Division 08 Health and Safety

Chapter 07 – Infection Control Program

March 2009

POLICY

This General Order shall outline and govern the Infection Control Program.

While providing emergency services, employees and members are considered at risk for exposure to communicable diseases during patient transports, accidents, and fires. Most incidents involve blood and body fluid exposure during the performance of invasive procedures, emergency resuscitation, or the handling of contaminated medical items.

The Prince George's County Fire/Emergency Medical Services (EMS) Department recognizes its employees/members are at risk for potential exposure to communicable diseases during the performance of their duties. The Infection Control Program has been implemented to prevent employee/member and community exposure to communicable diseases.

This program has been developed in accordance with the National Fire Protection Standards 1581 - Infection Control Program and 1500 - Occupational Safety and Health Program and the OSHA - Bloodborne Pathogens Standard. This General Order applies to all employees/members providing fire, rescue, or emergency medical services.

DEFINITIONS

Airborne Isolation - Used for diseases transmitted by airborne droplet nuclei, which can remain suspended in air currents for hours. Examples of diseases requiring airborne isolation are tuberculosis, varicella, and measles.

Bloodborne Pathogens - Pathogenic microorganisms that are present in human blood and can cause disease in humans. Examples of bloodborne pathogens are Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), and Hepatitis C Virus (HCV).

Cleaning - The physical removal of dirt and debris. This is generally accomplished with soap, water, and physical scrubbing.

Contaminated- The presence of, or reasonably anticipated presence of blood, body fluids, or other potentially infectious materials (OPIM's) on an item or surface.

Contact Isolation - Used for diseases transmitted by direct patient contact or by contact with items in the patient's environment. Examples of diseases requiring contact isolation are MRSA, VRE, C. difficile, RSV, Herpes simplex virus, and Scabies.

Disinfection - The process used to inactivate virtually all recognized microorganisms, but not necessarily all microbial forms such as bacterial endospores.

Droplet Isolation - Used for diseases transmitted by large droplets. Droplet organisms usually fall to the floor within three feet of the patient. Examples of diseases requiring droplet isolation are Influenza, Mumps, Rubella, Meningitis, and Pertussis.

Immunization - Is the process or procedure by which a person is rendered immune to certain vaccine preventable diseases. Examples of vaccine preventable diseases are

Measles, Mumps, Rubella (MMR), and Varicella Zoster (chickenpox).

Infectious Occupational Exposure - A skin, eye, mucus membrane, non-intact skin, or parenteral contact with blood and body fluids or other potentially infectious materials (OPIM's) that may result from the performance of the employees/members duties.

Non-Infectious Exposure - Exposure to a non-infectious substance (i.e., chemicals, toxic gases or vapors, PCB's, radiation, etc.) that may result from the performance of a Fire/EMS Department employee/member's duties.

Other Potentially Infectious Materials (OPIM's) - Any body fluid that is visibly contaminated with blood; all body fluids in situations where it is difficult or impossible to differentiate between body fluids; and any unfixed tissue or organ (other than intact skin) from a human, living or dead.

Personal Protective Equipment (PPE) - Specialized clothing or equipment worn for protection against an infectious or communicable disease hazard. Splash resistant eyewear, cleaning gloves, and fluid resistant clothing are examples of PPE used for cleaning and disinfection.

Shall - Indicates a mandatory requirement.

Source Individual - Any individual, living or dead, whose blood or body fluids, or other potentially infectious materials (OPIM's) could be a source of an occupational exposure to an employee/member.

Standard Precautions - An approach to infection control in which all human blood and body fluids are treated as if known to be infected with bloodborne pathogens, including but not limited to, Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), and Hepatitis C Virus (HCV). Therefore, appropriate personal protective equipment (PPE) shall be worn for all procedures/tasks where there may be a potential or anticipated exposure to blood and body fluids or other potentially infectious materials (OPIM's).

Work Practice Controls - Work practice controls reduce the likelihood of exposure to communicable diseases by altering the manner in which a task is performed. Examples of work practice controls are prohibiting recapping of needles, utilizing the one-handed scoop technique when recapping needles, and hand washing.

PROCEDURES

1. Work Practice/Engineering Controls

Standard Precautions (formerly Universal Precautions)

An approach to infection control in which all human blood and body fluids are treated as if known to be infectious with bloodborne pathogens, including but not limited to, Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), and Hepatitis C Virus (HCV). Therefore, appropriate personal protective equipment (PPE) shall be worn for all procedures/tasks where there may be a potential or anticipated exposure to blood and body fluids or other potentially infectious materials (OPIM's).

Hand Washing

Hands shall be washed before and after direct patient care and after touching blood and body fluids or other potentially infectious materials (OPIM's). Hands shall be washed before eating, drinking, applying cosmetics,

and changing contact lenses, and after using the lavatory facilities. Hands shall be washed immediately or as soon as feasible after removal of gloves or other personal protective equipment (PPE).

Foamed alcohol hand degermer or antibacterial towelettes shall be used when hand-washing facilities are not readily available. When towelettes or alcohol foam degermer are used, cleanse hands for 60 seconds and wash hands with soap and running water as soon as possible.

REMEMBER HAND WASHING IS THE MOST EFFECTIVE MEANS TO PREVENT THE SPREAD OF INFECTION. WEARING GLOVES DOES NOT MEAN YOU DON'T HAVE TO WASH YOUR HANDS!

