Delaware County Emergency Medical Service  
Standard Operating Guidelines

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The purpose of this guideline is to identify those tasks for which it can be reasonably anticipated that exposure to potentially infectious bodily fluids and materials may occur, and to identify those tasks for which it can be reasonably anticipated that injuries might be incurred. The following tasks are reasonably anticipated to involve exposure to potentially infectious bodily fluids and materials and/or involve exposure to potentially hazardous environments in which injuries may be incurred.

- Emergency medical care to patients
- Rescue of victims from hostile environments
- Body recovery and/or body removal
- Operation of Emergency Apparatus

The job classifications listed below are anticipated to involve potential exposure to infectious substances and hostile environments, which may be hazardous to the employee’s health.

- Emergency Medical Technician - Intermediate and Paramedic
- EMS Lieutenant and Captain
- EMS Training Officer
- EMS Assistant Chief and EMS Chief
- EMS Division Maintenance Personal

This policy is to provide a comprehensive infection control and health maintenance plan, which maximizes protection against occupationally acquired communicable diseases and provides health maintenance and assistance programs for the prevention of communicable and non-communicable diseases and/or physical impairments.

This policy applies to all employees of Delaware County EMS who provide emergency medical services to the residents of Delaware County and the surrounding communities, and support to the division.

**IT IS THE POLICY OF DELAWARE COUNTY EMS:**

- To provide emergency medical services to the public without regard to race, gender, age, creed, religion and known or suspected diagnosis of disease, whether communicable or non-communicable in nature.
- To provide all employees with the necessary training in personal protective equipment, immunizations, assistance programs and health maintenance programs needed for the protection from communicable and non-communicable diseases and job related injuries and/or impairments.
- To encourage participation in health and maintenance training programs. To recognize the need for work restrictions based on infection control concerns and/or physical, mental impairments incurred by any employees.
- To prohibit discrimination of any employee for health reasons.
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- To regard all employees’ medical information as confidential medical information, which will be protected, and never released without the signed written consent of the employee.

Roles and Responsibilities:

The Chief of the Department - the EMS Chief has the authority to delegate Staff Officers to manage the tasks necessary to implement and sustain the infection control program; however the Chief is ultimately responsible for the health and welfare of all employees while performing the duties required on emergency scenes and around the stations.

Command Staff and Company Officers – The responsibilities of all promoted officers within DCEMS include:

- Support and enforce compliance of the infection control plan.
- Shall correct unsafe acts, which violate any section of the infection control plan
- Mandate safe operating practice on and away from the scene.
- Refer for medical evaluation members, which may be unfit to assume emergency response duties due to communicable or non-communicable disease.

The Infection Control Officer – will serve as the departments designated contact as required by the Ryan White comprehensive Aids resource act of 1990. This position is appointed by the Chief. The Infection Control Officer responsibilities include:

- Develop and implement the infection control plan (this document), which complies with OSHA regulation 29 CFR part 1910, 1030.
- Develop criteria for the purchase of infectious control personal protective equipment and determine stocking levels for the station and response vehicles.
- Evaluate possible employees’ exposure to communicable diseases and coordinate communications between the department and treating physician and hospital.
- Conduct monthly inspections of on-scene and station operations to insure compliance with department policies.
- Collect quality assurance data of the program to assure compliance.
- Notify the Assistant Chief or Chief if data indicates a safety hazard requiring immediate attention.
- Work with the Delaware County Safety Officer to assure that Department Policy and Delaware County Policy are in agreeable and not in conflict with each other.
- Coordinate the immunization program with the department’s physician medical director and maintain immunization records and maintain a database of exposures and treatment received.
- Provide technical expertise to the Training Officer concerning the Infection Control Plan.
- Keep abreast of new developments which apply to the program and make appropriate recommendation to the safety committee.
Safety Committee - the safety committee shall consist of the:

- EMS Chief and/or Assistant Chief
- All Department Command Staff
- Any other interested members of the department

The committee will periodically review and revise this policy when required, and will meet quarterly to discuss safety and infection control issues.

