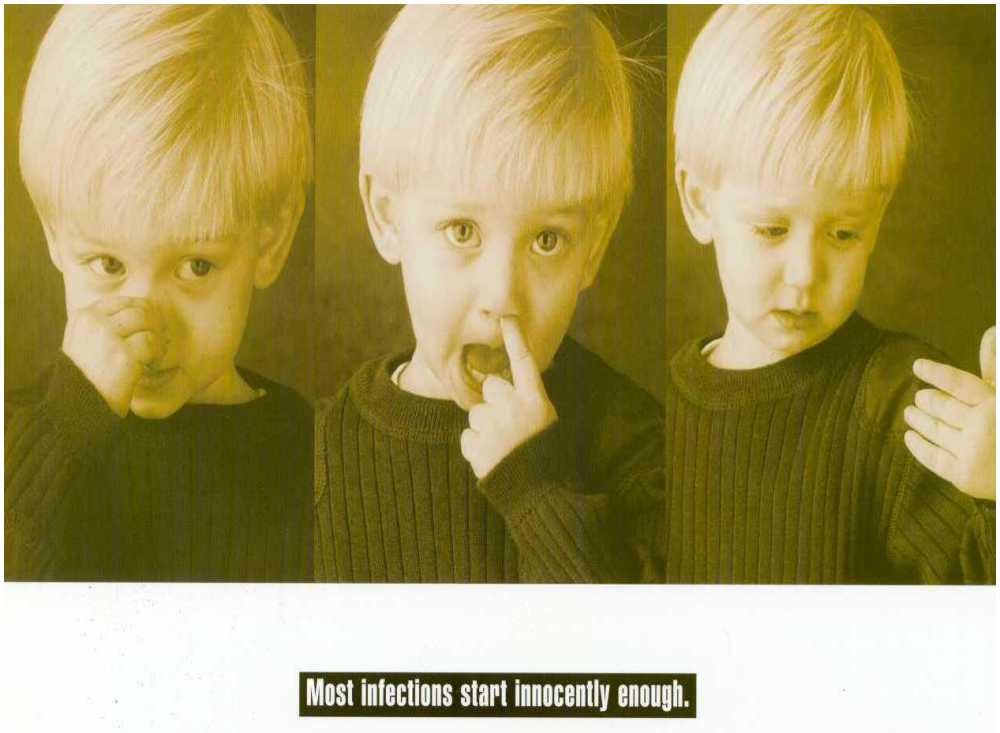
Infection Prevention



- Transmissible infections are a major concern among healthcare workers (all paid and unpaid persons working in healthcare settings).
- Transmissible infections can be spread from patient to healthcare worker or from healthcare worker to patient.

Our Infection Prevention program only works if you are committed to following the guidelines described in this CBL.

Continue

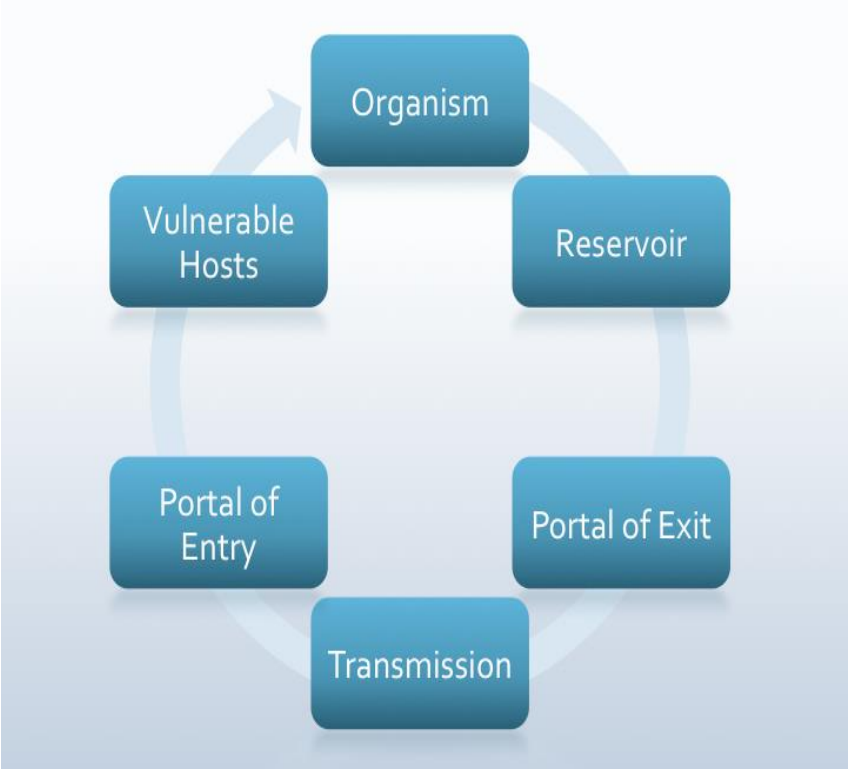
Learning Objectives

Upon completion of this CBL, you should:

- Recognize your role in preventing infection in the health care setting
- Identify three (3) key strategies in preventing infection
- Understand the types of transmission-based precautions used at Med Center Health facilities and general situations to which they apply
- Know available resources within Med Center Health to provide information and guidance in preventing infection

Continue

The Basics of Infection Prevention and Control



In order for a disease to go from person to person:

- The germ causing the disease must have a way to get out of the sick person
- The second person must then come in contact with the germ
- Finally, the germ must find a way into the second person

Continue

Policies and Procedures

This facility provides written policies and procedures for infection prevention and control. All health care workers have access to these policies and procedures that clearly explain the infection prevention and control methods used by this facility. If you are ever unsure about how to protect yourself, you may consult these policies and procedures. You may also ask your supervisor for guidance or call Infection Prevention.

From any Med Center Health computer go to
Policies and Manuals>Infection Prevention Manual
for all Infection Prevention Policies

Continue

Engineering Controls

As part of its infection prevention and control responsibilities, this facility also provides engineering controls. Engineering controls work to remove a hazard from the workplace.

- Engineering controls may be as simple as the use of a sharps container for used needles to protect workers and others from disease spread through contact with blood.
- They may also be complex, such as negative pressure-ventilation systems for isolation rooms.
- Whether simple or complex, engineering controls stop the spread of infection by making the workplace safer.

Continue

Regulated Waste and Disposal

Regulated waste refers to:

- Contaminated items that could release blood or other potentially infectious material (OPIM) when you handle them
- Contaminated sharps
- Contaminated pathological wastes (such as human tissues)
- Microbiological wastes (such as cultures and culture dishes) that contain blood or OPIM

Disposal of Regulated Waste

- Regulated waste must be bagged in leak-proof plastic bags that are printed with the biohazard symbol. This bagging system prevents the waste from coming into contact with patients, workers, and visitors. Used sharps are to be placed in puncture-resistant containers.
- The biohazard symbol is a universal symbol placed on any container or area that may contain regulated waste. Biohazard signs are red or orange and include the biohazard symbol.

Continue

Work Practice Controls: Cleaning and Disinfecting

The cleaning and disinfection of ALL patient care areas is important. Frequently touched surfaces are most likely to be contaminated, especially those located closest to the patient, such as bed rails, bedside tables, toilets, doorknobs, sinks, & equipment.

- Decrease your risk of contact with disease-causing germs by containing, removing, and disinfecting all blood or body fluid spills as quickly and effectively as possible.
- Use gloves & other proper personal protective equipment (PPE).
- Use the correct product according to the manufacturers' instructions for use (IFU) & whether transmission based (isolation) precautions are applicable.
- Know the "wet time" for the disinfectant you are using. This is how long the surface must stay wet with the disinfectant to kill germs.

Continue

Cleaning and Disinfecting: Use the Product Correctly

- 1 or 2 step technique:
  - If the surface is **visibly soiled**, use the 2 step technique.
    - Use one or more wipes to completely pre-clean the surface.
    - Dispose of the wipe(s) in appropriate trash bin, depending upon infectious material.
    - Disinfect the pre-cleaned surface with additional wipe(s).
  - If the surface **is not visibly soiled**, use the 1 step technique.
    - Disinfect the surface with one or more wipes. Discard wipe(s) in trash.
- Surface coverage:
  - Use enough wipes to thoroughly wet the entire surface with disinfectant product. If the wipe starts to dry out before the surface is completely cleaned, use additional fresh wipes to continue.
- Wet (contact or kill) time:
  - The surface must remain wet with the disinfectant product for the entire recommended wet (contact or kill) time.

Oxivir wipes – wet time = 1 minute

Clorox bleach wipes – wet time = 3 minutes

Continue

Work Practice Controls: Worker Issues

- In workplace settings where contact with disease-causing germs is likely, do not apply cosmetics, lip balm or contact lenses. Do not eat, drink or put objects in your mouth while you are in such settings.
- Food and drinks must be stored separately from blood or other potentially infectious materials (OPIM).

Continue

Work Practice Controls: Needles and Other Sharps

Injuries due to needles and other sharps have been associated with the transmission of the hepatitis B virus, hepatitis C virus, and HIV/AIDS to health care personnel.

- Do not recap, bend, break, or hand-manipulate used needles.
- Use safe sharps whenever possible and activate the safety device immediately after use.
- Dispose of used sharps in a puncture-resistant container, and remember to never overfill sharps disposal containers.

Continue

Hand Hygiene

Health care workers must practice good hand hygiene. They must wash their hands after touching:

- **Blood**
- **Body fluids**
- **Secretions**
- **Excretions**
- **Items contaminated by these fluids**

- **If a worker has worn gloves, he/she must wash his/her hands before donning the gloves and right after removing the gloves.**

- **He/she must also wash his/her hands when going from one patient to the next.**

Hand Hygiene – How?

Alcohol Hand Sanitizer

- Apply to palm of one hand, rub hands together covering all surfaces until dry

Hand Washing

Wet hands with water, apply soap, rub hands together for at least 15 seconds

Continue

Hand Hygiene

Clean hands are the single most important factor in preventing the spread of germs and antibiotic resistance in health care settings.

