DIX HILLS FIRE DISTRICT
DIX HILLS FIRE DEPARTMENT
EXPOSURE CONTROL PLAN
OCCUPATIONAL EXPOSURE TO BLOODBORNE PATHOGENS
29 CFR 1910.1030

I. EXPOSURE DETERMINATION

This plan identifies those who are at risk, without regard to the use of personal protective equipment (PPE).

1. Ambulance personnel, including all EMTs, drivers, and observers, both volunteers and paid personnel.
2. Firefighters, including all interior and exterior firefighters, line officers and heavy rescue personnel.

II. METHODS OF COMPLIANCE

A. **Universal Precautions**

All personnel will have initial and annual Bloodborne Pathogens Training. They will be instructed to treat all human blood and body fluids as if they are known to be infectious for Human Immunodeficiency Virus (HIV), Hepatitis B (HBV) and other bloodborne pathogens. Special guidelines treating patients with suspected hemorrhagic fever diseases such as Ebola are included in Appendix B.

B. Engineering and Work Practice Controls (Exposure Controls)

1. Whenever patient contact may be anticipated, the ambulance and/or worksite will be equipped with approved sharps disposal containers and other protective devices including, but not limited to, PPE (described in section II C) pocket masks, disposable bag-valve-masks, and other devices. These control devices will be examined and maintained or replaced as needed by the Exposure Control Officer or designee. Needleless IV systems will be used whenever possible. New technology for exposure control, particularly needlestick prevention, will be evaluated and implemented at least annually.

2. Handwashing facilities with antiseptic/antibacterial soap and tepid running water will be accessible whenever feasible. If this is not feasible, such as on an ambulance, antiseptic hand cleaners will be available. When the latter are used, the personnel will be instructed to wash with antibacterial soap and water as soon as practical, preferably at the hospital before returning to station. Hand washing should be done as soon as gloves are removed. Frequent hand washing protects the patients, as well as personnel.

3. Following contact with any body fluids, skin or mucous membranes will be flushed with copious amounts of water, or other acceptable agents.

4. Sharps shall not be bent, broken, recapped, removed or sheared. All sharps will be single use items that will be immediately disposed of in an approved sharps container. All sharps containers will be capped and discarded at ¾ full in an approved manner.

5. Eating, drinking, smoking, applying cosmetics (including lip balm) and handling of contact lenses is prohibited in work areas where there is a reasonable likelihood of occupational exposure.

6. Any specimens of blood or body fluids shall be handled in a manner to prevent leakage, and should be placed in a secondary container such as a zip-lock bag.

7. All procedures involving blood or potentially infectious materials shall be performed in such a manner as to minimize splashing, splattering, and generation of droplets.

8. Equipment which has become contaminated with blood or body fluids shall be decontaminated prior to the equipment being returned to service.

C. Personal Protective Equipment

1. All personnel will be provided appropriate personal protective equipment at no cost. Repair or replacement of PPE will be provided at no cost.

2. Rescue gear consisting of ANSI standard gear (jacket and pants, or coveralls) shall be worn on all calls where there is the likelihood of exposure to bloodborne pathogens (BBP). During the summer months, rescue shirts may be worn in place of jackets if there is no BBP exposure likely. Long pants must be worn on all calls, regardless of BBP exposure.

3. All footwear worn on calls shall have closed toes. No sandals are permitted. Impermeable footwear of vinyl, rubber, or leather is preferred.

4. Disposable gloves shall be provided in all emergency response vehicles. The gloves shall be used whenever there is the possibility of BBP exposure. All gloves shall be removed and replaced when damaged or contaminated. Gloves shall not be re-used.

5. Full face masks and safety glasses are provided on all emergency vehicles to prevent personnel from the splashing or splattering of blood or body fluids. Patients with suspected tuberculosis or excessive coughing should wear non-rebreather oxygen masks when indicated, or N95 face mask respirators.

6. All PPE which has become contaminated with blood or body fluids shall be placed in a designated area for decontamination or disposal. It shall not be used on another call prior to decontamination.

