VHSO Pathology and Laboratory Medicine

Bloodborne Pathogens

Training

OSHA Bloodborne Pathogens Standard

Regulation:

- 29 CFR 1910.1030, Occupational Exposure to Bloodborne Pathogens
- https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=10051

Who is covered:

- All employees with reasonable anticipated skin, eye, mucous membrane, or parenteral contact with human blood, blood components, or other potentially infectious materials (OPIM) that may result from the performance of their duties.

Why is this important?

- This standard has served as the basis for implementing policies and practices to **minimize your risk of exposure to BBPs**, specifically to Hepatitis B Virus (HBV), Hepatitis C Virus and Human Immunodeficiency Virus (HIV).

- These policies and practices, if followed, are an effective means to reducing your risk of exposure to other pathogens as well.

Objectives

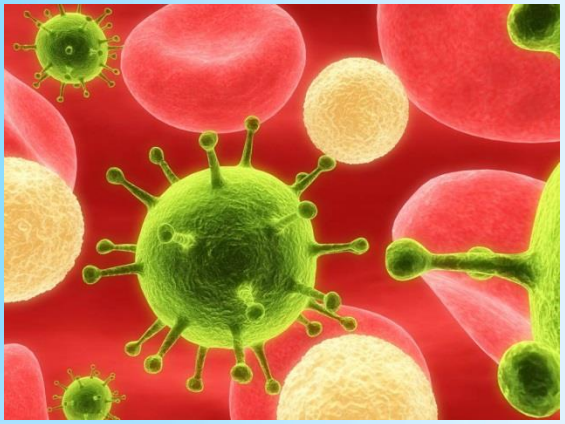
At the conclusion of this training, employees will be able to explain:

I. Bloodborne Pathogens – what are they?

II. Occupational Exposure Control – how to protect yourself!

III. Incident Response – actions to take in emergency/non-emergency situations

IV. Signage and Labels- communication of hazards



What are they, how are they transmitted, and a review of HIV, HBV, and HCV.

I. BLOODBORNE PATHOGENS

What is a BB Pathogen?

OSHA® FactSheet

OSHA's Bloodborne Pathogens Standard

Bloodborne pathogens are infectious microorganisms present in blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV), the virus that causes AIDS. Workers exposed to bloodborne pathogens are at risk for serious or life-threatening illnesses.

Protections Provided by OSHA's Bloodborne Pathogens Standard

All of the requirements of OSHA's Bloodborne Pathogens standard can be found in Title 29 of the Code of Federal Regulations at 29 CFR 1910.1030. The standard's requirements state what employers must do to protect workers who are occupationally exposed to blood or other potentially infectious materials (OPIM), as defined in the standard. That is, the standard protects workers who can reasonably be anticipated to come into contact with blood or OPIM as a result of doing their job duties.

In general, the standard requires employers to:

