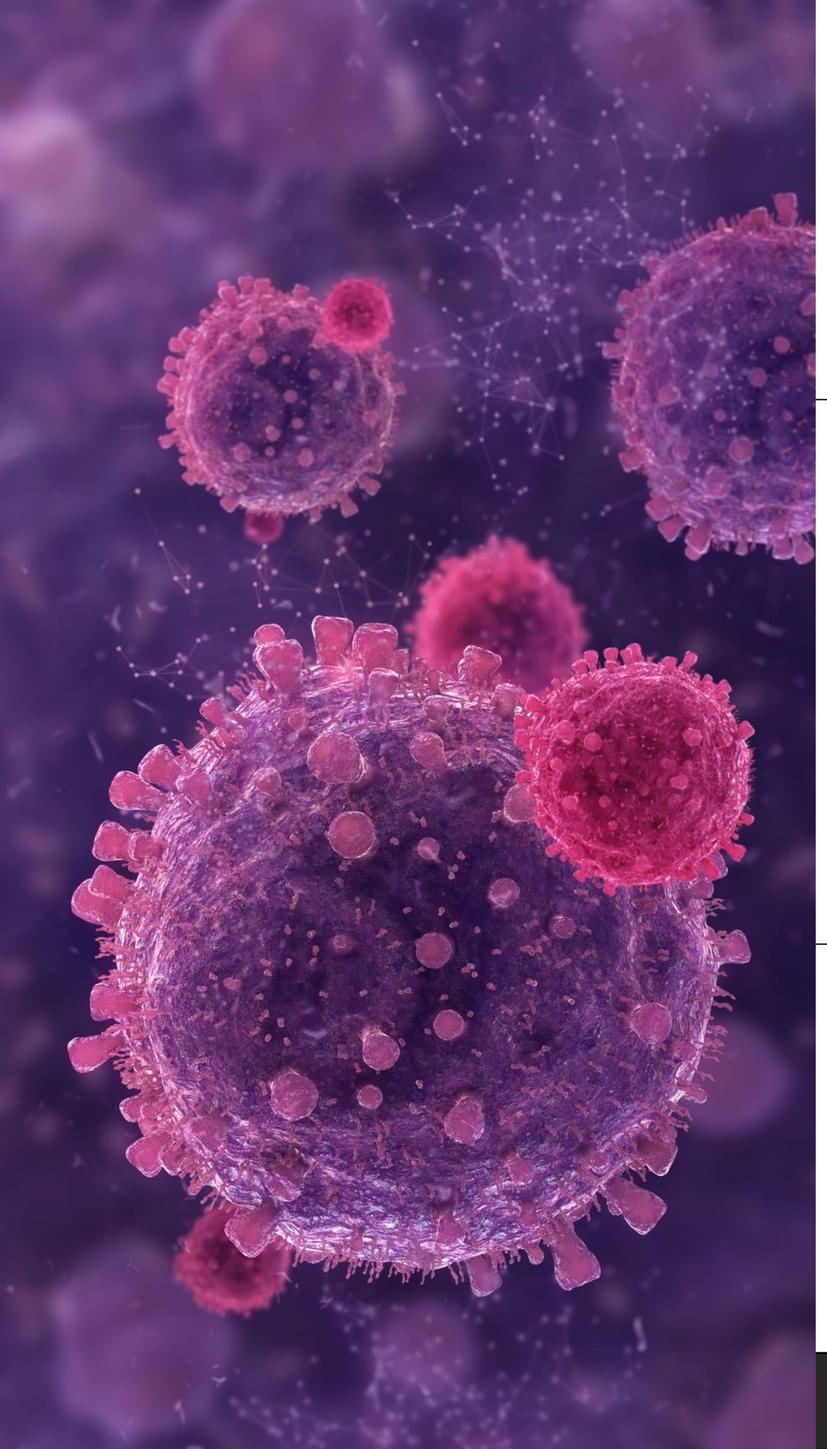


Bloodborne Pathogens

Pearla Romero

Environmental, Occupational, Health and Safety Specialist

Housekeeping

1.Use the hand raise, come off mute, or drop question in chat
2.Please share your experience
3. 👍 = Yes, 😮 = No
4.Resources

- “Needlestick safety is important because it’s not somethings that someone thought up one time as just another rule to follow…when you go through something like this it really brings home to you about why you do it, why it’s so important, and the effect it can have not just on you but on other people around you.”

