



The Miriam Hospital

Transmission-Based Precautions for Schools of Nursing Clinical Placements



Infection Control and
The Center for Professional Practice and Innovation

Reviewed August 2016

Transmission-Based Precautions

- Transmission-Based Precautions are isolation techniques that are used during the care of patients known or suspected to be infected or colonized by certain pathogens that can be transmitted through the contact, droplet or airborne route.
- The goal is to prevent the transfer of microorganisms from a source to a susceptible patient or healthcare worker.

Transmission-Based Precautions

Transmission-based precautions do not replace Standard Precautions.

Standard Precautions are always used, whether or not one or a combination of transmission-based precautions are indicated.

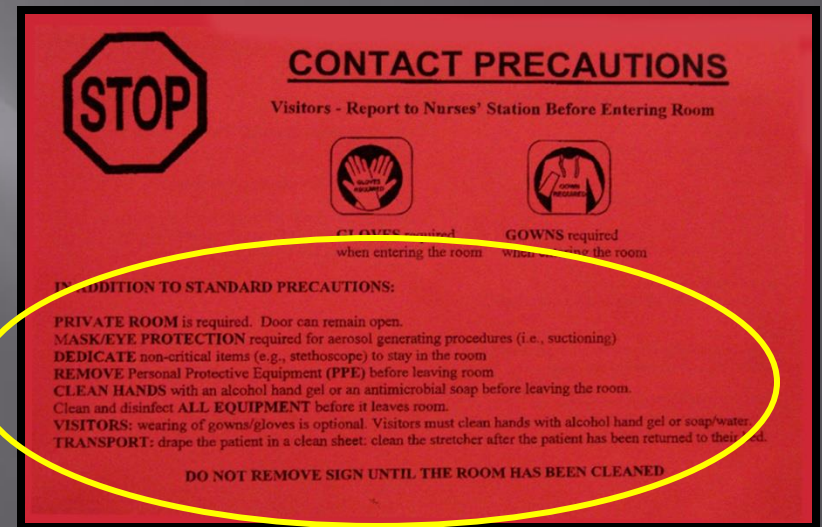
Placing Patients on Precautions

- ▣ The nurse is responsible for placing a precaution sign on the door (and on paper chart, if applicable).
- ▣ The nurse is responsible for ordering the precaution type into the electronic medical record (EMR).

Entry into the EMR is important in order to communicate precautions throughout the hospital and to Infection Control.

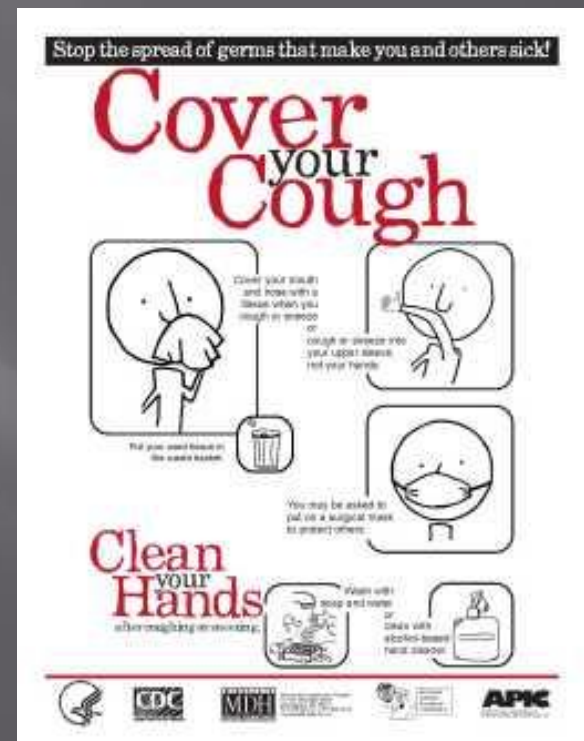
Precautions and You

In addition to following Standard Precautions, you must carry out the activities indicated on the applicable transmission-based precaution sign.



Respiratory Hygiene/Cough Etiquette

- Respiratory hygiene is an important first step to prevent transmission of respiratory infections at the first point of contact with a potentially infected person.
- Teach patient and families good respiratory hygiene (see next slide)
- Signs are posted throughout the hospital.



