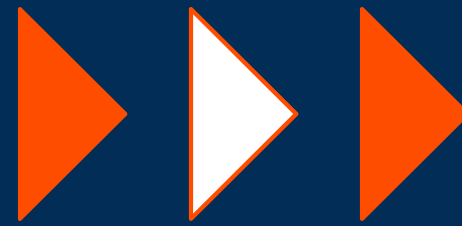




WESTERN CONNECTICUT
STATE UNIVERSITY



BLOODBORNE PATHOGENS (BBP)

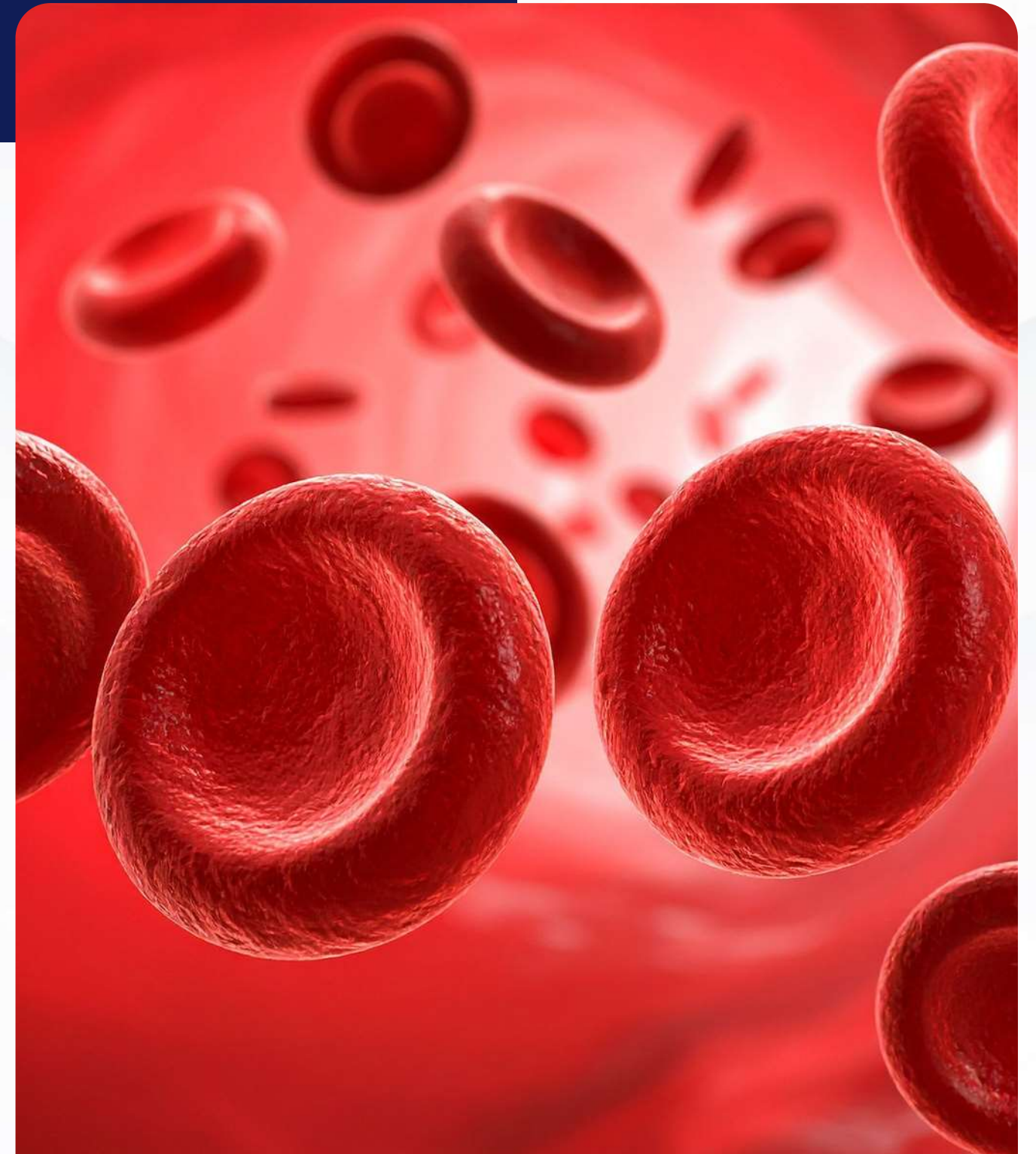


SECTION

01. Identifying Potential Sources and Transmission Routes

02. Preventing Exposure

