Bloodborne Pathogens
29 CFR 1910.1030

Occupational Exposure to Bloodborne Pathogens

Protecting yourself from transmission of bloodborne illnesses.

References

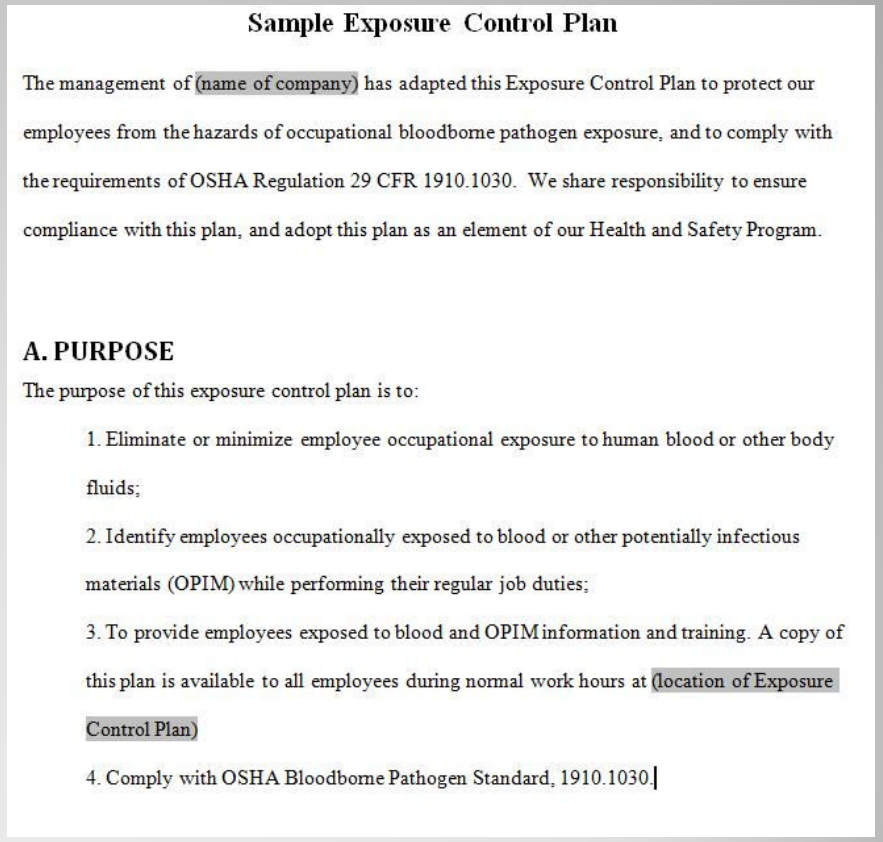
- OSHA CFR 29 1910.1030
- Company Exposure Control Plan

Objectives

- Describe the primary diseases that the exposure plan covers.
- Explain modes of transmission of HBV and HIV.
- Define the term “Universal Precautions.”
- Define the term “engineering controls” and “work practice controls” and be familiar with how these are used in the workplace.
- List the personal protective equipment that serve as effective barriers for infectious fluids.
- Describe labeling, contaminated waste, and disposal procedures.
- Understand the requirements of your exposure control plan.

Exposure Control Plan

- An exposure control plan has been developed to protect employees from the hazards of bloodborne pathogens.
- A copy of the exposure control plan is in the HSE Manual



Sample Exposure Control Plan

The management of (name of company) has adapted this Exposure Control Plan to protect our employees from the hazards of occupational bloodborne pathogen exposure, and to comply with the requirements of OSHA Regulation 29 CFR 1910.1030. We share responsibility to ensure compliance with this plan, and adopt this plan as an element of our Health and Safety Program.

A. PURPOSE

The purpose of this exposure control plan is to:

1. Eliminate or minimize employee occupational exposure to human blood or other body fluids;
2. Identify employees occupationally exposed to blood or other potentially infectious materials (OPIM) while performing their regular job duties;
3. To provide employees exposed to blood and OPIM information and training. A copy of this plan is available to all employees during normal work hours at (location of Exposure Control Plan)
4. Comply with OSHA Bloodborne Pathogen Standard, 1910.1030.

