

INFECTION PREVENTION

UPMC Systemwide Annual Mandatory Training



We interact with many people during the course of our day and it is our **RESPONSIBILITY** to take precautions to decrease the spread of infection.





Section One: Healthcare-associated Infections (HAI)

HEALTHCARE-ASSOCIATED INFECTION

A Healthcare-associated Infection (HAI) is an infection that is acquired while the patient is in the hospital and was not present at the time of admission.

Infections are spread by bacteria and viruses.

They are ALL around us: on surfaces, our hands, and, at times, in the air. Not all bacterium are created equal. Some bacteria have become resistant to antibiotic therapy and, therefore, difficult to treat. The emergence of **multi-drug resistant organisms** is increasingly recognized as a major public health threat based on data from the Centers for Disease Control and Prevention (CDC) costing the United States healthcare system approximately \$3.2 billion annually with increasing mortality rates.

Multi-drug resistant organisms develop when antibiotics are taken longer than necessary, not as prescribed, or when they are not needed.



Adherence to infection control practices are key to preventing the transmission of healthcareassociated infections and multidrug resistant organisms.

Section Two: Prevent The Spread Through Hand Hygiene

The SINGLE most important way to prevent the spread of germs from one person or one site to another is...**clean hands**.



Who is Responsible for Performing Hand Hygiene?

All UPMC healthcare providers are responsible for performing, promoting, and monitoring compliance with hand hygiene. Everyone is encouraged and expected to respectfully remind other staff if they have not performed hand hygiene. All staff must perform hand hygiene during these five moments of care.

> Before touching a patient

Before Clean/Aseptic Procedure

After Body Fluid Exposure Risk After Contact with Patient Surroundings

After Patient Contact Soap and water hand washing MUST be performed when hands are visibly soiled or when caring for a patient with C-difficile or Norovirus.

Performing Proper Hand Washing Technique

Use warm, running water and moisten hands well



Apply soap to moistened hands



Lather well and rub hands together for a minimum of 15 seconds



Clean under and around fingernails



Rinse and dry hands with a paper towel

Use the towel to turn off the faucets

Using Alcohol-based Hand Sanitizers

Apply the product to the palm of one hand

Rub your hands together, covering all surfaces until hands and fingers are dry.

REMEMBER: Alcohol-based hand sanitizers should NOT be used if hands are visibly soiled.

You MUST clean your hands before and after glove use.

Gloves **DO NOT** replace the need for hand hygiene.



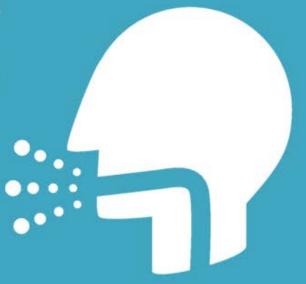
Section Three: **Prevent The Spread Use Standard & Transmission-Based (Isolation) Precautions**



Standard precautions were designed for the care of all patients in the hospital regardless of their diagnosis or presumed infection status.

Implementation of standard precautions is the primary strategy for successful healthcare-associated infection control, as well as staff safety. **STANDARD PRECAUTIONS** help prevent the spread of germs from personto-person by using personal protective equipment (PPE) and other infection prevention measures when indicated, such as:

- Hand hygiene, gown, gloves, and face shields
- Proper handling of waste and linen
- Cleaning shared equipment between patients



ALL blood and body fluids MUST be treated as potentially infectious.

Sometimes, to prevent the spread of germs, isolation/transmission-based precautions are required and are to be used in addition to standard precautions.

Isolation precautions are to be used when a patient is known or suspect to transmit bacteria or germs, such as tuberculosis.

A precaution sign and PPE will be posted on or near the patient's room. Make sure to read the precaution sign before entering the patient's room. It will tell you what type of PPE is needed before entering the room.

There are 3 transmission-based precautions categories recognized by the Centers for Disease Control (CDC).

Visitors: report to the unit station before

entering room



These categories can be used in combination, such as airborne/ contact for chicken pox.



eep door closed to maintain negative pressor

Section Four: Prevent The Spread Provide A Safe Environment Germs found on equipment can lead to healthcare associated infections.

Some examples of commonly used equipment are keyboards, phones, IV poles, blood sugar testing units, wheelchairs, blood pressure units, and medication carts.



Hand Hygiene is required after using any equipment.



Equipment must be cleaned after each patient use.



Use manufacture's recommendation for disinfectant wet times.

Strict infection prevention and control measures, such as containment and barriers, are put in place during hospital construction/renovation.