- **Establish an exposure control plan.** This is a written plan to eliminate or minimize occupational exposures. The employer must prepare an exposure determination that contains a list of job classifications in which all workers have occupational exposure and a list of job classifications in which some workers have occupational exposure, along with a list of the tasks and procedures performed by those workers that result in their exposure.
- **Employers must update the plan annually** to reflect changes in tasks, procedures, and positions that affect occupational exposure, and also technological changes that eliminate or reduce occupational exposure. In addition, employers must annually document in the plan that they have considered and begun using appropriate, commercially-available effective safer medical devices designed to eliminate or minimize occupational exposure. Employers must also document that they have solicited input from frontline workers in identifying, evaluating, and selecting effective engineering and work practice controls.
- **Implement the use of universal precautions** (treating all human blood and OPIM as if known to be infectious for bloodborne pathogens).
- **Identify and use engineering controls.** These are devices that isolate or remove the bloodborne pathogens hazard from the workplace. They include sharps disposal containers, self-sheathing needles, and safer medical devices, such as sharps with engineered sharps-injury protection and needleless systems.
- **Identify and ensure the use of work practice controls.** These are practices that reduce the possibility of exposure by changing the way a task is performed, such as appropriate practices for handling and disposing of contaminated sharps, handling specimens, handling laundry, and cleaning contaminated surfaces and items.
- **Provide personal protective equipment (PPE), such as gloves, gowns, eye protection, and masks.** Employers must clean, repair, and replace this equipment as needed. Provision, maintenance, repair and replacement are at no cost to the worker.
- **Make available hepatitis B vaccinations to all workers with occupational exposure.** This vaccination must be offered after the worker has received the required bloodborne pathogens training and within 10 days of initial assignment to a job with occupational exposure.
- **Make available post-exposure evaluation and follow-up to any occupationally exposed worker who experiences an exposure incident.** An exposure incident is a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or OPIM. This evaluation and follow-up must be at no cost to the worker and includes documenting the route(s) of exposure and the circumstances under which the exposure incident occurred; identifying and testing the source individual for HBV and HIV infectivity, if the source individual consents or the law does not require consent; collecting and testing the exposed worker's blood, if the worker consents; offering post-exposure prophylaxis; offering counseling; and evaluating reported illnesses. The healthcare professional will provide a limited written opinion to the employer and all diagnoses must remain confidential.
- **Use labels and signs to communicate hazards.** Warning labels must be affixed to containers of regulated waste; containers of contaminated reusable sharps; refrigerators and freezers containing blood or OPIM; other containers used to store, transport, or ship blood or OPIM; contaminated equipment that is being shipped or serviced; and bags or containers of contaminated laundry, except as provided in the standard. Facilities may use red bags or red containers instead of labels. In HIV and HBV research laboratories and production facilities, signs must be posted at all access doors when OPIM or infected animals are present in the work area or containment module.
- **Provide information and training to workers.** Employers must ensure that their workers receive regular training that covers all elements of the standard including, but not limited to: information on bloodborne pathogens and diseases, methods used to control occupational exposure, hepatitis B vaccine, and medical evaluation and post-exposure follow-up procedures. Employers must offer this training on initial assignment, at least annually thereafter, and when new or modified tasks or procedures affect a worker's occupational exposure. Also, HIV and HBV laboratory and production facility workers must receive specialized initial training, in addition to the training provided to all workers with occupational exposure. Workers must have the opportunity to ask the trainer questions. Also, training must be presented at an educational level and in a language that workers understand.
- **Maintain worker medical and training records.** The employer also must maintain a sharps injury log, unless it is exempt under Part 1904 -- Recording and Reporting Occupational Injuries and Illnesses, in Title 29 of the Code of Federal Regulations.

Additional Information

For more information, go to OSHA's Bloodborne Pathogens and Needlestick Prevention Safety and Health Topics web page at: https://www.osha.gov/SLTC/bloodbornepathogens/index.html.

To file a complaint by phone, report an emergency, or get OSHA advice, assistance, or products, contact your nearest OSHA office under the "U.S. Department of Labor" listing in your phone book, or call us toll-free at (800) 321-OSHA (6742).

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; the teletypewriter (TTY) number is (877) 889-5627.

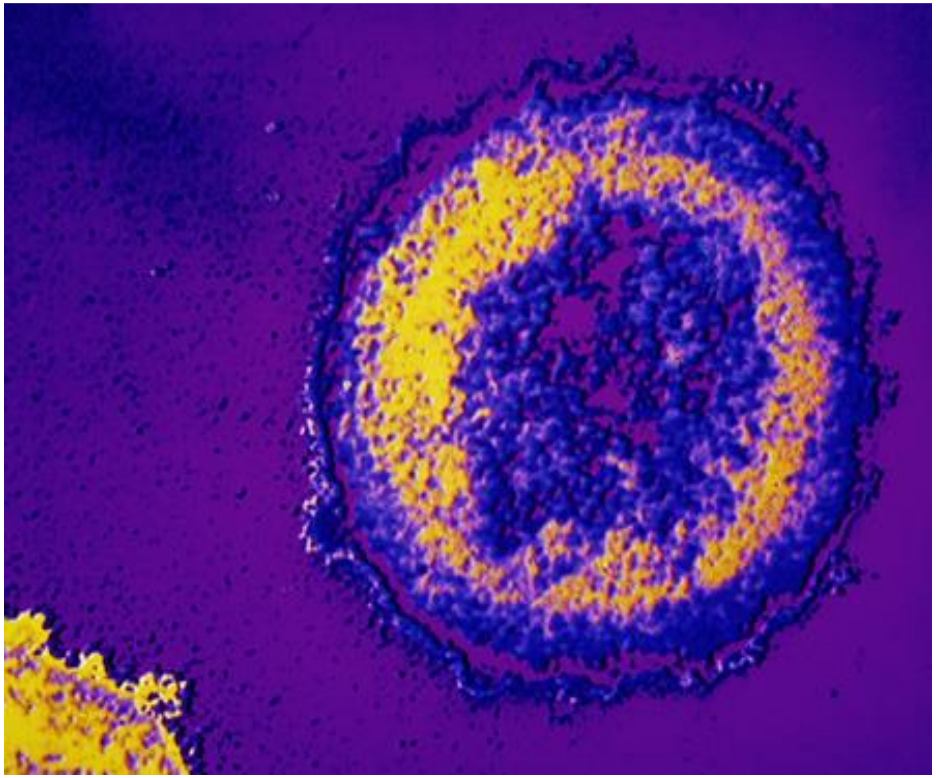
For assistance, contact us. We can help. It's confidential.

