Infection Prevention and Control Annual Education

Isolation Precautions and Signage Change 2017

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Objectives

After you complete this Computer-Based Learning (CBL) module, you should be able to:

– Describe Standard Precautions designed to prevent transmission of blood borne pathogens.

– Describe procedures involved in these Transmission-Based Precautions (categories of isolation): Contact, Droplet, Airborne or a combination for Highly communicable Novel Diseases (HCND) such as Ebola.
Standard Precautions

• GMC uses **Standard Precautions** for every contact involving a:
  – Patient
  – Resident
  – Volunteer
  – Visitor
  – Associate

• Treat **all** blood and body fluids as if they are potentially infectious.

• Standard Precautions includes the use of hand hygiene **and** appropriate PPE **before** caring for any patient if you anticipate any exposure to blood or body fluids.
Standard Precautions

Personal Protective Equipment

• Wear Personal Protective Equipment (PPE) whenever you anticipate contact with blood or body fluids.
  – For example, wear gloves when drawing blood.
• Don appropriate PPE **before** beginning the task or entering the patient’s room.
• Remove PPE and perform hand hygiene **upon leaving** the patient’s room.
Empiric Precautions

• **Apply isolation precautions before a clear diagnosis.**

• Because it is not possible to immediately identify all patients needing specific precautions, certain clinical conditions call for the practical application of isolation precautions while waiting for a more clear diagnosis.
Empiric Precautions, continued

• **Examples include:**
  – An incontinent or diapered patient with acute diarrhea with a likely infectious cause.
  – Open and draining wounds with no dressing or drainage not contained by a dressing.
  – Cough/fever/upper lobe pulmonary infiltrate in any patient.

• Enter an **order into HEO** for each patient placed in isolation.
Transmission-Based Precautions

• Use **Transmission-based Precautions** when a patient requires more than **Standard Precautions**.

• Follow the instructions on the isolation sign on the patient door.
  – The sign lists specific requirements for each precaution.

• Transmission-based categories include:
  – Contact, Droplet, and Airborne.
  – Or a combination in the case of HCNDs.
Transmission-Based Precautions – Contact Precautions

Contact Precautions

Standard Precautions, plus...

– Gowns and gloves for direct contact with patient or patient’s environment.

– Use dedicated equipment or clean equipment thoroughly between patients.

– Environmental Services cleans room with emphasis on high-touch items.
  • Environmental Services uses bleach to clean all *C. difficile* rooms.
Transmission-Based Precautions – Contact Precautions

Contact Precautions, continued

• Use Contact Precautions when caring for patients with:
  – Multi-drug resistant organisms (MDROs),
  – Draining wounds,
  – Scabies, or
  – Viral pathogens.

• Examples of MDROs include:
  – MRSA (Methicillin-resistant Staphylococcus aureus)
  – VRE (Vancomycin resistant Enterococcus faecalis or faecium)

• All healthcare workers involved in the care of patients on Contact Precautions must wear gowns and gloves for direct contact with the patient or the patient’s environment, i.e. during transfer, bathing, examination, vital.
Transmission-Based Precautions – Contact Precautions

Transporting Patients

• Before leaving a Contact Isolation room:
  – Ensure that the patient’s wounds or lesions are covered.
  – Dress the patient in a clean hospital gown.
  – The patients bed (hand rails, head and foot board) must be cleaned using disinfectant wipes prior to leaving the room.
  – Then transporter and patient both must perform hand hygiene immediately prior to leaving the room.

• The transporter does not wear a gown, gloves or mask in the hallway when transporting patients on Contact Isolation Precautions.

• The transporting unit and the transporter must notify the receiving department of the impending arrival of the patient.
Transmission-Based Precautions – Droplet Precautions

Droplet Precautions

• Start empiric (practical) application of **Droplet Precautions** in the following situations:
  – Influenza
  – Mumps
  – *Mycoplasma pneumoniae*
  – Pertussis (whooping cough)
  – Rubella (German measles)
  – Suspected bacterial meningitis
Transmission-Based Precautions – Droplet Precautions

Droplet Precautions, continued

• Droplets are particles of respiratory secretions larger than 5 micrometers.
  – They do not remain suspended in the air for extended periods.
  – They can be transmitted within 3-6 feet from the source patient.
Transmission-Based Precautions – Droplet Precautions

Droplet Precautions, continued

• You do **not** have to use special air handling systems and higher level respirator masks to care for patients with diseases capable of droplet transmission.

