- Periodically reviewing the training programs with the Exposure Control Officer, Department Managers and Supervisors to include appropriate new information.

EMPLOYEES

As with all of our departments activities, our employees have the most important role in our bloodborne pathogens compliance program. The ultimate execution of much of our **Exposure Control Plan** rests in their hands. In this role they must do things such as:

- Know what tasks they perform that have occupational exposure.
- Attend the bloodborne pathogens training sessions.
- Plan and conduct all operations in accordance with work practice controls.
- Develop good personal hygiene habits.

B. AVAILABILITY OF THE EXPOSURE CONTROL PLAN TO EMPLOYEES

To help them with their efforts, the group's **Exposure Control Plan** is available to our employees at any time. Employees are advised of this availability during their education/training sessions. Copies of the Exposure Control Plan are kept in the following locations:

- Fire Station #41 -- 163 Maple Avenue
- Fire Station # 42 -- 45 West Whipp Road
- Fire Station # 43 -- 10499 Dayton Lebanon Pike
- Fire Station # 44 -- 1699 Thomas Paine Parkway
- Fire Station # 45 -- 8328 McEwen Road
- Headquarters Administration – 8320 McEwen Road
- Township Administrator Office -- 8200 McEwen Road
- Township Clerk's Office -- 8200 McEwen Road
- Exposure Control Officer's Office – 10499 Dayton Lebanon Pike

C. REVIEW AND UPDATE OF THE PLAN

We recognize that it is important to keep our **Exposure Control Plan** up-to-date. To ensure this, the plan will be reviewed and updated under the following circumstances:

- Annually, on or before July 30th of each year.
- Whenever new or modified tasks and procedures are implemented which affect occupational exposure of our employees.
- Whenever the employees' jobs are revised such that new instances of occupational exposure may occur.
- Whenever it is established, new functional positions within our operations that may involve exposure to bloodborne pathogens.

SECTION III

EXPOSURE DETERMINATION

EXPOSURE DETERMINATION

One of the keys to implementing a successful **Exposure Control Plan** is to identify exposure situations employees may encounter. To facilitate this in our operations, we have prepared the following lists:

- Job Classifications in which **All** employees have occupational exposure to bloodborne pathogens.
- Job classifications in which **Some** employees have occupational exposure to bloodborne pathogens.
- Tasks and procedures in which occupational exposure to bloodborne pathogens occur (these tasks and procedures are performed by employees in the job classifications shown on the two following lists).

The initial lists were compiled on or before February 1, 1993. The Chief of Operations will work with department officers and supervisors to revise and update these lists as our tasks, procedures, and classifications change.

**JOB CLASSIFICATIONS IN WHICH ALL EMPLOYEES HAVE
EXPOSURE TO BLOODBORNE PATHOGENS**

Below are listed the job classifications in our operations where ALL employees may come into contact with human blood or other potentially infectious materials, which may result in possible exposure to bloodborne pathogens:

| JOB TITLE | JOB TITLE ABBREVIATION | JOB CLASSIFICATION |
|--------------------------------------|-----------------------------------|-------------------------------|
| -FIRE- | | |
| <u>FIRE CHIEF</u> | <u>(F/C)</u> | <u>(F/F)</u> |
| <u>DEPUTY CHIEF</u> | <u>(D/C)</u> | <u>(F/F)</u> |
| <u>FIRE MARSHAL</u> | <u>(F/M)</u> | <u>(F/F)</u> |
| <u>SHIFT COMMANDERS (CAPTAINS)</u> | <u>(S/C)</u> | <u>(F/F)</u> |
| <u>COMPANY COMMANDER (CAPTAINS)</u> | <u>(C/C)</u> | <u>(F/F)</u> |
| <u>FIRE LIEUTENANTS</u> | <u>(F/LT.)</u> | <u>(F/F)</u> |
| <u>FIREFIGHTER</u> | <u>(F/F)</u> | <u>(F/F)</u> |
| <u>SAFETY OFFICER</u> | <u>(S/O)</u> | <u>(F/F)</u> |
| -EMS- | | |
| <u>MEDICAL ADVISORS</u> | <u>(M/A)</u> | <u>(EMS)</u> |
| <u>SAFETY OFFICER</u> | <u>(S/O)</u> | <u>(EMS)</u> |
| <u>EMS LIEUTENANTS</u> | <u>(EMS/LT.)</u> | <u>(EMS)</u> |
| <u>EMERGENCY MEDICAL TECHNICIANS</u> | <u>(EMT)</u> | <u>(EMS)</u> |
| <u>EMT - PARAMEDIC</u> | <u>(EMT/P)</u> | <u>(EMS)</u> |
| <u>EMT - INTERMEDIATE</u> | <u>(EMT/I)</u> | <u>(EMS)</u> |
| <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> |

**JOB CLASSIFICATIONS IN WHICH SOME EMPLOYEES
HAVE EXPOSURE TO BLOODBORNE PATHOGENS**

Below are listed the job classifications in our groups where SOME employees may come into contact with human blood or other potentially infectious materials, which may result in possible exposure to bloodborne pathogens:

| <u>JOB TITLE</u> | <u>JOB TITLE ABBREVIATION</u> | <u>JOB CLASSIFICATION</u> |
|-------------------------------------|-----------------------------------|-------------------------------|
| -SUPPORT- | | |
| <u>MECHANIC I</u> | <u>(M/I)</u> | <u>(S/S)</u> |
| <u>MECHANIC II</u> | <u>(M/II)</u> | <u>(S/S)</u> |
| <u>ALARM SUPERVISOR</u> | <u>(FAO/S)</u> | <u>(S/S)</u> |
| <u>ALARMS OPERATORS</u> | <u>(FAO)</u> | <u>(S/S)</u> |
| <u>PUBLIC EDUCATION SPECIALIST</u> | <u>(PES)</u> | <u>(S/S)</u> |
| <u>PART TIME MAINTENANCE WORKER</u> | <u>(MW/PT)</u> | <u>(S/S)</u> |
| <u>CHAPLIN</u> | <u>(CH)</u> | <u>(S/S)</u> |
| <u>VOLUNTEER COORDINATOR</u> | <u>(VC)</u> | <u>(S/S)</u> |
| <u>SPECIAL PROJECTS COORDINATOR</u> | <u>(SPC)</u> | <u>(S/S)</u> |
| | | |
| | | |
| | | |
| | | |
| | | |

WORK ACTIVITIES INVOLVING POTENTIAL EXPOSURE TO BLOODBORNE PATHOGENS

Below are listed the tasks and activities in daily operations where employees may come into contact with human blood or other potentially infectious materials which may result in bloodborne pathogens:

WORK ACTIVITY/TASK

CLASSIFICATION

| | | |
|--|-------------|---------|
| Bleeding control with spurting blood | EMS-F/F | |
| Bleeding control with minimal bleeding | EMS-F/F | |
| Burn Wounds | EMS-F/F | |
| Emergency Childbirth | EMS-F/F | |
| Blood Drawing | EMS-F/F | |
| Starting an I.V. | EMS-F/F | |
| Relief Tension Pneumothorax | EMS-F/F | |
| Cricothyrotomy | EMS-F/F | |
| Endotracheal Intubation | EMS-F/F | |
| Oral - Nasal Suction | EMS-F/F | |
| Airway Maintenance Oral/Nasal | | EMS-F/F |
| Giving an Injection IM / SL | EMS-F/F | |
| Measuring B/P | EMS-F/F | |
| Measuring Temperature Oral/Rectal | EMS-F/F | |
| Direct Patient Contact | EMS-F/F | |
| Handling and Cleaning Infected Equipment/Medic | EMS-F/F-S/S | |
| CPR | EMS-F/F | |
| Inducing Vomiting/Vomiting | EMS-F/F | |
| Incontinence Urine/Feces | EMS-F/F | |

SECTION IV

METHODS OF COMPLIANCE

METHODS OF COMPLIANCE

We understand that there are a number of areas that must be addressed in order to effectively eliminate or minimize exposure to bloodborne pathogens in our operations.

The first five areas to be addressed are:

- The use of Universal Precautions.
- Establishing appropriate Engineering Controls.
- Implementing appropriate Work Practice Controls.
- Using necessary Personal Protective Equipment.
- Implementing appropriate Housekeeping Procedures.

Each of these areas is reviewed with our employees during their bloodborne pathogens related training (see the "Information and Training" section of this plan for additional information). By rigorously following the requirements of OSHA's Bloodborne Pathogens Standard in these five areas, we feel that we will eliminate or minimize employees' occupational exposure to bloodborne pathogens as much as is possible.

A. UNIVERSAL PRECAUTIONS

In our groups we have began the practice of "Universal Precautions" on March 3, 1988. As a result, we treat all human blood and body fluids such as semen and vaginal secretions as if they are known to be infectious for HBV, HIV and other bloodborne pathogens.

In circumstances where it is difficult or impossible to differentiate between body fluid types, we assume all body fluids to be potentially infectious.

The Department Exposure Control Officer is responsible for overseeing our Universal Precautions Program.

PERSONAL PROTECTION EQUIPMENT (PPE)

B. ENGINEERING CONTROLS

One of the key aspects to our **Exposure Control Plan** is the use of Engineering Controls to eliminate or minimize employee exposure to bloodborne pathogens. As a result, employees use cleaning, maintenance and other equipment that is designed to prevent contact with blood or other potentially infectious materials.

The Fire Department Exposure Control Officer periodically works with department officers and supervisors to review tasks and procedures performed and operations where engineering controls can be implemented or updated. As part of this effort, a survey was completed on March 1, 1993 and revised July 8, 1994 in which three (3) areas of operations were identified:

- **Operations** where engineering controls are **currently employed**.
- **Operations** where engineering controls **can be updated**.
- **Operations** currently not employing engineering controls, but where engineering controls **could be beneficial**.

The results of this survey can be found on the following pages.