03. Responding to a Potential Exposure



Section 01. Identifying Potential Sources and Transmission Routes

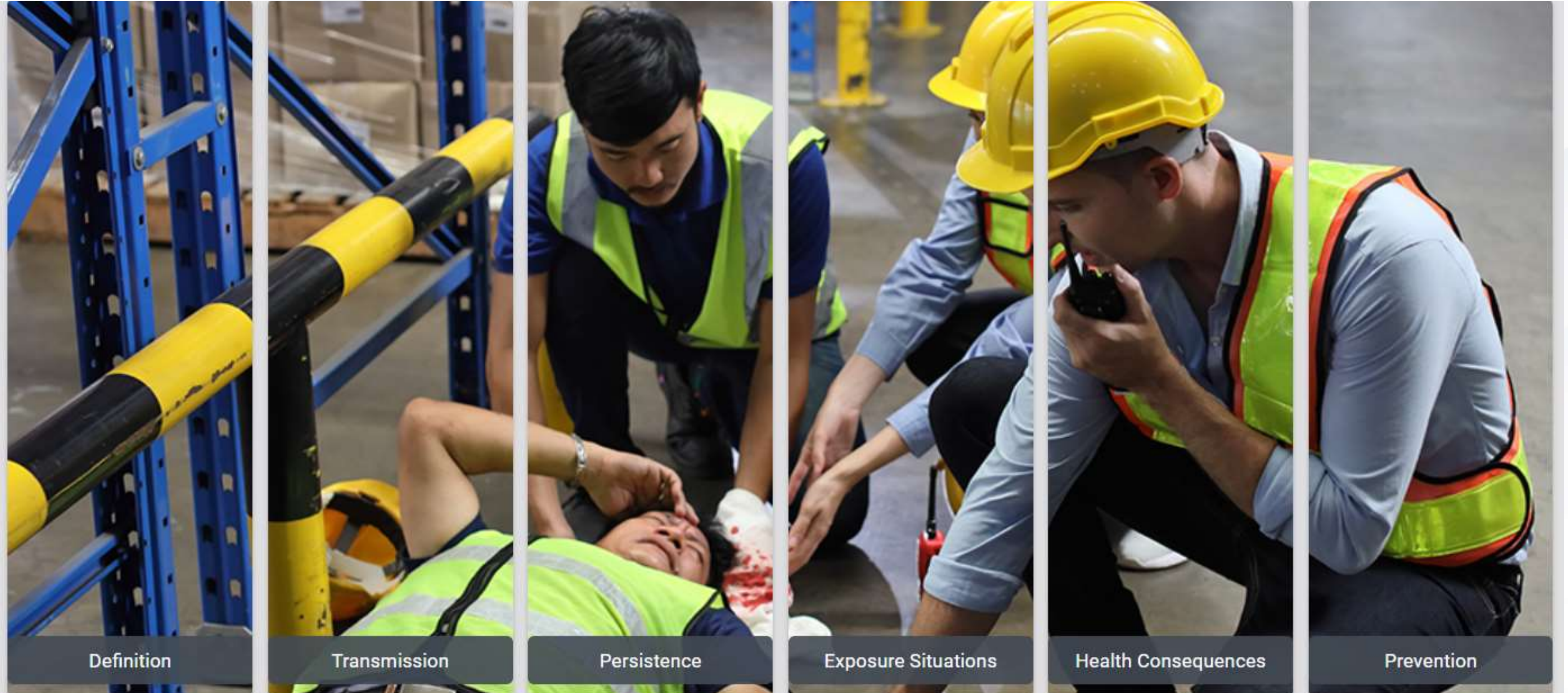
What Happened?



just letting you know that we're checking out that hissing noise that was called in.