Food and Specimens

Eating, drinking, smoking, applying cosmetics or lip balm, chewing gum and handling contact lenses is prohibited in areas where there is a risk of occupational exposure to blood and body fluids or other potentially infectious materials (OPIM's). Examples include emergency response vehicles and equipment disinfection areas. Storage of food and drinks are prohibited in places where blood and body fluids or other potentially infectious materials (OPIM's) are kept.

Equipment and Clothing

All specimens of blood and body fluids or other potentially infectious materials (OPIM's) must be contained in leak-proof containers or biohazardous plastic bags during handling and transport. Equipment that may become contaminated shall be inspected for blood and body fluids or other potentially infectious materials (OPIM's) on a regular basis and decontaminated as necessary. Removal of blood and body fluids or other potentially infectious materials (OPIM's) from skin and/or clothing must be done as soon as possible.

Work uniform contaminated with blood and body fluids or other potentially infectious materials (OPIM's) must be removed as soon as possible for more thorough cleaning. Clothing soiled with body fluids must be placed in a clear plastic bag until washed/laundered at the station. If disinfection is not feasible, place the work uniform into a red bag for disposal at the nearest hospital.

Employee/member should complete an Infection Control Exposure Report to track gear contamination and/or disposal.

Loss/Damage Reports should be completed and forwarded with a Clothing Request Form to Logistics & Support Services for replacement of contaminated work uniforms.

DO NOT SEND CONTAMINATED PPE OR WORK UNIFORMS TO LOGISTICS AND SUPPORT SERVICES.

Needleless Systems, Needle Devices, Non-Needle Sharps and Sharps Disposal

Needleless systems must be used for:

- Withdrawal of body fluids after initial venous or arterial access is established
- Administration of medications or fluids
- Any other procedure involving the potential for an exposure incident for which a needleless system is available as an alternative for the use of needle devices
- In certain instances when needleless systems are not used, needle devices with engineered sharps injury protection must be used for:

- Withdrawal of body fluids
- Accessing a vein or artery
- Administration of medications or fluids
- Any other procedure involving the potential for an exposure incident for which a needle device with engineered sharps injury protection is available

Non-needle sharps must include sharps injury protection. Note the only exceptions to the above requirements are, if:

- The engineering control is not available in the marketplace
- In a rare situation, the licensed health care professional directly involved in a patient's care determines, in the reasonable exercise of clinical judgment, that use of the engineering control will jeopardize the patient's safety or the success of a medical procedure involving the patient. Such a determination must be documented in the patient's medical record
- After extensive evaluation the Safety Committee determines that the available engineering control(s) is not more effective in preventing exposure incidents than alternative mechanisms (e.g., work practices)
- The engineering control does not have reasonably specific and reliable information on its safety performance and is being evaluated to determine such efficacy

NOTE: Staff Education for Sharps Safety Products

Education regarding the use of all engineering controls such as sharps safety devices is provided prior to implementation of such devices and as needed to assure appropriate and successful use of all engineering controls.

Sharps Disposal

Never attempt to re-sheath, break, bend, or otherwise manipulate contaminated needles or sharps. Immediately after use, needles/sharps must be placed in a puncture resistant, leak proof container with color-coded red biohazard symbol. The sharps container must be kept upright at all times. These containers are commonly referred to as sharps boxes and kept on all ambulances, medic units, and at the hospital. This container, when two-thirds (2/3) full, shall be left at the hospital for proper disposal.

DO NOT OVERFILL SHARPS CONTAINERS AND NEVER PUT USED NEEDLES IN THE TRASH.

Contaminated needles and other contaminated sharps must not be recapped or removed from devices.

EXCEPTION: Contaminated sharps may be bent, recapped or removed from devices if:

- The procedure is performed using a mechanical device or a one-handed technique, AND
- It can be demonstrated that no alternative is feasible or such action is required by a specific medical procedure

NOTE: One-handed recapping is accomplished by placing the needle cap on a horizontal, firm surface and placing the needle into the cap, lifting the capped needle vertically and then securing the cap to the needle. TWO-HANDED RECAPPING IS STRICTLY FORBIDDEN.

Personal Protective Equipment (PPE)

PPE shall be worn for any task or procedure in which direct contact with blood or body fluids or other potentially infectious materials (OPIM's) of the patient is anticipated. Examples of PPE are gloves, masks, and eye protection (goggles). *(See TABLE 2.)*

PPE shall be removed promptly after use, before touching non- contaminated items or surfaces, before caring for another patient, and before leaving the work area/scene.

Disposable exam gloves must be worn whenever exposure to blood and body fluids or other potentially infectious materials (OPIM's) is likely. These gloves may be worn under turnout gloves when extrication is necessary. The turnout gloves can then be quickly removed, leaving the examination gloves for intricate patient care procedures.

Radios, stretchers or equipment that is touched or handled while wearing gloves contaminated or soiled with blood or body fluids or other potentially infectious materials (OPIM's) must also be considered contaminated until disinfected.

Heavy gauge (reusable gloves) can be used when cleaning the unit or equipment. These gloves should be washed in the same manner as hands are washed, but both inside and out. These gloves should be discarded if they become cracked, torn, punctured, or otherwise show signs of deterioration.