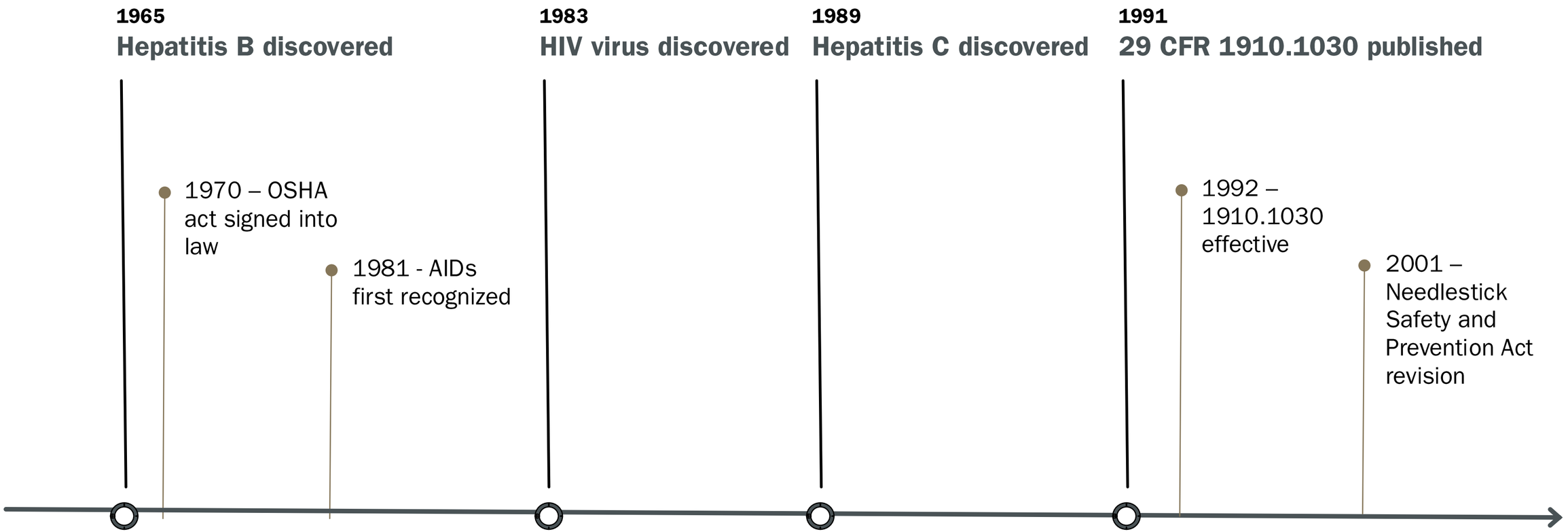
Objectives

1. Define core Bloodborne Pathogens concepts
2. Determine applicability and exposure risk
3. Apply exposure prevention controls
4. Describe medical and post-exposure requirements
5. Identify compliance and recordkeeping requirements

Understanding BBPs

- Bloodborne Pathogens are pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV). 1910.1030(b)

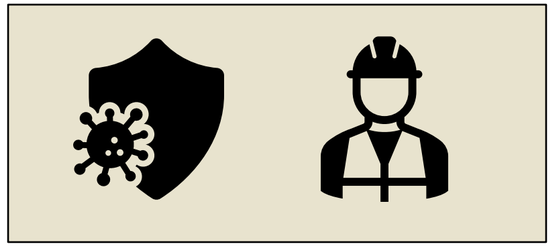
Timeline


1965
Hepatitis B discovered
1970 – OSHA act signed into law
1981 - AIDs first recognized
1983
HIV virus discovered
1989
Hepatitis C discovered
1991
29 CFR 1910.1030 published
1992 – 1910.1030 effective
2001 – Needlestick Safety and Prevention Act revision

