

Infection Control Plan

Policy

It is the policy of (Name of Service):

- To regard all patient contacts as potentially infectious;
- To assure that each Emergency Services Provider (ESP) will observe Standard Precautions when dealing with the public. Transmission Based Precautions will be employed as necessary to manage body fluids and other potentially infectious material;
- To provide members of the service with the necessary training and testing of personal protective equipment (PPE) needed for protection from communicable disease;
- To regard all medical information as confidential;
- To encourage ESP to maintain an up-to-date vaccination status for preventable diseases as recommended by the Center of Disease Control (CDC) guidelines;
- To assure post exposure procedures be followed;
- To assure proper decontamination/cleaning of the ambulance;
- To assure proper decontamination/cleaning of the equipment; and
- To assure proper disposal of equipment and supplies.

Scope

All members of (Name of Service) who provide or assist with rescue or emergency medical services.

Purpose

Emergency Services Providers perform their duties in unpredictable situations with an increased potential for exposure to infectious disease. It is the purpose of this plan to provide a guideline, that when adhered to offers an effective means to reduce the risk of exposure for the ESP and the patient alike. Precautions delineated in this plan are intended to assist the ESP in the delivery of safe care for each patient encountered and to evaluate and report possible exposure to communicable disease as prescribed by the Emergency Medical Services Practice Act.

Prevention and Control of Infection

Standard Precautions & Transmission Based Precautions were developed by the Centers for Disease Control and Prevention (CDC) and Healthcare Infection Control Practices Advisory Committee (HICPAC) to minimize the risk of exposure and transmission of a given infectious disease. These practices are defined in the following sections and are adapted for use in an Emergency Medical Services context. All body substances should be treated as if they are potentially infectious and personal protective equipment should be utilized as required by the situation to prevent transmission.

Exposure Risk Reduction

Utilization of Standard Precautions, anticipation of the risk of exposure and appropriate use of Personal Protective Equipment (PPE) are the most important measures to decrease the risk of exposure. It is recommended that each ESP maintain a current status for vaccine preventable diseases.

Personal Protective Equipment

ESP will be equipped with or have ready access to the following Personal Protective Equipment (PPE), non-latex gloves, shielded face masks, safety goggles disposable sleeves or gowns, surgical masks and N-95 respirators. Equipment and supplies designated by the manufacturer as single use or disposable will not be reused and must be disposed of.

Modes of Transmission

Transmission of infectious disease can be reasonably anticipated during the provision of emergency care, rescue and body recovery/removal. Modes of transmission include:

- **Direct/Indirect Contact transmission** occurs when an infectious disease is spread through direct skin to skin contact with an infected person or through touching objects that have been in contact with the infected person.
- **Airborne transmission** occurs when a person breathes in very small respiratory particles that become airborne when an infected person coughs, sneezes, sings or talks.
- **Droplet transmission** takes place when respiratory droplets carrying infectious pathogens transmit infection when they travel directly from the respiratory tract of the infectious individual to susceptible mucosal surfaces of the recipient, generally over short distances (3 feet or less). Droplets are generated when the infected person coughs, sneezes, talks or sings. Procedures such as suctioning, endotracheal intubation, and cardiopulmonary resuscitation (CPR) also produce respiratory droplets.
- **Vector borne transmission** occurs via a bite from an infected insect or animal.

Standard Precautions

Standard precautions include adherence to each of the following components:

- **Hand Hygiene:** The single most important intervention employed to prevent infection is hand hygiene. Hands should be washed with soap and water when visibly soiled if at all possible. Alcohol gel and or wipes are acceptable if hands are not visibly soiled. Hand hygiene should be completed before and after every patient contact regardless of the use of gloves.
- **Respiratory Etiquette** includes coughing/sneezing into one's sleeve, covering the mouth/nose with a tissue and prompt disposal of used tissues, placing a surgical mask on a patient with a respiratory illness and hand hygiene after contact with respiratory secretions.
- **Gloves** should be utilized if contact with blood or body fluids or contaminated items such as linen or surfaces are anticipated.
- **Gowns** should be worn to protect clothing if the ESP anticipates exposure to blood or body fluids during the provision of care or when contact precautions are needed.
- **Mask/Goggles** (face mask with shield or surgical mask with goggles) should be utilized during procedures that may generate respiratory secretions or create splash of blood or body fluids
- **Sharps** – Activate the safety feature & disposed of in puncture proof containers. **DO NOT BEND, BREAK OR RECAP NEEDLES.**
- **All Linens** are considered contaminated and should be removed & bagged while wearing gloves. Supplies that are grossly contaminated with blood should be placed in a Bio/hazard bag and disposed of at the hospital according to the hospital policy.
- **Open Areas in Skin** – Cover with an appropriate dressing prior to assignment. Dressings should be changed as necessary during the shift.
- **DO NOT RESPOND IF SICK.** If the member has a fever, if they have been on antibiotics for less than 48 hours for a communicable disease or if they have open wounds or draining lesions that **cannot** be completely covered/contained by a dressing they should not report for service. This practice prevents peers and patients from exposure to said illness.