7. If a garment is penetrated with blood or body fluids, it shall be removed immediately, or as soon as feasible.

8. In cases where a member temporarily and briefly declines to use personal protective equipment under rare and extraordinary circumstances and it was their professional

judgement that in that specific instance its use would have prevented the delivery of health care or public safety hazard services or would have posed an increased hazard to the safety of the member or co-worker, the circumstances will be investigated, completely documented, and evaluated by the DHFD Exposure Control and/or Safety Officer, in order to determine whether changes should be instituted to prevent such occurrences in the future.

9. It will be the responsibility of the Officer in Charge at the end of the call to be sure that all use PPE is replaced. If replacement is not readily available, a call will be made to the Lieutenants, Captain, or Exposure Control Officer to obtain the needed equipment. This shall be done at the completion of the call.

D. Housekeeping

1. The ambulance and other items will be maintained in a clean and sanitary condition.

2. All members are responsible for the maintenance of a clean and sanitary ambulance. The crew will decontaminate all equipment and work surfaces that become contaminated, with an approved cleaner upon completion of a call and before returning the unit to active service.

3. Cleaning supplies will be made readily available to each unit at their respective stations. All necessary decontamination equipment will be stored in the custodial closets in each station.

4. Broken glassware which may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as brush and dust pan, tongs, or forceps.

5. All surfaces in the ambulance should be wiped down with antibacterial cleaner at least weekly.

E. Regulated Waste Containment and Disposal

1. Contaminated sharps will be discarded immediately, or as soon as feasible in containers that are closable, puncture resistant, leakproof on the sides and bottom, and labeled or color coded. They will be easily accessible, should be maintained upright throughout use, and replaced when ¾ full. Sharps containers should be closed whenever moved.

2. Contaminated PPE or equipment which is to be cleaned shall be bagged in red bags with the biohazard label, and placed in a designated area in the station for decontamination.

3. All regulated biohazard waste shall be placed in red bags with the biohazard label, and discarded in appropriate regulated waste containers. Sharps containers and red bag waste should be discarded at the hospital.

F. Laundry

1. Contaminated laundry is to be handled as little as possible with a minimum of agitation. It should be bagged or containerized at the location where it is used.

2. Stretcher sheets should be removed and left at the receiving hospital at each call. Clean sheets are available at the hospitals.

3. Protective gloves and other appropriate PPE should be used when handling contaminated laundry.

III. HEPATITUS B VACCINATION AND POST-EXPOSURE FOLLOW-UP

A. **Hepatitis B Vaccination**

1. The Hepatitis B vaccination shall be made available free of charge to all members of the Dix Hills Fire Department within 10 days of assignment unless: 1) the member has previously received the complete Hepatitis B vaccination series, 2) Antibody testing reveals that the member is immune, 3) Medical reasons prevent the member from being vaccinated, 4) Member refuses the vaccine, and signs the Hepatitis B declination form (Appendix A). Any member initially declining the Hepatitis B vaccination may request and receive the vaccination at any time.

2. If a routine booster dose of Hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, such booster dose(s) will be made available to members.

3. The responsibility of advising members and employees about the vaccination series is assigned to the Board of Fire Commissioners of the Dix Hills Fire District.

B. **Post-Exposure Evaluation and Follow-up**

1. Any member that experiences an exposure to bloodborne pathogens or infectious diseases should report the exposure as soon as possible to the receiving hospital and to the Communications Office. An exposure is a specific eye, mouth or other mucous membrane, non-intact skin, or parenteral (puncture) contact with blood or other potentially infectious materials. Appendix B is used to report the exposure. All needlestick injuries will also be recorded on the Sharps Injury Log, Appendix C.

2. All records will be maintained by the Exposure Control Officer and remain confidential.

3. The Exposure Control Officer will contact the appropriate medical personnel (Effective April 20, 1994 regarding the Ryan White comprehensive AIDS resource emergency act of 1990 P.L. 101-381, also known as the Ryan White Act, medical facilities must notify the designated Exposure Control Officer of the organization within 48 hours of exposure to any infectious disease). At this point, all post-exposure procedures may begin.

4. All members that have an exposure incident will be offered a confidential evaluation and follow-up visit.

5. Testing results of the source individual will be made available to the healthcare professional providing the post-exposure evaluation.

