

Bloodborne
Pathogens (BBP)
Training



Bloodborne Pathogens Training

Training Objectives:

- Know where to find:
 - OSHA BBP standard
- Identify types of BBP & health effects
- Understand BBPs transmission modes
- List Exposure Control Plan Elements
- Identify at risk tasks
- Learn how to Prevent Exposure
- Understand Hepatitis B Vaccine – facts



Bloodborne Pathogens Training

- **Objective:**
 - Where to Find the Regulations





Bloodborne Pathogens Training

BBP Regulations

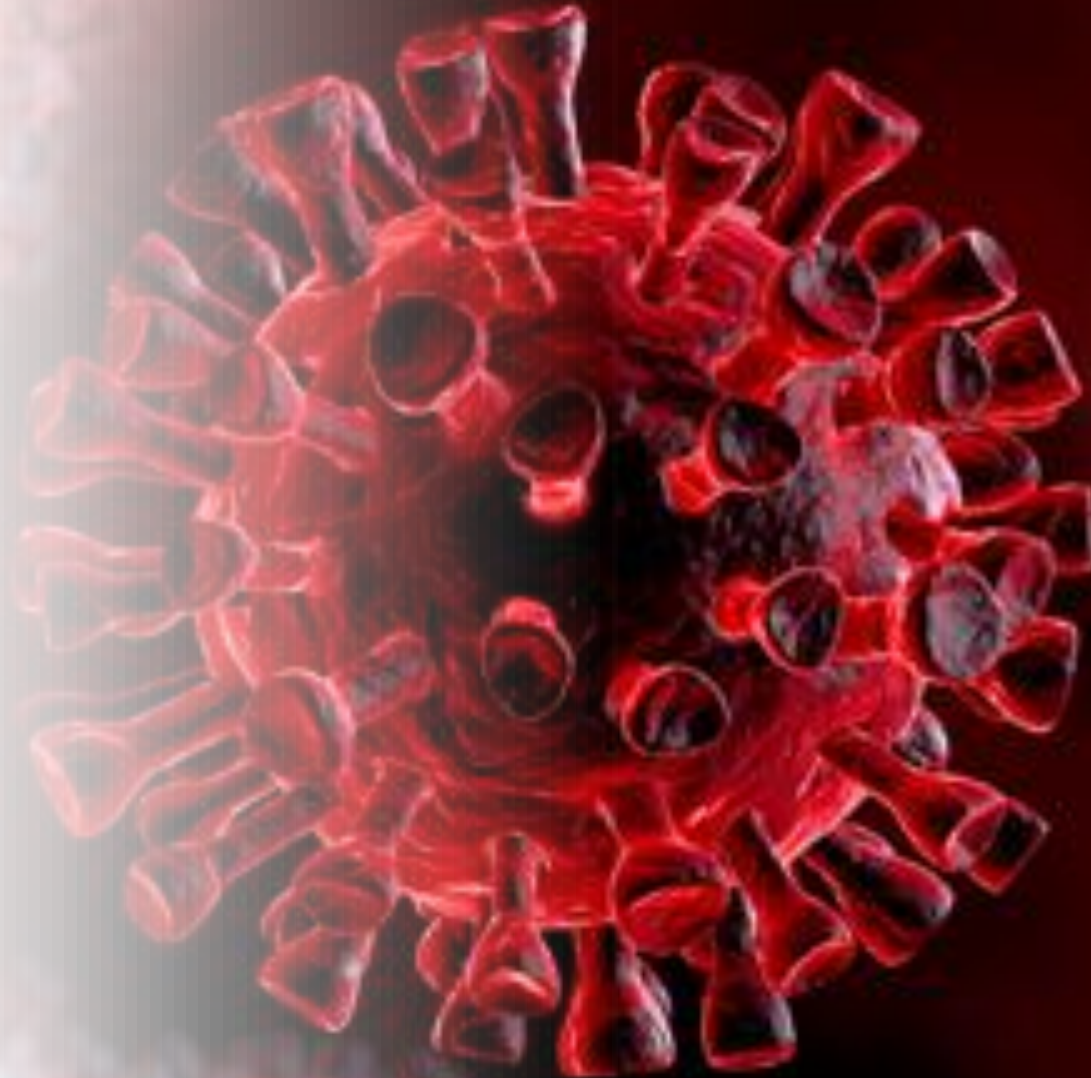
OSHA 1910.1030 BBP Standard

- www.osha.gov
- Search “Bloodborne Pathogens”
- Protects employees with
Occupational Exposure