Each of these lists is re-examined during our annual Exposure Control Plan review and opportunities for new or improved engineering controls are identified. Any existing engineering control equipment is also reviewed for proper function and needed repair or replacement every six (6) months, in conjunction with the department officer or supervisor where the equipment is located. Equipment is monitored on a constant basis with the semi-annual checks being in June and January.

* **AREA WHERE ENGINEERING CONTROLS ARE CURRENTLY EMPLOYED:**

| Item | Last reviewed | Scheduled Update |
|----------------------------|----------------------|-------------------------|
| - Disposable rubber gloves | 8/06 | semi-annual |
| - Plastic sharps container | 8/06 | semi-annual |
| - Personal protection kits | 8/06 | semi-annual |
| - Face mask/eye shields | 8/06 | semi-annual |
| - Bio-hazard bags | 8/06 | semi-annual |
| - Vionex skin wipes | 8/06 | semi-annual |
| - Disinfectant | 8/06 | semi-annual |
| - A33 dry cleaning soap | 8/06 | annually |
| - Blood remover | 8/06 | semi-annual |

This equipment (except A33 dry) is found on all three Medics and the Attack at this time. The equipment should be part of the daily check to insure that all the equipment is in good condition and properly stocked. Any time that a piece of equipment is found faulty it should be replaced from stock.

| | | |
|--|------|-------------|
| - Separate buckets and mops for medics only | 8/06 | semi-annual |
| - Heavy duty latex utility gloves (for cleaning) | 8/06 | semi-annual |
| - PPE'S on all Fire Department equipment | 8/06 | semi-annual |
| - Specimen containers and secondary containers | 8/06 | semi-annual |
| - Contaminated laundry holding area. (Plastic Hamper or Bin to place contaminated laundry "Marked with Bio-Hazard label") | 8/06 | semi-annual |
| -Specimen containers, which are: (Blood Vial) | 8/06 | semi-annual |
| - Leak-proof; | | |
| - Color-coded or labeled with a bio-hazard warning label; | 8/06 | semi-annual |
| - Puncture-resistant, when necessary. | | |
| - Secondary containers which are: (Moody Tube) | 8/06 | semi-annual |
| - Leak-proof; | | |
| - Color-coded or labeled with a bio-hazard warning label; | | |
| - Puncture-resistant, if necessary. | | |
| - Isolated decontamination/cleaning area. This area should contain some of the equipment already mentioned. The following should be present: | 8/06 | annually |
| -Shower area. | | |
| -Slop Sink to clean equipment (foot pedal control). | | |
| -Cabinets for cleaning supplies and new equipment. | | |

-Motion Controlled lighting.

On site industrial size washing machine with air drying system to clean contaminated laundry (small, lighter items) as well as bunker gear (large bulky item).

- Portable shower located in the stations housing medics. (movable shower head with hose to clean equipment).
- Weekly cleaning schedule for Medic Units and EMS areas

In addition to the engineering controls identified on these lists, the following engineering controls are used throughout the operations:

- Hand washing facilities (or antiseptic hand cleansers and towels or antiseptic towelettes), which are readily accessible to all employees who have the potential for exposure.
Wash Buckets Marked **EMS Only** for the soaking and/or cleaning of contaminated equipment.
-
Mop Buckets with Mops and brushes Marked **Medic Only** for the cleaning of the medic floors.
- On site industrial size washing machine in all Stations housing medic units with an air drying system to clean contaminated laundry (small, lighter items) as well as bunker gear (large bulky item).
- A shower located in the apparatus room of all stations housing medics. (with movable shower head with hose to clean equipment).
- Regular type sink for hand washing. Must have soap dispenser, air dryer or paper towels for drying hands and hand brushes to clean under nails.

In the isolated area in apparatus room designed as a decontamination/cleaning area

The following are present:

- Wall Hangers for drying washed equipment.
- Laundry bin.

The Engines and Staff Vehicles as well as the Rescue, Ladder Truck and the Air Unit are equipped with rubber gloves, face mask/eye shield, Vionex skin wipes, personal protection kits and bio-hazard bags. The disposable TB mask (two sizes) have been added to the engines as of 5/96.

* **AREA WHERE ENGINEERING CONTROLS CAN BE UPDATED (these items are currently present and must be kept updated):**

- Self-Sheathing needles, *Blunt tip and/ or manual sheathing needles*
- Alcohol Soap Dispensers on the Fire Apparatus (ex: Engines, Truck)
- Clean Towels on all equipment
- Container of antiseptic towelettes on all equipment
- Spray bottles (to clean interior of equipment)
- Bottled Water to be used for (flushing/washing/rinsing)

* **OPERATIONS CURRENTLY NOT EMPLOYING ENGINEERING CONTROLS, BUT WHERE ENGINEERING CONTROLS COULD BE BENEFICIAL.**

- Slop sink with hands free operation controls in all stations housing medic units (foot pedals or motion detector).
- Flush type sink (allows for a place to dispose of large amounts of contaminated body fluids and doubles as a good soaking basin for contaminated equipment).

In the isolated area in apparatus room designed as a decontamination/cleaning area

The following should be present:

- Commode and a Sink with mirror

C. WORK PRACTICE CONTROLS

In addition to engineering controls, the Department uses a number of Work Practice Controls to help eliminate or minimize employee exposure to bloodborne pathogens. Many of these Work Practice Controls have been in effect for some time. Any controls that we are using for the first time will be fully implemented before July 6, 1992.

The Employee's who are responsible for overseeing the implementation of these Work Practice Controls are **Medical Advisors and EMS Officers**. They work in conjunction with department officers, supervisors and our department's training coordinators to effect this implementation.

The Department has adopted the following Work Practice Controls as part of our Bloodborne Pathogens Compliance Program:

- Employees wash their hands immediately, or as soon as feasible, after removal of potentially contaminated gloves or other personal protective equipment.
- Following any contact of body areas with blood or any other infectious materials, employees wash their hands and any other exposed skin with soap and water as soon as possible. They also flush exposed mucous membranes with water.
- Following any contamination of an employee's gear or clothing, the employee will place the soiled items in a red bio-hazard bag, seal the bag, and then mark item for laundering. After washing the exposed skin, the employee will be given appropriate clothing to return to the station in. Each medic unit carries extra jumpsuits.
- Contaminated needles and other contaminated sharps are not bent, recapped or removed unless:
 - It can be demonstrated that there is no feasible alternative;
 - The action is required by specific medical procedure;
 - In the two situations above the recapping or needle removal is accomplished through the use of a medical device or a one-handed technique.
- Contaminated sharps are placed in appropriate containers immediately after use.
- Eating, drinking, smoking, applying cosmetics or lip balm and handling of contact lenses is prohibited in work areas where there is potential for exposure to bloodborne pathogens. This includes all department vehicles where there is a likelihood for occupational exposure. (*Example: engines, medics, ladder or rescue*).
- *Staff cars shall be utilized for the transport of food or beverages when ever practical. This will be dependant on many factors(i.e., staffing, availability of staff car, etc). When a staff car cannot be utilized for the transport of food or beverage, fire apparatus may be used. Providing the food and beverage are placed into a closed container and not opened or consumed while in the vehicle. A bag or box shall suffice as a closed container.*
- Food and drink is not kept in refrigerators, freezers, on countertops or in other storage areas where blood or other potentially infectious materials are present.
- All procedures involving blood or other infectious materials minimize splashing, spraying or other actions generating droplets of these materials.
- Specimens of blood or other materials are placed in designated leak-proof containers, appropriately labeled, for handling and storage.
- If outside contamination of a primary specimen container occurs, that container is placed within a second leak-proof container, appropriately labeled, for handling and storage. (If the specimen can puncture the primary container, the secondary container must be puncture-resistant as well).
- Equipment which becomes contaminated is examined prior to servicing or shipping, and decontaminated as necessary (unless it can be demonstrated that decontamination is not feasible).

- An appropriate bio-hazard warning label is attached to any contaminated equipment, identifying the contaminated portions.
- Information regarding the remaining contamination is conveyed to all affected employees, the equipment manufacturer and the equipment service representative prior to handling, servicing or shipping.

- All equipment shall be decontaminated and cleaned only in the proper area. Every attempt should be made to clean contaminated equipment before returning from the hospital. If equipment must be cleaned at the Fire Station, proper procedures must be followed. This would include only cleaning equipment in the EMS room, using the proper cleaning supplies and the use of proper protective equipment for the employee. Proper cleaning equipment includes buckets designated for EMS Only and cleaning solutions described in Section IV Part B (Engineering Controls) of this Plan. At no time is cleaning of any equipment to take place in any living/eating area of the Fire House. These are to be considered a food consumption/storage area, and cleaning of contaminated equipment is not allowed.
- *At no time will EMS equipment be allowed in living spaces of fire stations, this will be the dormitories, kitchens and eating areas. The exception will be for the delivery of patient care.*

When a new employee comes to our department, or any employee changes jobs within the department, the following process takes place to ensure that they are trained in the appropriate work practice controls:

- The employee's job classification and the tasks and procedures that they will perform are checked against the Job Classifications and Task Lists which we have identified in our Exposure Control Plan as those in which occupational exposure occurs.
- If the employee is transferring from one job to another within our department, the job classifications and tasks/procedures pertaining to their previous position are also checked against these lists.
- Based on this "cross-checking" the new Job Classifications and/or tasks and procedures which will bring the employee into occupational exposure situations are identified.
- The employee is then trained by the department's Training Coordinator or another instructor regarding any work practice controls that the employee is not experienced with.
- The Infection Control Standard for Washington Township is discussed with the employee as part of his/her orientation. The new Employee will receive as part of orientation a

summarized version of the Infection Control Policy. This does not release the employee from becoming familiar with the entire policy. This the employee should do within the first month of employment. This summarized version will highlight some of the main points.

D. PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment is our employees "last line of defense" against bloodborne pathogens. Because of this, our group provides (at no cost to our employees) the Personal Protective Equipment they need to protect themselves against such exposure. This equipment includes, but is not limited to:

- | | |
|---------------------------|---|
| 1. Nitrile Gloves - | Minimum acceptable protection to be used in the care or injured/ill patients. Primarily found on <u>engine, truck, etc.</u> |
| 2. Heavy Duty Gloves - | Preferred protection to be worn at all possible times by the immediate care personnel. Primarily found on the medic units. |
| 3. Surgical Masks - | To be used/worn by the care providers or the patient if there is a significant risk of respiratory problems such as Tuberculosis, Flu, etc. or if the patient has a violent discharge of body fluids as a result of coughing, spitting, sneezing etc. |
| 4. Pocket Masks - | Mandated for use in cases when advanced airway equipment is not immediately available. |
| 5. Goggles /Face Shields- | To be worn when giving respiratory care such as endotracheal intubation, suctioning, etc. |
| 6. Gowns - | To be worn when clothing may become soiled with blood, body fluids, secretions or excretions. |

7. Provided Respirators

To be worn when a patient is suspected of having or has been identified as having symptoms of Tuberculosis, SARS or influenza. Symptoms are identified in **Part Two** of this Plan. Fit testing is also discussed.

Hypoallergenic gloves, glove liners or similar alternatives will be available to employees who are allergic to the gloves our facility normally uses.

The EMS Supply Officer, working with department officers and supervisors, is responsible for ensuring that all vehicles and work areas have appropriate personal protective equipment available to employees.

Our employees are trained regarding the use of the appropriate personal protective equipment for their job classifications and task/procedures they perform. Initial training about personal protective equipment was completed in our facility on or before February 1, 1993. Additional training is provided, when necessary, if an employee takes a new position or new job functions are added to their current position.

To determine whether additional training is needed the employee's previous job classification and tasks are compared to those for any new job or function that they undertake. Any needed training is provided by their department officer or supervisor working with our department's Training Coordinator.

To ensure that personal protective equipment is not contaminated and is in the appropriate condition to protect employees from potential exposure, we adhere to the following practices:

- All personal protective equipment is inspected periodically and repaired or replaced as needed to maintain its effectiveness.
- Reusable personal protective equipment is cleaned, laundered and decontaminated as needed and after every use.(Ex: goggles)
- Single-use personal protective equipment (or equipment that cannot, for whatever reason, be decontaminated) is disposed of by forwarding that equipment to any **Hospital Emergency Department** and following with a request for replacement.

To make sure that this equipment is used as effectively as possible, our employees adhere to the following practices when using their personal protective equipment:

- Any garments penetrated by blood or other infectious materials are removed immediately, or as soon as is feasible.
- All potentially contaminated personal protective equipment is removed prior to leaving a work area or accident/incident site, if possible (or as soon as is feasible).
- Gloves worn in the following circumstances:
 - Whenever employees anticipate hand contact with potentially infectious materials;
 - When handling or touching contaminated items or surfaces.
- Disposable gloves are replaced as soon as practical after contamination or if they are torn, punctured or otherwise lose their ability to function as an "exposure barrier".
- Utility cleaning gloves are decontaminated for reuse unless they are cracked, peeling, torn or exhibit other signs of deterioration, at which time they are disposed of.
- Masks and eye protection (such as goggles, face shields, etc.) are used whenever splashes or sprays may generate droplets of infectious materials.
- Protective clothing (such as gowns/protective clothing/coats) is worn whenever potential exposure to the body is anticipated.

All vehicles are equipped with gloves, face shields, gowns, and chux. You are required to wear proper PPE whenever there is the potential for exposure to body fluids. The following chart gives an idea of minimum PPE needed for different procedures:

| TASK OR ACTIVITY | GLOVES | GOWN | MASK | SHIELD |
|--|---------------|-------------|-------------|---------------|
| Bleeding control with spurting blood | YES | YES | YES | YES |
| Bleeding control with minimal bleeding/burn | YES | NO | NO | NO |
| Emergency childbirth | YES | YES | YES | YES |
| Blood drawing | YES | NO | NO | NO |
| Starting IV/Tension/Crich | YES | NO | NO | NO |
| Endotracheal intubation | YES | NO | YES | YES |
| Oral/nasal suctioning, manual clearing of airway | YES | NO | NO** | YES |
| Handling and cleaning infected equipment/materials/medic | YES | NO | NO | NO |
| Measuring B/P or temperature | YES | NO | NO | NO |
| Measuring rectal temperature | YES | NO | NO | NO |
| Giving an injection | YES | NO | NO | NO |
| CPR | YES | NO | NO | NO |
| Inducing vomiting/burns | YES | YES | YES | YES |

* when starting IV put chux under site to absorb blood

** unless splashing/soiling is likely

E. HOUSEKEEPING

Maintaining our equipment and facility in a clean and sanitary condition is an important part of our Bloodborne Pathogens Compliance Program. To facilitate this, we have set up a written schedule for cleaning and decontamination of equipment and the appropriate facility. The schedule provides the following information (this schedule can be found on the following pages).

- The equipment or area to be cleaned/decontaminated.
- Day and time of scheduled work.
- Cleansers and disinfectants to be used.
- Any special instructions that are appropriate.

Using this schedule, our department employs the following practices:

- All equipment and surfaces are cleaned and decontaminated after contact with blood or other potentially infectious materials:
 - After the completion of medical procedures;
 - Immediately (or as soon as feasible) when surfaces are overtly contaminated
 - After any spill of blood or infectious materials;
 - At the end of the work shift if the surface may have been contaminated during that shift.
- Protective coverings (such as liners, plastic trash bags or wrap, aluminum foil or absorbent paper) are removed and replaced:
 - As soon as it is feasible when overtly contaminated.
 - At the end of the work shift if they may have been contaminated during the shift.
- All trash containers, pails, bins and other receptacles intended for use are routinely inspected, cleaned and decontaminated as soon as possible if visibly contaminated.
- Potentially contaminated broken glassware is picked up using mechanical means (such as dustpan and brush, tongs, forceps, etc.)
- Contaminated reusable sharps are stored in containers that do not require "hand processing".

The **Exposure Control Officer** is responsible for setting up the departments cleaning and decontamination schedule as well as checking to assure that it is carried out within our operations.

- *The ambulances shall be disinfected/decontaminated on a weekly basis. The on duty daytime crew shall be responsible for this task. The disinfecting/decontaminating procedure will follow the written schedule and check sheet.*

We are also very careful in the handling of regulated waste (including used bandages, disposed of personal protective equipment and other potentially infectious materials). Starting on or before March 1,1993 the following procedures are used with all of these types of wastes:

They are discarded or "bagged" in containers that are:

- Closeable;
 - Puncture-resistant if the discarded materials have the potential to penetrate the container;
 - Leak-proof if the potential for fluid spill or leakage exists;
 - Red in color or labeled with the appropriate bio-hazard warning label.
- Containers for this regulated waste are placed in appropriate locations in our vehicles and facility within easy access of our employees and as close as possible to sources of the waste.
- Waste containers are maintained upright, routinely replaced, and not allowed to overfill.
- Contaminated laundry is handled as little as possible and is not sorted or rinsed where it is used.
- Whenever our employees move containers of regulated waste from one area to another, the containers are immediately closed and placed inside an appropriate secondary container if leakage is possible from the first container.

The **Squad Leader** is responsible for proper disposal of infectious waste at a hospital emergency department and the decontamination/cleaning of the vehicle & all equipment after each run, *at the end of the shift and on designated days.*

WORKPLACE PRACTICES

The following procedures are to be followed whenever there is the potential for exposure to an infectious disease.

- 1. Handwashing:** Any employee who has a potential exposure will wash their hands thoroughly with soap and water for a minimum of 30 seconds as soon as feasible after exposure. If handwashing facilities are not immediately available, use the disinfectant towelettes provided on the vehicles. Handwashing is still to be performed as soon as feasible even if towelettes are used.
- 2. Cleaning and decontaminating spills of body fluids:** All spills of blood and blood contaminated fluids are to be promptly cleaned with the A33 dry bleach solution on each vehicle in the following manner **while wearing heavy type gloves**. Visible material should be removed first using disposable towels or other appropriate means that will ensure against direct contact with the fluid. If splashing is anticipated protective shields should be worn with a gown to provide a barrier to splashes. The area should then be cleaned with the bleach solution. If not at a hospital, all contaminated items are to be put in a plastic bag and sealed until arrival at a hospital. **Under no circumstances are infectious clean up materials to be returned to quarters.** Infected material is to be properly disposed of at a hospital.
- 3. Cleaning and disinfecting equipment and surfaces:** For equipment and surfaces that come in contact with intact skin (i.e., stethoscope, BP cuff, splints) and have been visibly contaminated. Pre-clean surface of visible material and use bleach solution **while wearing gloves**. Dispose of bag valve masks at the hospital and replace with like device from the hospital or at quarters. Suction units are to be washed with warm water and soap. Suction unit canisters should be disposed of properly and replaced. Contents are to be properly disposed of at a hospital. Disinfecting wipes shall be available for surface cleaning and not for decontamination.
- 4. Clothing:** If, during the course of a shift, your clothing becomes contaminated with body fluids you are to contact the on duty FAO to advise them of the situation. The fire alarms room operator will contact the Exposure Control Officer. You will be provided a change of clothing to finish your shift or wear home. Each medic is stocked with two (2) jumpsuits to be used in the event of contamination. **At no time will an employee be allowed to wear contaminated clothing when leaving at the end of their shift.** Upon being provided with a change of clothing, you are to remove the contaminated clothing, **while wearing gloves**, and put the item(s) in a plastic bio-hazard bag, seal the bag, and label the bag. *The contaminated clothing may be washed at any of the fire stations in the commercial washers.* If shoes are contaminated they are to be scrubbed with A33 dry soap and warm water. If you must wear contaminated clothing back to quarters any areas that come into contact with the contaminated area must be disinfected.
- 5. Infectious waste:** Any infectious waste is to be taken to a hospital ED for proper disposal.
- 6. Needles and sharps disposal:** All employees must take precautions to prevent injuries caused by needles and other devices used during invasive procedures. **To prevent needle stick injuries, needles are never to be recapped, bent or broken by hand, removed from disposable syringes, or otherwise manipulated by hand.** After they are used, needles and syringes are to be properly disposed of in the sharps container on the vehicle. When the sharps container, located in the blue first in bag, has 1 or more sharps placed in it or if the container is punctured, it should be disposed of and replaced by a new container. The Sharps Container must be sealed and left at the hospital for proper disposal. The larger Sharps Containers that are on board the medic units should be replaced when they become half full. **At no time is a sharps container to be opened or emptied and at no time should anything be forced into the container.**
- 7. Vehicles:** There will be no smoking by anyone in any department vehicle. In addition, no employee is to apply cosmetics or lip balm, or handle contact lenses inside a department vehicle. A patient's contact lenses may be removed for the purpose of treating an eye problem, but must be done with body fluid precautions. *Refer to Methods of Compliance Section C. Work Place Controls for transportation of food or beverage in department equipment.*

