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| HALIFAX FIRE DEPARTMENT R&R ARTICLE 29 | INFECTION CONTROL POLICY |
| PAGE 1 OF | ISSUED: November 13, 2013 REVISED : |

29.0 PURPOSE

The policies and procedures outlined in this document provide a comprehensive infection control program and plan for the Halifax Fire Department which maximizes protection against communicable diseases for all members of the pre-hospital services and for the public that they serve. This policy applies to all members providing emergency medical services to the community.

Emergency response personnel routinely face potential exposure to debilitating and sometimes life-threatening communicable disease. Opportunities for the transmission of disease abound in the emergency response work environment, both on the scene and in the station. Thus, preventing the transmission of infectious and communicable diseases through effective infection control is a priority concern in all emergency response organizations and in the Southeastern Massachusetts Emergency Medical Services Council (Region V). The Halifax Fire Department based this program on guidelines and procedures outlined in Guide to Developing and Managing an Emergency Service Infection Control Program, initially published in 1989 and republished in 2002 by the United States Fire Administration.

29.1 DEFINITIONS

AIDS. Acquired Immune Deficiency Syndrome, a communicable disease caused by Human Immunodeficiency Virus (HIV).

Advanced Life Support (ALS). Emergency medical treatment at an advanced level, usually provided by paramedics and including use of drugs, cardiac monitoring/intervention and intravenous fluids.

Airborne Pathogen. Disease causing germs and other pathologic microorganism spread by droplets expelled into the air, typically through a productive cough or sneeze.

Basic Life Support (BLS). Emergency medical treatment at a level authorized to be performed by emergency medical technicians as defined by the medical authority having jurisdiction. Generally refers to treatment provided at the Emergency Medical Technician-Basic level.

Blood borne Pathogen. Disease causing germs and other pathologic microorganisms that are present in human blood and that can cause disease in humans. The term blood includes blood, blood components and products made from human blood.

Body Fluids. Fluids that have been recognized by the Centers for Disease Control

and Prevention (CDC) as directly linked to the transmission of HIV (Human Immunodeficiency Virus) and/or HBV (Hepatitis B) and/or to which Universal Precautions apply: blood, semen, blood products, sputum, vaginal secretions, cerebrospinal fluid, synovial fluid, pericardial fluid, amniotic fluid and concentrated HIV or HBV viruses.

Body Substance Isolation (BSI). An infection control strategy which considers all body substances and fluids potentially infectious and poses a risk for transmission of blood borne diseases. BSI should be used by emergency response personnel.

Cleaning. The physical removal of dirt and debris.

Communicable Disease. A disease that can be transmitted from one person to another. Also known as a contagious disease.

Contaminated. The presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item.

k. Decontamination. The physical and/or chemical process of reducing and preventing the spread of contamination from person and equipment by removal, inactivation, or destruction of the pathogens so that the contaminant can no longer transmit infectious particles.

Designated Infection Control Officer. 105 Code of Massachusetts Regulation 170.380 and 105 CMR 171.223 require that each ambulance service and first responder agency appoint a Designated Infection Control Officer (D.I.C.O.). Each D.I.C.O. is responsible for receiving notice from health care facilities regarding the exposure of care providers employed at the D.I.C.O.'s agency and for notifying the care provider who was exposed to an infectious disease dangerous to the public health.

Designated Officer. According to the Ryan White CARE Act, the designated officer is appointed by an emergency service provider, in conjunction with the State Department of Public Health, whose job is to receive notice of exposures and follow up with appropriate parties regarding the exposure. This officer may also serve as the Halifax Fire Department Infection Control Officer.

Disease. An alteration of health, with a characteristic set of symptoms, which may affect the entire body or specific organs. Diseases have a variety of causes and are known as infectious diseases when due to a pathogenic microorganism such as a bacteria, virus or fungus.

Emergency Medical Care. The provision of treatment to patients, including first aid, cardiopulmonary resuscitation, basic life support, advanced life support and other medical procedures that occur prior to arrival at a hospital or other health care facility..

Engineering Controls. Devices and techniques which serve to reduce or eliminate the risk for transmission in the workplace.

Exposure. Eye, mouth, other mucous membrane, non intact skin parenteral contact with blood, other body fluids or other potentially infectious material.

r. First Responder. Personnel who arrive first on the scene at emergency incidents and have the responsibility to act. Includes fire, police, EMS and other public safety workers.

Immunization. The process of rendering a person immune or highly resistant, to a disease.

Infection. Growth of germs and other pathogenic organisms in the tissues of a host with or without detectable signs or injury.

Needle Stick. An exposure which occurs through a break in the skin (parenteral exposure) with a needle contaminated from patient use.

Member. Any full time/part time employee/volunteer or first responder of the Halifax Fire Department.

w. Occupational Exposure. Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials.

Parenteral Exposure. Exposure which occurs through a break in the skin barrier. This includes injections, needle sticks, human bites and cuts contaminated with blood.

Sterilization. The use of a physical or chemical procedure to destroy all microbial life.

Universal Precautions. A system of infectious disease control which assumes that every direct contact with body fluids is infectious and requires every employee exposed to direct contact with body fluids to be protected as though such body fluids were HBV or HIV infected.

29.2 POLICY

Based on the policies and guidelines outlined by the Commonwealth of Massachusetts and Region V, the Halifax Fire Department recognizes that communicable disease exposure is an occupational health hazard.