Transmission-Based Precautions

In addition to Standard Precautions, Transmission-Based Precautions are used for all patients with specific diseases or pathogens to contain highly transmissible and/or epidemiologically important agents and are based on the mode of transmission of the specific pathogen.

Transmission-based Precautions include Contact, Droplet and Airborne or may include a combination of these based on transmission mode.

Contact Precautions are used for diseases transmitted by contact with the patient or the patient's environment.

- **Personal Protective Equipment (PPE):** A gown and gloves should be worn during all interactions involving contact with the patient or the patient's environment. Don PPE upon entry to the patient's home and discard before leaving the delivery location.
- **Patient Transport:** Cover or contain potentially infectious body fluids or wounds before transport.
- **Environmental Measures:** All surfaces touched by the patient or ESP must be disinfected after transport. A general disinfectant is used for most situations. Meticulous environmental cleaning and use of products with a C-difficile inactivation label claim combined with strict hand hygiene and appropriate laundry practices are recommended to decrease transmission of C-difficile.

Droplet Precautions prevent transmission of diseases caused by large respiratory droplets (larger than 5 microns in size).

- **Personal Protective Equipment:** A surgical mask should be worn. Handle items contaminated with respiratory secretions (e.g., tissues, handkerchiefs) with gloves. Change PPE between patients. If the patient is unable to control secretions, a gown may also be necessary.
- **Patient Transport:** The patient should wear a surgical mask and follow respiratory hygiene and cough etiquette during transport. Once the patient is masked, the patient transporter does not need to wear a surgical mask.
- **Environmental Measures:** Disinfection of all surfaces touched by the patient or within 3 feet of the patient is required. A general disinfectant is used for most situations.

Airborne Precautions are used to prevent transmission of infectious organisms that remain suspended in the air for long periods of time (small particle residue [5 microns or smaller in size] of droplets) and may travel great distances.

- **Personal Protective Equipment:** Appropriate respirators include N-95 masks or PAPRs, gowns and gloves.
- **Patient Transport:** During transport, place a surgical mask on the patient and instruct him/her to observe respiratory hygiene and cough etiquette. Cover patient skin lesions with clean bandages and/or clean linens (if applicable). Transport personnel do not need to wear respiratory protection during transport if the patient is masked and skin lesions are covered. If ESP may come into contact with contaminated surfaces – gown and glove.
- **Environmental Measures:** Routine cleaning is standard. After transport, the unit should remain unoccupied with doors and windows open for one hour to allow for complete air exchange to occur.
- **Personal Restrictions:** Restrict susceptible healthcare workers from transporting patients known or suspected to have measles (rubeola), chickenpox or disseminated zoster (varicella zoster virus), and smallpox if other immune healthcare workers are available.

Post Exposure Procedures

Immediate action at the scene: Wash skin affected immediately with germicidal soap or soap and water. If mucous membranes are exposed, flush with water immediately. Remove contaminated clothing and package and tag as "BIOHAZARD" to avoid additional exposures.

Report all incidents involving any significant exposure **IMMEDIATELY** to the EMS officer in charge and to the Emergency Room Staff. Depending on the type of significant exposure time may be of the essence so immediate treatment should be sought. It is important that you follow the receiving hospital's procedure for testing following a significant exposure.

After delivery of the patient to the health care or alternate facility complete the ESP Significant Exposure Report Form and deliver each as noted on the front. Report can be found at: <http://dhhs.ne.gov/publichealth/NebraskaEMS/Resources/Significant%20Exposure%20Report%20Form.pdf>

Complete form and make copies of the original

- Original to: The Health Care or Alternate Receiving Facility
- One Copy to: The ESP Designated Physician
- One Copy to: The ESP Provider Agency
- One Copy to: The ESP provider

Discuss with your designated physician your exposure situation. This should take place soon after the exposure. Follow your physician's recommendation for treatment, testing, and behavior modifications. Be sure to have your physician contact the receiving physician or facility to request testing of the patient. Remember that all information is confidential. Complete all paperwork requested by your agency to ensure any potential benefits.

Before returning to your work site or home make, sure that you have decontaminated yourself and your clothing to assure that no cross contamination occurs.

If the responder's clothing or skin have become contaminated request the following when arriving at the hospital:

1. To be allowed to take a shower;
2. A bio/hazard bag to place contaminated clothing & disposal if necessary; and
3. Scrubs or other clothing to be worn home.

