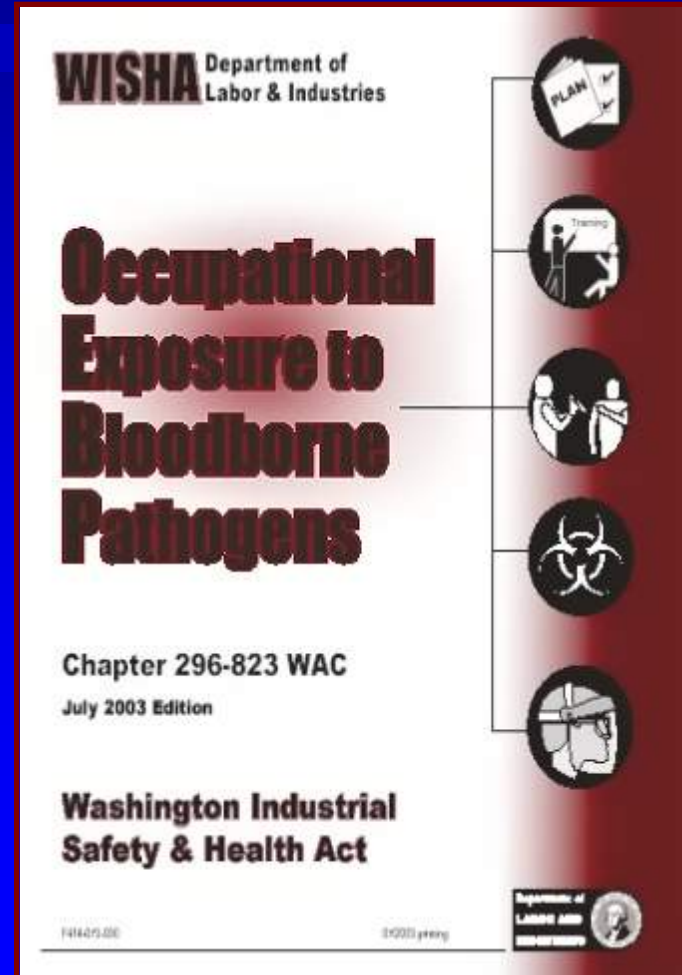


Bloodborne Pathogens Training

Washington
Industrial
Safety & Health
Rules

Chapter 296-823
WAC



Course Topics

- What are bloodborne pathogens (BBPs)?
- Why are they harmful?
- How can I protect myself?
- What is our Exposure Control Plan?



General overview

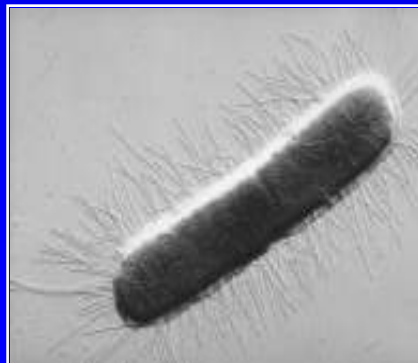
Pathogen: any microorganism that can cause disease

Examples of Illnesses pathogens cause

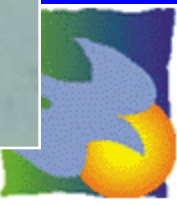
- Viruses AIDS, Hepatitis B, colds, flu, Herpes
- Bacteria Intestinal diseases, Tuberculosis, Gonorrhea
- Fungi Athlete's foot, Farmer's lung, Asthma/allergies
- Parasites Giardiasis, Malaria, Trichinosis

E. coli (bacteria)

*Image courtesy
Indigo Instruments.