Bloodborne Pathogens Training

*BBP's / Health Effects /
Transmission*

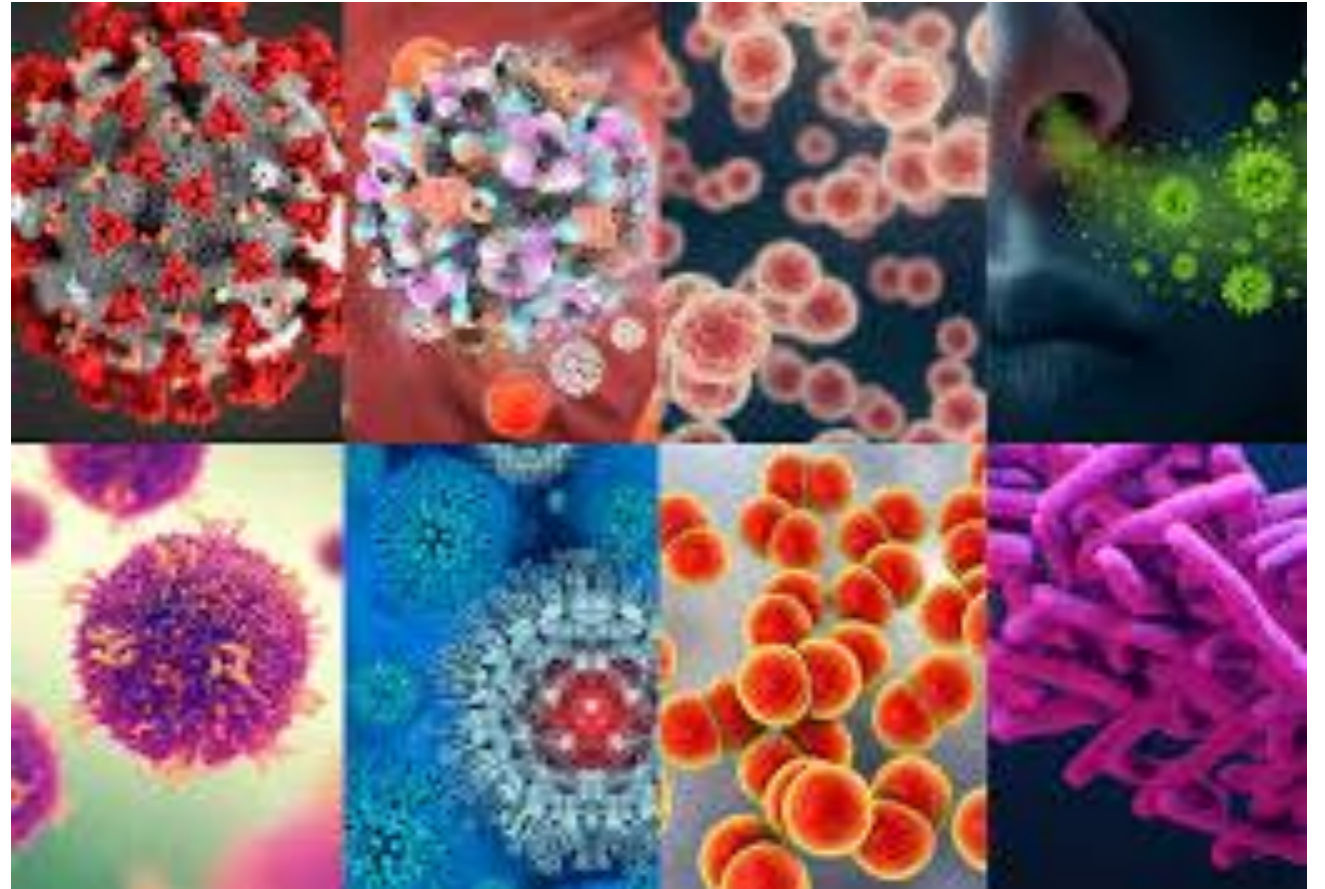
- Infectious Diseases vs.
Bloodborne Pathogens
 - Is there a difference?

