HealthStream Regulatory Script

Standard Precautions:
Bloodborne Pathogens and Other Potentially Infectious Materials
Release Date: August 2008
HLC Version: 602

Lesson 1: Introduction
Lesson 2: Bloodborne Pathogens
Lesson 3: Protecting Yourself
Lesson 4: What to Do if You Are Exposed
## Introduction

Welcome to the introductory lesson on Standard Precautions and bloodborne pathogens.

As your partner, HealthStream strives to provide its customers with excellence in regulatory learning solutions. As new guidelines are continually issued by regulatory agencies, we work to update courses, as needed, in a timely manner. Since responsibility for complying with new guidelines remains with your organization, HealthStream encourages you to routinely check all relevant regulatory agencies directly for the latest updates for clinical/organizational guidelines.

If you have concerns about any aspect of the safety or quality of patient care in your organization, be aware that you may report these concerns directly to The Joint Commission.
<table>
<thead>
<tr>
<th>Course Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some organisms that cause disease are carried in a person’s blood and other body fluids.</td>
</tr>
<tr>
<td>Healthcare workers are routinely exposed to the blood and fluids of their patients. Therefore, they are at risk for contracting disease.</td>
</tr>
<tr>
<td>This course will help you protect:</td>
</tr>
<tr>
<td>• Yourself</td>
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<tr>
<td>• Your coworkers</td>
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<tr>
<td>• Your patients</td>
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<tr>
<td>• Your family</td>
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<tr>
<td>You will learn how to:</td>
</tr>
<tr>
<td>• Work safely with blood and body fluids</td>
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<tr>
<td>• Protect against exposure to bloodborne pathogens</td>
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</table>
## Course Goals

After completing this course, you should be able to:

- Identify important bloodborne pathogens and how they are spread
- List important safeguards against bloodborne pathogen exposure
- Recognize what to do if you are exposed to a bloodborne pathogen

**NO IMAGE**
Course Outline

This introductory lesson gave the course rationale and goals.

Lesson 2 describes bloodborne pathogens. This includes three important bloodborne diseases and how they are spread.

Lesson 3 explains how to use Standard Precautions to protect against exposure to bloodborne pathogens.

Finally, lesson 4 describes what to do if you are exposed to a bloodborne pathogen.
Welcome to the lesson on bloodborne pathogens.

After completing this lesson, you should be able to:

- Define “bloodborne pathogen”
- List three important bloodborne diseases
- Identify the symptoms of these diseases
- Recognize how bloodborne diseases are spread

FLASH ANIMATION

Lesson 2: Bloodborne Pathogens

- Important bloodborne diseases and their symptoms
- How bloodborne diseases spread
**Bloodborne Pathogens**

A *pathogen* is an organism that causes disease.

*Bloodborne pathogens* are pathogens carried in a person’s bloodstream. They also may be present in other body fluids.

**Pathogens include:**

- Bacteria
- Viruses
- Fungi
- Parasites
<table>
<thead>
<tr>
<th>Bloodborne Diseases</th>
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<tbody>
<tr>
<td>Healthcare workers routinely come into contact with human blood and other body fluids.</td>
</tr>
<tr>
<td>As a result, healthcare workers are at risk for exposure to bloodborne pathogens.</td>
</tr>
<tr>
<td>This means that healthcare workers need to know:</td>
</tr>
<tr>
<td>• Important bloodborne diseases</td>
</tr>
<tr>
<td>• Symptoms of these diseases</td>
</tr>
<tr>
<td>• How these diseases are spread</td>
</tr>
</tbody>
</table>
## Important Bloodborne Pathogens

<table>
<thead>
<tr>
<th>Three important bloodborne pathogens are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hepatitis B virus (HBV)</td>
</tr>
<tr>
<td>• Hepatitis C virus (HCV)</td>
</tr>
<tr>
<td>• Human immunodeficiency virus (HIV)</td>
</tr>
</tbody>
</table>
HBV & HCV

HBV and HCV both infect the liver.

Both of these viruses can cause long-term liver damage.

Eighty-five percent (85%) of those infected with HCV become chronic carriers.

HBV and HCV infections can be life threatening.
HBV & HCV: Vaccines

If you are at risk for exposure to blood or OPIM* [glossary] because of your job, your employer must:
- Offer you the hepatitis B vaccine
- Pay for the vaccine

The vaccine is very safe and effective.