Construction work can generate dust, which may contain pathogens that can lead to healthcare associated infections.

These healthcare associated infections can be severe and can result in death in some patients with conditions that weaken their immune system.





Section Five: **Tuberculosis Prevention**

Tuberculosis (TB) (noun)

Tuberculosis (TB) is a potentially serious infectious disease that mainly affects your lungs. The bacteria that causes tuberculosis are spread from one person to another through tiny droplets **released into the air through coughing and sneezing**. Patients who have been diagnosed with TB or who are in rule-out status **MUST** be housed in a negative airflow isolation room.

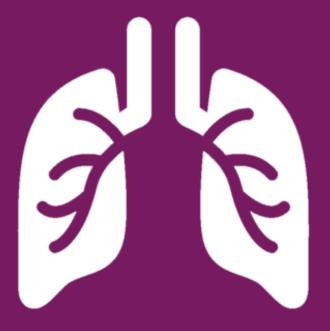
This room **MUST** have a sign posted that identifies the requirement of airborne precautions.

Patients **MUST** wear a regular mask (not N-95) if they leave their room or come in for a doctor's appointment.



Proper use of *respiratory protection* (Powered Air Purifying Respirator [PAPR] or N-95 Mask) by staff is **critical to prevent the spread of airborne disease**, such as tuberculosis.

This respiratory protection MUST be worn by all staff who enter the patient's room.



N-95 RESPIRATOR

N-95 masks are tight-fitting respirators and seal around the wearer's face.

Before you can wear an N-95 mask, you MUST:

- Pass a respirator fit-test
- Be trained in its use
- Complete a medical questionnaire and receive clearance from Employee Health

Check with your manager if you need to schedule an initial fit test or an annual fit-testing.

If you believe you have been exposed to tuberculosis:



Clean and wash affected area immediately.



Immediately notify your supervisor.



Notify employee health. If employee health is not available report to the ER.



Follow any treatment protocols and follow-up procedures.



Follow the post-exposure procedures that are outlined in the systemwide Tuberculosis Exposure Control Plan Policy.

Section Six: Seasonal Influenza (Flu)

SEASONAL INFLUENZA (FLU) (*noun*) The flu is a contagious **respiratory illness** caused by influenza viruses. It can cause mild to severe illness and, at times, can lead to death.

If you are sick, for your own well being and the safety of your co-workers, patients, and visitors, stay home.

"Cover Your Cough" The Healthcare Worker

To stop the spread of germs that can make you and others sick:

Cover your mouth and nose with a tissue when you cough or sneeze. If you do not have a tissue, cough or sneeze into your upper sleeve or elbow, not your hands.

Always remember hand hygiene.



"Cover Your Cough" The Patient

When a patient has a cough and cold, educate them on "Cover Your Cough."

You may need to place them in droplet or droplet/contact precautions.

While in precautions, the patient will need to wear a mask outside his/her room.

Reinforce the importance of hand hygiene.





When you receive the vaccine, you help reduce the risk of transmission of the flu to your patients, co-workers, yourself, and family. UPMC offers the flu shoot FREE of charge to ALL staff.

Flu education is available on the Infonet.

MYTH - A flu shot can cause the flu.

FACT: The influenza viruses contained in a flu shot are inactivated (killed), which means they cannot cause infection. Some people get a little soreness or redness where they get the shot. It goes away in a day or two.

Myth - Two. Myth - Three.

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MYTH - The Flu shot does not work.

FACT: Most of the time, the flu shot will prevent the flu. In scientific studies, the effectiveness of the flu shot has ranged from 70%-90% when there is a good match between circulating viruses and those in the vaccine.

Getting the vaccine is your best protection against this disease.

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MYTH - The side effects are worse than the flu.

FACT: The worst side effect you are likely to get from a shot is a sore arm. The nasal mist flu vaccine might cause nasal congestion, runny nose, sore throat and cough. People may become ill from non-flu viruses that circulate during the flu season, which can cause flu-like symptoms. The flu vaccine will not protect people from respiratory illnesses that are not caused by flu viruses.

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Myth - Two.

Myth - One.

Myth - Three

MYTH - Only older people need a flu shot.

FACT: Adults and children with conditions like asthma, diabetes, heart disease, and kidney disease need to get a flu shot. Even if you're healthy, you can get sick and spread the flu to your co-workers, patients, or even bring it home to your family. While assuming the RESPONSIBILITY of decreasing the spread of infection, we keep each other and our customers at the center of everything we do.