OSHA® Occupational Safety and Health Administration
www.osha.gov 1-800-321-6742

DSG 1/2011

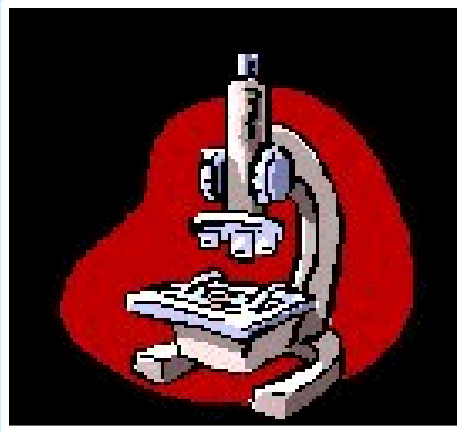
Common BB Pathogen Diseases

- Malaria
- Brucellosis
- Syphilis
- **Hepatitis B(HBV)**
- **Hepatitis C(HCV)**
- **Human Immunodeficiency Virus (HIV)**



Human Immunodeficiency Virus (HIV)

- Leads to AIDS
- Depletes the immune system
- Does not survive well outside the body
- No threat on contracting HIV through casual contact



- Symptoms include: swollen lymph nodes, fatigue, weight loss, diarrhea, persistent dry cough and fever; may be asymptomatic
- The average risk of HIV infection after a needlestick or cut exposure to HIV-infected blood is 0.3% (about 3 in 1000)[1].
- The risk after exposure of the eye, nose, or mouth to HIV-infected blood is estimated to be 0.1% (1 in 1000)[1].

[1]CDC, National Centers for Infectious Disease, 2008.

Hepatitis B (HBV)

- 1—1.25 million Americans are chronically infected
- Symptoms include: jaundice, fatigue, abdominal pain, loss of appetite, intermittent nausea, vomiting
- May lead to chronic liver disease, liver cancer, and death
- Vaccination available since 1982

- HBV can survive for at least one week in dried blood
- Symptoms can occur 1-9 months after exposure
- Approximately one-half of all people who become infected do not have any symptoms
- Approximately 10% of all people who become infected may become “carriers”-infectious to others

Hepatitis B (HBV)

- Hepatitis B virus is more prevalent and much more infectious than HIV.
- This difference in infection risk is best illustrated by the following statistics:
  - If you had a needle stick accident and were exposed to infected blood, your chance of acquiring an infection would be:
    - HIV ~0.3% or 3 in 1000
    - HBV ~30.0% or 300 in 1000
- According to CDC, your risk for acquiring an HBV infection is 100 times greater than for HIV.
- **When considering the risk of occupational exposure to HBV, keep in mind that a safe and effective vaccine is available to you.**

Hepatitis C (HCV)

- Hepatitis C is the most common chronic bloodborne infection in the United States
- Appears to be transmitted most efficiently through parenteral exposure to blood from an infected individual (blood transfusion or sharing intravenous drug needles
- Symptoms include: jaundice, fatigue, abdominal pain, loss of appetite, intermittent nausea, vomiting
- May lead to chronic liver disease and death

What are Potentially Infectious Materials (OPIM)?

