

Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2021

Advisory Statement

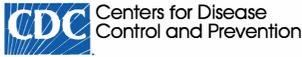
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Publication date of referenced document: May 2023

Preexposure prophylaxis (PrEP) coverage is currently estimated by taking the number of persons prescribed PrEP (numerator) and dividing it by the estimated number of persons with indications for PrEP (denominator). Since the current methodology for estimating PrEP coverage was first published in 2018, CDC has cited limitations of both the numerator and denominator. For example, the number of persons prescribed PrEP is estimated by using data from the IQVIA pharmacy database based on an algorithm that includes FDA-approved drugs for PrEP. Although IQVIA records 94% of all prescriptions from retail pharmacies and 74% from mail-order outlets in the United States, data from closed health care systems are not included in the IQVIA data set. Therefore, the current PrEP numerator has represented minimum estimates of PrEP prescriptions. Additionally, race/ethnicity data in the IQVIA database are only available for <40% of persons prescribed PrEP each year. Regarding limitations of the current denominator, the number of persons who have indications for PrEP is estimated by using data from 3 sources: National HIV Surveillance System, National Health and Nutrition Examination Survey, and U.S. Census Bureau's American Community Survey. Each of these data sources have different schedules of data availability. As a result, the availability of a denominator often lags the availability of a numerator.

In March 2024, updated data from 2 closed-system sources were made available to CDC that can improve the representativeness of the number of persons prescribed PrEP in the United States. In the coming months, CDC also expects to have updates to the data sets currently used to estimate the number of persons with indications for PrEP. To ensure that PrEP coverage estimates are calculated using the best available data at the time of publication, CDC is pausing PrEP coverage reporting for one year. During this time, CDC will update PrEP coverage data sources and determine the best way to present PrEP coverage. CDC plans to resume PrEP coverage reporting in the next HIV Surveillance Supplemental (Monitoring) Report, currently scheduled for publication in June 2025.

Until updated estimates are published, CDC advises against citing specific PrEP coverage data points and instead recommends referencing general trends and disparities. In addition, because of a formula error that affects a subset of race and ethnicity PrEP data, race and ethnicity data points from all reports published prior to 2024 should not be cited.



Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data—United States and 6 Dependent Areas, 2021

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Acknowledgments

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Last Reviewed: May 23, 2023

Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data—United States and 6 Dependent Areas, 2021: Commentary

Commentary



Report Contents

Other Reports

The Centers for Disease Control and Prevention (CDC) collects data to monitor progress toward achieving national goals and the objectives set forth in federal directives [1–4]. This surveillance supplemental report complements the 2021 *HIV Surveillance Report* [5] and presents the results of focused analyses of National HIV Surveillance System (NHSS) [6] data to measure progress toward achieving HIV prevention and care goals [1–3]. Data in this report are used to inform program planning and accelerate action to reach disproportionately affected populations and achieve national goals outlined in [Healthy People 2030](#), [the National HIV/AIDS Strategy \(2022–2025\)](#), [and the Ending the HIV Epidemic in the U.S. \(EHE\) initiative](#) [1–4].

Most data in this report are reported in our interactive tool, [NCHHSTP AtlasPlus](#), that allows users the ability to create customized tables, maps, and charts. Data can be stratified by disease, year, geography, and selected characteristics.

Impact of COVID-19 Pandemic

Data for the year 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. To emphasize the need for caution, tables presenting data for the year 2020 include “COVID-19 pandemic” in the title, and the 2020 column is highlighted in tables that provide multiple years of data. The ongoing impact of the pandemic on HIV testing, diagnoses, and treatment has varied by jurisdiction, with some recovering more slowly than others. In 2021, some jurisdictions’ levels of HIV testing, diagnoses, and treatment remained below pre-COVID-19 levels [7–11]. Increasing testing efforts and innovative strategies to reach people with undiagnosed HIV are needed to offset this diagnosis gap. Assessment of trends in HIV diagnoses, deaths, and prevalence that include the year 2020 should be interpreted with caution.

Report Changes

- Tables that present data by using the transmission category classification, based on a person's assigned sex at birth (ASAB), include the definition for male-to-male sexual contact (MMSC), an updated definition for injection drug use (IDU), and MMSC *and* IDU.
- The Prevalence-based HIV Care Continuum table and associated data have been reincorporated, as in years prior to 2020 (COVID-19 pandemic).

Last Reviewed: May 23, 2023

Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data—United States and 6 Dependent Areas, 2021: National Profile

National Profile

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Other Reports

NHSS data presented in this report are based on case data reported to CDC through December 31, 2022, and allow for a 12-month reporting delay and assessment of diagnoses, deaths, and prevalence for the year 2021. The statements in this section, unless otherwise indicated, are based on numbers of 12 or more. Please use caution when interpreting data on diagnosed HIV infection (see Technical Notes for additional information on definitions and data specifications).

Important notes

- Jurisdictions (47 states and the District of Columbia) that reported complete CD4+ T-lymphocyte (CD4) and viral load laboratory results to CDC were included for the analyses that require laboratory data (Tables 1a–4b).
- Data from the 50 states, the District of Columbia, and 6 U.S. dependent areas (where indicated) were used for analyses of prevalence-based HIV care continuum (Table 5); stage 3 (AIDS) at the time of diagnosis of HIV infection (Tables 6a–6d); deaths and survival of persons with diagnosed HIV infection (Tables 7a–8f); and persons with diagnosed, perinatally acquired HIV infection (Tables 10a/b).
- For tables that include data by transmission category, the data were statistically adjusted to account for missing transmission category and the percentages are presented based on ASAB as reported in the tables.
- Please use caution when interpreting data for transgender men, additional gender identity (AGI), American Indian/Alaska Native persons, and Native Hawaiian/other Pacific Islander persons as the percentages and/or rates are based on small numbers.
- Please read all titles and footnotes carefully to ensure a complete understanding of the displayed data. Percentages, not rates, are calculated for the care outcomes. Please note that important points are highlighted with the magnifying glass icon  and important findings are called to attention with the exclamation icon  in the graphic.