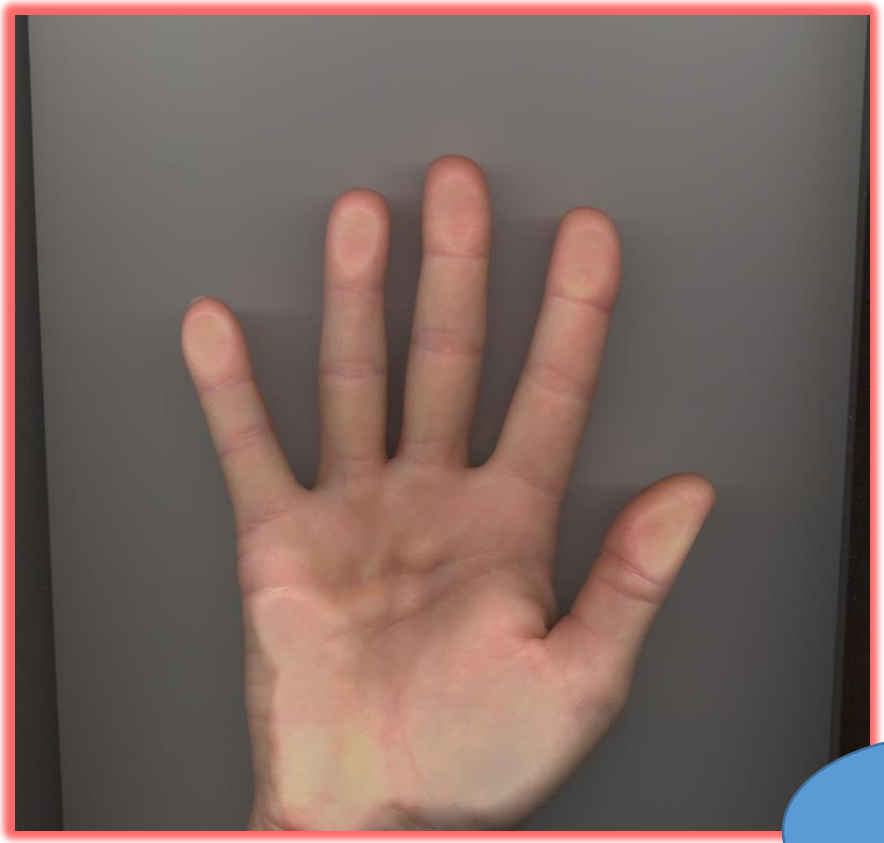
As noted in the Med Center Health Employee Handbook:

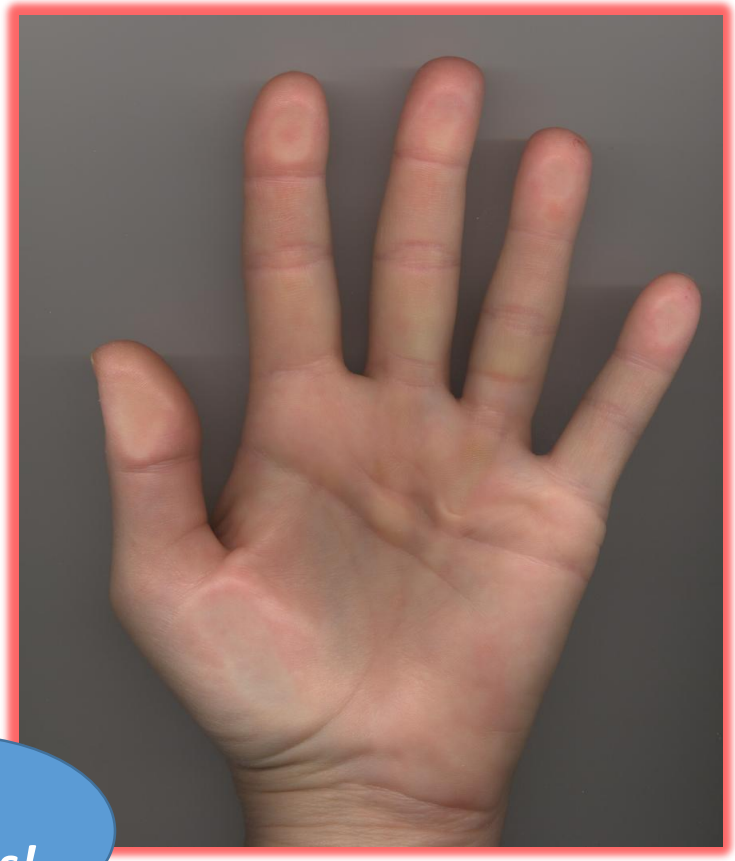
- "Fingernails must be clean and trimmed so as to not interfere with the employee's work. Nail polish is permitted provided that it does not detract from a professional image and does not present any health/safety concerns due to chipping, etc."

- "Employees and associates who work in positions that provide direct patient care or work in Food Services cannot (1) wear artificial fingernails, acrylic overlays, nail tips or nail extenders and/or (2) have natural nail tips longer than one quarter inch."

Continue

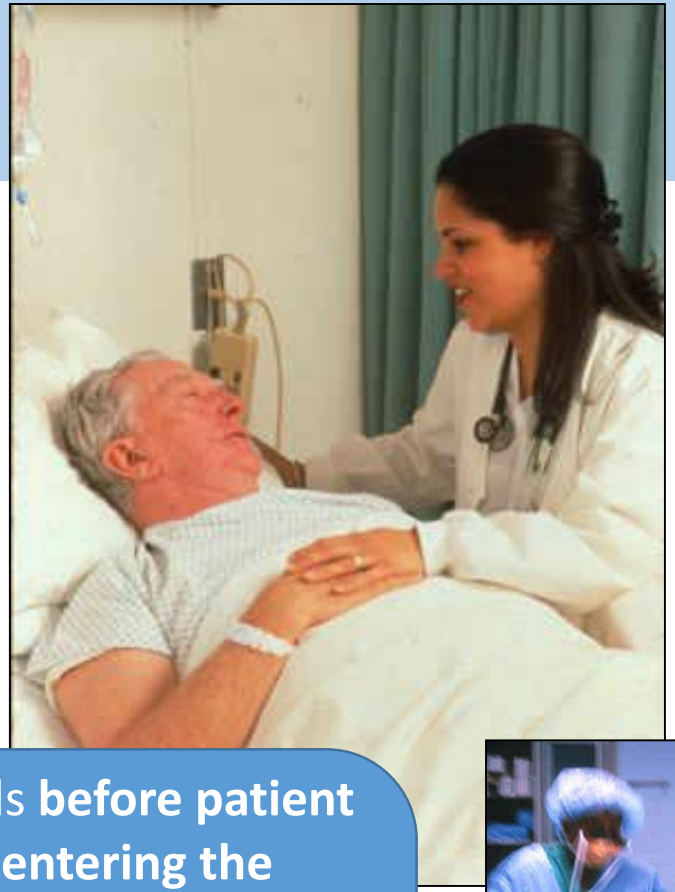
What are the 10 most common causes of infections?





Your Fingers!

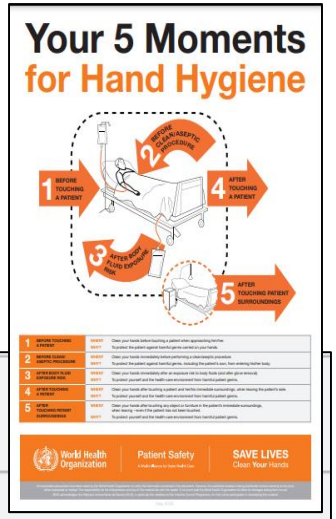
Continue



Clean your hands **before patient contact (i.e. entering the patient's room), before clean/aseptic procedure, after removing gloves & after contact with patient or contaminated items/materials – "foam in" and "foam out"**

Continue

Hand Hygiene – When & Why



1	BEFORE TOUCHING A PATIENT	WHEN?	Clean your hands before touching a patient when approaching him/her.
		WHY?	To protect the patient against harmful germs carried on your hands.
2	BEFORE CLEAN/ ASEPTIC PROCEDURE	WHEN?	Clean your hands immediately before performing a clean/aseptic procedure.
		WHY?	To protect the patient against harmful germs, including the patient's own, from entering his/her body.
3	AFTER BODY FLUID EXPOSURE RISK	WHEN?	Clean your hands immediately after an exposure risk to body fluids (and after glove removal).
		WHY?	To protect yourself and the health-care environment from harmful patient germs.
4	AFTER TOUCHING A PATIENT	WHEN?	Clean your hands after touching a patient and her/his immediate surroundings, when leaving the patient's side.
		WHY?	To protect yourself and the health-care environment from harmful patient germs.
5	AFTER TOUCHING PATIENT SURROUNDINGS	WHEN?	Clean your hands after touching any object or furniture in the patient's immediate surroundings, when leaving – even if the patient has not been touched.
		WHY?	To protect yourself and the health-care environment from harmful patient germs.

World Health Organization | Patient Safety
A World Alliance for Safer Health Care | SAVE LIVES
Clean **Your** Hands

Gloves and Hand Hygiene

Keep in mind that wearing gloves does not replace hand hygiene, the most basic factor in infection prevention and control.

- During use, your gloves may develop small holes that you cannot see.
- Germs may grow quickly on gloved hands.

Therefore, you should always perform appropriate hand hygiene after taking off your gloves.

Continue

Personal Protective Equipment (PPE)

PPE is provided based on an assessment of exposure hazards in each work area.

- In order to protect areas of the body, you must always check your PPE for damage each time you use it.

- In order to control the spread of infection, the areas of the worker that need to be protected are the hands, face, and body or garments.

- Enhanced PPE (full-body coverage) is required when caring for patients with viral hemorrhagic fevers, such as Ebola. Ask your supervisor or call Infection Prevention for guidance on these practices.

Always clean your hands after removing PPE

Continue

Gowns

As part of your infection prevention and control responsibility, you must wear a gown when your clothing could be soiled with blood or OPIM. Your gown needs to be fluid resistant.

Gowns are worn to keep germs from being spread from a patient's room to another part of the facility. Therefore, when you remove the gown, you must do so without contaminating yourself or your clothing.

The outside of the gown is considered to be unclean. Therefore, when you remove the gown, be sure to contain the germs by folding it so that the inside of the gown (which was against your body) is now on the outside of the removed gown.