- Blood
- Blood products
- All body fluids, secretions, excretions, *except sweat*, regardless of whether or not they contain visible blood
- Non-intact skin
- Mucous membranes
- Any unfixed tissue or organ

Transmission Potential

(when BB pathogen is introduced into the bloodstream of a person)

In the workplace:

- Parenteral-the infected blood or OPIM is introduced directly into your body through a break in the skin.
- Mucous membrane-the infected blood or OPIM enters your body through contact with mucous membranes in your eye, nose or mouth

Bloodborne pathogens may also be transmitted through:

- Sexual contact
- Child birth
- Breast milk

Your Exposure Potential

- Aerosols created through routine processing blood and body fluids
- Laboratory accident
- Needle stick injury
- Handling of returned product
- Handling of any waste products

A review of how to protect yourself from a bloodborne pathogen exposure at work.

II. OCCUPATIONAL EXPOSURE CONTROL

VHSO Exposure Control Plan for Bloodborne Pathogens MCM XX-00-50

- Policy is located on the Medical Center's intranet system, in the Medical Center Memorandums section
- Establishes policy and procedures for reducing the risk of accidental occupational exposures to bloodborne pathogens
- Contains procedures for appropriate evaluation, follow up, and documentation if exposure does occur

Exposure Determination

- Chief, P&LMS, in collaboration with the Infection Control Committee, categorizes each job classification according to potential risk of exposure to blood and other body fluids

- Chief, P&LMS, will also maintain a task analysis for all category 1 and 2 employees, which will be a list of all tasks and procedures involving potential exposure and indicate the minimal personal protective equipment required while performing each task

Category 1 – Employees who routinely perform procedures or tasks that involve inherent potential for percutaneous injury, mucous membrane or skin contact with blood, body fluids, or tissues, or a potential for spills or splashes of them

- Pathologist
- Histotechnician
- Cytotechnologist
- Medical Technologist
- Medical Laboratory Technician
- Health Technician

Category 2 – Employees who are not frequently at risk of exposure to blood or other body fluids, but, may be required to perform job-related tasks that would place them at risk of potential exposure

- Advanced Medical Support Assistant

Category 3 – Employees whose normal work routine involves no exposure to blood, body fluids or tissues and who will not be called upon to perform or assist in emergency care or first aid

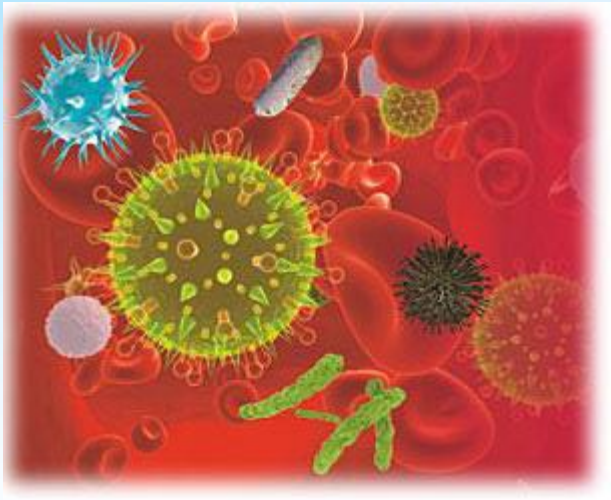
- Laboratory Manager
- Administrative Staff

Task and Required PPE

Phlebotomy	• Gloves
Handling specimen containers	• Gloves
Working with specimens	• Gloves, knee length fluid-repellant coats with long sleeves, closed (snapped)
Any task with potential for aerosol formation, splashes, sprays, droplets to eye, nose, mouth	• Gloves, knee length fluid-repellant coats with long sleeves, closed (snapped) • Masks and eye protection; chin-length face shields; mounted safety shields
Autopsy	• Scrubs, disposable surgeon's gowns with long sleeves and fluid resistant fronts, disposable masks, face shields, disposable shoe covers, gloves

What is an Exposure?

- A percutaneous injury (e.g., needlestick or cut with a sharp object) or contact of mucous membrane or nonintact skin (e.g., exposed skin that is chapped, abraded, or with dermatitis) with blood or OPIM



Exposure Control Strategies

1. Standard and Transmission-Based Precautions will be followed by all employees for the care of **all patients, all the time.**
2. Laboratory Facilities
3. Engineering Controls
4. Work Practices
5. Proper Clean Up and Decontamination
6. Disposal of Waste

STANDARD PRECAUTIONS

Designed to reduce the risk of transmission of microorganisms from both **recognized** and **unrecognized** sources of infection

Includes :