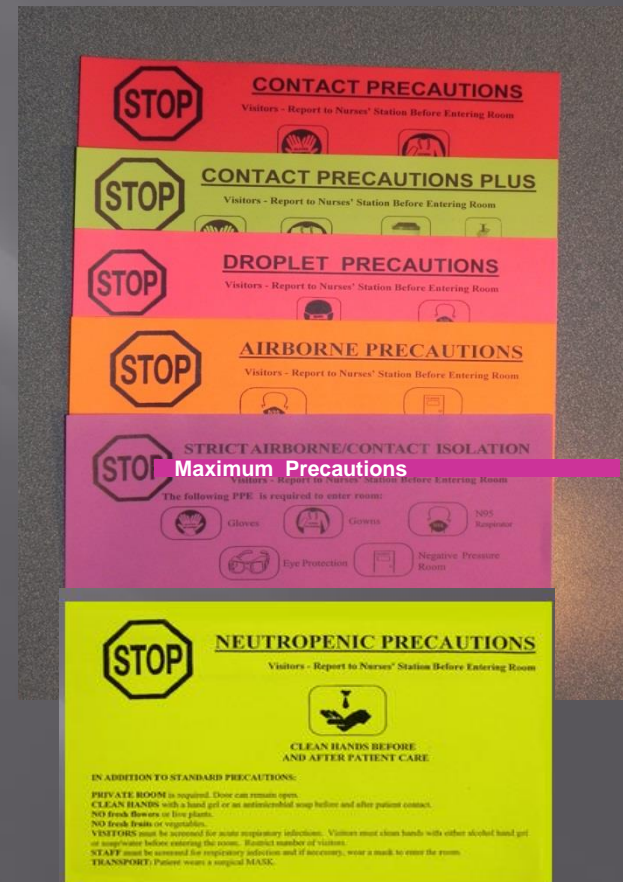
Respiratory Hygiene/Cough Etiquette

Recommended for all individuals with signs and symptoms of a respiratory illness:

- ▣ Cover the nose/mouth when coughing or sneezing.
- ▣ Use tissues to contain respiratory secretions.
- ▣ Perform hand hygiene.
- ▣ Ensure the availability of tissues, waste receptacles, alcohol hand rubs.
- ▣ Offer surgical masks to persons who are coughing and encourage coughing person to sit at least three feet away from others if possible.

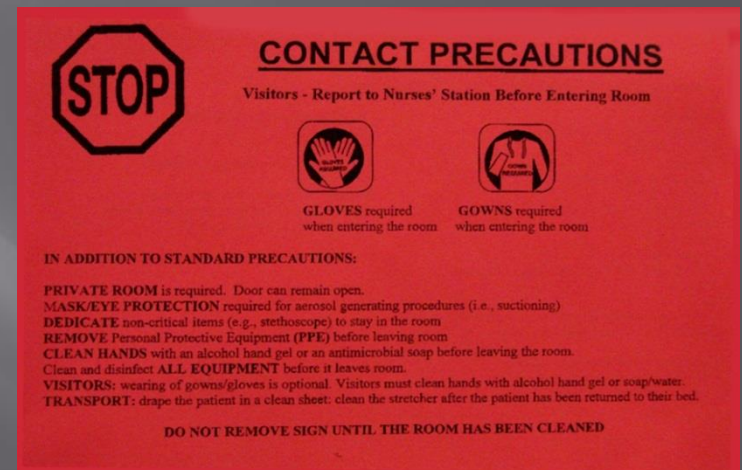
Types of Precautions at The Miriam Hospital (TMH)

- Contact Precautions
- Contact Precautions Plus
- Airborne Precautions
- Droplet Precautions
- Maximum Precautions
- Neutropenic Precautions



Contact Precautions

- Indicated when there is a chance of direct patient/environment contact, such as with MRSA, VRE.
- Private room required.
- Personal Protective Equipment (PPE) required for staff entering room, per instructions on sign.