Communicable disease transmission is possible during any aspect of emergency response, including in-station operations. The health and welfare of each member is a joint concern of the member, the department or agency chain of command and CIEMSS. While each member is ultimately responsible for his or her own health, the Region established standards which will provide as safe a work place as possible. The goal of this program is to provide all department/agency members with the best available protection from occupationally acquired communicable disease. It is the policy of the Halifax Fire Department:

That members of the Halifax Fire Department provide pre-hospital care to patients without regard to known or suspected diagnosis of communicable disease.

To regard all patient contacts as potentially infectious. Emergency responders will observe body substance isolation precautions, when patient contact occurs.

To require providers receive initial infection control training (Silent Wars or similar program, lasting between 6-12 hours) presenting the objectives outlined by the Occupational Safety and Health Administration and Massachusetts Department of Public Health, at least one hour annual refresher training, immunizations (if desired) and personal protective equipment (PPE) needed for protection from communicable diseases.

To recognize the need for work restrictions based on infection control concerns.

To encourage participation in Critical incident Stress Debriefing (CISD) program.

To prohibit discrimination against any member for health reasons, including infection and/or seroconversion, which will not affect public contact.

To regard all medical information as strictly confidential. No Halifax Fire Department member or physician will release member health information without the signed, written consent of the member.

To require all members, during scene operations, to follow the procedures outlined by CIEMSS and included below.

29.3 SCOPE

This plan applies to **all employees** who have the potential for exposure to airborne or blood borne pathogens in the course of their assigned duties. This plan does not apply to employees performing "good samaritan" assistance to co-workers.

29.4 HEALTH MAINTENANCE

The Halifax Fire Department officers/staff will not assign new members of the system to emergency response duties until the Department Physician or his/her designee has performed an entrance physical assessment and has certified the member fit for duty.

The Department Physician may initiate work restrictions for reason of infection control. These may be temporary or permanent.

All new department members will be given a pre-employment physical in accordance with Commonwealth of Mass. HR division standards.

The Department Physician or designee will clear any member returning to work following debilitating injury or illness or communicable disease (occupational or non-occupational) before resuming emergency response duties.

The Designated Infection Control Officer and the Department/Agency Physician

will maintain records. The Designated Infection Control Officer will document member participation in the Infection Control Program including:

Name and Social Security number of member.

Immunization record.

Circumstances of exposure to communicable diseases.

Post-exposure medical evaluation, treatment and follow-up.

The Town of Halifax will maintain infection control records Medical records will be maintained for the duration of employment plus thirty (30) years. The records will become a part of the member's personal health file which will be maintained by the department's physician (or his designee). In the event of the dissolution of this organization, member's medical records will be transferred under the guidance of the Regional Office of the Occupational Safety and Health Administration.

The office of the Department Physician will maintain that member's medical records are strictly confidential. Medical records will not be kept with personnel records nor will the Town of Halifax release member medical records without the signed written consent of the member. There will be no exceptions to this policy for Town of Halifax administrators, Local Government Administration or Insurance companies.

Records of participation in member assistance programs or critical incident stress debriefing are considered medical records and will be governed by the rules of patient confidentiality.

Members may examine their own medical records and may request that copies be sent to their personal physician. Release of medical records to another physician will be made only with the signed written consent of the member.

Abstracts of medical records without personal identifiers may be made for quality assurance, compliance monitoring or program evaluation purposes, as long as the identity of the individual members cannot be determined from the abstract.

Communications between medical and personnel sections will focus on fitness to work or recommended restrictions, rather than upon specific diagnoses.

29.5 INFECTION CONTROL TRAINING

All members providing emergency services will complete:

Initial infection control training at the time of assignment to tasks where occupational exposure may occur (Members now assigned to such tasks who have not already received such training will complete initial training. Initial training for all members will last between 6-1.2 hours and will include standards outlined in paragraph 3, below (Use of Silent Wars video program complies with the initial training requirements of this document).

Refresher infection control training, lasting at least one hour, annually thereafter. This training may be included as part of the Emergency Medical Technician re-certification training program.

All infection control training materials will be appropriate in content and vocabulary to the educational level, literacy and language of members being trained and will include an opportunity for emergency services providers to have their questions answered by the trainer.

Training will be in compliance with NFPA Standard 1581 (for Fire Department based EMS agencies), OSHA Regulation 29 CFR part 1910.1030, the Ryan White Comprehensive AIDS Resource Emergency Act, Guidelines for the Prevention of Tuberculosis in Healthcare Facilities, Massachusetts General Law (MGL) Chapter 111 and 111C and in the Massachusetts Department of Public Health (DPH) regulations 105 CMR 170.000, 171.000, and 172.000 which shall include:

An accessible copy of 29 CFR Part 1910.1030, Massachusetts General Law (MGL) Chapter 111 and 111C, the Massachusetts Department of Public Health (DPH) regulations 105 CMR 170.000, 171.000, and 172.000 and an explanation of their contents.

A general explanation of the epidemiology and symptoms of blood borne disease.

An explanation of the modes of transmission of blood borne pathogens.

An explanation of the town's infection control plan and how the employee can obtain a copy.

An explanation of the appropriate methods of recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials. Each employee will be informed of the exposure determination for their job classification and the tasks which have potential for exposure to blood borne or airborne pathogens.

Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment.

An explanation of the basis for selection of personal protective equipment.

Information on the hepatitis B vaccine, including information on its efficacy, safety and the benefits of receiving vaccinations; notification that the Town of Halifax will provide the vaccines and vaccinations at no charge to the member.

Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials.

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 department or agency will provide following an exposure incident.

An explanation of the signs, labels and/or color coding required for biohazard materials; information on the proper storage and disposal of biohazard materials.

m. Opportunity for interactive questions and answers.

