



Blood borne Pathogen Training

For **Certified Nursing Assistants**

*Meets the Blood borne Pathogens & Infection Control Update (Formerly HIV/AIDS) 1.0 In-service Hour
required by the Florida Department of Health/Board of Nursing for Certified Nursing Assistants
Clinical Learning January 2012*

Objectives

- ❑ Define the term 'blood borne pathogen' and how they can be harmful to healthcare workers.
- ❑ Identify diseases transmitted through exposure to infected blood.
- ❑ Describe how to protect yourself and others from blood borne pathogens.
- ❑ Recognize the importance of practicing universal precautions at all times.

Why Care About Blood Borne Pathogens?

It's about keeping yourself and your patients safe!

Avoid transmitting a blood borne pathogen from:

- A patient to yourself.**
- A patient to another patient.**
- Yourself to a patient.**

The Basics....

What do we mean by *transmit*?

- ❑ To transmit means to spread, infect, receive, or give disease-causing pathogens (germs) from one person to another, causing illness.

What do we mean by *exposure*?

- ❑ The experience of coming into contact with an environmental condition, (such as blood borne pathogens), that has a harmful effect.

What is a blood borne pathogen?

- ❑ Blood borne pathogens are micro-organisms that are present in human blood and cause diseases in humans.
- ❑ **'Blood borne'** means that the pathogens (germs) are carried in the blood.
- ❑ Pathogens are viruses or bacteria (germs) that cause disease or illness.

What blood borne pathogens do we worry most about in hospitals?

- ❑ Hepatitis B Virus (HBV)**
- ❑ Hepatitis C Virus (HCV)**
- ❑ Human Immunodeficiency Virus (HIV)**

Hepatitis B Virus (HBV)

- Hepatitis B virus is a **hepadnavirus**.
- '**Hepa**' because it's attracted to the liver, and '**dna**' because it is a DNA virus.
- The virus multiplies in the liver & then spreads to the blood.
- The virus *proteins* and the *antibodies* against them are found in the blood of infected people.

Hepatitis B - Symptoms

- ❑ You cannot always tell when someone is sick with a Hepatitis B infection.

- ❑ Symptoms include:
 - Anorexia or loss of appetite.
 - Vague abdominal discomfort.
 - Nausea and vomiting.
 - Sometimes joint pain and rash.
 - Jaundice or yellowing of the skin.
 - Fever which may be absent or mild.



Ways of Transmitting Hepatitis B

- ❑ **Sexual**
 - ✓ **Either homosexual (gay) or heterosexual (straight) sex**
- ❑ **Parenteral (Injections)**
 - ✓ **Such as an injury with needles & sharps**
- ❑ **Perinatal**
 - ✓ **From a pregnant mother to her infant**

Hepatitis C Virus (HCV)

- Hepatitis C is an infectious disease caused by a virus.
- HCV mostly affects the liver.
- The infection often has no symptoms.
- This chronic infection can lead to scarring of the liver.
- It can eventually lead to cirrhosis after many years.
- In some cases, cirrhosis can lead to liver failure.

Hepatitis C Facts

- Most common chronic blood borne infection in U.S. (*Chronic* means it never goes away)
- Millions of Americans have it now or have had it in the past.
- It causes 8-10,000 deaths every year.
- It is the biggest reason for liver transplants for adults in United States.

HCV Transmission in Healthcare

- ❑ The Hepatitis C virus dies very quickly when outside of the human body
- ❑ Right now it does not seem as though health care workers can transmit it or get it from patients.



Human Immunodeficiency Virus (HIV)

- **HIV infection is a condition caused by a virus.**
- **HIV attacks the immune system and is carried in the blood.**
- **Our immune system fights against infections & cancer.**
- **HIV gradually destroys the immune system.**
- **HIV infection can lead to AIDS , or Acquired Immune Deficiency Sndrome**

Acquired Immune Deficiency Syndrome

- **AIDS** is the final stage of **HIV disease**.
- It causes severe damage to the immune system.
- Body becomes vulnerable to life-threatening infections and cancers.
- Common bacteria, yeast, parasites, and viruses that usually do not cause serious disease systems can cause death in people with AIDS.

HIV – Symptoms

- ❑ Within weeks or months after being infected, many people get sick from a mononucleosis-like illness that lasts a week or two.
- ❑ After that, infected people may be free of outward signs or symptoms for many months or even years.
- ❑ Many people may not even realize they are infected.
- ❑ The illness then interferes with their general health.
- ❑ They may get infections from tiny organisms that don't cause infections in healthy people.
- ❑ HIV can cause problems with the brain, interfering with thinking, concentration, and coordination.

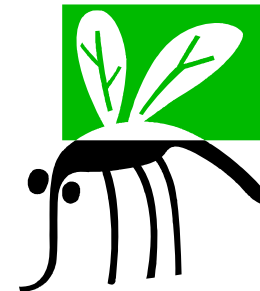
HIV – Modes of Transmission

- ❑ Blood Contacts - Needle-sticks and exposure of broken skin and mucous membranes.
- ❑ Sexual Contact - Exchange of vaginal secretions and semen.
- ❑ Mother to Infant - During pregnancy, at delivery & through breastfeeding.



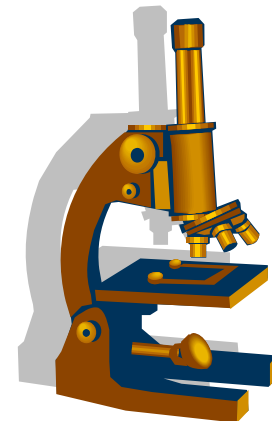
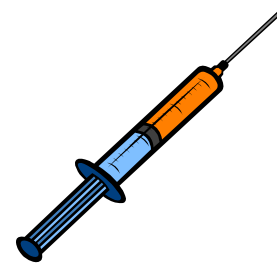
HIV – Modes of Transmission

- You cannot get infected with HIV from mosquitoes, kissing or hugs!