Use the following procedure to remove your gown without contaminating yourself or your clothing:

1. Remove gloves (remember that the gown front and sleeves are contaminated)
2. Unfasten waist and neck ties of gown
3. Pull gown away from neck and shoulders, only touching the inside of the gown.
4. Turn gown inside out
5. Fold or roll gown into a bundle and discard (remember to always keep hands inside the gown)
6. Perform hand hygiene.

Continue

Masks, Face Shields and Respirators

As part of your infection prevention and control effort, it may be necessary to wear a mask and goggles or a face shield.

Wear a mask that covers your nose and mouth as well as goggles or a face shield if you are at risk of coming into contact with splashes or sprays of blood or OPIM.

If you perform CPR, use a CPR mask to protect the patient and yourself. Remember to use a mouthpiece to prevent contact with mouth or oral secretions.

- Surgical masks are an important type of PPE.
- Surgical masks can protect workers from many diseases, but they do not protect workers from TB.
- A patient with suspected or diagnosed TB should be placed in an Airborne Infection Isolation Room (AIIR), also called a negative-pressure room.
- OSHA requires anyone entering an Airborne Infection Isolation Room to wear a fit-tested respirator or a PAPR hood.

Continue

Fit-Testing Respirators

Fit-tested respirators are essential for preventing the spread of airborne germs such as TB and measles. OSHA requires annual fit testing of respirators.

During the fit check, each worker must know how to:

- Don and remove the respirator correctly
- Perform fit checks, also known as user-seal checks, prior to each use

Disposable Respirators:

- At the end of the shift, all disposable respirators must be discarded
- Health care workers must not share respirators
- Prior to each use, you must always check to make sure the fit is not compromised by a change in shape
- Check with your supervisor or call Infection Prevention if you have questions about specific guidelines for using, managing, and disposing of respirators.

Continue

Gloves

Gloves are an essential element of infection prevention and control.
With respect to gloves, remember that:

- You should wear gloves any time you are at risk of coming into contact with blood or OPIM (e.g., you handle dirty laundry)
- You should wear gloves that cover your wrists
- If you have donned an isolation gown, your gloves should cover the cuffs of the gown
- Gloves are made for one-time use and must be properly removed and disposed of after a single use (do not wash gloves)

Removing Gloves:

- Properly removing gloves is essential to protecting yourself and others from the risk of infection. Remove gloves so that the inside part of the glove is turned toward the outside. This is because the outside of the glove is soiled, and taking the gloves off inside out will keep the germs contained within the gloves.

- Be sure to dispose of the gloves properly. Gloves grossly contaminated with blood or OPIM should be disposed of in a regulated waste container. Gloves without gross blood or OPIM are to be disposed of in a regular waste container. Immediately after removing gloves, perform hand hygiene.

Continue

Donning and Removing PPE

According to the CDC, a certain order should be followed when donning and doffing (removing) PPE. When using more than one piece of PPE, put the equipment on in the following order:

1. Gown
2. Mask or respirator
3. Goggles or face shield
4. Gloves

When removing PPE, remove the equipment in the following order:

1. Gown & Gloves
2. Goggles or face shield
3. Mask or respirator
4. Hand hygiene

CDC
CENTERS FOR DISEASE™ CONTROL AND PREVENTION

Continue

Standard Precautions

Use Standard Precautions for all patients, regardless of age, diagnosis, or overall health status. Assume everyone is potentially infectious – protect yourself from human immunodeficiency virus (HIV), hepatitis B, hepatitis C and other bloodborne diseases.

Standard Precautions include:

1. Hand hygiene
2. The use of PPE as a barrier to keep blood and body fluids off your clothes, skin, eyes, nose and mouth
3. Respiratory hygiene and cough etiquette
4. Appropriate patient placement
5. Proper handling and cleaning/disinfection of patient care equipment and the environment
6. Careful handling of textiles & laundry
7. Safe injection practices including wearing a surgical mask when performing lumbar punctures.
8. Proper handling of needles and other sharps by healthcare workers

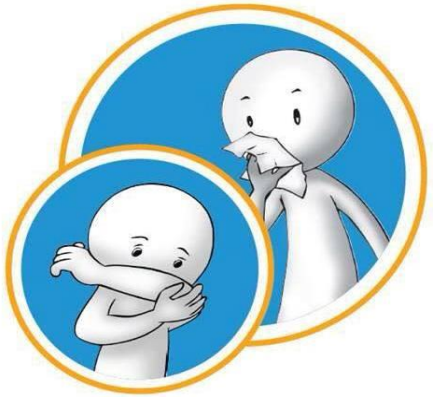
Continue

Respiratory Hygiene and Cough Etiquette

The elements of respiratory hygiene and cough etiquette include the education of health care facility staff, patients, and visitors.

The following source control measures are part of the etiquette:

- Covering the mouth and nose with a tissue when coughing
- Disposal of used tissues
- Use of procedure masks by the coughing person, as appropriate
- Hand hygiene after contact with respiratory secretions
- Keeping a distance of more than 3 feet from a person with a respiratory infection or wearing a procedure mask when with such patient



Cover your mouth with a disposable tissue when coughing or sneezing. If a tissue is not available, cough or sneeze into your upper sleeve

Continue

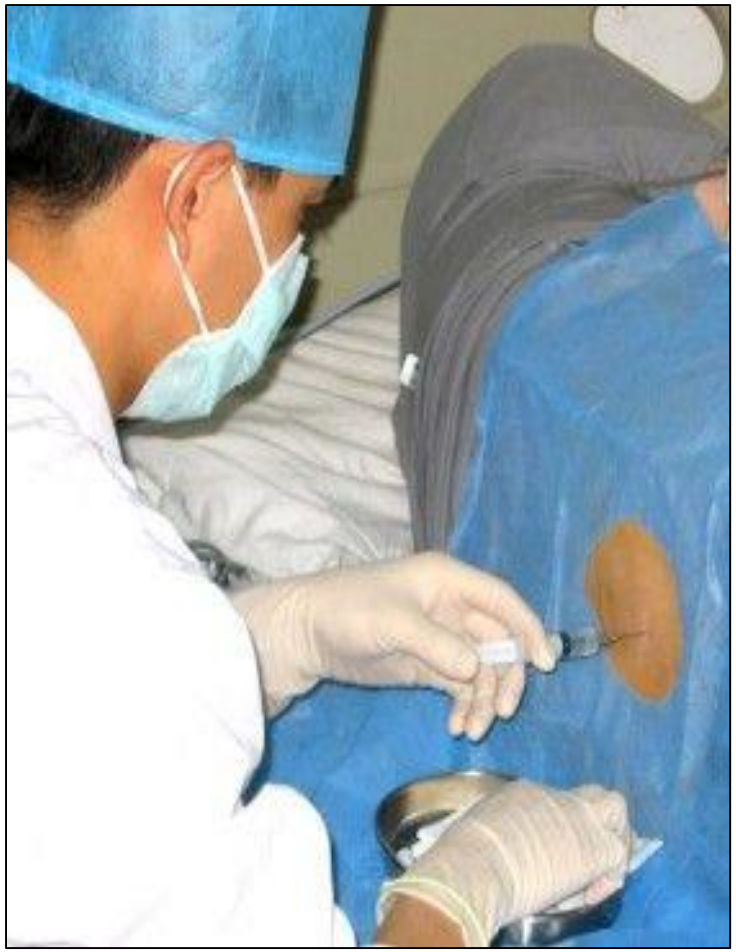
Safe Injection Practices

The elements of safe injection practices include the use of a sterile, single-use, disposable needle and syringe for each injection given and the prevention of the contamination of injection equipment and medication.

It is important for all health care workers to understand and adhere to these recommended practices and to the basic principles of infection prevention and control, as well as aseptic technique.

Continue

Infection Prevention and Control Practices for Special Lumbar Puncture Procedures



- The additional protection of a face mask for individuals who perform special lumbar puncture procedures is recommended.
- Examples of these procedures are myelograms and spinal or epidural anesthesia.
- Be an advocate for the safety of your patients and remind providers of the need for the face mask.

Continue

Transmission-Based (Isolation) Precautions

Transmission-Based Precautions are used when a patient:

- has a documented or suspected infection
- is colonized with certain germs (the person has the germ present but they are not sick)

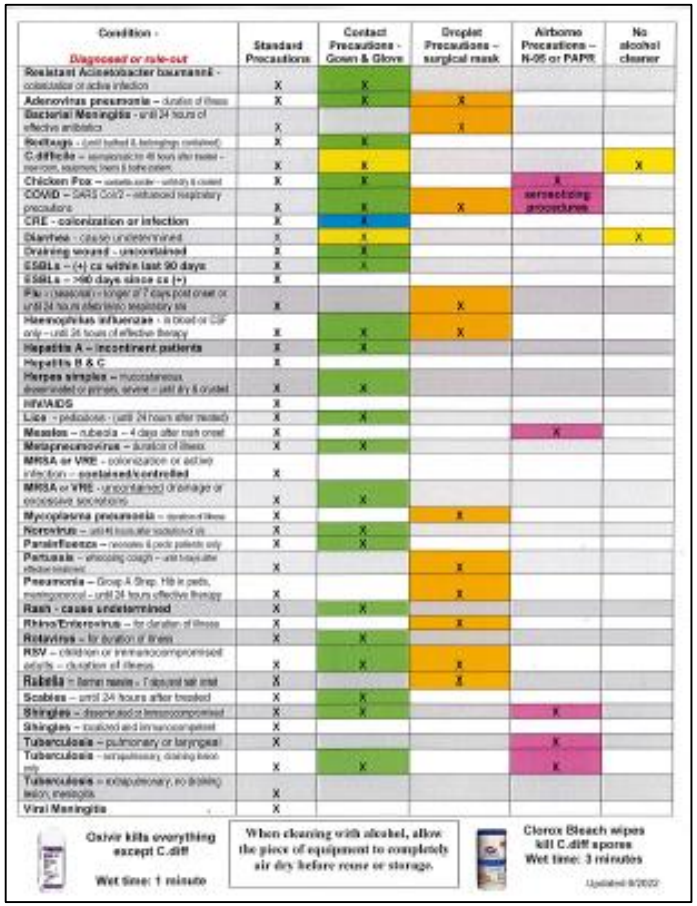
Transmission-Based Precautions are assigned based on how the disease is spread.
Transmission-Based Precautions include:

