Information about Recent Cases of HIV Infection Among Two People Taking PrEP New York State Department of Health New York City Department of Health and Mental Hygiene November 4, 2016

WHAT IS KNOWN ABOUT THESE TWO INDIVIDUALS WITH HIV INFECTION DESPITE PREP USE?

In February of 2016, there was a report of a man from Toronto, Canada who was regularly taking HIV Pre-exposure Prophylaxis (PrEP) and acquired HIV infection. This case is important because the man's infection was caused by a strain of HIV that is resistant to several commonly used anti-HIV medications. On October 27, 2016 the New York City Department of Health and Mental Hygiene (NYC DOHMH) issued a Health Bulletin Alert about a similar case of HIV in New York City. Like the case in Toronto, the New York City man was also regularly taking PrEP and having condomless anal sex. Both cases involved infection with a resistant strain of HIV, meaning a strain of HIV that Truvada (the PrEP medication) is not fully protective against.

EFFECTIVENESS OF PrEP

Estimates indicate that there are about 15,000 people in NYS taking PrEP at this time. The fact that we are currently aware of only one such case in New York should help to ease patient and community fears. We believe that this is a <u>rare occurrence</u>. In fact, the medication tenofovir was selected for use as PrEP because resistance to this medication is rare, with studies showing that about 1 in 300 people living with HIV in the United States with resistance to it. For the PrEP medication to be effective, it is important to take it daily. The more a person can stick to a daily dose, the better it works to prevent HIV. PrEP is a highly effective method of HIV prevention, but like other prevention methods, it does not provide 100% protection. In addition to taking PrEP daily, an important way to reduce the risk of getting HIV is to use condoms as often as possible for anal or vaginal sex. Condoms provide protection against any strain of HIV, including multidrug resistant strains. Condoms also provide protection against other STIs. Other harm reduction strategies such as using plenty of lube and getting checked for STIs regularly can help further lower your risk of getting HIV. While news of these cases is unsettling, PrEP and early HIV treatment remain very powerful tools to fight HIV.

THE IMPORTANCE OF REGULAR HIV TESTING

It is important for all people taking PrEP to have an HIV test every three months. Regular HIV testing helps to ensure that, if you do develop HIV infection, you will know about it early and your doctor can put you on medication that will treat your specific strain of HIV. Early diagnosis is important for your health and, if you know you have HIV, you can take steps to prevent

passing the virus to your partners. Early HIV testing for each of the men described above led to rapid action and the best possible health outcomes for both men.

EFFECTIVE TREATMENT IS AVAILABLE

In the Toronto and New York City cases described above, the health care providers were able to prescribe a combination of medications and effectively treat each one. Early diagnosis and rapid treatment allowed these men to quickly achieve an undetectable viral load. Having an undetectable viral load improves the individual's health and provides a very high level of protection for the person's sexual partners.

BE ALERT TO SIGNS OF ACUTE HIV INFECTION

Many, but not all, people who develop HIV infection will have symptoms of acute or early HIV infection. Symptoms of early HIV are similar to the flu, with some important differences. The flu and HIV both feature fever and sore throat. If you have early HIV, you will most likely also have swollen glands, a rash or sore throat, but NOT a runny nose, cough or sneezing. If you have fever and sore throat as well as runny nose, cough and sneezing, you probably have the flu or a common cold. If you develop any symptoms of early HIV, tell your health care provider as soon as possible and request an HIV test. Depending on when your symptoms started, your doctor may want to order HIV RNA test as well as a "fourth generation" HIV test.

TALK TO YOUR HEALTH CARE PROVIDER

It is important for people who are taking PrEP, or considering it, to be comfortable with their plan to prevent HIV infection. Each person's situation and feelings are different. By talking openly with your health care provider about your behavior and your feelings, you can make a plan to prevent HIV and adjust your plan to make sure you are comfortable with your choices and level of protection.

For more information about PrEP and HIV prevention, please visit the following websites:

New York State Department of Health: www.nyhealth.gov/prep

New York State PrEP Clinical Guidance: www.hivguidelines.org

New York City Department of Health and Mental Hygiene:

http://www1.nyc.gov/site/doh/health/health-topics/pre-exposure-prophylaxis-prep.page

Centers for Disease Control:

http://www.cdc.gov/hiv/research/biomedicalresearch/prep/index.html