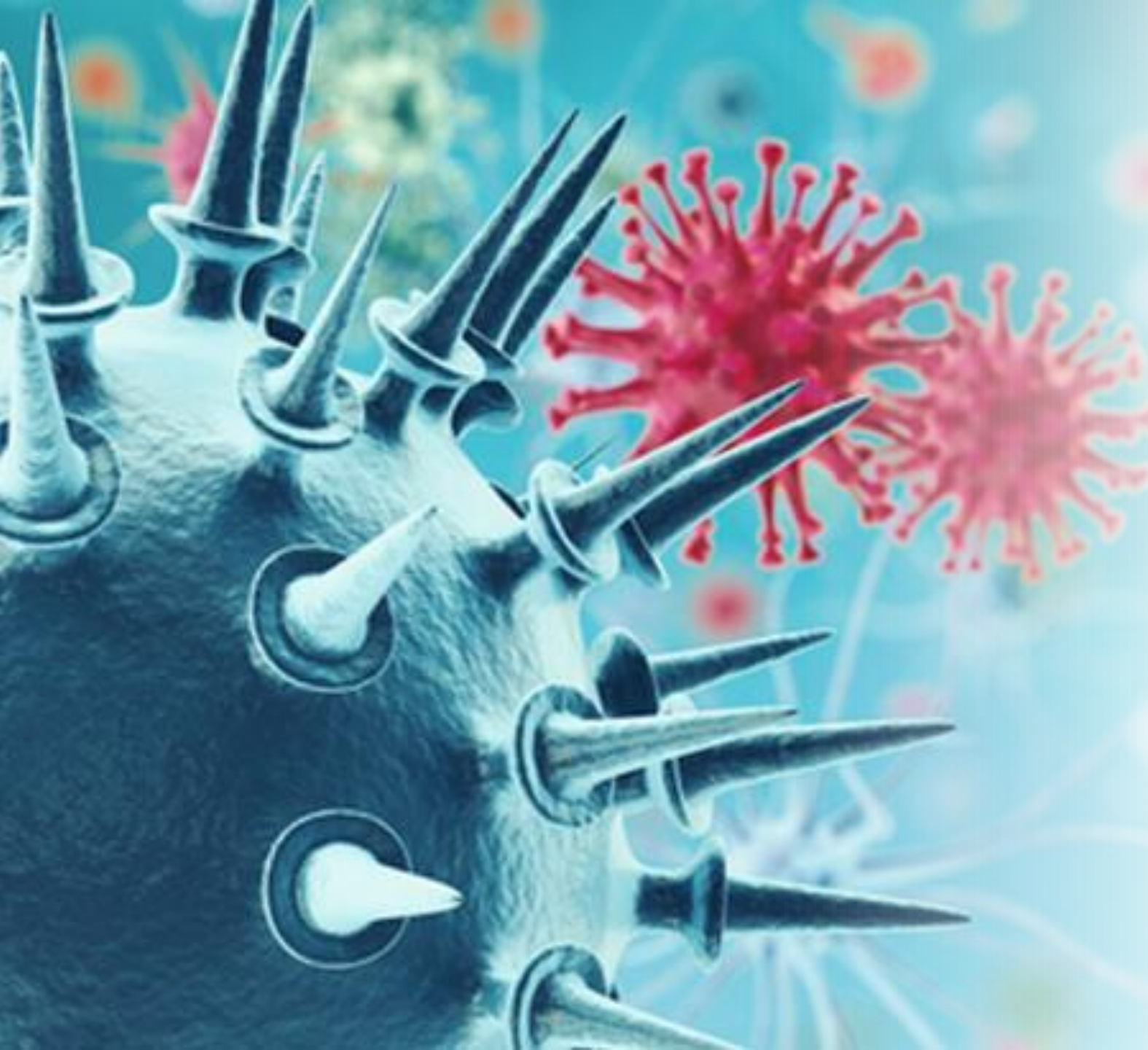


Bloodborne Pathogens Training

BBP's / Health Effects / Transmission

- Infectious Diseases vs. Bloodborne Pathogens
 - YES
- All BBP are Infectious Diseases, but not all Infectious Diseases are transmitted via blood exposure.





Bloodborne Pathogens Training

*BBP's / Health Effects /
Transmission*

- Infectious Diseases (non-BBP)
 - TB - Tuberculosis
 - Measles
 - H1N1 - Swine flu
 - Meningitis
 - Mono - Infectious Mononucleosis
 - Mumps
 - Lice
 - Chickenpox