- **Airborne Precautions** – disease spread through the air
- **Droplet Precautions** – disease spread through respiratory droplets such as coughs and sneezes
- **Contact Precautions** – disease spread by touching the patient, surfaces, or equipment
- **Enhanced Respiratory Precautions** – COVID-19

Transmission-Based Precautions are always in addition to Standard Precautions

Continue

Transmission-Based (Isolation) Precautions Communication Tools - Signage



Condition - Diagnosed or rule-out	Standard Precautions	Contact Precautions - Gown & Glove	Droplet Precautions – surgical mask	Airborne Precautions – N-95 or PAPR	No alcohol cleaner
Resistant Acinetobacter baumannii - colonization or active infection	X	X			
Adenovirus pneumonia – duration of illness	X	X	X		
Bacterial Meningitis - until 24 hours of effective antibiotics	X		X		
Bedbugs - (until bothed & belongings contained)	X	X			
C.difficile – asymptomatic 48 hours after loose stool in room, equipment, linens & bathe patient	X	X			X
Chicken Pox – varicella zoster - until dry & crusted	X	X		X	
COVID – SARS CoV2 – enhanced respiratory precautions	X	X	X	X aerosolizing procedures	
CRE - colonization or infection	X	X			
Diarrhea - cause undetermined	X	X			X
Draining wound - uncontained	X	X			
ESBLs – (+) cx within last 90 days	X	X			
ESBLs – >90 days since cx (+)	X				
Flu – (seasonal) – longer of 7 days post onset or until 24 hours after last respiratory sx	X		X		
Haemophilus influenzae - in blood or CSF only – until 24 hours of effective therapy	X	X	X		
Hepatitis A – incontinent patients	X	X			
Hepatitis B & C	X				
Herpes simplex – mucocutaneous, disseminated or primary, zoster – until dry & crusted	X	X			
HIV/AIDS	X				
Lice – pediculosis - (until 24 hours after treated)	X	X			
Measles – rubeola – 4 days after rash onset	X			X	
Metapneumovirus – duration of illness	X	X			
MRSA or VRE - colonization or active infection – contained/controlled	X				
MRSA or VRE - uncontained or drainage or excessive secretions	X	X			
Mycoplasma pneumonia – duration of illness	X		X		
Norovirus – until 48 hours after isolated sx	X	X			
Parainfluenza – neonates & peds patients only	X	X			
Pertussis – whooping cough – until 5 days after effective treatment	X		X		
Pneumonia – Group A Strep, Hib in peds, meningococcal – until 24 hours effective therapy	X		X		
Rash - cause undetermined	X	X			
Rhino/Enterovirus – for duration of illness	X		X		
Rotavirus – for duration of illness	X	X			
RSV – children or immunocompromised adults – duration of illness	X	X	X		
Rubella – German measles - 7 days post rash onset	X		X		
Scabies – until 24 hours after treated	X	X			
Shingles – disseminated or immunocompromised	X	X		X	
Shingles – localized and immunocompetent	X				
Tuberculosis – pulmonary or laryngeal	X			X	
Tuberculosis – extrapulmonary, draining lesion only	X	X		X	
Tuberculosis – extrapulmonary, no draining lesion, meningitis	X				
Viral Meningitis	X				

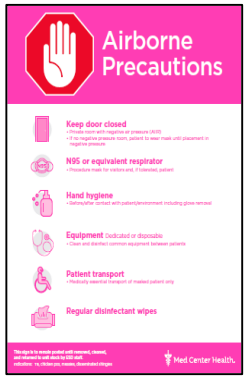
Clorox kills everything except C.diff
Wet time: 1 minute

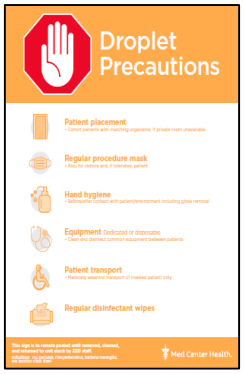
When cleaning with alcohol, allow the piece of equipment to completely air dry before reuse or storage.

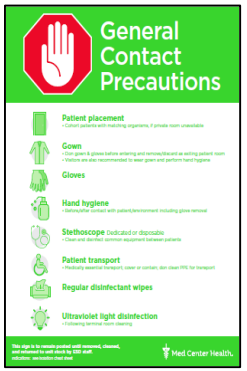
Clorox Bleach wipes kill C.diff spores
Wet time: 3 minutes

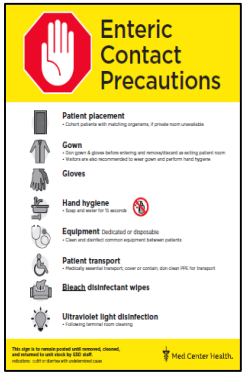
Updated 8/2022

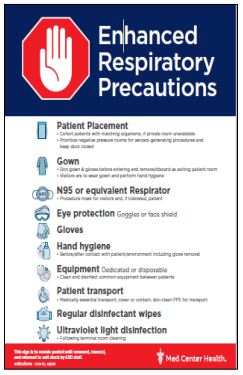
Isolation Cheat Sheet







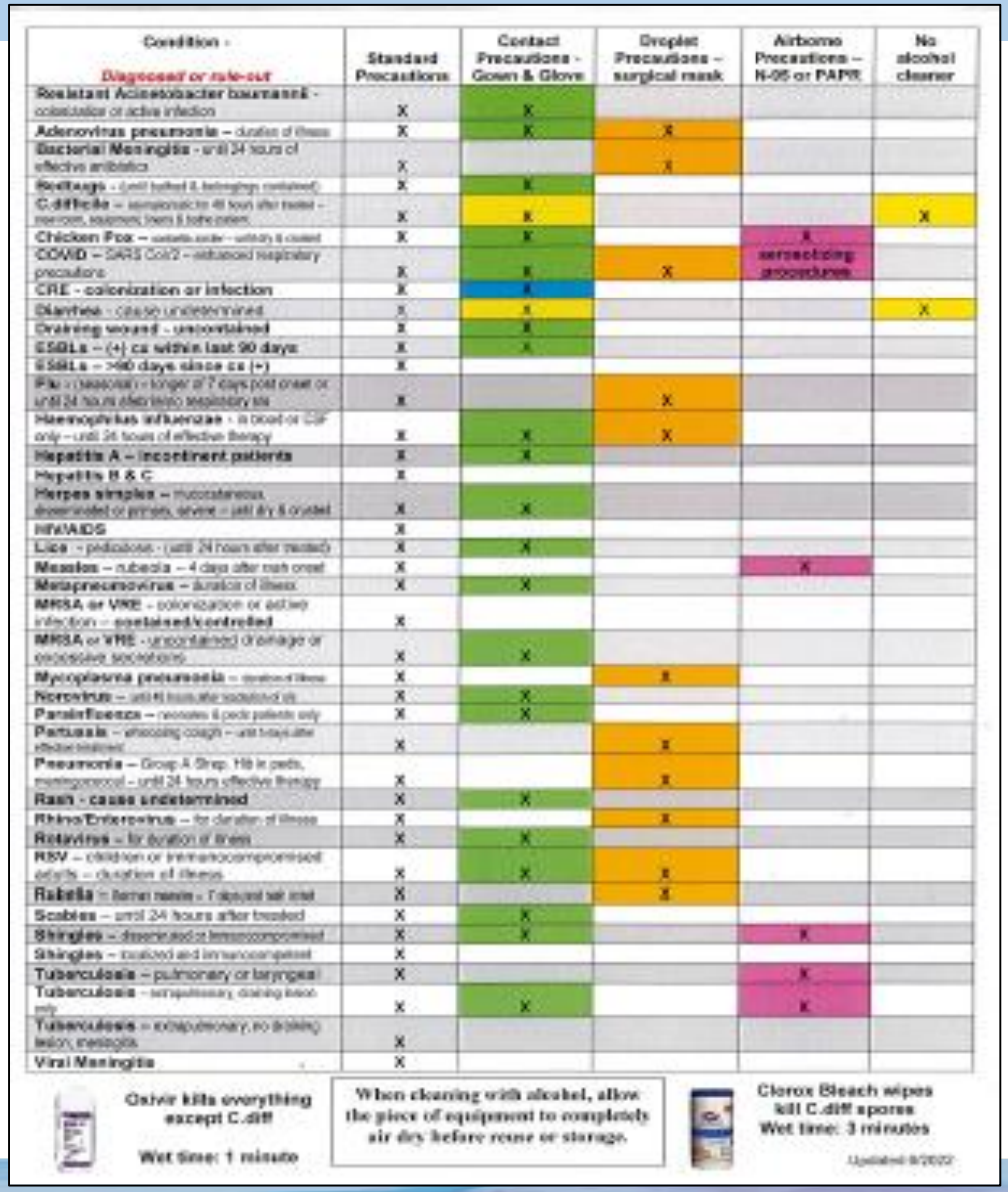




Updated & standardized isolation precaution signs

Continue

Isolation Cheat Sheet



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Resistant Acinetobacter baumannii - colonization or active infection	X	X			
Adenovirus pneumonia – duration of illness	X	X	X		
Bacterial Meningitis - until 24 hours of effective antibiotics	X		X		
Bedbugs - (until bathed & belongings contained)	X	X			
C.difficile – asymptomatic till 48 hours after treatment – room, equipment, linens & toilet cleaned	X	X			X
Chicken Pox – isolate under - until dry & crusted	X	X		X	
COVID – SARS CoV2 – enhanced respiratory precautions	X	X	X	X aerosolizing procedures	
CRE - colonization or infection	X	X			
Diarrhea - cause undetermined	X	X			X
Draining wound - uncontained	X	X			
ESBLs – (+) cx within last 90 days	X	X			
ESBLs – >90 days since cx (+)	X				
Flu – (seasonal) – longer of 7 days post onset or until 24 hours afebrile/no respiratory sx	X		X		
Haemophilus influenzae - if blood or CSF only – until 24 hours of effective therapy	X	X	X		
Hepatitis A – incontinent patients	X	X			
Hepatitis B & C	X				
Herpes simplex – mucocutaneous, disseminated or primary, severe – until dry & crusted	X	X			
HIV/AIDS	X				
Lice - pediculosis - (until 24 hours after treated)	X	X			
Measles – rubeola – 4 days after rash onset	X			X	
Metapneumovirus – duration of illness	X	X			
MRSA or VRE - colonization or active infection – **contained/controlled**	X				
MRSA or VRE - uncontained drainage or excessive secretions	X	X			
Mycoplasma pneumonia – duration of illness	X		X		
Norovirus – until 48 hours after resolution of sx	X	X			
Parainfluenza – neonates & peds patients only	X	X			
Pertussis – whooping cough – until 5 days after effective treatment	X		X		
Pneumonia – Group A Strep; Hib in peds, meningococcal – until 24 hours effective therapy	X		X		
Rash - cause undetermined	X	X			
Rhino/Enterovirus – for duration of illness	X		X		
Rotavirus – for duration of illness	X	X			
RSV – children or immunocompromised adults – duration of illness	X	X	X		
Rubella – home nursing – 7 days post rash onset	X		X		
Scabies – until 24 hours after treated	X	X			
Shingles – disseminated or immunocompromised	X	X		X	
Shingles – localized and immunocompetent	X				
Tuberculosis – pulmonary or laryngeal	X			X	
Tuberculosis – extrapulmonary, draining lesion only	X	X		X	
Tuberculosis – extrapulmonary, no draining lesion, meningitis	X				
Viral Meningitis	X				