What is occupational exposure?

- *You are at risk for occupational exposure if in the performance of your duties it is reasonably anticipated that skin, eye, mucous membrane, or parenteral* contact with blood or other potentially infectious materials may occur.

Job Tasks With Potential Exposure

- Any job task that includes the handling of or exposure to blood or bodily fluids has exposure risk.
- These tasks include:
  - Administering first aid
  - Industrial accidents
  - Accident cleanup
  - Janitorial or maintenance work
  - Waste cleanup

What methods can you use to determine if a job has bloodborne pathogen exposure risk?

Exposure Determination

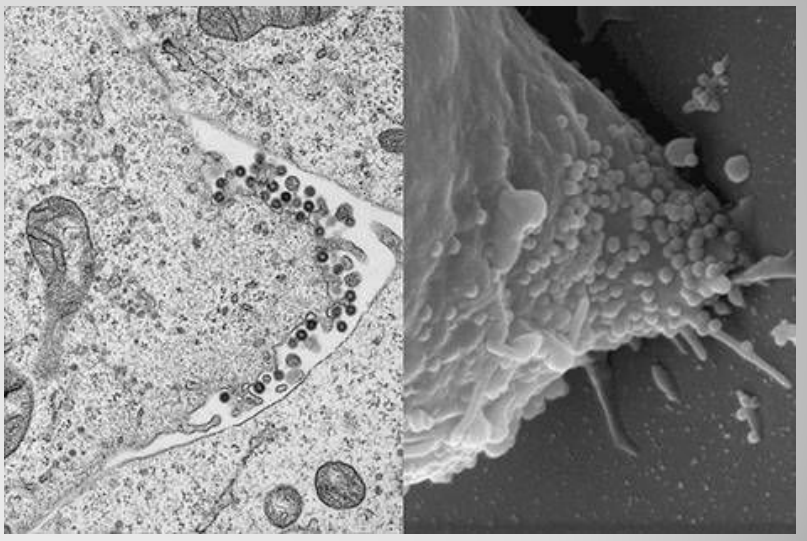
- What work activities at your facility may cause a potential exposure to these bloodborne pathogens?
- The company has performed an exposure determination, and it is listed in the exposure control plan.

What job titles and activities have BBP exposure risk at your facility?

Hepatitis B Virus (HBV)

- HBV is a virus that attacks the liver.
- It can lead to cirrhosis and liver cancer.
- Symptoms include:
  - Fatigue, abdominal pain, loss of appetite, jaundice, nausea and vomiting.

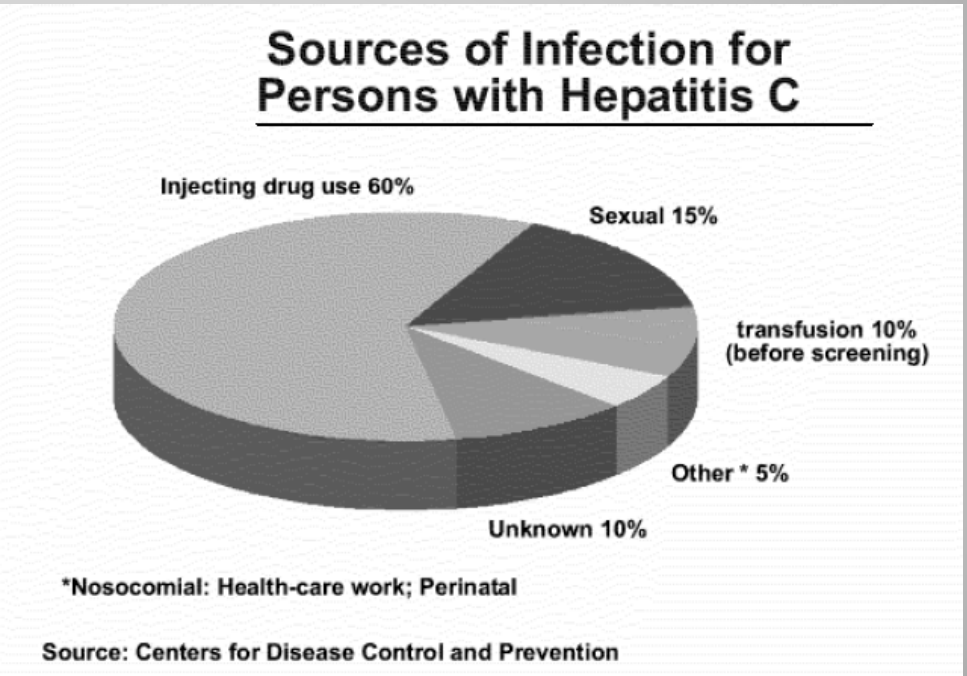
It is mainly transmitted by sexual contact and sharing needles with an infected person.