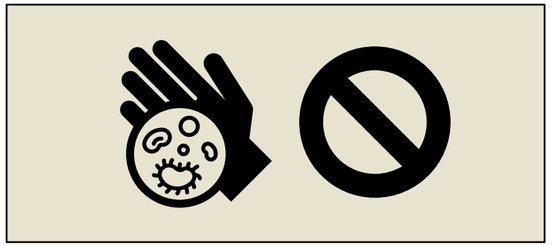
Standard Sections

a.Scope and Application
(b) Definitions

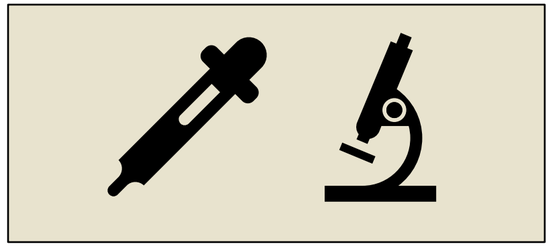
(c) Exposure Control



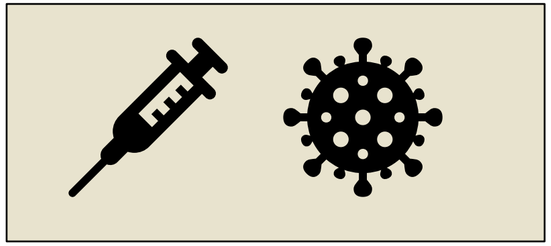
(d) Methods of Compliance



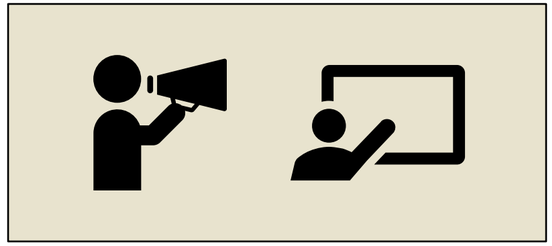
(e) HIV and HBV Research Labs and Production Facilities



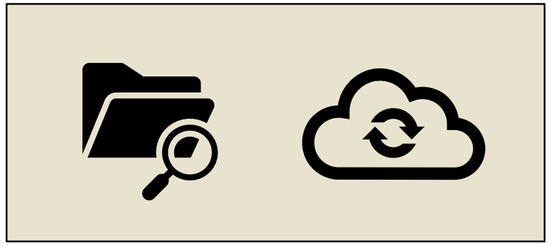
(f) Hepatitis B Vaccination and post-exposure



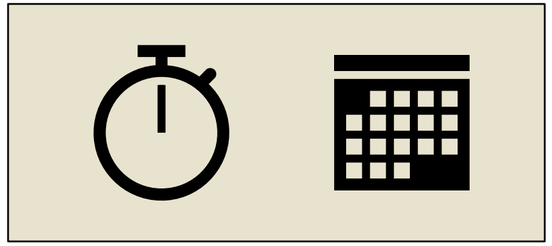
(g) Communication of hazards to employees



(h) Recordkeeping



(i) Dates



1910.1030(a) Scope and Application

Scope and Application

- 1910.1030(a)
- Scope and Application. This section applies to all occupational exposure to blood or other potentially infectious materials as defined by paragraph (b) of this section.
- Occupational Exposure means **reasonably anticipated** skin, eye, mucous membrane, or parenteral **contact** with blood or other potentially infectious materials that may result from the **performance of an employee's duties.**
- Blood means human blood, human blood components, and products made from human blood.
- Other Potentially Infectious Materials means

(1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids;

(2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and

(3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

Applicability

- Scenario A: “A nurse performing first aid at an oil rig’s infirmary clinic.” ☑
- Scenario B: “An office administrator who occasionally walks through the lab but never handles blood or OPIM.”
- Scenario C: “Environmental services staff handling bags that may contain contaminated laundry.” ☑
- Scenario D: “A forklift driver rendering first aid as his Emergency Response lead duties.” ☑

Reasonably anticipated contact

The performance of an employee’s duties

1910.1030(b) Definitions

Definitions

- Assistant Secretary
- Blood
- Bloodborne Pathogens
- Clinical Laboratory
- Contaminated
- Contaminated Laundry
- Decontamination
- Director
- Engineering controls
- Exposure Incident
- Handwashing facilities
- Licensed Healthcare Professional
- HBV
- HIV
- Needless systems
- Occupational Exposure
- Other Potential Infectious Materials
- Parenteral
- Personal Protective Equipment
- Production Facility
- Research Laboratory
- Sharps with engineered sharps injury protections

1910.1030(c) Exposure Control

Exposure Control Plans

Employers must make the Exposure Control Plan accessible to employees, review and update it annually to reflect new tasks, technologies, and safer devices, and document input from non-managerial staff in selecting effective controls.

