
Just the Facts... **Bloodborne Pathogen Exposure Response** **Frequently Asked Questions**

What do we need to consider in planning evaluation and care for employees who might be exposed to blood at work?

You must consider access to prompt evaluation and care, including availability of anti-retroviral medications, which should ideally be started within 2 hours of exposure, if indicated. Evaluation must include assessment of the source individual's history, risk of infection, and obtaining a blood sample from the source individual with required consent. You must train employees and supervisors about the need for prompt reporting and medical evaluation. You should also plan the administrative details, such as paperwork that will need to go with an employee seeking urgent care for a blood exposure.

What is an exposure event?

An exposure event is an incident in which blood or other potentially infectious material is introduced into the bloodstream of another person, through skin puncture by a contaminated sharp, splash of blood onto mucous membranes (eyes, mouth, inside nose) or blood getting on skin that is damaged by rash, abrasion, etc.

What materials besides blood are of concern for bloodborne pathogen transmission?

Other materials that may contain the bloodborne pathogens are sexual fluids, and any body fluid that must be removed with a needle (e.g. peritoneal fluid, CSF, etc.) Urine, saliva and sweat are not considered infectious (unless, of course, blood-tinged.)

What are the bloodborne pathogens?

The bloodborne pathogens are Human Immunodeficiency Virus (HIV), Hepatitis B and Hepatitis C. There is an effective vaccine against Hepatitis B, which should be offered to all healthcare workers unless already immune.

When is medication indicated after an exposure?

The U.S. Public Health Service (USPHS) updated its recommendations on post-exposure prophylaxis (PEP) in 2001. Their detailed recommendations can be found at <http://www.cdc.gov/mmwr/PDF/rr/rr5011.pdf>. In general terms, the risk of exposure is weighed both by how the exposure occurred (for example, puncture with a large-bore needle filled with blood poses more risk than a blood splash on abraded skin) and how likely it is that the material was infected (for example, blood from a known HIV patient or an IV drug user would pose more risk than blood from a married monogamous non-drug-user.) When the exposure is high-risk, PEP is recommended. If the source patient's blood can be tested immediately for HIV using rapid testing, this helps determine the need for PEP.

How long should a person take anti-HIV medication after an exposure event?

If blood is available from the source patient, and it is determined that the exposure is high-risk, PEP should be continued until the source patient's blood can be tested. If the blood is negative for HIV, the PEP may be discontinued. If the source patient has HIV, or if there is no source blood available for testing (but the exposure is felt to be high-risk due to demographics or other considerations), then the PEP should be continued for one month.

What are the side effects of the anti-HIV medication?

Side effects are common, and were reported in about half the health care workers taking PEP in one study. Symptoms include nausea, malaise, anorexia, and headache. One third of those taking PEP stopped it due to the side effects. More serious side effects, including hepatic and hematologic toxicity, have been reported rarely.

If an employee gets sick from taking the anti-HIV medication, and can't work, will he get compensation for the time lost?

Yes, an employee disabled from the side effects of medications used to treat a bloodborne pathogen exposure may file a claim for disability using a CA-1 form, and since the original event was a traumatic injury, would be entitled to continuation of pay.

Can a pregnant woman take anti-HIV medication?

Antiretroviral drugs are mutagens in vitro, and animal studies have shown teratogenicity potential. There have also been reports of fatal and nonfatal lactic acidosis in pregnant women treated with combination therapy with d4T and ddI. Pregnant women and their providers should consider whether the potential benefits of PEP outweigh the risks. Consultation with a specialist in obstetrics should be considered, if available.

What is used to prevent Hepatitis B transmission?

The first line of defense is the Hepatitis B vaccine. If the exposed person has been vaccinated and had a protective post-vaccine titer, then there is no significant risk for Hepatitis B transmission. If the exposed person has never been vaccinated, or if post-vaccine titers were not protective, then an exposure event with materials at high risk for containing the Hepatitis B virus warrants Hepatitis B PEP. This consists of a dose of the Hepatitis B vaccine in one arm, and concurrent administration of Hepatitis B Immunoglobulin (HBIG) in the other arm. Follow-up should include subsequent doses of vaccine over 4-6 months to complete the vaccine series.

Can a pregnant woman take Hepatitis B vaccine?

There are no apparent risks for adverse effects to developing fetuses when hepatitis B vaccine is administered to pregnant women (CDC, unpublished data, 1990). The vaccine contains noninfectious HBsAg particles and should pose no risk to the fetus. HBV infection during pregnancy might result in severe disease for the mother and chronic infection for the newborn. Therefore, neither pregnancy nor lactation should be considered a contraindication to vaccination of women. HBIG is not contraindicated for pregnant or lactating women. For more information on Hepatitis B immunization, please refer to USACHPPM fact sheet number 64-006-0203, available at <http://chppm-www.apgea.army.mil/fs.htm>.

Is there any post-exposure prophylaxis for Hepatitis C?

There is currently no recommended PEP against Hepatitis C. There are ongoing research studies on use of drugs effective against Hepatitis C in the setting of an occupational exposure.