Contact Precautions – Additional Measures

- Wear mask/eye protection for aerosol-generating procedures (required).
- Wash hands frequently using:
 - Soap and water, or
 - Waterless alcohol products
- Bathe patients daily with chlorhexidine gluconate.
- Clean and disinfect all equipment before it leaves the room.
- Dedicate care items such as stethoscopes to stay in the room.
- Dedicate a linen hamper to the room.
- Visitors must clean hands before entering and leaving the room.
PPE for visitors is optional

Contact Precautions – Additional Measures

- Transporting patients on Contact Precautions
 - Cover the patient with a clean sheet or blanket (not one from the bed)
 - Notify other departments of isolation precautions
 - The employee transporting the patient SHOULD NOT wear PPE during transport
- Discontinue Contact Precautions only with permission of Infection Control. Criteria for discontinuing Contact Precautions:
 - MRSA – discontinue after 2 negative cultures of nares and other previously positive sites one week apart
 - VRE – discontinue after 3 negative cultures of perirectal and other previously positive sites one week apart
 - C. difficile – discontinue at discharge

Contact Precautions – Additional Measures

Policy/Procedure NU-21: Contact Precautions Ambulation Outside a Patient Room

- ▣ Patients on Contact Precautions are restricted to their rooms except for:
 - Diagnostic Testing
 - Therapeutic Physical Therapy
 - Risk for deconditioning and injury due to immobility
 - GENESIS mobility protocol
- ▣ If non-eligible patients on Contact Precautions ambulate outside the room, notify Infection Control.
- ▣ Refer to the policy on the hospital intranet for ambulating procedures.

Contact Precautions – Required for MRSA and VRE

Surveillance Screening for MRSA and VRE

- ▣ High risk patients are screened for MRSA and VRE on admission.
- ▣ High risk patients are:
 - Patients from long term care facilities (nursing homes, rehab, group home, assisted living)
 - Patients from correctional facilities
 - Patients previously hospitalized within 6 months
 - Patients currently on dialysis
 - All critical care patients (admitted or transferred)
 - Patients previously identified as positive

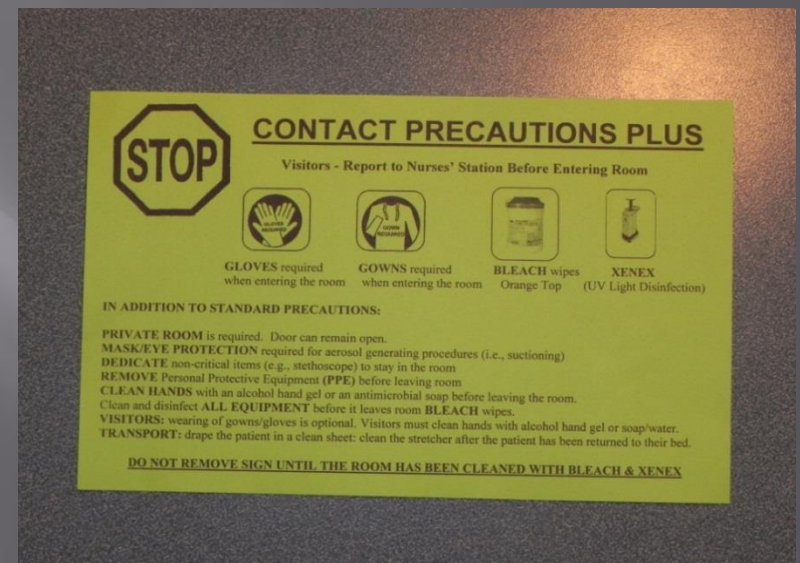
Contact Precautions – Required for MRSA and VRE

MRSA and VRE Screening Protocol Order

- ▣ Nursing staff should verify and collect specimens within 24 hours. Refer to instructions on hospital intranet for procedure; ask staff if you need help locating the procedure.
- ▣ During the admission assessment, the student nurse may identify a high risk patient who was not previously identified and who does not have a screening protocol order. If this happens, notify faculty and the patient's assigned Miriam nurse.

Contact Precautions Plus

- Contact Precautions Plus targets organisms such as C. difficile and Norovirus, which are not killed with standard hospital disinfectants.
- Contact Precautions Plus requires cleaning with bleach during the hospital stay and at discharge, and an additional disinfectant at discharge (see next page).



