

Treatment after Exposure to HIV

What Is Post-Exposure Prophylaxis?

Prophylaxis means infection or disease prevention. Post-exposure prophylaxis (or PEP) means taking antiviral drugs (ARVs) as soon as possible after exposure to HIV, so that the exposure will not result in HIV infection. ARVs are only available with a prescription. The most common ARVs used for PEP are Combivir (zidovudine plus lamivudine in a pill). In some regions of the world where drug resistance many exist a third drug is added. PEP should begin within as soon as possible after exposure to HIV - usually within 72 hours. Treatment with 2 or 3 antiviral drugs should continue for 4 weeks, if tolerated.

When Should PEP be Used?

1- Workplace exposure

PEP has been standard procedure since 1996 for healthcare workers exposed to HIV. ARVs are started within a few hours of exposure. The exposure frequently results from a "needle stick", when a health care worker accidentally gets jabbed with a needle containing HIV-infected blood. PEP is effective in the majority, but not all of cases.

2- Other exposure

The Centers for Disease Control concluded that PEP should be available after HIV exposures that are not work-related. People can be exposed to HIV following rape, during unsafe sexual activity, when a condom breaks during sex, or if they share needles for injecting drugs. Infants can be exposed if they drink breast milk from an infected woman. Semen and vaginal fluids from an HIV infected individual carry the potential of HIV transmission.

Forced rape may be a particular high risk. Following rape, if possible, testing to determine HIV infection status of an exposure source (usually difficult to obtain) should be performed as soon as possible. Hospitals, clinics and other sites that manage HIV should consult their laboratories regarding the most appropriate test to use to expedite obtaining these results. An approved rapid HIV-antibody test kit should be considered for use in this situation.

PEP should be started as soon as possible after exposure to HIV. The medications used in PEP depend on the exposure to HIV. The following situations are considered serious exposure:

- Rape from a known or unknown HIV infected individual
- Exposure to a large amount of blood
- Exposure to blood from someone who has a high viral load (a large amount of virus in the blood)
- Blood came in contact with cuts or open sores on the skin
- Blood was visible on a needle that stuck someone

How are ARVs for PEP Taken?

For serious exposures, the U.S. Public Health Service recommends using a combination of three approved antiviral drugs for four weeks. For less serious exposure, the guidelines recommend four weeks of treatment with two drugs: zidovudine and lamivudine also

know as Combivir - one capsule (tablet) twice a day). In regions of the world where drug resistance may occur the addition of a third drug is recommended.

In January 2001, the Centers for Disease Control warned against using nevirapine for PEP because of the risk of liver damage. The CDC has not updated its PEP recommendations since 2001.

What Are Common ARV Side Effects?

The most common side effects from PEP medications are nausea and not feeling well. Other side effects include headaches, fatigue, vomiting and diarrhea. For more information, see the fact sheets on individual antiviral medications.

Summary

Post-exposure prophylaxis (PEP) is the use of antiviral drugs as soon as possible after exposure to HIV, to prevent HIV infection. PEP can reduce the rate of infection in health care workers exposed to HIV by 80%.

PEP is a four-week program of two or three antiviral medications, several times a day. Some of the ARVs have serious side effects that can make it difficult to complete the program. Although PEP is effective when take within 72 hours of exposure, it is not 100% effective.

Additional Information

Centers for Disease Control

Occupational exposure: <http://www.cdc.gov/mmwr/PDF/rr/rr5011.pdf>

Non-occupational exposure:
<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5402a1.htm>