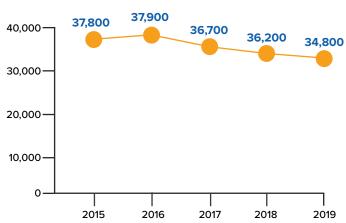


# **Ending the HIV Epidemic in the United States Indicators to Monitor Progress**

The *Ending the HIV Epidemic in the United States* (EHE) initiative aims to reduce new HIV infections by 90% by 2030. The initiative includes four pillars: **DIAGNOSE**, **TREAT**, **PREVENT**, and **RESPOND**. For each pillar, the EHE initiative scales up science-based strategies that can end the epidemic.





New HIV infections fell

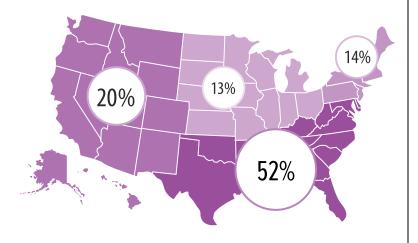
8% from 2015–2019.

**Diagnose** all people with HIV as early as possible

Total Number of HIV Diagnoses in 2019: 36,801\*\*

of the estimated 1.2 million people with HIV in the U.S. know their status.\*

#### Percentage of HIV Diagnoses by Region, 2019

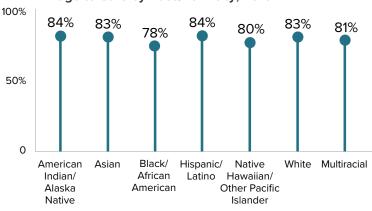




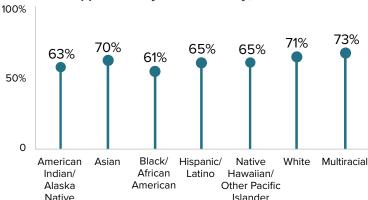
**Treat** people with HIV rapidly and effectively to reach sustained viral suppression

1 in 4 people with HIV are not receiving needed HIV care.

#### Linkage to Care by Race/Ethnicity, 2019



#### Viral Suppression by Race/Ethnicity, 2019



**Prevent** new HIV transmissions by using proven interventions, including pre-exposure prophylaxis (PrEP) and syringe service

About

25%

who could benefit from PrEP are prescribed it.

More than

1.2 million

people could benefit from PrEP.

**Respond** quickly to rapid HIV transmission



CDC works to ensure that all jurisdictions have the capacity to quickly identify, investigate, and respond to potential HIV outbreaks.

## CDC uses six HIV indicators to monitor progress toward *Ending the HIV Epidemic* goals:



#### Incidence

Reduce new infections by **75%** by 2025.



#### **Diagnoses**

Reduce new HIV diagnoses by **75%** by 2025.



#### **Knowledge of Status**

Increase the percentage of people who have knowledge of their status to 95% by 2025.



#### **PrEP Coverage**

to **50%** by 2025.



#### Linkage to Care

Link 95% of people newly diagnosed with HIV to care by 2025.



#### **Viral Suppression**

Increase viral suppression among people with diagnosed HIV to **95%** by 2025.

- \* Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2015–2019. HIV Surveillance Supplemental Report 2021;26(No. 1). http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 2021.
- \*\* Centers for Disease Control and Prevention. *HIV Surveillance Report*, 2019; vol. 32. http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 2021. *Note*. Data from all 50 states, the District of Columbia, and 6 US dependent areas (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, Republic of Palau, and the U.S. Virgin Islands).
- † Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2019. HIV Surveillance Supplemental Report 2021;26(No.2). http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 2021. Note. Data from 44 states
- ‡ Centers for Disease Control and Prevention. Core indicators for monitoring the Ending the HIV Epidemic initiative (preliminary data): National HIV Surveillance System data reported through June 2021; and preexposure prophylaxis (PrEP) data reported through March 2021. HIV Surveillance Data Tables 2021;2(No. 4). https://www.cdc.gov/hiv/library/reports/surveillance-data-tables/. Published October 2021.



