

BLOODBORNE PATHOGENS

Annual Refresher
Part 1

Monmouth County Fire Academy

BBP TRAINING

- The OSHA Standard
- Definition of a BBP
- Common BBP Diseases
- Modes of Transmission
- Recognizing Exposure
- Exposure Control
- PPE
- HBV Immunization



BBP TRAINING

- Emergencies involving blood or infectious material
- Exposure follow-up
- Post Exposure follow-up
- Questions



OSHA BB PATHOGENS STANDARD

- OSHA 1910.1030
 - Anyone who may be exposed to BB pathogens is required to complete training for awareness
 - The major intent of this regulation is to prevent the transmission of bloodborne diseases in the work place
 - An Exposure Control Plan must established by your employer

WHAT IS A BBP?

 Microorganisms that are carried in the blood that can cause or transmit diseases in humans.

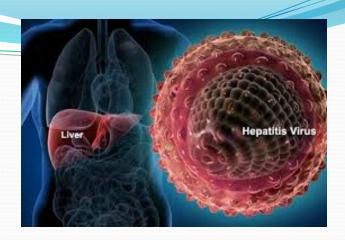
HIV/AIDS

- HIV is the virus that leads to AIDS
- Depletes the immune system
- Lives in blood and other bodily fluids
- Transmitted through sexual contact, needle sharing, or during birth
- No cure, no vaccine
- Incubation period = 10 years



HEPATITIS B

- Liver infection caused by HBV
- Sexual contact; sharing needles, syringes or from mother to baby at birth
- Carried in blood and other bodily fluid
- Can lead to cirrhosis or liver cancer.
- The best way to prevent Hepatitis B is by getting vaccinated.
- No cure
- Can survive outside the body for 7 days



HBV Vaccination

- Must be provided by employer
- Consent or declination forms
- Series of 3 shots
 - Initial/2 months / 6 months
- Vaccine effective after all 3
- Synthetic, yeast based vaccine



HEPATITIS C



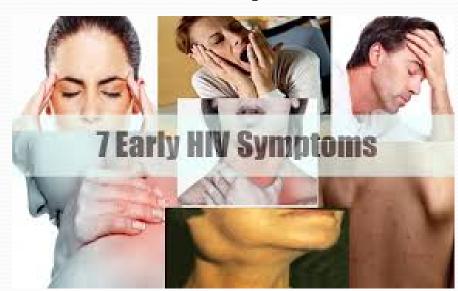
- Liver infection caused by HCV
- Sharing needles, needle sticks, mother to baby at birth
- Low risk of transmission through sexual contact
- Can lead to cirrhosis or liver cancer.
- No vaccination available
- A cure is now possible. Advancements are being made

HEPATITIS C

- Can survive outside the body for up to 3 weeks
- Most common chronic BBP infection
- Signs & Symptoms may not appear for 10 years
- PPE & Awareness = Prevention

