

**ANSWER TO LAST MONTH'S**

**Question of the Month**

What testing or treatment is required for an employee who is stuck with a needle when the source patient is unknown (e.g., a stick from a sharper in a sharps container) or the patient refuses to be tested?



**ANSWER:** Since the source patient cannot be tested, the exposed employee must be presumed to have been exposed to the most common bloodborne pathogens—hepatitis B, hepatitis C and HIV—and tested and treated accordingly.

**Hepatitis B**

Status of Exposed Employee	Action to Take	Comments
Never vaccinated	Initiate HB vaccine series. Test for immunity (anti-HBs) 1 to 2 months after the last dose of vaccine.	
Vaccinated and titer shows immunity (anti-HBs 10mIU/ml or greater).	No treatment or testing needed.	Employee is immune to infection with hepatitis B.
Vaccinated, not immune, and has not completed the second 3-dose series of vaccinations.	If source is known to be high risk*, treat as if hepatitis B positive, i.e., give hepatitis B immune globulin (HBIG) (0.06 mL/kg intramuscularly) immediately after exposure and reinstate the vaccine series.	85%-95% effective in preventing HBV infection.
Vaccinated, not immune, re-vaccinated and still not immune.	If source is known to be high risk*, give HBIG immediately after exposure and a second dose one month later.	70%-75% effective in preventing HBV infection.
Vaccinated, but never tested for immunity.	Test for hepatitis B antibody (anti-HBs). If not immune, administer HBIG and vaccine booster.	

*\*For known source patients who refuse testing, consider medical diagnoses, clinical symptoms, and history of risky behaviors. For unknown sources, consider the likelihood of bloodborne pathogen infection among patients in the exposure setting. (Editor's Note: We disagree with Uncle Sam on this one. Whatever happened to Universal Precautions?) Do not test discarded needles for bloodborne pathogens.*

**Hepatitis C**

Treatment When Source Patient is Unknown or Cannot Be Tested	Employee Testing When the Source Patient Is Unknown or Cannot Be Tested
Immune globulin and antiviral drugs are not recommended for post-exposure prophylaxis.	Perform baseline testing for anti-HCV and ALT, then repeat at 4 to 6 months after exposure and again at 12 months after exposure.

**HIV**

Post-Exposure Prophylaxis	Comments
No treatment necessary, but consider 2-drug PEP in settings where exposure to HIV infected persons is likely. Also consider whether the puncture was less severe (solid needle and superficial injury) or more severe (large bore hollow needle, deep puncture, visible blood on device, or needle used in patient's artery or vein).	If PEP is chosen, evaluate the exposed employee with CBC and renal and hepatic function tests for at least 2 weeks.
Post-Exposure Testing	Comments
Test for HIV antibodies at baseline, 6 weeks, 3 months, 6 months, and 12 months, or anytime illness occurs that resembles HIV infection.	Advise employee to use precautions during this period of uncertainty to prevent transmitting to others.