

South Metro Fire Department
Clinical Policies and Procedures

Title: Standard Precautions and Personal Protective Equipment Use
Effective Date: December 15, 2015
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Standard: Patient Care and Transport
Policy: South Metro Fire personnel will don the appropriate level of Personal Protective Equipment (PPE) as indicated by the patient's condition and procedures performed.

I. Purpose

To provide specific procedures designed to minimize the potential for exposure to blood and other infectious substances by patient care providers.

II. Definitions

- A. Airborne Precautions: PPE requirement in addition to Standard Precautions for patients known or suspected to be infected with microorganisms transmitted by airborne droplet nuclei (small-particle residue [5 micron or smaller in size] of evaporated droplets containing microorganisms that remain suspended in the air and that can be dispersed widely by air currents within a room or over a long distance). Common conditions that warrant Airborne Precautions include Tuberculosis, Measles, Varicella (chickenpox), and Influenza.
- B. Contact Precautions: PPE requirement in addition to Standard Precautions for specified patients known or suspected to be infected or colonized with microorganisms listed below. These organisms can be transmitted by direct contact with the patient (hand or skin-to-skin contact that occurs when performing patient-care activities that require touching the patient's skin) or indirect contact (touching) with environmental surfaces or patient-care items in the patient's environment. Common conditions include Multidrug-resistant bacteria (MRSA, VRE, ESBLs, CRE), Respiratory Syncytial Virus (RSV), Enteroviral infections in children/infants, skin infections such as shingles, impetigo, cellulitis, lice, scabies, varicella (chickenpox), viral hemorrhagic infections such as Ebola, Lassa, and Marburg Fever.
- C. Contaminated: means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.
- D. Droplet Precautions: PPE requirement in addition to Standard Precautions for a patient known or suspected to be infected with microorganisms transmitted by droplets (large-particle droplets [larger than 5 microns in size] that can be generated by the patient during coughing, sneezing, talking, or the performance of procedures such as suctioning and endotracheal intubation). Common conditions include influenza, meningitis, diphtheria, pertussis, streptococcal pneumonia, adenovirus, mumps, and rubella.

- E. Enteric Precautions: PPE requirement in addition to Standard Precautions for a patient known or suspected to be infected with microorganisms transmitted by contact with feces or vomitus. These organisms can be transmitted by direct contact with the patient's stool, vomitus or enteric fluids or indirect contact (touching) with possibly contaminated environmental surfaces or patient-care items in the patient's environment. Common conditions include acute diarrhea (C. difficile, E. coli, Hepatitis, Norovirus, Rotavirus), gastroenteritis in diapered or incontinent patients.
- F. Hand Hygiene: is a general term that includes hand washing, antiseptic hand washing, waterless hand sanitizing and surgical hand scrub.
 - 1. Hand washing is defined as a process for removal of soil and transient microorganisms from the hands using soap and water.
 - 2. Hand sanitizing is a process for the removal or destruction (with an antimicrobial agent) of transient microorganisms using antibacterial soap/water or a waterless alcohol based product.
- G. Personal Protective Equipment: is specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts, or blouses) are not intended to function as protection against a biological hazard and are not considered to be personal protective equipment.
- H. Standard Precautions: Approach to PPE selection based on the principle that all blood, body fluid secretions, excretions except sweat, non-intact skin, and mucous membranes may contain infectious diseases. Implementation of Standard Precautions constitutes the primary strategy for the prevention of healthcare-associated transmission of infectious agents among patients and healthcare personnel.

III. Procedure

- A. Hand Hygiene:
 - 1. Effective hand hygiene removes transient microorganisms, dirt and organic material from the hands and decreases the risk of cross contamination from patients, patient care equipment and the environment. Promotion of healthy hands and nails is also an important part of hand hygiene.
 - 2. Hand hygiene is the single most important action to reduce the risk of transmitting organisms from one person to another or from one site to another on the same patient. Cleaning hands promptly and thoroughly between patient contact and after contact with blood, body fluids, secretions, excretions, equipment and potentially contaminated surfaces is an important strategy for preventing healthcare-associated infections.
 - 3. Glove use does not replace the need for hand hygiene. Hand hygiene must be done prior to donning sterile gloves and upon all glove removal.
 - 4. Clean hands;
 - a) Before and after routine patient care activities.
 - b) After body fluid exposure even if wearing gloves. Clean hands immediately after removing gloves.
 - 5. Procedures for cleaning hands