Infection control trainers shall be knowledgeable in all the program elements listed above, particularly as they relate to emergency services provided by the department or agency.

The Town of Halifax will maintain infection control records. Written training records will be maintained for three (3) years after the date on which the training occurs. The records will become a part of the member's personal training file which will be maintained by the department's training officer or infection control officer (or his designee). In the event of the dissolution of this organization, member's infection control training records will be transferred under the guidance of the Regional Office of the Occupational Safety and Health Administration. Training records will include:

The dates of the training session.

The contents or a summary of the training sessions.

The names of persons conducting the training.

The names and job titles of all persons attending the training sessions.

Members may examine their own training records. Release of training records to another agency will be made only with the signed written consent of the member and the department chief.

Abstracts of training records without personal identifiers may be made for quality assurance, compliance monitoring or program evaluation purposes, as long as the identity of the individual members cannot be determined from the abstract.

29.6 STATION ENVIRONMENT

Storage, decontamination and disposal areas:

All stations/agencies will designate appropriate areas for:

Equipment decontamination and disinfection

Storage of clean patient care equipment and infection control protective equipment.

Storage of biohazard waste.

Under no circumstances will members use kitchens, bathrooms or living areas for decontamination or storage of patient care equipment or infectious waste.

The department will mark decontamination areas with bio hazard signs. Optimum equipment in the decontamination area includes:

Sink constructed of nonporous material, equipped with spray attachment control, with hot and cold running water.

Proper lighting and adequate ventilation.

Adequate counter/table area constructed of nonporous materials.

Adequate rack space to allow air-drying of equipment.

Appropriate containers for disposal of biohazard waste.

Facilities for the safe storage, use and disposal of cleansing and disinfecting solutions.

Appropriate Personal Protective Equipment (PPE) for the use of disinfecting solutions.

Material safety data sheets (MSDS) for cleansing and disinfecting solutions. All personnel using these solutions will be familiar with the MSDS and will use the recommended PPE.

If a separate decontamination area is not readily available, the department may designate a decontamination area within the facility.

This area will:

Be clearly marked and have floor drains connected to the sewer/septic system.

Have proper lighting and adequate ventilation.

Have adequate counter/table area constructed of nonporous materials.

Have adequate rack space to allow air-drying of equipment.

Have appropriate containers for disposal of biohazard waste.

Facilities for the safe storage, use and disposal of cleansing and disinfecting solutions.

Have appropriate Personal Protective Equipment (PPE) for the use of disinfecting solutions.

Have Material Safety Data Sheets (MSDS) for cleansing and disinfecting solutions. All personnel using these solutions will be familiar with the MSDS and will use the

recommended PPE.

Be cleaned and disinfected weekly.

Have hot and cold water available.

The department will mark infectious waste storage areas with biohazard signs and will maintain them in accordance with EPA and local regulations (including closable containers, puncture resistant, leak proof on sides and bottom and labeled).

The department will store contaminated sharps in closed puncture-resistant containers (sharp boxes) with appropriate biohazard markings and color coding.

The department will store other contaminated materials in leak proof bags with appropriate biohazard markings and color coding.

If outside contamination of a disposal bag is a possibility, the department will place a second bag with identical markings over it.

The department will inspect reusable bins and containers used to store biohazard waste. Clean them and disinfect them weekly and immediately if outside contamination is present.

All disposal of biohazard waste will be properly disposed at the medical facility receiving the patient. If the department generates other waste and the department cannot dispose of it in the hospital, then the department will dispose of the material in accordance with EPA and local regulations and, by using an approved licensed contractor designated by the department.

Decontamination and cleaning of contaminated equipment should occur at the medical facility receiving the patient (if possible).

Clean it if it's dirty, if it's wet, bag it, and label it.

Kitchen

The department should equip the kitchen with a sink constructed of nonporous materials.

The department should construct food preparation areas, counter tops and cutting boards of nonporous materials.

Under no circumstances will members use any kitchen facility for the purposes of cleaning, sterilizing, disinfecting, storing or disposal of any infectious material or waste.

Thermometers should be kept in all refrigerators and freezers. Refrigerators should maintain a temperature of 38 degrees Fahrenheit or below and freezers should maintain a temperature of 0 degrees Fahrenheit or below.

Food will be properly prepared and cooked. Members will wash hands before and after preparing food. If an alarm interrupts a meal, members will return food to the refrigerator before leaving the station.

The department should equip the kitchen with a dishwasher.

Bathrooms

Bathrooms should have push-to-open doors without handles.

Sinks and toilets shall be kept clean at all times.

Members should use disposable hand-drying materials. Members will not use cloth towels.

29.7 Personal Protective Equipment (PPE)

Specification, purchase, storage and issue of personal protective equipment.

The Designated Infection Control Officer and the Chief will develop standards for personnel protective equipment and update or modify as needed, based on Region V and published standards and/or guidelines of OSHA (minimum standard for protection will be outlined by OSHA. The department may exceed this standard and be in compliance with NFPA 1999 - as determined by the department Chief.

The Town of Halifax is responsible for the supply, repair, replacement and safe disposal of infection control PPE.

The Infection Control Officer and the EMS Coordinator will determine proper stock levels of PPE both for the station and for response vehicles.

The senior officer or a member designated by him/her, at the station will ensure that station stock of PPE is adequate and that members use supplies nearing expiration date first.

The department will develop standards for the amount, type and location of PPE on all response vehicles in the system.

Available PPE (besides PPE for structural firefighting will include disposable gloves, rubber gloves for disinfection purposes, face masks, full face shields, fluid-impervious gowns, leak proof disposable bags and.