Gloves shall be worn when an open wound is known to exist on your hands. Open wounds or rashes must be covered with a waterproof dressing (for example, tegaderm) prior to providing direct patient care.

Mask and eye protection (goggles, helmet, visor or glasses) shall be worn when splashing of blood and body fluids or other potentially infectious materials (OPIM's) is likely, to prevent mucous membrane exposure of the eyes, nose, and mouth.

ALWAYS WASH HANDS AFTER REMOVING GLOVES OR OTHER PERSONAL PROTECTIVE EQUIPMENT!

2. Isolation/Communicable Diseases

Isolation precautions shall be used in addition to Standard Precautions for suspected/confirmed communicable diseases/conditions. Isolation precautions are based on the route of transmission of the disease/condition. **Airborne**, **Droplet** and **Contact** are the three isolation categories that are currently recognized by the Centers for Disease Control and Prevention (CDC).

3. Vaccination and Immunization Practices

Hepatitis B Vaccine (HBV)

The Hepatitis B vaccine is recommended for all employees/members with anticipated occupational exposure to blood and body fluids or other potentially infectious materials (OPIM's). Exceptions are employees/ members who have received the complete vaccine series, have antibody testing that indicates immunity, or have a medical contraindication for the vaccine.

The Hepatitis B vaccine is offered at no cost, within ten working days of initial assignment, during education and training sessions and annually. The Hepatitis B vaccine is administered as a series of three (3) injections at 0, 1 and 5-month intervals.

Employees/ Members who accept or refuse the Hepatitis B vaccine must sign a consent or declination statement (waiver). The declination statement (waiver) can be rescinded at any time and the Hepatitis B vaccine shall be provided at no cost to the employee/member. Compliance with the

vaccine schedule is the employee/member's responsibility.

Tetanus Toxoid

Tetanus Toxoid vaccines will be administered at **no cost** to employees/members for prophylaxis and management of any breaks in the integrity of the skin due to work related injuries.

For a minor wound with low potential of contamination, Tetanus Toxoid Booster dose will be given if no booster has been administered within the last 10 years.
For wounds with a high potential of contamination, Tetanus Immune Globulin will be given regardless of when the last booster was administered.

Varicella Vaccine (Chickenpox)

a. Employees/members immunity to varicella will be reviewed and documented at pre-employment and during their scheduled health screenings. Varicella immunity can be documented by proof of prior immunization, reliable history of varicella infection, or a positive serologic titer.

b. If an employee/member is determined to be non-immune to varicella, he/she will be offered the varicella vaccine at **no cost** unless medically contraindicated.

c. If an employee/member receives a **work-related exposure** to varicella or (shingles) and is found to be non-immune to varicella, he/she will be offered the varicella vaccine and/or be placed on mandatory work restriction from the 10th through the 21st day post-exposure, as appropriate.

d. If an employee/member receives a **non-work related** exposure to varicella or shingles or a work-related exposure to varicella, the employee/member must use sick leave to be paid for mandatory time off from the 10^{th} - 21^{st} day post-exposure, as appropriate.

4. Work Restrictions, Communicable Diseases and Occupational Exposures

Employees/members exposed to known communicable diseases shall be restricted from duty in accordance with the Centers for Disease Control and Prevention, "Guidelines for Infection Control in Healthcare Personnel, 1998."

5. Management of Employees with Bloodborne Diseases

a. All employees/members shall follow standard precautions. Therefore, neither mandatory nor voluntary screening programs for Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and other bloodborne diseases is warranted.

b. Employees/members with a bloodborne infection implicated in a employee/member to patient Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), and/or Hepatitis C Virus (HCV) transmission shall be referred to the Infection Control Officer/Physician and Private Physician for fitness for duty exam *(Reference the Americans with Disability Act of 1990, Titles 1-5).*

c. Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV) and/or Hepatitis C Virus (HCV) infected employees/members shall not be prohibited from work/practice solely on the basis of their bloodborne pathogen infection/disease.

d. Employee/member's job accommodations shall be based on the results of fitness for

duty exam, work restrictions, competence, and ability to perform routine duties, including the following:

- HBV e-antigen carriage, for the subset of activities previously linked epidemiologically to clusters of provider to patient HBV transmission, despite use of good infection control practices.
- Medical conditions resulting in employees/members incompetence or inability to perform assigned tasks.
- Documented untoward events, for example employees/members known to transmit HIV, HBV and HCV despite following established guidelines to prevent transmission of infectious diseases.
- Employees/member's refusal to follow the Infection Control Program.
- Employee/member's inability to perform regular duties assuming that "reasonable accommodation" has been offered for this disability.

6. Post Exposure Incident, Evaluation and Follow Up

- **STEP 1 - Clean Injured Area**

Wash injured area with soap and running water or germicidal hand washing solution. After thoroughly cleaning the wound, apply alcohol, betadine, or hydrogen peroxide.

- **STEP 2 - Report Incident/Exposure**

All blood and body fluids or other potentially infectious materials (OPIM's) exposures shall be reported immediately to the Fire/Emergency Medical Services Operations Center Supervisor, who will immediately contact the Infection Control Officer, who is responsible for medical follow-up and referrals.

- **STEP 3 - Employee/Member Counseling and Documentation**

The Infection Control Officer, or his/her designee, shall conduct the post-exposure evaluations. The confidential post-exposure evaluation and follow-up counseling session shall be conducted immediately, (PEP medications shall be offered within 2 hours, as appropriate), and at no cost to employees/members who have been exposed to blood and body fluids or other potentially infectious materials (OPIM's).

