

HIV TESTING AND TREATMENT



OVERVIEW

To end the global HIV epidemic, we must find all persons living with HIV and rapidly link them to lifelong treatment. As a key implementing agency of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), **the U.S. Centers for Disease Control and Prevention (CDC)** helped 1.6 million people learn their HIV-positive status, nearly 60 percent of all new HIV diagnoses identified through PEPFAR in 2020.

CASE IDENTIFICATION

CDC uses targeted evidence-based strategies such as index testing, a model that involves HIV testing of family members and sexual partners of known persons living with HIV (index clients) to find individuals who are at increased risk of infection. CDC also uses self-testing to improve HIV case finding for individuals who might otherwise be reluctant to be tested. Innovative *recency testing* developed by CDC helps distinguish between recent (within the last 1 year) and long-term HIV infections. This information helps CDC and its partners to identify geographical areas with an emerging HIV outbreak and to target immediate treatment and prevention services.

TREATMENT AS PREVENTION

CDC supports people living with HIV to start life-saving antiretroviral treatment, often on the same day that they are diagnosed. As of September 30, 2020, as part of PEPFAR, CDC supported antiretroviral treatment for 10.5 million people living with HIV – more than one third of all people on treatment worldwide. Research shows that **sustained antiretroviral treatment reduces the amount of HIV in a person's body** – also referred to as viral load – to an undetectable level, that virtually eliminates transmission of the virus to sexual partners. Once a person starts HIV treatment, CDC supports countries to provide

person-centered and differentiated models of service – such as multi-month dispensing of antiretroviral treatment – to help people living with HIV remain virally suppressed on treatment for life.

Reducing HIV viral load for pregnant and nursing mothers not only keeps mothers healthy, it also eliminates the risk of transmission from mother to child. **CDC supports programs to eliminate mother-to-child transmission through early identification of HIV-positive mothers (within and outside of health care facilities), rapid antiretroviral treatment initiation with ongoing monitoring to ensure that their viral load is low, and appropriate testing and care for HIV-exposed infants** through the end of breastfeeding. By increasing the number of mothers on antiretroviral treatment worldwide, the number of annual new infant HIV infections declined by 50 percent from 2010 to 2018 to 130,000.¹ In 2019, 85 percent of pregnant women with HIV received antiretroviral treatment to prevent transmission of HIV to their children.²

Finally, **a robust and reliable laboratory system is the backbone of HIV testing and treatment**. From accurately diagnosing infections to verifying virus levels in a patient's body during antiretroviral treatment, CDC-supported laboratories play a vital role in HIV epidemic control.

CLOSING REMAINING GAPS

There is still much work to do. The Joint United Nations Programme on HIV/AIDS reported that 12.6 million of 38 million people living with HIV were not accessing antiretroviral treatment at the end of 2019.³ In countries with high levels of HIV infection, the rate of mother-to-child transmission at the end of breastfeeding is over 11 percent⁴ – a further challenge to reaching an AIDS-free generation. **CDC is working to address barriers including stigma, discrimination, and other social inequities that stand in the way of finding and treating all people living with HIV** including those previously undiagnosed.

¹UNAIDS. *Start Free Stay Free AIDS Free. 2019 Report.*

²UNAIDS. *Global HIV & AIDS Statistics – 2020 Fact Sheet. 2020.*

³UNAIDS. *Seizing the Moment; Tackling Entrenched Inequalities to End Epidemics. Global AIDS Update 2020.*

⁴UNAIDS. *Start Free Stay Free AIDS Free. 2019 Report.*