HIV – No Vaccine Available

- ❑ Research continues toward the development of an “HIV” vaccine.
- ❑ There is **no** vaccine available for the prevention of HIV infection.



Can you tell?

Who's got hepatitis? Who's got HIV? You can't tell by what someone looks like!
Use universal precautions for all patients.



Staying Safe from Blood Born Pathogens

- The Goal: Prevent infected blood from getting into your body or anybody else's body.
- The Reason: For a healthy person to get sick, the infected blood has to get inside the healthy person's blood.

Potentially Infectious Materials

Besides blood, be careful with other body fluids, because they may contain blood, even if you can't see it!

Amniotic Fluid

Bloody Body Fluids

Cerebrospinal Fluid

Pleural Fluid

Saliva in Dental Procedures

Semen

Synovial Fluid

Vaginal Secretions

Your Best Bet!


- ❑ Treat all blood and body fluids as potentially infected.
- ❑ Always Follow Standard or Universal Precautions.



Hand Washing

Areas most often missed



 Most frequently missed  Less frequently missed  Not missed

How To Wash Your Hands

1. Wet your hands with clean running water (warm or cold) and apply soap.
2. Rub your hands together to make a lather and scrub them well; be sure to scrub the backs of your hands, between your fingers, and under your nails.
4. Continue rubbing your hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
5. Rinse your hands well under running water.
6. Dry your hands using a clean towel or air dry.



Hand Hygiene



Hand sanitizers are not effective when hands are visibly dirty.

Use Soap & Water for visibly soiled hands

Hand Hygiene



- How should you use hand sanitizer?
- Apply the product to the palm of one hand.
- Rub your hands together.
- Rub the product over all surfaces of your hands and fingers until your hands are dry.

Employer Responsibilities for Keeping You Safe

- ❑ Enforcing good work practices like disinfecting surfaces, following universal precautions, and proper waste disposal.
- ❑ Providing sharps containers, needleless IV systems, and self-sheathing needles.
- ❑ Providing Personal Protective Equipment (PPE): Gloves, gowns/aprons, goggles, face shields, side shields and surgical masks

Your Responsibilities

- ❑ Complete your annual trainings.
- ❑ Get your Hepatitis B vaccination.
- ❑ Safely dispose of sharps and blood-contaminated materials.
- ❑ Use barriers to prevent blood contact.
- ❑ Follow Universal Precautions!

Medical Waste Best Practices



- **Dispose of sharps properly in the red containers.**
- **Never RECAP needles before placing them in the container.**
- **Sharps containers are exchanged when 3/4 full.**

Medical Waste Best Practices



Red Bags - Always use for disposing of medical waste saturated with blood/body fluids.

Medical Waste Best Practices



- Dispose of all medical waste properly and promptly.

Remember, dispose of all medical waste properly.



Clean equipment between patients



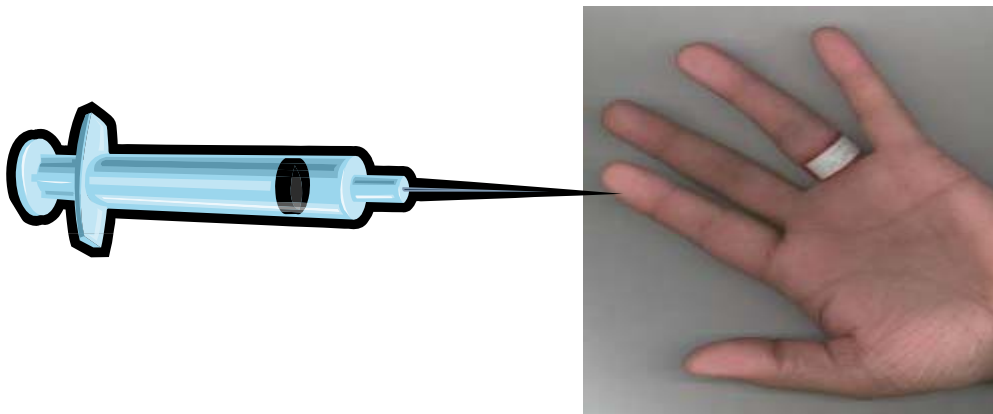
Please!!
An ounce of prevention is worth it.

A Pound of Cure

- ❑ Take every precaution to prevent being exposed to blood borne pathogens.
- ❑ Know what to do if you are accidentally exposed.

If You've Been Stuck...

- ❑ Promptly wash or flush the affected area right away.
- ❑ Notify your supervisor immediately.



Do Not Delay...

- Go to the Employee Health Office right away.
- If the Employee Health Office is closed, go to the emergency department to get evaluated and treated.

The Center for Disease Control (CDC) recommends treatment within two hours of exposure.

Get Evaluated!



- ❑ **Get Evaluated by the employee health office** right away. The severity of the injury must be assessed.
- ❑ Serious exposures require drug therapies most effective when given within a few hours.

For more information go to the
Centers for Disease Control & Prevention
website <http://www.cdc.gov>

Congratulations!

You have successfully completed this portion of this course.

Before you exit, you may review the content once more. Please complete the quiz in order to complete this course.

Take the quiz and score at least 80% to successfully complete the quiz. After passing the quiz, provide us with your valuable feedback in the brief evaluation so that we may continue to improve our courses. The evaluation is not required for successful completion of this course.

Thank you!

HR Learning Management