



WEST
CANCER CENTER
& RESEARCH INSTITUTE

Infection Prevention and Control

Bloodborne Pathogens

Bloodborne pathogens are infectious microorganisms in human blood that can cause disease in humans.



- Bloodborne pathogens include (but are not limited to):
 - Hepatitis B Virus (HBV)
 - Hepatitis C Virus (HCV)
 - Human Immunodeficiency Virus (HIV)



Why the concern?

The CDC estimates that 5.6 million workers in healthcare and related industries are at risk of exposure to bloodborne pathogens such as human immunodeficiency (HIV) and hepatitis B virus.



What is an Occupational Exposure?

- Contact with blood or other potentially infectious materials that may result from the performance of an employee's duties
- Duties may include:
 - Direct Patient Care
 - Phlebotomy/Laboratory
 - Environmental Services
 - Waste Management
 - Other



All West Cancer Center & Research Institute Team Members and Volunteers will use Standard Precautions

Standard precautions are a set of infection prevention practices used to avert transmission of diseases that can be acquired by contact with blood, body fluids, non-intact skin (including rashes), and mucous membranes.



Standard Precautions Help Protect Healthcare Personnel and Patients from Infection and Include:

- Hand Hygiene
- Personal Protective Equipment
- Needle Stick and Sharps Injury Prevention
- Cleaning and Disinfection
- Respiratory Hygiene (Cough Etiquette)
- Waste Disposal
- Safe Injection Practices



Hand Hygiene

Using Alcohol-Based Hand Sanitizer (Preferred Method)

- Alcohol-based Hand Rub (follow manufacturer's instructions for use):
 - Dispenser releases predetermined amount of hand sanitizer.
 - Dispense into palm of one hand.
 - Rub hands together, covering all surfaces of hands, fingers, and wrists for 20 seconds until they are dry. Do not wave hands in the air to dry.



Indications for Hand Hygiene

Always perform hand hygiene in the following situations:

- Before touching a patient, even if gloves will be worn
- After touching a patient, even if gloves were worn
- After contact with inanimate objects (including medical equipment) in the patient environment
- After contact with blood, body fluids, or wound dressings
- Prior to performing an aseptic task (e.g., accessing a port, preparing an injection)
- If hands will be moving from a contaminated body site to a clean body site during patient care
- After glove removal



Personal Protective Equipment (PPE)



Use of PPE - Gloves

- Wear gloves when there is potential contact with blood (e.g., during phlebotomy), body fluids, mucous membranes, non-intact skin, or contaminated equipment
- Wear gloves that fit appropriately (select gloves according to hand size)
- Do not wear the same pair of gloves for the care of more than one patient
- Do not wash gloves for the purpose of reuse
- Perform hand hygiene before and immediately after glove use



More about Wearing Gloves

- Don new gloves immediately prior to performing a procedure and remove immediately after
- Collect equipment and supplies and place in patient area prior to donning gloves to avoid glove contamination
- Store gloves in original box. Do not remove and place into other containers or pockets
- Avoid storing on windowsills to prevent dust collection and contamination



Use of PPE - Gowns

- Wear a gown to protect skin and clothing during procedures or activities where contact with blood or body fluids is anticipated
- Do not wear the same gown for the care of more than one patient
- Remove gown and perform hand hygiene before leaving the patient's environment (e.g., exam room)



Use of PPE – Facemasks, Goggles, and Face Shields

- Use a facemask when there is potential contact with respiratory secretions and sprays of blood or body fluids
- Use a facemask in combination with goggles or a face shield to protect the mouth, nose, and eyes (personal eyeglasses and contacts are not adequate protection)
- Use a facemask when placing a catheter or injecting material into the spinal canal or subdural space (to protect patients from exposure to infectious agents carried in the mouth or nose of healthcare personnel)
- Use a facemask to perform intrathecal chemotherapy