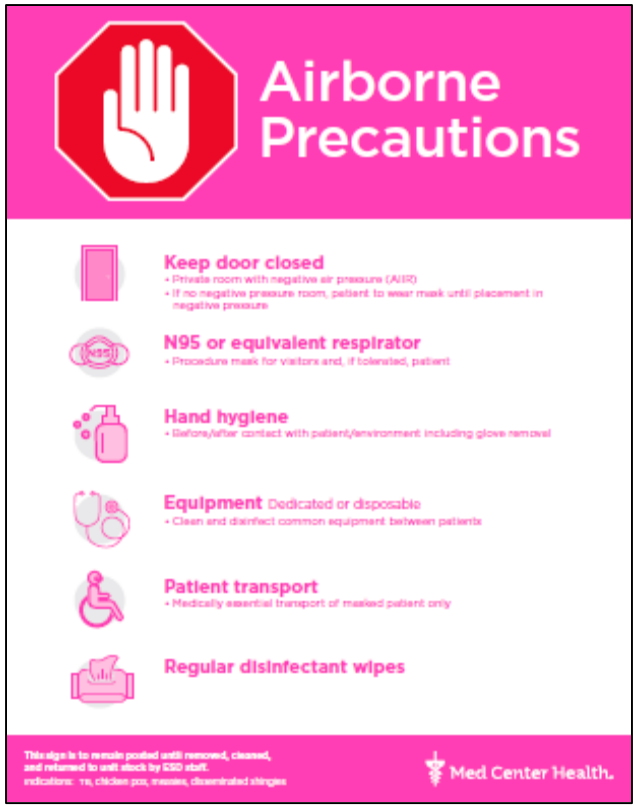
The Isolation Cheat Sheet is a reference posted in clinical settings which includes a listing of organisms, associated transmission-based precautions, and duration of precautions.

Additionally, Med Center Health approved cleaners/disinfectants and associated wet times are listed at the bottom of the Isolation Cheat Sheet.

https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html

Continue

Airborne Precautions



Diseases spread through tiny airborne particles:

- **TB**
- **Measles**
- **Disseminated shingles**
- **Chicken pox**

You must wear a fit-tested **N95 respirator or PAPR** to enter an Airborne Isolation room.

The movement of patients in Airborne Isolation should be limited to procedures/tests that are absolutely essential to the patient's care. If the patient must leave the Airborne Isolation room, place a surgical mask on him/her – NEVER ask a patient to wear a N95.

The air from an Airborne Infection Isolation Room (AIIR) is vented to the outside of the facility (negative pressure). Only open the hallway door to an Airborne Room when the inner door of the ante-room is closed.

Continue

Shingles – Herpes Zoster

Localized and immunocompetent

- People with herpes zoster usually have a rash in one or two adjacent dermatomes, most commonly on the trunk along a thoracic dermatome.
- The rash does not usually cross the body's midline.
- Dermatomes are areas of skin that have connections to specific spinal nerves, creating a surface map of the body.
- **Standard Precautions**

Disseminated or immunocompromised

- Less commonly, the rash can be more widespread and affect 3 or more dermatomes.
- This generally occurs only in people with compromised or suppressed immune systems.
- **Airborne Precautions** in addition to Standard Precautions.

Droplet Precautions

Wear a procedure mask – **not an N-95 respirator or PAPR.**

Eye protection is encouraged, but not required for droplet precautions.

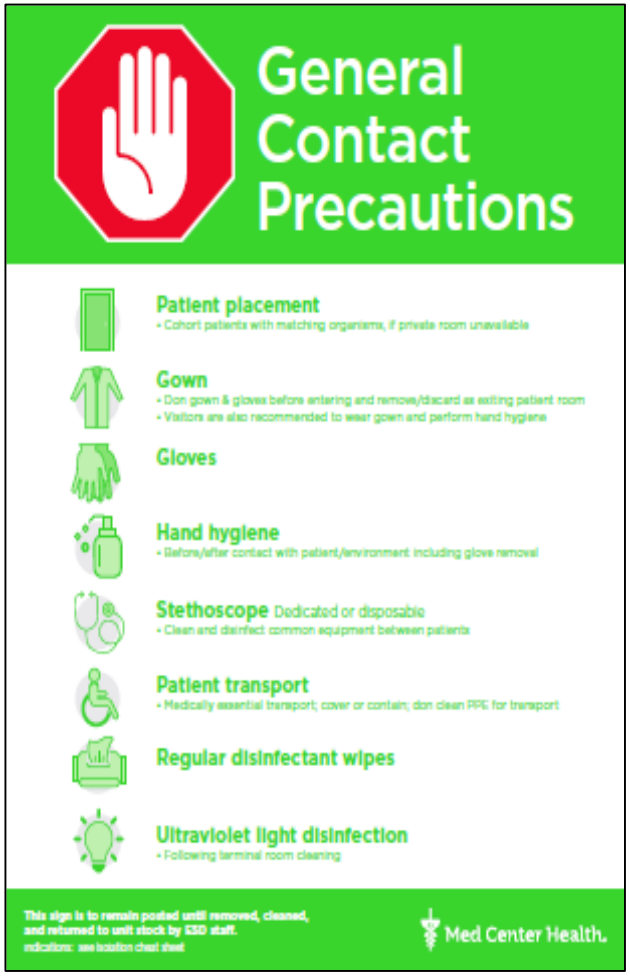
Diseases spread through respiratory droplets of coughs and sneezes such as:

- **Flu (seasonal)**
- **Rhino/enterovirus**
- **RSV (contact & droplet)**
- **Meningitis**
- **Mumps**
- **Pertussis**
- **Adenovirus**
- **H.flu (in blood or CSF only)**
- **Mycoplasma pneumonia**
- **Rubella**

If the patient must travel within the facility, place a procedure mask on the patient before leaving the patient's room.

Continue

General Contact Precautions



Dedicate a stethoscope for the patient's entire stay.

Keep our hallways clean!

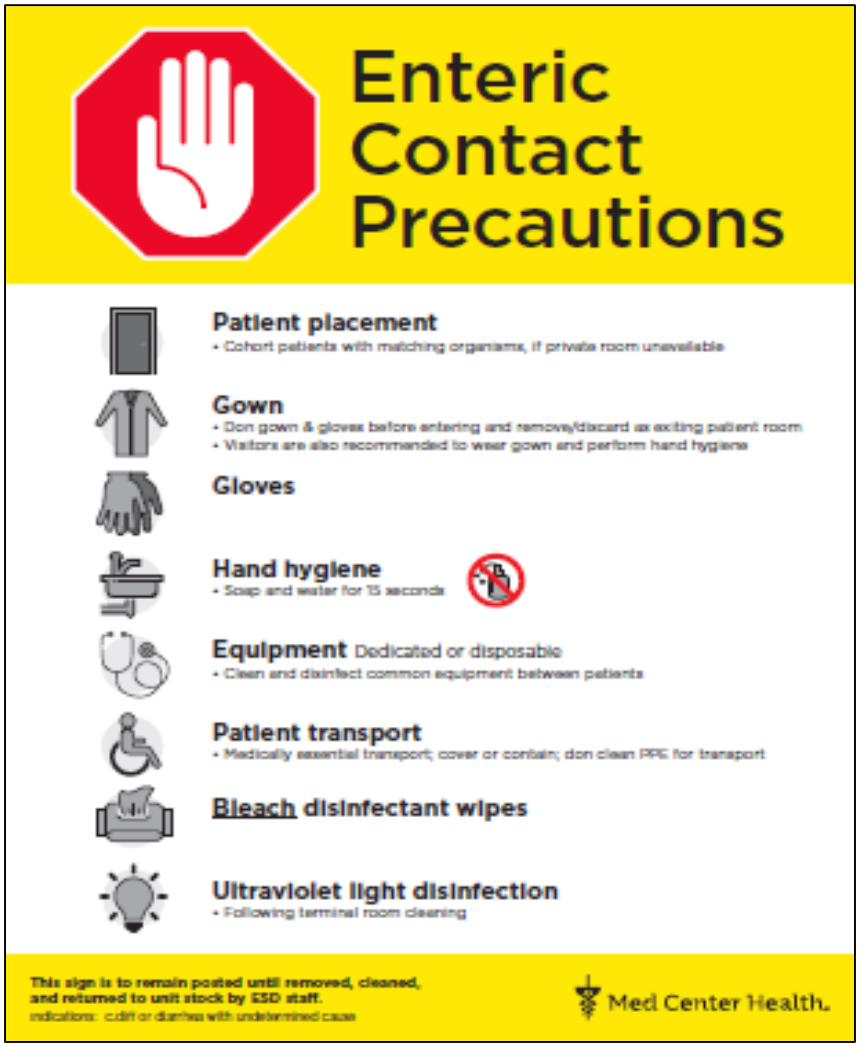
- Hand hygiene should be performed prior to putting on PPE, before entering the patient's room.
- Also, hand hygiene should be performed after PPE removal, prior to exiting the patient's room.