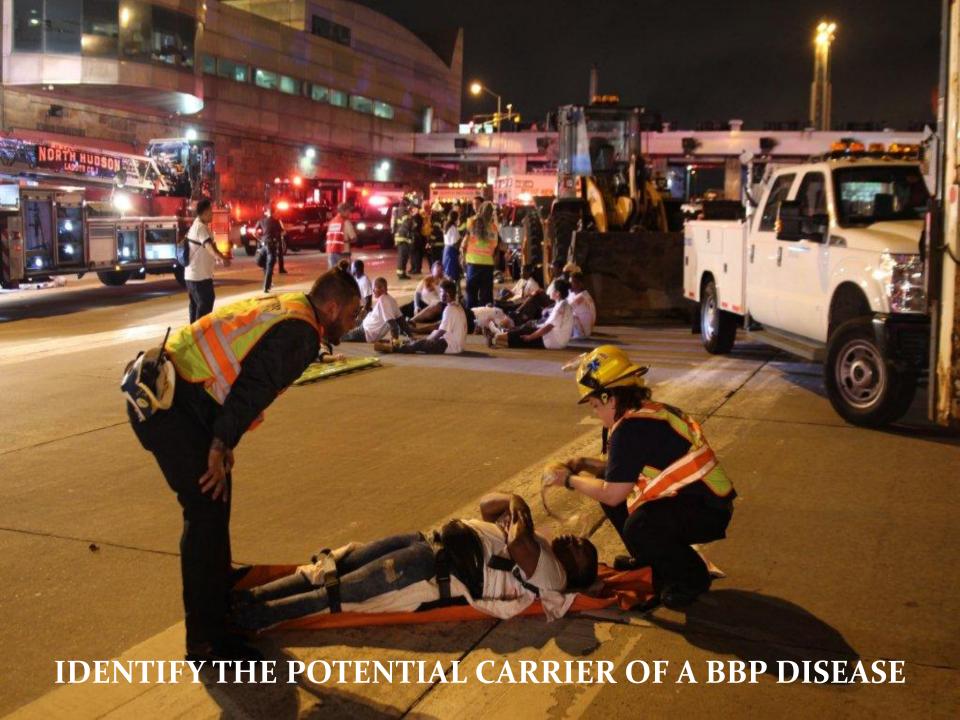
SYMPTOMS

- Symptoms of HIV or HBV/HCV are very similar
- Flu-like
- Jaundice
- Fatigue
- Abdominal pain
- Weight loss
- Muscle/joint pain
- NO SYMPTOMS AT ALL!!!



WHAT IS A BBP EXPOSURE?

- A specific incident of contact with potentially infectious bodily fluids
- If there is no infiltration of mucus membranes or open skin surfaces it is not considered an occupational exp.
- BBP can enter the body through...
 - Cracked/broken skin
 - Ingestion (mouth)
 - Eyes
 - Needle sticks



BBP EXPOSURE AT EMERGENCY INCIDENTS

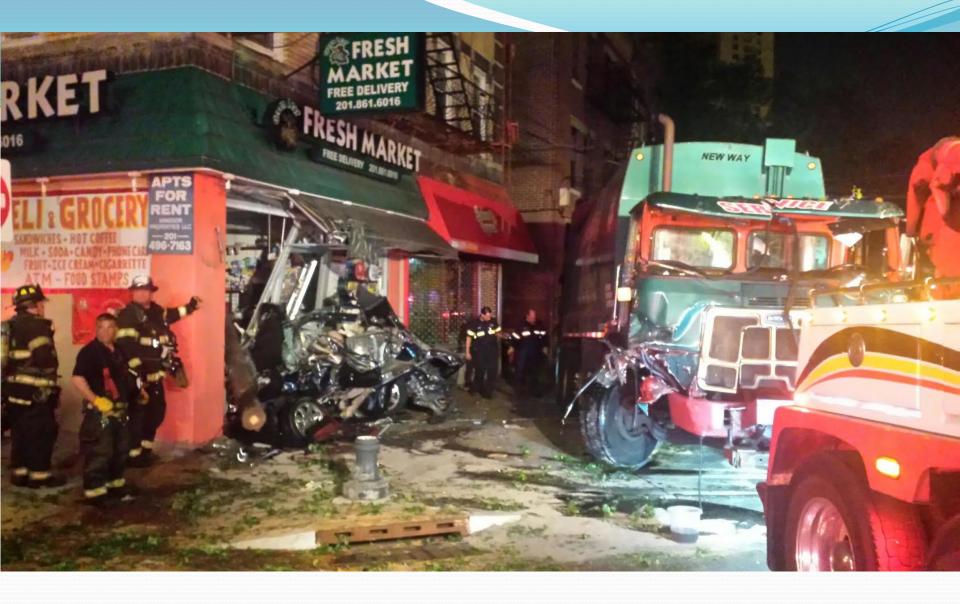
- Fires
- Motor vehicle accidents
- Mass casualty incidents
- Technical rescues
- Hazmat
- EMS assists
- Medical emergencies
- Elevator rescues
- Industrial accidents



BBP SAFETY

- Begins in the firehouse...before the alarm is transmitted
- Ensure the apparatus is fully stocked with BBP PPE
- Universal precautions must be followed by all
- PPE donning and doffing proficiency





AT NIGHT, VEHICLE FLUIDS AND BODILY FLUIDS ALL LOOK THE SAME!!!

UNIVERSAL PRECAUTIONS

- Gloves
- Sanitizing wipes
- Goggles
- Face shield
- Barrier gowns



BBP TOOL DECON KIT

- Bleach
 - 1:10 solution
- 5 gal bucket
- Scrub brushes
- Bio hazard bags
- Waste must be disposed according to CDC & DOT guidelines
- Phmsa.dot.gov/hazmat/transporting-infectioussubstances



EN-ROUTE TO THE SCENE

- Ensure all members don universal precautions
- Have plenty of spare gloves readily available
- Keep spare gloves away from moisture, oils, and dirt





PPE RULES TO REMEMBER

- Always check PPE for defects or tears before using
- If PPE becomes torn or defective remove and get new
- Remove PPE before leaving a contaminated area
- Do not reuse disposable equipment
- Properly dispose of contaminated PPE