All DCEMS Employees: - The responsibilities of ALL employees include:

- Assume the ultimate responsibility for their own health and safety.
- Abide by the regulations outlined herein.
- Report any suspected exposure, whether biological, mechanical or chemical in nature to their Company Officer or the Command Staff.
- Report any diagnosis of communicable disease, whether occupational or non-occupational, to their Company Officer or the Command Staff.
- Report any diagnosis of health related problems, whether physical, mental or emotional, to their Company Officer or the Command Staff.

Infection control and health maintenance program compliance requirements:

- All employees shall be required to comply with the infection control policy set forth.
- All employees are required to participate in any annual training held and any amendments or changes in the infection control plan. Any changes in infection control will be posted for (30) thirty days and then will be in effect, unless otherwise directed.
- When non-compliance by an employee is noted, the employee shall receive counseling, education and/or training. In the event this does not resolve the non-compliance, appropriate disciplinary action shall be considered in accordance with the contract between the County and the IAEP Local R7-11. Non-compliance shall be documented in the employees file.
- If non-compliance is due to unclear and/or inadequate standard operating procedures, revisions will be required.
- Evaluation of the infectious control plan shall be evaluated annually and shall be updated if necessary.

Infection control training - All employees are required to complete the following:

- Initial infectious control training upon receiving appointment to Delaware County EMS
- Refresher training annually on infectious control.
- All training will be in compliance with OSHA regulation 29 CFR part 1910.1030 and shall include:
  - An accessible copy of OSHA reg.29 CFR part 1910.1030
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- A general explanation of the epidemiology and systems of blood borne diseases
- An explanation of the modes of transmission of blood borne pathogens
- An explanation of the department’s exposure control plan
- Training in recognizing tasks that may involve exposure to blood borne pathogens
- An explanation for the basis for selection of PPE
- Information on the location, use, removal, handling, decontamination and disposal of PPE
- Information on the appropriate actions to take should exposure to potentially infectious material occur
- Information on post-exposure evaluation
- Information on label and color-coding of biohazard materials
- Information on storage and disposal of biohazard materials
- The infection control training Officer shall be knowledgeable in this program’s components
- Written records will be maintained for (3) three years from the date which training occurred

Training records shall include:

- Date of training
- Course Objectives and it’s contents
- Instructor’s name and credentials
- Name of all employees attending training

Universal Precautions:

- All employees shall assume that all body fluids are infectious and all providers shall be required to adhere to all universal precautions.
- When in doubt select maximal PPE rather than minimal PPE
- **Gloves are to be worn for all medical calls. At no time shall any employee of Delaware County EMS have any contact with a patient without gloves being worn.**
- Any time that DCEMS personnel have been in contact with a patient, they shall wash their hands at the completion of the run or at the time they turn the patient over to the receiving hospital.
- When splattering, splashes of body fluids are likely to occur, eye/face protection, also a gown are to be worn.
- Prior to placing equipment back in service, all equipment shall be cleaned and disinfected.
- All supplies used at the scene are to be placed in the appropriate waste receptacles and disposed of properly.
- Standards for personal protective equipment will be developed by the Safety Committee and updated or modified as needed.
- Delaware County EMS is responsible for the supply repair or replacement and safe disposal of infection control personal protection equipment.
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- At the beginning of each shift change, the medic in charge will inventory all personal protective equipment and check to ensure that all emergency apparatus is fully stocked and intact. If for any reason equipment is in need of replacement or repair the on duty Captain will be advised. Available personal protective equipment shall include but not be limited to:
  - Non-sterile latex gloves
  - Face mask
  - Eye protection
  - Fluid impervious gowns
  - Sharps container
  - Biohazard bags
  - Shoe covers

