# **BLOOD EXPOSURE**

## WHY IS BLOOD EXPOSURE A CONCERN?

Blood may contain microbes that give you infections. These include blood-borne viruses, like Hepatitis B, Hepatitis C, and HIV.

Risk of a viral infection through exposure depends on how much blood you were exposed to, how much virus was in the blood, and how deep the blood penetrated your tissues.



#### HUMAN IMMUNODEFICIENCY VIRUS (HIV)

HIV is a virus that takes over the cells in your body that fight disease and destroys them. Eventually, it is difficult for the body to fight infections. AIDS, or Acquired Immunodeficiency Syndrome, is a severe stage of HIV infection.

## **HEPATITIS B AND HEPATITIS C**

are visibly bloody.

Hepatitis B and C are viruses that targets cells in the liver. The body's immune system starts attacking these liver cells, causing inflammation and damage to the liver. This can eventually lead to cancer.

Blood-borne viruses can also be transmitted through other body fluids like semen, vaginal fluids, saliva, breast milk, and abdominal fluids. Feces, nasal secretions, sweat, tears, urine, and vomit are less likely to carry these microbes unless they

## HOW DO I PREVENT EXPOSURE?

#### WHO IS AT RISK FOR EXPOSURE?

People who work in hospitals or other medical facilities are at an especially high risk for blood exposure. The CDC estimates 5.6 million workers in the health care industry are at risk to blood-borne microbes with 600,000-800,000 sharps injuries occurring annually.



## **EMPLOYERS MUST PROVIDE:**

- Appropriate vaccines if workers are at risk for blood-borne disease exposure. This includes the vaccine for Hepatitis B.
- Personal protective clothing, e.g. gloves, gowns, lab coats, face shields or masks and eye protection, mouthpieces, and other ventilation devices.
- Training on how to use sharp materials safely.
- Sharps disposal containers and training on how to dispose of sharp materials and contaminated materials safely.
- Safer devices if possible, e.g. self-sheathing needles, sharps with engineered sharp injury protection, and needleless systems. It is estimated 62-88% of sharps injuries can be prevented this way.
- Handwashing stations and antiseptic hand cleanser.
- Worksites that are clean and sanitary, Employers should implement a written schedule for cleaning and decontamination.

## WHAT SHOULD I DO IF I HAVE BEEN EXPOSED?

You can be exposed directly to visible blood, or indirectly from an object that was contaminated by a visible or invisible amount of blood. Exposure to blood is only a problem if it enters your body; this can happen through wounds, open cracks, scratches or rashes in the skin, or through mucous membranes, like the slippery tissue around your eyes, nose, mouth, and throat.



If you have been exposed, immediately wash areas with soap and water. Flush mucous membranes. Do not scrub hard, since this can break the skin. Seek medical attention immediately.



Treatment is most effective within two hours of exposure for HIV, and within 24 hours for Hepatitis B.

#### **MEDICAL CARE**

Medical attention is urgent, since benefits of treatment decrease as time goes on. It is preferable to see a doctor familiar with the Occupational Safety and Health Administration (OSHA) Blood-Borne Pathogen Standard, but you can go to any emergency department if you do not know who to see.

Call the New York Post-Exposure Prophylaxis Hotline (PEPline) at 888-448-4911 as a part of your medical visit for the most recent post-exposure guidelines.

#### WHAT ARE THE TESTS AND TREATMENTS?

If you know the person to whose blood you were exposed, your employer should get consent to do a rapid (30 minute) blood test on that person for HIV/AIDS. In some cases, consent is not required.



Viruses can take weeks (up to six months) to multiply to levels that are detectable. Get a baseline blood test as soon as possible to determine if you had an infection before exposure occurred.









HIV infection can be treated with anti-viral drugs. Hepatitis B can be prevented through medications or the vaccine if you were not already vaccinated. There is no vaccine or treatment for Hepatitis C, but early treatment can prevent chronic infections.



Selikoff Centers for Occupational Health To learn more, contact us at **888-702-0630** or visit us at www.mountsinai.org/selikoff