Disposable gloves will be constructed of latex rather than plastic. While these types provide equal protection, latex is more durable during on-scene operations.

All members should have a pocket mask with one-way valve. Every response vehicle will carry a Bag Valve mask and the station will maintain them in stock.

Selection and use of personal protective equipment.

Emergency response often is unpredictable and uncontrollable. While blood is the single most important source of HIV and HBV infection in the work place, in the field it is safest to assume that all body fluids are infectious. For this reason, PPE

will be chosen to provide barrier protection against all body fluids (body substance isolation).

Members should select PPE appropriate for spill, or exposure to body fluids. No standard operating guideline or PPE ensemble can cover all situations. Members must use common sense. When in doubt, select maximal rather than minimal PPE.

Disposable latex/non latex gloves will be worn during any patient contact when potential exists for contact with blood, body fluids, non intact skin or other infectious material. All members will carry extra pairs of disposable gloves which are easily accessible and can be quickly donned.

Members will replace gloves as soon as possible when soiled, torn or punctured. Wash hands after removal.

Where possible, members should change gloves between patients in multiple casualty situations.

Structural firefighting gloves will be worn in situations where members may encounter sharp or rough edges.

Members may use heavy-duty utility gloves (appropriate to cleaners in use) for the handling, cleaning, decontamination or disinfection of potentially contaminated patient care equipment.

Members will use facial protection where splash contact with the face is possible. Members may gain facial protection by using both a face mask and eye protection or by using a full face shield. When treating a patient with a suspected or known airborne transmissible disease, members will use a face masks or particulate respirators (unless patient is wearing the mask). The first choice is to mask the patient; if this is not feasible, mask the member(s).

Members will not use face shields on structural firefighting helmets for infection control purposes.

Fluid-resistant gowns are designed to protect clothing from splashes. Structural firefighting gear (SFFG) also protects clothing from splashes and is preferable in fire, rescue or vehicle extrication activities. Gowns may interfere with or present a hazard to, the member in these circumstances. The decision to use barrier protection to protect clothing and the type of barrier protection used will be left to the member. Structural firefighting gear will always be worn for fire suppression and extrication activities. If SFFG becomes contaminated, immediate precautions should be taken. Members should remove/wash gross contamination. Remove SFFG using appropriate precautions and clean SFFG for decontamination.

Under certain circumstances, members will require head covers and/or shoe covers to protect these areas from potential contamination. Members may also use structural firefighting gear (impervious boots, helmets) for barrier protection. Eye shields mounted in structural firefighting helmets do not provide adequate eye

protection from splashes by potentially infectious materials.

This department has determined that personal uniforms are not part of the ensemble of personal protective equipment. If the uniform becomes soiled with potentially infectious material, the uniform must be removed as soon as practical, rinsed, bagged, and the member should wash the affected area.

Summary.

If it is wet, it is infectious -- use gloves.

If it could splash onto your face, use eye shields and mask or full face shield.

If it is airborne, mask the patient or yourself.

If it could splash on your clothes, use a gown or structural firefighting gear.

If it could splash on your head or feet, use appropriate barrier protection.

Clean it if it's dirty, if it's wet, bag it and label it.

29.8 Scene Operations

The Centers for Disease Control and Prevention (CDC) consider that blood, body fluids and tissues of all patients are potentially infectious. Members will use Universal Precautions/Body Substance Isolation procedures for all patient contact.

Personal protective equipment (PPE) is situation dependent. Specified below, based on common medical situations, are the choices of PPE. The department members are encouraged to use maximal rather than minimal PPE for each situation.

While complete control of the emergency scene is not possible, scene operations as much as possible will attempt to limit splashing, spraying or aerosolization of body fluids.

Incident commander/person in charge will use, for all on- scene operations, the minimum number of members required to complete the task safely. Members not immediately needed, will remain a safe distance from operations where communicable disease exposure is possible or anticipated.

Hand washing is the most important infection control procedure. Members will wash hands:

After removing PPE.

After each patient contact

After handling potentially infectious materials.

After cleaning or decontaminating equipment

After using the bathroom

Before eating.

Before and after handling or preparing food.

Members will wash hands with soap and water for ten to fifteen seconds. If soap and water is not available at the scene members may use a waterless hand wash, if the member washes his/her hands immediately upon return to quarters or upon arrival at the hospital.

Eating, drinking, smoking, handling contact lenses, applying cosmetics, or talking on a personal cellular phone is prohibited at the scene of operations and until member has washed his/her hands.

Members will dispose used needles and other sharps in approved sharps containers. Members will not recap, re-sheath, bend, break or separate needles from disposable syringes. The most common occupational blood exposure occurs when providers recap needles.

Sharps containers will be easily accessible on-scene.

Members will use disposable resuscitation equipment whenever possible. For CPR, the order of preference is:

Disposable bag-valve mask.

Demand valve resuscitator with disposable mask.

Disposable pocket mask with one-way valve.

Mouth-to-mouth resuscitation.

Members will do mouth-to-mouth resuscitation only as a last resort if no other equipment is available. All members should have pocket masks with one-way valves to minimize the need for mouth-to-mouth resuscitation. Disposable resuscitation equipment will be kept readily available during on-scene operations.

Patients with suspected airborne communicable diseases will be transported wearing a face mask (surgical mask first choice, non-rebreather mask second choice). Ambulance windows will be open (if possible) and ventilation system turned on full (not recycle air, fresh air input) whenever possible. As determined by the local public health officials, members will wear high efficiency particulate air respirators when traveling (for periods in excess of twenty (20) minutes) with a patient with confirmed or suspected infectious pulmonary tuberculosis.