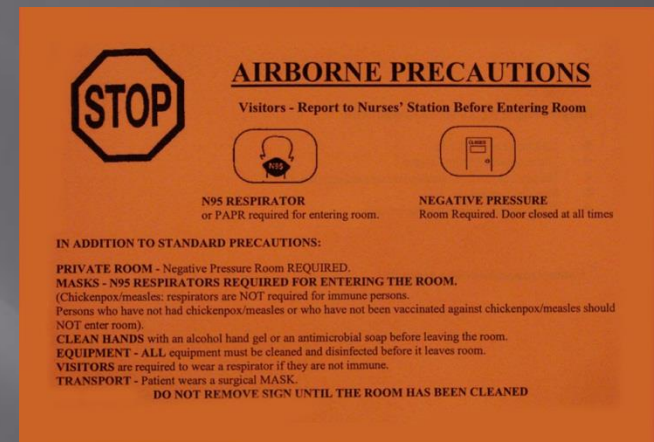
Contact Precautions Plus – Additional Measures

- ▣ Cleaning and disinfection during hospitalization –
Use bleach wipes to clean:
 - Equipment
 - High touch areas in patient room daily
 - Patient bathrooms

- ▣ Cleaning and disinfection at discharge
 - Patient bathroom will be cleaned with bleach.
 - The room will be disinfected with Xenex.

Airborne Precautions

- Indicated when infection is transmitted by very small droplets (<5 microns) called droplet nuclei
- Examples of infection: Tuberculosis (TB), measles, chickenpox, herpes zoster in the immunocompromised patient
- A private negative-pressure airflow room is required.
- Masks (N95 or duckbill respirators) are required, as specified in the next slide.



Airborne Precautions – Additional Measures

Masks (N95 or duckbill respirators)

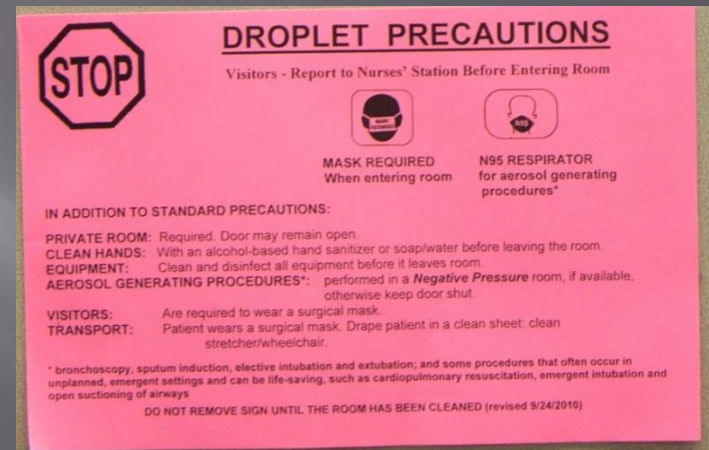
- Tuberculosis (TB)
 - Respirators are required for entering the room for TB.
 - Staff must be fit tested for an N95.
 - Faculty and students are not fit-tested, and may not care for patients on airborne precautions.
- Chickenpox and measles
 - Respirators are not required for immune persons.
 - Persons who have not had chickenpox or measles or who have not been vaccinated should NOT enter the room.

Airborne Precautions – Additional Measures

- Wash hands frequently.
- All equipment must be cleaned before leaving the room.
- Visitors must wear an N95 or duckbill respirator if they are not immune,
- Patient must wear standard surgical mask when transported out of the room.

Droplet Precautions

- Indicated when infection is transmitted by large particle droplets (>5 microns)
- Examples of infection: Pneumonia, mumps, meningococcal sepsis, streptococcal pharyngitis, influenza, rubella, and pneumonic plague.
- Private room required.
- Standard surgical mask required when entering room.