## **DIAGNOSE PILLAR**

## **HIV Diagnoses in the United States**

The *Ending the HIV Epidemic in the United States* (EHE) initiative aims to reduce new HIV infections by 90% by 2030. The initiative includes four pillars: **DIAGNOSE**, TREAT, PREVENT, and RESPOND. For each pillar, the EHE initiative will scale up science-based strategies that can end the epidemic.

#### **Knowledge of HIV Status in 2019**

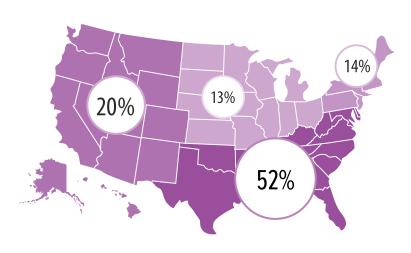
Knowing one's status is a critical step in accessing powerful prevention and treatment tools. Whether or not a person has HIV, this knowledge leads to actions that can improve health and prevent HIV.

**87%** of the estimated 1.2 million people with HIV in the U.S. are aware of their status.

Only 56% of those aged 13-24 know their status.\*

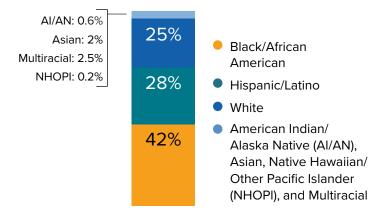
#### Total Number of HIV Diagnoses in 2019: 36,801

### **HIV Diagnoses by Region**



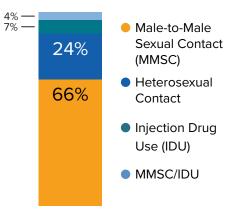
#### **HIV Diagnoses by Race/Ethnicity**

Black/African-American persons and Hispanic/Latino persons account for **70% of HIV diagnoses** but make up only 31% of the U.S. population.

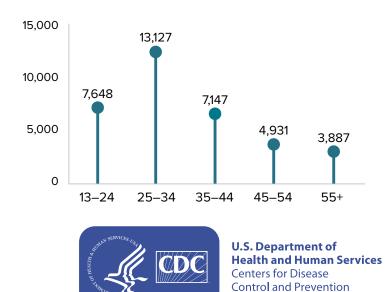


## **HIV Diagnoses by Transmission Categories**<sup>†</sup>

Male-to-male sexual contact accounts for about **66% of HIV diagnoses** each year. Gay and bisexual men represent only about 2% of the U.S. population.



#### **HIV Diagnoses by Age**



## Early diagnosis is essential to end the HIV epidemic.



at least 3 years before diagnosis.

people with HIV have the virus at least **7 years before diagnosis**.

40%
of people in the
United States have
ever been tested
for HIV.

About 80%

of annual HIV infections are transmitted by people who don't know they have HIV or who are not in HIV care.

## CDC is focused on making HIV testing simple, accessible, and routine.

In 2006, CDC began recommending that all people aged 13 to 64 be tested for HIV at least once in a healthcare setting. However, uptake of that recommendation has not been optimal.

### Strategies for diagnosing all people with HIV as soon as possible:



## Apply innovative approaches

to increase testing in clinical settings (e.g., conducting routine screening in emergency departments)



**Develop systems** to make HIV testing more accessible in nontraditional settings (e.g., self-testing)



**Establish ways** to regularly rescreen people at increased risk

## **Ending the HIV Epidemic goals**



Increase the percentage of people who have knowledge of their status

to 95% by 2025.



Reduce new infections by **90%** by 2030.