6. The exposed members will be informed of the applicable laws and regulations concerning disclosure of the identity and status of the source individual.

7. The member will be offered the option of having their blood drawn for testing of HIV/HBV. The blood sample will be preserved for 90 days to allow the member to decide if the blood should be tested for HIV.

8. The member will be given appropriate counseling concerning precautions to take during the post-exposure procedure. The member will be given information on what potential illness to be alert for and to report any related experiences to the Exposure Control Officer.

9. The healthcare professional providing the post-exposure evaluation will provide a report to the Exposure Control Officer within 15 working days of the completion of the evaluation, and will make the results known to the member.

IV. COMMUNICATION OF HAZARDS

A. Labels

All containers of regulated waste or blood or body fluids will be labeled with standard biohazard labels or red bags or containers.

B. Information and Training

1. All members will be given Bloodborne Pathogens training at the time of initial assignment, and at least annually thereafter. Additional training will be provided in the event of changes in job scope or regulations.

2. The training program will include the minimum following elements:

    - A reference to the 29CFR 1910.1030 standard and instructions and where it can be located.
    - A general explanation of the epidemiology and symptoms of bloodborne diseases.
    - An explanation of the modes of transmission of bloodborne pathogens.
    - An explanation and copy of this Exposure Control Plan.
    - An explanation of how to recognize events that may involve exposure to blood and other potentially infectious materials.
    - An explanation of the basis for selecting PPE including information on the types, selection, proper use, location, removal, handling, decontamination and disposal of PPE.
    - Information on the Hepatitis B vaccine, including information on it efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge.

- An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- Information on the post-exposure evaluation and follow-up that the District is required to provide for the member following an exposure incident.
- An explanation of the warning signs and labels.
- An opportunity for interactive questions and answers regarding the material presented.

V. RECORDKEEPING

A. Medical Records

Medical records for all members of the Dix Hills Fire Department and employees of the Dix Hills Fire District employees will be maintained by the Board of Fire Commissioners for at least the duration of membership or employment plus 30 years. The medical records will be confidential and include:

- Name and social security number
- A copy of the Hepatitis B vaccination dates or medical records relative to vaccination
- A copy of all results of examinations, medical testing, and follow-up procedures.
- A copy of the healthcare providers information as required by the post-exposure follow-up.

B. Training Records

Training records will be maintained by the Exposure Control Officer for three years from the date of training, and will include the following:

- The dates of the training sessions
- Contents or a summary of the training sessions
- The names and qualifications of persons conducting the training
- The names and job titles of all persons attending the training.

Appendix A

Declination of Hepatitis B Vaccine

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 hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccine 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 infections materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Print Name: _____

Signature: _____

Date: _____

Appendix B

October 3, 2014
EBOLA VIRUS DISEASE (EVD) ADVISORY (ADDENDUM)

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1. PURPOSE

1.1 To increase the awareness by all EMS providers of the concerns associated with treating and transporting patients who may have Ebola Virus Disease (EVD)

2. SCOPE

2.1 This directive applies to all EMS providers (CFRs, EMTs and Paramedics) and Voluntary Hospital ambulance personnel who provide prehospital emergency medical treatment .

3. BACKGROUND

3.1 Human to human transmission of EVD occurs through direct contact with body fluids (saliva, blood, breast milk, sweat, semen, and other body substances – such as fecal material and vomitus – contaminated with blood) or following contaminated sharps injuries (e.g. needle sticks). Airborne transmission of the virus may occur during aerosol-generating procedures.

3.2 Patients are not contagious prior to the development of symptoms. Patients can transmit the virus from onset of fever and through later stages of the disease, as well as post mortem.

3.3 EVD symptoms can appear from 2 to 21 days after exposure with 8 to 10 days being the most common. Symptoms typically include: fever, headache, myalgia (muscle pain), arthralgia (joint pain), diarrhea, vomiting, and abdominal pain. Some patients may also experience: rash, conjunctival injection (redness and swelling), cough, pharyngitis (sore throat), chest pain, dyspnea, and hemorrhagic symptoms (conjunctival hemorrhage, easy bruising, GI bleeding).