Counseling shall include at a minimum, information related to HIV, HBV, HCV, Standard Precautions, and emotional/ medical concerns, and documentation of the circumstances surrounding the exposure as well as follow-up with employees/ members to ensure appropriate counseling, serology testing and medical treatment, as appropriate.

- **STEP 4 - Exposure Determination**

The Infection Control Officer, or his/her designee, shall determine the exposure code and level of exposure. The following information shall be documented: (1) Type of exposure, i.e., percutaneous injury, mucous membrane or non-intact skin; (2) Duration of exposure; (3) Length of time since the exposure incident (for example immediate vs. several hours); (4) Source of the exposure; and (5) Vaccination status of the employee/member.

- **STEP 5 Laboratory Testing and Informed Consent**

Laboratory testing shall be obtained on employees/members as soon as feasible, after informed consent is obtained, in order to determine HBV, HIV, and HCV status. If employees/members consent to baseline blood collection but do not consent at that time to HIV serological testing, the laboratory shall be instructed to save the blood sample

for at least 90 days. If the employee/member elects to have the baseline blood sample tested within that time frame, such testing shall be done as soon as feasible.

- **STEP 6 Evaluation of the Source Individual**

The Infection Control Officer, or his/her designee, shall obtain source patient information. This shall include patient identification and the circumstances under which the exposure incident occurred, if feasible.

Laboratory testing shall be done on the source individual as soon as feasible, after informed consent is obtained in order to determine HBV, HCV, HIV status. If the source patient's HBV, HCV, and HIV status is known, these tests do not need to be repeated. When law does not require the source individual informed consent, the source individual's blood shall be tested and the results documented.

7. Vehicle and Equipment Disinfection Procedures

In the Station

Due to the increasing use of invasive devices in pre-hospital care (i.e., ETT's, IV's, and oral airways), it has become necessary to develop a system to ensure invasive devices are cleaned, disinfected, and discarded properly and safely.

CLEANING AND DISINFECTION PROCEDURES:

Stethoscopes: may harbor pathogenic organisms and must be cleaned with soap and water or alcohol wipe after examining each patient.

Unit Disinfection: All areas of the unit shall be completely cleaned/disinfected at least once a week as a part of the weekly maintenance in addition to "as needed" cleaning and disinfection.

Laundry and Clothing: All non-exchangeable items, such as towels, blankets and personal clothing, must be removed and placed in a yellow or clear plastic bag. These items should be placed directly in the washer and washed with hot soapy water and one cup of bleach, as appropriate.

Non-Disposable Equipment: Backboards, cots, mattresses, reeves, and B/P cuffs must be rinsed with cold water and washed with warm soapy water. Then rinse a second time with hot water, spray with the disinfectant solution, and allow items to soak for 20 minutes. Items should be rinsed an additional three times to remove any residual disinfectant.

When soaking is not possible, clean the items by spraying liberally with the disinfectant solution and scrubbing with a brush or cloth. Once clean, spray a second time with the disinfectant solution and allow to soak for at least 20 minutes.

Non-Disposable Patient Care Instruments: Shall be disinfected with 2% alkaline gluteraldehyde solution prior to re-use. Instruments on the unit (for example, laryngoscope blades and McGill forceps) must be rinsed with cold water, thoroughly cleaned with soap and water, and then rinsed a second time with hot water until complete disinfection with gluteraldehyde solution can be done at the station.

GLUTERALDEHYDE DISINFECTION PROCEDURE:

STEP 1 - Utilizing gloves, prepare two percent (2%) alkaline gluteraldehyde solution in a two to three gallon, sealed, heavy duty, plastic container, as per instructions, and label with expiration date. This solution can be reused for 28 days. *(See Manufacturer's Instructions.)*

STEP 2– Pre-wash all non-disposable patient instruments to remove blood and body fluids or other potentially infectious materials (OPIM's) prior to placing them into the gluteraldehyde solution. **Failure to pre-wash will decrease the effectiveness of the gluteraldehyde solution.**

STEP 3 - Contaminated non-disposable instruments such as blades and McGill forceps that have been pre-washed as previously described, must be placed in the gluteraldehyde solution for a **20-minute soak**, then thoroughly rinsed and dried for reuse.

STEP 4 - Restock the unit, when possible, with any items being disinfected and replace personal protective equipment (PPE) such as gloves, resuscitation devices, and masks.

REMEMBER TO WASH HANDS THOROUGHLY AFTER COMPLETING THE DISINFECTION PROCEDURES.

At the Hospital

Laundry: All contaminated laundry must be placed in a yellow or clear plastic bag, sealed, and left at the hospital for proper cleaning. Non-exchangeable items such as blankets, towels, and personal clothing must be bagged in the same manner until further cleaning can be done at the station.

PPE: All contaminated disposable items such as gloves; masks, and dressing must be placed in a red bag and left at the hospital for proper disposal.

Unit Disinfection: All areas of the unit such as radio scanners, walls, benches, floors and handles, where contact with blood and body fluids or other potentially infectious materials (OPIM's) is likely, must be thoroughly pre-cleaned with soap and water or approved germicide detergent solution then wiped dry. Cracks and crevices must be scrubbed with a brush.

