POSTEXPOSURE PROPHYLAXIS AFTER EXPOSURE TO HIV

The risk of HIV infection after accidental exposure **varies with the type and severity of exposure.** The average risk for HIV transmission after a percutaneous exposure to HIV infected blood has been estimated to be approximately 0.3%, and after mucous membrane exposure, approximately 0.09%.

PEP is available to healthcare personnel (HCP) only with a physician's order.

PERSONNEL ELIGIBLE FOR PEP:

To be eligible for PEP, Health Care Personnel (HCP) must meet the following criteria:

1) The HCP should have an occupational exposure to blood or body fluids from an HIV infected patient or a patient at risk for HIV infection prior to beginning therapy. If the patient's HIV status is unknown, initiating postexposure prophylaxis (PEP) should be decided on a case-by-case basis. Rapid determination of source patient HIV status provides essential information about the need to initiate and/or continue PEP. If the source patient is determined to be HIV-negative, PEP should be discontinued and no follow-up HIV testing for the exposed provider is indicated.

   Note: The CDC recommends starting PEP as soon as possible including follow up within 72 hours after exposure. Administration of PEP should not be delayed while waiting for test results in situations where the source patient either has, or there is a reasonable suspicion of HIV infection. Severity of exposure and epidemiologic likelihood of HIV exposure should be considered.

2) The HCP must agree to have an HIV test and give informed consent.

3) The HCP must be 18 years of age or have parental/guardian consent.

4) Persons other than employees, e.g., Licensed Independent Practitioner's (LIP's) that include physicians, physician assistants, nurse practitioners, etc., students, volunteers, vendors, and all other contracted personnel should be considered for PEP on case by case basis after consultation with Infectious Disease Physician/Emergency Department Physician. LIP's are encouraged to immediately report exposures to their physician, employer, school, or responsible party for exposure follow-up and PEP recommendations. When PEP is recommended and physician's order obtained, consent should be signed and baseline labs drawn before distribution of PEP medications. Further prophylaxis medications for non-employees will be directed by their physician, employer, school, or responsible party.

HIV POSTEXPOSURE PROPHYLAXIS REGIMENS

HCP receiving PEP should complete a full 4-week regimen if possible. Because all antiretroviral agents have been associated with side effects (**Appendix B**), the toxicity, duration, severity, and reversibility of side effects is a critical consideration when selecting an HIV PEP regimen. Consultation with a pharmacist or physician (Infectious Disease) who is an expert in HIV PEP and antiretroviral medication drug interactions is **strongly encouraged.**

HIV PEP medication regimen recommendations are listed in **Appendix A**. If regimen is ordered and started by a physician other than hospital employee health physician or infectious disease physician, they should be consulted as soon as possible for follow up and review of PEP. Close attention and adherence should be followed in the Appendix A list of preferred or alternative antiretroviral agents for use. Other categories of antiretroviral agents in Appendix A should be considered only after consultation with an Infectious Disease physician.

CONTRAINDICATIONS TO PEP:

Contraindications to HIV PEP should be decided on a case by case basis that includes consultation with a physician expert (Infectious Disease) and HCP's or LIP's regular physician. An example can include serious medical illness in the exposed person or significant underlying illness (e.g., renal disease) or an exposed provider already taking multiple medications that may increase the risk of drug toxicity and drug-drug interactions.

Nevirapine (NVP) is listed as contraindicated for use as PEP due to severe toxicities. This along with other drugs listed under, "Not Recommended For Use" or "Use Only With Expert Consultation" in Appendix A should be avoided without expert consultation.

MONITORING AND MANAGING PEP TOXICITY

If PEP is used, the individual should be monitored for drug toxicity by testing at baseline and again 2 weeks after starting PEP. Testing should be based on medical conditions in the exposed person and the toxicity of drugs included in the PEP regimen. Minimally, laboratory monitoring for toxicity should include a complete blood count and renal and hepatic function tests.

- As side effects have been cited as a major reason for not completing PEP regimens as prescribed, the selection of regimens should be heavily influenced toward those that are best tolerated by HCP receiving PEP. Potential side effects of antiretroviral agents should be discussed with the PEP recipient, and, when anticipated, preemptive prescribing of agents for ameliorating side effects (e.g. anti-emetics, anti-spasmodics, etc.) may improve PEP regimen adherence.