Bloodborne Pathogen Basics

Making contact with a bloodborne pathogen may expose you to disease.



Definition

Transmission

Persistence

Exposure Situations

Health Consequences

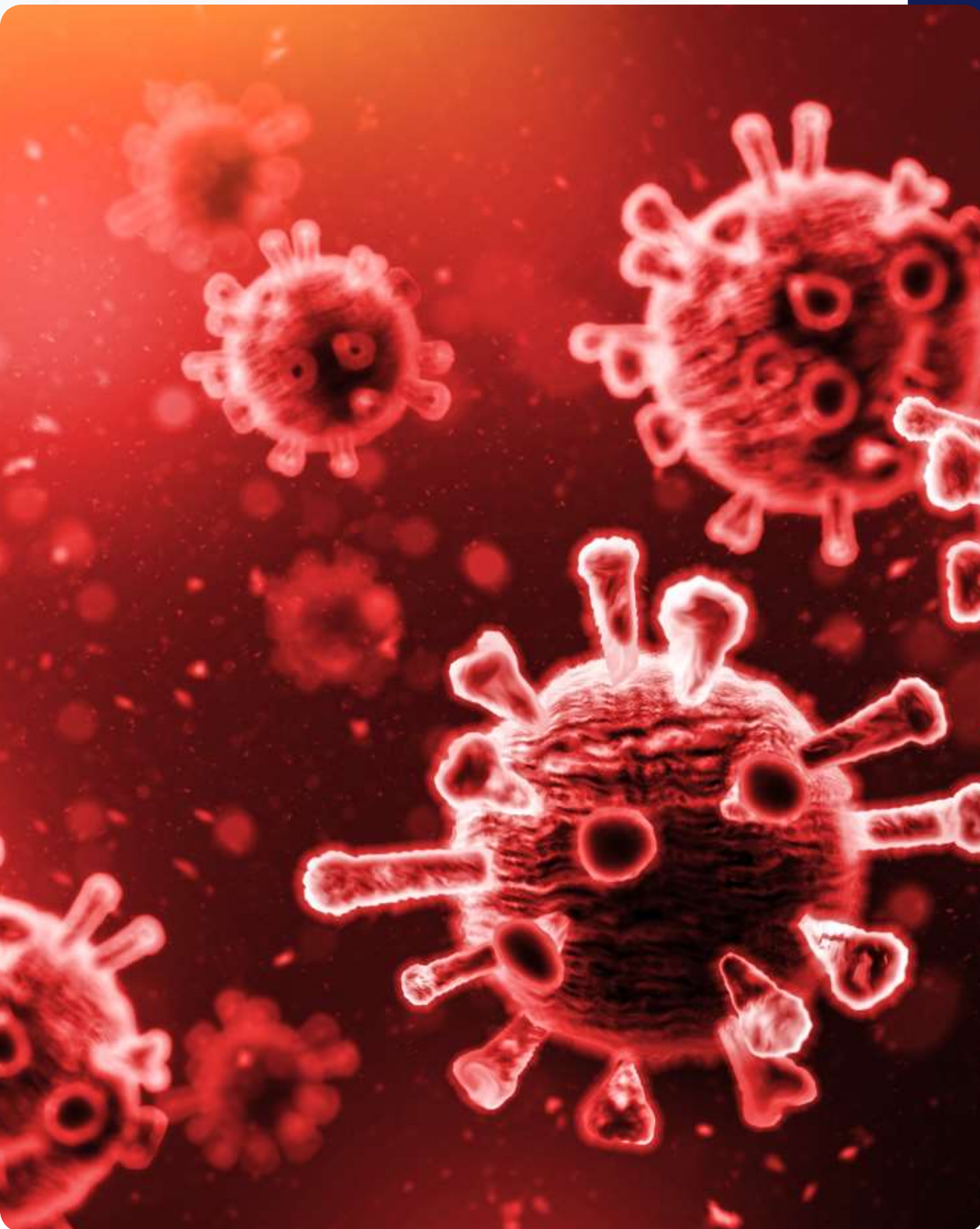
Prevention

DEFINITION

Blood borne pathogens, sometimes called BBPs, are infectious microorganisms carried in human blood and other potentially infectious materials (OPIMs), that can cause disease.