- \* Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2015–2019. HIV Surveillance Supplemental Report 2021;26(No. 1). http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 2021.
- \*\* Centers for Disease Control and Prevention. HIV Surveillance Report, 2019; vol. 32. http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 2021. Note. Data from all 50 states, the District of Columbia, and 6 US dependent areas (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, Republic of Palau, and the U.S. Virgin Islands).
- <sup>†</sup> Transmission category data are presented based on sex at birth and include transgender persons.
- <sup>‡</sup> Dailey, A. F., Hoots, B. E., Hall, H. I., et al. (2017). Vital signs: Human immunodeficiency virus testing and diagnosis delays—United States. *Morbidity and Mortality Weekly Report,* 66, 1300–1306. https://www.cdc.gov/mmwr/volumes/66/wr/mm6647e1.htm



## TREAT PILLAR

## **HIV Treatment in the United States**

The *Ending the HIV Epidemic in the United States* (EHE) initiative aims to reduce new HIV infections by 90% by 2030. The initiative includes four pillars: DIAGNOSE, **TREAT**, PREVENT, and RESPOND. For each pillar, the EHE initiative will scale up science-based strategies that can end the epidemic.

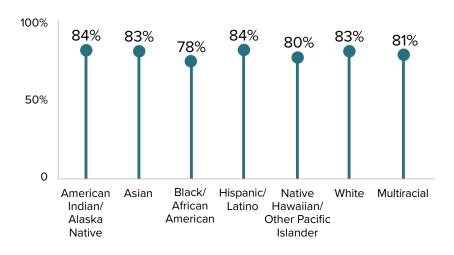
HIV treatment not only preserves the health of people with HIV but also is one of the most powerful strategies to prevent HIV transmission.

But 1 in 4 people with HIV are not receiving needed HIV care.\*

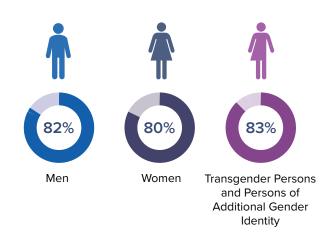
## Linkage to HIV Medical Care Within One Month in 2019

In 2019, 81% of persons receiving a diagnosis of HIV were linked to care within 1 month.

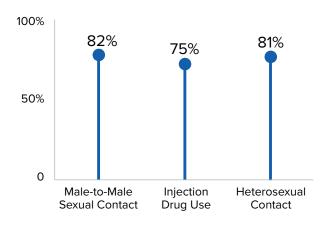
#### Linkage to Care by Race/Ethnicity



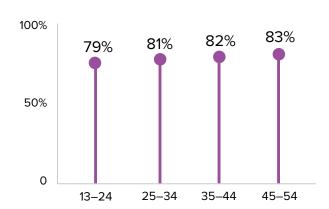
## Linkage to Care by Gender



#### Linkage to Care by Transmission Category



#### Linkage to Care by Age



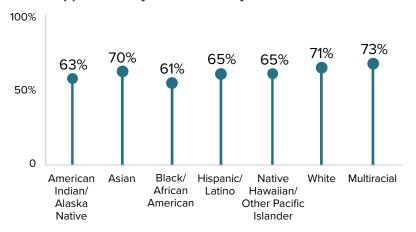


**U.S. Department of Health and Human Services**Centers for Disease
Control and Prevention

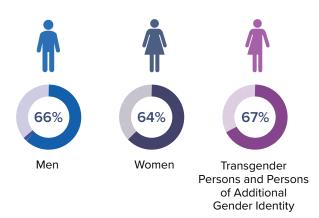
## Viral Suppression in 2019

In 2019, 66% of people with diagnosed HIV were virally suppressed. Antiretroviral therapy (ART) not only preserves the health, quality of life, and life expectancy of people with HIV but also is a powerful tool to eliminate HIV transmission if taken as directed by all who need it. People who receive HIV treatment and then reach and sustain an undetectable viral load have effectively no risk of sexually transmitting the virus to others.