- Antiretroviral agents might have potentially serious drug interactions when used with certain other drugs, thereby requiring careful evaluation of concomitant medications, including over-the-counter medications and supplements (e.g., herbals), used by an exposed person before prescribing PEP and close monitoring for toxicity of anyone receiving these drugs. PIs and NNRTIs have the greatest potential for interactions with other drugs.

ADDITIONAL CONSIDERATIONS:

PEP for Pregnant or Breastfeeding Health Care Workers.

1) If the exposed person is pregnant, the evaluation of risk of infection and need for PEP should be approached as with any other person who has had an HIV exposure. However, the decision to use any antiretroviral drug during pregnancy should involve discussion between the woman and her health care provider regarding the potential benefits and risks to her and her fetus.

2) Lactating women with occupational exposures to HIV who will take antiretroviral medications
as PEP must be counseled to weigh the risks and benefits of continued breastfeeding both while taking PEP, and while being monitored for HIV seroconversion.

3) If EFV-based PEP is used in women, a pregnancy test should be done to rule out early pregnancy, and non-pregnant women who are receiving EFV-based PEP should be counseled to avoid pregnancy until after PEP is completed.

PROCEDURES:

A. WHEN THE EMPLOYEE HEALTH OFFICE IS OPEN

1) The HCP/LIP should notify the Employee Health Nurse **immediately** of an exposure.

2) The Employee Health Nurse will evaluate the exposure. Policy for Management of Needlestick and/or Other Exposure to Blood and/or Body Fluids will be followed. HCP/LIP's sustaining exposures from known HIV positive patients or patients at risk for HIV infection will be referred to a physician regarding PEP.

3) If PEP is recommended/ordered by the physician, the HCP/LIP must have a baseline HIV test if they agree to take PEP. Other labs at baseline and 2 weeks postexposure include: CBC with diff., renal and hepatic function tests, pregnancy test (if applicable). Further testing may be indicated if abnormalities are detected.

4) If the HCP/LIP agrees to prophylaxis treatment after counseling, they must sign an Informed Consent Regarding the Administration of Post Exposure Prophylactic Agents.

5) With a physician's written order, the Employee Health Nurse will help the HCP obtain PEP medications from an outpatient Pharmacy at no cost to the employee.

6) Doctor visits, laboratory studies, and follow-up care associated with the giving of PEP will be done by the hospital physician (or designated physician) at the hospital's expense for employees. LIP's and other non-employees will be instructed to follow their exposure policy per their physician, employer, school, or responsible party.

7) If the employee chooses not to take PEP after recommendation, the Employee Health Nurse will document refusal in Midas on the Remote Data Entry Risk Form.

B. WHEN THE EMPLOYEE HEALTH OFFICE IS CLOSED

1) The employee, LIP or other non-employee should notify the Administrative Nursing Supervisor **immediately** of an exposure.

2) The Supervisor will evaluate the exposure. Policy for Management of Needlestick and/or Other Exposure to Blood and/or Body Fluids will be followed. HCP/LIP's or other non-employees sustaining exposures from known HIV positive patients or patients at risk for HIV infection will be referred to a physician regarding PEP.

3) If PEP is recommended/ordered by the physician, the employee, LIP or other non-employees must have a baseline HIV test if they agree to take PEP. Other labs at baseline and 2 weeks postexposure include: CBC with diff., renal and hepatic function tests, pregnancy test (if applicable). Further testing may be indicated if abnormalities are detected.

4) If the HCP/LIP or other non-employee agrees to prophylaxis treatment after counseling, they should sign an Informed Consent Regarding the Administration of Post Exposure Prophylactic Agents.

5) The Administrative Nursing Supervisor will obtain a prescription written by an authorized provider and will deliver to the pharmacy. A pharmacist will provide a HIV PEP kit with appropriate labeling and instructions for use. The prescription will be obtained for record.

6) The LIP and non-employee will be directed to follow up with their employer or responsible party as to where they will obtain the remaining course of medications and post exposure labs..

7) If the employee or LIP chooses not to take PEP, the Administrative Nursing Supervisor should notify the Employee Health Nurse for follow up and documentation.

Revised: 8/1996, 8/1998, 10/2001, 7/2012, 5/2018, 7/2019

REFERENCE:

CDC. "Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Postexposure Prophylaxis." Centers for Disease Control (CDC)., MMWR, September 30, 2005. Vol. 54/No. RR-9., updated September, 2013.

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