Sequence for Dressing in PPE

1. Perform hand hygiene
2. Don gown and fasten in the back
3. Secure mask or respirator and mold to snugly fit face
4. Place goggles or face shield over eyes
5. Extend gloves to cover wrists of gown



Sequence for Removing PPE

1. Remove gloves and discard in waste container
2. Remove goggles or face shield
3. Remove gown being careful not to touch the front
4. Remove mask or respirator by reaching behind head to loosen
5. Perform hand hygiene



Tips to Remove PPE

- PPE must be removed before exiting the patient's environment. A respirator (if worn) should be removed outside the patient's environment.
- Personal clothing and skin can be easily contaminated during PPE removal
- Removing Gloves
 - Grasp outside of glove with opposite gloved hand; peel off and discard
 - Slide ungloved fingers under the remaining glove at the wrist; peel off and discard
 - If hands get contaminated during removal, immediately perform hand hygiene before continuing PPE removal



Tips to Remove PPE (cont'd.)

- Goggles or Face Shield
 - Avoid touching the front of the goggles or face shield
 - Remove by handling the head band or earpieces and discard
 - If hands get contaminated during removal, immediately perform hand hygiene before continuing PPE removal



Tips to Remove PPE (cont'd.)

- Gowns

- Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
- Pull gown away from neck and shoulders, touching inside of gown only
- Turn contaminated outside surface toward the inside
- Roll or fold into a bundle and discard into waste container
- If hands get contaminated during removal, immediately perform hand hygiene before continuing PPE removal



Tips to Remove PPE (cont'd.)

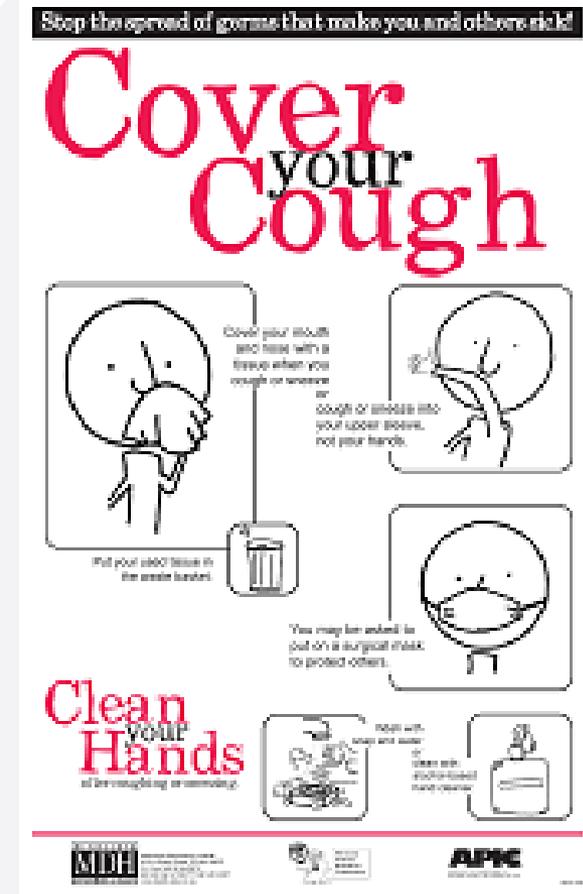
- Mask or Respirator
 - Avoid touching the front of the mask or respirator – it is contaminated
 - Grasp bottom ties or elastics of the mask or respirator, then the ones at the top, and remove without touching the front
 - Discard into waste container
 - Always perform hand hygiene immediately after completing PPE removal



Respiratory Hygiene and Cough Etiquette

Identifying Persons with Potential Respiratory Infection

- Staff should remain alert for any persons arriving with symptoms of a respiratory infection
- Signs are posted at the reception area instructing patients and accompanying persons to:
 - Self-report symptoms of a respiratory infection during registration
 - Practice respiratory hygiene and cough etiquette and wear facemask as needed



Availability of Supplies

- The following supplies are available when needed for patients:
 - Facemasks
 - Tissues
 - Dispensers of alcohol-based hand sanitizer
 - No touch trash receptacles for tissue disposal