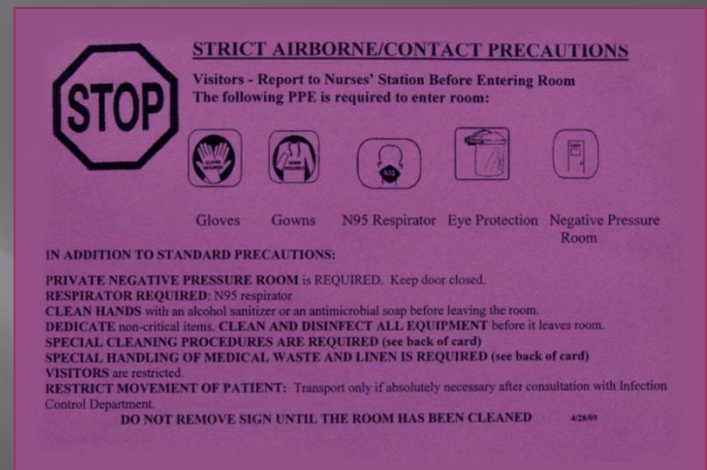


Droplet Precautions – Additional Measures

- Wash hands frequently.
- Staff: For AEROSOL GENERATING PROCEDURES, N95 or duckbill respirator is required. Perform procedure in a negative pressure room, if available.
- Visitors must wear surgical mask.
- Patient must wear standard surgical mask when transported out of the room.

Maximum Precautions

- Indicated when infection is transmitted by small droplets or a new novel virus has emerged and transmission is unknown
- Examples of infection: Small pox, SARS, hemorrhagic fevers, novel influenza
- Maximum Precautions is a combination of Airborne Precautions and Contact Precautions.
- Private negative pressure room required.



Maximum Precautions – Additional Measures

Personal Protective Equipment (PPE) required when entering room:

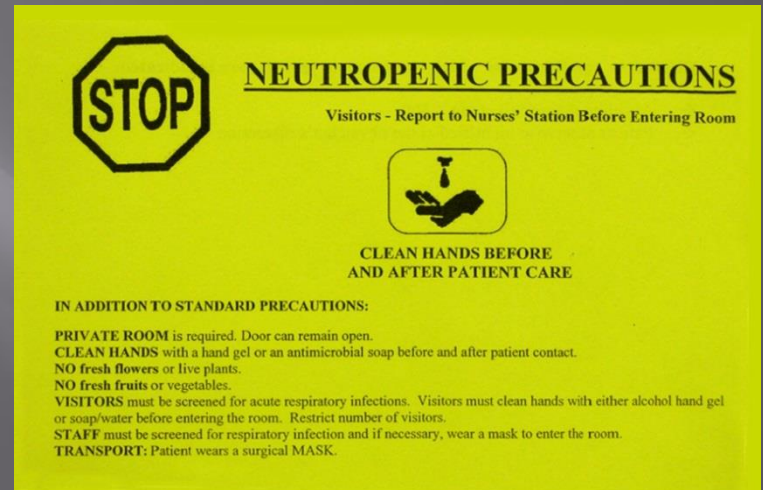
- Gloves
- Gown
- N95 or duckbill respirator
- Eye protection (face shield)

Maximum Precautions – Additional Measures

- Clean hands frequently.
- Dedicate equipment such as stethoscopes to the room.
- Special cleaning is required (room is cleaned with bleach).
- Special handling of medical waste and linen is required (dedicate linen hamper to the room).
- Restrict movement off the unit for the patient.
- Restrict visitors.

Neutropenic Precautions

- Indicated to protect immunocompromised patients from acquiring infections from staff or visitors
- Initiated for patients who have an absolute neutrophil count $<500/\text{MM}^3$ or leukemia




The sign is white with black text and graphics. At the top left is a black octagonal 'STOP' sign. To its right, the title 'NEUTROPENIC PRECAUTIONS' is underlined. Below the title is the instruction 'Visitors - Report to Nurses' Station Before Entering Room'. In the center is a graphic of two hands being washed with a single drop of soap. Below this graphic is the instruction 'CLEAN HANDS BEFORE AND AFTER PATIENT CARE'. At the bottom, under the heading 'IN ADDITION TO STANDARD PRECAUTIONS:', are several lines of text detailing requirements for private rooms, hand hygiene, no fresh flowers or vegetables, visitor screening, staff screening, and transport protocols.