THE USE OF HEAVY GLOVES OR DOUBLE GLOVING IS NECESSARY WHEN PERFORMING CLEAN-UP PROCEDURES AND MIXING DISINFECTANT SOLUTIONS.

UNIT DISINFECTION PROCEDURES:

STEP 1 -The approved germicidal detergent solution must be mixed and labeled with the date the mixture was mixed and the discard date. *(See Manufacturer's Instructions.)*

STEP 2 -The disinfectant solution must be kept in a spray bottle on the unit at all times. Once mixed, the disinfectant solution is effective for one week. After a week the unused portion should be discarded. Checking the dates of the solution should be integrated into the daily apparatus check.

STEP 3 -Before adding a fresh mixture, clean the bottle and allow to air dry.

STEP 4 -Never add (top off) newly mixed solution to the used solution because this will decrease the effectiveness of the new solution.

A solution of nine parts water to one part bleach may be substituted for the name brand disinfectant solution. Once mixed, bleach must be discarded within 24 hours.

REMEMBER TO NEVER PLACE A RED BAG OR CONTAMINATED ITEMS IN REGULAR OR UNMARKED TRASH CANS.

REMEMBER TO WASH HANDS PRIOR TO LEAVING THE HOSPITAL.

On the Scene

It is the responsibility of the Officer-In-Charge (OIC) on the scene of an incident to ensure the following precautions are taken prior to leaving the scene:

- All contaminated disposable items, for example gloves, masks, dressings, etc., must be placed in a red bag, sealed, removed from the scene, and delivered to a hospital for proper disposal.
- Any blood/body fluid spills on the streets, roadways, or other outside public areas should be disinfected and washed down.

If wash down is not possible ensure that those responsible for cleanup are advised to follow Standard Precautions. If the scene is unable to be cleaned due to investigation by another agency, for example police or FBI, employees/ members shall ensure proper clean up by the biohazard clean up contractor.

REMEMBER TO NEVER PLACE A RED BAG OR CONTAMINATED ITEMS IN A REGULAR OR UNMARKED TRASH CAN.

Medical Anti-Shock Trousers (MAST)

When cleaning trousers **without removable bladders**, soak in gluteraldehyde disinfectant solution and allow to air dry.

When cleaning trousers **with removable bladders**, remove and close the air chambers. Pre-wash the bladders with either gluteraldehyde disinfectant solution or soap and water. Spray the bladders liberally with the gluteraldehyde disinfectant solution, allow soaking for 20 minutes, then rinse with warm water and allow to air dry. Do not machine-wash or dry the bladders.

The outer garment may be both hand-washed with warm soapy water and sprayed with the gluteraldehyde disinfectant solution, or machine-washed with soap and bleach on gentle cycle (if available). Allow to air dry or machine dry at a low setting.

ALL MEDICAL ANTI-SHOCK TROUSERS (MAST) GARMENTS SHOULD BE WASHED SEPARATELY FROM OTHER ITEMS.

7. Mandatory Equipment Requirements

All ALS and BLS Units

All Advanced (ALS) and Basic Life (BLS) Support Units must be stocked with the minimum quantities of infection control equipment as outlined in TABLE 1.

All employees/ members are responsible for restocking ALS and BLS units prior to returning the units to service.

All Stations

All Stations must maintain a stock of the minimum quantities of infection control equipment as outlined in TABLE 2. All supervisors are responsible for restocking/ ordering station supplies.

All Fire/EMS heavy duty response Department vehicles (pumpers, trucks, towers, special units and squads)

All Fire/EMS heavy duty response Department vehicles, with the exception of ALS and BLS Units, must be equipped with the minimum quantities of infection control equipment as outlined in TABLE 3. All employees/ members are responsible for restocking the vehicles prior to returning the vehicles to service.

Note: The infection control equipment should be stored with the "first aid" kit that is carried on each Fire/EMS Department vehicle. It is the responsibility of each Station Supervisor to ensure that their vehicles are adequately equipped with the infection control equipment.

8. Education and Training Programs

Education programs are coordinated the Fire/EMS Training Academy. All employees/ members are required to receive infection control training prior to riding apparatus and/or providing patient care. Mandatory refresher training will be conducted annually as referred to in the training policies.

The training consists of, but is not limited to:

- A general explanation of communicable diseases.
- Information on the Hepatitis B Vaccine including, but not limited to, information of the efficacy, safety, and method of administration.
- Information on the appropriate person to contact for communicable disease exposure incidents, including, but not limited to, medical follow-up.

9. Record Keeping

Education and Training Records

Education and training records for employees/members shall be maintained at the Fire/EMS Training Academy.

Education and training records shall include the date of the training, the name and rank/qualifications of the instructor, and attendees.

Education and training records are maintained for a minimum of three years from the date on which the training occurred.

Infection Control Exposure and Immunization Records

a. All files shall include employee/member name and identification number, and vaccination status.

b. All files shall include records related to post-exposure evaluations, communicable disease exposure incidents, results of examination and medical testing, and follow-up.

c. All files shall include a description of the employee/member duties related to the exposure incident. All files shall include documentation on the routes of exposure and the circumstances under which the exposure occurred, including device specific information, if the incident is device related.

d. All files shall include results of the source patient's HIV, HBV, and HCV infectivity, if feasible and not prohibited by state or local law.

e. All employee/ member medical records regarding exposure shall be kept confidential and are not disclosed without employee/

member written consent *(See PGC Form #4558).*

f. All medical records shall be provided upon request for examination and copied to the employee/member, legal representatives, and OSHA representatives, where required by law.

g. All medical records shall be maintained for the duration of employment plus thirty (30) years.