If you do not want the vaccine, you will need to sign a form. This form states that your employer offered you the vaccine, and you refused. If you change your mind later, you can still receive the vaccine at any time.

For more information on the HBV vaccine, contact your supervisor.

There is no vaccine for HCV at this time.

*Note: You will learn more about OPIM later in the course. See the glossary for a definition.
# HBV & HCV: Symptoms of Infection

Signs and symptoms of HBV and HCV infection can include:
- Feeling tired
- Loss of appetite
- Mild fever
- Aching muscles or joints
- Diarrhea
- Nausea and vomiting
- Yellowed skin and eyes (jaundice)
- Dark urine
- Light colored stools
- Itching

![Image: 2007.JPG](CDC/Dr. Thomas F. Sellers/Emory University)
HIV

HIV attacks the immune system. This causes the disease known as AIDS.

Without a strong, healthy immune system, the body develops many infections and illnesses.

These infections and illnesses are the direct cause of death for many AIDS patients.
HIV: Symptoms of Infection

Early HIV infection may feel like the flu.

Other signs and symptoms of HIV infection can include:
- Swollen lymph nodes
- Visual changes
- Diarrhea
- Night sweats
- Unexplained weight loss
- Rash
- Fatigue
- Shortness of breath
- Frequent pneumonias
Transmission of Bloodborne Diseases

Many patients infected with HBV, HCV, or HIV do not have obvious symptoms.

These patients can still spread the disease.

They may pass the disease to others without even knowing it.
Bloodborne diseases can be spread in several ways.

The three most important ways are:
- Sexual contact
- Sharing drug needles
- Mother-to-baby exchange of bodily fluids

**High-Risk Activities for Contracting a Bloodborne Disease:**
- Unprotected sex
- Using dirty needles for injection drugs
Exposure & Transmission: Among Healthcare Workers

In the healthcare setting, workers can be exposed to bloodborne pathogens in additional ways.

Workers are at highest risk of HBV, HCV, or HIV infection from needle-stick or other sharps injury.

Healthcare workers also can be exposed to bloodborne pathogens if they have:
- Mucous membrane (eye, nose, mouth) contact with infectious materials
- Non-intact skin contact with infectious materials

Healthy, intact skin is the best natural defense against bloodborne pathogens. Even a simple hangnail or a rash can be an entry point for pathogens.
Exposure & Transmission Among Healthcare Workers: Risk

When a healthcare worker is exposed to a bloodborne pathogen, the pathogen is not always transmitted.

For example, HBV is more transmissible than HCV or HIV.

What does this mean?

Suppose a healthcare worker is exposed to blood from a patient who has hepatitis B. This worker has up to a 30% chance of becoming infected with the virus.

By contrast, a healthcare worker exposed to HIV has less than a 1% chance of getting the virus.
Exposure & Transmission Among Healthcare Workers: Risk

Several other factors also affect the risk of infection following exposure.

These factors include:
- **Amount of exposure.** For example, a large blood splash into the mouth is more likely to lead to infection than a small splash.
- **Route of exposure.** For example, a needle-stick injury is more likely to lead to infection than a blood splash.
- **Amount of virus in the infectious material.** For example, blood with a large amount of HBC, HCV, or HIV is more likely to lead to infection than blood with less of the virus.
Important bloodborne pathogens are:

<table>
<thead>
<tr>
<th>Choice</th>
<th>Pathogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Salmonella</td>
</tr>
<tr>
<td>b)</td>
<td>VZV and SARS-CoV</td>
</tr>
<tr>
<td>c)</td>
<td>HBV, HCV, and HIV</td>
</tr>
<tr>
<td>d)</td>
<td>Mycobacterium tuberculosis</td>
</tr>
</tbody>
</table>

**MULTIPLE CHOICE INTERACTION**

- **CORRECT ANSWER: C**
  - [RESPONSE FOR CHOICE A: Incorrect. The correct answer is C.]
  - [RESPONSE FOR CHOICE B: Incorrect. The correct answer is C.]
  - [RESPONSE FOR CHOICE C: Correct.]
  - [RESPONSE FOR CHOICE D: Incorrect. The correct answer is C.]
### Review

Listed below are some of the tasks of a healthcare worker. Choose the task that puts the worker at greatest risk for exposure to a bloodborne disease.