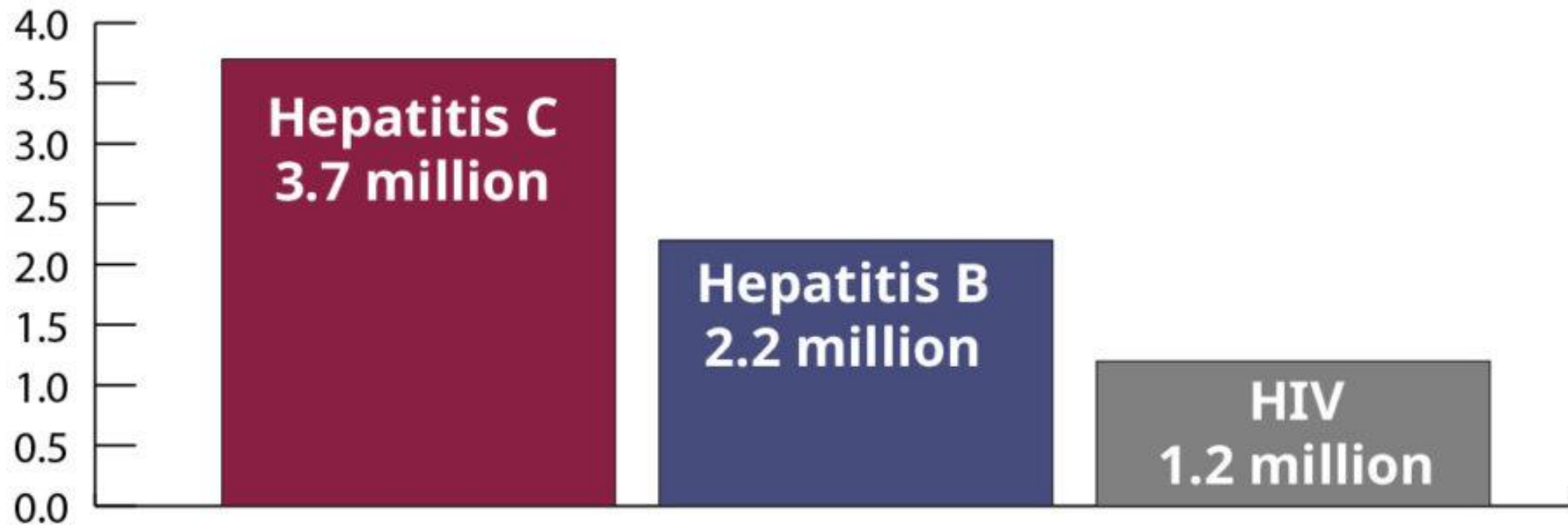


Bloodborne Pathogens Training

*BBP's / Health
Effects /
Transmission*

- What are Bloodborne Pathogens?
 - Bloodborne pathogens are microorganisms such as viruses or bacteria that are carried in blood and can cause disease in people.
- BBP – examples?
 - HIV / AIDS
 - Hepatitis B
 - Hepatitis A
 - Hepatitis C

3 Most Common Bloodborne Infections in the U.S.



Bloodborne Pathogens Training

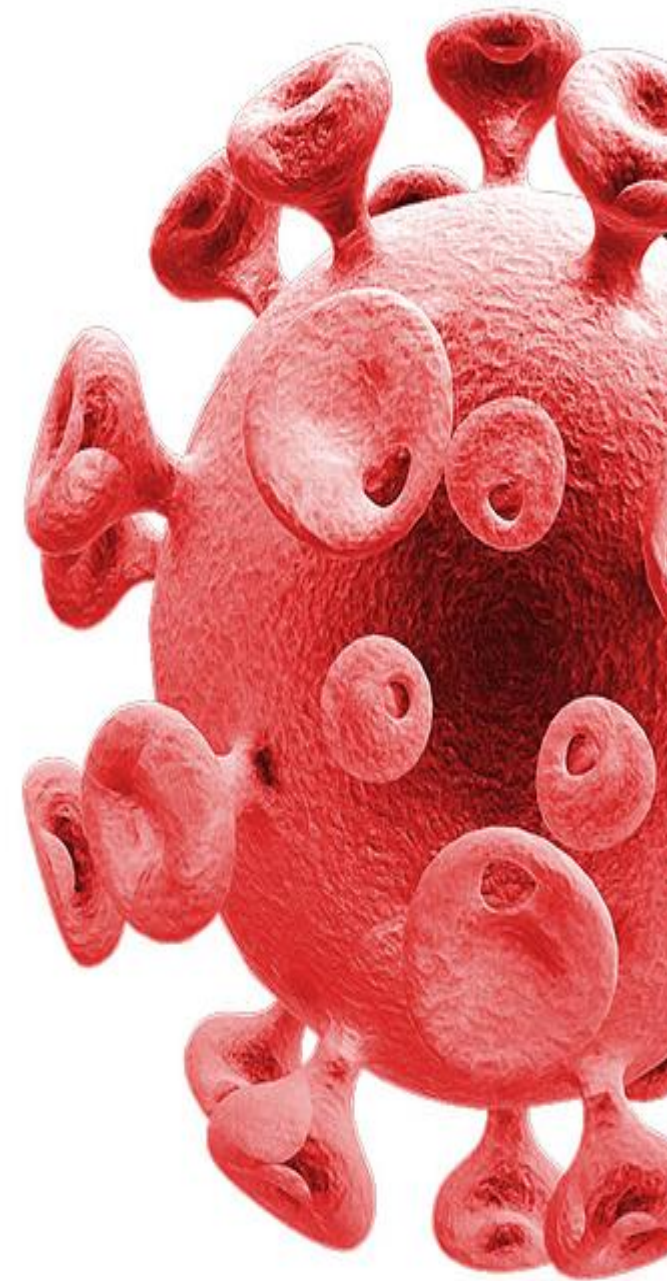
BBP's / Health Effects / Transmission

Human Immunodeficiency Virus (HIV)

HIV attacks the immune system and weakens it so that it cannot fight other deadly diseases.