Link to OSHA's Model Plan

Exposure Control Plan

Plan Elements

- It must outline the schedule and methods for implementing compliance measures (paragraphs d–h) and describe procedures for evaluating circumstances surrounding exposure incidents per paragraph (f)(3)(i).

Exposure Determination

- The plan must specify the exposure determination as outlined in paragraph (c)(2).

Exposure Determination

Document

- A list of all job classifications in which **all** employees in those job classifications have occupational exposure
- A list of job classifications in which **some** employees have occupational exposure
- A list of all tasks and procedures or groups of closely related task and procedures in which occupational exposure occurs and that are performed by employees in job classifications listed in accordance with the provisions of paragraph (c)(2)(i)(B) of this standard.

Determination is based on **occupational exposure** without regard to personal protective clothing or equipment.

1910.1030(d) Methods of Compliance

Engineering and Work Practice Controls

Universal Precautions

Treat all blood and body fluids as potentially infectious when differentiation is not possible.

Sharps Handling

Prohibit bending, recapping, or removing contaminated needles unless no alternative exists; use mechanical devices or one-handed technique. Dispose of sharps in puncture-resistant, leakproof, labeled containers immediately after use.

Specimen Handling & Equipment

Use leakproof, labeled containers for specimens; apply secondary containment if needed. Decontaminate equipment or label contaminated parts before servicing or shipping.

Work Area Restrictions

Ban eating, drinking, smoking, applying cosmetics, and storing food in contaminated areas. Implement procedures to minimize splashing and prohibit mouth pipetting.

Engineering Controls: Controls that isolate or remove the bloodborne pathogens hazard from the workplace. **Work Practice Controls** means controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

Personal Protective Equipment

Personal Protective Equipment:
Provide and ensure use of appropriate PPE (gloves, gowns, masks, eye protection) at no cost. PPE must prevent penetration of infectious materials, be accessible in various sizes, and include hypoallergenic options. Employers handle cleaning, disposal, repair, and replacement. Remove PPE before leaving work areas and store properly.

Specific PPE Requirements:
Gloves: Mandatory for anticipated contact; replace when compromised; no reuse of disposables.
Masks/Eye Protection: Required when splashes or sprays may occur.
Gowns/Body Clothing: Worn based on exposure risk; surgical caps/hoods and shoe covers for gross contamination scenarios.

PPE Standard: 29 CFR 1910.132 for general industry

Common Engineering Controls

Engineering Controls:
Engineering controls means controls (e.g., **sharps disposal containers**, self-sheathing needles, safer medical devices, such as sharps with engineered sharps injury protections and needleless systems) that isolate or remove the bloodborne pathogens hazard from the workplace.

Sharps Disposal Containers
Site Photo

Common Engineering Controls

Self-sheathing needles
Site Photo

Needleless Connector
Site Photo


have a needle


I stuck


attach a syringe
that is also luer lock

Safe Practices for Sharps, Laundry, and Housekeeping

Housekeeping:
Maintain the worksite in a clean, sanitary condition. Implement a written cleaning and decontamination schedule based on location, surface type, soil type, and tasks performed. Decontaminate work surfaces after procedures, spills, or at shift end; replace protective coverings when contaminated; inspect and clean bins, pails, and receptacles regularly; use mechanical tools for broken glassware; never reach by hand into containers with contaminated sharps.

Contaminated Sharps Discarding and Containment:
Discard sharps immediately in puncture-resistant, leakproof, labeled containers located near use areas; keep containers upright, replace routinely, and close before moving. Use secondary containers if leakage is possible. Never manually clean reusable containers to avoid percutaneous injury.

