

## UNDETECTABLE = UNTRANSMITTABLE

### FREQUENTLY ASKED QUESTIONS FOR COMMUNITY

#### **TDH JOINS THE U=U CAMPAIGN**

On November 27, 2019 the Tennessee Department of Health became one of the first state health departments in the South to join the “Undetectable Equals Untransmittable” or “U=U” campaign. The “U=U” campaign promotes the message that individuals living with HIV who take medication to achieve and maintain an undetectable viral load cannot transmit the virus to their sexual partner(s). This message is vital to combating HIV-related stigma and empowering people to enter and remain engaged in HIV care.

*“The most important thing someone living with HIV can do to stay healthy and prevent transmission of HIV is to be treated with medications on an ongoing basis,” said Pamela Talley, MD, MPH, medical director of the TDH HIV/STD/Viral Hepatitis section. “The science is clear. Numerous studies have shown that people living with HIV who take their HIV medication as prescribed and get and keep an undetectable viral load have effectively no risk of transmitting HIV.”*

#### **WHAT DOES UNDETECTABLE MEAN?**

HIV viral load tests measure the amount of HIV virus in the blood. There are many different viral load tests used by labs in the United States, each with different degrees of sensitivity for detecting the HIV virus. Some viral load tests are very sensitive and can measure as few as 20 copies of the HIV virus per milliliter (mL) of blood, while other viral load tests need at least 200 copies per/mL to detect the HIV virus. If there are less than the number of copies able to be detected by that lab test, the number of viral particles in the blood are said to be “undetectable”.

Regardless of the which test is used, if someone’s HIV viral load remains below 200 copies/mL of blood they are considered undetectable. Undetectable means the same thing as being virally suppressed.

#### **WHAT DOES UNTRANSMITTABLE MEAN?**

Untransmittable means there is no evidence that individuals who have successfully achieved and maintained an undetectable viral load through antiretroviral therapy (ART) can transmit the virus through sex.

#### **HOW LONG DOES IT TAKE TO BECOME UNDETECTABLE ?**

Once the provider finds the right ART regimen for a person it can take up to 6 months for the medications to lower the number of HIV viral particles in a person’s body to an undetectable

level. Taking medications as prescribed and remaining in HIV care helps people get to an undetectable level faster. Getting viral load labs is the only way to know when a person has reached an undetectable level.

Every person's body is different. It may take a provider some time to find the right medications for a person living with HIV and some more time for the medications to work at their best level in person's body. It is important not to compare the time it takes one to become undetectable to other people living with HIV. Remaining in HIV care is the best way to reach and keep an undetectable status.

### **HOW LONG DOES SOMEONE NEED TO BE UNDETECTABLE TO BE CONSIDERED UNTRANSMITTABLE?**

After first reaching an undetectable viral load a person living with HIV should maintain viral suppression for 6 months before they use their undetectable status as a method of HIV prevention.

### **HOW OFTEN SHOULD SOMEONE LIVING WITH HIV GET THEIR VIRAL LOAD CHECKED?**

Viral load testing is how a provider and person living with HIV knows their HIV medications are working. It is also the only way to ensure a person living with HIV has kept their undetectable status and can keep using it as a method of HIV prevention.

A person living with HIV should get viral load testing every three months to make sure they are virally suppressed. If a person has been undetectable for a long time a provider may switch to less frequent viral load testing (every 6 months).

### **DOES U=U APPLY TO ALL TYPES OF SEX?**

Yes. People living with HIV that have an undetectable viral load cannot transmit HIV through insertive or receptive vaginal, anal, or oral sex.

### **DOES U=U HELP PROTECT AGAINST OTHER SEXUALLY TRANSMITTED INFECTIONS (STI)?**

U=U only applies to the transmission of HIV and does not protect against the transmission of other STIs like syphilis, chlamydia, and gonorrhea.

### **SHOULD CONDOMS STILL BE USED IF SOMEONE IS UNDETECTABLE?**

Since U=U only applies to HIV and does not protect individuals from other STIs and unwanted pregnancy, condoms remain an important prevention tool for those purposes.

### **IF SOMEONE IS UNDETECTABLE SHOULD THEIR PARTNER STILL TAKE PREP?**

Like U=U, PrEP is an effective HIV prevention tool. This once-a-day pill is estimated to be more than 99% effective in preventing sexual transmission of HIV. U=U is estimated to be 100%

effective in preventing the sexual transmission of HIV.

While taking PrEP may not be necessary if a person is in a monogamous relationship with someone who has an undetectable viral load, a partner may still want to take PrEP because they feel more assured by making their own sexual health choice or have additional partners.

[Click here to read CDC's estimated effectiveness of various HIV prevention methods.](#)

### **WHAT DOES U=U MEAN FOR PEOPLE TRYING TO GET PREGNANT?**

U=U is an important message of hope for couples that have different HIV statuses who want to get pregnant without the concern of HIV transmission from condomless sex.

A person living with HIV wanting to become pregnant should talk to their provider about ways to lower the chance of passing HIV during birth to their child. Staying in HIV care, taking HIV medications as prescribed, and making a pregnancy and birthing plan with a provider can help ensure the healthiest outcome for the parent and the child.

### **DOES U=U APPLY TO PEOPLE WANTING TO BREASTFEED?**

There is not enough evidence at present to extend U=U to HIV transmission from breastmilk. While being on effective ART has been shown to significantly reduce the risk of HIV transmission from breastfeeding, it does not eliminate the risk. Therefore, it is still recommended that people living with HIV refrain from breastfeeding.

[Click here to read more about HIV and breastfeeding.](#)

### **DOES U=U APPLY TO PEOPLE WHO INJECT DRUGS?**

People living with HIV that have an undetectable viral load who inject drugs cannot pass HIV to their partners through sex. But, U=U does not apply to HIV transmission from sharing needles and other items used to inject drugs. Using new needles and items used to inject drugs every time is an important practice to prevent the transmission of HIV and other bloodborne pathogens like hepatitis C.

[Click here to learn about syringe services programs in Tennessee.](#)

### **HOW DOES U=U SUPPORT ENDING THE HIV EPIDEMIC?**

People living with HIV maintaining an undetectable status play a big role in preventing HIV. Making sure all people living with HIV get into and stay in HIV care is the only way we can truly end the HIV epidemic in the United States.

## **WHY IS IT IMPORTANT TO TALK ABOUT U=U?**

HIV stigma has kept many people living with HIV out of care and has prevented other people from even wanting to get tested for HIV. To end the HIV epidemic in the United States we need every person to know their HIV status and for all people living with HIV to become and remain engaged in care. Talking about U=U reduces stigma about HIV. U=U encourages people to know their HIV status by getting tested. And for those living with HIV, U=U helps motivate people to stay in care. U=U is a message of hope that all people (those living with HIV and those not living with HIV) can live and love without fear thanks to truly effective HIV medications.

## **HOW CAN I TALK ABOUT U=U?**

How a person talks about U=U is very important to people understanding the message and feeling confident that U=U is an effective HIV prevention method. The most important part is be clear that U=U works and to talk about it often. Below is some language guidance to consider when talking about U=U.

<b>Try these phrases, which are clear and accurate</b>	<b>Instead of these phrases, which may cause doubt</b>
People who are undetectable <b>do not transmit</b> HIV.	People who are undetectable are <i>extremely unlikely to transmit</i> HIV.
There is <b>no risk</b> that a person with an undetectable viral load will pass HIV to a partner.	There is <i>less risk</i> that a person with an undetectable viral load will pass HIV to a partner.
There is <b>no chance</b> that a person with an undetectable viral load will pass HIV to a partner.	There is <i>less chance</i> that a person with an undetectable viral load will pass HIV to a partner.
U=U <b>prevents</b> HIV.	U=U <i>helps to prevent</i> HIV.
U=U <b>eliminates</b> sexual transmission of HIV.	U=U <i>makes it hard</i> to sexually transmit HIV.