- Use of appropriate PPE
- Handwashing
- Treat all blood and body fluids as if they are contaminated
- Proper clean up and decontamination
- Disposal of all contaminated materials in the proper manner

Transmission Based Precautions

CONTACT PRECAUTIONS

- Designed to prevent transmission of highly communicable diseases and organisms such as scabies, lice, MRSA & VRE Both gowns & gloves are required when entering rooms and are removed when leaving

SPECIAL CONTACT PRECAUTIONS

- Designed to prevent transmission of spore forming organisms including Clostridium difficile, Norovirus and suspected Anthrax
- **Hand hygiene with soap & water** after patient care and contact with surfaces and equipment. Room cleaned with 1:10 solution of bleach is required
- Use gloves and gown when in room.

DROPLET PRECAUTIONS

- Designed to prevent transmission of those infectious diseases spread via droplets. These include Influenza, Measles, and Mumps
- Regular masks are required for all persons entering the room

AIRBORNE PRECAUTIONS

- Designed to prevent infections that are transmitted by the airborne route such as Tuberculosis, Chicken Pox, and Shingles
- Requires Negative Air Pressure Room (2B – 247, ICU -318-3, & ICU -318-7)
- An N95 Mask or PAPR must be worn when entering room of a patient on airborne precautions
- Patient must wear regular mask when transported out of rooms for procedures

NEUTROPENIC PRECAUTIONS

- Designed for those patients with compromised immune systems
- PPE to protect patient from organisms on healthcare worker
- PPE as ordered by physician

Personal Protective Equipment

Provision. When there is occupational exposure, the employer shall provide, at no cost to the employee, appropriate personal protective equipment such as, but not limited to, gloves, gowns, laboratory coats, face shields or masks and eye protection.

- PPE should be readily accessible
- VHSO cleans, launders, repairs, replaces all PPE

PPE Rules to Remember

- Always check PPE for defects or tears before using
- If PPE becomes torn or defective remove and get new
- If PPE penetrated by blood or OPIM, remove immediately or as soon as feasible
- Remove PPE before leaving a contaminated area
- Not worn in public hallways or other public areas unless the specific task performed requires continued use of PPE
- Do not reuse disposable equipment

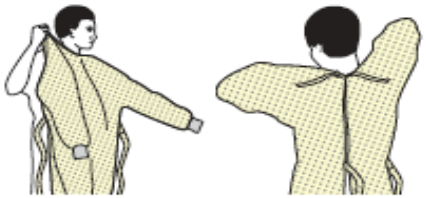
Putting On

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator

3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit

4. GLOVES

- Extend to cover wrist of isolation gown

USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

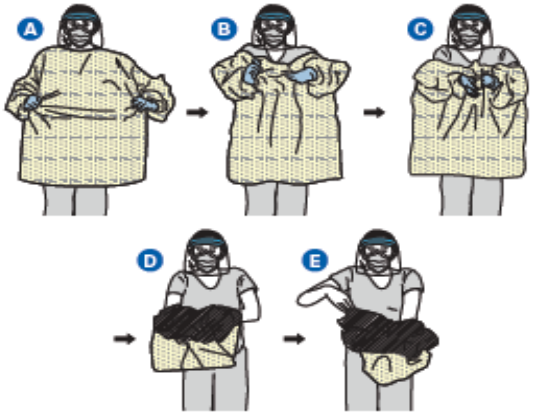
Removing

HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE)
EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



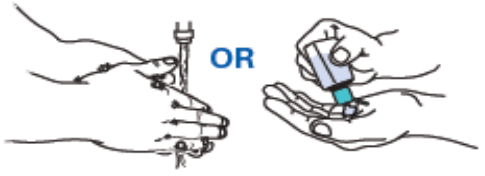
2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container

4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE

CDC

Eye Protection

Cleaning and disinfection:

- Non-disposable eye protection should be placed in a designated receptacle for subsequent cleaning and disinfection.
- Eye protection should be physically cleaned and disinfected with the designated hospital disinfectant, rinsed, and allowed to air dry. Gloves should be worn when cleaning and disinfecting these devices.

