Springfield Public Schools

Bloodborne Pathogens Training

What's in it for me?

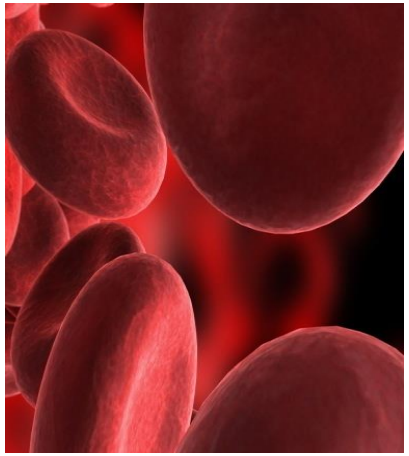
- Review the potential hazard of exposure to blood and other potentially infectious materials (OPIMs).
- Review safe work practices to prevent occupational exposure
- Review procedures for post-exposure incidents
- Satisfy OSHA requirement for annual training of affected employees

Definition of Bloodborne Pathogen

- Pathogenic microorganism
- Causing or capable of causing disease in humans
- Can be present in human blood

Most common BBPs are:

- Hepatitis B
- Hepatitis C
- HIV



Infectious Body Fluids

- Blood
- Other Potentially Infectious Materials (OPIMs)
  - Semen
  - Vaginal Secretions
  - Cerebrospinal Fluid
  - Pleural Fluid (or Lung Fluid)
  - Synovial Fluid (or Fluid from Your Joints)
  - Amniotic Fluid (or Uterine Fluid)
  - Peritoneal Fluid (or Fluid that fills your body cavity)
  - Saliva in Dental Procedures
  - Any Body Fluid that is **Visibly** Contaminated with Blood

BBPs Are NOT Spread By…

- Urine
- Feces
- Vomit
- Saliva
- Nasal Secretions
- Air
- Food
- Water

….Unless Visibly Contaminated with Blood!!!

Purpose of OSHA Standard

- To reduce or eliminate occupational exposure to blood and other potentially infectious materials (OPIMs) which could cause disease or death.
- Designed to protect 5.6 million workers in healthcare and related occupations.

Who Does it Cover?

- All employees for whom exposure can be "reasonably anticipated" as part of their normal job duties
- Health care occupation primary focus
- Your employer is responsible for evaluating potential for exposure
- Excludes Good Samaritan activities (i.e. teacher breaking up a fight)

BBP Program Requirements

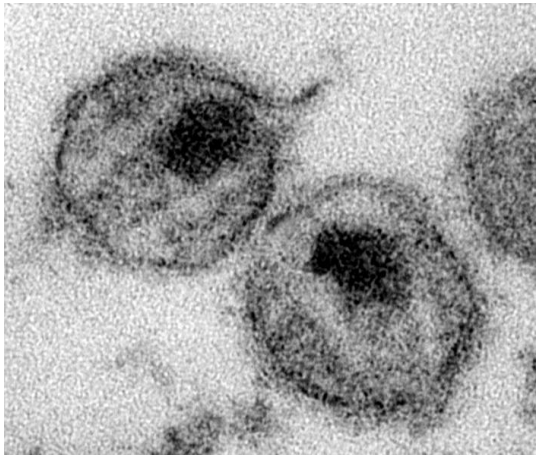
- Evaluation of employee job descriptions
- Develop Exposure Control written plan
- Practice Universal Precautions
- Hepatitis B vaccinations and titers
- Post exposure procedures
- Personal protective equipment
- Training
- Annual review
- Recordkeeping

Exposure Control Written Plan

- A written plan in which potential exposures are listed along with appropriate responses
- The plan is available through the school nurse (Phyllis Affeldt) or through the Exposure Control Officer (Mr. Kottke)
- Accessible to all employees & OSHA
- Reviewed/updated annually

Human Immunodeficiency Virus

- Virus that causes A.I.D.S
- Attacks immune system
- Not vaccine preventable
- Virus is killed easily outside the body



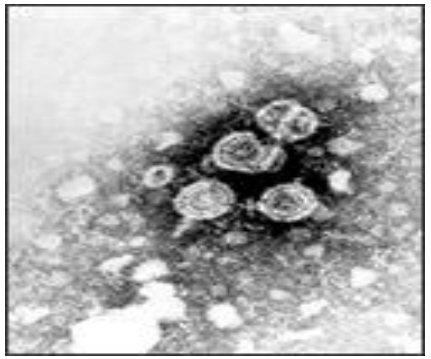
From the Public Health Image Library – Center for Disease Control and Prevention

Symptoms of HIV

- Weakness/Fatigue
- Fever
- Sore throat
- Nausea
- Headaches
- Swollen lymph glands
- **Sometimes no immediate symptoms**

Hepatitis B Virus (HBV)

- Attacks liver
- 90% of infected adults are ACUTE carriers (i.e. will eventually get rid of the disease)
- Death occurs in 15-25% of chronically infected people
- Virus can survive for 7-14 days outside the body (need proper disinfectant!!!)
- Vaccine preventable



From the Public Health Image Library – Center for Disease Control and Prevention

Symptoms of Hepatitis B

- Fatigue
- Possible stomach pain
- Loss of appetite
- Nausea
- Jaundice
- Darkened urine
- **Sometimes asymptomatic (~30%)**