Members will remove personal protective equipment after leaving the work area and as soon as possible if contaminated. After use, members will place all PPE in

leak proof bags, color coded and marked as a biohazard and transported back to the hospital or station for proper disposal.

On-scene public relations will be handled by the department or agency Public Information Officer, if available. The senior line officer will assume this function in the absence of the Public Information Officer. Departments/agencies should reassure the public on the routine use of infection control PPE for the protection of all members and the victims they treat. The use of PPE does not imply that a victim may have a communicable disease.

Members will not release medical information on scene. Media queries will be referred to the Department Public Information Officer or Chief. Town of Halifax members will maintain patient confidentiality always. When a patient has an infectious disease, information regarding the specific nature of the disease should not be given "over the air" unless absolutely medically necessary.

At conclusion of on-scene operations, members will remove all potentially contaminated patient care equipment for appropriate disposal or decontamination and reuse.

Personnel doing invasive procedures, both in Basic Life Support (BLS) and Advanced Life Support (ALS) procedures or procedures with a high probability of contact with body fluids, will comply with the following guidelines when doing stated procedures:

Endotracheal Intubation, Esophageal Obturator Airway (EOA), Pharyngeal- Tracheal Lumen (PTL) Airway, Combitube (dual lumen airway), Laryngeal Mask (LMA), Naso- and Oropharyngeal Airways (NPA/OPA) and other airway adjuncts (including oral/nasal suctioning and manually clearing/cleaning the airway).

Use personal protective equipment (PPE) and protective barriers to prevent exposure to blood, body fluids containing visible blood and other fluids to which body substance isolation apply.

At a minimum, use gloves (sterile surgical or non sterile examination).

Eye Protection, in the form of goggles or a face shield and face masks shall be worn if splashing is likely.

In a trauma situation, where substantial visible blood is present, the providers may consider the use of gowns.

Suctioning patient airways will only be done by mechanical means, e.g., portable suction unit, on-board suction unit, V-Vac device (or similar), etc.

Emergency Childbirth

Use personal protective equipment (PPE) and protective barriers to prevent exposure to blood, body fluids containing visible blood and other fluids to which body substance isolation apply.

At a minimum, use gloves (sterile surgical or non sterile examination).

Eye protection, in the form of goggles or a face shield and face masks shall be worn if splashing is likely.

With the high probability of large amounts of fluid present, the CDC recommends the use of gowns.

Controlling Bleeding, wound management and management of any body fluids.

Use personal protective equipment (PPE) and protective barriers to prevent exposure to blood, body fluids containing visible blood and other fluids to which body substance isolation apply.

As a minimum, use gloves (sterile surgical or non sterile examination).

Eye protection, in the form of goggles or a face shield and face masks shall be worn if splashing is likely (bleeding control with spurting blood, substantial trauma, etc.).

With the high probability of splashing present, the CDC recommends the use of gowns.

Vital signs. If no blood or visible body fluids present, the likelihood of contamination is minimal. The CDC does not make a recommendation requiring the use of gloves, gowns, masks or protective eye wear.

29.9 POST-RESPONSE

Upon delivery of the patient to the hospital or return to quarters, members will remove contaminated equipment and replace it with clean equipment. Crew members will replenish supplies of PPE on response vehicles.

The department will store contaminated equipment in the decontamination area. Members will clean and decontaminate equipment as soon as practical.

Members will store disposable equipment and other biohazard waste generated during on-scene operations in the biohazard area in appropriate leak proof containers. Members will close sharps containers, when full and dispose of them properly.

Gloves will be worn for all contact with contaminated equipment or materials. Members will use other personal protective equipment (PPE) depending on splash or spill potential. Members may use Heavy-duty utility gloves for cleaning, disinfecting or decontamination of equipment.

Eating, drinking, smoking, handling contact lenses, applying cosmetics or talking on personal cellular phones are prohibited during cleaning or decontamination procedures.

Members will decontaminate work surfaces with an appropriate disinfectant after completion of procedures and after spillage or contamination with blood or potentially infectious materials. Members will also decontaminate seats on response vehicles, contaminated with body fluids from soiled PPE, upon return to station.

Members will clean contaminated structural firefighting gear according to manufacturer's recommendations found on attached label. Turnout gear will be air dried. Do not use chlorine bleach on structural firefighting gear, as it may impair the gear's fire-retardant properties.

Contaminated boots will be brush-scrubbed with a solution of hot, soapy water, rinsed with clean water and allowed to air dry.

Remove and change contaminated work clothes for clean clothes. The member will shower if body fluids were in contact with skin under clothes.

Members should launder contaminated work clothes at the station using hot water. Under no circumstances should contaminated work clothes be laundered at home by any member.

Infectious waste generated during cleaning and decontamination operations will be properly bagged and placed in the biohazard disposal area.

The following levels of decontamination will be adhered to by members of this department/agency:

Sterilization. Destroys all microorganisms including highly resistant bacterial spores. Used for instruments that penetrate the skin or contact normally sterile areas of the body during invasive procedures. The only methods approved include steam under pressure (autoclave), gas process (ethylene oxide), immersion in an EPA approved chemical sterilizing agent for a prolonged period (6-10 hours), and liquid chemical sterilization for instruments that cannot be sterilized with heat.