- **Traits:**

- HIV can progress to AIDS
- The HIV virus is very fragile
- Symptoms of HIV infection may vary



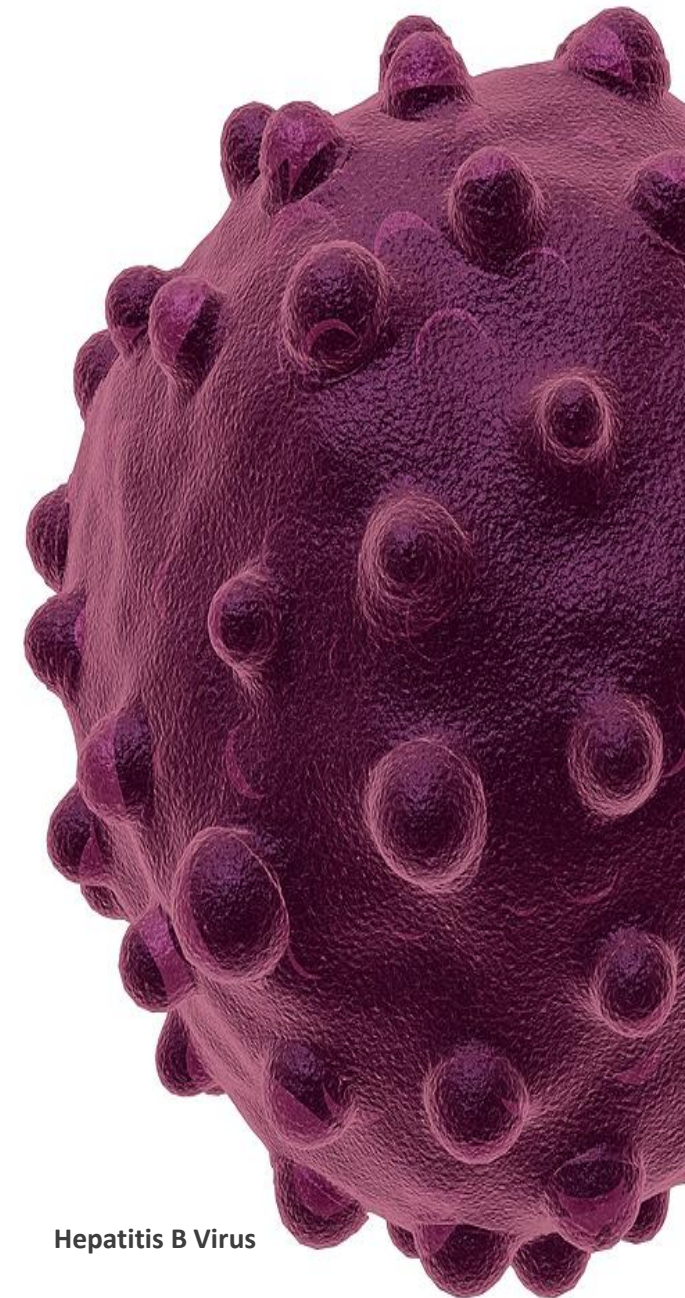
Human Immunodeficiency Virus (HIV)

Bloodborne Pathogens Training

BBP's / Health Effects / Transmission

Hepatitis B Virus (HBV)

- Attacks the liver
- May cause fever, jaundice, abdominal pain, nausea, vomiting, loss of appetite, fatigue, or death
- Can become chronic or long-term
- Can lead to cirrhosis or liver cancer
- Transmits through sexual contact or exposure to infected blood or OPIM
- May be transmitted by carriers
- Can survive outside the body for up to seven days
- Has no cure
- Does have a safe, effective vaccine