All persons with signs and symptoms of a respiratory infection (including staff) are asked to:

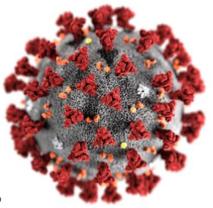
- Cover the mouth and nose with a tissue when coughing or sneezing
- Dispose of the used tissue in the nearest waste receptacle
- Don a mask for signs/symptoms of respiratory infection
- Perform hand hygiene after contact with respiratory secretions and contaminated objects/materials
- **Special protocols apply during a pandemic. See your supervisor for the latest updates.**



Specific Infection Prevention Practices



COVID-19

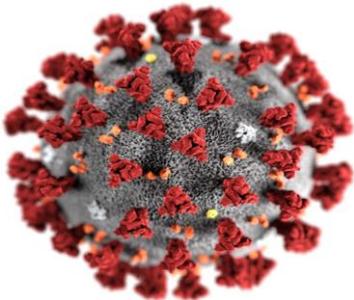


- Per the CDC, COVID-19 is an airborne virus that is spread in three main ways:
 - Breathing in air when close to an infected person who is exhaling small droplets and particles that contain the virus.
 - Having these small droplets and particles that contain virus land on the eyes, nose, or mouth, especially through splashes and sprays like a cough or sneeze.
 - Touching eyes, nose, or mouth with hands that have the virus on them.
- COVID-19 vaccination status reporting is required by Human Resources for all employees.
 - Please turn in your records
 - or notify them of your intent to not vaccinate so they can give you further guidelines/requirements.
- Mask mandates may change throughout the course of the pandemic, but currently it is required for all staff and vendors to be masked in all areas of the clinic. This is regardless of vaccine status.
- All Patients and visitors are required to be masked at all times within all clinic sites, this is also regardless of their vaccination status.
- Please follow all current government and WCC mandates as they change.



COVID-19 (cont'd.)

- All positive or suspected staff members need to report their status to the Infection Prevention Team (IPT) – Melanie Epperson and Kim Muse.
 - This includes if there are positive individuals in their households.
- All positive patients also need to be reported to the IPT as well.
 - Positive patients need to remain isolated from WCC for 14 days from positive test since they are immunocompromised.
- The IPT will conduct contact tracing and notify staff if they are considered a “close contact” and need testing/isolation/etc.



Mycobacterium Tuberculosis (TB)

- TB usually attacks the lungs
- It spreads when a person infected with TB coughs, speaks, or sings and people nearby breathe in the bacteria
- TB is infectious and can spread to people who are frequently around the infected person (family, friends, coworkers, or schoolmates)
- Risk factors include: contact with someone who has TB & medical conditions that weaken the immune system
- Symptoms include: cough, chest pain, fever, chills, weight loss, night sweats, appetite loss, and fatigue
- Prevention: avoid contact with those with known/suspected TB; consider PPE (respirator) use if traveling to a country with a known high incidence of TB



Safe Injection Practices

- Use aseptic technique when preparing and administering parenteral medications
- Avoid prefilling and storing batch-prepared syringes except in accordance with pharmacy standards
- Avoid unwrapping syringes prior to the time of use
- Never administer medications from the same syringe to multiple patients, even if the needle is changed or the injection is administered through an intervening length of intravenous tubing
- Do not reuse a syringe to enter a medication vial or solution



Safe Injection Practices (cont'd.)

