Texas HIV Prevention Works

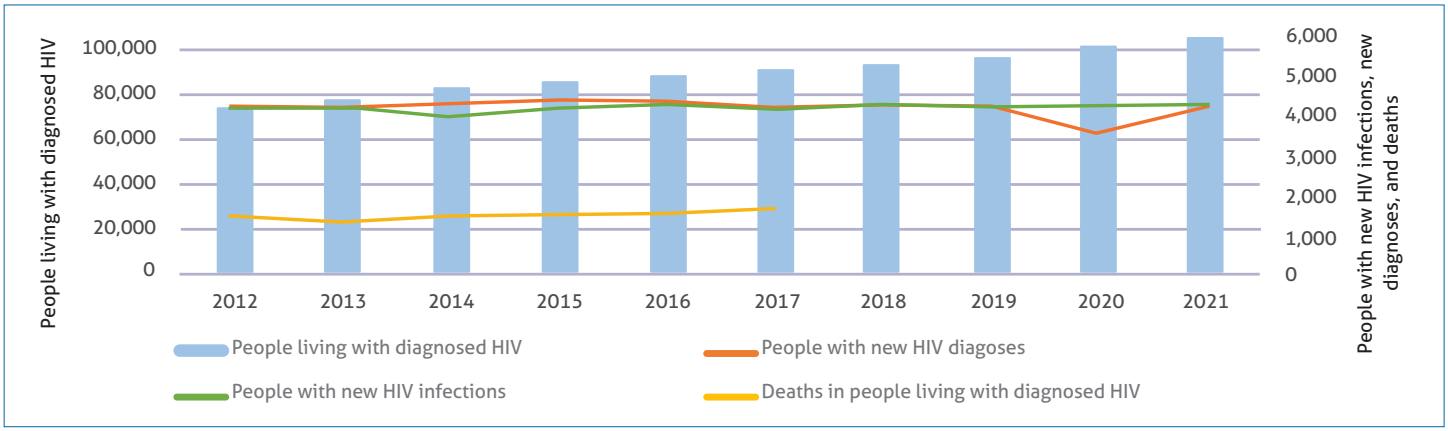
The Big Picture

Over the past decade, the number of Texas residents living with diagnosed HIV has increased by about 4 percent a year. With about 74,000 in 2012, the number increased by 38 percent to more than 102,000 Texans living with diagnosed HIV in 2021. DSHS estimates there were around 20,000 more people living with undiagnosed HIV in 2021. At first glance, this increase gives the impression Texas is not reducing the annual number of people who become infected with HIV, which is also called lowering HIV transmissions. A closer look reveals a different story.

Figure 1 shows that the rise in people living with diagnosed HIV is not due to increases in the number of people diagnosed with the virus each year. That number has been flat at about 4,400 people per year for the last decade. Additionally, there have been no increases in the estimated annual number of people who acquired or became infected with HIV from 2012 to 2021.[1]

The rise in people living with diagnosed HIV is due to the increasing number of people who are taking highly effective treatment drugs known as antiretroviral therapy (ART). ART extends the lives of people living with HIV and keeps the number of deaths in Texas at around 1,600. Studies indicate that people who start treatment immediately after an HIV diagnosis have life expectancies similar to those of people living without HIV.[2]

Figure 1: The annual number of people living with diagnosed HIV, number of people with new HIV infections, people with new HIV diagnoses, and number of deaths in people living with HIV, Texas 2012 to 2021



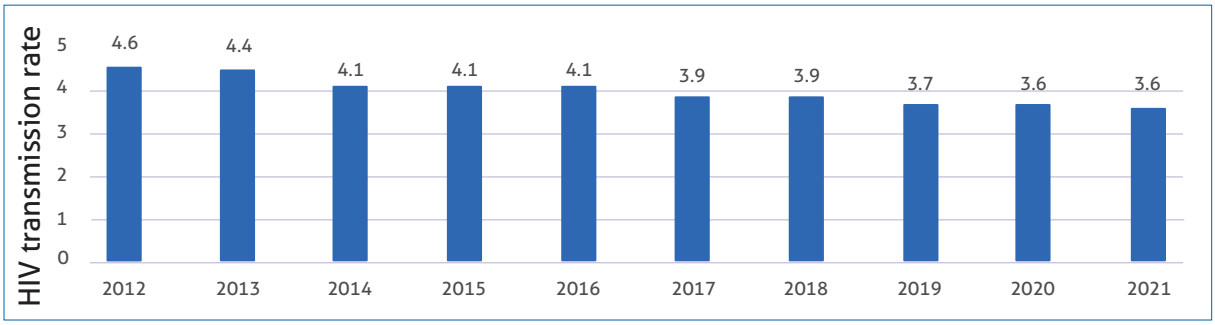
Source: Routine HIV surveillance information for people living with diagnosed HIV, new diagnoses, and deaths. The estimate of people acquiring HIV comes from the use of a CDC-developed estimation model with Texas HIV data.

ART extends a healthy life by suppressing the HIV viral load, which is the amount of HIV circulating in the body. People with a suppressed viral load cannot transmit HIV sexually.[3] Increasing the number of people with HIV who are on successful treatment has the double benefit of improving their health and preventing further transmission of HIV.

