



BLOODBORNE PATHOGENS TRAINING

for Faculty, Staff, Instructors and Students

DePaul University
School of Nursing
2020-2021
Academic year

WELCOME TO BBP TRAINING

- Your job is helping others. But sometimes doing your job could put your own health at risk. One such risk is exposure to bloodborne pathogens. Unprotected exposure could make you seriously sick.
- Fortunately, your chance of being exposed to bloodborne pathogens on the job, at school or in your clinical experience is small. But keeping that risk to an absolute minimum is important to us all. So this is an extremely important training session.

The main objective of this training is to help you avoid harmful exposure to bloodborne pathogens.

At the end of this training you will be able to:

- Identify risks of exposure;
- Understand the requirements of DePaul' s exposure control plan and OSHA regulations;
- Prevent exposure by taking proper precautions; and
- Take effective action in the event of an exposure.

What You Need to Know

- Risks of exposure and means of transmission
- OSHA requirements
- Exposure control plan
- Universal precautions and other exposure control measures
- What to do in the event of a direct exposure

Understanding the Risks

Pathogens are disease-producing viruses or bacteria. You can't see these tiny microorganisms with the naked eye, but they can make you very sick, or even kill you.

- Bloodborne pathogens, as their name implies, are carried in the blood of infected people. But they may also be found in other bodily fluids if there is even a little blood present in those fluids.
- Potentially infectious bodily fluids include amniotic, cerebrospinal, peritoneal, pleural, pericardial, and synovial fluids. Bloodborne pathogens may also be found in urine and vomit if they contain blood. And they can be carried in semen and vaginal secretions as well.

Understanding the Risks

- Bloodborne pathogens may be found in very low quantities in saliva and tears, although contact with saliva and tears has not been shown to result in transmission of these microorganisms.
- Bloodborne pathogens have not been found in sweat.
- They may, however, be present in unfixed tissue samples and organs as well as in laboratory cell cultures.
- They may also be found on materials such as sheets, towels, or bandages contaminated with blood and bodily fluids.



HIV

Probably the most well-known bloodborne pathogen is HIV, or human immunodeficiency virus.

- HIV is the virus that leads to AIDS, or acquired immunodeficiency syndrome. A person can carry HIV for many years and not have symptoms until it turns into full-blown AIDS.
- HIV attacks a person's immune system, which makes it difficult for the body to fight off disease.
- Scientists and medical authorities agree that HIV does not survive well outside the body. Drying HIV-infected blood or other bodily fluids reduces the risk of transmission to nearly zero.

HIV Signs & Symptoms

- Symptoms include fever, loss of appetite, weight loss, chronic fatigue, and skin rashes and lesions. However, some people who carry the virus have no symptoms.
- In later stages of the disease, victims can develop unusual types of cancer or serious infections, including pneumonia, that the body can no longer fight off.

Hepatitis B

Another bloodborne pathogen of concern in a healthcare facility is hepatitis B virus.

- Hepatitis B, like HIV, is carried in blood and bodily fluids.
- Untreated infection with hepatitis B can lead to chronic liver disease, liver cancer, and death.
- Hepatitis B can survive for at least one week in dried blood.
- Symptoms include fatigue, loss of appetite, intermittent nausea, abdominal pain, vomiting, and jaundice.
- The vaccine series is available to help prevent infection.

Hepatitis B Vaccinations

Although there is no vaccine that protects you against all bloodborne pathogens, there is a very effective vaccine for hepatitis B.

- The three vaccine series has been used for a long time and has been found to be safe and effective.
- We offer the vaccine to all potentially exposed employees in our facility.
- The vaccination is free if you are an employee, if you are a student you must cover the cost.
- If you are an employee you may decline to have a vaccination, you will be asked to sign a form that states that you have waived the opportunity to receive the free vaccination.
 - This is required by OSHA regulations.
 - Even after you decline and sign the form, if you change your mind, you can receive the vaccination at a later date.

Hepatitis C

- Millions of Americans have been infected with hepatitis C. While hepatitis C continues to be a common chronic bloodborne infection in the United States, in recent years, there has been a considerable decline in new cases.
- Most cases in the healthcare field are the result of needlesticks.
- People who are infected with hepatitis C may not even be aware of it because they may not feel or show signs of illness. In fact as many as 80 percent of victims have no symptoms. It can sometimes take decades before symptoms are recognized.