10. Responsibilities

Program Compliance

The Infection Control Officer is responsible for the following:

- Providing 24-hour communicable disease exposure advice, post-exposure follow-up, and referral to the physician or nearest medical center, as appropriate.
- Documentation of pre- and post-test counseling and medical treatment for exposure to communicable diseases, blood and body fluids, or other potentially infectious materials (OPIM's).
- Documentation that employees/ members have been informed about medical conditions resulting from the exposure incident.
- Maintaining medical records on communicable disease exposures and treatment, education and training records, vaccination records and related safety and compliance reports.
- Coordinating employee/member new hire and annual education and training programs and developing infection control policies and procedures.
- Coordinating or administering PPD Skin Testing and Vaccination Programs
- Ensuring employees/members are offered and receive the Hepatitis B Vaccine within ten (10) working days of assignment. Obtaining the Hepatitis B Waiver/Request Form indicating acceptance or refusal of the Hepatitis B Vaccine or any desired change, as appropriate.
- Reporting and documenting employee/ member failure to keep follow-up appointments and treatments to the Occupational Safety and Health office.
- Maintaining CONFIDENTIAL infection control exposure and immunization records for the duration of employment plus 30 years.
- The Infection Control Officer will notify and interview employees/members involved in the exposure incident to determine the extent of exposure, if any. The employee/member will be referred to the physician or Employee Assistance Program, (EAP), as appropriate.
- Obtaining copies of the pre-employment physical examinations, immunizations and PPD skin tests, as appropriate, for investigation of communicable disease exposure incidents, workers compensation claims, immunization reviews, and PPD skin test screenings.
- Obtaining completed Medical Evaluations, Laboratory Test Results, Hepatitis B Vaccine Waiver/Request forms and vaccination administration records for placement in the employees/members medical file.

Supervisors are responsible for the following:

- Ensuring employees/members comply with the standards of practice outlined in this General Order.
- Notifying, coordinating, communicating, and assisting the Infection Control Officer with employee/member infection control concerns and exposure follow-up.
- Monitoring the condition and availability of personal protective equipment (PPE) and ensuring minimum requirements are maintained at all times. (*See PGC Form #4561*).
- Notifying the Infection Control Officer immediately of communications from hospitals, Medical Examiners Office and Medical Centers related to possible exposure to communicable diseases.
- Forwarding written confirmed or suspected communicable exposure notices from hospitals, Medical Examiner's Office and medical centers to the Infection Control Officer within 24 hours.
- Upon request from the Infection Control Officer providing a written list identifying employees/members who may have transported a patient with a contagious disease listed in Maryland Annotated Code 10-213.
- Fire/Emergency Medical Services (EMS) Operations Center supervisors are responsible for notifying the Infection Control Officer immediately of all reported communicable disease exposures.
- Upon request Operations Center personnel shall provide to the Infection Control Officer the names and identification numbers of all personnel who are involved or responded to incident.
- Upon request from the Infection Control Officer, the Operations Center shall transport to the incident scene the Bloodborne Pathogen Exposure Packet and Post Exposure Prophylactic Medication Kit or other medical supplies.

Employees/Members are responsible for the following:

- Complying with the infection control practices outlined in this General Order.
- Immediately notifying the Infection Control Officer, Fire/Emergency Medical Services (EMS) Operations Center personnel and immediate supervisor of an exposure to a communicable disease, blood and body fluids, or other potentially infectious materials (OPIM's).
- Completing the Infection Control Exposure Report and forwarding the completed form to the Infection Control Officer no later than 24 hours post-incident for documentation, counseling and follow-up, as appropriate. (*See PGC Form #4138).*
- Scheduling and maintaining appointments with the physician or designated medical facility as recommended.
- Completing the Career Injury Packet or Volunteer Injury Packet for all injuries or illness as the result of a confirmed communicable disease exposure and forwarding the completed packet to the Occupational Safety and Health office.
- Maintaining confidentiality of source patients regardless of an exposure to communicable diseases, blood and body fluids or other potentially infectious materials (OPIM's). For example, do not provide the source patient's diagnosis or medical

information such as HIV status over the Department radio system.

- Notifying the hospital staff to utilize proper isolation precautions when transporting patients with known or suspected communicable diseases.
- Reporting directly to the nearest medical center in the event of a life threatening exposure/injury involving communicable diseases, blood and body fluids, or other potentially infectious materials (OPIM's).
- Utilizing sick leave when experiencing **non-work related** fever, flu-like symptoms, vomiting, diarrhea, lesions, and rashes of unknown origin and / or productive cough to minimize the risk of transmission of communicable diseases to other employees/members and to the public we serve.