Hepatitis B Virus

Bloodborne Pathogens Training

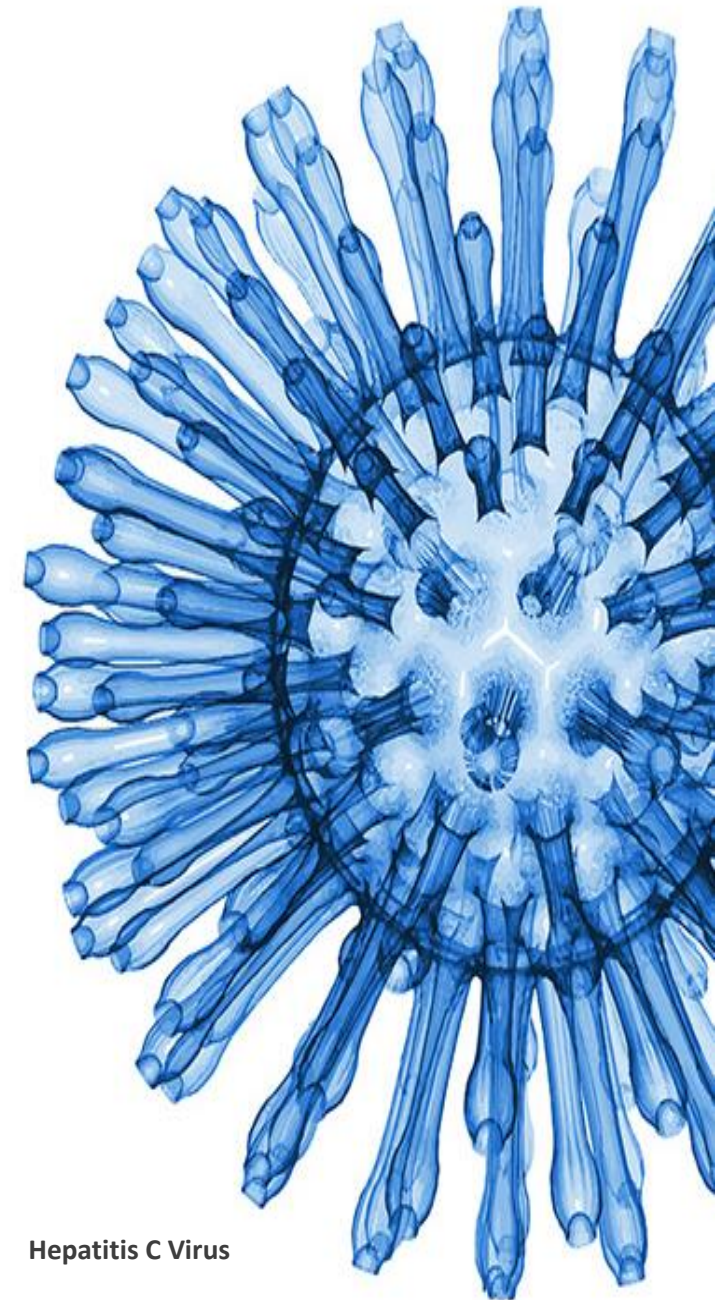
BBP's / Health Effects / Transmission

Hepatitis C Virus (HCV)

HCV is another common bloodborne pathogen. It has symptoms that are similar to HBV.

- **Traits:**

- $\frac{1}{4}$ of those infected will **recover on their own**.
- For the remaining $\frac{3}{4}$, HCV leads to a chronic infection and liver disease.
- While HCV has no vaccine, it can be cured with medical treatment.
- As with HBV, it can be transmitted by **carriers**.



Hepatitis C Virus

Bloodborne Pathogens Training

BBP's / Health Effects / Transmission

- What transmits / carries BBP?
 - BLOOD!
- What else?
 - **Other Potentially Infectious Material (OPIM)
 - Any body fluid that is ***visibly contaminated*** with blood, and
 - ***All body fluids*** in situations where it is difficult or impossible to differentiate between body fluids;**



Bloodborne Pathogens Training

BBP's / Health Effects / Transmission



- Occupational Transmission Modes – The Big 3
 - 1. Needlestick
 - 2. Cut from sharp object w/ blood or OPIM
 - 3. Blood or OPIM contacting
 - open wound
 - contacting mucous membranes
- Obviously sharing needles, sexual transmission, tattoos, etc.

Bloodborne Pathogens Training

ECP Elements

What is an ECP?

- Identifies the jobs and tasks with potential occupational exposure.
- Includes guidelines for the following:
 - Training
 - Work practice controls - Universal Precautions
 - Personal protective equipment (PPE)
 - Post-exposure medical evaluation and follow-up
 - Medical surveillance
 - Vaccinations
 - Signs and labels



Bloodborne Pathogens Training *At Risk Tasks*

- At Risk Tasks???????
- Physical contact with people
- Trauma / first aid / CPR
- Disinfection / decon – equipment / vehicles
- Handling syringes / needles – why?
- Other sharp objects w/ blood or OPIM
- Trash



Bloodborne Pathogens Training *At Risk Tasks*

- At Risk Tasks
 - What do you do that places you at risk?