STOP

NEUTROPENIC PRECAUTIONS

Visitors - Report to Nurses' Station Before Entering Room



CLEAN HANDS BEFORE
AND AFTER PATIENT CARE

IN ADDITION TO STANDARD PRECAUTIONS:

PRIVATE ROOM is required. Door can remain open.
CLEAN HANDS with a hand gel or an antimicrobial soap before and after patient contact.
NO fresh flowers or live plants.
NO fresh fruits or vegetables.
VISITORS must be screened for acute respiratory infections. Visitors must clean hands with either alcohol hand gel or soap/water before entering the room. Restrict number of visitors.
STAFF must be screened for respiratory infection and if necessary, wear a mask to enter the room.
TRANSPORT: Patient wears a surgical MASK.

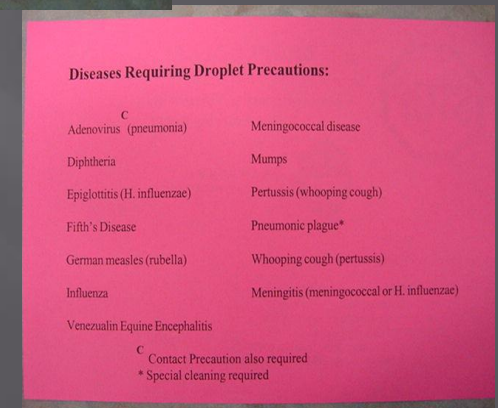
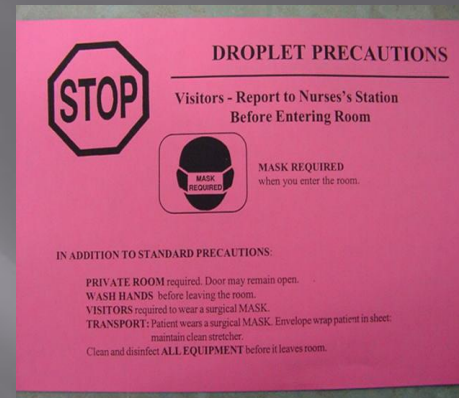
Neutropenic Precautions – Additional Measures

Policy/Procedure NU-52: Neutropenic Care

- ▣ Private room
- ▣ Wash hands frequently
- ▣ Cooked food diet
- ▣ No fresh flowers or live plants.
- ▣ No fresh fruits or vegetables, unless peeled.
- ▣ Screen visitors and staff for signs of respiratory infection.
- Patient must wear standard surgical mask when transported out of the room.

Precaution Signs

- ▣ Precaution signs should be posted in clear view outside patient room.
- ▣ Precaution signs clearly state:
 - On the front side
 - Type of precautions;
 - How to prepare to enter the room
 - What supplies should be ready/available for use
 - On the back side
 - The organisms for which precautions have been initiated.



Limit Supplies in Room

Remember, the patient should only have a few personal belongings or patient supplies in the room when on precautions.



Cleaning and Disinfection

Disinfect patient care items or the environment:

- Use hospital approved germicides
- Clean blood spills by donning gloves and using paper towels and germicide
- Use elbow grease during cleaning
- Let disinfectant air dry. Contact time for disinfection is a few minutes



2-minute dry time

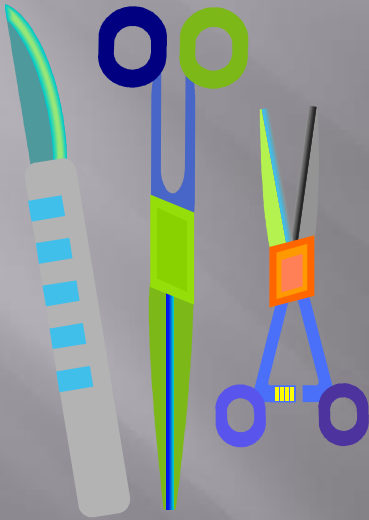


3-minute dry time



4-minute dry time

Patient Care Equipment



- Pre-clean or soak instruments in puncture resistant boxes
 - Do not allow body fluids or tissues to dry
- Throw away single use items when done.
- Be sure that equipment does not get passed from one patient to another without proper cleaning.