The best way to understand if HIV prevention and treatment are reducing the number of Texans who acquire HIV is to track the HIV transmission rate.[4] The HIV transmission rate is the estimated number of people who become infected with HIV per year for every 100 people living with HIV (diagnosed and undiagnosed).[5]

The Texas transmission rate dropped by 22 percent over the past ten years, from 4.6 in 2012 to 3.6 in 2021. This means that even as the number of Texans living with diagnosed HIV grew due to effective treatment, there were no increases in transmissions. (Figure 2). This means that despite increases in the number of people with diagnosed HIV, the number of transmissions and the number of people who become infected with HIV each year are not rising. This also means that about 96 percent of Texans living with HIV in 2021 had no transmissions that year.

Figure 2: HIV transmission rate in Texas, 2012-2021



Source: Results of a CDC-developed estimation model with Texas HIV data.

The decrease in the transmission rate also reduced the number of people living with diagnosed HIV by about 4,000 in 2021. In 2021, the estimated lifetime cost to the health care system for someone diagnosed with HIV in Texas was around $377,413[6]. This reduction in the number of HIV diagnoses saves $1.78 billion[7] in health care costs.

Texas can continue to reduce the transmission rate through four paths:

- Expanding the use of effective prevention methods, such as condoms or pre-exposure prophylaxis (PrEP).[8]
- Increasing the percentage of people with HIV who have been diagnosed to 90 percent (currently at 84 percent).

- Raising the proportion of people with diagnosed HIV who are on ART to 90 percent (currently at 70 percent).
- Increasing the proportion of people on ART who have a suppressed viral load to 90 percent (currently at 88 percent).

It is especially important to increase the number of people who know their status and the number of people with diagnosed HIV who are in medical care. In 2021, these two groups accounted for almost 9 out of 10 transmissions in Texas.[9]

In 2021, DSHS and its funded partners at the local health department provided the following key services to reduce HIV transmission:

- Facilitated PrEP access for 1,525 people at very high risk for HIV.
- Provided almost 57,869 HIV tests to people at very high risk for HIV through partner services and focused testing programs, diagnosing 601 people.
- Integrated HIV testing into routine health care in some hospital emergency departments and primary care settings, which provided 170,058 HIV tests and diagnosing 289 people.
- Provided direct providing access to treatment medication for 22,572 people living with diagnosed HIV and collaborated with community partners who provided outpatient medical and support services to 46,749 people living with diagnosed HIV, filling gaps in local service systems.

For more information on these programs, see the annual HIV Program Reports in the Legislative Reports section.

The Bottom Line

Texas is preventing HIV transmissions and increases in the number of people acquiring HIV through a focused strategy that combines effective prevention interventions such as PrEP. These are programs to increase access to HIV testing for people at high risk for HIV and increase integration of HIV testing into routine medical care; and systems to facilitate access to medical care, treatment drugs, and supportive services for low-income persons living with diagnosed HIV. Prevention and treatment programs are working together to reduce HIV transmission and improve the health and well-being of Texans living with HIV.

Endnotes

1 *The CDC estimates that about the half of the people who acquire HIV live for three or more years before they get a diagnosis. Dailey, A.F., Hoots, B.E., Hall, H.I., et al (2017). Vital Signs: Human Immunodeficiency Virus Testing and Diagnosis Delays. Morbidity and Mortality Weekly Report, 66, 1300-1306.*

2 *Marcus, J.L., Leyden, W.A., Alexeeff, S.E., et al. (June 15, 2020). Comparison of Overall and Co-morbidity-Free Life Expectancy Between Insured Adults With and Without HIV Infection, 2000-2016. Journal of the American Medical Association Network Open, 3(6) retrieved from https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2767138*

3 *Eisinger, R.W., Diffenbach, C.W., Fauci, A.S. (January 10, 2019). HIV viral load and transmissibility of HIV infection: undetectable equals untransmittable. Journal of the American Medical Association, 321 (5:451-452). Retrieved from https://jamanetwork.com/journals/jama/article-abstract/2720997*

4 *Holtgrave, D.R., Hall, H.I., Prejean, J. (March 30, 2012). HIV Transmission Rates in the United States, 2006-2008. The Open AIDS Journal, 6. Retrieved from https://openaidsjournal.com/VOLUME/6/PAGE/26/FULLTEXT/*

5 *The transmission rate uses estimates of the number of people who became infected with HIV each year divided by the estimated total number of people living with HIV both diagnosed and undiagnosed. The calculation does not use the number of people diagnosed annually or the number of people living with diagnosed HIV. Using these figures will overestimate the transmission rate and the financial impact of changes to the rate.*

6 *Franham, P.G., Gopalappa, C., Sansom, S.L., et al. (October 1, 2013). Updates of Lifetime Costs of Care and Quality-of-Life Estimates for HIV-Infected Persons in the United States: Late Versus Early Diagnosis and Entry Into Care. Journal of Acquired Immune Deficiency Syndrome 64(2):183-189. Retrieved from https://journals.lww.com/jaids/pages/results.aspx?txtKeywords=Updates+of+Lifetime+costs+of+care+and+quality+of+life+estimates. This reports adjusts the costs to fit the profile of newly diagnosed Texans in 2021 and for inflation.*

7 *Because of the nature of the estimate, we cannot calculate the expenditure per year or the expenditures that would be avoided for DSHS programs.*

8 *PrEP is a medicine that prevents people at very high risk from acquiring HIV.*

9 *Karpinski, J., Rosenberg, E., Paz-Bailey, G., et al. (April 2015). Human Immunodeficiency Virus Transmission at Each Step of the Care Continuum in the United States. Journal of the American Medical Association INternal Medicine, 175(4):588-596. Retrieved from https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2130723*

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