Hepatitis C (HCV)

- Attacks liver
- No vaccine
- 80% of infected people are chronic carriers
- 50-55% develop chronic liver disease
- Treatment with interferon but has side effects

Symptoms of Hepatitis C

- Fatigue
- Joint pain
- Belly pain
- Itchy skin
- Sore muscles
- Dark urine
- 80% of carriers are asymptomatic and may be for 20-30 years

Modes of Transmission

- Sexual contact
- Exposure to another person's blood
  - Contaminated needle sharing
  - Blood contact with non-intact skin
  - Blood contact with mucous membranes (i.e. eyes, nose, mouth)
  - Blood transfusions
- Infected mother to child

Common Occupational Transmissions

- Needle-sticks (80% mostly in healthcare field)
- Contaminated sharps/glass/ceramics
- Mucous membranes (eyes, nose, mouth)
- Non-intact skin that is exposed to

Methods of protection

Universal Precautions

- Treat ALL blood/body fluids as potentially infectious!!!
- Avoid skin exposure to blood and OPIM
- Use an impervious barrier to keep fluids from contacting skin (e.g. gloves)
- Dispose of sharps in a puncture resistant container
- Dispose of soiled items in leak –proof bags/containers
- Wash Hands for 20 seconds with friction/soap/water
- Contact custodian to clean/disinfect blood spill ASAP!

Vaccinations

- HIV
  - There is NO vaccine for HIV. Some treatments can improve length of life dramatically.
- Hepatitis B Virus
  - The HBV vaccination is administered in a series of 3 injections
    - Given at 0, 1, and 4-6 month intervals
    - Effective in 95% of people who complete series of all three shots
    - Series may continue if exceeded interval (i.e. do not have to start over even if 1st shot was 2 years ago)
- Hepatitis C Virus
  - There is NO vaccine. Treatment is only effective in 40% of cases.

Engineering Controls

- Sharps containers
  - Closable, leak proof, puncture resistant
  - Used for disposal of used needles and other contaminated sharp objects (e.g. broken glass)
  - Located in school health offices
- Self-Sheathing Needles
  - Avoid having to re-cap needles!

Personal Protective Equipment

Possible PPE needed for protection from Bloodborne Pathogens:

-
- Smock/aprons
- Eye protection
- Paper face masks
- CPR masks
- Face shields
- Booties

Personal Protective Equipment (PPE)

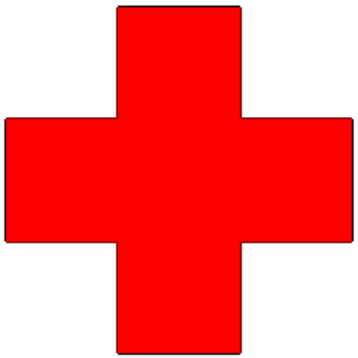
Gloves shall be worn when it can be reasonably anticipated that you may:

- Have hand contact with blood or other OPIMs
  - contact with mucous membranes
  - contact with non-intact skin
  - Handle or touch blood/OPIM contaminated items or surfaces

Need Additional PPE? Contact Your Supervisor!

First Aid Procedures

- Assess the situation – call nurse for assistance or send injured to health office
- Use personal protective equipment
- Instruct injured person on self-care
- Wash hands
- Report incident to your supervisor



Cleaning Procedures

- Custodial staff is primarily responsible for cleaning up Blood and Bodily Fluids:
  - Use gloves
  - Use disposable towels to absorb spill
  - Pre-clean spill area with soap and water
  - Apply disinfectant and let sit wet for required kill time (see label)
  - Dispose of waste in proper waste container

Disinfectants

- 1:10 Bleach-Water Solution (made fresh daily)
- High level commercial germicides
  - Products effective against HBV and HIV are approved by EPA
  - Follow label instructions
    - Personal Protective Equipment
    - Disposal
    - Kill time

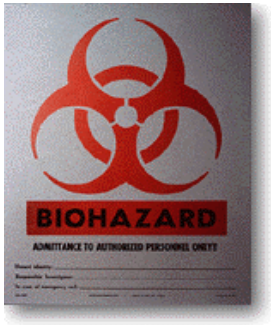
Make Sure You Have a Proper Disinfectant!

Infectious Waste

- Materials used to clean up blood spills (e.g. absorbent material, gloves) typically can go in general trash as long as they are bagged separately first

- Contaminated sharp objects (e.g. used needles and broken glass) should always go in sharps container

- Red biohazard bags require special disposal procedures. Use only if absorbent material is:
  - Saturated or dripping with blood
  - Pourable (avoid blood pooling in bottom of waste container)



Post-exposure procedures

Post-Exposure Procedures

1. Wash exposed area immediately (15 minutes)
2. Report incident to supervisor & school nurse
3. Document exposure incident
4. Proceed to local health care provider for exam and follow-up testing

Recordkeeping

Springfield Public Schools is required to keep the following BBP-Related Records:

- ***Medical***
  - duration of employment + 30 years (confidential)
- ***Training***
  - 3 years
- ***Exposure Incident***
  - duration of employment + 30 years (confidential)

Quiz Time

To finish this training, you must click on the link below and complete a short quiz.

CLICK HERE

Thank you for your attention!

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