CLEANING SCHEDULE

| | SCHEDULED EQUIPMENT/AREA DISINFECTANTS USED | CLEANERS AND INSTRUCTIONS | SPECIAL CLEANING (DAY / TIME) |
|--|---|---|---|
| Instruments/devices that penetrate or contact normally sterile area of the body ex: IV needles, Thermometer | After Use | Discard as infectious waste | Use disposable equipment in use |
| Equipment devices that contact mucous membranes ex: Laryngoscope blades | After Each Use | A33 Dry Soap with warm water then EPA registered "sterilant" | chemical |
| Surfaces/equipment with visibly contaminated blood or blood body fluids "hospital disinfectant" | As soon as possible or as soon as transport chemical germicide | A33 Dry Soap with water, 1:100 dilution of common bleach is complete with tuberculocidal | and/or EPA registered (1/4 cup bleach to 1 |
| gallon water.) Dry Soap with warm fluids | Surfaces/equipment without blood | water or department provided | After Each Use A33 or body anti-microbial wipes. |

Levels of Decontamination

| Level | Effects | Uses | Methods |
|--|--|--|--|
| sterilizing agent for a prolonged (6 to 10 hours). body during invasive * Liquid chemical sterilants for instruments that cannot be with heat. | Destroys all | For instruments that microorganisms | * Immersion in an EPA (A33 penetrate the skin Dry) approved chemical including highly or contact normally Sterilization resistant sterile areas of the period bacterial spores. procedures. sterilized |
| EPA* approved sterilization agent for 10 to 45 minutes in accordance with manufacturer's instructions | High Destroys | Destroys all Level Disinfection | * Hot water pasteurization by placing articles in water 176^ to 212^F(80^ to 100^C) for 30 Min. For reusable equipment that has * Immersion in an except large contacted mucous chemical numbers of membranes. bacterial spores. |
| germicide kills tuberculocidal activity with a commercially surface germicide with a 1: 100 chlorine to water solution. | Destroys | For surfaces that only tuberculosis Disinfection | * Wiping with an EPA* registered contact intact skin and disinfectant/chemical Intermediate Level bacteria, have been visibly that vegetative contaminated with * Wiping bacteria, most body fluids. available hard viruses and fungi * Wiping but not bacterial * Wiping bleach spores. |
| registered soiling body fluids tuberculosis | Destroys most hospital disinfectant. are visible. bacteria or | bacteria, some bacterial spores. | For routine cleaning * Wiping with an EPA* Low Level viruses and or removal of Disinfection fungi, but not when no |

* EPA approved chemical is "A33 DRY"

Recommendation for Decontamination Procedure

EQUIPMENT

Decontamination Procedure

| | |
|--|--|
| Airway bag & Intubation bag | Washing/low level decontamination |
| Airways | |
| -Nasaopharyngeal | Disposable |
| -Oraopharyngeal | Disposable |
| Anti shock trousers | Low level disinfection |
| Backboards | Intermediate level disinfection |
| Bite Sticks | Disposable |
| Blood Pressure Cuffs | |
| -rubber bladder cuffs | Low level disinfection |
| -cloth cover | Low level disinfection |
| Sphygmomanometer | Low level disinfection |
| Bulb syringe | Disposal |
| Cervical collars-stiff neck | Disposable or intermediate level |
| Cold packs | Disposable |
| Dressing if package open | Disposable |
| Drug box | Low level disinfection |
| Emesis basin | Disposable |
| Endotracheal tubes | |
| -stylettes (plastic coated) | Disposable |
| Laryngoscopes | |
| -blades | High level disinfection |
| -handle | High level disinfection |
| Magill forceps | Sterilization |
| Monitor, defibrillator exterior only, includes patient cables and non disposable lead wires. | Low level disinfecton |
| Needles and syringes. Disposable in impervious container; do not break, bend, cut, or recap needles prior to disposal. | Disposable |
| Oxygen delivery equipment | |
| -extension tubing | Disposable |
| -face mask | Disposal or low level disinfection |
| -nasal cannula | Disposable |
| Oxygen flow meter and cylinder | Low level disinfection |
| Oxygen powered, breathing devices | |
| -hose | Intermediate Level Disinfection |
| -masks | Disposable |
| -valve | Intermediate level disinfection |
| Oxygen regulators | Low level disinfection |
| Oxygen tanks | Low level disinfection |
| Penlight | Disposable/Low level disinfection |
| Personal equipment (belts, holsters, flashlights, etc) | Low level disinfecton |
| Pillows | Disposable/Low level disinfection |
| Pocket mask | Disposable/Intermediate level disinfection |
| Restraints-cloth | Washing/Low level disinfection |

EQUIPMENT

Resuscitators

- bag
- masks
- valve

Safety Pins

Scissors

Splints

- metal
- cloth support straps

Stethoscope

Straps-cloth

Stretcher

- ambulance cot

Suction devices

Collection unit:

- liner
- bottle

Tubing from Patient to collection unit

Tubing from collection unit to power source

Portable suction unit case (exterior parts)

Tongue Blades

Trauma bag (1st in bag)

DECONTAMINATION PROCEDURE

Disposable

Disposable

Disposable

Disposable

Low level disinfection

Intermediate level disinfection

Washing and low level disinfection

Low level disinfection

Washing and low level disinfection

Intermediate level disinfection

Disposable

High level disinfection

Disposable

Intermediate level disinfection

Low level

Disposable

Low level disinfection

Notes:

In all cases, Manufacturers should be consulted to ensure that products will not be adversely affected by the decontamination process.

Items visibly contaminated with blood require a higher level of decontamination than if blood is not present.

SECTION V

HEPATITIS B VACCINATION, POST-EXPOSURE EVALUATION AND FOLLOW-UP

HEPATITIS B VACCINATION, POST-EXPOSURE EVALUATION AND FOLLOW-UP

Everyone in our group recognizes that even with good adherence to all of our exposure prevention practices, exposure incidents can occur. As a result, we have implemented a Hepatitis B Vaccination Program, as well as set up procedures for post-exposure evaluation and follow-up should exposure to bloodborne pathogens occur.

A. VACCINATION PROGRAM

To protect our employees as much as possible from the possibility of Hepatitis B infection, our department has implemented a vaccination program. This program is available within five (5) days of employment, at no cost, to all employees who have occupational exposure to bloodborne pathogens. The vaccination program consists of a series of three inoculations over a six-month period. As part of their bloodborne pathogens training, our employees have received information regarding Hepatitis vaccination, including its safety and effectiveness.

The Exposure Control Officer is responsible for setting up and operating our vaccination program, which has been in effect since 1990.

Vaccinations are performed under the supervision of a licensed physician or other health care professional. Employees taking part in the vaccination program are listed on the following pages. Employees who have declined to take part in the program are listed as well, and have signed the "Vaccination Declination Form" (a sample of which is found after the Employee Shot Record Form).

Located at the Health Care facility (Southview Hospital) is a notebook that contains Employee Shot Record Forms. These forms are provided to the facility by Washington Township Fire to act as a vaccination record to enable the Department to track each employee's vaccination history. This form shall remain in the notebook until said time that the third (3rd) shot has been administered. At that time the Infection Control Officer shall remove the form and forward it to the employees medical record file. It is the employees responsibility to make certain that during each of the three (3) vaccination shots, the Employee Shot Record Form is completed. This is the only record that the vaccination was administered. (a sample of the "Employee Shot Record Form" is on the following page)

Within thirty days of the completion of the series, employees will be titered to determine their antibody level. If the antibody amount falls below the recommended level, the individual will be given a booster vaccination and retitered. If the employee remains below the recommended antibody level they will be given the three (3) shot series again. The employee will once again be titered and if again the antibodies remain below the recommended level they will be counseled by the department's medical advisor on available options.

To ensure that all employees are aware of our vaccination program, it is thoroughly discussed in our bloodborne pathogen training and upon *initial hiring*. There will be signs posted periodically as reminders to the employees regarding the Vaccination Program.

**Employee
Shot Record**

Name _____

SSN# _____

Consent for Injection #1

Signature of person to receive vaccine _____ Date _____

Witness _____ Date _____

_____ No Adverse reaction. Reaction as follows _____

Consent for Injection #2

Signature of person to receive vaccine _____ Date _____

Witness _____ Date _____

_____ No Adverse reaction. Reaction as follows _____

Consent for Injection #3

Signature of person to receive vaccine _____ Date _____

Witness _____ Date _____

_____ No Adverse reaction. Reaction as follows _____

Titer Results (to be determined within 30 days of receipt of injection #3)

Antibody level _____ Date _____

Recommendation _____

Hepatitis B

WASHINGTON TOWNSHIP FIRE DEPARTMENT
433-3083

VACCINATION DECLINATION FORM

Date: _____

Employee Name: _____

Employee # : _____

I understand that due to my occupational exposure to blood or other potential infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline the Hepatitis B vaccination at this time. I understand that be declining this vaccine, 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 want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Employee Signature

Date

Supervisor Signature

Date

B. POST-EXPOSURE EVALUATION AND FOLLOW-UP

If one of our employees is involved in an incident where exposure to bloodborne pathogens may have occurred there are two things that we immediately focus our efforts on:

- Investigating the circumstances surrounding the exposure incident.
- Making sure that our employees receive medical consultation and treatment (if required) as expeditiously as possible.