High level disinfection. Destroys all microorganisms except large numbers of bacterial spores. For reusable equipment that has contacted mucous membranes. The following methods of decontamination will achieve this level of disinfection: Hot water pasteurization by placing articles in water 176-212 F for 30 minutes, or immersion in an approved EPA chemical sterilizing agent for 10-45 minutes in accordance with manufacturer's instructions.

Intermediate level disinfection. Destroys tuberculosis bacteria, vegetative bacteria, most viruses and fungi, but not bacterial spores. For surfaces that only contact intact skin and have been visibly contaminated with body fluids. The following methods of decontamination will achieve this level of disinfection: Wiping with an EPA registered disinfectant/chemical germicide that kills tuberculocidal activity, wiping with a commercially available hard surface germicide, or wiping with a 1:100 chlorine bleach to water solution (1/4 cup bleach to one gallon of water, mixed within 24 hours of use).

Low level disinfection. Destroys most bacteria, some viruses and fungi, but not tuberculosis bacteria or bacterial spores. For routine cleaning or removal of soiling when no body fluids are visible. The following methods of decontamination will achieve this level of disinfection: Wiping with an EPA registered hospital disinfectant.

For equipment decontamination, manufacturers recommendations should be consulted to ensure that products will not be adversely affected by the decontamination process. Items visibly contaminated with body fluids or blood require a higher level of decontamination than if blood is not present. The following procedures will be used for equipment decontamination (based on Silent Wars and guidelines "published by the Centers for Disease Control and Prevention:

| Equipment | Decontamination |
|---|------------------------------------|
| Airway Bag | High Level Disinfection |
| Airways | Disposal |
| Antishock trousers | High Level Disinfection |
| Backboards | Intermediate Level Disinfection |
| Bedpans | Disposal |
| Bite blocks | Disposal |
| Blood pressure cuffs | Low Level Disinfection |
| Bulb syringe | Disposal |
| Cervical collars | Disposal or Low Level Disinfection |
| Cold or hot packs | Disposal |
| Dressings, if package open or wet | Disposal |
| Emesis basin | Disposal |
| Endotracheal tubes, including styletes | Disposal |
| Intravenous poles | Low Level Disinfection |
| Laryngoscope blades | High level Disinfection |
| Magill Forceps | High level Disinfection |
| Monitor, Defibrillator & Cables | Low Level Disinfection |
| Needles/Syringes | Disposal |
| Other Electronic Equipment | Low Level Disinfection |
| Oxygen Equipment, tubing, masks, etc. | Disposal |
| Oxygen Flow Meter, regulator, and tanks | Low Level Disinfection |
| Penlights | Low Level Disinfection |
| Personal Equipment | Washing and Low Level Disinfection |
| Pillows | Disposal or Low Level Disinfection |
| Pocket Masks | Disposal |
| Restraints | Washing and Low Level Disinfection |
| Scissors | Low Level Disinfection |
| Splints | Intermediate Level Disinfection |
| Stethoscope | Low Level Disinfection |
| Straps (Stretcher) | Washing and Low Level Disinfection |
| Stretcher | Intermediate Level Disinfection |
| Suction Equipment | Disposal |
| Urinals | Disposal |

29.10 POST-EXPOSURE PROTOCOLS

Any member exposed to potentially infectious material will immediately wash the exposed area with soap and water or saline eye wash if the eyes or other mucous membranes are involved.

Any member having an occupational exposure to a body fluid will:

Immediately clean the affected area with an alcohol wipe or alcohol based cleaning solution (waterless soap). If the individual notices any burning from the alcohol, he/she will note it in his/her report (indicative of open skin on the provider). If the injury involved a needle stick, members will attempt to make the injured site bleed for a few seconds before cleaning it with alcohol/alcohol based cleaner.

As soon as possible, clean the affected area with soap and water.

Report the exposure to his or her supervisor.

Complete the DPH "Unprotected Exposure Form"

Report the exposure to the departments infection control officer and to the receiving hospital.

The station will maintain a supply of Unprotected Exposure Forms. Emergency Departments at the hospitals where this department normally transports patients will have a supply of DPH Unprotected Exposure Forms available in the emergency department.

Unless otherwise established, department members or infection control officers will submit their exposure report forms to the medical facility's infection control provider (ICP) or in his/her absence, to the charge nurse in the Emergency Department. A copy shall be forwarded to the Department's Designated Infection Control Officer.

The member will fill out a DPH "Unprotected Exposure Form" prior to leaving the receiving facility for any of the following exposures:

Needle stick injury

Break in skin caused by a potentially contaminated object.

Splash of blood or other potentially infectious material into eyes, mucous membranes or non-intact skin.

Mouth-to-mouth resuscitation without barrier device.

Other exposure that the member may feel is significant.

The report will include details of the task the member was doing, the means of transmission, the portal of entry and the type of personal protective equipment (PPE) in use at the time. Format for the DPH Unprotected Exposure Form, appears in Appendix A.

In the event you did not accompany the patient to the hospital you shall bring the completed DPH Unprotected Exposure Form to the receiving facility within 24 hours of the exposure.

The designated hospital or receiving facility Infection control Person/Officer will evaluate the report for exposure hazards. If a possible exposure occurred, the hospital or receiving facility Infection Control Person/Officer will arrange for medical evaluation by a Physician or designee no later than 48 hours post-exposure. If no exposure took place, the hospital or receiving facility Infection Control Person/Officer will counsel the member on exposure hazards. The hospital or receiving facility will complete the evaluation of the communicable disease exposure report, showing disposition of medical management and inform the member of the outcome. The hospital or receiving facility Infection control Person/Officer will inform the department's Infection Control Officer of the receipt and procession of the DPH unprotected Exposure Report and the resolution of the reported exposure (within one week of initial report and maintaining member confidentiality).