## **WHAT IS THE EVIDENCE SUPPORTING U=U?**

There is a lot of scientific research and evidence that supports U=U. Some of the most important studies are summarized on the next page. The CDC says U=U is 100% effective. [Click here to read CDC's estimated effectiveness of various HIV prevention methods.](#)

## **WHERE CAN I LEARN MORE?**

- [National Institute of Allergy and Infection Diseases "10 Things to Know About Viral Suppression" Fact Sheet](#)
- [The Center for Disease Control and Prevention's HIV Treatment as Prevention Webpage](#)
- [The Prevention Access Campaign Website](#)

## SUMMARY OF THE STUDIES PROVING U=U IS EFFECTIVE

Study Name	Number of Couples in the Study where one partner was living with HIV and one was not	Number of Condomless Sex Acts	Number of Instances HIV was Passed from an Undetectable Partner to a Partner Not Living with HIV
<b>HPTN 052</b>	1,763 couples	unknown	zero
<b>PARTNER 1</b>	1,166 couples	55,193	zero
<b>Opposites Attract</b>	358 couples	12,447	zero
<b>PARTNER 2</b>	972 couples	76,991	zero

### ***HPTN-052 – Antiretroviral Therapy for the Prevention of HIV-1 Transmission***

Cohen, M., Chen, Y., McCauley, M., Gamble, T., Hosseinipour, M., Kumarasamy, N., Hakim, J., Kumwenda, J., Grinsztejn, B., Pilotto, J., Godbole, S. & Charialertsak, S. for the HPTN 052 Study Team. (2016). Antiretroviral Therapy for the Prevention of HIV-1 Transmission. *N Engl J Med.* 375, 830-839. Available at <https://www.nejm.org/doi/full/10.1056/NEJMoa1600693>.

### ***PARTNER 1 – Sexual Activity Without Condoms and Risk of HIV Transmission in Serodifferent Couples When the HIV-Positive Partner is Using Suppressive Antiretroviral Therapy***

Rodger, AJ., Cambiano, V., Bruun, T. et al (2016). Sexual Activity Without Condoms and Risk of HIV Transmission in Serodifferent Couples When the HIV-Positive Partner Is Using Suppressive Antiretroviral Therapy. *JAMA.* 316(2), 171–181. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/27404185>.

### ***Opposites Attract Study – Viral Suppression and HIV Transmission in Homosexual Male Serodiscordant Couples: An International Cohort Study***

Bavinton, B., Pinto, A., Phanuphak, N., Grinsztejn, B., Prestage, G., Zablotska-Manos, I., Jin, F., Fairley, C., Moore, R., Roth, N., Bloch, M., Pell, C., McNulty, A., Baker, D., Hoy, J., Tee, B., Templeton, D., Cooper, D., Emery, S., Kelleher, A., Grulich, A. and the Opposites Attract Study Group. (2018). Viral suppression and HIV transmission in homosexual male serodiscordant couples: an international cohort study. *Lancet HIV.* 5(8): e438-447.

### ***PARTNER 2 – Risk of HIV Transmission Through Condomless Sex in Serodifferent Gay Couples with the HIV-positive Partner Taking Suppressive Antiretroviral Therapy (PARTNER): Final Results of a Multicentre, Prospective, Observational Study***

Rodger, A., Cambiano, V., Bruun, T. et al (2019). Risk of HIV Transmission Through Condomless Sex in Serodifferent Gay Couples with the HIV-positive Partner Taking Suppressive Antiretroviral Therapy (PARTNER): Final Results of a Multicentre, Prospective, Observational Study. *The Lancet.* 393(10189): p2428-2438.