

# ESSENTIAL 29: BBP – Bloodborne Pathogens



## Key Takeaways:

- Understanding which bloodborne pathogens pose the most serious health threats
- Learning about the ways HIV, HBV, and HCV pathogens are transmitted
- Understanding basic precautions to prevent exposure
- Observing the key components of the Exposure Control Plan
- Comprehending the actions to take in case of exposure to bloodborne pathogens

## Course Description

In just one year, the CDC estimated that 20 million people globally acquired hepatitis B virus (HBV) infections from unsafe medical injections.

## Bloodborne Pathogen Safety at Work

For your discretion, bloodborne Pathogens (BBP) are viruses that live in human blood and other body fluids, causing disease in people. There are many different bloodborne pathogens, including malaria and syphilis, but the human immunodeficiency virus (HIV), hepatitis B (HBV), and hepatitis C (HCV) viruses, which can each lead to liver cancer, pose the most serious threat of workplace exposure.

Perhaps no other profession is more at risk of the hazards posed by bloodborne pathogens (BBP) than the medical profession, but that's not to say that awareness and prevention measures shouldn't

be prevalent in all workplaces, because the price of ignorance can be very costly and simple understanding of some bloodborne pathogen basics, really can save lives.

The primary means of transmission is through unprotected sexual contact with an infected person, sharing contaminated needles or syringes, transfusions from infected blood, and contact with open sores or wounds of an infected person. Infected mothers can also transmit these diseases to their babies during pregnancy, birth, or breastfeeding.

In the workplace, transmission is usually through injuries from contaminated sharp objects that penetrate the skin, such as needles, knives, broken glass, or from splashes into the mucous membranes of your eyes, nose, or mouth, or through exposed openings or abrasions in the skin from scratches, cuts, bites, or wounds.

### Number One Rule

Treat all blood and body fluids as if they were infected.

### Prevention

The primary prevention tool against hepatitis B is vaccination before and after any exposure.

For mitigating potential exposure hazards to bloodborne pathogens (BBP), the most desirable approach is to implement engineering controls that minimize or eliminate exposure to a risk at its source, such as physical barriers which can include sharps containers, biological safety cabinets that lock, self-sheathing needles, and containers specifically designed and labeled with color coding that identifies them as contaminated waste.

Practice controls is another line of defense from spreading bloodborne pathogens (BBP). Making folks wash their hands following an exposure incident or mandatory use of an appropriate antiseptic if there is no hand wash facility, are examples of work practice controls.

Proper Personal Protective Equipment (PPE) is another line of defense from exposure. This can include disposable gloves, masks, and eye protection such as goggles or glasses with side shields, and face shields.

Most companies with occupational exposure furnish biohazard spill cleanup kits, or should be doing so to minimize risk—if that isn't the case where you work, you might consider checking into it.

Some standard first aid kits now include disposable one-way resuscitation mouth pieces because in an emergency scenario where Cardiopulmonary Resuscitation CPR is required, people act fast and often without recognizing the risk of bloodborne pathogens. If blood is present during a first aid response, the responder should use the appropriate personal protective equipment to prevent direct contact with blood.

Key practices to help prevent the transmission of Bloodborne Pathogens (BBP):

Always wear disposable gloves whenever there is a potential for exposure to blood, body fluids, or other potentially infectious materials.

Keep cuts and/or sores covered.

Wash hands or other affected body parts anytime there is contact with blood or body fluids, or other potentially infectious materials. Even if there's a shred of doubt about exposure, scrub the suspect area.

Dispose of needles in puncture and leak proof, medical hazard containers, and disinfect surfaces visibly soiled with blood or body fluids.