Hepatitis C (HCV)

- The most common bloodborne infection in the US.
- Primary cause of liver transplants.
- Spread through large or repeated exposures to infected blood.

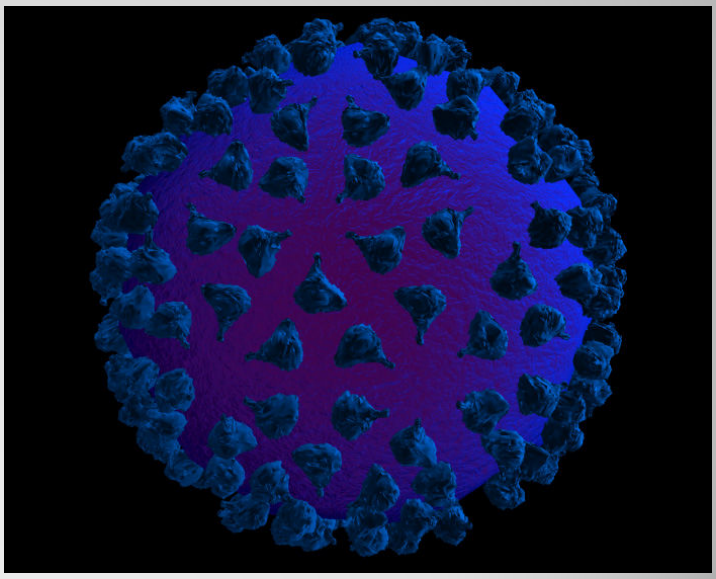
HCV is not spread by kissing, hugging, sneezing, coughing, food or water, sharing eating utensils or drinking glasses, or casual contact.



Human Immuno-defeciency Virus (HIV)

- HIV is the virus that causes AIDS.
- HIV is spread through blood-to-blood and sexual contact.
- The AIDS virus destroys blood cells that fight off illness.
  - This weakens the immune system, making the person highly susceptible to illness.
  - There is no cure for AIDS.

HIV does not live well outside the body. It does not survive in dried blood.

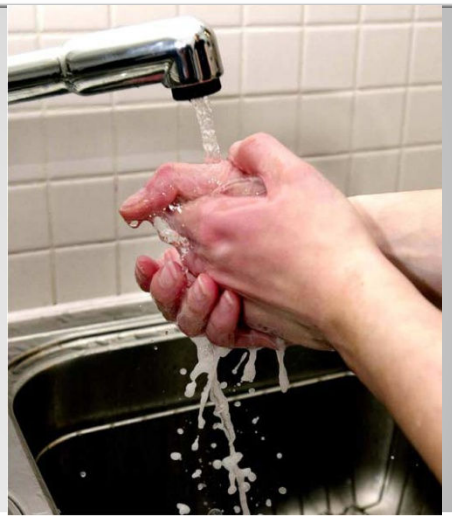


Methods of Compliance – Universal Precautions

- Universal precautions is the method of control that assumes all blood, bodily fluids, or other potentially infected material, is infectious for bloodborne pathogens.
- Since bodily fluids cannot be easily distinguished, universal precautions assumes that all bodily fluids are potentially infectious.
- Universal precautions must be used to prevent contact with blood or other potentially infectious material.