Laundry:
Handle contaminated laundry minimally and without agitation; bag at point of use in labeled/color-coded containers. Use leakproof bags for wet laundry. Employees handling laundry must wear gloves and appropriate PPE. When shipping to a facility that does not use Universal Precautions, ensure proper labeling/color-coding

Are employees allowed to take their protective equipment home and launder it?

Regulated Waste

The Bloodborne Pathogens standard defines “regulated waste” as blood or OPIM–contaminated liquids, materials capable of releasing them, contaminated sharps, and pathological or microbiological wastes

Regulated Waste Disposal

Regulated Waste

Medical waste in Texas is regulated by TCEQ. SQGs and LQGs may store *on-site* medical waste without permit, notification, or authorization if securely stored and non-nuisance.

Medical waste is primarily regulated by state environmental and health departments.; the EPA no longer has authority since the Medical Waste Tracking Act (MWTA) of 1988 expired in 1991.

Regulated Waste

All regulated waste must be placed in closable, leakproof, labeled/color-coded containers and disposed of in accordance with federal, state, and local regulations.

Other Regulated Waste Containment

Place regulated waste in closable, leakproof, labeled/color-coded containers; use secondary containment if outside contamination occurs; close containers before removal to prevent spillage or protrusion..

1910.1030(e)
HIV and HBV Research Labs and Production Facilities

Safety in the Lab

Facilities

Applies to labs engaged in HIV/HBV culture, production, and manipulation (not routine clinical labs).
All regulated waste must be incinerated or decontaminated (e.g., autoclaving).

Special Practices

Restrict access, post biohazard signs, and keep doors closed.
Perform all HIV/HBV work in safety cabinets with PPE and gloves
Handle sharps safely, clean spills immediately, and maintain an updated biosafety manual.

Innovating

Use certified biological safety cabinets (Class I, II, or III) or equivalent containment devices for splash/aerosol risks.

Certify biological safety cabinets upon installation, after relocation, and at least annually.

Training

Employees require specialized training on hazards, entry/exit procedures, and emergency response per paragraph (g)(2)(ix).

1910.1030(f)
Hepatitis B vaccination and post-exposure evaluation and follow-up

HBV Vaccination and Post-Exposure Procedures

General Requirements:
Provide Hepatitis B vaccine series and post-exposure evaluation at no cost, promptly, and under licensed supervision.

Hepatitis B Vaccination
Offer vaccine within 10 days of initial assignment, after training; no prescreening required.
Employees can accept later; declinations must be documented.
Provide booster doses if recommended by U.S. Public Health Service.

Post-exposure Evaluation and Follow-up
Immediate confidential evaluation after exposure:
- Document exposure details and source testing (HBV/HIV).
- Test employee blood; preserve sample for 90 days if HIV testing deferred.
- Provide prophylaxis, counseling, and illness evaluation.

Can we make our own Hepatitis B Declination Statement?

