

Letters to the Editor

Send letters to Kenny Lin, MD, Associate Medical Editor for *AFP* Online, e-mail: afplet@aafp.org, or 11400 Tomahawk Creek Pkwy., Leawood, KS 66211-2680.

Please include your complete address, e-mail address, telephone number, and fax number. Letters should be fewer than 500 words and limited to six references and one table or figure.

Letters submitted for publication in *AFP* must not be submitted to any other publication. Possible conflicts of interest must be disclosed at time of submission. Submission of a letter will be construed as granting the American Academy of Family Physicians permission to publish the letter in any of its publications in any form. The editors may edit letters to meet style and space requirements.

When Is Postexposure Prophylaxis Recommended for Needlestick?

Original Article: Postexposure Prophylaxis Against Human Immunodeficiency Virus

Issue Date: July 15, 2010

Available at: <http://www.aafp.org/afp/2010/0715/p161.html>

TO THE EDITOR: The authors of this article state that human immunodeficiency virus (HIV) transmission following a needlestick from a discarded needle in the community setting (as opposed to the health care setting) has not been reported. They also state that "some experts may recommend PEP [postexposure prophylaxis] if the needlestick occurred in a high-risk community setting, such as a park known to be visited by injection drug users."

At the National HIV/AIDS Clinicians' Consultation Center's Post-Exposure Prophylaxis Hotline (PEpline; <http://www.nccc.ucsf.edu>), we receive 2,000 calls annually on managing percutaneous exposures. The PEpline does not recommend PEP for exposures to discarded needles in the community.

The common concern with discarded needles is that the needle may have been used by a person with HIV infection. The risk of transmission from discarded needles is unknown, but is considerably lower than the one in 300 chance with percutaneous injuries from a known HIV-positive source in a health care facility.¹ At room temperature, HIV concentration in dried blood is reduced by 90 to 99 percent.² The risk of HIV infectivity declines exponentially outside the body, with the risk of HIV transmission from exposure to dry blood contaminated by research laboratory levels of concentrated virus declining by 90 percent every nine hours.³ The small statistical risk of transmission, further reduced by the rapid decay of transmissible HIV from drying over time, explains why discarded needles in the community setting have not transmitted HIV.

There have been rare and extraordinary

circumstances when the PEpline has varied from our general approach of not recommending PEP after exposure to a discarded needle, such as during a police raid in which a needlestick is sustained from a freshly bloody discarded needle used by an intravenous drug user. In such cases, risk of toxicity to the exposed person should be weighed against the potential benefits from PEP.

The risk of toxicity from antiretroviral drugs used for PEP, although small, generally far outweighs potential benefits from PEP following percutaneous injury from discarded needles. Children are often the ones exposed to discarded needles in the community setting; they would be at risk of regrettable toxicities from unnecessary PEP. Therefore, we recommend counseling parents that HIV transmission in these circumstances has not been reported and that the risk of PEP toxicity to their child far outweighs potential benefits.

For the treating physician, the recommendation against PEP is almost always the best course of action for exposures from a discarded needle in the community. In all cases, the decision about whether to receive PEP is a personal one. The exposed person needs to be informed of the risks and benefits, and should participate in the decision. The PEpline is available for consultation at 888-448-4911.

MINA MATIN, MD

RONALD H. GOLDSCHMIDT, MD

San Francisco, Calif.

Email: mmatin@nccc.ucsf.edu

Author disclosure: No relevant financial affiliations to disclose.

REFERENCES

1. Bell DM. Occupational risk of human immunodeficiency virus infection in healthcare workers: an overview. *Am J Med*. 1997;102(5B):9-15.
2. Centers for Disease Control and Prevention. Recommendations for prevention of HIV transmission in health-care settings. *MMWR Morb Mortal Wkly Rep*. 1987; 36(suppl 2):1S-18S.
3. Resnick L, Veren K, Salahuddin SZ, Tondreau S, Markham PD. Stability and inactivation of HTLV-III/LAV under clinical and laboratory environments. *JAMA*. 1986; 255(14):1887-1891. ■