- Do not administer medications from single-dose or single-use vials, ampules, bags, or bottles of intravenous solution to more than one patient (e.g., do not use a bag of saline as a common source supply for multiple patients)
- Cleanse the access diaphragms of medication vials with 70% alcohol and allow the alcohol to dry before inserting a device into the vial
- Dispose of used syringes and needles at the point of use in a sharps container that is closable, puncture-resistant, and leak-proof



Phlebotomy Procedures

- Phlebotomy procedures should be performed in a dedicated area
- If phlebotomy must be performed elsewhere (e.g., exam room) do not bring common trays of supplies; bring only the necessary supplies
- Use aseptic technique to perform the procedure
- Do not reuse vacutainer holders
- Label tubes before blood is drawn
- Avoid placing tubes on surfaces that cannot be properly cleaned
- Do not process or store blood specimens near medications or medication preparation area





Medication Storage

- Store medications that require refrigeration in a dedicated, labeled refrigerator that meets requirements for such storage (e.g., thermostat control, separate exterior door for refrigerator and freezer compartments)
- Designated personnel maintain temperature log (monitor temperature at least twice daily for vaccine storage) and ensure alternative storage method is in place in the event of power or refrigerator failure
- Multi-dose vials are stored in the Medication Room and not in the immediate patient treatment area (e.g., exam room, chemotherapy suite)



General Infection Prevention Guidelines

- Change the paper covering on the exam table and pillows between patient use
- Place any used linens in a designated container located in each exam room after each patient use
- Clean any medication preparation area after each patient encounter and ensure contaminated items are not placed in or near the area
- Focus cleaning on high-touch surfaces (at least daily), e.g., exam beds, bedrails, blood pressure cuffs, stethoscopes, wall-mounted ophthalmoscopes and otoscopes (per manufacturer's instructions), chairs and bedside stools, and doorknobs
- Decontaminate high-touch surfaces using an EPA-registered disinfectant with specific kill claim labels; observe wet contact times
- Clean patient chairs, IV poles/pumps, and side tables between each patient use



Cleaning Spills of Blood and Body Substances

- Wear protective gloves and use appropriate PPE (e.g., use forceps to pick up any sharps and discard in sharps container)
- If the spill contains large amounts of blood or body fluids (e.g., >10 mL), clean the visible matter with disposable absorbent material and discard in appropriate containers for biohazardous waste
- Decontaminate the area using an EPA-registered disinfectant with specific label claims for bloodborne pathogens or a freshly diluted bleach-based product (preferably EPA-registered), in accordance with manufacturer's instructions, and allow the surface to dry
- If a bleach-based product is used:
 - Use a 1:100 dilution to decontaminate nonporous surfaces
 - If the spill involves large amounts of blood or body fluids, use a 1:10 dilution for first application of product before cleaning, then follow by cleaning and subsequent decontamination with 1:100 dilution application



Handling and Laundering Soiled Linens

- Handle all contaminated linens with minimum agitation to avoid contamination of air, surfaces, and persons
- Do not sort or rinse soiled linens in patient-care areas
- Use leak-resistant containment for linens contaminated with blood or body substances; ensure that there is not leakage during transport



Waste Disposal

- Puncture-resistant, leak-proof sharps containers are located in every patient-care area (e.g., exam room, chemotherapy suite, phlebotomy station)
- All sharps are disposed of in the designated sharps container; do not bend, recap, or break used syringe needles before discarding them into the container
- Filled sharps containers are disposed of in accordance with state regulated medical waste rules
- Regular trash and regulated medical waste (e.g., biohazardous material and chemical hazardous waste, including antineoplastic drugs) are disposed of in their designated containers
- All trash and waste containers are emptied at least daily by designated personnel
- Handle, transport, and dispose of regulated waste, including antineoplastic and hazardous drugs, in accordance with state and local regulations



Summary

- Infection prevention is the responsibility of everyone at West Cancer Center & Research Institute
- Protect yourself as well as your patients
- If in doubt, ask questions



West Cancer Center & Research Institute

Infection Prevention Training - Conclusion

This concludes Module 2 – Infection Prevention Training.

This course includes four modules:

- Module 1 – Compliance & HIPAA Training
- Module 2 – Infection Prevention Training
- Module 3 – Safety Training
- Module 4 – Sexual Harassment Prevention

After completing these four modules, you are required to pass a test with a score of 90% or higher. You have three attempts to pass the test, and you may refer to these modules if needed.

Thank you!