Bloodborne pathogens may be:

- Viral, such as hepatitis B or C
- Bacterial, such as syphilis
- Fungal, such as thrush





TRANSMISSION

Bloodborne pathogens are transmitted when infected blood, body fluids, or other materials make contact with broken skin or one of the body's mucous membranes, such as the eyes, nose, or mouth.

Anyone can be infected by bloodborne pathogens through a single, direct exposure. A person may unknowingly be infected and infect others.



PERSISTENCE

Bloodborne pathogens can survive outside the body for varying periods of time, depending on the type of pathogen and environmental conditions.

Contaminated surfaces can pose a risk if not properly cleaned and disinfected.



EXPOSURE SITUATIONS

Incidents that could cause possible bloodborne pathogen exposures include:

- An employee providing first aid for a coworker's cut or scrape
- An on-site first responder providing an emergency injection
- A worker handling contaminated materials, such as biological waste
- Two workers moving equipment and materials with cut, bare hands



HEALTH CONSEQUENCES

Blood borne pathogens can cause severe, and sometimes life-threatening, infections. These infections can have long-term health implications and may require lifelong management.

While medical advancements have improved the treatment options for some BBPs, such as HIV, there is no definitive cure for these infections.



PREVENTION

Exposure prevention is extremely important to avoid transmissible diseases. If exposed, early intervention and management of potentially infectious diseases can mitigate the impact of BBPs.

Potential Sources of Infection



make contact with another person's broken skin.

POTENTIAL TRANSMISSION ROUTES

Broken Skin



Puncture



Mucous Membrane



Broken Skin



Broken skin is a route for BBP transmission through direct contact with infected blood or OPIMs.

Broken skin might include:

- An open sore, cut, or abrasion
- Acne
- Chapped skin or skin damaged by burns or blisters

Note: BBPs cannot be transmitted through unbroken skin.

Puncture



One of the most common transmission routes of a BBP is a skin puncture from a sharp object, such as a cutting tool, needle, or jagged piece of equipment that has contaminated blood on it.

Mucous Membrane



A mucous membrane, such as a person's eyes, nose, or mouth, can be a transmission route for contaminated blood or body fluid.

Note: Although the mouth is a mucous membrane, eating food prepared by an infected person does not transmit BBPs.

Preventing Exposure

Watch Out!



Shared Responsibilities



Control Plan



Training



Vaccines



Universal Precautions



Controls



Response



Additional Requirements



EXPOSURE CONTROL PLAN

Your employer must establish, communicate, and implement an exposure control plan that outlines:

- Exposure risks by job classification and task
- Appropriate exposure controls
- Implementation methods

Employers in some states must make their exposure control plan available to all employees and may need to evaluate their exposure control plan annually.

It is your responsibility to know and follow the policies and procedures outlined in your facility's BBP exposure control plan.



TRAINING

Your employer must provide training to each worker who is at risk of an occupational BBP exposure before their first assignment and every year after that.

The training should address:

- General information about BBPs
- Exposure risks
- Potential transmission routes
- Exposure prevention controls and techniques
- Incident response and reporting protocols

It is your responsibility to complete any training programs your employer requires and to apply the information you learn on the job.



VACCINES

Your employer must make the hepatitis B vaccine available to all workers who are at risk of occupational exposure to BBPs. They should offer the vaccine after you have received the required BBPs training and within 10 days of your initial assignment.

If your job puts you at risk of occupational exposure, getting the hepatitis B vaccine, and any other vaccines your employer makes available to you, will protect you from bloodborne illnesses. Although you may decline the vaccines, you should know the risks you are assuming and that you can get it later if you change your mind.



UNIVERSAL PRECAUTIONS

Your employer must communicate and implement universal precautions, which are standard safety practices to protect against bloodborne disease transmission. Universal precautions are an approach to infection control that treats all human blood and certain human body fluids as if they are infectious and includes specific actions to keep yourself safe.