Post-Exposure Documentation Requirements

Healthcare Professional Info

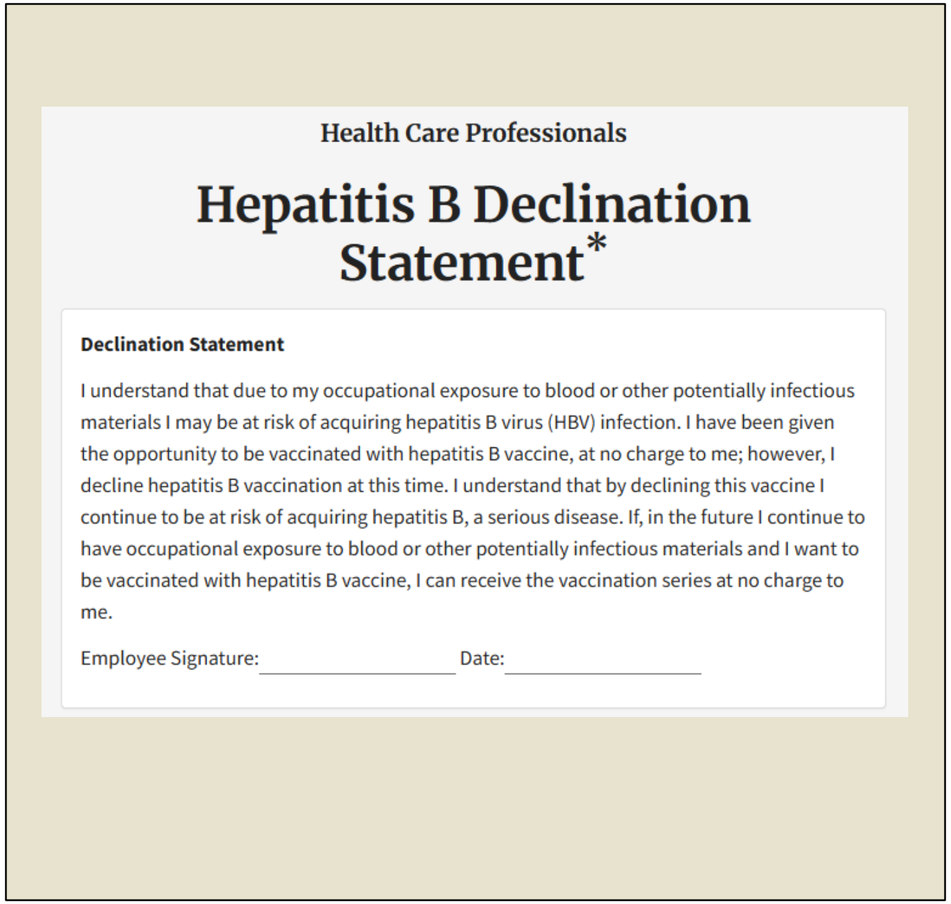
Provide regulation copy, exposure details, source test results, and employee medical records.

Written Opinion

State if vaccination indicated/received and confirm employee informed of results; keep other findings confidential.

Medical Recordkeeping

Maintain all required medical records per paragraph (h)(1).



Health Care Professionals

Hepatitis B Declination Statement*

Declination Statement

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to me; however, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine I continue to be at risk of acquiring hepatitis B, a serious disease. If, in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Employee Signature: _____ Date: _____

First Aid Exception- DEFACTO DUTIES

- To delay offering the Hepatitis B vaccine until after a first-aid response, ALL of the following must be true:

1.First Aid Is Not Their Primary Job
2.First Aid Is Only a Collateral Duty
3.They Do NOT Routinely Provide Care

- **Exposure Control Plan Requirements:**

1.Reporting
2.Incident List
3.Training
4.Post-Response HBV vaccination

1910.1030(g) Communication of hazards to employees

Labels and Signs

Labels

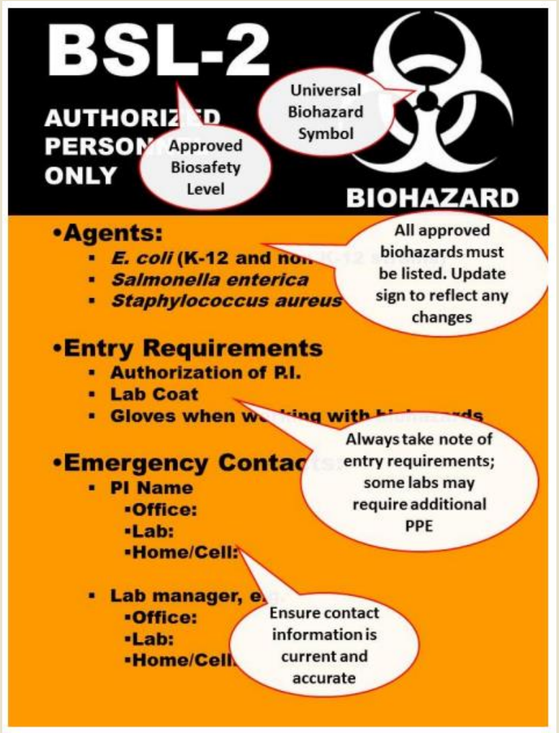
Biohazard labels are required on containers of regulated waste, refrigerators/freezers with blood or OPIM, and transport containers.
Labels must be fluorescent orange or orange-red with contrasting symbols/lettering; affixed securely.
Red bags/containers may substitute for labels; decontaminated waste need not be labeled.
Equipment labels must indicate contaminated portions.