Bloodborne Pathogens Training

Exposure Prevention

- Work practice controls (just a few)
 - Universal Precautions
 - Hand washing / sanitizing
 - Training & education
 - SOP
 - PPE



Bloodborne Pathogens Training

Exposure Prevention

- Universal Precautions Means?????????
 - "**Universal Precautions**" is the name used to describe a prevention strategy in which all blood and potentially infectious materials are treated as if they are, in fact, infectious, regardless.
 - In other words, whether or not you think the blood/body fluid is infected with bloodborne pathogens, *you treat it as if it is.*

Bloodborne Pathogens Training

Exposure Prevention

- Universal Precautions
 - Probably the first thing to do in any situation where you may be exposed to bloodborne pathogens is to ensure you are wearing the appropriate **personal protective equipment (PPE)**.
 - For example, you may have noticed that emergency medical personnel, doctors, nurses, dentists, dental assistants, and other health care professionals always wear latex or protective gloves.
 - This is a simple precaution they take in order to prevent blood or potentially infectious body fluids from coming in contact with their skin. **To protect yourself, it is essential to have a barrier between you and the potentially infectious material.**



Bloodborne Pathogens Training

Exposure Prevention

- Standard Operating Procedures (SOPs)
 - Personal hygiene – Bandage any cuts or sores
 - No eating / drinking / food in and around areas where blood and OPIM
 - NO smoking w/ contaminated hands
 - Not taking home contaminated clothes
 - Don't touch sharps with your hands
 - Make sure all sharps make their way to a proper container

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Exposure Prevention

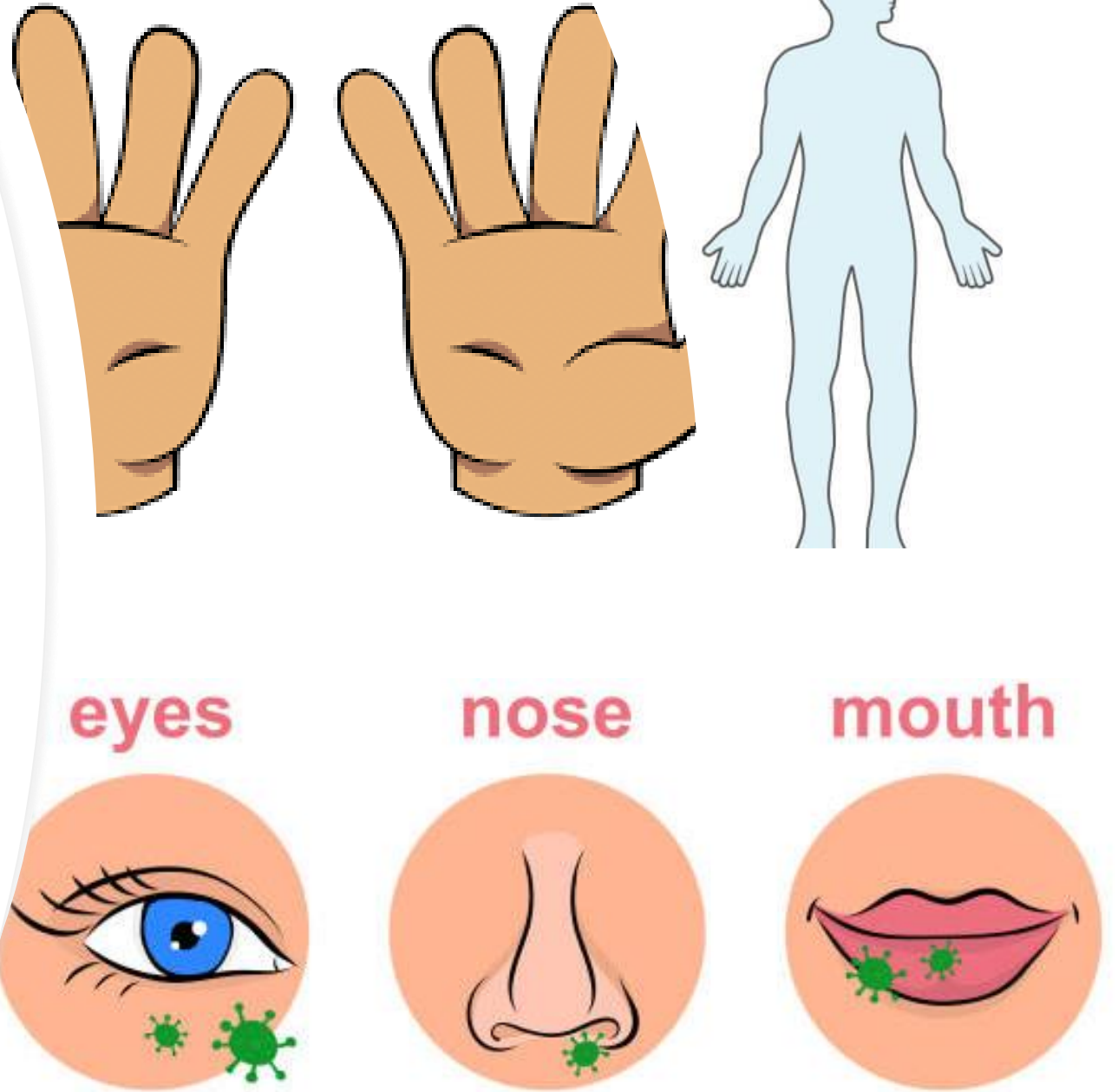
- Personal Protective Equipment
 - When is it used?
 - When you deem it necessary
 - Blood and OPIM
 - Needlesticks or cuts from other sharps objects with blood or OPIM