• The doors of **Droplet Precaution** rooms may remain open, **unlike with Airborne Precautions**.

• **Everyone** entering these rooms **must** wear a surgical mask.
Transmission-Based Precautions – Droplet Precautions

Transporting Patients

- The patient must wear a surgical mask during transport.
- If needed, escort the patient while he or she is transported to procedure areas to ensure that the patient does not remove his or her mask during transport.
- The transporter does not wear a gown, gloves or mask in the hallway when transporting these patients.
  - The transporting unit and the transporter must notify the receiving department of the precautions necessary to reduce the risk of transmission of infectious microorganisms.
Transmission-Based Precautions – Airborne Precautions

Airborne Precautions

- Airborne nuclei particles are **smaller than 5 micrometers** that can remain suspended in air for an extended time to create exposure risk for individuals who are susceptible.
- Patients on **Airborne Isolation Precautions** require an AIIR or negative air pressure room.
  - The AIIR must be a private room with negative air pressure and a minimum of 6-12 air changes per hour.
  - The door to AIIR isolation rooms must remain closed, except for entering and exiting the rooms.
  - When notified by nursing, the Engineering Department does daily checks on all AIIR currently in use.
    - Negative pressure log books are kept on the unit.
- Everyone entering these rooms must wear an N95 respirator mask.
Airborne Precautions, continued

• Start empiric (practical) application of Airborne Precautions in the following situations:
  – Suspected or confirmed TB
  – Measles
  – Chickenpox or disseminated zoster, per MD’s diagnosis
  – Smallpox
Transmission-Based Precautions – Airborne Precautions

Transporting Patients

• The patient must wear a surgical mask during transport.
• If needed, escort the patient while he or she is being transported to procedure areas to ensure that the patient does not remove his or her mask during transport.
• The transporter does not wear a gown, gloves or mask in the hallway when transporting patients on Airborne Isolation Precautions.
• The transporting unit and the transporter must notify the receiving department of the precautions necessary to reduce the risk of transmission of infectious microorganisms.
Transmission-Based Precautions

Discharging Isolated Patients

If the patient has not been cleared from a specific isolation prior to discharge, the isolation sign remains posted on the discharged patient’s door until EVS terminally cleans the room.
Highly Communicable Novel Disease (HCND)

- A highly communicable novel disease is a new (novel) virus that has changed in such a way to become highly contagious or cause death.

- These changes may cause the virus to be transmitted in ways different than in the past, causing more risks.
  - Such as a virus that used to be transmitted by droplets is now transmitted by airborne particles.

- Examples may include Ebola, viral hemorrhagic fevers and novel viruses such as SARS (severe acute respiratory syndrome).
Highly Communicable Novel Disease (HCND)

For suspected or confirmed HCND patients (such as Ebola):

• Place in a private Airborne Infection Isolation Room (AIIR) with its own bathroom.
  – Keep door to hallway closed.
• Implement Standard, Contact and Droplet precautions.
• Maintain a log of all persons entering room.
• Use dedicated, disposable medical equipment if possible.
• Notify:
  – Infection Preventionist on call.
  – Administrator on call.
  – Public Health at 1-866 PUBHLTH (1-866-782-4584), a 24 hour help line.
HCND Placement and Care

For suspected or confirmed HCND patients:

• Limit use of needles and sharps.
  – Dispose of in puncture-proof, sealed containers.

• Limit blood draws and lab testing to essential medical care.

• Avoid aerosol-generating procedures.

• When cleaning room:
  – Wear personal protective equipment (PPE)
  – Use EPA-registered hospital disinfectant for non-enveloped viruses
HCND in Healthcare Settings

When caring for patients with suspected or confirmed HCND, be strict about proper use and removal of PPE to prevent contact with body fluids and contaminated surfaces and materials such as clothes and bedding.
Using PPE for HCND Patient Contact

• Use a buddy system to make sure you put on and remove PPE safely.

• If you are uncertain regarding requirements for PPE, consult your immediate supervisor or an infection preventionist.
Using PPE for HCND Patient Contact

Before entering room, don:

- Fluid resistant, impermeable gown or coverall.
- Powered air purifying respirator (PAPR).
- Double gloves.
- Disposable shoe covers.
- Leg coverings.