A. Drawing blood  
B. Delivering a breakfast tray  
C. Taking an oral temperature  
D. Helping a patient change his or her gown

**MULTIPLE CHOICE INTERACTION**

[**CORRECT ANSWER: A**]

[RESPONSE FOR CHOICE A: Correct. Healthcare workers are at risk whenever they handle blood or OPIM.]

[RESPONSE FOR CHOICE B: Incorrect. The correct answer is A. Healthcare workers are at risk whenever they handle blood or OPIM.]

[RESPONSE FOR CHOICE C: Incorrect. The correct answer is A. Healthcare workers are at risk whenever they handle blood or OPIM.]

[RESPONSE FOR CHOICE D: Incorrect. The correct answer is A. Healthcare workers are at risk whenever they handle blood or OPIM.]
## Summary

You have completed the lesson on bloodborne pathogens.

Remember:

- Important bloodborne pathogens are HIV, HBV, and HCV.
- These pathogens are most commonly spread by sexual contact and sharing drug needles.
- In the healthcare setting, workers can be exposed to bloodborne pathogens through sharps injury, mucous membrane contact, or non-intact skin contact.
- After a healthcare exposure, infection is most likely with HBV. Infection is least likely with HIV.
- Other factors also affect the risk of developing infection after an exposure. These factors include: amount of exposure, route of exposure, and how much virus is present in the infectious material.
Lesson 3: Protecting Yourself
3001
## Introduction & Objectives

Welcome to the lesson on protecting yourself from bloodborne pathogens.

After completing this lesson, you should be able to:
- Define Standard Precautions
- List work practice and engineering controls that help prevent exposure to bloodborne pathogens
- Recognize the importance of proper hand hygiene
- Identify the role of personal protective equipment (PPE)

### FLASH ANIMATION

**Lesson 3: Protecting Yourself from Bloodborne Pathogens**
- Environmental controls
- Work practice controls
- Housekeeping
- Personal protective equipment
## Standard Precautions: Origin

Standard Precautions protect healthcare workers from exposure to blood and other potentially infectious materials.

Standard Precautions were put together from:
- Universal Precautions (UP), a set of infection-control practices that focus on bloodborne pathogens
- Body Substance Isolation (BSI), a set of infection-control practices that focus on moist body substances
### Standard Precautions: When to Use

Standard Precautions are used whenever a healthcare worker may have contact with patient blood.

Whether or not there is visible blood, Standard Precautions also apply to:
- All body fluids
- All secretions
- All excretions

The one exception is sweat. Standard Precautions do not apply to sweat.

Standard Precautions apply whether or not you think or know the patient has a bloodborne disease.

**In other words, Standard Precautions are used with all patients.**
Standard Precautions: Body Fluids

Why do Standard Precautions apply to body fluids other than blood?

Certain other body fluids and materials also carry bloodborne pathogens.

As a group, these materials are known as “other potentially infectious materials” (OPIM).

Regardless of the body fluid, use Standard Precautions to help protect against exposure to bloodborne diseases.

OPIM include:

- Semen
- Vaginal fluids
- Fluid from around an unborn baby
- Fluid from any human body cavity
- Unfixed tissue or organ
- Human cell, tissue, or organ culture
- Saliva from a dental procedure
- Any other body fluid contaminated with visible blood
- Any body fluid, when it is impossible to tell which body fluid is which
### Standard Precautions: Protecting Yourself

Your employer has reviewed the tasks that put employees in your facility at risk of exposure to bloodborne pathogens.

To decrease this risk, your employer has put safeguards in place.

These safeguards include:
- Engineering controls
- Work practice controls
- Proper housekeeping
- Personal protective equipment (PPE)

Standard Precautions are an important basis for these safeguards.

These safeguards also should be documented in your facility’s Exposure Control Plan. Refer to the Plan for specific information on the safeguards in your facility.

The following screens provide an overview of safeguards against exposure.

![Image: 3005.JPG](image://3005.JPG)
Engineering Controls

Engineering controls are the first type of safeguard against bloodborne pathogen exposure.

These controls are devices with built-in safety features. These features minimize or eliminate the risk of exposure to bloodborne pathogens.

Examples include:
- Safety needles
- Sharps disposal boxes

![Image: 3006.jpg]
Work Practice Controls: Hand Hygiene

Work practice controls are the second type of safeguard against exposure. These controls are ways of doing your job, to protect against exposure.

Handwashing is a critical work practice control, and a critical part of Standard Precautions.