You need to comply with the universal precautions that your employer has communicated and implemented.



CONTROLS

Your employer must put in place various types of controls to protect employees from BBP exposures.

These include:

- Engineering controls
- Administrative controls (e.g., operating procedures and warning labels)
- Personal protective equipment (PPE)

You must use the engineering controls that your employer has made available to you, follow required operating procedures, pay attention to BBP-related warning labels, and wear the required PPE to protect yourself and others.



POTENTIAL EXPOSURE RESPONSE

Your employer must provide the procedures, facilities, and supplies you need to respond to a potential BBP exposure.

This includes, establishing and communicating the procedure you should follow to report a potential exposure to your employer.



ADDITIONAL REQUIREMENTS

You and your employer may need to comply with additional precautions as required by your industry and region. Some states and provinces have established their own, specific requirements regarding BBP training, vaccinations, post-exposure reporting, and follow-up.

CONTROL TYPES

Engineering Controls



Warning Labels



Safe Work Practices



PPE





ENGINEERING CONTROLS

Engineering controls are equipment and safety devices designed to isolate, reduce, or eliminate hazards.

In some regions, additional safety measures - such as needle safety devices or sharps injury prevention mechanisms - may be required for enhanced protection.



WARNING LABELS

Warning labels, such as biohazard labels, are affixed to containers, machines, or devices to communicate to you when a BBP hazard may be present.

BBP-related warning labels may be on:

- Containers of regulated waste or reusable sharps
- Containers used to store, transport, or ship blood or OPIMs
- Contaminated equipment that is being shipped or serviced
- Bags or containers of contaminated laundry



SAFE WORK PRACTICES

Safe work practices reduce the possibility of hazardous exposure with steps to perform a task safely.

These practices defend against the transmission of BBPs and include those for:

- Cleaning potentially contaminated work surfaces, machinery, and tools
- Handling and disposing of biohazardous waste
- Handling potentially contaminated laundry



PPE

PERSONAL PROTECTIVE EQUIPMENT

PPE is protective clothing or equipment that is designed to protect you from injury or infection.

Examples of PPE include:

- Gloves
- Eye protection
- Disposable mouthpieces used for emergency, mouth-to-mouth resuscitation

PPE protects against BBPs only if, under normal use, it does not permit blood or other potentially infectious materials (OPIMs) to pass through it.

UNIVERSAL PRECAUTIONS

Universal precautions are a standard approach to infection control in which all human blood and certain human body fluids are treated as if they are infectious.



Hand Washing



Additional PPE



Gloves



Sharps Handling



Disinfecting



Waste Disposal



HAND WASHING

Wash your hands frequently and thoroughly throughout your workday, especially after contact with blood, body fluids, or contaminated surfaces.

To wash your hands:

- Soap and lather your hands for at least 10 seconds
- Wash and scrub under your fingernails and cuticles with a small brush for at least 20 seconds
- Rinse and dry your hands thoroughly



GLOVES

Wear surgical-quality, disposable vinyl, or nitrile gloves whenever you may be at risk of exposure to blood, potentially contaminated body fluids, or other potentially contaminated materials.

After removing the gloves, wash your hands thoroughly with soap and warm water.

Change gloves after each task or exposure and dispose of used gloves in a biological waste container.



ADDITIONAL PPE

In addition to gloves, you may need to wear other personal protective equipment (PPE) based on the situation.

Wear protective eyeglasses and a mask when blood or body fluids are likely to splash into your eyes, nose, or mouth.

If you need to perform emergency mouth-to-mouth resuscitation, utilize a disposable mouthpiece or other resuscitation device.

SHARPS HANDLING

Make a plan for how you will safely handle and dispose of any sharps before beginning your work. If the sharp has safety features, activate them before use. Properly handle hypodermic needles and do not break, bend, or recap them.

Dispose of needles in special puncture-resistant containers designed for that purpose and do not attempt to remove contaminated needles or other sharps from the container.



DISINFECTING

When disinfecting surfaces:

- Wear gloves
- Use disposable towels
- Apply any other appropriate cleaning techniques that will protect against direct contact with blood or body fluids



WASTE DISPOSAL

Dispose of potentially contaminated waste in a puncture-resistant container lined with a leak-proof plastic bag, and make sure the container prominently displays a biohazardous waste symbol.

When handling contaminated waste, wear puncture-resistant gloves and keep the waste away from your body.

When emptying contaminated waste, hold only the outside of the container. Never reach into the container, load it beyond its capacity, or attempt to compact its contents with your hands.

Never mix biohazardous waste with regular trash.



PRECAUTIONS DURING AN EMERGENCY

- Use PPE
- Clean Up
- Remove PPE
- Dispose Safely
- Wash Up



USE PPE

When providing first aid or CPR:

- Protect yourself first and then treat the victim
- Wear disposable vinyl or nitrile gloves and any other appropriate protective equipment, such as eye and face protection
- When performing CPR, always use a disposable mouthpiece with a one-way valve



CLEAN UP

Contain spills and accidental discharges or potentially contaminated material immediately. Clean up and disinfect the area using disposable materials, then dispose of the cleaning materials as biohazardous waste.

To clean up contaminated broken glass, use tongs, forceps, or a brush and dustpan. Never pick the broken glass up with your hands, even if your hands are protected by gloves.

Handle all trash as if it contains sharps or other infectious items.



REMOVE PPE

Once you have addressed the emergency and cleaned up any spills or accidental discharges, carefully remove any potentially contaminated PPE, turning each item inside out as you remove it to contain contaminants.

To remove your gloves:

- Pinch the outside of one glove a few inches from the wrist
- Peel the glove off your hand (it will be inside out)
- Hold the inside-out glove with your gloved hand
- With your gloveless hand, slide your fingers under the wrist of the glove and peel it off without touching its outside surface



DISPOSE SAFELY

Dispose of all potentially infectious clothing, gloves, PPE, cleaning materials, and other items in closeable, biological hazard containers or bags that are marked with a biohazard label.

WASH UP

After disposing of used PPE and other potentially infectious items, wash your hands and other affected parts of your body with soap and warm water and vigorously scrub all areas to remove any potentially infectious contamination.



RESPONDING TO A POTENTIAL EXPOSURE



What Now?



Initial Response to a Potential Exposure



If you believe you may have been exposed to bloodborne pathogens,

FOLLOW-UP ACTIONS

After you report a potential BBP exposure, your employer must make a medical evaluation and follow-up care available to you and report the incident.

