



OSHA Training

University of St. Francis
Leach College of Nursing



Who is OSHA?

- ◆ The Occupational Safety and Health Administration a division of the Department of Labor
 - OSHA's mission is to assure the safety and health of America's workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health.
 - Based on this mission, OSHA has developed standards and policies regarding health and safety in the workplace that each institution must follow.



Why do we need to know about OSHA?

- ◆ There are numerous health and safety issues associated with working in healthcare facilities
 - Some of these hazards include:
 - blood borne pathogens
 - airborne pathogens
 - infection control
 - electrical and fire hazards
 - hazardous materials
 - general safety



Why do we need to know about OSHA?

- ◆ OSHA training is required by most of our clinical agencies.
- ◆ The information was developed to familiarize you with health and safety policies and procedures you may encounter during your clinical rotations.
- ◆ This guide serves as a baseline for the knowledge you should have in order to work safely within each of the institutions.
- ◆ Each institution may have further instructions or guidelines that you will need to be aware of.



Bloodborne Pathogens Overview

- ◆ The OSHA Bloodborne Pathogens Standard became effective in 1992 to protect any employee who has a reasonable anticipated risk of occupational blood or body fluid exposure based on his or her job. Employees and healthcare workers covered by this standard include those who:
 - Have direct patient contact.
 - Draw blood.
 - Work with blood and other bodily fluid specimens.
 - Handle contaminated equipment.



Bloodborne Pathogens

- ◆ All employees and healthcare workers covered by this standard are required to follow the institution's Exposure Control Plan, which includes procedures for:
 - What to do if you are exposed to bloodborne pathogens.
 - Protecting your workplace from becoming contaminated.
 - Medical waste handling and disposal.
 - The use and disposal of protective clothing and personal protective equipment (PPE).
 - The handling of needles and other sharps.
 - How to protect yourself from puncture wounds.
 - Receiving the hepatitis B vaccine series.



Bloodborne Pathogens

- ◆ The OSHA Bloodborne Pathogens Standard applies to blood or body fluids or materials that are considered to be potentially infectious. These materials include:
 - Blood.
 - Body fluids - semen, vaginal secretions, pleural fluid, cerebrospinal fluid, synovial fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any other fluid visibly contaminated with blood, and all other body fluids in situations where it is difficult or impossible to differentiate between body fluids.
 - Tissues and organs (prior to fixation).
 - Other - feces, urine, and vomitus only if they contain visible blood.



Common Bloodborne Pathogens

◆ Human Immune Deficiency Virus (HIV)

- **HIV** or the Human Immunodeficiency Virus (the causative agent of AIDS) can be transmitted parenterally (needle-sharing, needlesticks, blood exposure), sexually and perinatally.

◆ Hepatitis B Virus (HBV)

- **Historically, the greatest bloodborne risk to the healthcare worker is infection by the hepatitis B virus.** Occupational needlesticks, and other sharps injuries and exposure to blood and other potentially infectious material are the leading sources of transmission to the healthcare provider

◆ Hepatitis C Virus (HCV)

- A history of unintentional needlestick injury is generally the only occupational risk factor independently associated with hepatitis C infections. Transmission is associated with infecting drug use, transfusion or transplant from an infected donor, and unsafe injection practices in a healthcare setting.



Bloodborne Pathogens Exposures

◆ Reporting Blood And/Or Body Fluid Exposure Accidents

Any exposure to blood and/or body fluids must be IMMEDIATELY reported to the clinical agency.

- Such accidents include, but are not limited to:
 - needlestick injuries
 - cuts/lacerations
 - any sharps injury
 - mucous membrane contact (eyes, noses, or mouth)
 - skin exposures involving large amounts of blood and/or body fluid



Bloodborne Pathogen Exposure

- In case of exposure:
 - you should wash the exposed area with soap and water.
 - In case of eye injury, you should irrigate the eye immediately with at least one liter of water or IV solution of normal saline.
 - All events should be reported as soon as possible to the employee health department, infection control department or Emergency Department (if after hours), as well as the Leach College of Nursing.



Airborne Pathogens

◆ Tuberculosis

- Tuberculosis (TB) is a disease that is spread from person to person through the air. TB usually affects the lungs. The bacteria are dispersed into the air when a person with TB of the lungs coughs, sneezes, laughs or sings. TB transmission via the airborne route occurs when a person with untreated TB of the lungs or larynx coughs up droplets. Close contact with a person untreated or with undiagnosed pulmonary TB places healthy people at high risk of acquiring the infection.