**Proper hand hygiene is the single most important way to prevent the spread of disease.**

To wash hands properly:
- Apply soap.
- Rub hands together for 15 seconds.
- Rinse with a stream of warm water.
- Dry with a paper towel.

Use a clean paper towel to turn off the faucet.
Hand Hygiene: When to Wash Wands

Hands should be washed:
- Before and after each work shift
- Before and after physical contact with each patient
- After handling contaminated items such as bedpans, dressings, or urinary drainage bags
- After removing gloves
- After using the toilet, blowing the nose, covering a sneeze, etc.
- Whenever hands become visibly dirty
- Before eating, drinking, or handling food
### Hand Hygiene: Alcohol-Based Hand Rubs

Alcohol-based hand rubs are an alternative to soap-and-water for hand hygiene.

**Alcohol rubs:**
- Give good protection against the spread of infection
- Are less drying to the skin than soap-and-water washing
- Are convenient (you do not need a hand-washing sink to use an alcohol rub)

Alcohol wipes are less effective than rubs. They should *not* be used.

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**You have two choices for routine hand hygiene in most cases:**

- Antimicrobial soap and water
- Alcohol-based hand rub
<table>
<thead>
<tr>
<th>Hand Hygiene: How &amp; When to Use an Alcohol Rub</th>
</tr>
</thead>
<tbody>
<tr>
<td>To use an alcohol rub:</td>
</tr>
<tr>
<td>• Apply enough rub to cover all surfaces of both hands.</td>
</tr>
<tr>
<td>• Rub hands until dry. Do not rinse or wipe dry.</td>
</tr>
<tr>
<td>You may use an alcohol rub almost any time hands should be washed (see previous screen). In fact, the CDC now recommends alcohol rubs for routine hand decontamination in most clinical situations.</td>
</tr>
<tr>
<td>An exception is when hands are visibly dirty. In that case, wash with soap and water.</td>
</tr>
</tbody>
</table>

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**When hands are visibly dirty, use soap and water.**
### Work Practice Controls: Sharps

Other work practice controls to prevent bloodborne pathogen exposure are:

- Dispose of sharps in proper containers
- Do not recap or bend needles

![](3011.jpg)
Work Practice Controls: Personal

Additional examples of work practice controls are:
- Do not eat or drink in contaminated areas.
- Do not apply makeup in areas where exposure could occur.
- Do not handle contact lenses in areas where exposure could occur.
- Do not store food in refrigerators with contaminated items.
A final example of a work practice control is to handle contaminated linen according to your facility's policy.

Your facility should have guidelines for handling contaminated linen without:

- Exposing your skin or mucous membranes
- Contaminating your clothing
- Transferring microbes to other patients or to the environment
Housekeeping Practices

<table>
<thead>
<tr>
<th>Good housekeeping practices also can help protect you against exposure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Keep a clean and sanitary workplace.</td>
</tr>
<tr>
<td>• Use proper disinfectants when cleaning contaminated areas or spills.</td>
</tr>
<tr>
<td>• Keep biohazardous waste separate from ordinary trash.</td>
</tr>
</tbody>
</table>
Personal Protective Equipment

Personal protective equipment (PPE) is special clothing or equipment worn to protect against a hazard.

Using proper PPE around blood and OPIM is another important part of Standard Precautions.

Examples of PPE include:
  • Gloves
  • Masks
  • Eye protection
  • Face shields
  • Shoe covers
  • Lab coats

If you need these items to do your job safely, your employer must:
  • Provide the items at no charge to you
  • Train you to use the items properly
# Personal Protective Equipment: Gloves

Wear **gloves** to touch:

- Blood
- Body fluids
- Secretions
- Excretions
- OPIM

![Image: 3016.JPG](IMAGE: 3016.JPG)
**Personal Protective Equipment: Face Protection**

To protect the face, you may use the following:
- **Mask**
- **Eye protection (goggles)**
- **Face shields**

These items shield the mucous membranes of the eyes, nose, and mouth.

Wear this type of PPE during tasks that may expose you to splashes or sprays of:
- **Blood**
- **Body fluids**
- **Secretions**
- **Excretions**
Personal Protective Equipment: Protective Clothing

**Protective clothing** includes:
- Gowns
- Hoods
- Surgical caps
- Shoe covers
- Lab coats

These items are used to protect skin and street clothes from contamination.