The department's Infection Control Officer will perform or refer members to, infection control retraining or for stress management counseling if needed. Spousal counseling will be available. The department's Infection Control Officer will follow-up (one week after initial report) reported exposures with the hospital's or other receiving facility's Infection Control Person/Officer, discussing only administrative information, maintaining patient confidentiality.

The member will inform the hospital or receiving facility Infection Control Person/Officer that a possible communicable disease exposure took place and request an infectious disease determination, as provided under the Ryan White Act of 1990. The receiving medical facility's Infection Control Person/Officer will trace the source patient and will request for consent to test the source patient for HIV and HBV. The source patient has the right to refuse such testing under present regulations.

The Department Physician or designee will provide appropriate diagnostic workup and treatment of members with communicable disease exposures. Services will include long-term follow-up and member/spousal counseling.

Under the Ryan White CARE Act and Code of Massachusetts regulations, medical treatment facilities will notify the Department Infection Control Officer of any patient transported by members of the department with a diagnosis of an airborne transmissible disease considered dangerous to the public health. When so notified, the Infection Control Officer will contact members involved and schedule medical evaluations with the Department Physician, if appropriate.

Although not required by the Ryan White Act, medical treatment facilities may provide similar notification of diagnosis of bloodborne or other potentially communicable disease if a member provided care or transportation to the source patient and if disease transmission could have taken place. This policy will be carried out through cooperative agreements between medical treatment facilities and the department. All persons involved with an incident will preserve the

patient's confidentiality in any notification procedure.

The Fire chief will assume the duties of the Infection Control Officer in his/her absence.

The department will use specific post-exposure protocols current at the time of exposure.

29.11 COMPLIANCE AND QUALITY MONITORING/PROGRAM EVALUATION

Compliance and quality monitoring.

The Infection Control Officer will collect compliance and quality monitoring data including:

Inspection of station/agency facilities.

Observation of on-scene activities.

Analysis of reported exposures to communicable diseases.

The Department Designated Infection Control Officer will submit a quarterly quality and compliance report to the Chief of the department and the EMS Coordinator.

Program evaluation

The Designated Infection Control Officer, the Fire Chief and the EMS Coordinator will reevaluate the Infection Control Program, at least annually, to ensure that the program is both appropriate and effective.

The D.I.C.O. will continually reevaluate the Infection Control Program, to reflect any significant changes in assigned tasks or procedures; in medical knowledge related to infection control; or in regulatory matters.

The Department Health Care Provider will actively participate in program reevaluation to ensure that the program remains up to date.

29.12 EXPOSURE CONTROL PLAN.

Purpose. To identify those tasks and corresponding job classifications for which it can be reasonably anticipated that an exposure to blood, body fluids or other potentially infectious materials may occur; to establish a schedule for implementation of the Town of Halifax infection control plan; and to identify the procedure for the evaluation of circumstances surrounding exposure incidents.

Exposure Determination

The following tasks are reasonably anticipated to involve exposure to blood, body fluids or other potentially infectious materials or airborne pathogens:

provision of emergency medical care to injured or ill patients.

Rescue of victims from hostile environments including burning structures or vehicles, water contaminated atmospheres or oxygen deficient atmospheres.

Extrication of persons from vehicles, machinery, or collapsed excavations or structures.

Recovery and/or removal of bodies from any situation cited above.

Response to hazardous materials emergencies, both transportation and fixed-site, involving potentially infectious substances.

The following job classifications are reasonably anticipated to involve exposure to blood, body fluids or other potentially infectious substances in the performance of their duties:

Fire fighter

Emergency Medical Technician (3) Driver/operator

First Responder

Company officer

Other emergency personnel

Any emergency response provider identified by the Town of Halifax Fire Chief or DICO as reasonably at risk for exposure to blood borne or airborne pathogens.

The following job classifications are not reasonably anticipated to involve exposure to blood, body fluids or other potentially infectious substances in the performance of their duties and the department does not consider at risk for exposure:

Civilian personnel

Any uniformed personnel not in positions which require EMS certification, first responder training, or reasonably anticipated hands-on emergency service.

29.13 ROLES AND RESPONSIBILITIES

Chief of Department. The final responsibility for the health and welfare of all members remains that of the Chief of Department. He/she may delegate the task of managing the department's Occupational Health and Safety and Infection Control programs to appropriate staff officers and committees.

The Safety Officer, besides duties described, in other documents, will be responsible for overseeing the department's safety and infection control program. This officer will help the Infection Control Officer in the performance of his or her duties.

Designated Infection Control Officer. The department Chief will appoint an Infection Control Officer. This person should have five or more years of recent fire/EMS experience and have current Emergency Medical Technician certification.

The Infection Control Officer will:

Collect quality assurance data on the department Infection Control Program, based on data from the Infectious Disease Exposure Control Form and training records and present the data to the Chief and EMS Coordinator on a quarterly basis.

Notify the Department Chief and the EMS Coordinator if quality assurance data suggest a safety hazard requiring immediate attention. Make recommendations to department staff.

Conduct spot inspections of on-scene and station operations to ensure compliance with departmental infection control policy. Maintain records of such inspections.

Coordinate the immunization program with the department physician and maintain immunization records at the department and at the physician's office.

Maintain a confidential database of exposure and treatment given, with and at the office of the Department physician.

Provide technical expertise to the Training Officer on development of the infection control curriculum. Insure training on pertinent information is provided. Ensure that the training officer as well as the D.I.C.O. maintains infection control training records. Provides formal and informal training when requested.