REFERENCES

N/A

FORMS/ATTACHMENTS

Infection Control Mandatory Equipment Requirements, PGC Form #4561 (1/05)

Authorization Letter for Release of Employee Medical Record, PGC Form #4558

Follow-up Notifications, PGC Form #4138 (1/05)

Hepatitis B Vaccine Waiver/Request

PRINCE GEORGE'S COUNTY, MARYLAND
FIRE/EMS DEPARTMENT

INFECTION CONTROL MANDATORY EQUIPMENT REQUIREMENTS

ALS AND BLS UNIT INSPECTIONS

All Advanced Life Support (ALS) and Basic Life Support (BLS) units must be stocked with the following minimum quantities of infection control equipment:

Mandatory Equipment	Pass	Fail
Disposable Exam Gloves: 1 Box each: SM, MD, LG		
Disposable Surgical Masks: 1 Box		
Foamed Alcohol Hand Degermer: 2 Cans (one in use, one spare)		
Antibacterial Towelettes: 1 Box		
Short Handled Scrub Brush		
Red Biohazard Bags: 10 Each		
Clear Plastic Bags: 10 Each		
Yellow Isolation Bags: 10 Each		
Trash Bags: 10 Each		
Paper Towels: 1 Roll or Package		
Suction Tubing: 1 Box		
Goggles: 3 Each		
NIOSH Approved Moldex 2315N99 Respirators: 4 Each		
Heavy Duty (cleaning) Latex Gloves: 2 Pair		
Puncture-proof Needle Container: 1 Per Unit		
Spray Bottle of Disinfectant Mixture: 1 Per Unit		
Holder For Hand Degermer: 1 Per Unit		

Date of Inspection:_____ Inspection Completed By:_____

PRINCE GEORGE'S COUNTY, MARYLAND
FIRE/EMS DEPARTMENT

INFECTION CONTROL MANDATORY EQUIPMENT REQUIREMENTS

ALL STATIONS

All Stations must maintain a stock of the following infection control equipment and supplies.

Mandatory Equipment	Pass	Fail
Disposable Exam Gloves: 1 Box each: SM, MD, LG		
Disposable Surgical Masks: 1 Box (minimum)		
Foamed Alcohol Hand Degermer: 4 Refills		
Antibacterial Towelettes: 2 Boxes (minimum)		
Spray Bottle: 2 Bottles (minimum)		
Short Handled Scrub Brush		
Red Biohazard Bags: 50 Each		
Clear Plastic Bags: 50 Each		
Yellow Isolation Bags: 50 Each		
Plastic Trash Bags: 50 Each		
Paper Towels: 1 Roll or Package		
Suction Tubing: 1 Box		
Plastic Soap Bucket: 2 Gallon with snap lid (for disinfectant)		
Heavy Duty Plastic Soak Buckets For Cidex: 3 Gallon with Lid		
Disinfection Solution: 20 Ounce (minimum of 10 ounces)		
2% Alkaline Glutaraldehyde Solution or Cidex: 4 Gallons (2 month supply)		
NIOSH Approved Moldex 2315N99 Respirators: 1 bag (10 respirators)		
Heavy Duty (cleaning) Latex Gloves: 4 Pairs		
Bleach: 1 gallon (minimum)		
Dedicated Washer and Dryer:		
Goggles: 3 Each		

Date of Inspection:_____ Inspection Completed By:_____

PRINCE GEORGE'S COUNTY, MARYLAND
FIRE/EMS DEPARTMENT

INFECTION CONTROL MANDATORY EQUIPMENT REQUIREMENTS

ALL EMERGENCY RESPONSE VEHICLES: (PUMPERS, TRUCKS, TOWERS, SQUADS, AND SPECIAL UNITS)

All Fire Department vehicles must be equipped with the following minimum quantities of infection control equipment

Mandatory Equipment	Pass	Fail
Disposable Exam Gloves: 1 Box each: SM, MD, LG		
Disposable Surgical Masks: 5 Each		
Foamed Alcohol Hand Degermer: 2 Cans (one in use, one spare)		
Antibacterial Towelettes: 1 Box		
Red Biohazard Bags: 2 Each		
Clear plastic Bags: 2 Each		
Yellow Isolation Bags: 2 Each		
Trash Bags: 2 Each		
Paper Towels: 1 Roll or Package		
Goggles: 6 Each		
NIOSH Approved Moldex 2315N99 Respirators: 1 Each per riding position		
Heavy Duty (cleaning) Latex Gloves: 2 Pair		

Date of Inspection:_____ Inspection Completed By:_____

PRINCE GEORGE'S COUNTY, MARYLAND
FIRE/EMS DEPARTMENT

AUTHORIZATION LETTER FOR THE RELEASE OF EMPLOYEE MEDICAL RECORD

I, hereby_____(name of Fire/EMS Employee or

Members), authorize _____
(Occupational Safety Health/ Infection Control Office or organization holding the medical records) to release the following medical information from my personal medical records (describe generally the information desired to be released):

_____

_____

_____

I give permission for this medical information to be used for the following purposes:

_____

_____

_____

(Note: Several extra lines are provided below so that you can place additional restrictions on this authorization letter if you want to. You may, however, leave these lines blank. On the other hand, you may want to (1) specify a particular expiration date for this letter (if less than one year); (2) describe the medical information to be created in the future that you intend to be covered by this authorization letter; (3) describe the portions of the medical information in your records which you do not intend to be released as a result of this letter). (Source: OSHA 29 CFR 1910.20)

_____

_____

_____

_____
Full Name of Employee or Legal Representative

_____
Signature of Employee or Legal Representative Date of Signature

Forward To: Infection Control Office
Prince George's County Fire/EMS Department
Occupational Safety and Health, Fire Services Building
6820 Webster Street
Landover Hills, MD 20784
301-583-1934 (Office)
301-583-1837 (Fax)

PGC Form # 4558 (10/01) Attachment #5

INFECTION CONTROL EXPOSURE REPORT

Follow -Up Notifications

Immediate
Supervisor Name: _____ Date: _____ Time: _____

Operation Command
Center Supervisor_____ Date: _____ Time: _____

I have spoke with the Infection Control Officer and understand my plan of care. I have notified my immediate supervisor and have completed this form to best of my knowledge.