See Isolation Cheat Sheet for indications.

Contact may be **direct, as when the** skin of the patient touches the skin of the worker, or it may be indirect, as when a worker comes in contact with a patient care item that has been contaminated with the patient's germs.

Continue

Enteric Contact Precautions – "C.diff"



Keep our hallways clean –

- Alcohol foam use is permitted prior to room entry, but not upon leaving the room.
- Hand hygiene should be performed prior to putting on PPE, before entering the patient's room.
- Hands should be washed with soap and water for at least 15 seconds after PPE removal, prior to exiting the patient's room.

Continue

Enhanced Contact Precautions

Enhanced Contact Precaution signs are used to indicate special multi-drug resistant organisms that require special attention to the room once the patient is transferred out or discharged.

These rooms are terminally cleaned by two separate people.

Keep our hallways clean!

- Hand hygiene should be performed prior to putting on PPE, before entering the patient's room.
- Also, hand hygiene should be performed after PPE removal, prior to exiting the patient's room.

Indications: CRE, VISA, Candida auris, & other extremely resistant organisms – If you have questions, contact Infection Prevention.

Continue

Neutropenic Precautions Signage

- Neutropenic precautions are for patients with an absolute neutrophil count (ANC) ≤1000 (estimated as Neutrophil # ≤1 on CBC) & may be discontinued when patient's ANC is >1000 for 48 hours. *Manual calculation is ANC = (WBC x 1000) x ((Segs + Bands)/100))*
- Neutropenic inpatients & outpatients should have "Neutropenic precautions" in Special Indicator field in Meditech.
- Specific room ventilation/filtration is not required in the care of the typical neutropenic patient. <u>These patients should not be in a negative pressure room unless necessary due to transmission based precautions.</u>
- Allogenic hematopoietic stem cell transplant (HSCT) patients with ANC of ≤1000 require positive pressure/protective environment rooms on 4C with HEPA filtration.
- The Neutropenic Precautions policy is located in the online Infection Prevention Manual under Section C: Special & Standard Precautions (Isolation).

Healthcare providers and visitors should wear a procedure mask. Educate patient to wear a procedure mask, especially during transport from patient's room.

Continue

Neutropenic Precautions Documentation

Enter/Edit Special Indicators

New | Edit

	Special Indicator	Last Edited By	Last Edit Dt/Tm
☐	Neutropenic Precautions	Herman,Amber J	03/27/23 14:59

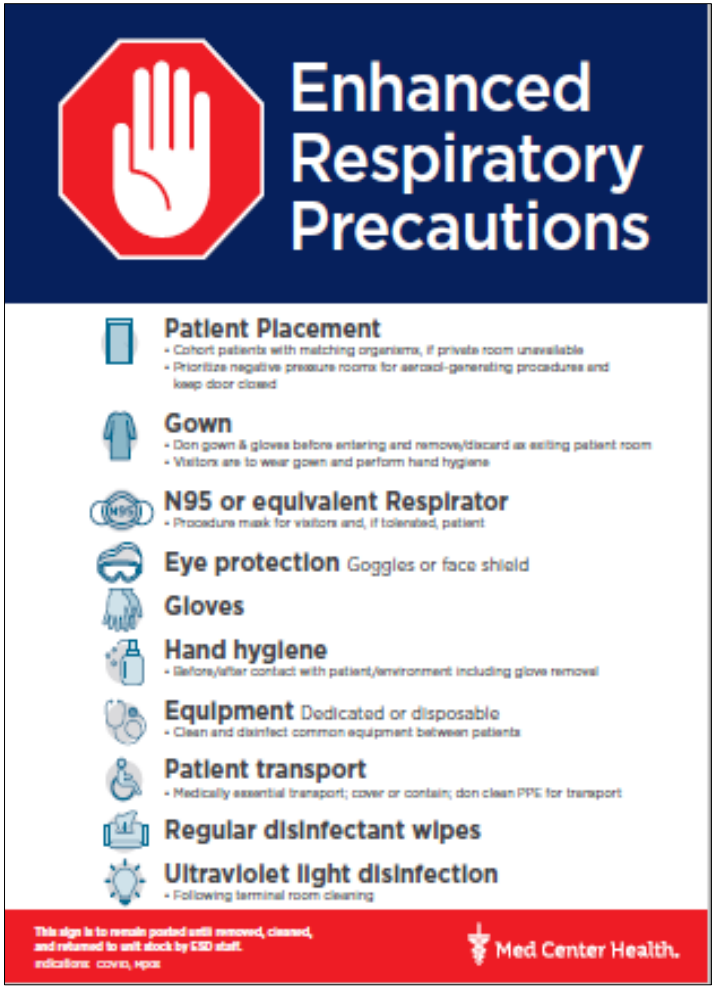
Precautions/ Isolation

Isolation	☐ Standard Precautions ☐ Droplet Precautions ☐ Contact + Gown/Glove ☐ Airborne Precautions ☐ Contact+Gown/Glove+No Foam ☐ Intermediate Respiratory Precautions *Patients with known blood borne pathogens (HIV, HBC, HCV) are placed in Standard Precautions only.
Precautions	☐ Pressure Ulcer Precautions ☐ Seizure Precautions ☐ Other - See Notes ☐ Aspiration Precautions ☐ Suicide Precautions ☐ Fall Precautions ☐ Neutropenic Precautions
Does the Patient Have a Drug Resistant Organism	○ N/A - No DR Organisms ○ Yes ○ Results Pending
Note	

Continue

COVID-19 – Enhanced Respiratory Precautions

- SARS-CoV-2 is the virus that causes COVID-19. It is spread from person to person via respiratory droplets or indirectly via droplets on hard surfaces.
- COVID has a wide range of symptoms, from mild symptoms to severe illness. Symptoms of COVID include fever or chills, cough, fatigue, shortness of breath, body aches, headache, new lost of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, and diarrhea. Onset of symptoms may occur 2 to 14 days after exposure.
- Patients, visitors and employees are routinely screened for COVID symptoms prior to entering facilities.
- Social distancing, surface cleaning, and hand hygiene are recommended to prevent spread.
- Universal masking, home isolation and quarantine are based on CDC, OSHA & KY Department of Public Health guidance.
- Discontinuation of isolation is provider-driven, using the NIH criteria outlined in the current MCH COVID-19 Provider update—last updated 12/2/22.



Continue

COVID-19 – (continued)

COVID 19 Provider Update

Med Center Health

December 2, 2022

Symptom-Based Strategy for Discontinuing Transmission-Based Precautions & Testing Recommendations

- It is important to release a COVID+ patient from isolation when the patient meets criteria.
- Providers need to document severity of the COVID infection/illness to help direct isolation precautions.
- Patients who are **asymptomatic** throughout their infection and are not moderately to severely immunocompromised, regardless of their vaccination status, may be released from COVID precautions when:
  - At least 10 full days have passed since the date of their first positive viral diagnostic test.
- Patients with **mild to moderate illness**, who are not moderately to severely immunocompromised, regardless of their vaccination status, may be released from COVID precautions when:
  - At least 10 full days have passed since symptom onset or the date of their first positive viral diagnostic test, **AND**
  - At least 24 hours have passed since last fever without the use of fever-reducing medications, **AND**
  - Symptoms (such as cough or shortness of breath) have improved.
- Patients with **severe to critical illness**, regardless of their vaccination status, may be released from COVID isolation when:
  - At least 10 full days and up to 20 days have passed since symptom onset or the date of their first positive viral diagnostic test, **AND**
  - At least 24 hours have passed since last fever without the use of fever-reducing medications, **AND**
  - Symptoms (such as cough or shortness of breath) have improved.
- Patients who are **moderately to severely immunocompromised** may produce replication-competent virus beyond 20 days after symptom onset, or beyond the date of their first positive test for asymptomatic patients. Therefore, use of a test-based strategy and consideration for consultation with an ID provider is recommended to determine the length of COVID isolation precautions for this subpopulation.
- **SARS-CoV-2 Illness Severity Criteria (adapted from the NIH COVID-19 Treatment Guidelines)**
  - The highest level of illness severity experienced by the patient at any point in their clinical course should be used when determining the duration of COVID isolation. Clinical judgement regarding the contribution of SARS-CoV-2 to clinical severity might also be necessary when applying these criteria.
  - **Mild illness** – Individuals who have any of the various signs and symptoms of COVID-19 (e.g., fever, cough, sore throat, malaise, headache, muscle pain) without shortness of breath, dyspnea, or abnormal chest imaging.
  - **Moderate illness** – Individuals who have evidence of lower respiratory disease by clinical assessment or imaging, and a saturation of oxygen (SpO_2) ≥94% on room air.
  - **Severe illness** – Individuals who have respiratory rate >30 breaths/minute, SpO_2 <94% on room air (or, for patients with chronic hypoxemia, a decrease from baseline of >3%), ratio of arterial partial pressure of oxygen to fraction of inspired oxygen (PaO_2/FIO_2) <300 mmHg, or lung infiltrates >50%.
  - **Critical illness** – Individuals who have respiratory failure, septic shock, and/or multiple organ dysfunction.

- COVID patients are placed in Enhanced Respiratory Precautions. Appropriate PPE is worn and hand hygiene is performed.
- Negative pressure rooms are prioritized for patients with Aerosol Generating Procedures (AGP). The door is kept closed. Patients should only leave their rooms for absolutely essential tests and should wear procedure mask.
- Severely immunocompromised patients remain in isolation for 20 full days, regardless of symptom resolution, due to prolonged viral shedding.

Continue

Multi-drug Resistant Organisms (MDROs)

What are they?

Bacteria that have become resistant to certain antibiotics, and these antibiotics can no longer be used to control or kill the bacteria

What causes MDROs?

Antibiotics taken longer than necessary or when they are not needed. The more often the antibiotics are used, the more likely it is that resistant bacteria will develop.

How are they spread?

From patient to patient on the hands of healthcare workers or objects such as bed rails, IV poles, surgical equipment, datascopes, etc.

What types of infections do MDROs cause?