Signs

Post biohazard signs at entrances to HIV/HBV research and production areas, including the following legend:

- Infectious agent name
- Entry requirements
- Contact info for responsible person

Signs must be fluorescent orange-red with contrasting text.



Texas A&M University Biosafety Manual

Labels and Signs cont.

Labels

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- Infectious agent name
- Entry requirements
- Contact info for responsible person

Signs must be fluorescent orange-red with contrasting text.

The George Washington University

Training

Training content must include:

- Copy of the standard and explanation
- Bloodborne disease basics (symptoms, transmission)
- Exposure control plan and PPE use
- Hepatitis B vaccine info (free of charge)
- Emergency actions and exposure incident procedures
- Labeling/sign requirements
- Interactive Q&A with a knowledgeable trainer

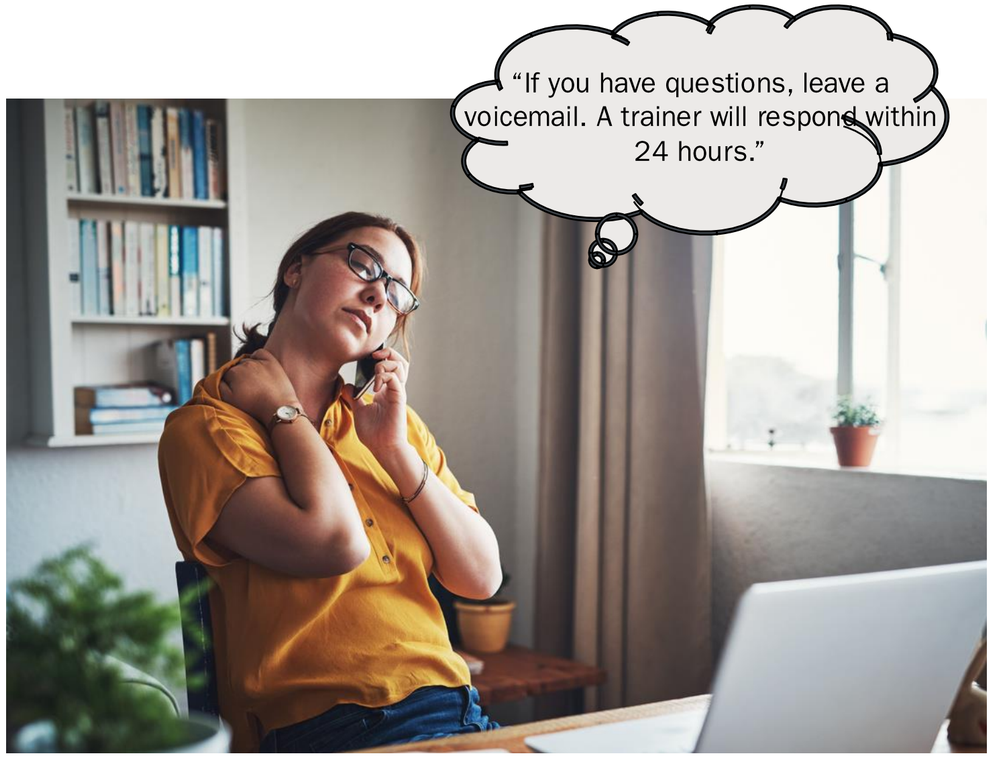
Training

Training required for all employees with occupational exposure:
At initial assignment and annually thereafter; additional training for new tasks or procedures.
Must be free, during work hours, and in language/format appropriate to employee literacy.

HIV/HBV Labs

Must demonstrate proficiency in microbiological practices before handling infectious agents.

Access to Trainer



Scenario 1

Scenario 2

1910.1030(h)
Recordkeeping

Recordkeeping

Confidential Medical Records
Employee medical records, including vaccination history and evaluations, must be kept confidential for 30 years after employment.

Training Documentation
Training records should include dates, content summary, trainer names/qualifications, and attendees' names/job titles., and be retained for at least 3 years.

Record Accessibility and Release
Records must be available upon request to OSHA (Assistant Secretary), NIOSH (Director), employees, and authorized representatives. Medical records are released only to the employee or with written consent.