The Staff Exposure Control Officer investigates every exposure incident that occurs in our operations. This investigation is initiated within 24 hours after the incident occurs and involves gathering the following information:

- When the incident occurred.
Date and time
- Where the incident occurred.
- What potentially infectious materials were involved in the incident.
 - Type of material (blood, etc.).
- Source of the material.
- Under what circumstances the incident occurred.
 - Type of work being performed.
- How the incident was caused.
- Personal protective equipment being used at the time of the incident.
- Actions taken as a result of the incident.
 - Employee decontamination.
 - Clean-up.
 - Notifications made.

After this information is gathered it is evaluated and a written summary of the incident and its causes is prepared and recommendations are made for avoiding similar incidents in the future (to help with this, the following reports must be completed.).

Incident Report- within 24 hours by the employee

Fire Service Casualty Report- NFIRS 5 Form - by the Supervisor

Request for Information Form- filled out at the hospital by employee and given to Doctor on duty.

Employee Report of Occupational Disease form- filled out by employee if symptoms of a disease develop.

Exposure Incident Investigation Form- filled out by Infection Control Officer (copy of Form page 42 of policy)

Post Exposure Evaluation and Follow-up Checklist- filled out by Infection Control Officer.(copy of form page 43 of policy)

Medic Report- if employee is treated or removed to a hospital.

Sharps Injury Form Needlestick Report – filled out by employee for every needlestick and submitted to the Infection Control Officer. *Contact must be made to Infection Control Officer within 24 hours.*

In order to make sure that our employees receive the best and most timely treatment if an exposure to bloodborne pathogens should occur, our department has set up a comprehensive post-exposure evaluation and follow-up process. We use the "checklist" at the end of this section to verify that all the steps in the process have been taken correctly. This

process was implemented to comply with the Communicable Disease Notification provision of Senate Bill 2 and AM Sub Senate Bill #145 (See attached Training Bulletin, "Communicable Disease Notification").

We recognize that much of the information involved in this process must remain confidential, and will do everything possible to protect the privacy of the people involved.

As the first step in this process we provide an exposed employee with the following confidential information:

- Documentation regarding the routes of exposure and circumstances under which the exposure incident occurred.
- Identification of the source individual (unless infeasible or prohibited by law).

Next, if possible, we test the source individual's blood to determine HBV and HIV infectivity. This information will also be made available to the exposed employee, if it is obtained. At that time, the employee will be made aware of any applicable laws and regulations concerning disclosure of the identity and infectious status of a source individual.

Finally, we collect and test the blood of the exposed employee for HBV and HIV status.

Once these procedures have been completed, an appointment is arranged for the exposed employee with a qualified healthcare professional to discuss the employee's medical status. This includes an evaluation of any illnesses, as well as any recommended treatment.

C. INFORMATION PROVIDED TO THE HEALTHCARE PROFESSIONAL

To assist the healthcare professional we forward a number of documents to them, including the following:

- A copy of the Bloodborne Pathogen Standard.
- A description of the exposure incident.
- The exposed employee's relevant medical records.
- Other pertinent information

D. HEALTHCARE PROFESSIONALS WRITTEN OPINION

After the consultation, the healthcare professional provides our group with a written opinion evaluating the exposed employee's situation. We, in turn furnish a copy of this opinion to the exposed employee.

In keeping with this process, emphasis on confidentiality, the written opinion will contain only the following information:

- Whether Hepatitis B Vaccination is indicated for the employee
- Whether the employee has received the Hepatitis B Vaccination.
- Confirmation that the employee has been informed of the results of the evaluation.
- Confirmation that the employee has been told about any medical conditions resulting from the exposure incident which require further evaluation or treatment

All other findings or diagnosis will remain confidential and will not be included in the written report.

E. MEDICAL RECORD KEEPING

To make sure that we have as much medical information available to the participating healthcare professional as possible, our department maintains comprehensive medical records on our employees. Deputy Chief of Operations is responsible for setting up and maintaining these records, which include the following information:

- Name of the employee.
- Social Security Number of the employee.
- A copy of the employee's Hepatitis B Vaccination status.
 - Dates of any vaccinations.
 - Medical Records relative to the employee's ability.
- Copies of the results of the examinations, medical testing and follow-up procedures which took place as a result of an employee's exposure to bloodborne pathogens.
- A copy of the information provided to the consulting healthcare professional as a result of any exposure to bloodborne pathogens.

As with all information in these areas, we recognize that it is important to keep the information in these medical records confidential. We will not disclose or report this information to anyone without our employee's written consent (except as required by law).

EXPOSURE INCIDENT INVESTIGATION FORM

Date of Incident: _____

Time of Incident: _____

Location: _____

Potentially Infectious Materials Involved:

Type: _____

Source: _____

Circumstances (work being performed, etc.): _____

How Incident Was Caused (accident, equipment malfunction, etc.): _____

Personal Protective Equipment Being Used: _____

Actions Taken (decontamination, clean-up, reporting, etc.): _____

Recommendations For Avoiding Repetition: _____

POST-EXPOSURE EVALUATION AND FOLLOW-UP CHECKLIST

The following steps must be taken, and information transmitted, in the case of any employee's exposure to Bloodborne Pathogens:

| <u>ACTIVITY</u> | <u>COMPLETION DATE</u> |
|--|------------------------|
| - Employee furnished with documentation regarding exposure incident. | _____ |
| - Source individual identified. (_____) Source individual | _____ |
| - Source individual's blood tested and results given to exposed employee. _____ Consent has not been able to be obtained. | _____ |
| - Exposed employee's blood collected and tested. | _____ |
| - Appointment arranged for employee with healthcare professional. (_____) Professional's name | _____ |

Documentation forwarded to healthcare professional. _____

_____ Bloodborne Pathogens Standard

_____ Description of exposed employee's duties.

_____ Description of exposure incident, including routes of exposure.

_____ Result of source individual's blood testing.

_____ Employee's medical records.

SECTION VI

LABELS AND SIGNS

LABELS AND SIGNS

For our employees one of the warnings of possible exposure to bloodborne pathogens are bio-hazard labels. Because of this, we have implemented a comprehensive bio-hazard warning labeling program in our operations using labels of the type shown on the following page, or when appropriate, using red "color-coded" containers. **Exposure Control Officer** is responsible for updating and maintaining this program.

On or before March 1, 1993 the following items in our operations were labeled:

- Contaminated equipment.
- Containers of regulated waste.
- Refrigerators/freezers containing blood or other potentially infectious materials.
- Sharps disposal containers.
- Other containers used to store, transport or ship blood and other infectious materials.
- Laundry bags and containers.

On labels affixed to contaminated equipment we have also indicated which portions of the equipment are contaminated.

We recognize that bio-hazard signs must be posted at entrances to HIV and HBV research laboratories and production facilities. However, we are not attached to these types of operations, so we are not affected by these special signage requirements.

SECTION VII

INFORMATION AND TRAINING

INFORMATION AND TRAINING

Having well informed and educated employees is extremely important when attempting to eliminate or minimize our employee's exposure to bloodborne pathogens. Because of this, all employees who have the potential for exposure to bloodborne pathogens are put through a comprehensive training program and furnished with as much information as possible on this issue.

This program was set up so that employees would receive the required training on or before March, 1 1993. Employees will be retrained at least annually to keep their knowledge current. Additionally, all new employees, as well as employees changing jobs or job functions, will be given any additional training their new position requires at the time of their new job assignment.

Department Training Officer is responsible for seeing that all employees who have potential exposure to bloodborne pathogens receive this training. They will be assisted by the following instructors:

- Medical Advisor(s)
- EMS Officers

A. TRAINING TOPICS

The topics covered in our training program include, but are not limited to, the following:

- The Bloodborne Pathogens Standard itself.
- The epidemiology and symptoms of bloodborne diseases.
- The modes of transmission of bloodborne pathogens.
- Our department's **Exposure Control Plan** (and where employees can obtain a copy).
- Appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.
- A review of the use and limitations of methods that will prevent or reduce exposure, including:
 - Engineering controls.
 - Work practice controls.
 - Personal protective equipment.
- Selection and use of personal protective equipment including:
 - Types available
 - Proper use
 - Location within the facility
 - Removal
 - Handling
 - Decontamination
 - Disposal
- Visual warnings of bio-hazard within our facility including labels, signs and "color-coded" containers.
- Information on the Hepatitis B Vaccine, including its:
 - Efficacy
 - Safety
 - Method of Administration
 - Benefits of Vaccination
 - Our facility's free vaccination program.

- Actions to take and persons to contact in an emergency involving blood or other potentially infectious materials.
- The procedures to follow if an exposure incident occurs, including incident reporting.
- Information on the post-exposure evaluation and follow-up, including medical consultation, that our facility will provide.

B. TRAINING METHODS

Our department's training presentations make use of several training techniques including, but not limited to, those listed below:

Classroom type atmosphere with personal instruction.

Videotape programs.

Training manuals / employee handouts.

Employee Review Sessions.

Because we feel that employees need an opportunity to ask questions and interact with their instructors, time is specifically allotted for these activities in each training session.

C. RECORD KEEPING

To facilitate the training of our employees, as well as to document the training process, we maintain training records containing the following information:

- Dates of all training sessions.
- Contents / summary of the training sessions.
- Names and qualifications of the instructors.
- Names and job status of employees attending the training sessions.

Washington Township Training Form 4B (Rev. 8/93) will be considered the training record. A copy of this two-sided form is on the following page.

These training records are available for examination and copying to our employees and their representatives, as well as OSHA and its representatives.