Trichinella
(parasite)



Transmission of Diseases

Organisms can enter the body by:

- Inhalation

Air



- Ingestion

Contaminated food,
water



- Direct blood contact

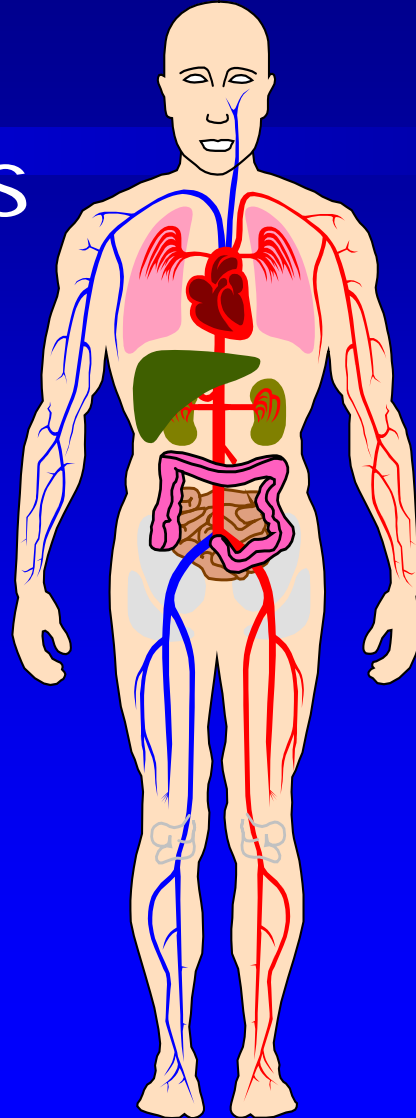


Bloodborne Pathogens (BBPs)

Microorganisms
present in

Blood,

or



Other
Potentially
Infectious
Materials



Bloodborne Pathogens (BBPs)

“OPIM ” is:

- Semen
- vaginal secretions
- body fluids such as pleural, cerebrospinal, pericardial, peritoneal, synovial, and amniotic
- saliva in dental procedures
- any body fluids visibly contaminated with blood
- body fluid where it is difficult to differentiate
- any unfixed tissue or organ (other than intact skin) from a human (living or dead)
- HIV- or HBV-containing cultures (cell, tissue, or organ), culture medium, or other solutions
- blood, organs, & tissues from animals infected with HIV, HBV, or BBPs



Transmission of BBPs

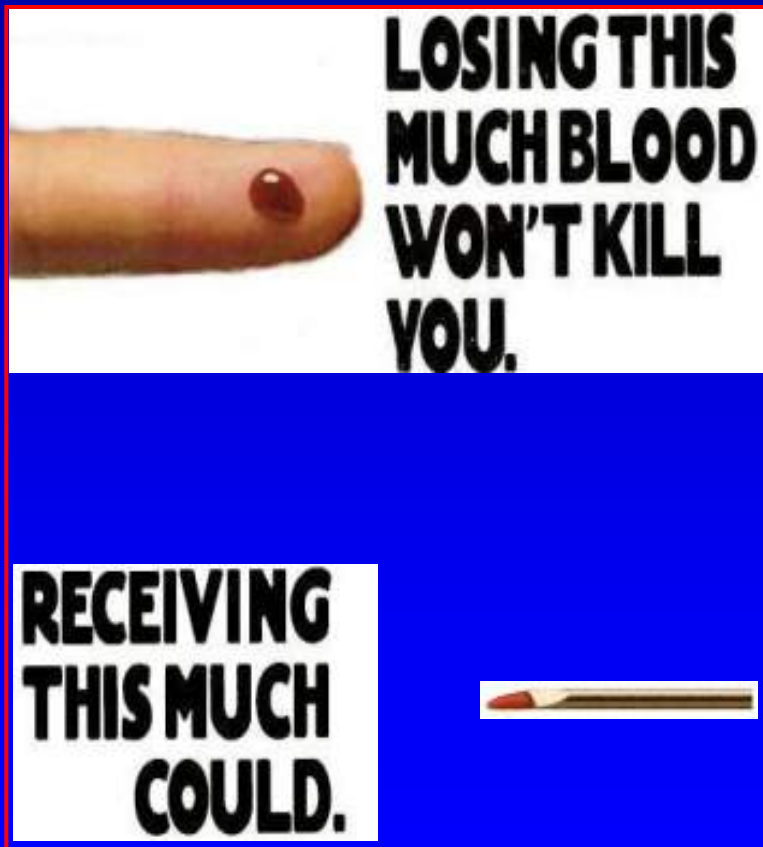
Bloodborne pathogens can enter your body through:

- contaminated instrument injuries
- a break in the skin (cut, lesion, etc.)
- mucus membranes (eyes, nose, mouth)
- other modes



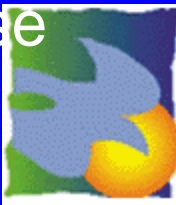
Transmission of BBPs

Risk of infection depends on several factors:



Courtesy of Owen Mumford, Inc.

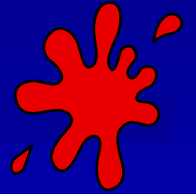
- The pathogen involved
- The type/route of exposure
- The amount of virus in the infected blood at the time of exposure
- The amount of infected blood involved in the exposure
- Whether post-exposure treatment was taken
- Specific immune response of the individual



Bloodborne Diseases

Some examples of bloodborne pathogens:

- Malaria
- Syphilis
- Brucellosis
- Leptospirosis
- Arboviral infections
- Relapsing fever
- Creutzfeld-Jakob Disease
- Viral Hemorrhagic Fever



Main bloodborne pathogens and diseases of concern

- Hepatitis B Virus (HBV) – Hepatitis B
- Hepatitis C Virus (HCV) – Hepatitis C
- Human Immunodeficiency Virus (HIV) – AIDS



Transmission of BBPs

Occupational Exposure:

means reasonably anticipated skin, eye, mucous membrane, or parenteral (piercing of the skin) contact with blood or OPIM that may result from the performance of an duties



Transmission of BBPs

Exposure Incident:

is a broken skin, mucous membrane or sharps injury exposure to blood or OPIM



Exposure Control Plan

To eliminate/minimize your risk of exposure



- Exposure determination
- Exposure controls
- Training and Hazard Communication
- Hepatitis B Vaccine
- Post exposure evaluation & follow-up
- Recordkeeping

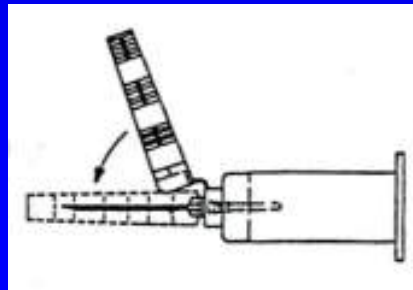
Copies of our plan are located at:



Exposure Controls

Reducing your risk

- Universal precautions
(*or equivalent system**)
 - Equipment and Safer Medical Devices
 - Work practices
 - Personal protective equipment
- Housekeeping
 - Laundry handling
 - Hazard communication
- labeling
 - Regulated Waste



Exposure Controls

UNIVERSAL PRECAUTIONS

A system of infection control that treats all human blood and OPIM as if it is infected with a bloodborne disease.



Exposure Controls

Equipment and Safer Medical Devices

- Physical guards

Sharps disposal containers are:

- Closable
- Puncture-resistant
- Leak-proof
- Labeled or color-coded
- Upright, conveniently placed in area where sharps used



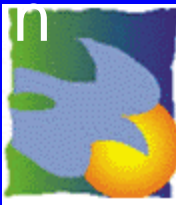
DO NOT OVERFILL!



Exposure Controls

Safe Work Practices

- Don't eat, drink, smoke, apply cosmetics or lip balm, or handle contact lenses in any work areas where there is the possibility of exposure to blood or OPIM.
- Don't place food or drink in refrigerators, freezers, shelves, cabinets, or on countertops or bench tops in any work areas.