Airborne Pathogens

◆ PPD Testing

- All healthcare workers with patient contact are required to receive a PPD at least annually. The purpose of the TB skin test or PPD is to determine whether an individual has been exposed to TB and has a TB infection.



Airborne Pathogens

◆ Tuberculosis Infection Control Plan

- Each clinical facility will have a TB infection control plan. Please refer to the specific facility plan for details.
- Special masks will be provided in every facility to protect you if your job necessitates your caring for a patient on respiratory isolation. These masks are called N-95 Respirators. You will be "fit-tested" for this mask to be sure the mask is sized and fitted appropriately for your face.



Infection Control

- ◆ The Chain of Infection includes:
 - the infectious agent
 - bacterial, viral, or fungal
 - modes of transmission
 - airborne, droplet, contact, or vehicle spread such as via insects
 - susceptible host
 - the very young, the very old, the ill, or the immunocompromised are most susceptible



Infection Control

- ◆ The chain of infection can be broken through:
 - education and training
 - immunizations
 - proper use of sterile technique
 - meticulous hand washing
 - following Standard Precautions and Transmission-Based Precautions



Handwashing

- ◆ **Why is Handwashing so Important?**

- According to the Centers for Disease Control and Prevention (CDC)

handwashing is the single most important procedure for preventing the spread of infection. That is because microorganisms can enter your body by “hitching a ride” through hand-to-hand, food-to –hand and surface-to-hand contact



Handwashing Guidelines

- ◆ In 2002, the CDC released new hand hygiene guidelines. These guidelines advise the use of alcohol based hand rubs to protect patients and workers in health care settings. Recent data show that alcohol cleaners are more effective than hand washing for two reasons:
 - Health care personnel are more inclined to use alcohol based hand rubs because they are convenient.
 - Alcohol hand rubs reduce the number of bacteria on hands more effectively than soap and water.



Handwashing Guidelines

- ◆ If hands are visibly dirty wash hands with either a non-antimicrobial soap and water or an antimicrobial soap and water.
- ◆ If hands are not visibly soiled, use an alcohol-based hand rub for routinely decontaminating hands. Handwashing with an antimicrobial soap and water may be substituted



Facts About Handwashing

- ◆ In order to protect yourself and your patients you should sanitize your hands:
 - before and after each patient contact
 - after removing gloves
 - after situations which could result in hand contact with blood, body fluids or secretions
 - after handling items that could be contaminated, such as bedpans and dressings
 - before eating, drinking, handling food and applying make-up
 - after using bathroom facilities, blowing your nose, etc.
 - whenever hands are visibly soiled they should be washed before using a hand sanitizer.



Standard Precautions

- ◆ The CDC Guideline for Isolation Precautions in Hospitals was released in July 1997. It introduced the concept of Standard Precautions.
- ◆ Standard Precautions are designed for the care of all patients regardless of their diagnosis or infection status.



Standard Precautions

- ◆ Standard Precautions are designed to reduce the risk of transmission of microorganisms from known or unknown sources of infection.
- ◆ Standard Precautions apply to:
 - blood
 - all body fluids
 - secretions and excretions (except sweat)
 - non-intact skin
 - mucous membranes



Standard Precautions

- ◆ All patients, all the time
- ◆ When in contact with blood or body fluids or possible blood or body fluids
- ◆ Use standard precautions in addition to other precautions or isolation .



Transmission-Based Precautions

- ◆ There are three types of additional precautions that are based on the mode of transmission, known as Transmission-Based Precautions:
 - Airborne Precautions
 - Droplet Precautions
 - Contact Precautions.



Transmission-Based Precautions

- ◆ All three of these transmission-based precautions are to be used in addition to Standard Precautions.
- ◆ These precautions may also be used individually or combined for diseases that have multiple routes of transmission.
- ◆ Follow facility-specific policies and procedures to implement transmission-based precautions for each disease.