PART TWO

AIRBORNE PATHOGEN

PROGRAM

PART TWO

Airborne Pathogen Policy

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SECTION VIII

PURPOSE OF THE PLAN

PURPOSE OF PLAN

A. Purpose of Document

The purpose of this document is to review the mode and risk of tuberculosis transmission in health-care settings-including workers, patients, volunteers and visitors. The document may also serve as a useful resource for educating health care workers about tuberculosis. It is the intent of the Washington Township Fire Department to comply with the CDC Guidelines for the Prevention of Transmitting Tuberculosis and OSHA's Respiratory Protection Standard 1910.134. This document became part of the Infection Control Policy in November 1994.

This Document is to be considered the **Policy** concerning Airborne Pathogens for the Washington Township Fire Department.

B. Transmission of Tuberculosis

Mycobacterium Tuberculosis is carried in airborne particles, known as droplet nuclei, that can be generated when persons with tuberculosis sneeze, cough, speak or sing. The particles are so small that normal air currents keep them airborne and can spread them through a room or building. Infection occurs when a susceptible person inhales droplet nuclei containing M. Tuberculosis, and bacilli become established in the alveoli of the lungs and spread through out the body. Transmission of tuberculosis has been associated with close contact with infectious patients, as well as procedures such as bronchoscopy, endotracheal intubation and suctioning. The risk of progression to active disease is markedly increased for persons with HIV infection.

Although TB is not easily transmitted, it is more easily transmitted in closed spaces such as an ambulance or ambulette. For the TB organism to be transmitted another person must inhale the droplet. Tuberculosis cannot be transmitted through contact with such things as clothing, bedding, food or eating utensils.

It is a common misconception to believe that TB is easily transmitted. In fact, most people exposed to TB do not become infected. The body's first line of defense, the upper airway, often prevents most inhaled TB organisms from ever reaching the lungs. But if the inhaled particles are small enough, the organisms can survive in the upper respiratory tract, reach the alveoli, and establish infection.

It should be understood, that the following procedures increase the potential for tuberculosis transmission when performing any of these procedures on a(n) infected patient.

- Close Contact
- Endotracheal Intubation
- Suctioning
- Mechanical Ventilation's
- Open Abscess Irrigation
- Aerosol Treatments

It will be difficult, at times, to determine as first responders if a patient has signs and (or) symptoms of TB. And for that reason this policy exists, to educate and train employee's on the early signs of a potential problem and then the proper procedures on protecting yourself. In the unfortunate case of an exposure, the policy will help to make documenting and reporting much more understandable.

If at any time there are areas of concern contact the **Exposure Control Officer**.

Specific actions to **reduce** the risk of tuberculosis transmission should include the following:

- Screening Employee's for active tuberculosis and tuberculous infection
- Provide rapid diagnostic services
- Prescribe appropriate curartive and preventive therapy.
- Maintain physical measures to reduce microbial contamination of the air
- Promptly investigate and follow up reported exposures.

SECTION IX

GENERAL PRICIPLES OF TUBERCULOSIS

GENERAL PRINCIPLES OF TUBERCULOSIS POLICY

A. Responsible Persons

While it is every persons responsibility to fully understand and follow the Airborne Pathogen Policy, the persons responsible for reviewing, implementing, training and enforcing the Policy are listed below. As in the Bloodborne Pathogen Compliance Program, there shall be the same "*Categories of Responsibility*"

- The Exposure Control Officer
- Department Officers and Supervisors
- Education/Training Instructor
- Our Employees

The above mentioned positions remain the same for the Airborne Pathogen Program. This is the same list that you will find in the Bloodborne Pathogen Program. The only change is that it now pertains to the Airborne Pathogen Program.

FOR EXAMPLE:

The **Exposure Control Officer** is responsible for :

- The implementation of the plan for the entire operation.
 - Working with management and other employees to develop and administer any additional airborne pathogens related policies and practices needed to support the effective implementation of this **Plan**.
- Collect and maintain a suitable library on the Airborne Pathogen Standard.
- Acting as the group's liaison during OSHA inspections.
- Conduct periodic audits and updates to maintain an up-to-date plan.

It is the task of all Supervisors/Officers(Part-time, Part-paid and Career) to educate themselves and their employees in the area of Infection Controls. This policy should also be enforced by these people.

It shall be the Training Officers Responsibility to set up annual training sessions to provide employees with any changes or updates. It is necessary to provide employees with training in this area so that they remain proficient.

It shall be the duty of each employee to read the policy periodically and attend the annual training sessions on this topic. It shall also be the employees responsibility to maintain and request repair on any issued equipment that pertains to this policy. It is also the employees responsibility to follow any orders or guidelines that are generated concerning any Infection Control Topic. And it shall be the employees responsibility to make every attempt to attend the annual TB screening that will be announced on an annual basis.

The Exposure Control Committee as listed in the Bloodborne Pathogen Program shall remain the same. This Committee shall now be responsible for both the Bloodborne Pathogen and Airborne Pathogen Programs.

B. Employees That Are Covered Under OSHA's Occupational Exposure To Tuberculosis

To comply with the CDC Guidelines and OSHA's Standards on the subject of Preventing the Transmission of Tuberculosis, all persons that actively function as a(n) EMT, EMT-A, EMT-P, F/F, or Medical Advisor for the Washington Township Fire Department are covered under this Plan. This has been identified in the Bloodborne Pathogen Plan in Section III (job classifications in which all employees have exposure to Bloodborne Pathogens. ex: **Job Classification F/F and EMS**).

C. Availability To Employees

The Airborne Pathogen Plan will be placed into, and become a part of, the Exposure Control Books that contain the Blood borne Pathogen Plan. At the present time these Books are located at all 5 Fire Stations, Headquarters Administration, Township Administrators Office, and the Township Clerk's Office. The Infection Control Officer also has a copy.

D. Review and Up-Date

The Exposure Control Plan is to be up-dated annually , on or before July 30 as is highlighted in the Blood borne Pathogen Plan. At this annual up-date both the Bloodborne and Airborne Plans should be reviewed and, if need be, revised.

E. Approach to Tuberculosis Control

An effective tuberculosis-control program requires identification, isolation and treatment of persons with active tuberculosis. Employees should periodically review the tuberculosis policies and procedures, and determine the actions necessary to minimize the risk of tuberculosis transmission. The prevention of tuberculosis transmission in the health-care setting requires that all of the following basic approaches be used: **1) Prevent the generation of infectious droplet nuclei. 2) Prevent the spread of the infectious droplet nuclei into the air circulation. 3) Reduce the number of infectious droplets in the air 4) Conduct surveillance for tuberculosis transmission of personnel.**

It is necessary that health care personnel are trained for early identification or suspicion of tuberculosis. This would include:

- **Bloody cough**
- **Persistent cough**
- **Sudden loss of weight**
- **Fever**
- **Anorexia**

If any of these are detected, then employees should consider wearing a respirator.

Once a patient is suspected of having tuberculosis it is necessary to isolate the spread of infection. This is possible through one of two methods. One choice would be to hand the patient a Kleenex and ask them to hold this up to their mouth when they cough. This would help prevent some of the nuclei from becoming airborne. *A second choice would be to place, if patient condition allows, a properly fitted, disposable, valveless high efficiency bacterial filtration surgical mask on the patient. This may also help to control the spread of infectious nuclei.

***Note:** If the patient is on oxygen a non-rebreather mask could also be used to help control the spread of the droplet nuclei.

It is also important to remember that the contagious nuclei could have already become airborne before the precautions were taken. When a patient demonstrates signs or symptoms of tuberculosis, good ventilation in an enclosed area would help remove the airborne contaminates. Local exhaust ventilation is a source control technique used to help with the dispersement of infectious droplet nuclei.

These are not 100% cure all controls. It is important to remember that when there is reason to suspect the presence of TB, it becomes time to protect yourself.

SECTION X

IDENTIFICATION AND MANAGEMENT

OF

TUBERCULOSIS

IDENTIFYING and MANAGING PERSONS with TUBERCULOSIS INFECTION

A. Identifying Persons with Active or Suspected Tuberculosis Infection

The following information is provided to assist employees in identifying an individual with **active** or **suspected** tuberculosis. If an individual meets any of the criteria listed below, the employee should consider taking the necessary precautions for protection against tuberculosis:

- 1) Presence of a persistent cough (more than 2 weeks duration) or other signs or symptoms compatible with Tuberculosis such as complaints of bloody sputum, night sweats, weight loss, anorexia or fever.
- 2) The index of suspicion should also be high with any immune-suppressed person who exhibits any pulmonary symptoms.

B. Managing Persons with Suspected Tuberculosis Infection

If considered suspect, the patient should be given a tissue to cover their mouth to prevent the spread of the nuclei. If using O₂ therapy, consider the use of a mask instead of a nasal canula. **The Use of a Mask On The Patient Does Not Relieve The Employee Of The Use Of The NIOSH Respirator.**

(Note: Patients should not be given a disposable particulate respirator mask with an exhalation valve, since exhalations are exhaled through the exhalation valve and may spread infectious organisms.)

C. Transport of Patient

Contact with the receiving facility should be initiated as soon as possible by phone or BLS. If using BLS, advise the receiving hospital that you are **using airborne precautions.**

Since the ambulances cannot be adapted with negative pressure ventilation, Washington Township adheres to the hierarchy of controls as described in the CDC recommendations for Tuberculosis, in developing administrative policies and providing personal respiratory protection for its employees. This was begun in October 1994.

SECTION XI

General Airborne Disease Exposure and Control

A. Early Detection and Isolation of Patients Potentially at Risk for SARS-CoV Disease

Activities

Screening and triage

Once person-to-person SARS-CoV transmission has been documented anywhere in the world, the probability that a patient presenting with early clinical symptoms of SARS actually has SARS-CoV disease increases if the patient has an epidemiologic link to a geographic location in which SARS-CoV transmission has been documented.