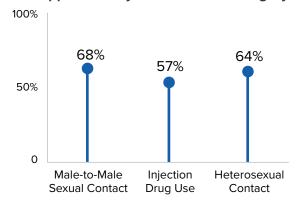
#### Viral Suppression by Race/Ethnicity



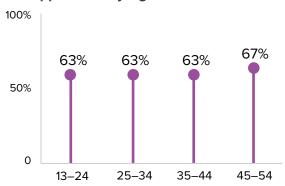
#### **Viral Suppression by Gender**



#### Viral Suppression by Transmission Category



#### **Viral Suppression by Age**



CDC is working with grantees, partners, and providers to quickly link people with HIV to care and treatment, and to re-engage those who have stopped receiving care.

#### Strategies for treating people with HIV rapidly and effectively:



## **Expand innovative options** to improve adherence and support medical care (e.g., text

reminders, telehealth)

**W** 

**Develop networks** to rapidly link persons with a recent HIV diagnosis to services



Scale up Data-to-Care programs to reach people who are not receiving care and engage them in care



Provide evidence-based incentives to patients to stay in or return to care

## **Ending the HIV Epidemic goals**

Current HIV treatment guidelines recommend that all people with HIV begin treatment as soon as possible after receiving a diagnosis. CDC is working with communities and partners to:



Increase linkage to care within 1 month of HIV diagnosis to 95% by 2025.



Increase viral suppression among people with diagnosed HIV to **95%** by 2025.

- \* Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2019. HIV Surveillance Supplemental Report 2021;26(No.2). http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 2021. Note. Data from 44 states and the District of Columbia.
- \*\* Linkage to care data by gender are presented by gender identity. Gender identity refers to a person's internal understanding of their own gender, or gender with which a person identifies.
- <sup>†</sup> Transmission category data are presented based on sex at birth and include transgender persons.
- <sup>††</sup> Percentage of persons with diagnosed HIV who had at least one CD4 or viral load test run by a healthcare professional in a given year.



## PREVENT PILLAR

## **HIV Prevention in the United States**

The *Ending the HIV Epidemic in the United States* (EHE) initiative aims to reduce new HIV infections by 90% by 2030. The initiative includes four pillars: DIAGNOSE, TREAT, **PREVENT**, and RESPOND. For each pillar, the EHE initiative will scale up science-based strategies that can end the epidemic.

To prevent new HIV transmissions, CDC is supporting proven interventions, including pre-exposure prophylaxis (PrEP) and comprehensive syringe services programs (SSPs).



**PrEP** is medication that is highly effective in preventing HIV.

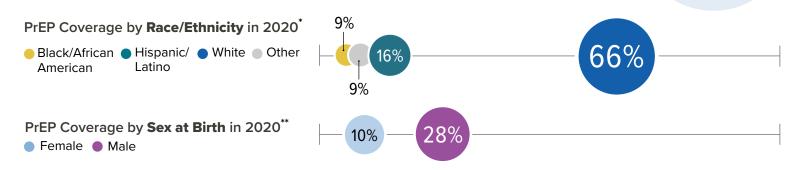
**About** 

25%

who could benefit from PrEP are prescribed it. More than

1.2 million

people could benefit from PrEP.



In a study among transgender women who were HIV negative, PrEP awareness was high but use was low. **92%** had heard of PrEP, but **only 32%** had used it in the last 12 months.<sup>†</sup>

New users of SSPs are 5x more likely to enter drug treatment and 3x more likely to stop using drugs<sup>‡</sup> than people who don't use the programs.



SSPs are associated with an approximately

**50**%

decline in HIV transmission risk.

**SSPs** are community-based programs that provide access to sterile needles and syringes, facilitate safe disposal of used syringes, and provide a link to other important health and social services and programs.



U.S. Department of Health and Human Services Centers for Disease Control and Prevention CDC is accelerating efforts to increase availability and use of PrEP, especially **for disproportionately affected populations with the highest rates of new HIV diagnoses and low PrEP use**.