Airborne Precautions

Type of Precaution	Type of Transmission	Examples of Diseases	Special Considerations
Airborne	Airborne	<ul style="list-style-type: none">◆ TB◆ Measles◆ Chickenpox◆ Smallpox◆ SARS	<ul style="list-style-type: none">◆ OSHA mandated/NIOSH certified respirator◆ negative pressure private room with the door closed◆ limit movements and transport of the patient◆ patient must wear a mask when leaving his/her room



Droplet Precautions

Type of Precaution	Type of Transmission	Example of Disease	Special Considerations
Droplet	Droplet	<ul style="list-style-type: none">◆ Influenza◆ Whooping cough◆ mumps	<ul style="list-style-type: none">◆ private room◆ a surgical mask must be worn when working within 3 feet of a patient◆ limit movements and transport of patient (must wear a mask when leaving room)



Contact Precautions

Type of Precaution	Type of Transmission	Example of Diseases	Special Considerations
Contact	Contact	<ul style="list-style-type: none">◆ VRE◆ MRSA◆ lice◆ scabies◆ RSV◆ Impetigo◆ smallpox◆ SARS	<ul style="list-style-type: none">◆ private room◆ gloves and gown must be worn when caring for a patient with some type of contact-transmitted disease◆ dedicated patient care equipment and cleaning



Personal Protective Equipment (PPE)

◆ Personal Protective Equipment

- When in contact with blood or body fluids is possible, healthcare workers must wear PPE as part of standard precautions.
- The clinical facility must provide personal protective equipment (PPE) to each healthcare worker and healthcare provider at no charge. This equipment should be readily accessible and available in an assortment of sizes and types.



Personal Protective Equipment

◆ Examples of PPE include:

- Gloves - latex and latex-free and powdered and powder-free
 - To be worn when with any contact or potential contact with blood or body fluids
- Gowns
 - Wear when blood or body fluid contact is likely
 - Wear upon entry to room if patient is on contact precautions
- Goggles with side shields
 - Wear when caring for a patient requiring droplet precautions
- Face masks and shields
 - Wear when splashing or blood or body fluids is possible as part of standard precautions



Hazardous Chemicals

- ◆ OSHA says, “*You have a right to know*”
 - What chemicals may be harmful
 - How to protect yourself
 - How to safely handle hazardous materials
 - How to clean up minor spills
- ◆ All this information is included on the
MSDS



MSDS- Material Safety Data Sheet

- ◆ The MSDS is a basic hazard communication tool that provides details on chemical and physical dangers, safety procedures, and emergency response techniques. The MSDS gives you all of the information you need to work safely with chemicals.
- ◆ All clinical facilities are required to have an MSDS available for every chemical used in the facility.



Fire Safety

- ◆ All Students must know the institution's Fire Emergency Plan, the location of fire pull/call boxes, the location of and how to use a fire extinguisher, places of safe refuge and evacuation procedures, and must comply with the Institution's "No Smoking" policy.



Code Red: R-A-C-E

- ◆ Rescue anyone in immediate danger
- ◆ Activate the nearest alarm and/or dial emergency number
- ◆ Contain smoke/fire by closing doors
- ◆ Extinguish fire or Evacuate if necessary



Fire Extinguisher : P-A-S-S

- ◆ Pull the safety pin
- ◆ Aim at the base of the base of the fire
- ◆ Squeeze handle
- ◆ Sweep in a side to side motion at the base of the fire



Oxygen Safety

- ◆ O₂ tanks are green and are labeled as containing oxygen
- ◆ Tanks should NOT be placed in bed with patients
- ◆ Transport tanks only in approved carriers
- ◆ Store tanks only in designated areas
- ◆ “Empty” O₂ tanks still contain oxygen and are therefore still dangerous



General Safety

- ◆ The only person who can keep you safe every day on the job is YOU. Make these common sense rules a part of your job:
 - Identify hazards before you start a job or procedure.
 - Respect all precautions - don't take chances.
 - Ask your clinical instructor, preceptor, or facility staff person when you have questions.
 - Know in advance what could go wrong and what to do about it.



General Safety – con't

- Learn and understand emergency procedures and other institution policies and procedures.
- Follow all warnings and instructions.
- Read labels and MSDSs.
- Use the correct protective equipment and clothing.
- Treat equipment with care.
- Be aware of your surroundings and others around you.
- Use common sense - practice sensible, safe work habits.



Need more information?

- ◆ OSHA Website:

- <http://www.osha.gov/>

- ◆ CDC Website:

- <http://www.cdc.gov/>



Training Acknowledgement

- ◆ You must click on the following link in order to acknowledge that you understand what you just read.
- ◆ <https://myusf.stfrancis.edu/portal/secure/college/nursing/forms/osha>