Hepatitis C Signs & Symptoms

- Hepatitis C can lead to chronic liver disease and death. Liver disease occurs in approximately 70 percent of infected people and claims thousands of lives each year.
- Symptoms, when they do appear, are similar to hepatitis B—fatigue, loss of appetite, nausea and vomiting, abdominal pain, and jaundice.

Treatment

- Although there are some drugs for treating hepatitis C that are quite effective, there is no vaccine, like there is for hepatitis B.

Workplace Transmission

Workplace transmission of bloodborne pathogens can occur in a number of different ways. It is important to note first, however, that transmission can occur in ways not associated with work, such as by unprotected sexual contact with an infected person or drug use with unclean needles.

- At work, you could be infected by getting an infected person's blood or bodily fluids on your skin.
 - Even then, you may not be infected because your healthy skin is usually an excellent barrier to infection.
- Transmission can also occur through direct contact with materials contaminated with infected blood or bodily fluids.
 - For example, a towel contaminated with an infected patient's blood.
- You could also be exposed to bloodborne pathogens if a contaminated sharp, such as a needle or broken glass penetrates your skin.



Workplace Transmission

- Although your skin normally acts as an effective barrier to infection, workplace transmission of bloodborne pathogens could occur through contact with non-intact skin—for example, through cuts, abrasions, hangnails, dermatitis, or acne.
- Contaminated blood or bodily fluids could also enter your body through mucous membranes in your eyes, nose, and mouth—for example, if blood is splashed in your unprotected eyes or if you wiped your nose with a contaminated glove.
- Bloodborne pathogens are not transmitted by coughing or sneezing, by touching an infected person, or by using the same equipment, materials, toilets, showers, or water fountains as an infected person. Nor, as we said, is it transmitted through sweat.
- Think about situations at school or in your clinical environment that could lead to an exposure to bloodborne pathogens like HIV, hepatitis B, or hepatitis C.

OSHA Requirements

OSHA, the federal government agency that regulates workplace safety and health, requires healthcare facilities to take a number of important steps to prevent exposure to bloodborne pathogens. For example:

- OSHA's Bloodborne Pathogens Standard provides a complete set of rules designed to protect you and your co-workers from infection.
- The Standard requires DePaul University to have a written exposure control plan.
- The regulations also require DePaul to identify hazards and develop and implement effective protective measures.
- OSHA requires DePaul to train you to recognize risks and take proper precautions and require you to use personal protective equipment that has been proven effective in preventing exposure to bloodborne pathogens.

Exposure Control Plan

OSHA requires DePaul to have a written exposure control plan for bloodborne pathogens. There's some important information about our plan that you should know. For example:

- The plan must be reviewed and updated annually, or whenever necessary to reflect new or revised tasks and procedures that affect exposure risks.
- The plan must also be updated to reflect changes in technology designed to reduce or eliminate risks.
- We are also required to consider and implement the use of safer medical devices designed to eliminate or minimize exposure, and we have to document this in the exposure control plan.
- Also, the Bloodborne Pathogens Standard also requires DePaul to ask you and your co-workers to help identify, evaluate, and select effective engineering and work practice controls to prevent exposures. And this, too, must be documented in the plan.

Exposure Control Plan

The goal of our exposure control plan is to identify potential risks and establish precautions for preventing exposure. The plan contains many significant elements, including:

- Safe work practices and engineering controls to prevent exposure;
- Selection and use of appropriate personal protective equipment to prevent exposures;
- Housekeeping practices and decontamination schedules and procedures;
- Methods for handling biowaste that may contain blood or bodily fluids and contaminated materials such as needles;
- Labels and signs designed to warn you of exposure risks and required precautions; and
- Training, like this session, designed to teach you what you need to know about bloodborne pathogens so that you can take adequate precautions to prevent exposure.

Universal Precautions

If doing your job could bring you into contact with human blood or other potentially infectious materials you need to take universal precautions.

- Taking universal precautions means treating all blood and bodily fluids as if they are infected. That way, if bloodborne pathogens are present, you're protected.
- It also means treating any materials that may be contaminated with blood or bodily fluids as if they are infected. For example, laundry, floors, countertops, and other surfaces may be infected.



Universal Precautions

- The goal of universal precautions is to avoid exposure by avoiding all direct contact. No contact, no exposure. No exposure, means no infection.
- Remember, universal precautions apply to any and all potential exposures—not just situations where you know a patient is infected.
- Think about the steps you take to avoid exposures. Do you always use universal precautions when exposure is possible?