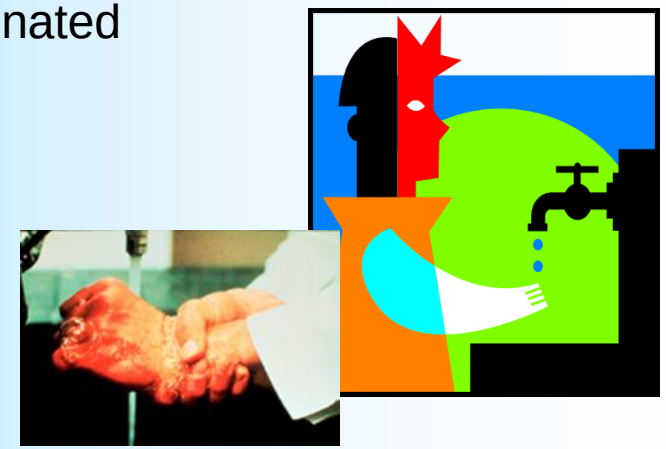
How to Remove Gloves

Gloves are removed prior to turning on the faucets to avoid contaminating them.

Hand Hygiene Rules to Remember

Practice Handwashing

- Whenever hands are visibly dirty or contaminated
- Before:
  - having contact with patients
  - putting on gloves
- After:
  - Having contact with patient's skin
  - Having contact with body fluids
  - Having contact with inanimate objects near the patient
  - Removing gloves
- **Alcohol-based hand rubs (foam or gel) kill more effectively and more quickly than handwashing with soap and water**



Grooming

- Keep natural fingernails short to about ¼ inch
- Do not wear artificial nails or enhancements if you have direct contact with patients

Laboratory Facilities

- The laboratory is designed so that it can be easily cleaned.
- Chairs are covered with vinyl so that they can be disinfected.
- Bench tops are impervious to water and resistant to acids, alkalis, organic solvents and moderate heat.
- There are designated “clean sinks” for handwashing (sinks should be scrubbed down daily with chlorine containing abrasive and flushed with a suitable decontaminant).
- Eyewashes are readily available.
- Laboratory supply air will have the supply air volume (CFM) controlled so as to assure inflow of air to laboratory from adjacent areas.

Engineering Controls

(They control the hazard at its source and are *only* effective if used properly.)

- Biological safety cabinets
- Ventilating laboratory hoods
- Autoclaves
- Sharps disposal containers
- Safer sharps devices

Work Practices

- Laboratory doors are kept closed.
- Laboratory access is limited. In general, persons who are at increased risk of acquiring infection are not allowed in laboratories.
- Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is reasonable likelihood of exposure.
- Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets or on countertops or benchtops where blood or OPIM are present.
- Personal clothing accidentally contaminated with blood or OPIM should be removed immediately, placed in a plastic bag, labeled with the person’s name and taken to the clothing room where it will be transported to the laundry plant for appropriate laundering. Scrubs are available to the employee.

Work Practices

- All procedures involving blood or OPIM shall be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances.
- All body fluids, other than blood and urine, should be centrifuged in centrifuge safety cups and opened only in the biological safety cabinet.
- A biological safety cabinet should be used to perform any procedure with a high probability of creating aerosols, grossly contaminated specimens, or specimens which may harbor unusually virulent pathogens.
- Mouth pipetting/suctioning of blood or OPIM is prohibited.
- Use gauze and safety glasses when opening vacuum tubes if not using a safety shield.
- Always pipette specimen instead of pouring off.

Work Practices

- Never lay personal articles, such as eyeglasses or kleenex, on workbenches in general lab area.

- Specimens of blood or OPIM shall be placed in a container which prevents leakage during collection, handling, processing, storage, transport, or shipping.

- If outside contamination of the primary container occurs, the primary container shall be placed within a second container which prevents leakage during handling, processing, storage, transport, or shipping and is labeled “Biohazard” or color-coded red.

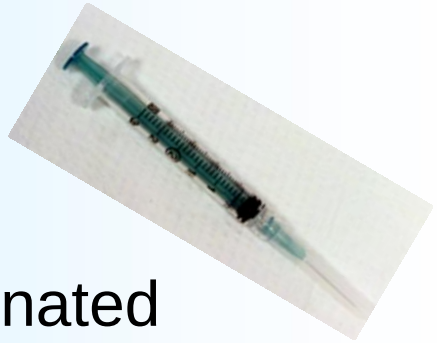
- If the specimen could puncture the primary container, the primary container shall be placed within a secondary container which is puncture-resistant in addition to the above characteristics.