- Screen all patients with fever or lower respiratory symptoms, with or without pneumonia, to determine if, within 10 days of the onset of symptoms, they had:
 - Close contact with a person suspected of having SARS-CoV disease, *or*
 - A history of foreign travel (or close contact with an ill person with a history of travel) to a location with documented or suspected SARS-CoV transmission, *or*
 - Exposure to a domestic or occupational location with documented or suspected SARS-CoV (including a laboratory that contains live SARS-CoV), or close contact with an ill person with such an exposure history
- For persons with a high risk of exposure to SARS-CoV (e.g., persons previously identified through contact tracing or self-identified as close contacts of a laboratory-confirmed case of SARS-CoV disease; persons who are epidemiologically linked to a laboratory-confirmed case of SARS-CoV disease), the clinical criteria should be expanded to include, in addition to fever or respiratory symptoms, the presence of any other early symptoms of SARS-CoV disease (subjective fever, chills, rigors, myalgia, headache, diarrhea, sore throat, rhinorrhea). The more common early symptoms include chills, rigors, myalgia, and headache. In some patients, myalgia and headache may precede the onset of fever by 12-24 hours. However, diarrhea, sore throat, and rhinorrhea may also be early symptoms of SARS-CoV disease.

B. Patient Transport

Objective: Safely transport patients with known or possible SARS-CoV disease.

Activities

Patients who may have SARS-CoV disease may be safely transported in any emergency vehicle with the proper precautions.

- Involve the fewest EMS personnel required to minimize possible exposures.
- Family members and other contacts of SARS patients should not ride in the ambulance if possible. If necessary, they should be evaluated for fever and lower respiratory symptoms and, if either is present, asked to wear a surgical or procedure mask when riding in the vehicle.
- When possible, use vehicles that have separate driver and patient compartments that can provide separate ventilation to each area. Close the door/window between these compartments before bringing the patient on board. Set the vehicle's ventilation system to the non-recirculating mode to maximize the volume of outside air brought into the vehicle. If the vehicle has a rear exhaust fan, use it to draw air away from the cab, toward the patient-care area, and out the back end of the vehicle.
- If a vehicle without separate compartments and ventilation must be used, open the outside air vents in the driver area and turn on the rear exhaust ventilation fans to the highest setting. This will create a negative pressure gradient in the patient area.
- If possible, place a surgical mask on the patient to contain droplets expelled during coughing. If this is not possible (i.e., would further compromise respiratory status, difficult for the patient to wear), have the patient cover the mouth/nose with tissue when coughing.
- Oxygen delivery with a non-rebreather face mask may be used to provide oxygen support during transport. If needed, positive-pressure ventilation should be performed using a resuscitation bag-valve mask, preferably one equipped to provide HEPA or equivalent filtration of expired air.
- Cough-generating procedures (e.g., mechanical ventilation, nebulizer treatment) should be avoided during prehospital care.

C. Personal Protective Equipment

Objective: Ensure the safety of prehospital care providers who transport patients with known or possible SARS-CoV disease.

Activities

- Prehospital care providers who directly handle a patient with SARS-CoV disease or who are in the compartment with the patient should wear PPE as recommended for Standard, Contact, and All Precautions. These include the following:
 - Disposable isolation gown, pair of disposable patient examination gloves, eye protection (i.e., goggles or face shield).
 - Respiratory protection (i.e., N-95 or higher-level respirator)
- Personnel in the driver's compartment who will have no direct patient contact should wear an N-95 or higher-level respirator during transport. Drivers who also provide direct patient care (e.g., moving patients on stretchers) should wear the recommended PPE for patient contact. This PPE, with the exception of the respirator, should be removed and hand hygiene performed after completing patient care and before entering driver's compartment to avoid contaminating the compartment.

D. Safe Work Practices

Objective: Ensure safe work practices among EMS personnel to prevent transmission of SARS-CoV.

Activities

- Avoid touching one's face with contaminated gloves.
- Avoid unnecessary touching of surfaces in the ambulance vehicle.
- Arrange for the receiving facility staff to meet the patient at the ambulance door to limit the need for EMS personnel to enter the emergency department in contaminated PPE. (It may not be practical to change PPE before patient transfer into the facility.) Remove and discard PPE after transferring the patient at the receiving facility and perform hand hygiene. Treat used disposable PPE as medical waste.

E. Post-Transport Management of the Contaminated Vehicle

Objective: Safely clean vehicles used for transport of SARS patients to prevent SARS-CoV transmission.

Activities

- Follow standard operating procedures for the containment and disposal of regulated medical waste.
- Follow standard operating procedures for containing and reprocessing used linen. Wear appropriate PPE when removing soiled linen from the vehicle. Avoid shaking the linen.
- Clean and disinfect the vehicle in accordance with standard operating procedures. Personnel performing the cleaning should wear a disposable gown and gloves (a respirator should not be needed) during the clean-up process; the PPE should be discarded after use. All surfaces that may have come in contact with the patient or materials contaminated during patient care (e.g., stretcher, rails, control panels, floors, walls, work surfaces) should be thoroughly cleaned and disinfected using an EPA-registered hospital disinfectant in accordance with manufacturer's recommendations.
- Clean and disinfect reusable patient-care equipment according to manufacturer's instructions.

F. Follow-up of EMS Personnel

This will be in accordance with all other blood borne or airborne disease.

SECTION XII

METHODS OF COMPLIANCE

METHODS OF COMPLIANCE

It is responsibility of the Fire Department to provide the employee with the proper training and proper protection equipment. It also is the responsibility of the fire department to provide a method of early detection to employees on an annual basis. This is done through annual T.B. screenings. It is important that the employee become aware of steps that are currently in place to help avoid contamination or exposure. Employees should constantly stay updated on:

- Infection Control Plans
- Engineering Controls
- Work Practice Controls
- Personal Protective Equipment
- Universal Precautions

It is the employee's responsibility to constantly review the policies and procedures of Infection Control. Employees are also responsible to follow up on care or treatment that may effect them. If an employee maintains their equipment and uses the equipment properly than there will be no problems. If an employee does not use the provided equipment they are taking a great risk. In this situation discipline is required. The employee must be accountable for his/her actions.

A. Engineering Controls

Currently in place:

| Item | Reviewed | Scheduled Update |
|-----------------------------------|----------|------------------|
| - Nitrile Gloves | 9/06 | Semi-Annual |
| - Face Mask/Eye Shields/Gowns | 9/06 | Semi-Annual |
| -Vionex anti-microrobal Skin Wipe | 9/06 | Semi-Annual |
| -Bio-hazard Bags | 9/06 | Semi-Annual |
| -A 33 Dry Cleaning Soap | 9/06 | Annually |
| - Decontaminate/Disinfectant | 9/06 | Semi-Annually |
| -Permanent Respirators | 9/06 | Annually |
| -Disposable Respirators | 9/06 | Annually |

B. Work Practice Controls

- Employees shall wash hands as soon as feasible after removal of contaminated gloves.
- Employees shall wear issued respirators when there is a high index of suspicion toward T.B.
- Equipment must be disinfected and cleaned as soon a possible.
- If a known Tuberculosis patient has been transported in the medic, the medic must be ventilated for at least 20 minutes before re-entering. This includes opening all doors and windows and turning the fan on outside air.

C. Universal Precautions

The same procedure for Universal Precautions that is set forth in the Bloodborne Pathogen applies in the Airborne Plan. Employees are to follow Universal Precaution procedures at all times. This includes treating all body fluids as if infectious.

D. Personal Protective Equipment

Personal Protective Equipment is listed in the Bloodborne Pathogen Policy of this Infection Control Plan. All the provided equipment is listed in that section and it also applies to the Airborne Pathogen Policy. The new addition to this section of the plan deals with Hepa-Respirators. It is important to remember that these two Policies overlap each other. It is not necessary to be repetitive.

SECTION XIII

TUBERCULOSIS SCREENING

EMPLOYEE SCREENING RECOMMENDATIONS

A. Explanation of Screening

The Mantoux Tuberculin skin test is the standard method to identify persons that have been infected with M. Tuberculosis. This test is performed by administering .1 ml of purified protein derivative (PPD) Tuberculin containing 5 tuberculin units (TU) into either the volar or the dorsal surface of the arm. This test must be read by a trained health care worker 48 to 72 hours after the injection. If the Employee is not read within 72 hours the test must be repeated.

The Tuberculin skin test is a valuable tool but it is not perfect. Several factors can effect the test.

If the employee has had the vaccine (BCG) basille Calmette-Guerin a false positive reading is possible. It is also possible to return with false negative reads.

B. Implementation of the Screening Plan

Since the Tuberculosis Standard is new to the Fire Service there are many new and unexplored areas. One of these new areas deals with employee screening. This is a new procedure that must now be undertaken on an annual basis. Each time that the annual screening is offered it is the employees responsibility to be available. If an employee has documentation of a previous annual screening, it must be copied to the Exposure Control Officer. If an employee elects to decline the screening, a declination form must be filled out and sent to the Exposure Control Officer. If an employee declines the skin test but is suspect of having, or displays the signs and symptoms of TB he/she will be recommended to a physician for evaluation. The time and place of the screening will be announced at least **two weeks** in advance each year.

Washington Township has elected at this time to contract with Southview Hospital in purchasing and allowing their representative(s) to administer and then read the results of the screen.

C. Screening Employee's

1) All employees shall be offered a Mantoux Skin test unless a previous positive reaction is documented. If an employee has had a previous positive reaction and has no signs or symptoms of Tuberculosis, screening will not be required. If at any time an employee that has tested positive develops symptoms of Tuberculosis they shall be recommended to a physician.

2) All employees having previously documented positive skin test, including those completing adequate preventive therapy or adequate therapy for active disease, shall be assessed for symptoms. If symptomatic, they shall be referred for physician evaluation.

3) BCG vaccine is not considered a contraindication for TB skin testing. Reactors with a more than 10mm indication are considered positive and shall be referred for physician evaluation and possible chest x-ray .

