Viral Suppression U=U

WHAT IS VIRAL SUPPRESSION?

Antiretroviral therapy (ART) keeps HIV from making copies of itself. When a person with HIV begins an ART regimen, the amount of virus in their blood (viral load) drops. For almost everyone who starts taking antiretroviral medication (ARV) daily as prescribed, viral load will drop to an undetectable level in 6 months or less. Continuing to take ARVs as directed is imperative to stay undetectable.

If a person with HIV has an undetectable viral load, it means that the virus cannot be detected in the blood. Being undetectable means that the virus is less able to attack immune system cells and there will be less damage to the immune system. This allows people to stay healthier and live longer.

WHAT DOES IT MEAN TO BE UNDETECTABLE?

Taking ART as prescribed to suppress HIV levels leads to an undetectable status. When copies of HIV cannot be detected by standard viral load tests, a person with HIV is said to have an undetectable viral load. For most tests used clinically today, this means fewer than 50 copies of HIV per milliliter of blood (< 50 copies/mL). Reaching an undetectable viral load is the key goal of ART. A person is considered to have a durably undetectable viral load if their viral load remains undetectable for at least 6 months after their first undetectable test result. It is essential to continue to take ART as directed to maintain an undetectable viral load.

UNDETECTABLE = UNTRANSMITTABLE

People whose viral loads are undetectable do not transmit HIV to other people. That is the meaning of “undetectable = untransmittable” or “U=U”, a message started by the Prevention Access Campaign about what it means to be undetectable. If a person has been taking ART for at least 6 months, they have a consistently suppressed viral load, and continue taking their ART as directed, they will not transmit HIV to others.

DOES BEING UNDETECTABLE MEAN THAT THE VIRUS HAS LEFT MY BODY?

Even when viral load is undetectable, HIV is still present in the body. The virus lies dormant inside a small number of cells in the body called viral reservoirs. When therapy is halted by missing doses, taking a treatment holiday, or stopping treatment, the virus emerges and begins to multiply, becoming detectable in the blood again. This newly reproducing virus is infectious. It is essential to take ART as directed to achieve and maintain an undetectable status.

HOW DOES BEING UNDETECTABLE AFFECT MY RISK OF TRANSMITTING HIV TO A SEXUAL PARTNER?

People with HIV who take ART as prescribed and who achieve and maintain an undetectable viral load have effectively **no risk** of sexually transmitting the virus to an HIV-negative partner.

Three large multinational research studies involving couples in which one partner had HIV and the other did not observed no HIV transmission to the HIV-negative partner while the partner with HIV had an undetectable viral load. These studies followed approximately 3,000 male-female and male-male couples over many years while they did not use condoms. Over the course of the studies, couples reported engaging in more than 74,000 condomless episodes of vaginal or anal intercourse.

(Two of the studies mentioned above can be found here and here).

AFTER I BEGIN HIV TREATMENT, HOW LONG DOES IT TAKE TO BECOME UNDETECTABLE?

There is effectively no risk of sexual transmission of HIV when the partner with HIV has achieved an undetectable viral load and then maintained it for at least 6 months. Most people with HIV who start taking ART as prescribed achieve an undetectable viral load within 1-6 months after beginning treatment.

WHAT HAPPENS IF I STOP TAKING ART?

When ART is stopped, viral load rebounds, and the risk of transmitting HIV to a sexual partner in the absence of other prevention methods returns. Research has shown that people receiving intermittent ART had twice the rate of disease progression compared to those receiving continuous ART.

Taking ART as directed to achieve and maintain undetectable status stops HIV infection from progressing, helping people with HIV stay healthy and live longer, while offering the benefit of preventing sexual transmission. Stopping and re-starting treatment can cause drug resistance to develop, making that treatment regimen ineffective and limiting future treatment options.

HOW OFTEN DO I NEED TO BE TESTED TO CONFIRM THAT I’M UNDETECTABLE?

According to U.S. ART guidelines, viral load typically should be measured every 3-4 months. However, the frequency of testing may vary depending on other factors, such as the effectiveness of treatment and whether the patient is adherent to their therapy. People with HIV should talk with their healthcare teams to determine an appropriate schedule for viral load testing.

THE BOTTOM LINE

Development of antiretroviral medications (ARVs) to treat HIV has turned what was once a fatal infection into a manageable chronic condition.

Antiretroviral therapy (ART) can reduce the amount of HIV in the blood to levels that are undetectable with standard tests. Staying on treatment is crucial to keep the virus suppressed.

Research has demonstrated that achieving and maintaining a durably undetectable viral load (the amount of HIV in the blood) not only preserves the health of the person living with HIV, but also prevents transmission of the virus to other people.

Remember, U=U! Undetectable=Untransmittable.

Reviewed June 2025