Infections in almost any part of the body, including bloodstream, lungs, urinary tract, wounds, skin, and surgical sites.

How do we prevent MDROs?

Antibiotic stewardship, General Contact Precautions, appropriate hand hygiene, environmental cleaning.

Continue

Resistant Acinetobacter

What is it?

Acinetobacter is one of the gram negative rod bacteria. Other examples of gram negative rod bacteria include: E.coli, Klebsiella, and Enterobacter. These bacteria are often resistant to many commonly prescribed antibiotics. If Acinetobacter is highly resistant (resistant to 3 or more classes of antibiotics), **isolation is required for active (new) and colonized (old).**

Where is it found?

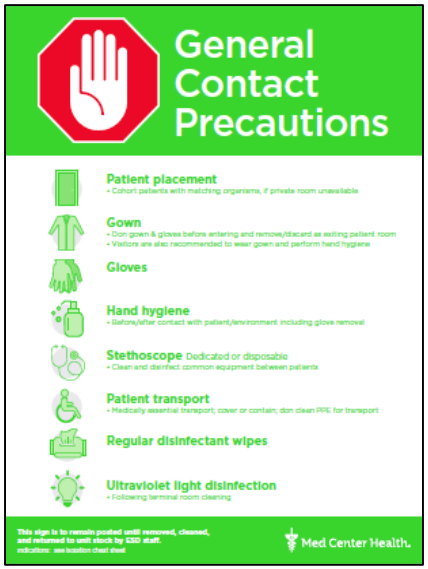
Acinetobacter is commonly found in soil and water. It can also be found on the skin of healthy people.

How is the patient identified?

"Acinetobacter" is documented under "Special Indicators" in Meditech. This can be viewed on the "Status Board" or in the "Summary" tab.

How is it spread?

The Acinetobacter germ is spread when a patient or healthcare worker touches a patient or surface the germ is on and then touches another patient, surface, or healthcare worker prior to performing proper hand hygiene.



General Contact Precautions Required

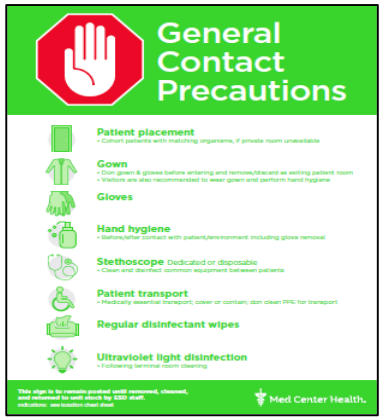
Continue

Extended-spectrum Beta Lactamase (ESBL)

- ESBLs are enzymes that help create resistance to third generation cephalosporins.
- ESBLS are most frequently seen with Klebsiella pneumoniae, E.coli, and Proteus mirabilis.
- Because ESBLs can be spread by contact, patient should remain in Contact Isolation for their entire hospital stay.
- Patients with **active** (new or within the last 90 days) infection are identified by "**ESBL Isolation**" in the "Special Indicators" tab in Meditech. **Colonization** (old or greater than 90 days ago) is identified as "**ESBL History**". This can be viewed on the "Status Board" or in the "Summary" tab.

How is it spread?

The ESBL germ is spread when a patient or healthcare worker touches a patient or surface the germ is on and then touches another patient, surface, or healthcare worker prior to performing proper hand hygiene.



General Contact Precautions Required

Continue

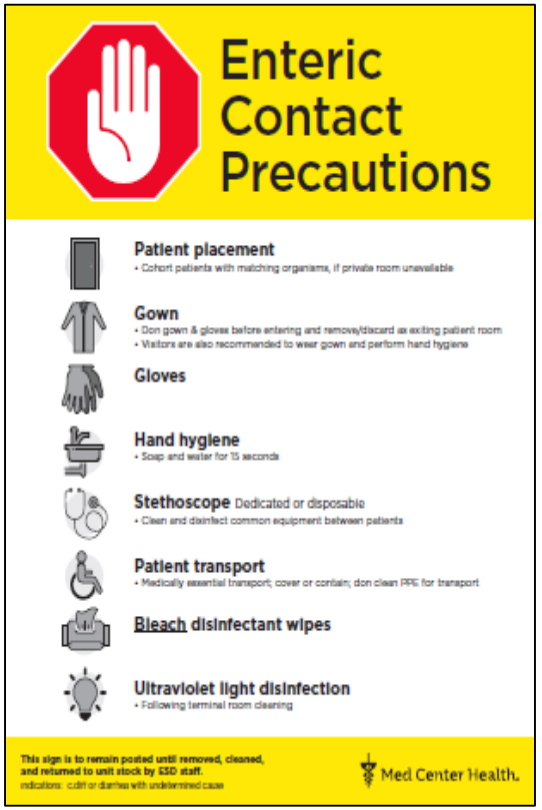
Clostridioides difficile (C.diff)

What is it?
C-diff is a bacteria that causes diarrhea and more serious intestinal problems, such as sepsis. It could even cause death. It occurs mostly in patients taking antibiotics.

Where is it found?
C-diff can live on things in the patient's environment such as bed rails, linens, bathroom fixtures, and medical equipment.

How is the patient identified?
"C-Diff Isolation" is documented under "Special Indicators" in Meditech for patients with current C.diff. Patients with prior C.diff are identified by "C.diff History". This can be viewed on the "Status Board" or in the "Summary" tab.

How is it spread?
C-diff is spread when a patient or healthcare worker touches a patient or surface the germ is on and then touches another patient, surface or healthcare worker prior to performing proper soap and water hand hygiene. (Alcohol does not kill C-diff.)

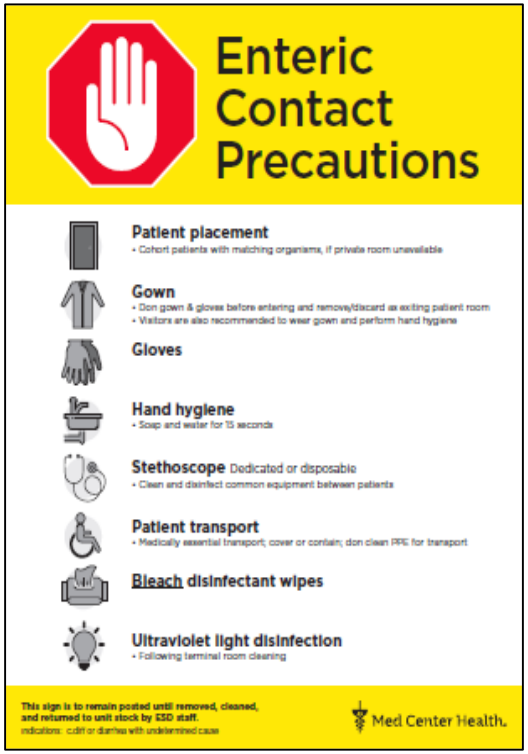


Enteric Contact Precautions Required
– remember to wash your hands with soap and water for at least 15 seconds when leaving the patient's environment.

Continue

Clostridioides difficile (C.diff) continued

- Because C.diff is spread by contact, patients with C.diff (confirmed or results pending) must be placed in Enteric Contact Precautions.
- C.diff is so easy to spread. You need to wear gown and gloves every time you enter the room and remove the PPE before exiting the room.
- **C.diff spores are NOT killed by alcohol-based cleansers.** Wash your hands with soap and water for 15 seconds after caring for a patient with C.diff.
- Enteric Contact precautions precautions may be discontinued when patient is asymptomatic for 48 hours after treatment. Patient must be bathed & have new linens & new equipment in new room.



Do not test stool from patients on stool softeners or laxatives. Also, do not test for cure.

Continue

Vancomycin Resistant Enterococcus (VRE)

What is it?

Vancomycin Resistant Enterococcus (VRE) results from the germ Enterococcus becoming resistant to an antibiotic called Vancomycin.

Where is it found?

Enterococcus is commonly found in the lower intestine. It is also found in the female vaginal tract.

How is the patient identified?

"VRE" is documented under "Special Indicators" in Meditech. This can be viewed on the "Status Board" or in the "Summary" tab.

Reminder: patients with active infection (new) or colonization (old) VRE are not routinely placed in general contact precautions, unless they have uncontained secretions or drainage.

Continue

Methicillin-resistant Staph aureus (MRSA)

What is it?

Methicillin-resistant Staph aureus (MRSA) results when the bacteria Staphylococcus aureus becomes resistant to an antibiotic called oxacillin.

Where is it found?

Staph aureus is commonly found on the skin.

How is the patient identified?

MRSA is documented under “Special Indicators” in Meditech. This can be viewed on the “Status Board” or in the ”Summary” tab.

Reminder: patients with active infection (new) or colonization (old) MRSA are not routinely placed in general contact precautions, unless they have uncontained secretions or drainage.

Continue

Carbapenem Resistant Enterobacterales - CRE

What is it?

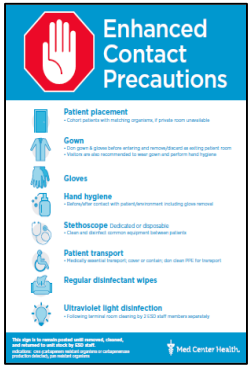
Carbapenem Resistant Enterobacterales (CRE) are bacteria that are either resistant to many antibiotics, including carbapenems, or these bacteria produce an enzyme (carbapenemase) that actively attacks carbapenem antibiotics. Many bacteria can become CREs, such as E.coli, Klebsiella pneumoniae, Acinetobacter baumannii, and Pseudomonas aeruginosa. Carbapenem antibiotics are a family of antibiotics that are used to treat severe infections and often referred to as our last line of defense.

How is it spread?

Usually, CRE is spread by person to person contact with dirty hands or improperly cleaned medical equipment.

How is the patient identified?

CRE is documented under “Special Indicators” in Meditech. This can be viewed on the “Status Board” or in the ”Summary” tab. Patients with active (new) and colonized (old) CRE are placed in Enhanced Contact Precautions.



Continue

Vancomycin Resistant Staph aureus – VRSA
Vancomycin Intermediate Staph aureus - VISA

What is it?

Vancomycin-resistant Staph aureus (VRSA) results when the bacteria Staphylococcus aureus becomes resistant to an antibiotic called vancomycin. Likewise, Vancomycin-intermediate Staph aureus (VISA) results when the same bacteria is not susceptible, but also not resistant, to vancomycin.