- a) Waterless alcohol hand sanitizer (not for use on visibly soiled hands)
 - i. Apply product to palm of one hand.
 - ii. Dip finger tips into product to get under and around nails.
 - iii. Rub hands together, covering all surfaces of hands/fingers until dry.
 - iv. Follow the manufacturer's recommendations for product volume.
 - v. Total time to complete procedure = approximately 10-15 seconds.
- b) Soap and water hand washing
 - i. Stand near the sink, but avoid touching it, as the sink itself may be a source of contamination.
 - ii. If using a lever-operated paper towel dispenser, dispense a portion of towel before washing hands.
 - iii. Using tepid (warm, not hot) water, wet hands. Avoid splashing and keep moisture away from sleeves and clothing. Avoid using hot water, as repeated exposure to hot water may increase the risk of dermatitis.
 - iv. Apply soap product according to manufacturer's recommendations.
 - v. Rub hands together for at least 15 seconds, lathering and covering all surfaces of the hands and fingers.
 - vi. Rinse hands thoroughly under running water.
 - vii. Dry hands with disposable towel.
 - viii. Use paper towel to turn off faucet for handle-operated faucets to prevent contaminating your hands.
 - ix. Total time to complete procedure = 1 –1.5 minutes.

B. Standard Precaution:

- 1. Hand Hygiene as described above.
- 2. Gloves:
 - a) Gloves must be worn for;
 - i. All vascular access procedures
 - ii. "Reasonably anticipated" contact with:
 - a. Blood or body fluids
 - b. Patient's mucous membrane
 - c. Patient's non-intact skin
 - iii. Healthcare worker with non-intact skin (cut scratches, rash).
 - iv. Contact with equipment or surfaces that are soiled with blood or body fluid.
 - b) Disposable (single use) gloves shall not be washed or decontaminated for reuse.

- c) It is encouraged to wear gloves while giving injections. Gloves can offer some protection from needle sticks. Less blood is likely to remain on the needle after going through the glove, thus reducing the risk to the employee.
- d) Gloves that have come into contact with potentially infectious substances should be removed, if possible, before handling clean equipment. Avoid touching bins, cabinets, and drawers with contaminated gloves. It is encouraged that when not delivering direct patient care that gloves be removed and disposed of and fresh pair donned if required.

C. Droplet Precautions: in addition to Standard Precautions all providers are to wear;

- 1. Eye, Nose and Mouth Protection for provider.
 - a) Wear a surgical mask when working within 3-6 feet of the patient.
 - b) Mask and eye protection (goggles, full-face shield/mask) must be worn for;
 - i. "Reasonably anticipated" splash of blood or body fluids.
 - ii. During procedures that are likely to generate droplets of blood or body fluids. Such as;
 - a. Advanced airway techniques such as intubation, endotracheal suction, or BVM in the presence of significant secretions.
 - b. Assessing and dressing injuries with arterial bleeding.
- 2. Place a surgical mask on the patient if possible to minimize the dispersal of droplets.

D. Airborne Precautions: in addition to Standard Precautions all providers are to wear;

- 1. All providers caring for the patient must wear a fit-test N95 respirator mask or a powered air purifying respirator (PAPR).
- 2. Place a surgical mask on the patient if possible to minimize the dispersal of droplets.

E. Contact and Enteric Precautions: in addition to Standard Precautions all providers are to wear;

- 1. Gowns are to be worn if you anticipate that your clothing will have direct contact with the patient, environmental surfaces or other possibly contaminated items during the transfer and treatment of the patient.
- 2. Remove the gown after leaving the patient's room (hospital) or immediate scene (911). Ensure clothing does not contact potentially contaminated surfaces or the patient during transport.
- 3. Don a new gown at the receiving destination before transferring the patient to their bed if contact direct contact with the patient or possibly contaminated items is anticipated.
- 4. Place a clean sheet on the stretcher and then transfer patient over and on to the clean sheet. Wrap the patient completely in a clean sheet to prevent direct contact with possibly contaminated material.

F. Documentation

1. Choose PPE Used in the Outcome Tab of the ePCR.
 - a) Choose all forms of PPE used during care.
 - b) Standard Precautions should be checked at a minimum for all patient contact.
 - c) For example, after performing an intubation the correct PPE is Standard Precautions plus Airborne Precautions.

G. Deviation from use of personal protective equipment.

1. In an emergency situation when a provider declines to use personal protective equipment, an on-line Safety Event Report will be completed in 9th Brain. The HEMT Infection Control Officer will investigate to determine whether changes can be instituted to prevent such occurrences in the future.
2. Deviation from compliance with standard precautions and the use of personal protective equipment will be evaluated on the employee's annual performance review.
3. Failure to use indicated personal protective equipment when it is available will be dealt with on an individual basis consistent with the nature of the infraction through normal Human Resources procedures.

Previous versions: