## Mohawk Valley Health System Infection Prevention



## **Annual Mandatory Education**



## Infection Prevention is Everyone's Responsibility

Here are some steps that you can take to help prevent healthcare acquired infections and reduce harm to you and your patients:

- Perform Hand Hygiene
- Practice Respiratory Etiquette
- Keep immunizations current
- Follow appropriate precautions
- Promote patient hygiene
- Maintain environmental safety and cleanliness
- Do not come to work if you are ill



#### Healthcare Associated Infections

- A Healthcare Associated Infection (HAI) occurs when a patient comes to the hospital and gets a new infection during their hospital stay
- Exposure can come from the hands and clothing of healthcare workers, other patients and contaminated environmental surfaces or equipment.
- Every year, one out of every four hospitalized patients acquires an infection during their stay; 75,000 of those patients die. More patients die each year from hospital acquired infections than die from breast cancer, AIDS, and automobile accidents combined.



# OSHA mandates for the safe use of personal protective equipment (PPE)

- Provided by employer
- Immediately available at the point of care
- Prevent blood or body fluid from contaminating the employee or clothing
- PPE storage containers should be closed or covered at all times

#### **Standard Precautions**

Standard Precautions are the minimum infection prevention practices that should be used during all patient care in any setting where healthcare is delivered. These practices are designed to both protect healthcare workers and prevent healthcare workers from spreading infections to patients.

#### Standard Precautions include:

- Hand hygiene
- Use of personal protective equipment (e.g., gloves, gowns, masks)
- Safe injection practices
- Safe handling of potentially contaminated equipment or surfaces in the patient environment
- Respiratory etiquette (covering coughs and sneezes and disposing of used tissues in a waste receptacle)



#### **Transmission-based Precautions**

- In addition to standard precautions, transmission based precautions are used with certain types of infectious diseases.
- Transmission based precautions include:

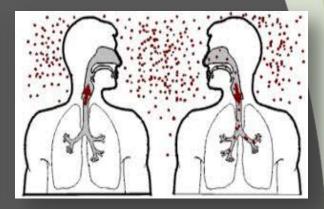
#### Contact



Droplet



Airborne



### **Isolation Signs**

- Pay attention to signs posted outside patient rooms
- These signs let you know if the patient requires isolation precautions
- ALWAYS follow the instructions on the signs prior to entering the room
- There are many indications for transmission based precautions. For any questions regarding when to implement transmission based precautions contact the Infection Prevention office for guidance.









### **Cleaning Products**

- Cleaning products are specific to the organism that you are trying to remove from a surface.
- Each container has a "dwell time" labeled on the container. Dwell time is the required time for the solution to stay wet for it to effectively disinfect a surface and decrease the risk of contamination to patients.







## Identifying equipment



Yellow tape- used to flag equipment that has come into contact with patients on Contact Precautions



White tape- used to flag clean equipment



Red tape- used to flag equipment that has come into contact with patients on C.diff Contact Precautions

\*Equipment that is not identified as clean should be treated as contaminated and must be cleaned prior to use



### Bloodborne Pathogens

- Bloodborne pathogens are infectious organisms in blood that can cause disease in humans. These include hepatitis B, hepatitis C and HIV (human immunodeficiency virus). Workers exposed to these pathogens are at risk of acquiring a serious illness.
- OSHA has published federal regulations that protect workers whose jobs put them at a reasonable risk of coming into contact with blood and other potentially infectious materials. MVHS protects it's employees by complying with such regulations.

### Post Exposure Follow-up

- Wash the effected area
- Notify your supervisor immediately
- The Employee Health Office will be notified and assess your exposure risk. They will follow up with you and may recommend treatments such as medication or lab work depending on the risk level of the exposure.



## **Hepatitis**

- Leads to liver failure, liver cancer and death
- High-risk of transmission in healthcare due to needle stick injuries or blood exposure

#### **Hepatitis B Virus**

- Most easily transmitted
- Rate reducing due to vaccine
- Approximately 200 health care workers die from HBV related liver disease every year
- Can live up to 7 days on a surface in dried blood

#### **Hepatitis C Virus**

- 130-150 million people infected worldwide
- No vaccine, can be treated
- The longer people live with HCV the more likely they are to develop serious life-threatening liver disease
- Can live between 16 hours to 4 days on environmental surfaces



## Human Immunodeficiency Virus (HIV)

- HIV is the virus that causes AIDS
- High risk populations include
  - Those who engage in unprotected sex
  - IV drug users
  - MSM (men who have sex with men)
  - Current or past prison inmates
  - Sex-workers
- There is no risk of contracting HIV through casual contact
- Does not survive well in the environment
- Transmitted in healthcare setting by needle stick injuries or blood and body fluid exposures
- Post Exposure Prophylaxis (PEP)
  - To be effective PEP must begin within 3 days of exposure before the virus has time to multiply
  - HIV testing/status is confidential health information





## OSHA Bloodborne Pathogen Standard Occupational Exposure Control Plan

- Designed to eliminate or minimize employee exposure to blood, body fluids (semen, urine, breast milk, bodily fluids that are difficult to identify, etc.) or other potentially infectious material
- Exposures can occur via needle stick, splash to mucous membranes or break in skin barrier
- Risk of exposure depends on job duties and likelihood of contact with infectious materials.

## **Engineering Controls and Work Practice Controls**

- Engineering Controls are devices that remove the bloodborne pathogen hazard from the workplace. They include sharps disposable containers, safety needles and needleless systems.
- Work Practice Controls are practices that reduce the likelihood of exposure by changing the way a task is performed. They include proper hand washing procedures, laundry handling, and sharps disposal.

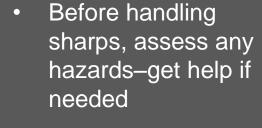
## **Sharps Safety**

#### Be Aware

- Keep the exposed sharp in view
- Be aware of people around you
- Stop if you feel rushed or distracted
- Focus on your task
- Avoid hand-passing sharps and use verbal alerts when moving sharps
- Watch for sharps in linen, beds, on the floor, or in waste containers

#### Dispose of Sharps with Care

- Be responsible for the device you use
- Activate safety features after use
- Dispose of devices in rigid sharps containers; do not overfill containers
- Keep fingers away from the opening of sharps containers



safety devices

Be Prepared

area with

within reach

Organize your work

appropriate sharps

disposal containers

Work in well-lit areas

Receive training on

how to use sharps



### Safe Injection Practices

- Never administer medications from the same syringe to more than one patient, even if the needle is changed.
- After a syringe or needle has been used to enter or connect to a patient's IV it is contaminated and should not be used on another patient or to enter a medication vial.
- Never enter a vial with a used syringe or needle.
- Never use medications packaged as single-dose vials for more than one patient.
- Assign medications packaged as multi-dose vials to a single patient whenever possible.
- Do not use bags or bottles of intravenous solution as a common source of supply for more than one patient.
- Follow proper infection control practices during the preparation and administration of injected medications.
- Wear a surgical mask when placing a catheter or injecting material into the spinal canal or subdural space.



## Labels, Signs, and the Biohazard Symbol

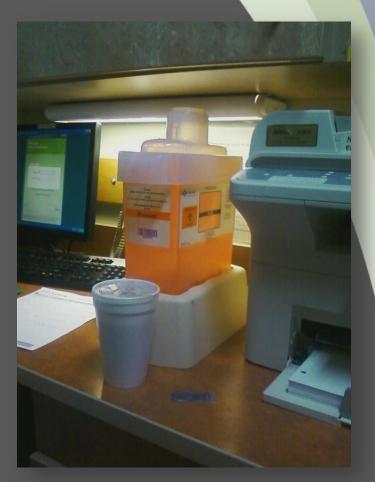
#### Warning labels required on:

- Containers of regulated waste
- Refrigerators and freezers that contain blood and other potentially infectious materials
- Other containers used to store, transport or ship blood or other potentially infectious materials



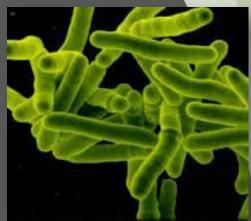
## Food and Drink OSHA mandates

- No food or drink in patient care areas
- Do not place food or drink where potentially infectious material may be present
- Food or drink may not be kept in medication or blood refrigerators



### Tuberculosis (TB)

- TB is a contagious disease found worldwide
- It is caused by inhaling infectious *Mycobacterium tuberculosis* organisms into the lung
- It is becoming more common with nearly 11,000 new cases found in the U.S. each year
- Populations at increased risk for TB exposure include
  - Current or past prison inmates
  - HIV positive individuals
  - Individuals suffering from alcohol dependence
  - IV drug users
  - Elderly
  - Foreign born, especially from areas of the world with high levels of TB cases (Sub-Saharan Africa, India, China, South East Asia and Pacific Ocean island areas)
  - People living in the same household as members of these groups



## **Tuberculosis (TB)**

- Patients admitted with signs/symptoms of TB will be screened for infection with tubercle bacilli on admission and placed in airborne precautions until TB is ruled out.
- A private, negative-pressure airborne isolation room is necessary
  with monitored negative air pressure relative to the other areas. The
  door must remain closed to ensure negative pressure.
- Patient must remain in the negative pressure room at all times, except for necessary treatments or procedures that cannot reasonably be performed in the negative pressure room.
- If the patient must have a test or procedure performed in an area
  which is not negative pressure, a hospital-approved HEPA filter must
  be available for the procedure. Infection Prevention should be
  consulted in order to coordinate safe care outside of negative
  pressure areas.



## **Tuberculosis (TB)**



- The N95 respirator is the most common type respirator. This product filters at least 95% of airborne particles
- An N-95 respirator should be worn by previously fit-tested personnel before entering the room.
- Employees will be fit tested for the N-95 respirator best suited to their anatomy and needs upon hire and if physical changes occur (gain or loss of 20 lb, addition of facial hair, etc.).
- Equipment should be easily available outside of the room
- An Airborne Precaution sign should be placed outside of the patient's room in order to indicate that a respirator must be worn in the area.



## **Hand Hygiene**



- 1. Before patient contact
- 2. Before performing a clean procedure
- 3. After exposure to blood or body fluids
- 4. After touching a patient
- 5. After touching patient surroundings

## Hand Hygiene & Care

- Fingernails should be clean and short in length. Nail polish should be not be chipped as the uneven surface of chipped nails is known to provide a place for germs to live.
- Artificial nails are strictly prohibited in all clinical areas.
- To protect yourself, prevent the skin breakdown of your hands with the frequent use of hospital provided hand lotion. Only hospital provided lotion may be used because common lotion ingredients may cause gloves to breakdown and may also inactivate alcohol based hand rubs.

## Am I doing it right?

#### Soap and Water:

- Use when hands are visibly soiled
- Wet hands with water
- Apply soap
- Lather hands by rubbing together for 15 seconds, focusing on fingertips and fingernails
- Rinse under running water
- Dry with paper towel
- Turn off faucet with a dry paper towel

#### Alcohol Hand Sanitizer:

- Apply to the palm of hand
- Rub hands together, covering all surfaces (concentrating on the fingertips and nails)
- Continue rubbing until dry





#### Flu-Infection Prevention

#### **Vaccination**

 The seasonal influenza vaccine is the <u>BEST</u> way to prevent yourself and your patients from getting the flu

#### Masking

 State regulation requires unvaccinated health care workers to wear masks during the entire period that flu is considered widespread in New York State

#### **Respiratory Etiquette**

- Cover nose and mouth when sneezing or coughing
- Use tissues
- Dispose of tissue in a waste receptacle
- Perform hand hygiene





## NYS masking regulation

- Preventing influenza transmission from health care personnel to patients is a serious patient safety issue. Health care personnel are at increased risk of acquiring influenza because of their contact with ill patients, and workers who are ill can also transmit influenza to their patients. Vaccination is the best protection against influenza. Masks are an alternative for persons who cannot be vaccinated or who refuse vaccination and help to reduce the likelihood of transmission.
- All employees and affiliated staff who are unvaccinated at the time that influenza is
  declared widespread in NYS will be required to wear a surgical mask any area within
  Mohawk Valley Health System, ACP Offices, SEMG Clinics, Home Health Care, or
  other home visit in which a HCW (health care worker) could potentially come within 6
  feet of a patient. This includes, but is not limited to, patient rooms, nurses' stations,
  hallways and elevators where patients might be present, cafeterias (except when the
  unvaccinated person is eating), and patients' homes when providing home care.
   Masks must be worn until influenza is no longer considered widespread.
- Any employee or staff member found to be non-compliant with the masking regulation will be subject to progressive discipline.

#### Infection Prevention



The Infection Prevention Department serves as a resource to the employees of the Mohawk Valley Health System. Please contact us at any time if you need information, clarification or guidance at the following numbers;

FSLH 315-624-6334 SEMC 315-801-3338