Where is it found?

Staph aureus is commonly found on the skin.

How is the patient identified?

"VRSA" or "VISA" is documented under "Special Indicators" in Meditech. This can be viewed on the "Status Board" or in the "Summary" tab. Enhanced Contact Precautions are required for active (new) or colonization (old).

Continue

Emerging Pathogen - Candida auris

What is it?

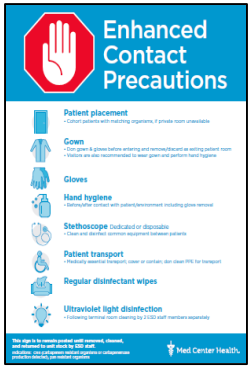
Candida auris is a strain of fungus (yeast) that is often resistant to multiple antifungal medications and can lead to severe infections. Some strains are resistant to all available antifungal medications. It is often difficult to identify and can lead to outbreaks in healthcare settings. While Candida auris was first discovered in 2009, and currently is rare in the USA, it is becoming more common – an emerging pathogen.

How is it spread?

Candida auris is spread by contact with infected patients or contaminated surfaces or medical devices, making proper hand hygiene and cleaning of surfaces extremely important.

How is the patient identified?

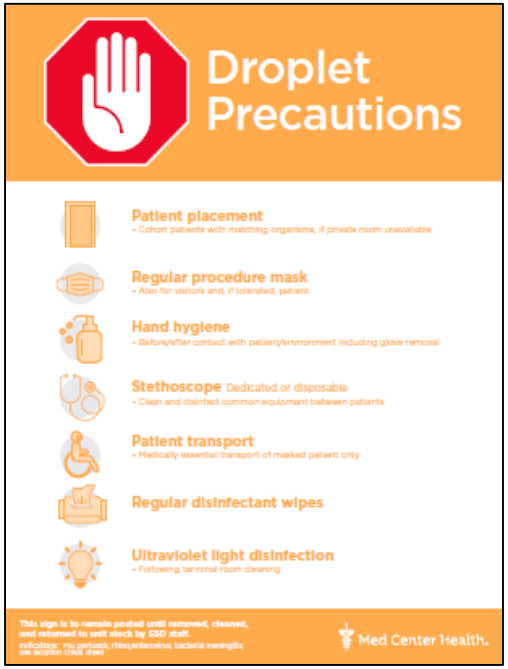
“Candida auris” is documented under “Special Indicators” in Meditech. This can be viewed on the “Status Board” or in the ”Summary” tab. “Enhanced Contact Precautions” are required for active (new) and colonization (old).



Continue

Influenza (Flu)

Because flu is spread by respiratory droplets of coughs and sneezes, patients with the flu (confirmed or results pending) are placed in Droplet Precautions.



- You can get infected when someone's respiratory droplets are propelled through the air and land on your mouth, eyes, or nose.
- You can also get infected if you come in contact with these respiratory droplets and then touch your eyes, mouth or nose, before washing your hands.
- The CDC is divided on the recommendation for eye protection for droplet precautions; therefore, eye protection is encouraged but not required for droplet precautions.

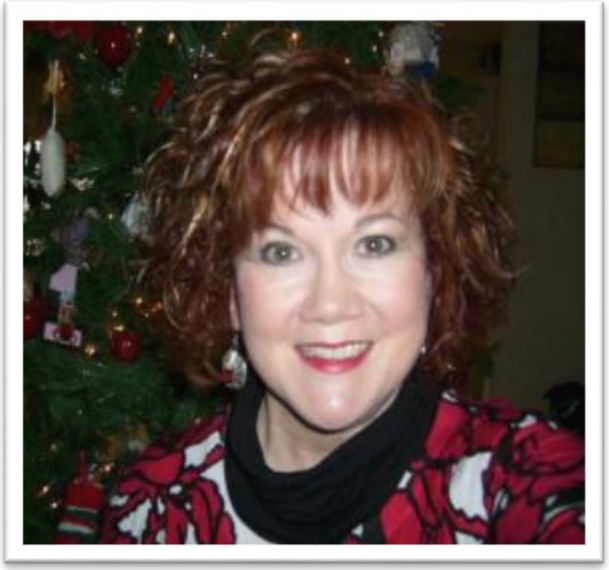
Gentle reminder – seasonal flu is not the same organism as Parainfluenza or Haemophilus influenzae.

Continue

Influenza (Flu)

The flu is such a common illness/disease. Is it really that serious of a disease? Do I need a flu vaccine every year? Can I have the flu virus and not know it?

Let's ask our Flu Expert, **Vicki Weaver**, Director Employee Health Services.



Vicki Weaver,
Director Employee Health Services & Flu Expert

Continue

Influenza (Flu)

Click on the Continue button to see what Vicki has to say.

Ask Do I really need to get the flu shot every year?

Ask How soon after my flu shot am I protected?

Ask Besides getting the flu shot, how else can I protect myself from getting the flu?

Ask What are the flu symptoms?

Ask Do people really die from the flu?

Ask What medical complications can result from the flu?

Ask How do I know I have the flu and not a bad cold?

Ask As a healthcare worker, how can I protect myself when testing a patient for the flu?

Continue

Ask

Do I really need to get the flu shot every year?

- **Yes, you should get the flu shot every year. Med Center Health provides the flu vaccine to all healthcare workers throughout the flu season.**
- **People who care for and/or live with those at high risk from flu complications should get the flu vaccine each year.**

How soon after my flu shot am I protected?

Besides getting the flu shot, how else can I protect myself from getting the flu?

What are the flu symptoms?

Do people really die from the flu?

What medical complications can result from the flu?

How do I know I have the flu and not a bad cold?

As a healthcare worker, how can I protect myself when testing a patient for the flu?

Continue

Do I really need to get the flu shot every year?

Ask **How soon after my flu shot am I protected?**

Besides getting the flu shot, how else can I protect myself from getting the flu?

What are the flu symptoms?

Do people really die from the flu?

What medical complications can result from the flu?

How do I know I have the flu and not a bad cold?

As a healthcare worker, how can I protect myself when testing a patient for the flu?

- **You are normally protected from the flu virus about 2 weeks after vaccination.**
- **You can infect others with the flu virus 1 day before you show signs or symptoms, and you can infect others up to 5 days after becoming sick.**

Continue

Do I really need to get the flu shot every year?

How soon after my flu shot am I protected?

Ask

Besides getting the flu shot, how else can I protect myself from getting the flu?

What are the flu symptoms?

Do people really die from the flu?

What medical complications can result from the flu?

How do I know I have the flu and not a bad cold?

As a healthcare worker, how can I protect myself when testing a patient for the flu?

In addition to getting the flu vaccine, you can:

- **Avoid close contact with people.**
- **Cover your mouth & nose when you cough or sneeze (cough & sneeze in your sleeve).**
- **Practice frequent hand hygiene.**
- **Avoid touching your eyes, nose, or mouth.**
- **Stay home if you're sick.**

Continue

Do I really need to get the flu shot every year?

How soon after my flu shot am I protected?

Besides getting the flu shot, how else can I protect myself from getting the flu?

Ask **What are the flu symptoms?**

Do people really die from the flu?

What medical complications can result from the flu?

How do I know I have the flu and not a bad cold?

As a healthcare worker, how can I protect myself when testing a patient for the flu?

Symptoms of the flu include:

- **Fever, Headache**
- **Extreme tiredness**
- **Dry cough & sore throat**
- **Runny or stuffy nose**
- **Muscle aches, nausea**
- **Vomiting & diarrhea can occur, but more often in children**

Continue

Do I really need to get the flu shot every year?

How soon after my flu shot am I protected?

Besides getting the flu shot, how else can I protect myself from getting the flu?

What are the flu symptoms?

Ask **Do people really die from the flu?**

What medical complications can result from the flu?

How do I know I have the flu and not a bad cold?

As a healthcare worker, how can I protect myself when testing a patient for the flu?

- **Yes, about 36,000 people in the U.S. die each year from flu-related causes.**
- **Plus, more than 200,000 people in the U.S. are hospitalized from flu-related complications.**

Continue

Do I really need to get the flu shot every year?

How soon after my flu shot am I protected?

Besides getting the flu shot, how else can I protect myself from getting the flu?

What are the flu symptoms?

Do people really die from the flu?

Ask

What medical complications can result from the flu?

How do I know I have the flu and not a bad cold?

As a healthcare worker, how can I protect myself when testing a patient for the flu?

Complications from the flu include:

- **Bacterial pneumonia**
- **Ear infections**
- **Sinus infections**
- **Dehydration**
- **Worsening of chronic medical conditions such as congestive heart failure, asthma, or diabetes**

Continue

Do I really need to get the flu shot every year?

How soon after my flu shot am I protected?

Besides getting the flu shot, how else can I protect myself from getting the flu?

What are the flu symptoms?

Do people really die from the flu?

What medical complications can result from the flu?

Ask

How do I know I have the flu and not a bad cold?

As a healthcare worker, how can I protect myself when testing a patient for the flu?

- **There are a variety of tests available for diagnosis of the flu. Rapid diagnostic tests can provide results in 15 minutes or less.**
- **Early diagnosis of flu can provide the option of treatment with antiviral medications.**

Continue

Do I really need to get the flu shot every year?

How soon after my flu shot am I protected?

Besides getting the flu shot, how else can I protect myself from getting the flu?

What are the flu symptoms?

Do people really die from the flu?

What medical complications can result from the flu?

How do I know I have the flu and not a bad cold?

Ask

As a healthcare worker, how can I protect myself when testing a patient for the flu?

Healthcare workers should wear a visor mask when collecting the nasal or nasopharyngeal specimen for diagnostic testing.

Continue

Annual Safety – Infection Prevention

*Infection Prevention & Control is **Everyone's** Responsibility!*

If you have any questions about the material in this CBL, contact Infection Prevention at 270-745-1145

- When you are comfortable with the material covered, Click TAKE TEST
- You will have 3 chances to achieve the passing score of 80% or better
- If you do not achieve 80% on your third chance, contact Infection Prevention at 270-745-1145. They will review the material with you and have your test reset.