Work Practices

Equipment which may become contaminated with blood or OPIM shall be examined prior to servicing or shipping and shall be decontaminated as necessary, unless VHSO can demonstrate that decontamination of such equipment or portions of such equipment is not feasible.

A readily observable biohazard label shall be attached to the equipment stating which portions remain contaminated. VHSO shall ensure that this information is conveyed to all affected employees, the servicing representative, and/or the manufacturer, as appropriate, prior to handling, servicing, or shipping so that appropriate precautions will be taken.

Work Practices
Sharps



- Contaminated needles and other contaminated sharps shall not be bent, recapped unless employer can demonstrate that no alternative is feasible or that such action is required by a specific medical procedure. Such recapping of needle must be accomplished using a one-handed technique.

- Shearing or breaking of contaminated needles is prohibited.

- Immediately, contaminated sharps shall be placed in puncture resistant, color-coded red, leak-proof on the sides and bottom containers.

Clean Up and Decontamination

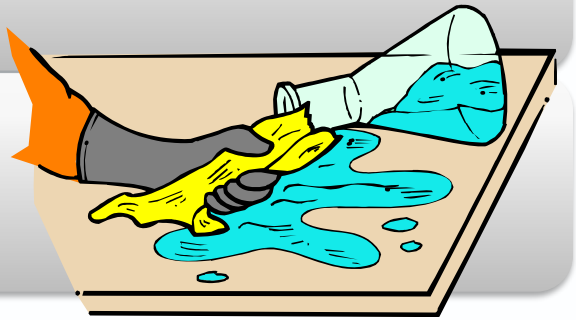
Chief, PLMS shall ensure that the worksite is maintained in a clean and sanitary condition. All equipment and environmental and working surfaces shall be cleaned and decontaminated after contact with blood or OPIM.

Work surfaces are decontaminated after completion of procedures; immediately or as soon as feasible following spills of blood and OPIM; and at the end of the work shift if the surface may have become contaminated since the last cleaning.

Protective coverings, such as imperviously-backed absorbent paper used to cover work surfaces, shall be removed and replaced as soon as feasible when they become overtly contaminated or at the end of the work shift.

All bins, pails, cans, and similar receptacles intended for reuse which have a reasonable likelihood for becoming contaminated with blood or OPIM shall be inspected and decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as feasible upon visible contamination.

Broken glassware which may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush and dust pan, tongs, or forceps.



Decontamination with 10% Bleach

- For general use, a dilution of 1 part household bleach (5.25% hypochlorite) to 9 parts water is most effective. Dilutions must be made up daily.

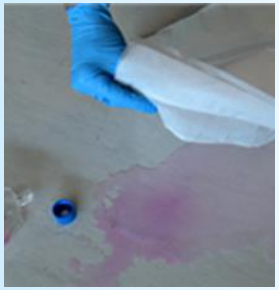
<u>When dealing with Liquid Biological Waste from Instrumentation</u>

  - The bleach should remain in contact with the liquid biological waste material for approximately 20 minutes to ensure adequate germicidal action.
  - Once decontaminated the liquid biological waste can be poured into the laboratory sink drain, unless the liquid is defined as chemically hazardous.

How to clean a biohazardous spill

- If significant aerosols may have been formed, area should be evacuated and not reentered for at least one hour.
- Wear appropriate PPE - at a minimum, gloves, lab coat and eye protection.
- Cover spill with absorbent materials (paper towels, pads, etc.).
- Wet spill with bleach solution. To minimize aerosols, pour disinfectant around the perimeter of spill and work toward the center. Let sit for the required contact time.
- The recommended contact time for disinfection with bleach is between 10 and 60 minutes, depending on the circumstances.
- Remove any broken glassware using mechanical means (i.e. dustpan and broom, forceps, plastic scrapers) and deposit into a biohazard bag or sharps container.
- Soak up the Bleach Solution and contaminated material with paper towels, working from the outside toward the center of the spill. Dispose of the paper towels in a biohazard bag.
- If a second cleaning is necessary, apply disinfectant a second time and blot up after sufficient contact time.
- After the clean up is complete, wash spill area again using a 10% bleach solution and allow to air dry.
- Wash hands thoroughly

Biological Spill Clean Up








Regulated Medical Waste

- Liquid or semi-liquid blood or OPIM
- Contaminated items that would release blood or OPIM when compressed
- Contaminated sharps
- Pathological and microbiological waste containing blood or OPIM

Regulated Waste - Sharps

- Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are: closable, puncture resistant, leakproof on sides and bottom, color-coded red

- During use, containers for contaminated sharps shall be easily accessible, maintained upright, replaced routinely and not be allowed to overfill.

