

Drug resistance - HIV medicines, part 4



HIV treatment, called antiretroviral therapy or ART, is a combination of HIV medicines, called an HIV regimen.

As the virus multiplies in the body, HIV sometimes changes form and produces slightly changed strains of itself. This is called mutation. New strains of virus that appear while a person is taking HIV medicines can become drug-resistant strains of HIV.

Drug resistant means that HIV medicines that used to work are now not effective against the new, drug-resistant HIV strain. Drug resistance can cause HIV treatment to fail.

A person can develop drug-resistant HIV after starting HIV medicines. Medication adherence means taking HIV medicines every day and exactly as prescribed. This lowers the risk of medicines becoming drug resistant.

People infected with a drug-resistant strain of the HIV virus may have drug resistance to some HIV medicines even before they start taking them. This is how drug-resistant HIV can spread from person to person.



There are six classes of HIV medicine with many medicines in each class. Cross resistance is when one HIV medicine that doesn't work causes other medicines in the same class to be ineffective as well. So a person's HIV strain may be resistant to HIV medicines that they have never even taken.

Drug-resistance testing is done to identify which HIV medicines won't work against a person's strain of HIV. This testing is done when a person first starts HIV medicines to help decide which medicines to include in a person's first HIV regimen.

After treatment is started, drug-resistance testing is repeated if the HIV regimen isn't working. The test results can be used to choose a new HIV regimen. Drug-resistance testing is also done for all HIV-infected pregnant women.



Be sure to get answers to any questions you have about HIV/AIDS. Your public health department, health care provider, and public library can help.

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