



# OSHA Training

University of St. Francis  
Leach College of Nursing





# 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

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





# 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



# 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



# 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





# 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 are spread through hand-to-hand, food-to-hand and





# 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.





# Facts About Handwashing

In order to protect yourself and your patients you should sanitize your hands:

“ before and after each patient contact

”



# 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	TB Measles Chickenpox Smallpox SARS	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	





# Personal P



# 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

*You have a right to know*

What chemicals may be harmful

How to protect yourself



# 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





# Oxygen Safety

O<sub>2</sub> 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

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

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>