Medic units

- The amount, type and location of personal protection equipment will be standardized on all DCEMS vehicles.
- Each medic unit is to carry non-sterile latex gloves, eye and face protection, gowns or trauma aprons, also a non-water based hand washing solution and paper towels.
- Each medic unit shall carry at least one, closable, puncture proof and leak proof sharps container. Sharps containers shall be color-coded, labeled as a biohazard and must be easily accessible.
- Any time the sharps container becomes full, it shall be disposed at the hospital in the proper location. A new sharps container shall be replaced at the same time.
- Face shields on rescue helmets shall not be acceptable for infection control purposes.
- When any personnel are performing or assisting with invasive procedures, all personnel shall utilize the appropriate barrier precautions when the possibilities exist of exposure to body fluids, either from contaminated instruments and/or direct contact with any patient’s body fluids.
- All personnel performing or assisting with invasive procedures shall exercise extreme caution to prevent injuries caused by sharp instruments. After use these instruments shall be placed in a puncture resistant container. To prevent needle stick injuries, needles should never be recapped.
- When a run consist of more than (1) one patient, new gloves shall be donned between patients to avoid cross-contamination of patients. We must protect THEM as well!
- Avoid operating emergency vehicles while wearing contaminated gloves. If possible, take a moment to remove and properly dispose of your gloves, use a waterless, alcohol-based hand cleaner, and don a new pair of gloves upon arrival at the hospital.
- All reusable contaminated items are to be cleaned with a 10% Clorox solution or acceptable cleaning solution and air dried before being put back into service.
- The medic unit shall be inspected and decontaminated if needed prior to departing from the receiving hospital.
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Duty Uniforms

DCEMS duty uniforms shall not be worn home after an employee’s shift, so as to avoid carrying contaminates home to the employee’s family. If absolutely necessary, only a clean uniform that has NOT been worn on an emergency response may be worn home. All routine laundering of uniforms should take place in the station washing machines, using the detergent provided by the department, in accordance to the uniform manufacture’s recommendations.

If an employee’s uniform has sustained a minor contamination during the care of a patient, it may be worn back to the station, but shall be washed in station and a clean uniform donned before participating in any further emergency responses.

If an employee’s uniform receives heavy contamination, it shall be removed at the Emergency Room, bagged and returned to the station for cleaning. If an employee’s uniform needs to be changed at the Emergency Room, the employee shall don a set of hospital scrubs until he/she returns to the station. At that time the heavily contaminated uniform shall receive two (2) wash cycles using the detergent provided by the department. After washing of employee’s uniform is completed, the washing machine shall be put through a third cycle EMPTY using a 10% Clorox solution to ensure decontamination of the washing machine. Afterwards, run the washing machine one last time rinsing it well to assure that all of the Clorox solution has been removed to avoid damage to future loads of uniforms.

Rescue / Protective Gear

At no time shall Clorox be used when washing Rescue / Protective Gear. Gear shall always be washed in accordance to the manufacture’s specifications. If the gear becomes contaminated with blood or body fluids, it shall be washed immediately after completion of the run. If heavily contaminated, it shall be run thru two wash cycles, then the washing machine shall be put through a third wash cycle EMPTY using a 10% Clorox solution. Afterwards, run the washing machine one last time rinsing it well to assure that all of the Clorox solution has been removed to avoid damage to future loads of uniforms.

At any time that contaminated duty uniforms or gear need to be washed, gloves shall be worn when handling. At the completion, gloves shall be disposed of in the proper manner.

Uniforms or gear, which has been contaminated with any hazardous materials, shall be handled on a case by case basis. It will be up to the Captain on duty to determine the severity of the contamination and the extent needed for decontamination or disposal.

Medic Vehicles

The apparatus shall be cleaned and disinfected at the hospital on any run involving contamination of the vehicle with body fluids. To disinfect the medic use a 10% Clorox bleach mixture. Most of the receiving
hospitals have a disinfectant solution and cleaning supplies available. The Bio waste container should also be changed and disposed of at the hospital after each run.

Delaware County EMS has designated the large sink in each station as the bio decontamination area. This area shall be used for cleaning all emergency medical supplies and equipment. This decontamination area shall be kept clean. This area shall be decontaminated after each use using a 10% Clorox bleach mixture or appropriate disinfectant agent. Any waste generated from the decontamination area shall be placed in a hazardous container bag and disposed of in the proper manner.

**General house keeping**

It is the responsibility of all employees of Delaware County EMS to maintain the cleanliness and order of the station and equipment. Use the proper cleaning equipment and solutions for the task. Do a thorough cleaning.

**Non contaminated or contaminated exposures**

In the case a clean needle stick, fresh from its sterile container, if your tetanus shot is current, clean the wound, notify your Company Officer and on-duty Captain, and file a Delaware County incident report.