Precautions With Sharps

The Needlestick Safety and Prevention Act requires healthcare facilities to use engineering controls to protect against exposure to bloodborne pathogens.

For example:

We might substitute needleless equipment or use devices that:

- Have a barrier between the needle and hands after use;
- Allow or require hands to stay behind the needle at all times; or
- Provide protection before disassembly and after disposal.

Precautions With Sharps

We might also encourage you to use sharps that are less likely to cause needlesticks, such as:

- Needles that retract into a syringe (AKA Retractable Needles) or vacuum tube holder;
- Blunt suture needles;
- Capillary tubes made of plastic or wrapped in puncture-resistant film to avoid breakage; and
- Sliding needle shields attached to disposable syringes, vacuum tube holder, or other needles.



Precautions with Sharps

In addition, we require you to use safe work procedures with sharps. That means:

- Dispose of all sharps immediately in properly labeled puncture-resistant, leak-proof containers;
- Don't shear, break, bend, or remove needles;
- Don't recap needles unless you are medically required to do so, and in that case, be sure to use a mechanical device or forceps, not your hands;
- Don't reach into a container that might contain sharps;
- Use a strainer basket to hold sharps in water-filled sinks, and remove sharps from the basket with forceps, not your hands; and
- Don't clean up broken glass with your hands—use tongs, forceps, or other tools.
- If you work with sharps, you want to be sure that you are thoroughly familiar with safe procedures. Check with your supervisor if you have any questions.



Personal Protective Equipment

PPE is an essential part of preventing exposure to bloodborne pathogens.

- Wear gloves to prevent hand contact with infectious substances. Replace disposable gloves after each use, and immediately if they are torn or punctured. Don't wash or decontaminate disposables.
- You need to wear a mask, face shield, and goggles or safety glasses with side shields when there is a risk of splashes, spray, or splatters of infectious substances in your nose, mouth, eyes, and face.
- You should use gowns, aprons, or similar clothing, and surgical caps or hoods and shoe covers or boots when required.

Personal Protective Equipment

- Before you put on PPE and protective clothing, inspect it to make sure it is in good condition. Don't wear anything that is damaged.
- After use, remove PPE and clothing carefully to avoid skin contact with contaminated surfaces. Place contaminated equipment and clothing in the assigned area or container for decontamination, washing, storage, or disposal. Don't wear contaminated PPE into clean areas, to handle phones, or when eating or drinking. Always remember to wash hands after PPE is removed.
- Think about the PPE you need to prevent exposures.

Personal Hygiene

Good personal hygiene is an important part of universal precautions and preventing disease. Remember these important hygiene rules:

- Wash with soap and water immediately after any exposure;
- Also wash thoroughly after removing gloves or other PPE;
- Flush eyes, nose, or mouth with water as soon as possible after any contact with potentially infectious materials;
- Don't eat, drink, smoke, apply cosmetics or lip balm, or handle contact lenses in areas with possible exposure to bloodborne pathogens; and
- Don't keep food, drinks, or their containers in refrigerators, in cabinets, or on countertops where blood or other potentially infectious materials are present.



Safe Work Practices

Also be sure to use safe work practices to prevent exposure to bloodborne pathogens. For example:

- Take special care when you collect, handle, store, or transport blood or other potentially infectious materials;
- Don't use your mouth to suction or pipette blood or other potentially infectious materials;
- Transport waste, sharps, or other potentially contaminated items in labeled and closed leak-proof containers, and place containers that might leak in secondary containers; and
- Do not open, empty, or clean reusable containers by hand.
- Think about the safe work practices you use on the job to prevent bloodborne pathogen exposures. Are you taking all the necessary precautions?

Labels and Signs

Another way we prevent potential exposure to bloodborne pathogens is through communication, which includes appropriate labels and signs. Labels that include the universal biohazard symbol and the word “Biohazard” must be attached to:



- Containers of regulated biowaste, which we'll talk more about in a few minutes
- Refrigerators or freezers that contain blood or other potentially infectious materials
- Containers used to store, transport, or ship these materials.
- Are you familiar with all the labels and signs used in our facility to warn you of possible bloodborne pathogen hazards?

Exposure Incidents

If you take all the precautions we've already discussed, you should never have to deal with an exposure incident. However, just in case, you need to know what to do.