Keep abreast of new developments in infection control and make appropriate recommendations to the Department Chief.

Serve as the liaison between department officers, staff, and members with medical facilities, public health personnel and Regional staff.

Training Officer. Besides existing duties, the Training Officer will work in conjunction with the D.I.C.O. and will be responsible for the development and delivery of a comprehensive infection control program which complies with OSHA Regulation 29 CFR Part 1910.1030 and Massachusetts General Law (MGL) Chapter 111 and 111C and in the Massachusetts Department of Public Health (DPH) regulations 105 CMR 170.000, 171.000, and 172.000. The department Physician and Infection Control Officer will provide technical assistance.

Department Physician. Is in charge of the Health Maintenance Program within the Department. The department should develop a program that provides baseline and annual physical and return-to-work determinations. The Department Physician, with the Infection Control Officer, will:

Develop and carry out an immunization program.

Develop and carry out a post-exposure program.

Provide technical assistance guidance to the Infection Control program.

Provide technical help and guidance in the development of appropriate Infection Control training.

Maintain confidentiality of all medical and exposure records.

Department Supervisors, including Chief Officers and Company Officers will:

Support and enforce compliance with the Infection Control Program.

Correct any unsafe acts and refer members for remedial infection control training, if required.

Mandate safe operating practices on-scene and in- station.

Refer for medical evaluation any member possibly unfit for work for infection control or other reasons.

Company Officers will not allow new members to assume emergency response duties until designated personnel complete initial medical evaluation and immunizations of the new member and the new member completes infection control training.

Incident Commander or person in charge, during an incident will:

Ensure members under his/her command use appropriate personal protective equipment.

Ensure that contaminated equipment is properly packaged and cleaned or disposed of.

Ensure emergency response personnel clean the incident scene of all materials generated as a result of patient care

If the emergency responder suspects a communicable disease at an emergency incident, the incident commander will:

Take immediate steps to protect the providers from direct contact.

Restrict personnel to only those necessary to patient care.

If the emergency responder suspects an airborne transmitted disease, ensure a mask, if appropriate, covers the patient's mouth and nose and/or the EMS provider uses a mask.

Advise the department Infection Control Officer of the possible exposure situation. Ensure exposed providers complete Region V Infectious Disease Exposure Control Form and DPH unprotected Exposure Trip Form.

Maintain confidentiality for patient and personnel involved.

Members

Assume final responsibility for own health and safety.

Always use appropriate PPE as the situation dictates and follow body substance isolation techniques for the task being performed.

Report any suspected occupational exposure or exposure incident to communicable disease to their department officers and submit DPH "Unprotected Exposure Trip Form" to the hospital where the service delivered the patient.

Report any diagnosis of communicable disease (occupational or non-occupational) to the department Infection Control Officer. The Infection Control Officer will maintain patient confidentiality and will advise the department Chief of the status of the member.

Know where the department's infection control plan and applicable regulations are located.

Hospitals and Medical Treatment Facilities. The hospital or medical treatment facility (while meeting patient confidentiality and while complying with state and federal rules) will:

When requested by a pre-hospital provider (resulting from a possible exposure to blood, body fluids or other potential infectious material) by receipt of the DPH Unprotected Exposure Trip Form determine contagiousness of patient and notify pre-hospital provider, through the Department's Designated Infection Control Officer, of results.

Notify the pre-hospital service that a hospital physician diagnosed a patient delivered to the medical treatment facility by the service with a possible contagious disease.

Advise the pre-hospital provider on the need for the establishment of a base-line/initial and later medical tests for exposed pre-hospital emergency medical service providers.

APPENDIX A
INFECTION CONTROL
Training Documentation

Employee Name: _____ Date: _____

Address: _____

Subject: _____ OEMS # _____

Instructor: _____

*Copies of lesson plans, instructor qualifications, and rosters for individual classes maintained within the Designated Infection Control Officers records.

APPENDIX B

EXPOSURE PROTOCOL

- 1. EXPOSURE OCCURS**
- 2. WASH EXPOSED AREA(S)**
- 3. NOTIFY OFFICER IN CHARGE**
- 4. FILL OUT UNPROTECTED EXPOSURE FORM AT THE HOSPITAL**
- 5. MAKE TWO (2) COPIES**
- 6. GIVE ORIGINAL TO HOSPITAL INFECTION CONTROL OFFICER**
- 7. GIVE ONE (1) COPY TO HFD DESIGNATED INFECTION CONTROL OFFICER**
- 8. KEEP ONE (1) COPY FOR YOUR OWN FILES**

The Hospital will:

Evaluate the exposure and if an exposure occurred, the hospital's DICO will provide the Halifax DICO with:

- a. Name of disease involved.
- b. Medical actions that should be taken.
- c. Date of emergency.

The Halifax Fire Department's DICO will:

Evaluate the exposure and if an exposure occurred the DICO will counsel and send the member for follow-up and make suggestions to the department for engineering or procedural changes.

HALIFAX FIRE DEPARTMENT

HEPATITIS-B VACCINE

NAME (PRINT): _____ SS# _____

ADDRESS: _____ DOB: _____

I hereby authorize _____ to administer the Hepatitis B Vaccine.

I understand this immunization consists of three (3) doses of vaccine; the two initial doses will be given one month apart and a booster dose will be given six months after the first dose. I will schedule follow-up doses with my department's contact person. I understand that I must attend an infectious disease education class before receiving this immunization.

I have read and understand the information provided by the Town of Halifax on the vaccine. I DO NOT have an allergy to yeast or molds.

SIGNATURE

DATE