Wear protective clothing during tasks that may expose you to splashes and sprays of blood or OPIM.
**Barrier devices** include mouthpieces and pocket masks. These should be used when performing CPR.
Training in Protecting Yourself

Employers must provide training to all employees at risk of exposure to blood and OPIM.

This training should be:
- Provided to each at-risk employee when he or she starts work
- Repeated once a year
### Standard Precautions: New Additions

In 2007, the CDC updated their recommendations for Standard Precautions. These new additions focus on patient safety.

They include:
- **Respiratory hygiene/cough etiquette for staff, patients, and visitors**
- **Safe injection practices**
- **Use of a mask when inserting a catheter or performing a lumbar puncture**

Click on each for additional information.

- **Respiratory hygiene/ cough etiquette**
  During the 2003 SARS outbreak, the disease was transmitted by patients and their families in emergency rooms. To prevent this type of disease spread, the CDC added respiratory hygiene/cough etiquette recommendations to Standard Precautions.

- **Safe injection practices**
  Recently, the CDC investigated four large outbreaks of HBV and HCV in ambulatory care facilities. They found that these outbreaks could have been prevented if aseptic techniques were used to prepare and administer medications.

- **Use of a mask**
  The CDC now recommends that a face mask be worn when inserting a catheter or performing a lumbar puncture. This will help prevent the spread of infectious organisms from healthcare provider to the patient.
<table>
<thead>
<tr>
<th>Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>The single most important defense against the spread of disease is:</td>
</tr>
<tr>
<td>a. Using safety needles</td>
</tr>
<tr>
<td>b. Proper use of gloves</td>
</tr>
<tr>
<td>c. Proper hand hygiene</td>
</tr>
<tr>
<td>d. Not recapping needles</td>
</tr>
</tbody>
</table>

**MULTIPLE CHOICE INTERACTION**

Correct: C

Feedback for A: Not quite. Safety needles are an important engineering control to protect against bloodborne pathogen exposure. However, the single most important defense against the spread of disease is proper hand hygiene. The correct answer is C.

Feedback for B: Not quite. Gloves are an important type of PPE used to protect against bloodborne pathogen exposure. However, the single most important defense against the spread of disease is proper hand hygiene. The correct answer is C.

Feedback for C: Correct.

Feedback for D: Not quite. Not recapping needles is an important work practice control used to protect against bloodborne pathogen exposure. However, the single most important defense against the spread of disease is proper hand hygiene. The correct answer is C.
Gloves should be worn when drawing blood from:
- a. A patient who has AIDS
- b. A patient who is HIV-positive
- c. A patient who is documented as HBV-negative, HCV-negative, and HIV-negative
- d. Both A and B
- e. All of the above

<table>
<thead>
<tr>
<th>MULTIPLE CHOICE INTERACTION</th>
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</thead>
<tbody>
<tr>
<td>Correct: E</td>
</tr>
</tbody>
</table>

Feedback for A: Not quite. The correct answer is E. Gloves should be worn whenever there is a possibility of contact with patient blood. The patient’s diagnosis does not matter.

Feedback for B: Not quite. The correct answer is E. Gloves should be worn whenever there is a possibility of contact with patient blood. The patient’s diagnosis does not matter.

Feedback for C: Not quite. The correct answer is E. Gloves should be worn whenever there is a possibility of contact with patient blood. The patient’s diagnosis does not matter.

Feedback for D: Not quite. The correct answer is E. Gloves should be worn whenever there is a possibility of contact with patient blood. The patient’s diagnosis does not matter.

Feedback for E: Correct. Gloves should be worn whenever there is a possibility of contact with patient blood. The patient’s diagnosis does not matter.
Summary

You have completed the lesson on protecting yourself from exposure.

Remember:
- Standard Precautions should be used whenever you may have contact with patient blood or OPIM. This is true whether or not the patient has a diagnosed bloodborne disease.
- Safeguards against exposure to bloodborne pathogens include engineering controls, work practice controls, and use of PPE. Standard Precautions are the basis for these safeguards.
- Proper hand hygiene is a Standard Precaution. It is the single most important way to prevent the spread of infection.
# Objectives

Welcome to the lesson on what to do if you are exposed.

