



RECOMMENDATIONS FOR MANAGING OCCUPATIONAL BLOOD EXPOSURES

Establish written protocols for management of occupational exposures:

- ✓ Based on current PHS/CDC Guidelines
- ✓ Review periodically
- ✓ Provide training to personnel
 - prevention & response to occupational exposures
- ✓ Identify a qualified health-care professional who
 - is familiar with current PHS postexposure management recommendations, antiretroviral therapy, bloodborne disease transmission, and the OSHA BBP standard
 - will ensure prompt evaluation, treatment, management, and follow-up
 - will provide necessary counseling

Provide immediate care to the exposure site:

- ✓ Wash wounds and skin with soap and water
- ✓ Flush mucous membranes with water
- ✓ No evidence exists that using antiseptics for wound care or expressing fluid by squeezing the wound further reduces the risk of BBP transmission

Immediately report the exposure to the infection control coordinator who should:

- ✓ Initiate referral to a qualified health-care professional
- ✓ Complete necessary reports

Include the following information in the postexposure report:

- ✓ Date and time of exposure
- ✓ Details of the procedure being performed
 - where and how the exposure occurred
 - type of device involved
 - how and when during its handling the exposure occurred
- ✓ Details of the exposure
 - type and amount of fluid or material
 - severity of the exposure
- ✓ Details about the exposure source (e.g., HBV, HCV, HIV status)
- ✓ Details about the exposed individual (e.g., hepatitis B vaccination and vaccine-response status)
- ✓ Details about counseling, postexposure management, and follow-up.

Evaluate the exposure

Determine risk associated with exposure

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| <ul style="list-style-type: none"> ✓ Exposures posing risk of infection transmission <ul style="list-style-type: none"> - Percutaneous injury - Mucous membrane exposure - Non-intact skin exposure - Bites resulting in blood exposure to either person involved | <ul style="list-style-type: none"> ✓ Substances posing risk of infection transmission <ul style="list-style-type: none"> - Blood - Fluids containing visible blood - Potentially infectious fluids (semen; vaginal secretions; saliva; and cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids) or tissue - Concentrated virus |
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| <ul style="list-style-type: none"> ✓ Status
Determine infectious status of source (if not already known) <ul style="list-style-type: none"> - Presence of HBsAg - Presence of HCV antibody - Presence of HIV antibody* - For unknown sources, evaluate the likelihood of exposure to a source at high risk for HBV, HCV, or HIV infection - Do not test discarded needles | <ul style="list-style-type: none"> ✓ Susceptibility
Determine susceptibility of exposed person <ul style="list-style-type: none"> - Hepatitis B vaccine status - HBV immune status if vaccine response status is unknown - Anti-HCV and ALT - HIV antibody |
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- * Consider using rapid testing

Abbreviations

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| ALT=alanine aminotransferase | HBIG=Hepatitis B Immunoglobulin |
| BBP=Bloodborne Pathogen | HCV=Hepatitis C Virus |
| CDC=Centers for Disease Control and Prevention | HIV=Human Immunodeficiency Virus |
| EIA=Enzyme Immunoassay | PEP=Postexposure Prophylaxis |
| HBV=Hepatitis B Virus | PHS=Public Health Service |

Additional Resources

National Clinicians' Postexposure Prophylaxis Hotline (PEpline) www.ucsf.edu/hivcntr (888) 448-4911
Needlestick! www.needlestick.mednet.ucla.edu

Give postexposure prophylaxis (PEP) for exposures posing risk of infection transmission

- ✓ **HBV**
 - Give PEP as soon as possible, preferably within 24 hours
 - PEP can be given to pregnant women
- ✓ **HCV-PEP** not recommended
- ✓ **HIV**
 - Initiate PEP within hours of exposure
 - Offer pregnancy testing to all women of childbearing age not known to be pregnant
 - Seek expert consultation if viral resistance suspected
 - Administer PEP for 4 weeks if tolerated

NOTE: A complete description of PEP can be found in CDC. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HBV, HCV, and HIV and recommendations for postexposure prophylaxis. *MMWR* 2001;50(No.RR-11): 1-52.

Perform follow-up testing and provide counseling

- ✓ **HBV exposures**
 - Test for anti-HBs 1-2 months after last dose of vaccine if only vaccine given
 - Follow-up not indicated if exposed person immune to HBV or received HBIG PEP
- ✓ **HCV exposures**
 - Perform testing for anti-HCV and ALT 4-6 months after exposure
 - Perform HCV RNA testing at 4-6 weeks if earlier diagnosis of HCV infection desired
 - Confirm repeatedly reactive anti-HCV EIAs with supplemental tests
- ✓ **HIV exposures**
 - Evaluate exposed persons taking PEP within 72 hours after exposure and monitor for drug toxicity for at least 2 weeks
 - Perform HIV-antibody testing for at least 6 months postexposure (e.g., at baseline, 6 weeks, 3 months, and 6 months)
 - Perform HIV antibody testing for illness compatible with an acute retroviral syndrome
 - Advise exposed persons to use precautions to prevent secondary transmission during the follow-up period

An exposure can be defined as a percutaneous injury (e.g., needlestick or cut with a sharp object) or contact of mucous membrane or non-intact skin (e.g., exposed skin that is chapped, abraded, or afflicted with dermatitis) with blood, saliva, tissue, or other body fluids that are potentially infectious. Exposure incidents might place dental health-care personnel at risk for HBV, HCV, or HIV infection, and therefore should be evaluated immediately following treatment of the exposure site by a qualified health-care professional.

Reference: CDC. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HBV, HCV, and HIV and recommendations for postexposure prophylaxis. *MMWR* 2001;50(No.RR-11). Available from <http://www.cdc.gov/mmwr/PDF/rr/rr5011.pdf>.