

Bloodborne Pathogens

Bloodborne pathogens (BBP) are infectious microorganisms present in blood that can cause disease in humans. Exposure to BBP can happen when you come in contact with blood or other bodily fluids, also known as other potentially infectious materials (OPIM).

While you likely won't encounter these substances during your regular day-to-day duties, it is important to be aware of BBP hazards and know how to protect yourself from potential infection.

The most common occupational BBP are hepatitis B (HPB), hepatitis C (HPC), and human immunodeficiency virus (HIV). HPB and HPC are viruses that affect the liver, and can lead to chronic, lifelong illness. HIV causes chronic immune system disease that can progress to acquired immunodeficiency syndrome (AIDS).

How can you be exposed?

Exposure to BBP can occur in the following workplace situations:

- Exposure to blood while administering first aid following lacerations or other injuries
- Accidental needle sticks and other sharps injuries, such as lacerations from broken glass or punctures from protruding objects
- Handling, cleaning, and disposing of materials contaminated with blood or OPIM

It is important to remember that infection is **only** likely to occur when infectious materials contact **broken or damaged skin** or mucous membranes, such as the **eyes, nose, or mouth**; simple contact with intact skin is not likely to lead to infection.

Tips for Success When Talking to Your Team

Preparation is Key: Keep the topic relevant to your work. Work with your team to review potential sources of BBP exposure in your work and discuss how to practice universal precautions to avoid exposure.

Stay Positive: Keep the focus on what can be done to create a safe workplace instead of focusing on what has gone wrong in the past.

Share a Story, Ask for a Story: Storytelling is a powerful method to convey information. Stories from your employees make the topic even more relatable.

Universal precautions

Adhering to *universal precautions* means **treating all blood and OPIM as if they were known to be infectious**. Follow the guidelines below to keep you and your colleagues safe:

- Avoid direct contact with blood, OPIM, and known or suspected contaminated materials.
- Protect yourself with appropriate personal protective equipment (PPE), such as gloves, goggles, face masks, and protective clothing if there is a potential for exposure.
- Always handle needles, broken glass, and other sharps carefully, and dispose of any contaminated sharps in designated containers.
- Never clean up blood or OPIM unless you have been trained to do so, are using appropriate PPE, and follow proper disposal procedures.
- If you are exposed to blood or OPIM, contact your supervisor and thoroughly wash your hands and any other exposed body parts with soap and water. All injuries and BBP exposures should be reported to Risk Management [online](#) or at (847) 491-5582.



Learn more

To learn more about how to respond to potential exposure events, complete BBP [training](#) and explore Northwestern's Research Safety (RS) Biological Safety [Program](#), the Occupational Safety and Health Administration (OSHA) [BBP Fact Sheet](#), and the U.S. Centers for Disease Control (CDC) [BBP Topic Page](#). You can also consider receiving [First Aid, CPR, and AED Certification](#) through RS.

Safety at Home

The threat of BBP, viruses, and other illness-causing agents exists outside of work as well. Use the following tips to keep yourself, friends, and family safe and healthy:

- Use safe work practices, such as PPE and machine guarding, when using tools and equipment at home to prevent laceration and puncture injuries.
- Always keep a first aid kit on hand and remember that **universal precautions** protect you at home too!
- Handle at-home medical waste, such as bandages, needles, and other contaminated items with care, and always wash your hands after handling.

For Additional Information Contact Environmental Health and Safety at ehs@northwestern.edu