After completing this lesson, you should be able to:

- Identify what to do after an exposure to blood or OPIM
- Recognize what should happen during post-exposure follow-up

## FLASH ANIMATION

Lesson 4: What to Do if You AreExposed

- WIN
- Medical evaluation and follow-up
WIN

If you are exposed to blood or OPIM: WIN.

This stands for:
- **W**ash the exposed area immediately with soap and water.
- **I**dentify the source of the exposure.
- **N**otify your supervisor immediately.
## WIN: Take Action Quickly

Quick action can decrease the risk of infection after an exposure.

![Image: 4003.jpg]
### Post Exposure Follow-Up

If you are exposed, your employer must offer you post-exposure evaluation and follow-up care.

This follow-up is:
- Free
- Confidential

You will be referred to a licensed healthcare professional for a medical exam.

Any necessary lab tests will be ordered, at no cost to you.

![Image: 4004.jpg]
Post-Exposure Follow-Up: Documentation

Before your medical exam, your employer should:
- Document the route of exposure
- Document how the exposure occurred
- Identify and document the source patient (if allowed by state and local law)
- Test the source patient for HIV and HBV (if allowed by state and local law)

This documentation and results of the source patient’s tests must be provided to the healthcare professional who performs your medical exam.

Your blood also may be collected for HIV testing, if you give consent.
## Post-Exposure Follow-Up: Medical Evaluation & Care

Your medical evaluation and follow-up should address:
- The possibility of taking medication to help prevent infection
- How to prevent possible spread of infection to your close contacts
- Any specific symptoms that you report

After your evaluation, the healthcare professional will send a written report to your employer. This report will *not* include your diagnosis.

Your employer must give you a copy of this report within 15 days.

*In some cases, post exposure prophylaxis medications must be started shortly after exposure to be effective. Do not delay reporting of an exposure!*
After an exposure: WIN. What does WIN stand for?

A. Write a report. Identify the patient. Note the patient’s condition.

B. Wash the exposed area. Identify the source. Notify your supervisor.

C. Wipe the exposed area. Ice the area immediately. Notify your doctor.

D. Wrap the exposed area. Identify the exposed area. Notify the patient’s doctor.

MULTIPLE CHOICE INTERACTION

[CORRECT ANSWER: B]

[RESPONSE FOR CHOICE A: Incorrect. The correct answer is B. Wash the exposed area. Identify the source. Notify your supervisor.]

[RESPONSE FOR CHOICE B: Correct.]

[RESPONSE FOR CHOICE C: Incorrect. The correct answer is B. Wash the exposed area. Identify the source. Notify your supervisor.]

[RESPONSE FOR CHOICE D: Incorrect. The correct answer is B. Wash the exposed area. Identify the source. Notify your supervisor.]
If you are exposed to blood or OPIM, your employer must offer:

A. Free lab testing
B. Free medical evaluation
C. Medication to help prevent infection
D. All of the above

MULTIPLE CHOICE INTERACTION

[CORRECT ANSWER: D]

[RESPONSE FOR CHOICE A: Not quite. The best answer is D. Your employer must offer free follow-up. This includes a free medical exam. It also includes any necessary lab testing. Finally, it includes medication to help prevent infection (if you and your doctor decide that you should take medication).]

[RESPONSE FOR CHOICE B: Not quite. The best answer is D. Your employer must offer free follow-up. This includes a free medical exam. It also includes any necessary lab testing. Finally, it includes medication to help prevent infection (if you and your doctor decide that you should take medication).]

[RESPONSE FOR CHOICE C: Not quite. The best answer is D. Your employer must offer free follow-up. This includes a free medical exam. It also includes any necessary lab testing. Finally, it includes medication to help prevent infection (if you and your doctor decide that you should take medication).]

[RESPONSE FOR CHOICE D: Correct. Your employer must offer free follow-up. This includes a free medical exam. It also includes any necessary lab testing. Finally, it includes medication to help prevent infection (if you and your doctor decide that you should take medication).]
Summary

You have completed the lesson on what to do after an exposure.

Remember:
- If you are exposed to blood or OPIM: WIN. Wash the area. Identify the source. Notify your supervisor.
- After an exposure, your employer must offer free follow-up evaluation and care.
GLOSSARY

other potentially infectious material (OPIM): fluids, tissues, and other biological materials that could contain and transmit bloodborne pathogens

organism: an individual form of life

transmission: the act of spreading or passing on, especially an infection

bacterium: a type of single-celled microorganism

virus: an acellular disease-causing parasite –

personal protective equipment: special equipment provided by an employer to protect workers from on-the-job hazards
Pre-Assessment

1. Which of the following is an important bloodborne pathogen?
   a. Hepatitis B virus
   b. Influenza A virus
   c. Tuberculosis bacterium
   d. Streptococcus bacterium

   Correct: Hepatitis B virus
   Rationale: HBV is bloodborne.