Employee Signature: _____ Date: _____

This Section to Be Completed by Infection Control Officer

Date Received: _____

Did the exposed person seek medical attention? o Yes o No
Doctor, Hospital or Treatment facility referred to: _____
Interim disposition: _____

- o Exposed person reported for follow-up (note from doctor)
- o Exposed person did not follow-up as directed
- o No further follow-up recommended at this time
- o Fact sheet forwarded to Employee
- o Referred to Quality Assurance
- o Referred to Risk Management

Final Disposition/Testing Medication: _____

Exposed Personnel's Questions or Comments_____

_____

_____

_____

_____

_____

_____

_____

Infection Control Officer Signature: _____ Date: _____

Forward Report to Infection Control Officer

PRINCE GEORGE'S COUNTY
OCCUPATIONAL SAFETY & HEALTH
Cranford/Graves Fire Service Building
6820 Webster Street
Landover Hills, MD 20784
Phone 301-583-1934
Fax 301-583-1837

PRINCE GEORGE'S COUNTY, MARYLAND
FIRE/EMS DEPARTMENT

INFECTION CONTROL EXPOSURE REPORT

This Form Is To Be Utilized To Report All

- **Suspected or Confirmed Exposures to Communicable Disease**
- **All Needle Stick Injuries**
- **All Incidents of Mouth of Mouth/Nose Resuscitation**
- **All Incidents of Blood and Body Fluid, or Other Potentially Infectious Materials (OPIM) Exposures**
- **Employee/Member to Patient Exposure to an Communicable Infectious Disease**

Personnel Exposed

Name: _____ ID#: _____ Station #: _____

Home Address: _____

Work Phone: _____ Home Phone: _____ Cell Phone: _____

Date of Exposure: _____ O Suspected O Confirmed

Contact/Patient Information

Incident #: _____ Date of Call: _____ Time: _____

Patient Name: _____ Patient Phone: _____

Physician Name: _____ MD Number _____

Transported To: _____ Transported By: _____

Type of Call: _____

Disease/Virus Exposed to:	Source of Exposure:
O Aids/HIV	O Needle Stick
O Hepatitis B	O Blood, or body fluids on wound or broken/abraded skin
O VRE	O Prolonged, or extensive skin contact with blood or body fluids
O MRSA	O Performed Mouth to Mouth resuscitation
O Scabies	O Blood, or body fluids splashed in eyes, nose or mouth
O Tuberculosis	
O Meningococcal Meningitis	
O Chickenpox	
O Other_____	

How did exposure occur (be specific)_____

Were personal protective (standard precautions) measures taken? O Yes O No

If yes what measures were taken? _____

Were other units or agencies on location? O Yes O No

Please specified Other/Police/Fire Agencies: O PGPDO MSP O other (specify)

PGC Form #4138 (1/05) Attachment #3

HEPATITIS B VACCINE WAIVER/REQUEST

[Please Print]

Name: _____ **ID#:** _____ **Company #:** _____

Status: _____ (Career, Civilian or Volunteer)

Address: _____

_____

Phone: (Home): _____ (Cell): _____ (Work): _____

DECLINE

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

Signature: _____ **Date:** _____

Witnessed by: _____

Reason for Declining:

Medically Contraindicated: _____ Previous HBV Infection: _____ Other _____

Comments: _____

PREVIOUSLY IMMUNIZED

I verify that I have already received the vaccine:

Date of Vaccination Series: _____ Where: _____ Booster: _____

Post-Vaccine titer (Test for Antibodies) obtained? Yes ☐ No ☐ Results _____

REQUEST FOR HBV VACCINE

I would like to receive the vaccine

Signature: _____ **Date**: _____

RECORD OF ADMINISTRATION

I have read or have had explained to me this information on the attached form about Hepatitis B and Hepatitis B vaccine. I have had a chance to ask questions, which were answered to my satisfaction. I believe I understand the benefits and risk of the Hepatitis B vaccine. I am requesting that I be given this shot, or given to the person named below, for whom I am authorized to make this request.

_____

(Signature of person receiving vaccine or person authorized to make the request.)

* * * * *

INJECTION #1

Date: _____ Lot #: _____ Expiration Date: _____

Location: _____ Manufacturer: _____

Site of Injection: L or R Deltoid Comments: _____

INJECTION #2

Date: _____ Lot #: _____ Expiration Date: _____

Location: _____ Manufacturer: _____

Site of Injection: L or R Deltoid Comments: _____

INJECTION #3

Date: _____ Lot #: _____ Expiration Date: _____

Location: _____ Manufacturer: _____

Site of Injection: L or R Deltoid Comments: _____

BOOSTER

Date: _____ Lot #: _____ Expiration Date: _____

Location: _____ Manufacturer: _____

Site of Injection: L or R Deltoid Comments: _____