4) There is no evidence that pregnancy contraindicates skin testing. If a pregnant employee refuses, she should provide written contradictions by her physician.

5) Immuno-suppressed employees shall be evaluated by delayed type hypersensitivity energy in conjunction with a tuberculosis skin test.

D. Screening of New Employee's

Annual Testing:

1) Annually, the fire Department will offer the employee's, a TB screen test. This is usually offered in conjunction with the Infection Control training in January. Employee's may refuse this test but must sign a decline form stating such. A record of the results of the test shall be kept in the employees medical record file.

2) If an employee is tested for the first time and has a positive reaction, the employee will then be tested again in three weeks. If the reaction is again positive and the employee is not symptomatic there will be no need for further screening. The employee may be referred to a Physician.

3) If an employee without a documented skin test in the past is tested for the first time and has a negative reaction, the employee will be retested in (3) three weeks. If this test is also negative no further testing is done until the next annual test.

E. Guidelines on Positive Skin Test During Annual Screening

Any Employee, *with the exception of new employees without a previous screening*, having a positive skin test reaction, or with a skin test conversion, shall be referred to a physician to be evaluated. This evaluation may include a repeat skin test and/or a chest x-ray. This would be based on the physical findings and the physician's request.

If the test is negative and the employee has no signs or symptoms of active TB, they shall be re-tested annually.

If there is a confirmed exposure and the first reading is negative the individual is to be re-tested in 10 weeks.

If a person has a positive skin test it is very likely a chest x-ray will be used to rule out TB. This would be by order of a physician upon evaluation.

Annual chest x-rays of known reactors are not recommended unless symptoms of tuberculosis are present. If symptomatic, the employee shall report such symptoms and be immediately evaluated by a physician.

F. Guidelines for Employee Exposed to a Tuberculosis Patient without Adhering to Infection Policy.

The following guidelines are to be utilized for any employees testing positive on a Mantoux skin test and for employees exposed to a potentially infectious Tuberculosis patient for whom the infection control guidelines within this policy have not been taken:

Unless a negative Mantoux test has been documented within the last three months, each exposed employee (except those already known to positive reactors) shall receive a Mantoux skin test as soon as possible after exposure.

If the initial skin test is negative, the test should be repeated in 10 weeks after the exposure is ended. **(Persons with previously known positive reactions do not require a skin test or chest X-RAY unless they have symptoms suggestive of Tuberculosis)**

G. Additional Concerns Relating to Follow-Up

Interpretation and follow-up management, (i.e. Chest x-ray or preventative therapy), will follow CDC's Guidelines for Preventing the Transmission of Tuberculosis in Health-Care Settings. (MMWR, Dec. 7, 1990)

Health Care workers with a positive PPD conversion should be evaluated for active disease and managed according to CDC's Guidelines under Treatment and/or Preventative Therapy.

Health Care workers with active disease such as Pulmonary or Laryngeal TB should be Excluded from work until determined non-infectious. (A non-infectious state is generally determined by reduction in symptoms and Three consecutive Sputum Smears that are negative for AFB.)

Immuno-suppressed employees are recommended to be counseled concerning potential risk factors of transmitting infection (such as tuberculosis) and urged to follow existing infection control policies. They shall also be advised concerning the potential and serious consequences of exposure to multiple drug resistant strains.

SECTION XIV

RESPIRATORY PROTECTION

PERSONAL RESPIRATORY PROTECTION FOR EMPLOYEES

A. Performance Criteria for Personal Respirators.

OSHA has identified the appropriate minimum level of respiratory protection for occupational exposure to TB, based on the following best available information regarding the characteristics of exposure and the feasibility of compliance:

- The minimum respiratory protection is a Niosh-approved high efficiency particulate air (HEPA) particulate respirator.
- The employer must establish and implement a respiratory protection program in accordance with the requirements of OSHA's respiratory protection standard, 29 CFR 1910.134.

NIOSH-approved respiratory protective devices, in conjunction with a respiratory protection program complying with 29 CFR 1910.134, will be provided by the employer at no cost to the employee; and worn by those persons in contact with a patient whose signs and symptoms suggest a potential for infectious Tuberculosis as described under Identification and Management of Tuberculosis (Section III). **Each employee that will have, or could have, patient care responsibilities will be fit tested.** All employees that have the designation **EMT** will be required to be fitted for the reusable respirator. Also any member of the department that wishes to be fitted and issued a reusable respirator, shall be.

Every employee will be fit tested for a disposable mask. Disposable Mask will be placed on all apparatus in an appropriate size range. It is each employee's responsibility to remember the proper size mask that they require. The employer will also provide replacement respirators, filters and cleaning supplies. This fit test must be performed annually. Fit testing will be done in the first quarter of each year to coincide with the Mandatory Infection Control training to be attended by all employees.

B. Implementing a Personal Respiratory Protection Program

Employees will be fit-tested and trained in the use of disposable as well as reusable **Respiratory Protective Equipment**. The NIOSH-approved Hepa-Filter is designed for a close fit and has high filtering capacity for particles at the 1-5 micron range. These devices are the minimum acceptable level of respiratory protection to be used by employees who may be exposed to MTB. Higher levels are also acceptable. For these Respirators to be effective, they must be fit-tested, fit-checked, and worn correctly.

Each respirator wearer shall receive fitting instructions including demonstrations and practice in how the respirator should be worn, how to adjust it, and how to determine if it fits properly. **Respirators shall not be worn when conditions prevent a good face seal.** Such conditions have been established by the Washington Township Fire Department in **General Order 94-2** of the Standing Operating Procedure dated August 9,1994.

The initial fit test will be performed by a representative of the manufactured respiratory device used by the Washington Township Fire Department. This representative will provide the training on fit testing, to the **Infection Control Officer**, the **Training Officer**, and other officers so chosen by **Deputy Chief- Operations**. In turn, these trained individuals will perform the fit test for the other members of the organization.

The fit testing procedure shall meet **OSHA's Standard Number 1910.1001** on Fit Testing Procedures. Washington Township will fit test its employees using the Irritant Smoke Test. There shall also be an Saccharin Solution Aerosol Test available if an employee has a problem with the irritant smoke. If irritant Smoke is used Eye Protection must be provided. Washington Township has decided at this time to provide employee's with a 3M Respirator that meets NIOSH approval. Each employee will be offered his/her choice of a disposable or permanent respirator. The employee will then be fit tested for the style mask that they selected. If the employee is an EMT they will be fitted for both style mask.

C. Employee Refusal

If an employee that has been previously designated as a possible care provider refuses a fit test procedure that employee is removed from active duty. The employee will not be returned to active status until said time that a fit test has been completed, respirator(s) are issued and the Deputy Chief of Operations gives final written approval to that employee to return to active status.

D. Maintenance and Care of Respirators

Respirators should be checked routinely before and after each use. A respirator that is not routinely used shall be inspected after each use and at least monthly to assure that it is in satisfactory working condition. Maintenance and care of respirators should include:

- Inspect for Defects (including a leak check)
- Clean and disinfect
- Repair
- **Proper Storage***

Respirator inspection should include a check for the tightness of connections and the condition of the face piece, headbands, valves, connecting tube, and canisters.

Reusable Respirators shall be cleaned and disinfected as frequently as necessary to insure that proper protection is provided for the wearer. Respirators shall be cleaned and disinfected after each use. **3M Respiratory Cleaning Wipes will be available for cleaning and disinfecting.**

After inspection, cleaning, and necessary repair, respirators shall be stored to protect against dust, sunlight, heat, extreme cold, excessive moisture, or damaging chemicals. Reusable respirators shall be quickly accessible at all times and should be cleaned after each use or examined and cleaned once a month. This information must be documented on the Respiratory Record Form.

The mask(s) are to be stored in the black cloth SCBA bag that has been issued to each employee. This bag should be kept with the employee or his/her equipment at all times.

SECTION XV

EDUCATION AND TRAINING

EDUCATION AND TRAINING

A. Employee Training

All employees shall be trained at the time of hire and up-dated annually regarding the hazards and control of tuberculosis. The tuberculosis information presented shall include:

- Epidemiology
- Transmission/Pathogenesis
- Diagnosis of Infection and Disease
- Signs and Symptoms of Infection
- Differences between Infection and Disease
- Treatment for Tuberculosis Infection and Disease
- Multi-Drug Resistance Tuberculosis
- Infection Control Policy
- Information on the Facility's TB Control Plan
- Respiratory Protection Program

B. Method of Training

The training presentation makes use of several techniques including, but not limited to the following:

- Classroom type atmosphere with personal instruction.
- Video tape programs
- Training manuals/employee handouts
- Employee review sessions
- Outside qualified guess speakers.

C. Record Keeping

Employee exposure records and medical records are handled according to OSHA Enforcement Policy on Occupational Exposure to TB, 29 CFR 1913.19 and 1910.20.

All aspects of the employee's assessment and/or management will be filed in the health record. This will include employee exposures, TB skin testing results, medical evaluations and treatment. All TB infections (positive Mantoux test) and TB disease are recorded on the OSHA 200 log. A positive skin test even on baseline is recorded on the OSHA 200 log. If an employee with TB infection (originally entered on the OSHA 200 log) progresses to active TB disease during the 5 year maintenance period, the original entry for infection shall be up-dated to reflect the new information.

It shall also be understood that all Medical Record information is considered confidential.

The Washington Township Training Record form 4B (Rev.4/93) is considered the Training Record. A copy of this two sided form is in the attachment section at the end of this Policy

REFERENCES:

1. Federal Restore, October 12, 1993
2. Enforcement Policy on Occupational Exposure to TB
3. OSHA TB Inspection Survey
4. Guidelines for Preventing the Transmission of Tuberculosis in the Health-Care Setting, with special focus on HIV-related Issues, MMWR, December 7, 1990
5. Core Curriculum on Tuberculosis, Third Edition 1994, CDC
6. TB Guidelines, GMVEMSC, September 1994
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