2. Which of the following is an important bloodborne pathogen?
   a. Rhinovirus
   b. Varicella-zoster virus
   c. Respiratory syncytial virus
   d. Human immunodeficiency virus

   Correct: Human immunodeficiency virus
   Rationale: HIV is bloodborne.

3. Bloodborne diseases are most commonly spread through mother-to-child transmission, sharing drug needles, and:
   a. Sneeze droplets
   b. Public toilet seats
   c. Unprotected sexual contact
   d. Needle-stick injury in the healthcare setting

   Correct: Unprotected sex
   Rationale: The three most important modes of transmission for bloodborne diseases are unprotected sex, sharing drug needles, and mother-to-child transmission.

4. Bloodborne diseases can be spread in the healthcare setting. This is most likely to happen if:
a. Patient blood touches the healthcare worker's mucous membranes.
b. The healthcare worker has direct contact with a patient's intact skin.
c. The healthcare worker is not wearing a mask when a patient sneezes.
d. Patient sweat touches the healthcare worker's hand when taking a pulse.

Correct: Patient blood touches the healthcare worker's mucous membranes.
Rationale: If infected blood touches mucous membranes, transmission of a bloodborne pathogen can occur.

5. The safeguards against exposure to bloodborne pathogens in the healthcare setting are:
   a. Droplet Precautions
   b. Contact Precautions
   c. Airborne Precautions
   d. Standard Precautions

Correct: Standard Precautions
Rationale: Standard Precautions are used to guard against exposure to blood and OPIM.

6. Which of the following correctly describes a work practice control used to safeguard against exposure to bloodborne pathogens?
   a. Dirty needles should be recapped for disposal in waste containers.
   b. Dirty needles should be snapped off for disposal in waste containers.
   c. Healthcare workers should wash or decontaminate their hands before and after each patient contact.
   d. Healthcare workers should use alcohol wipes to decontaminate their hands in routine clinical situations.

Correct: Healthcare workers should wash or decontaminate their hands before and after each patient contact.
Rationale: Hand hygiene is a very important part of Standard Precautions. Hands should be washed or decontaminated with an alcohol rub. Alcohol wipes are not considered effective for routine hand hygiene.

7. Which of the following is a VIOLATION of a work practice control used to safeguard against exposure to bloodborne pathogens?
   a. Eating lunch in a hospital cafeteria
b. Eating lunch in a designated break room
   c. Storing food in a refrigerator designated for food
   d. Storing food in a refrigerator with contaminated items

Correct: Storing food in a refrigerator with contaminated items
Rationale: Food should never be stored in a refrigerator that contains blood samples or OPIM.

8. Which of the following is an engineering control used to safeguard against exposure to bloodborne pathogens?
   a. Sharp needles
   b. Safety needles
   c. Reusable needles
   d. Uncapped needles

Correct: Safety needles
Rationale: Safety needles are an engineering control

9. If you are exposed to a patient's blood, it is important to follow the acronym:
   a. WIN
   b. PASS
   c. RACE
   d. SCUBA

Correct: WIN
Rationale: If exposed to blood, WIN. Wash the exposed area with soap and water. Identify the source of exposure. Notify your supervisor.

10. If you are exposed to a bloodborne pathogen while at work, your employer must offer you post-exposure evaluation and follow-up. Which of the following statements correctly describes one aspect of this follow-up?
    a. Your employer will receive the results of any lab tests or other diagnostic tests.
b. You must pay for the follow-up if you want your diagnosis to remain confidential.
c. You should find out about the possibility of taking medication to help prevent infection.
d. Your employer's only responsibility is to refer you to a healthcare provider for medical evaluation.

Correct: You should find out about the possibility of taking medication to help prevent infection.
Rationale: During post-exposure follow-up, you should find out about your options for post-exposure prophylaxis.
1. Which of the following is an important bloodborne pathogen?
   a. Adenovirus
   b. Smallpox virus
   c. Parvovirus B19
   d. Hepatitis C virus

Correct: Hepatitis C virus
Rationale: HCV is bloodborne.

