TRANSMISSION-BASED ISOLATION PRECAUTIONS

Effective Date: April 2012 Policy No: IC003

Cross Referenced: CDC Guidelines 2007 Origin: Infection Prevention
Reviewed Date: May 2014 Authority: Infection Prevention

Revised Date: 2/2012, 5/2014 Page: 1 of 7

SCOPE

Employees, physicians, patients, and visitors at Hackettstown Regional Medical Center Hospital.

PURPOSE

Transmission-Based Precautions are designed to supplement standard precautions in patients with documented or suspected infection/colonization of highly transmissible or epidemiologically important pathogens. The three general categories, and one sub category, of Transmission-Based Precautions include:

- Contact Precautions
 - Contact Enteric Precautions
- Droplet Precautions
- Airborne Precautions

For diseases that have multiple routes of transmission (e.g., Severe Acute Respiratory Syndrome (SARS), more than one Transmission-Based Precautions category may be used. When used either singly or in combination, they are always used **in addition to** Standard Precautions.

DEFINITIONS

Colonization: The presence of bacteria on a body surface (like on the skin, mouth, intestines or airway) without causing disease.

Cohort: Placing patients together in the same room who are colonized/infected with the same pathogen and are suitable roommates.

Infection: Invasion and multiplication of microorganisms in body tissues, especially that causing local cellular injury due to competitive metabolism, toxins, intracellular replication, or antigen-antibody response.

PPE: Specialized clothing or equipment worn by employees for protection against health and safety hazards. (i.e. Gloves, gowns, masks, goggles)

Standard Precautions: Guidelines recommended by the Centers for Disease Control and Prevention for reducing the risk of transmission of blood-borne and other pathogens in hospitals. Standard precautions apply to all patients receiving care in hospitals regardless of their diagnosis or presumed infection status. Standard precautions apply to (1) blood; (2) all body fluids, secretions, and excretions *except sweat*, regardless of whether or not they contain blood; (3) nonintact skin; and (4) mucous membranes. The precautions are designed to reduce the risk of transmission of microorganisms from both recognized and unrecognized sources of infection in hospitals. *Refer to Policy IC003a-Standard Precautions*

POLICY

I. CONTACT PRECAUTIONS

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In addition to Standard Precautions, use Contact Precautions, or the equivalent, for specified patients known or suspected to be infected or colonized with epidemiologically important microorganisms that 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 dry skin) or indirect contact (touching) with environmental surfaces or patient-care items in the patient's environment. *Category IB*

Patient Placement

1. Place the patient in a private room.

2. When a private room is not available, place the patient in a room with a patient(s) who has active infection with the same microorganism but with no other infection (cohorting). When a private room is not available and cohorting is not achievable, consider the epidemiology of the microorganism and the patient population when determining patient placement. Consultation with infection control professionals is advised before patient placement. Category IB

Gloves and Handwashing

- 1. Perform hand hygiene
- 2. Wear gloves (clean, nonsterile gloves) when entering the room. During the course of providing care for a patient, change gloves after having contact with infective material that may contain high concentrations of microorganisms (fecal material and wound drainage).
- 3. Remove gloves before leaving the patient's environment and perform hand hygiene immediately.

Gown

- 1. Wear a gown (a clean, nonsterile gown) when entering the room if your clothing will have ANY contact with the patient, environmental surfaces, or items in the patient's room.
- 2. Remove the gown before leaving the patient's environment and discard.
- 3. After gown removal, ensure that clothing does not contact potentially contaminated environmental surfaces to avoid transfer of microorganisms to other patients or environments. Category IB

Patient Transport

- 1. Limit the movement and transport of the patient from the room to essential purposes only.
- 2. If the patient is transported out of the room, ensure that precautions are maintained to minimize the risk of transmission of microorganisms to other patients and contamination of environmental surfaces or equipment. *Category IB*
- 3. Before patient leaves room for transport, the patient should apply a clean gown, and be provided with assistance in performing hand hygiene.
- 4. Stretchers and wheelchairs must be protected with linens or disposable under pads.

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5. Personnel transporting a patient at Hackettstown Regional Medical Center for tests/procedures that can not be performed at the bedside) should **NOT** routinely need to wear PPE during transportation. PPE is required to enter the room to prepare the patient for transport but contaminated PPE should be removed and hand hygiene performed on room exit. The patient should be transported in a clean wheelchair or stretcher and draped with clean linen in a way to prevent contact. Clean PPE will be donned to handle the patient at the transport destination. In addition, disinfectant wipes may be used to clean those parts of the bed and equipment handled in patient transport.

Patient-Care Equipment

- 1. When possible, dedicate the use of noncritical patient-care equipment to a single patient (or cohort of patients infected or colonized with the pathogen requiring precautions) to avoid sharing between patients.
- 2. If use of common equipment or items is unavoidable, then adequately clean and disinfect them before use for another patient. *Category IB*

Examples of illnesses which require use of Contact Precautions include:

Gastrointestinal, respiratory, skin, or wound infections or colonization with multidrugresistant bacteria judged by the infection control program, based on current state, regional, or national recommendations, to be of special clinical and epidemiologic significance. **Examples include**:

- Methicillin-resistant Staphylococcus aureus
- Vancomycin-resistant Enterococcus
- Extended spectrum B-lactamase (ESBL) resistant organisms
- Multidrug resistant Pseudomonas
- Lice/ Scabies
- Draining wounds awaiting cultures.
- Patient with a history of MDRO until cleared.
- Diphtheria (cutaneous)
- Herpes simplex virus (neonatal or mucocutaneous)
- Impetigo
- Major (noncontained) abscesses, cellulites, or decubiti

Flagging System For Readmission:

- 1. Patients with multidrug resistant organisms defined above will be isolated on admission or readmission to Hackettstown Regional Medical Center.
- 2. Infection Prevention and nursing will be responsible for entering the computer flag for drug resistant organisms in Diagnosis/Problems and in PM Conversation Infection Control.
- 3. Isolation shall be removed for organisms with multiple drug resistance in accordance to policy and after consultation with and approval of Infection Prevention.