Medical Evaluation

Post-Exposure Follow-Up

Post-Exposure Transmission Protection

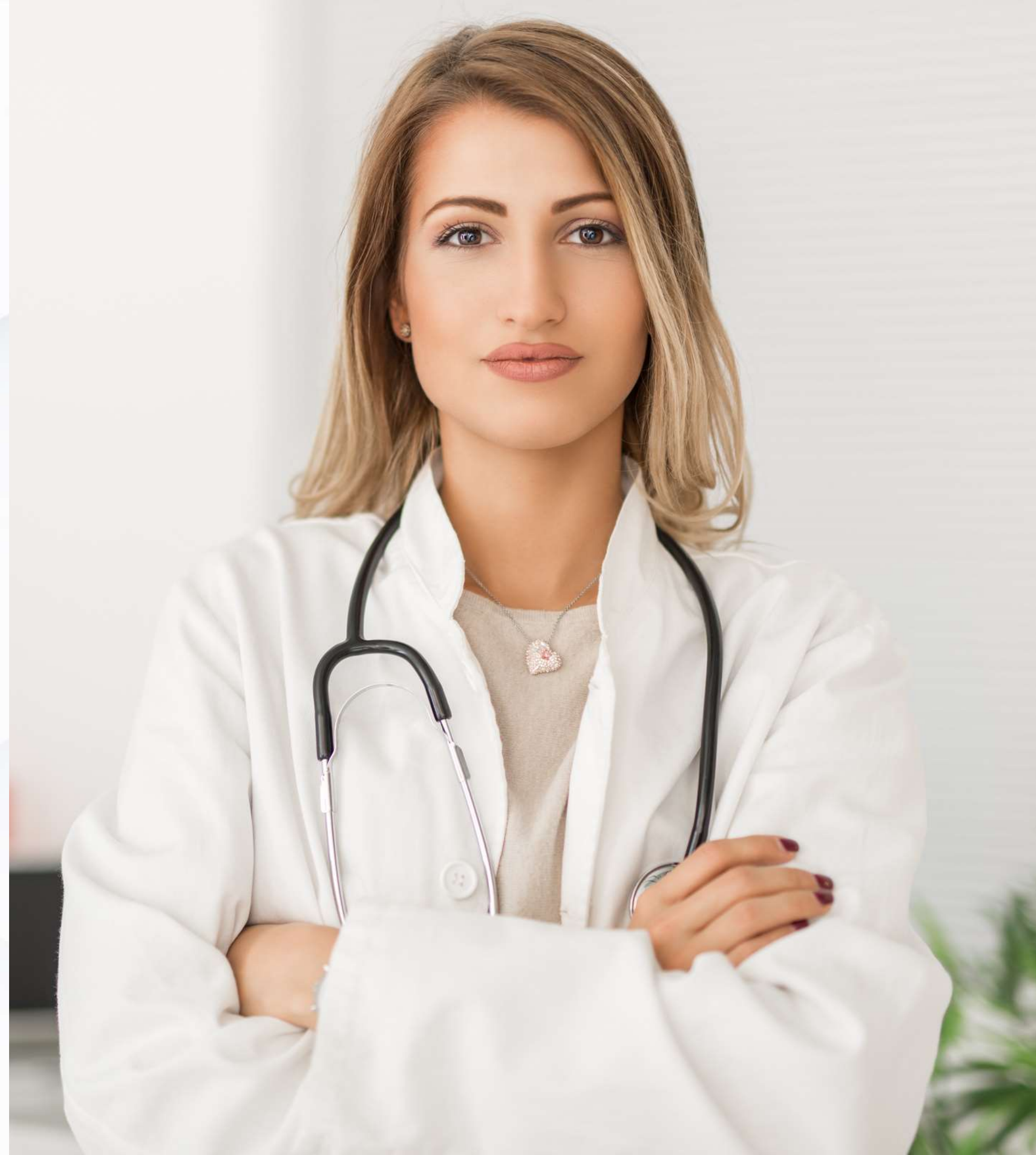
Evaluation of Reported Illnesses

Required Reporting

Medical Evaluation

During the evaluation, the medical professional will document the exposure incident, including when the potential exposure occurred. If the potential source of infection is known, that individual will be evaluated and tested separately.

This testing, and any preventive or proactive treatment for infectious disease, will be completed according to applicable healthcare privacy and occupational safety and health laws.



Post-Exposure Follow-Up

During a follow-up appointment, a healthcare professional will provide you with the results of all your tests and an interpretation of the test results, as well as counsel you concerning your infectious status.



Post-Exposure Transmission Protection

If needed, your healthcare provider will treat you according to current medical guidelines. Their approach will follow established medical practices and local health regulations.

You may need to return for follow-up visits, which could include blood tests, vaccinations, or monitoring how well any prescribed medications are working.



Evaluation of Reported Illnesses

The healthcare professional will also evaluate any reported illnesses you experience post-exposure to determine if the symptoms may be related to a bloodborne infection.

These post-exposure evaluations ensure that you get the benefit of early medical evaluation, treatment, and transmission prevention in a timely manner.



Required Reporting

If a worker tests positive for a bloodborne illness and receives treatment, and the employer determines the exposure happened at work, the case must be recorded in accordance with occupational health and safety regulations.

Needlestick or Sharp Injuries:

- Record if contaminated with blood or OPIM
- Record must include the date and time, description of the incident, and the type & brand of sharp
- Recorded in an Injury log or a Sharps Injury Log
- Must be logged in a way that protects the injured employee's confidentiality



Bloodborne Pathogen Safety Video



CONGRATULATIONS!
**YOU HAVE COMPLETED ALL
REQUIREMENTS FOR
BLOODBORNE PATHOGENS
(BBP) TRAINING.**