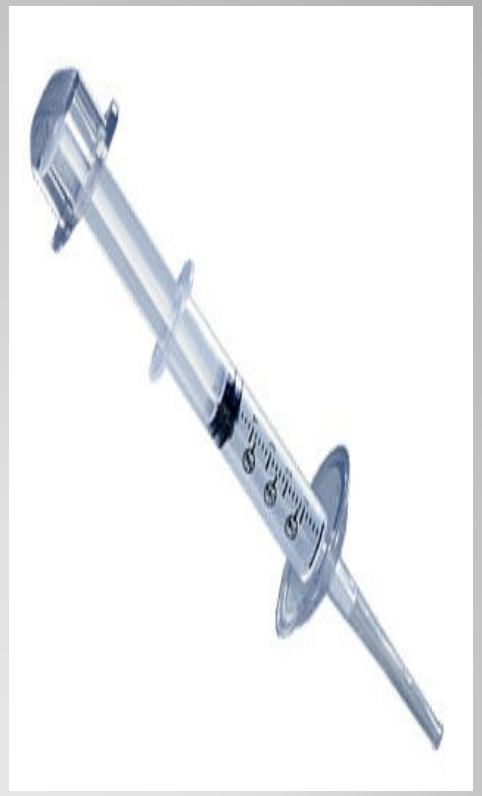
Methods of Compliance – Work Practice Controls

- Work practice controls are practices that reduce the likelihood of exposure by changing the way a task is performed.
- Hand washing facilities, equipment decontamination, and easy glove disposal are examples of work practice controls.
- What other work practice controls are used in your workplace?



Methods of Compliance – Engineering Controls

- ***Where engineering controls will reduce employee exposure either by removing, eliminating or isolating the hazard, they <u>must</u> be used.***
- Engineering controls isolate or remove the bloodborne pathogens hazard from the workplace.
  - Sharps disposal containers and self-sheathing needles are examples of engineering controls.



Safe Work Practices

- If hand washing facilities are not available, use hand cleaners and clean towels.
- Wash hands with hot water and soap as soon as possible.
- Wash hands after removing any PPE.

Safe Work Practices

- Do not eat, drink, smoke, or apply makeup any areas with potential bloodborne pathogen exposure.
- This can introduce pathogens into your body by contacting the eyes, mouth, or nose.

Avoid activities that bring your hands to your face. This is a common route for infection.

Personal Protective Equipment

- The employer must provide, for free, appropriate protective equipment for working with a risk of occupational exposure.
  - PPE will be considered "appropriate" only if it does not permit blood or other OPIM to pass through or reach the employee's work clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.
- What personal protective equipment is used for your job functions? (PPE Activity)

Important PPE Guidelines

- Always check PPE for defects or tears before using.
- If PPE becomes torn or defective remove and replace.
- Remove PPE before leaving a contaminated area.
- Do not reuse disposable equipment

Communicating the Hazard: Labels and Signs

- Biohazard warning labels must be placed on any container that holds blood, or any other potentially infectious material.

- Signs should be posted at the entrance to specified work areas.

Disposal of Contaminated Waste

- Contaminated waste must be disposed of in properly marked containers.

- Needles and other sharp objects must be disposed of in a designated sharps container.

Housekeeping

- The worksite must be maintained in a clean and sanitary condition.
- The employer must determine and implement an appropriate ***written*** schedule for cleaning and methods of decontamination based upon the location within the facility, type of surface cleaned, type of soil present, and tasks or procedures being performed in the area.
- Appropriate disinfectants include:
  - Diluted household bleach solution, freshly made within *24 hours of use at a* 1:10 to 1:100 concentration
  - EPA-registered tuberculocides

Post Exposure Procedures

- If an employee is potentially exposed to a BBP, they should immediately alert their supervisor.
- Immediately clean the affected body part with hot water and soap.
- Report the incident to housekeeping so they can disinfect necessary areas.