Sharps Injury Log Essentials

Establishment/Facility Name: _____

Sample Sharps Injury Log Year 2____

Date	Case/ Report No.	Type of Device (e.g., syringe, suture needle)	Brand Name of Device	Work Area where injury occurred [e.g., Geriatrics, Lab]	Brief description of how the incident occurred [i.e., procedure being done, action being performed (disposal, injection, etc.), body part injured]

29 CFR 1910.1030, OSHA's Bloodborne Pathogens Standard, in paragraph (h)(5), requires an employer to establish and maintain a Sharps Injury Log for recording all percutaneous injuries in a facility occurring from *contaminated* sharps. The purpose of the Log is to aid in the evaluation of devices being used in healthcare and other facilities and to identify problem devices or procedures requiring additional attention or review. This log must be kept in addition to the injury and illness log required by 29 CFR 1904. The Sharps Injury Log should include all sharps injuries occurring in a calendar year. The log must be retained for five years following the end of the year to which it relates. The Log must be kept in a manner that preserves the confidentiality of the affected employee.

OSHA Model Plan

Confidential Injury Logging

Maintain a secure record of percutaneous injuries from contaminated sharps to protect privacy and ensure accurate reporting.

Required Incident Details

Include device type and brand, work area, and incident description for each entry in the injury log.

Compliance and Recordkeeping

Retain the injury log in accordance with OSHA requirements for proper documentation and regulatory compliance (29 CFR 1904).

Sharps Injury Scenario

- On 1/23/2026 a medical assistant (MA) at an outpatient clinic is performing a routine venipuncture on a patient whose infection status is unknown. The MA is using a self-sheathing needle, but after completing the blood draw, the safety feature fails to fully engage. As the MA withdraws the needle and attempts to activate the mechanism again using one hand, the device unexpectedly shifts, causing a percutaneous injury to the MA's left index finger.
- The MA immediately reports the injury to the charge nurse. The incident occurs in Exam Room 4. The contaminated needle is disposed of in a puncture-resistant, leakproof, labeled sharps container located next to the phlebotomy chair, consistent with your sharps handling guidelines.
- No patient blood visibly contaminates the surrounding area, but housekeeping later performs routine surface disinfection per the facility's cleaning procedures.

1910.1030(h)

Dates

Key Dates

Standard Effective Date
The Bloodborne Pathogens standard became effective on March 6, 1992, marking the start of new safety requirements.

Exposure Control Plans
Exposure Control Plans were mandated for completion by May 5, 1992 to ensure workplace safety.

Training and Recordkeeping
Training, information, and recordkeeping requirements took effect by June 4, 1992 to protect employees.

Engineering Controls
Engineering controls and additional protective measures were required by July 6, 1992 to minimize exposure risks.

Exposure Control Plan

Is your site compliant?

1. Review the standard, find all the “shall” statements
2. Review OSHA’s model plan, complete all the fill in the blanks
3. Review OSHA’s most frequently asked questions
4. Use the Texas Workers Compensation Self Checklist

Citations	Inspections	Penalty	Industry Classification
245	90	$525,296	*Total for All Industries*
74	14	$156,356	623 / Nursing and Residential Care Facilities
65	27	$120,165	621 / Ambulatory Health Care Services
18	9	$36,518	721 / Accommodation
13	6	$33,033	622 / Hospitals
11	1	$6,400	339 / Miscellaneous Manufacturing
10	2	$13,023	812 / Personal and Laundry Services
8	5	$25,572	561 / Administrative and Support Services
8	3	$12,757	322 / Paper Manufacturing
4	2	$4,425	332 / Fabricated Metal Product Manufacturing
4	1	$36,000	562 / Waste Management and Remediation Services
4	1	$4,748	484 / Truck Transportation

BBP Citations October 2024 through September 2025

Appendix

- BBP Citations - OSHA
- BBP Model Plan – OSHA
- Eyewash Facilities – LOI
- First Aid Responders – LOI
- Needless Connectors - LOI
- Letters of Interpretation - OSHA
- Most Frequently Asked Questions - OSHA
- Texas Guidance on Medical Waste – TCEQ
- Texas Workers Comp Self Checklist - TDI

Thank you!