In the case of a contaminated needle stick, or any body fluid exposure to broken skin or mucous membranes, generate a run report on in the case of a contaminated needle stick, or any body fluid exposure to broken skin or mucous membranes, file a Delaware County incident report, a needle stick report, notify your Company Officer and the on-duty Captain, and follow the following guidelines.

- Clean the wound thoroughly with disinfectant soap and water. Do not attempt to “bleed” the wound.
- Tetanus prophylaxis as needed
- If the injured employee has had two (2) or more heptavax or recombivax B shots, an anti hepatitis B surface antigen is to be obtained on the injured employee.
- If the injured employee has not had at least two (2) shots of heptavax B, he/she is to receive HBIG and recombivax B.
- Give the appropriate portion of the incident report to the attending physician as indicated.
- Request that the patient be tested for serologic evidence of HIV and hepatitis B, a request in writing must be submitted along with the exposure form to the receiving hospital. Document the injury and why you suspect an exposure to an infectious disease.
- If the patient refuses the HIV test, the employee may request this testing through the receiving hospitals infectious control procedures. If the hospital refuses to order the testing, the employee may petition probate court for an order requiring the testing. To do this the employee must have an HIV test performed on him/her self within seven (7) days of the documented exposure.
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- If the patient is tested negative for HIV antibody, no further follow up for the employee is necessary unless the patient is at a high risk for HIV infection. In that case, follow up testing after a period of (12) weeks may be obtained.
- If the patient is VDRL positive, or at a high risk of being exposed to syphilis, a follow up VDRL test shall be performed at (1) month and (3) months following documented exposure. During this time, any skin eruptions, especially at the site of the inoculation, should receive prompt medical evaluation.
- Tetanus toxoid and hepatitis screening or vaccines must be obtained on the day of exposure at the hospital emergency department.
- Anytime you receive testing, treatment and/or vaccine of any kind for any exposure to contagious infectious disease, you must turn in a completed Delaware County incident report to your Company Officer or Captain by the end of that duty shift.

Specific Exposures

Meningococcal Meningitis:

- In cases of suspected meningococcal meningitis, prophylaxis is begun on the basis of the patient’s spinal fluid gram stain. This is usually available within a few hours of the patient’s arrival in the emergency department. Treatment with Rifampin is only needed for direct contact with saliva or vomit, or prolonged close contact. The determination is made by the attending emergency department physician.
- You must notify the Captain on duty immediately when you feel that you may have been exposed to meningitis.

Tuberculosis:

- In cases of tuberculosis, a repeated skin test if the employee has had a prior negative skin test is to be done in within 8 to 12 weeks of the exposure. You will be referred to employee health for testing and counseling.

SARS, or any patient with a suspected communicable respiratory illness;

- If pre-arrival information has been obtained to alert you to the possibility of the potential risk, then only one crew person should enter the scene in protective gear to assess the situation, and other crew persons wait outside until needed.
- SARS patients should be transported using the minimum number of EMS personnel in the patient compartment of the Medic, and without any other passengers or patients on-board.
- Wearing protective equipment - N95 rated mask protection, eye protection, gloves, and disposable surgical type gowns. This equipment is worn before entering the scene, and properly disposed of after the call. This is done for every call and patient transfer. Goggles or face shields must be worn in
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patient-care compartment and when working within six (6) feet of the patient. Corrective eyeglasses alone are not appropriate protection.

- Get as much info as possible before making contact with the patient. This may not be possible in some cases, however if you can obtain information before patient contact please do so. Receiving facilities must be notified of potential risk prior to transport of the patient.
- Cardiopulmonary resuscitation (CPR) should only be performed using a resuscitation bag-value mask equipped with HEPA filtration of expired air.
- Question the patient carefully:
  - Has the patient been out of the country recently, if so when and where?
  - Have they been to a hospital or doctors office recently, if so when and where? (Most of those quarantined were exposed to person in these environments)
  - Has anyone they live with or come close contact been sick recently, if so, when and what were the circumstances.

Issuing Authority:

DCEMS Chief Rob Farmer

08/01/2007 Date