- When moving containers of contaminated sharps from the area of use, the containers shall be: closed immediately prior to removal, placed in a secondary container if leakage is possible

Regulated Waste - Other

- Must be placed in container that is closable
- Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping
- Color-coded red
- Closed prior to removal

- If outside contamination of the regulated waste container occurs, it shall be placed in a second container
- Disposal of all regulated waste shall be in accordance with applicable state and local regulations

BAD BAD BUGS!

III. INCIDENT RESPONSE

Exposure Incident

A specific incident of contact with potentially infectious body fluid

(If there are no infiltrations of mucous membranes or open skin surfaces, it is not considered an occupational exposure)

Wound and skin sites that have been in contact with blood or body fluids should be washed with soap and water

Mucous membranes should be flushed with clean, running water

Eyes should be flushed for 15 minutes

Seek immediate medical evaluation

Post-Exposure Evaluation

- Confidential medical evaluation
- Document route of exposure and the circumstances under which the exposure incident occurred
- Identify source individual
- Test source individual's blood (with individual's consent)
- Provide results to exposed employee
- Exposed employee will be offered baseline and follow up HIV, HCV, HBV testing, as applicable
- Post-exposure prophylaxis, when medically indicated, is available

Hepatitis B Vaccination

- Offered to all Category 1 and Category 2 employees
- Provided at no cost
- A 3-shot vaccination series is administered intramuscularly
- If you previously declined the vaccination but would like to receive it at time this time, or if you would like to discuss the vaccination further, contact Employee Health.

Hepatitis B Vaccine Efficacy

Hepatitis B vaccine been available since 1982. The vaccine is 95% effective in preventing infection and the development of chronic disease and liver cancer due to Hepatitis B.

Protection lasts at least 20 years and is probably lifelong. Thus, the World Health Organization does not recommend booster vaccinations for people who have completed the 3-dose vaccination schedule, administered intramuscularly.

The vaccine has an excellent record of safety and effectiveness. Since 1982, over 1 billion doses of Hepatitis B vaccine have been used worldwide.

IV. COMMUNICATION OF HAZARDS TO EMPLOYEES

Labels

- Labels must include the universal biohazard symbol, and the term “Biohazard” must be attached to:
  - containers of regulated biohazard waste
  - refrigerators or freezers containing blood or OPIM
  - containers used to store, transport, or ship blood or OPIM

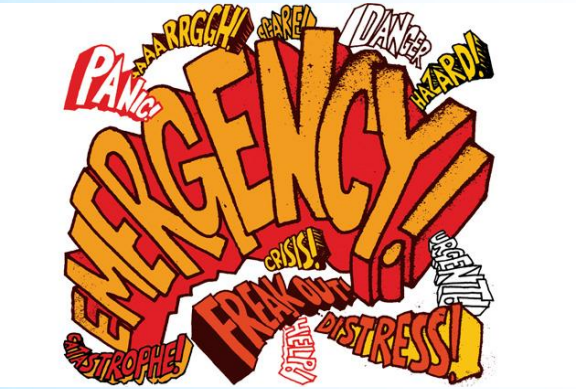
Labels

- Red bags or red containers may be substituted for labels.
- Containers of blood, blood components, or blood products that are labeled as to their contents and have been released for transfusion or other clinical use are exempted from the labeling requirements.

Signs

Biohazard signs will be posted at the entrance to work areas that contain bloodborne pathogens and OPIM.

Emergency Phone Numbers:



- Code Blue 911
- Code Alert 911
- Police 911
- Infection Control: Sherry Acosta, x-65619 & Jacque Moncrief, x-65294
- MC Safety Officer: Chuck Johnson, x-65416

Recordkeeping

Medical records include:

- Hepatitis B vaccination status
- Post-exposure evaluation and follow-up results

Training records include:

- Training dates
- Contents of the training
- Signature of trainer and trainee

In Conclusion

BB pathogen rules are in place for your health and safety

Failure to follow them is a risk that does *not* need to be taken

Questions?

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