- An exposure incident is a direct skin, eye, mouth, or nose contact with blood, bodily fluid, or other potentially infectious material.
- As soon as possible after direct exposure, wash thoroughly with soap and water. Flush eyes, nose, or mouth, if necessary.**
- Then report the incident right away and identify the type and source of exposure. This will help prevent future incidents.**
- If you are employed by DPU, we will offer you a free confidential medical evaluation and blood test. A medical professional will tell you the results of your evaluation and tests, and whether you require more evaluation or treatment.**
- If you are a student, we recommend a confidential medical evaluation and blood test where a medical professional will tell you the results of your evaluation and tests, and whether you require more evaluation or treatment. However, you or your insurance company will be responsible for the cost.**
- Think about what you would do if you had a direct exposure to blood, bodily fluids, or other potentially infected material. Do you know how to report an exposure?

Key Points to Remember

Here are the main points to remember from this session on bloodborne pathogens:

- Take universal precautions
- Wear assigned PPE
- Use safe work practices
- Practice good personal hygiene
- Dispose of contaminated materials properly in labeled containers
- Report all direct exposures.

If you are exposed to potential blood borne pathogens through a needle stick, splash, or any other type of exposure remember to take the following steps...

If you are exposed to blood or other potentially infectious material:

1	Immediately flush exposed skin with soap and water and exposed mucus membranes with water.
2	<p>At DePaul: Immediately report the incident to your instructor so that you can make decisions about how to obtain confidential post-exposure evaluation and follow-up. The incident should also be reported to the School of Nursing at (773) 325-7280.</p> <p>At RFUMS site: Immediately report the incident to your instructor so that you can make decisions about how to obtain confidential post-exposure evaluation and follow-up. The incident should be reported to the School of Nursing at (773) 325-7280.</p> <p>Off Site: Follow the post-exposure policy of the institution where the exposure occurred, and then report the incident to the School of Nursing at (773) 325-7280.</p>

^[1] Students are responsible for costs associated with the emergency room visit, post-exposure evaluation, prophylaxis, and/or any follow-up tests.

If you are exposed to blood or other potentially infectious material:

3	<p>At DePaul: If you would like to obtain this confidential post-exposure evaluation and follow-up from Advocate Illinois Masonic Medical Center you may contact DePaul Public Safety at (773) 325-7777. Public Safety will facilitate transportation to Advocate Illinois Masonic Medical Center.^[1]</p> <p>At RFUMS: If you would like to obtain this confidential post-exposure evaluation and follow- up and then report the incident to the School of Nursing (773) 325-7280.</p> <p>Off Site: Follow the instructions of the institution or go to a nearby emergency facility.</p>
4	<p>The emergency room practitioner will assess the information about the exposure to determine the transmission risk, prophylaxis recommendations, and necessary follow-up.</p>
5	<p>If a contaminated sharp was involved in the exposure incident, complete the Sharps Injury Log (Appendix A to SON BBP ECP) and return the completed form to the Safety Officer or his/her designee as soon as possible, but no later than one business day after the incident.</p>

^[1] Students are responsible for costs associated with the emergency room visit, post-exposure evaluation, prophylaxis, and/or any follow-up tests.

Where to find this information?

DePaul University

School of Nursing

Bloodborne Pathogens Exposure Control Plan

Faculty & Staff

Research

Student Resources

Aid & Scholarships

Preview Day and Orientation

Student Handbook

Health Requirements

**Bloodborne Pathogens
Exposure Control Plan**

Requests, Policies &
Procedures

Applying to Take the NCLEX

Nursing Honors and Pinning
Ceremony

Grace Peterson Research
Colloquium

The [Bloodborne Pathogens exposure control plan](#) was developed by the DePaul Environmental Health and Safety (EHS) Office. The manual will be reviewed and re-evaluated by the DePaul School of Nursing.

All students, faculty and staff are required review the Bloodborne Pathogen Exposure [PowerPoint](#) and to document yearly training by completing [this quiz](#).

IF YOU ARE READING THIS PLAN BECAUSE YOU HAVE BEEN EXPOSED TO BLOOD OR FLUIDS, GO DIRECTLY TO SECTION 11.1 (EXPOSED EMPLOYEES) OR SECTION 11.2 (EXPOSED STUDENTS).

Safety Contacts

Becky Adamski, School of Nursing Safety Officer: (773) 325-2962
Environmental Health & Safety: (773) 325-3344

Emergency, Public Safety: (773) 325-7777

**Find this information on the
School of Nursing Website**

You are almost done!

- Now please take the brief 10 question quiz
(See link posted on webpage)
- Upload quiz results into Castlebranch.com
(Must upload entire quiz with score summary)