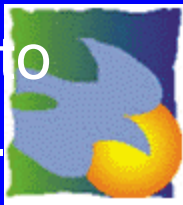
Exposure Controls

Safe Work Practices

During clean-up of spills and broken glassware/sharps contaminated with blood or OPIM, do the following:



- Wear protective eyewear and mask if splashing is anticipated.
- Remove glass and other sharps materials using a brush and dust pan, forceps, hemostat, etc. Do not use your hands.
- Properly discard all materials into a sharps or puncture-resistant biohazardous waste container.
- Use paper/absorbent towels to soak up the spilled materials.



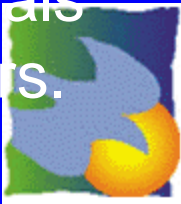
Exposure Controls

Safe Work Practices

Clean-up of spills and broken glassware/sharps (cont.)



- Clean the area with 10% bleach or EPA-registered disinfectant.
- Saturate the spill area with disinfectant. Leave for 10 minutes (or as specified by product manufacturer) or allow to air dry.
- Properly dispose of paper towels and cleaning materials into proper waste containers.



Exposure Controls

Personal Protective Equipment - Gloves



latex gloves

- Latex
- Nitrile
- Vinyl
- Utility



Nitrile and vinyl gloves



Exposure Controls

Remove gloves safely and properly

- Grasp near cuff of glove and turn it inside out. Hold in the gloved hand.
- Place fingers of bare hand inside cuff of gloved hand and also turn inside out and over the first glove.
- Dispose gloves into proper waste container.
- Clean hands thoroughly with soap and water (or antiseptic hand rub product if handwashing facilities not available).



Safe and proper glove removal



Video clip demonstration

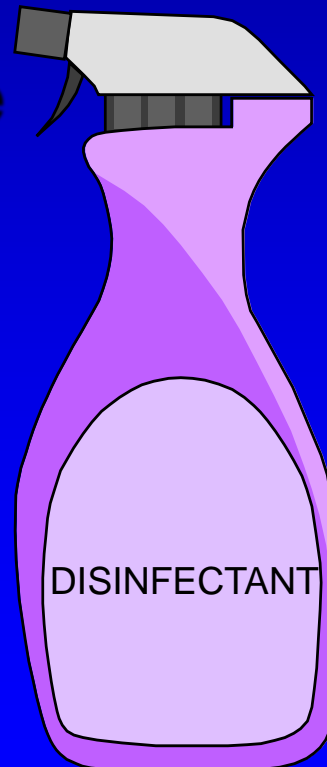


Exposure Controls

Housekeeping

Maintain a clean and sanitary workplace

- Written cleaning and decontamination schedule and procedures
- Approved disinfectant – bleach, EPA-approved
- Contaminated waste disposal methods
- Laundry



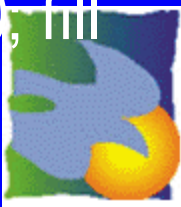
Exposure Incident

If you have an exposure incident to blood or OPIM, immediately do the following:



- Thoroughly clean the affected area
 - Wash needlesticks, cuts, and skin with soap and water
 - Flush with water splashes to the nose and mouth
 - Irrigate eyes with clean water, saline, or sterile irrigants

- Report exposure to (*supervisor, person or department responsible for managing exposures, etc.*), fill out an Incident Report Form



Post-exposure evaluation

- Provide immediate post-exposure medical evaluation and follow-up to exposed employee:
 - At no cost
 - Confidential
 - Testing for HBV, HCV, HIV
 - Preventive treatment when indicated
- Test blood of source person if HBV/HCV/HIV status unknown, if possible; provide results to exposed employee, if possible



Post-exposure evaluation



- Provide exposed employee with copy of the evaluating health care professional's (HCP) written opinion within 15 days of completion of evaluation
- Provide employee with information about laws on confidentiality for the source individual
- Provide post-exposure treatment as needed, including counseling

