

Management of Occupational Blood Exposures to

HBV, HCV, or HIV

Step 1 Provide immediate care to the exposure site

- Wash wounds and skin with soap and water
- Flush mucous membranes with water

Step 2 Evaluate the exposure

Determine risk associated with exposure

Exposures

- Substances posing risk of infection transmission**
- Blood
 - Fluids containing visible blood
 - Potentially infectious fluids (semen, vaginal secretions, and cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids) or tissue
 - Concentrated virus

Status

- Determine infectious status of source (if not already known)**
- 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

* Consider using rapid testing

Step 3

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

- **HBV** — see Table
- Give PEP as soon as possible, preferably within 24 hours
- PEP can be given to pregnant women
- **HCV** — PEP not recommended

● **HIV** — see Table

- 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

Step 4

Perform follow-up testing and provide counseling

Advise exposed persons to seek medical evaluation for any acute illness occurring during follow-up

- **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



For more help call the National Clinicians' Postexposure Prophylaxis Hotline (PEPLINE) 888-448-4911 or visit the Postexposure Prophylaxis Management website www.needleslick.mednet.ucla.edu



For more information please contact the Public Health Foundation at 877-232-1200 (toll free) or go to <http://needleslick.org>

Recommended HBV PEP

Exposure type	Source of unknown HIV status	Source of unknown HCV status	Source of unknown HIV status
Asymptomatic HIV infection or known low viral load (e.g., <1,500)	Asymptomatic HIV infection or known low viral load (e.g., <1,500)	Asymptomatic HIV infection or known low viral load (e.g., <1,500)	Asymptomatic HIV infection or known low viral load (e.g., <1,500)
Symptomatic HIV infection or known high viral load	Symptomatic HIV infection or known high viral load	Symptomatic HIV infection or known high viral load	Symptomatic HIV infection or known high viral load
Unknown source (e.g., discarded source or sharps disposal container)	Unknown source (e.g., discarded source or sharps disposal container)	Unknown source (e.g., discarded source or sharps disposal container)	Unknown source (e.g., discarded source or sharps disposal container)

* Persons who have previously been infected with HIV are immune to reinfection and do not require postexposure prophylaxis.

† Hepatitis B surface antigen (HBsAg) and antibody (anti-HBs) are tested for 1-2 months after exposure. If anti-HBs is positive, a response to the vaccine is confirmed. If anti-HBs is negative, a response to the vaccine is not confirmed. A second dose of vaccine is given 1-2 months after the first dose. If anti-HBs is still negative after the second dose, one more dose is given 1-2 months after the second dose.

‡ The source of exposure is unknown. If HBIG is given, the source status is unknown. If HBIG is not given, the source status is unknown. If HBIG is given and the source status is unknown, the source status is unknown. If HBIG is not given and the source status is unknown, the source status is unknown.

Recommended HIV PEP

Exposure type	Source of unknown HIV status	Source of unknown HCV status	Source of unknown HIV status
Asymptomatic HIV infection or known low viral load (e.g., <1,500)	Asymptomatic HIV infection or known low viral load (e.g., <1,500)	Asymptomatic HIV infection or known low viral load (e.g., <1,500)	Asymptomatic HIV infection or known low viral load (e.g., <1,500)
Symptomatic HIV infection or known high viral load	Symptomatic HIV infection or known high viral load	Symptomatic HIV infection or known high viral load	Symptomatic HIV infection or known high viral load
Unknown source (e.g., discarded source or sharps disposal container)	Unknown source (e.g., discarded source or sharps disposal container)	Unknown source (e.g., discarded source or sharps disposal container)	Unknown source (e.g., discarded source or sharps disposal container)

* Persons who have previously been infected with HIV are immune to reinfection and do not require postexposure prophylaxis.

† Hepatitis B surface antigen (HBsAg) and antibody (anti-HBs) are tested for 1-2 months after exposure. If anti-HBs is positive, a response to the vaccine is confirmed. If anti-HBs is negative, a response to the vaccine is not confirmed. A second dose of vaccine is given 1-2 months after the first dose. If anti-HBs is still negative after the second dose, one more dose is given 1-2 months after the second dose.

‡ The source of exposure is unknown. If HBIG is given, the source status is unknown. If HBIG is not given, the source status is unknown. If HBIG is given and the source status is unknown, the source status is unknown. If HBIG is not given and the source status is unknown, the source status is unknown.

* If the exposure is to a source who is known to be HIV positive, PEP should not be initiated. If the source is unknown, PEP should be initiated. If the source is unknown, PEP should be initiated. If the source is unknown, PEP should be initiated.

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