2. Which of the following is an important bloodborne pathogen?
   a. Hantavirus
   b. Enterococcus bacterium
   c. Human immunodeficiency virus
   d. Haemophilus influenzae bacterium

Correct: Human immunodeficiency virus
Rationale: HIV is bloodborne.

3. Bloodborne diseases are most commonly spread through mother-to-child transmission, unprotected sex, and:
   a. Sharing drug needles
   b. Contaminated water supplies
   c. Eating food prepared by an infected individual
   d. Blood splashes or sprays in the healthcare setting

Correct: Sharing drug needles
Rationale: The three most important modes of transmission for bloodborne diseases are unprotected sex, sharing drug needles, and mother-to-child transmission.
4. Bloodborne diseases can be spread in the healthcare setting. This is most likely to happen if a healthcare worker:
   a. Has a needle-stick injury
   b. Fails to use a personal respirator
   c. Is in the room when a sick patient sneezes
   d. Does not wear gloves when taking a patient's pulse

Correct: Has a needle-stick injury
Rationale: A healthcare worker may be exposed to bloodborne pathogens if he or she has a needle-stick injury.

5. Which of the following best describes a safeguard against exposure to bloodborne pathogens in the healthcare setting?
   a. Use Droplet Precautions in the care of all patients.
   b. Use Standard Precautions in the care of all patients.
   c. Use Droplet Precautions only in the care of patients known or suspected to have a bloodborne disease.
   d. Use Standard Precautions only in the care of patients known or suspected to have a bloodborne disease.

Correct: Use Standard Precautions in the care of all patients.
Rationale: Standard Precautions are used in the care of all patients to guard against exposure to blood or OPIM.

6. Which of the following is a work practice control used to safeguard against exposure to bloodborne pathogens?
   a. Recapping needles after use
   b. Snapping needles off after use
   c. Use of alcohol rubs for routine hand hygiene
   d. Use of alcohol wipes for routine hand hygiene

Correct: Use of alcohol rubs for routine hand hygiene
Rationale: Proper hand hygiene is a key part of Standard Precautions. Alcohol rubs are recommended for routine hand hygiene in most clinical situations.
7. Which of the following is a VIOLATION of a work practice control used to safeguard against exposure to bloodborne pathogens?
   a. A healthcare worker eats lunch in a designated staff break room.
   b. A healthcare worker cleans up a contaminated spill using a disinfectant.
   c. A healthcare worker applies makeup in a lab where blood samples are tested.
   d. A healthcare worker disposes of biohazardous waste in a designated container.

Correct: A healthcare worker applies makeup in a lab where blood samples are tested.
Rationale: Healthcare workers should not eat, drink, smoke cigarettes, or apply makeup in areas where contamination could occur.

8. Which of the following describes proper use of PPE to safeguard against exposure to bloodborne pathogens?
   a. Wear gloves when drawing blood.
   b. Avoid use of a mask during invasive procedures.
   c. If a surgical mask is worn during invasive procedures, additional eye protection is not necessary.
   d. If hands are washed immediately after drawing blood, it is not necessary to wear gloves to draw the blood.

Correct: Wear gloves when drawing blood.
Rationale: Gloves should be worn whenever there is a risk of contact with blood or OPIM.

9. If you are exposed to a patient's blood, you should IMMEDIATELY:
   a. Wash the exposed area with soap and water
   b. Isolate a blood sample from the exposed area
   c. Check the patient's chart to see if he or she has a bloodborne disease
   d. Ask your supervisor for permission to test the patient for bloodborne diseases

Correct: Wash the exposed area with soap and water.
Rationale: If exposed to patient's blood, WIN. Wash the exposed area immediately. Identify the exposure source. Notify your supervisor.
10. If you are exposed to a bloodborne pathogen while at work, your employer must offer you post-exposure evaluation and follow-up. Which of the following statements correctly describes what will happen during this post-exposure follow-up?
   a. You will have to pay for any necessary lab tests.
   b. You will be required to give a blood sample for HIV testing.
   c. Your employer will receive a written report including your diagnosis.
   d. Your employer will identify and document the source patient if allowed by law.

Correct: Your employer will identify and document the source patient if allowed by law.
Rationale: If you are exposed to a bloodborne pathogen while at work, your employer is responsible for identifying and documenting the source patient (if permitted under state and local law).