Upon exiting the room:

- Carefully remove PPE without contaminating skin, eye, mucous membranes, clothes.
- Discard disposable PPE.
- For re-useable PPE, clean in designated area per manufacturer’s instructions.
- Perform hand hygiene per HCND donning and doffing procedures.
Collecting and Transporting HCND Lab Specimens

Specimen collection:
• Use all precautions outlined in this CBL.

Specimen transport:
• Place in a durable, leak-proof secondary container.
• **DO NOT** transport in the pneumatic tube system!
• Consult Infection Prevention and Lab prior to transport.
Isolation Summary

- Always use Standard Precautions, regardless of diagnosis!
- Practice good hand and respiratory hygiene.
- Know how to apply, use, and remove personal protective equipment.
- Use safe injection practices, minimize if possible.

Keep it SAFE
Reference

Refer to Policy #600-02, located on the Intranet, regarding Transmission-Based Precautions.
• This computer-based learning (CBL) module applies to all departments and areas that currently use isolation signage.
• Typical examples include ‘inpatient’ areas such as patient rooms, procedural, surgical and supportive.
As part of our Back to Basics Campaign, we have developed isolation signage that is:

- Visually appealing and easy to read.
- Clear, with concise messaging.
- Supported by professional guidelines.
- Diverse for a variety of language populations.

Always read the sign (front and back) prior to display.
Changes

• You’ll see a few changes to the new isolation signage from the prior versions.
  – You’ll learn more from the rest of the slides in this CBL.
  – Policies have been updated to reflect these changes.
  – You’ll see new signage colors.

• McKesson MPV will change to match these changes.
Sign Basics

• Changes you’ll see on the front of the signs include:
  – New sign colors.
  – “Stop sign” image to draw attention.
  – Separate staff and visitor sections.
    • The visitor section includes Spanish and Korean language directions.
    • Both sections have pertinent directions for hand hygiene, personal protective equipment (PPE) and direction for room door.
Sign Basics

• Changes you’ll see on the back of the signs include staff direction for:
  • Patient transportation.
  • Criteria for discontinuing isolation.
  • Guidance for patient discharge.
Icons on Signs

- Pay close attention to the icons on the new signs!
- They are distinct.
Airborne Precautions - Front

- Change:
  - Sign color is **blue**.
Airborne Precautions - Back

- Change:
  - Discharge ‘room empty’ time is 60 minutes, not 69 minutes.
Contact Precautions - Front

• Changes:
  – Sign color is **yellow**.
  – Visitor directions for wearing PPE when assisting with patient care.
Contact Precautions - Back

- Changes:
  - Disinfect bed rails and head/foot boards prior to transport.
  - Cleaning directions after patient discharge.
Modified Contact Precautions - Front

Changes:
- Title is “Modified Contact Precautions” to indicate need for hand washing (with soap and water) and bleach disinfection.
  - For organisms such as *Clostridium difficile*, norovirus or spore-forming bacteria.
- Sign border is red/yellow checkered.
• Changes:
  – Disinfect bed rails and head/foot boards with bleach wipes.
  – Criteria for discontinuing isolation.
  – Patients remain on Modified Contact Precautions for current hospital admission.
  – Instructions for disinfecting surfaces and equipment with bleach.
Droplet Precautions - Front

- Changes:
  - Sign color is green.
  - Door can remain open if patient is > 3 feet from door.
  - Directions for visitors to wear PPE when assisting with patient care.
Droplet Precautions - Back

- Changes:
  - Disinfect bed rails and head/foot boards prior to patient transport.
  - Criteria for discontinuing isolation is 5 days after onset, not 7 days.
Modified Droplet Precautions - Front

- Changes:
  - Title is “Modified Droplet Precautions”.
  - Use for aerosol generating procedures and ‘novel’ influenza viruses such as H1N1, SARS, etc.
  - Signage will be stored in the Infection Prevention and Control department and posted at the discretion of Infection Prevention.
  - Keep door closed during aerosol generating procedures.
  - Sign border is green/black checkered.
Modified Droplet Precautions - Back

- Changes:
  - Disinfect bed rails and head/foot boards prior to patient transport.
  - Criteria for discontinuing isolation is 5 days after onset, not 7 days.
The go-live date for the new isolation signage is expected to be **Thursday June 1, 2017**.
Congratulations!

• You have completed this CBL module.
• Proceed to take the test.
• Questions?
  • Visit the Infection Prevention and Control web site.
  • Contact any Infection Prevention and Control team member.