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II. CONTACT ENTERIC PRECAUTIONS

In addition to Standard Precautions, use Enteric Precautions for specified patients known or suspected to be infected or colonized with epidemiologically important microorganisms that are transmitted by the same routers as described in contact precautions but can survive for longer periods of time in environmental surfaces. These organisms are usually contained in fecal flora and are thus shed in the environment and are resistant to most cleaning and hand washing agents including those which contain alcohol.

Additional precautions required beside Contact Precautions

- 1. Handwashing with soap and water required when leaving the patient's room
- 2. Disinfection wipes must be changed to **BLEACH** based hospital approved wipes. Environmental staff can replace wipes upon request.

Examples of illnesses which require use of Enteric Precautions include:

Enteric infections with a low infectious dose or prolonged environmental survival, including:

Clostridium difficile, Norovirus

II. DROPLET PRECAUTIONS

In addition to Standard Precautions, use Droplet Precautions for a patient known or suspected to be infected with microorganisms transmitted by large-particle droplets [larger than 5 μ m in size] can be generated by the patient when coughing, sneezing, talking, or undergoing procedures involving the respiratory track. Microorganisms can be acquired by direct contact, by contact with droplets over distances of 3-6 feet, as well as by contact with articles recently contaminated with respiratory secretions.

Patient Placement

- 1. Place the patient in a private room.
- 2. When a private room is not available, place the patient in a room with a patient(s) who has active infection with the same microorganisms but with no other infection (cohorting).
- 3. When a private room is not available and cohorting is not achievable, maintain spatial separation of at least 3 ft between the infected patient and other patients and visitors.
- 4. Special air handling and ventilation are not necessary, and the door may remain open.

Mask

1. Wear a surgical mask when entering the room.

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Patient Transport

1. Limit the movement and transport of the patient from the room to essential purposes only.

2. Use a surgical mask on the patient during transport, making sure the mask is properly tied.

3. If the patient is transported out of the room, ensure precautions are maintained.

Examples of illnesses which require use of Droplet Precautions include:

Neisseria meningitidis disease, including meningitis, pneumonia, and sepsis.

Diphtheria (pharyngeal) Mycoplasma pneumonia

Pertussis

Pneumonic plaque

Adenovirus

Influenza

Mumps

Parvovirus B19

Rubella

III. AIRBORNE PRECAUTIONS

In addition to Standard Precautions, use Airborne Precautions for patients known or suspected to be infected with microorganisms transmitted by airborne droplet nuclei (small-particle residue [5 μ m 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).

Patient Placement

- 1. Place the patient in a <u>private</u> room that has:
 - a. monitored negative air pressure in relation to the surrounding areas,
 - b. 12 air changes per hour, and
 - c. appropriate discharge of air outdoors or monitored high-efficiency filtration of room air before the air is circulated to other areas in the hospital.
- 2. Keep the room door closed and the patient in the room.
- 3. When a private room is not available, consult the Infection Control before patient placement.

Respiratory Protection

- 1. Wear an N95 respirator or a positive air purifying respirator (PAPR) when entering the room of a patient with known or suspected infectious pulmonary tuberculosis or of a patient with known or suspected disease transmitted by the airborne route.
- 2. Susceptible persons should not enter the room of patients known or suspected to have measles (rubeola) or varicella (chickenpox) if other immune caregivers are available. If susceptible persons must enter the room of a patient known or suspected to have measles (rubeola) or varicella, they should wear respiratory protection. The individual must carefully remove the N 95 respirator upon exiting the room to prevent

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themselves from becoming exposed.

3. Varicella Zoster Patients (Shingles: disseminated) Requiring Negative Pressurized Rooms: Employees need not wear a mask when caring for these patients if they have had natural disease (Varicella/Chicken-pox) or have been adequately immunized. Occupational health services can assist in determining staffs immune status if uncertain. Employees who are not immune should not care for the patient or enter the room unless unavoidable. If they enter they need to wear a N95 Isolation mask. Visitors should be assisted by Providers in determining immune status (natural disease: immunization) Non-Immune visitors should be discouraged from entering

Patient Transport

- 1. Limit the movement and transport of the patient from the room to essential purposes only.
- 2. If transport is necessary, place a surgical mask on the patient, making sure the mask is properly tied, to minimize patient dispersal of droplet nuclei.
- 3. Ensure precautions are maintained while patient is transported from the room

Examples of illnesses, suspected or known, which require use of Airborne Precautions include:

- 1. Mycobacterium tuberculosis (TB)
- 2. Severe acute respiratory syndrome
- 3. Smallpox
- 4. Measles (Rubeola)
- 5. Varicella (including disseminated zoster)

Removal of Precautions:

• Refer to Policy IC006. Contact Infection Prevention.

Communication of all categories of precautions:

- Place patients on precautions as soon as suspected or confirmed condition requiring precautions is identified.
- An appropriate sign needs to be hung outside the patient room.
- Personal Protective equipment needs to be available.
- Patient charts should be stickered with appropriate isolation status.
- Upon discharge of transfer the precaution signs can be wiped down with hospital approved wipes, air dried and stored for future use.

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