3.4 The largest ever EVD outbreak currently is taking place in the West African countries of Guinea, Liberia, Sierra Leone, Nigeria, Senegal and Mali. EVD may spread to other countries before the outbreak is contained. An updated list from the CDC is maintained at http://www.cdc.gov/vhf/ebola/resources/distribution-map-guinea-outbreak.html

4. PROCEDURE

4.1 EMS providers must be alert for and suspect patients as possibly having EVD who have (1) fever and/or any of the symptoms listed above and (2) have traveled to one of the West African countries affected by the EVD outbreak within the three weeks prior to the onset of symptoms.

4.2 *All members should don their PPE and maintain universal precautions prior to making patient contact for all assignments where the call-type has an* ***FT (fever/travel),*** *RF (rash/fever) or FC (fever/cough) suffix.*

4.3 Prior to patient contact, to the extent possible, standing three (3) feet back, ask the patient regarding recent travel to West African countries outlined above. If positive response, all EMS providers shall maintain standard, airborne and contact precautions (gloves, N95 respirator, eye protection [goggles or face shields], shoe covers, **PPE/Bunker pants** and gown) when treating any patient suspected of being a disease transmission risk.

4.4 Patient assessment and treatment shall be initiated according to Department policies and procedures and REMAC protocols.

4.5 If the patient is coughing, have the patient wear a surgical mask to limit droplet transmission. Patients should not wear an N-95 respirator. If indicated, administer high concentration oxygen via non-rebreather mask (NRB).

4.5.1 Fit-tested N-95 respirators, eye protection (goggles or face shields), **PPE/Bunker pants** and gowns should ALWAYS be worn by EMS personnel performing aerosol-generating procedures on patients with febrile respiratory illness. Aerosol-generating procedures include nebulized treatments, intubation, tracheal suctioning, and laryngoscopy.

4.5.2 Administration of nebulized (aerosolized) medications (e.g. Albuterol) may only be done via a nebulizer with a one-way valve (e.g. Aeroeclipse II Breath Actuated Nebulizer) or via a disposable metered dose inhaler (MDI) with spacer.
4.5.3 Use of the bag valve mask and endotracheal intubation may continue per current REMAC protocols unless otherwise notified through future directives.
4.6 Patients shall be transported to the closest, appropriate 911 Ambulance destination following all current Department policies and procedures.
4.6.1 If contacted by the Department of Health and Mental Hygiene (DOHMH), OLMC will honor a request for transport to a specific hospital designation identified by DOHMH.
4.7 Providers shall give a hospital notification through the EMD notification frequency for any patient with possible EVD.
4.7.1 ONLY the patient is to be transported in the ambulance (i.e., no other individuals besides the crew) unless the patient is a minor, in which case parents or guardians may accompany the patient.
4.8 *Aggressive hand washing* with soap and water immediately following patient contact *is essential* in limiting disease transmission.
4.9 All disposable materials should be red bagged and whenever possible left at the destination hospital.
4.9.1 Members shall clean all non-disposable equipment used in the treatment of the patient in accordance with DHFD Infection Control Program procedures.
NOTE: *PPE/Bunker pants do not need to be deconed unless there is known contact with, or visible evidence of bodily fluids.*
During cleaning of non-disposable equipment, members should wear gloves, surgical mask or N95 respirator, eye protection, shoe covers and gown.
NOTE: *Following the use of PPE, exercise caution when removing protective garments to prevent contamination with body fluids.*

5. ADDITIONAL UPDATES

5.1 Will be provided as new information and recommendations become available.

6. RELATED PROCEDURES

6.1 EMS OGP 108-15 – *Aeroeclipse II Breath Actuated Nebulizer*
6.2 EMS OGP 109-13 – *Hospital Notifications Frequency*
6.3 EMS OGP 115-08 – *Delivery of Patients to an Appropriate Hospital*
6.4 EMS OGP 125-04 – *Infection Control Procedures*
6.5 EMS OGP 125-09 – *Respiratory Protection Program*
6.6 MAD 2010-02 – *Aeroeclipse II Breath Actuated Nebulizer*
6.7 CFRD Manual Chapter 3 – *Infection Control Procedures*
6.8 NYS DOH Policy Statement 03-11, *Respiratory Disease Precautions*