DECONTAMINATION OF AMBULANCE EQUIPMENT

The following procedure will be followed when decontaminating the ambulance and ambulance equipment:

1. GLOVES will be worn throughout the cleaning process.
2. EMERGENCY UNIT will be cleaned monthly or more frequently as needed.
3. INFECTIOUS WASTE BAG (Bio/Hazard) should be given to the hospitals to dispose of according to their policy.
4. DISPOSABLE EQUIPMENT will be used only once and thrown away.
5. COT will be cleaned with disinfectant and the sheets, blankets, and pillowcase will be changed after each run.
6. SUCTION EQUIPMENT will be disposed of and replaced after each use.
7. PATIENT TRANSPORT/TRANSFER EQUIPMENT that includes the KED, scoop stretcher and other devices will be sprayed with a disinfectant.
8. THE PATIENT CARE SUPPLY KITS will be emptied and cleaned with soap and water or as instructed by the manufacturer. Use a disinfectant solution on the nylon equipment bags. DO NOT USE BLEACH ON NYLON EQUIPMENT. Let bag air dry before packing equipment into the Kit. Dispose of any trauma supplies that have exceeded their expiration date or usefulness.

DISPOSAL OF CONTAMINATED EQUIPMENT AND SUPPLIES:

1. Contaminated equipment, clothing and supplies will be double-bagged in a biohazard bag and left with the receiving hospital for disposal.
2. All general supplies used in cleaning the ambulance or equipment that has not been exposed to blood or air contamination may be placed in the trash container or poured into the drainage system.

ALL CONTAMINATED EQUIPMENT, CLOTHING OR BEDDING WILL BE DISPOSED OF BY THE RECEIVING HOSPITAL. THE DISPOSAL OF CONTAMINATED SUPPLIES WILL BE DONE ACCORDING TO THE RECEIVING HOSPITAL'S POLICY.

References

OSHA Standards and Regulations Relating to Bloodborne Pathogens/Respiratory Protection 29CFR 1910.1030 and 1910.134 respectively.

Nebraska Statutes Rules and Regulations Relating to: Emergency Medical Services Title 172 NAC 12 (12-003.04D, D1, D2 Sanitation Standards)

Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings

<http://www.cdc.gov/ncidod/dhqp/pdf/isolation2007.pdf>

Infection Prevention and Control: Best practices Manual for Land Ambulance Paramedics Emergency Health Services Branch-Ontario Ministry of Health and Long-Term Care March 2007 Version 1.0

[http://www.ambulance-transition.com/pdf_documents/infection_prevention & control_best_practices_manual.pdf](http://www.ambulance-transition.com/pdf_documents/infection_prevention_%20control_best_practices_manual.pdf)

MEDICAL DIRECTION

As Physician Medical Director of the (Name of Service), I have read the guidelines and have endorsed this policy's use. I will serve as a resource for the department personnel regarding risk management, policy and procedure review, and evaluation of significant exposure incidents. I will serve as a liaison between the service and the personal physicians of the member in case there is an exposure.

Physician Medical Director

Date

EMS Officer

Date

APPENDIX A

CLEANING INSTRUCTIONS FOR AMBULANCE AND EQUIPMENT

CLEANING KEY

Each of the following cleaning procedures is numbered. The number found under “Recommended Cleaning Procedure” corresponds to the suggested cleaning procedure found in the list of Suggested Cleaning Procedures.

Suggested Cleaning Procedures

1. DISPOSE OF ARTICLE
2. CLEAN WITH DETERGENT
3. CLEAN WITH DISINFECTANT OR BLEACH AND WATER SOLUTION
4. CLEAN WITH A HIGH-LEVEL DISINFECTANT (STERILIZATION OF EQUIPMENT)
5. LAUNDRY WITH SOAP AND HOT WATER

<u>ARTICLE</u>	<u>RECOMMENDED CLEANING PROCEDURE</u>
Airway	1
Blood pressure cuffs	2 or 3
Backboards	2 or 3
Bulb syringe	1
Cannulas, masks, one-way valves	1
Cervical collars	1, 2 or 3
Dressing and paper products	1
Non-specified equipment, supply boxes	3
Electronic equipment	3
Emesis basin	1
Protective eyewear	1 or 2
Gloves (latex, vinyl, etc.)	1
Gloves (protective, non-disposable)	2 or 5
Linens	1 or 5
Face masks (PPE)	1
Flashlights, penlights	1, 3, or 4
Pocket masks	1
Protective equipment (bunker gear, etc.)	5
Regulators and tanks	2
Restraints	1, 4, or 5
Resuscitators (BVM)	1
Scissors	3
Spinal immobilization devices	3
Splints	2 or 3
Stethoscope	2 or 3
Stretcher	3
Suction catheters	1
Suction unit and collecting containers	1
Uniforms, clothing	5
Ambulance interior and floors	3