

PEP FOLLOWING SEXUAL EXPOSURE TO HIV

The risks of HIV transmission associated with many sexual exposures to HIV are comparable to or exceed those associated with occupational exposures. Furthermore, the risk is probably significantly elevated if the exposure was traumatic (e.g. sexual assault) or if ulcerative lesions were present on either the source or the exposed individual. Many HIV specialists therefore endorse the use of PEP in certain situations following a sexual exposure to HIV, and U.S. Centers for Disease Control and Prevention (CDC) Guidelines have recently endorsed the concept of PEP following non-occupational exposures to HIV that confer a significant risk of transmission.ⁱ The levels of risk associated with various occupational and sexual exposures to HIV are summarised in *Table 4*.

In general, the management of PEP for sexual exposures is extrapolated from the management of occupational exposures, although the difficulty of accurately stratifying risk in such exposures has led the CDC to generally favour the use of expanded three drug regimens over basic two drug regimens. A two-drug NRTI regimen may nevertheless be considered as dictated by clinical circumstances and/or patient preference. Initiation of PEP as soon as possible following an exposure is recommended; many protocols that have been developed for PEP following sexual exposures have used seventy-two hours following the exposure as the upper limit beyond which PEP should not be offered. If initiated, PEP should be continued for twenty-eight days unless the source patient is subsequently discovered to be HIV-uninfected. While concern has been raised that offering PEP for sexual exposures may encourage unsafe sexual behaviour, a study in San Francisco, California, designed to assess this possibility found that risky sexual behaviour decreased, rather than increased, in patients who received PEP and behavioural counselling following sexual exposures to HIV. As it is for occupational PEP, the use of NVP is discouraged, as is the use of EFV in women who are pregnant or anticipate possible imminent pregnancy. In settings where the HIV status of the source patient is not known, case-by-case determination of the appropriateness of PEP is indicated, which may consider factors such as the severity of the exposure itself, prevalence of HIV in the community, and presence/absence of risk factors in the source patient.

Table 4: Estimated Risks of HIV Transmission

EXPOSURE	AVERAGE PER-EPISODE RISK
OCCUPATIONAL	
Percutaneous (blood)	0.3%
Mucocutaneous (blood)	0.09%
SEXUAL	
Receptive Anal Intercourse	1% to 2%
Insertive Anal Intercourse	0.06%
Receptive Vaginal Intercourse	0.1% to 0.2%
Insertive Vaginal Intercourse	0.03% to 0.14%
Receptive Oral (male)	0.06%
Female-Female Orogenital	4 case reports

Figure 1 presents an algorithm adapted from the CDC guidelines for non-occupational exposures to HIV.ⁱⁱ

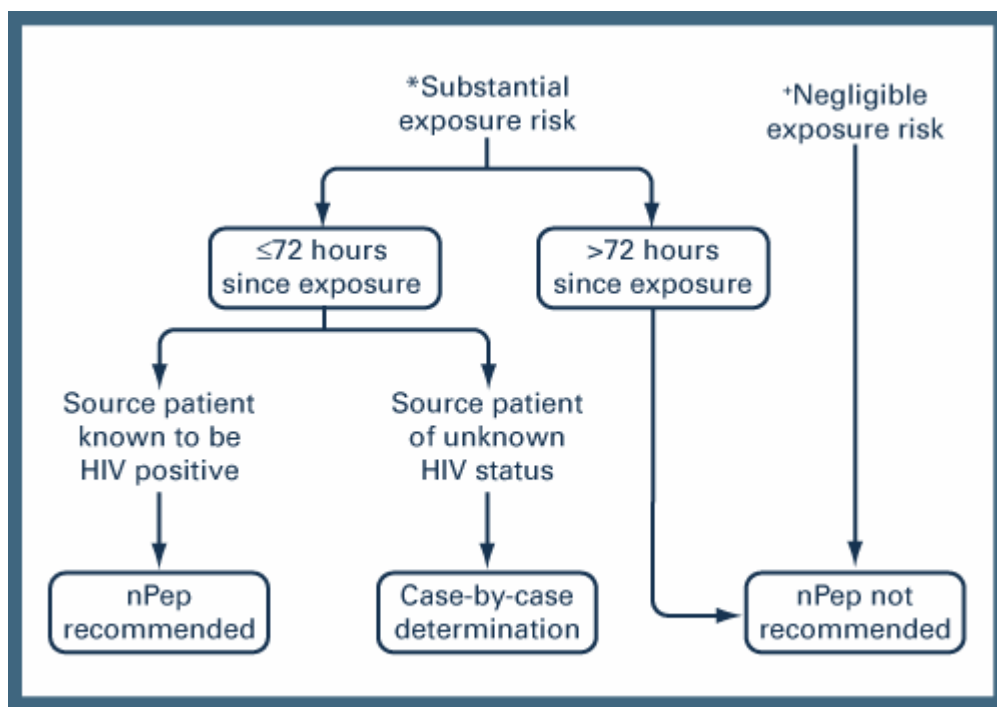


Figure 1: Recommendations for Antiretroviral Post-exposure Prophylaxis for Non-occupational Exposure to HIV

- * Substantial risk for HIV exposure is defined in these guidelines as exposure contact of an area of the body known to be associated with acquisition of HIV (vagina, rectum, eye, mouth, or other mucous membrane, non-intact skin, or percutaneous contact) WITH a body substance known to transmit HIV (blood, semen, vaginal secretions, rectal secretions, breast milk, or any body fluid that is visibly contaminated with blood) WHEN the source is known to have HIV infection.
- + Negligible risk is defined in these guidelines as exposure the vagina, rectum, eye, mouth, or other mucous membrane, nonintact skin, intact skin, or percutaneous contact WITH urine, nasal secretions, saliva, sweat, or tears (if not visibly contaminated with blood), REGARDLESS of the known or suspected HIV status of the source.

ⁱ Smith DK, Grohskopf LA, Black RJ, et al. Antiretroviral postexposure prophylaxis after sexual, injection-drug use, or other nonoccupational exposure to HIV in the United States: recommendations from the U.S. Department of Health and Human Services. *MMWR* [serial on the Internet] 2005;54(RR02):1-20. Available at <http://www.aidsinfo.nih.gov/Guidelines>

ⁱⁱ Ibid.