## **Strategies:**



Increase availability of PrEP and TelePrEP services in community health centers and sexual health and STD clinics



Work with health departments and community-based organizations to link people with PrEP services, ideally on the same day



Increase number of clinicians offering PrEP and PEP (post-exposure prophylaxis), including through TelePrEP



**Create peer networks** that build trust and improve uptake of PrEP

**Increase PrEP awareness** among clinicians and the public through social marketing and text-messaging campaigns

CDC is working to increase the **quality, availability, use of, and ease of access to SSPs** through innovative delivery options.

## Strategies:



Support enhanced technical assistance to ensure the provision of high-quality, comprehensive harm reduction services



Partner with other federal agencies and work with local communities to help implement SSPs where they are needed and permitted by state and local laws



Where SSPs are established, help scale up delivery of a range of services, including testing for HIV, sexually transmitted infections (STIs), and hepatitis C virus; linkage to substance use disorder and infectious disease care; and access to vaccinations

## **Ending the HIV Epidemic goals**



Increase PrEP coverage to 50% by 2025.

- \* Centers for Disease Control and Prevention. Core indicators for monitoring the Ending the HIV Epidemic initiative (preliminary data): National HIV Surveillance System data reported through June 2021; and preexposure prophylaxis (PrEP) data reported through March 2021. HIV Surveillance Data Tables 2021;2(No. 4). https://www.cdc.gov/hiv/library/reports/surveillance-data-tables/. Published October 2021. Note. Race/ethnicity categories available in the IQVIA database include White, Black/African American, Hispanic/Latino, and Asian/Other
- \*\* Transmission category data are presented based on sex at birth and include transgender persons.
- † Centers for Disease Control and Prevention. HIV Infection, Risk, Prevention, and Testing Behaviors Among Transgender Women—National HIV Behavioral Surveillance, 7 U.S. Cities, 2019–2020. HIV Surveillance Special Report 27. http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published April 2021.
- <sup>‡</sup> Hagan, H., McGough, J. P., Thiede, H., Hopkins, S., Duchin, J., & Alexander, E. R. (2000). Reduced injection frequency and increased entry and retention in drug treatment associated with needle-exchange participation in Seattle drug injectors. *Journal of Substance Abuse Treatment*, 19, 247–252.



## **RESPOND PILLAR**

## **HIV Cluster Detection and Response**

The *Ending the HIV Epidemic in the United St*ates (EHE) initiative aims to reduce new HIV infections by 90% by 2030. The initiative includes four pillars: DIAGNOSE, TREAT, PREVENT, and RESPOND. For each pillar, the EHE initiative will scale up science-based strategies that can end the epidemic.



Responding quickly to potential HIV outbreaks can **get vital prevention and treatment services to people who need them.** 



Real-time response systems are key to ending the HIV epidemic in the United States.



Cutting-edge public health approaches can pinpoint areas of rapid HIV transmission and can mobilize resources for HIV treatment and prevention.



HIV Cluster Detection and Outbreak Response uses data routinely reported to health departments to identify groups of people and communities experiencing rapid HIV transmission.

From December 2015 through December 2019, **242** clusters were detected.

**Transmission rates** in clusters identified using CDC's cluster detection approach are **8–11x** as high as the U.S. average.



CDC works with jurisdictions to ensure they are prepared to quickly detect and respond to HIV clusters and outbreaks.

CDC is accelerating efforts to increase availability and use of PrEP, especially **for disproportionately affected populations with the highest rates of new HIV diagnoses and low PrEP use**.

## **Strategies:**



Increase availability of PrEP and TelePrEP services in community health centers and sexual health and STD clinics



Work with health departments and community-based organizations to link people with PrEP services, ideally on the same day



Increase number of clinicians offering PrEP and PEP (post-exposure prophylaxis), including through TelePrEP



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- <sup>‡</sup> Hagan, H., McGough, J. P., Thiede, H., Hopkins, S., Duchin, J., & Alexander, E. R. (2000). Reduced injection frequency and increased entry and retention in drug treatment associated with needle-exchange participation in Seattle drug injectors. *Journal of Substance Abuse Treatment*, 19, 247–252.