- The company will provide a free post incident medical evaluation.
- All incidents must be recorded on an incident investigation report.

Post Exposure Procedures

- OSHA requires that every needle stick injury and cuts from contaminated sharp objects must be recorded.
- It must be entered in your OSHA 300 Log as an injury.
- For privacy, the name of the person should not be included on the log entry.

OSHA's Form 300 (Rev. 01/2004)

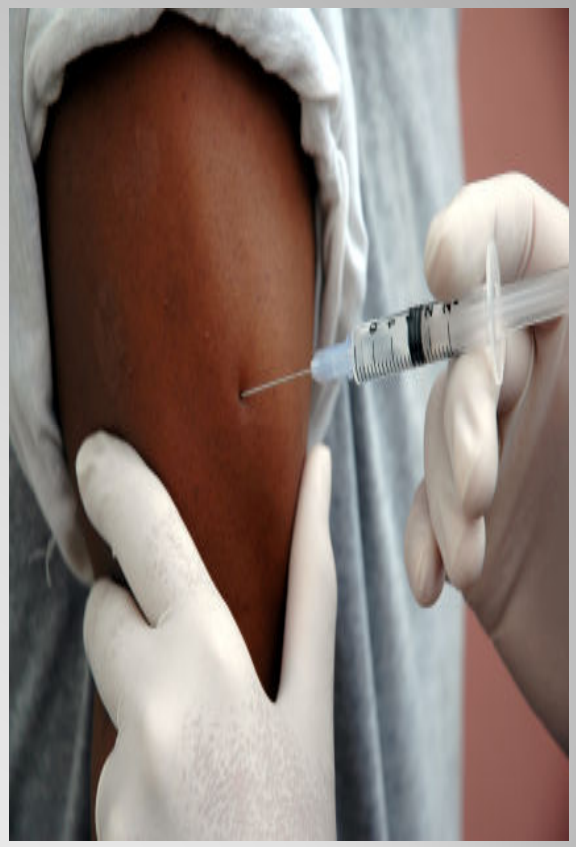
Log of Work-Related Injuries and Illnesses

You must record information about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR 1904.8 through 1904.12. Feel fr use two lines for a single case if you need to. You must complete an injury and illness incident report (OSHA Form 301) or equivalent form for each injury or illness r on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Identify the person				Describe the case		Classify the case											
(A) Case No.	(B) Employee's Name	(C) Job Title (e.g., Welder)	(D) Date of injury or onset of illness (mo./day)	(E) Where the event occurred (e.g. Loading dock north end)	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g. Second degree burns on right forearm from acetylene torch)	**CHECK ONLY ONE** box for each case based on the most serious outcome for that case:				Enter the number of days the injured or ill worker was:		Check the "injury" column or choose one type of illness:					
						Death	Days away from work	Remained at work		Away From Work (days)	On job transfer or restriction (days)	(M) Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other illnesses
								Job transfer or restriction	Other record-able cases								
						(G)	(H)	(I)	(J)	(K)	(L)	(1)	(2)	(3)	(4)	(5)	(6)
1	Private	Janitor	8/07/07	Trash Room	Cut finger with discarded needle							X					

HBV Vaccinations

- A Hepatitis B vaccination is offered at no cost to all employees who might receive occupational exposure.
- These are safe and effective. It provides employees with added protection in the event of exposure.
- HBV vaccines cannot cause Hepatitis, and have reduced Hepatitis infections by 95%.



Summary

- Companies with occupational exposure to bloodborne pathogens require an exposure control plan.
- Universal Precautions is a method of control that assumes that all blood or bodily fluid is potentially contaminated.
- Engineering controls eliminate the hazard and are the preferred method for dealing with occupational exposure risk.
- Work Practice controls reduce the risk by changing the way a task is performed.
- Contaminated waste must be disposed of in properly marked containers.
- HBV Vaccinations are offered to all employees at no cost.

Questions?