Bloodborne Pathogens Training

Exposure Prevention

- Personal Protective Equipment
 - Where is it used?
 - Hands
 - Mucous membranes
 - Eyes / Nose / Mouth
 - Body
 - Respiratory



Bloodborne Pathogens Training

Cleaning Up The Mess

- Decontamination should be accomplished by using:
 - A solution of 5.25% sodium hypochlorite (household bleach / Clorox) diluted between 1:10 and 1:100 with water. The standard recommendation is to use at least a quarter cup of bleach per one gallon of water.
 - [Lysol or some other EPA-registered tuberculocidal disinfectant](#). Check the label of all disinfectants to make sure they meet this requirement.

Bloodborne Pathogens Training

Cleaning Up The Mess

- If you are cleaning up a spill of blood, you can carefully cover the spill with paper towels or rags, then gently pour the 10% solution of bleach over the towels or rags, and leave it for *at least 10 minutes*.



Bloodborne Pathogens Training

Cleaning Up The Mess



- All surfaces, tools, equipment and other objects that come in contact with blood or potentially infectious materials must be decontaminated and sterilized as soon as possible.
- **Equipment and tools must be cleaned and decontaminated before being put back to use.**

Bloodborne Pathogens Training

Disposal

- Contaminated blood is considered Biohazard waste and must be disposed of by special procedures.
 - Use special “red” bag for disposal of contaminated materials.
 - You may use smaller, general purpose bags inside this bag.
 - Place all soiled, disposable cleaning materials in this bag.
 - After washing hands and placing last paper towel in bag, seal or tie off the bag.
 - What are we doing with our Sharps?



Bloodborne Pathogens Training

Removal Of Gloves



- When taking contaminated gloves off, do so carefully.
- Make sure you don't touch the outside of the gloves with any bare skin, and be sure to dispose of them in a proper container so that no one else will come in contact with them, either.
- Wash your hands!!!!

Bloodborne Pathogens Training

What To Do If You Are Exposed

- Procedure to follow after clean up or if you become exposed:
 1. Wet hands under running water.
 2. Wash hands thoroughly with germicidal soap and rinse completely.
 3. Dry hands vigorously with a paper towel.
 4. Use the paper towel to turn off the faucet.
 5. Apply hand cream after frequent washing to prevent skin irritation and infection
 6. Flush your eye, nose, or mouth with water as soon as possible after exposure.

Bloodborne Pathogens Training

*What To Do If
You Are
Exposed*

- Once reported – Your Employer Will
 - Determine route of exposure
 - Document circumstances of exposure
 - Identify source person or thing
 - Send you for immediate medical attention
 - Do not wait until the next day, shift, weekend
 - Your Employer is responsible for working with source individual to request / obtain consent

Bloodborne Pathogens Training

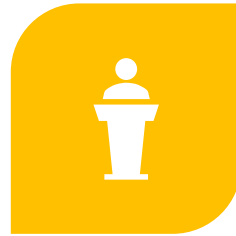
What To Do If You Are Exposed



MEDICAL
ATTENTION
INCLUDES:



TESTING



COUNSELING



COMMUNICATION
WITH MEDICAL
PROVIDERS



CONFIDENTIAL
PROCESS

Bloodborne Pathogens Training

HBV Vaccine



- HBV Vaccine Requirements
 - Offered to all employees at risk of exposure
 - Free
 - Performed by a licensed professional
 - Within ten working days of the initial assignment
 - At a reasonable time and in an accessible location

Bloodborne Pathogens Training

HBV Vaccine

- Opting Out of Vaccination
 - You do not have to be vaccinated if:
 - You have already been vaccinated.
 - An antibody testing reveals your immunity.
 - You opt out after being offered the immunization.
 - If you decline the vaccination, you must sign a declination form.
 - It is possible to initially decline and later accept.



Bloodborne
Pathogens
Training
Summary

- Protect yourself – Universally!
- Know the limits of safety devices & PPE.
- Remember transmission modes!
- Dispose of waste safely and properly.



Questions, Comments Concerns?