

The background is a light blue gradient with several realistic water droplets of various sizes scattered across it. Some droplets are at the top, some at the bottom, and some in the middle, all with highlights and shadows that give them a three-dimensional appearance.

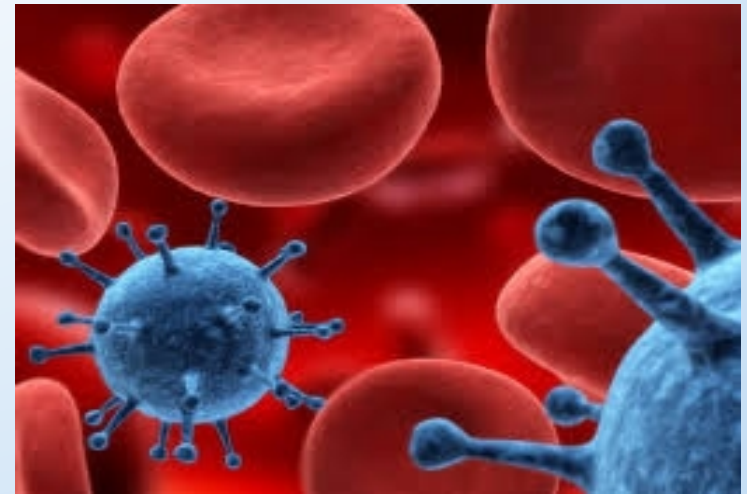
# Bloodborne pathogens

## The Standards

- **Training and annual review are required by osha (29 cfr 1910.1030)**
- **Applies to all employees of any industries that may cause exposure to blood or other potentially infectious materials (opim)**

# Blood-borne pathogens are...

- Viruses, bacteria and other such microorganisms that are present in human blood or secretions that can cause diseases in humans.
- Human immunodeficiency virus (hiv)
- Hepatitis b virus (hbv)
- Hepatitis c virus (hcv)



# Human Immunodeficiency Virus (HIV)

- Signs of illness may not be present for years
- Symptoms: flu like illness, weakness, diarrhea, weight loss
- Devastates the body's immune system
- The virus which causes AIDS
- ~1.1 million persons living with HIV/AIDS in U.S.; 39,782 new cases in 2015
- AIDS is chronic and fatal

# Hepatitis B (HBV)

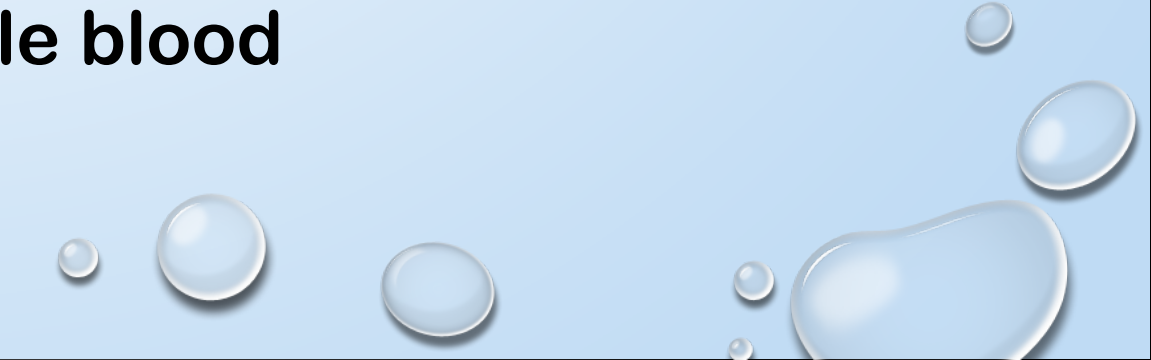
- Survives in dried blood for up to 1 week at room temperature
- 14,847 new infections each year, 2016;
- Attacks the liver
- Symptoms: fatigue, nausea, vomiting, abdominal pain, anorexia
- Can be chronic and fatal

# Hepatitis C (HCV)

- **Can lead to chronic hepatitis, cirrhosis and liver cancer**
- **Can be chronic and fatal**
- **No effective vaccine exists**



## Potentially Infectious Materials

- Any bodily fluid that cannot be identified
  - Human bodily fluids such as: Semen, vaginal secretions, lung fluid
  - **BLOOD**
  - Any bodily fluid containing visible blood
- 



# HOW ARE THEY TRANSMITTED

- **Puncture wounds caused by sharp objects**
- **Infectious materials contacting open wounds, cuts, or broken or damaged skin**
- **Infectious materials contacting mucous membranes of eyes, nose and mouth**





# Possible Exposure Incidents

- During an accident
- While administering First Aid
- During post-accident clean-up
- When performing routine maintenance or janitorial work



# Exposure Control Plan

- **Universal precautions**

Treat all human blood and bodily fluids as if they are infected with HIV, HBV, HCV and other blood-borne pathogens.

- **Work practice controls**

HANDWASHING, PERSONAL PROTECTIVE EQUIPMENT, SPILL CLEAN UP, LAUNDRY, Waste disposal

- **Post-exposure follow-up**

# Personal Protective Equipment

- First line of defense
- Limitations
- Rules:
  - Remove before leaving work area
  - Wash hands after removing
  - Properly dispose of contaminated PPE



# First-Aid Response

- Adopt Universal Precautions
- Encourage self-care
- Use PPE
- Avoid applying pressure without barrier

# Housekeeping: Spill Clean-up

- **Use PPE & Universal Precautions**
- **Cover spill or area with paper towel or rags**
- **Pour disinfectant solution over towels or rags**
- **Leave for at least 10 minutes**
- **Place materials in appropriate container**
- **Arrange for pick-up and disposal**

# Housekeeping: Contaminated Laundry

- Laundry soiled with blood or OPIM
- Use PPE
- Handle as little as possible
- Pre-soak all contaminated clothing
- If blood or OPIM gets on clothing, remove and thoroughly wash with detergent ASAP



# Exposure Incident Response

- ***Contact with skin:*** wash exposed areas with antibacterial soap and running water
- ***Contact with eyes or mucous membranes:*** flush affected area with running water for at least 15 minutes
- ***Contact with clothing:*** remove contaminated clothing, wash underlying skin
- Report exposure to supervisor immediately



# Post-Exposure Evaluation

- Confidential medical evaluation and follow-up after exposure incident
  - Identify and document source and circumstances of exposure
  - Test source individual's blood for HIV/HBV
  - Provide blood sample
- Healthcare professional's written opinion