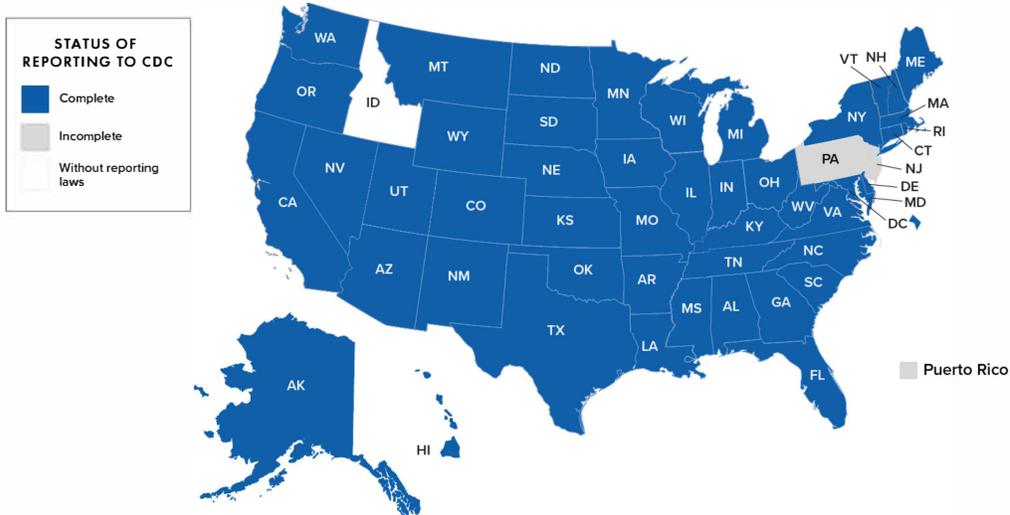
Status of Laboratory Reporting

Monitoring stage of disease at time of diagnosis, linkage to HIV medical care, retention in HIV medical care, and viral suppression (based on NHSS data) is dependent upon complete reporting of HIV-related laboratory results (including CD4 and viral load results; see Technical Notes) to HIV surveillance programs and CDC. Although most jurisdictions have regulations

that require laboratories and providers to report at least a subset of CD4 and viral load test results to health departments, not all jurisdictions have mandatory reporting of all levels of CD4 and viral load (i.e., detectable and undetectable) results.

As of December 2022, 48 jurisdictions (47 states and the District of Columbia) had complete laboratory reporting for all data years examined and specimens collected from at least January 2020 through September 2022 (Figure 1). In comparison with the 2020 report, the 2021 report includes data from 2 additional states (Kentucky and Vermont) that met the criteria. Please note that due to incomplete reporting of deaths for the year 2021, data for Mississippi, Guam, U.S. Virgin Islands, and West Virginia should be interpreted with caution.

FIGURE 1
Status of CD4 and viral load reporting, by area of residence as of December 2022—United States and Puerto Rico



Note. New Jersey and Pennsylvania recently enacted laws to require laboratories to report all CD4 and viral load test results, but a full calendar year of reporting laboratory results to CDC is required before data are included in care analyses.



Diagnosis-Based HIV Care Continuum—Overview

The diagnosis-based HIV care continuum describes each step of the continuum as a percentage of the number of people living with diagnosed HIV. The denominator is the number of persons aged ≥ 13 years living with diagnosed HIV infection at year-end 2021.

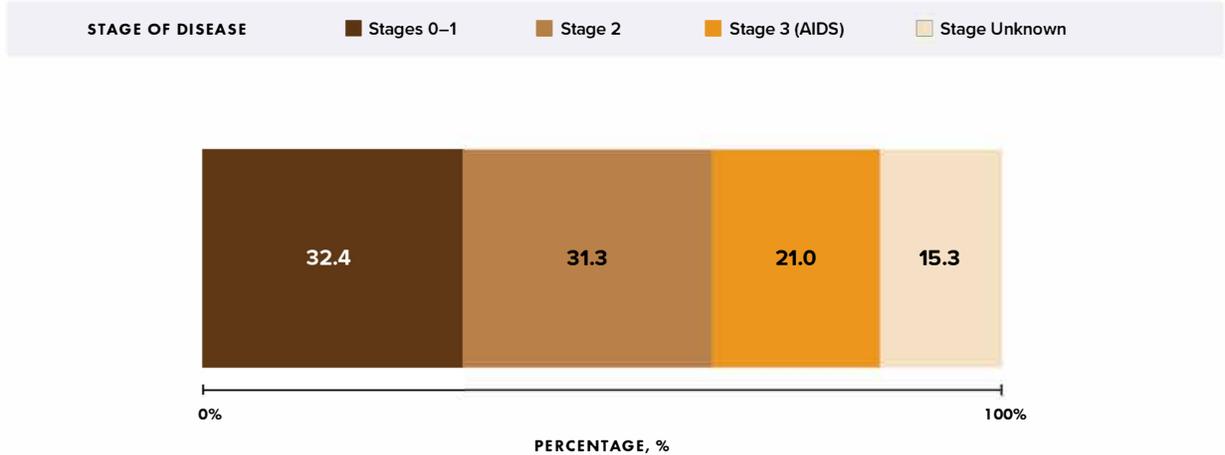
Note. Denominator for stage of disease, linkage to care within 1 month, and viral suppression within 6 months of diagnosis is limited to people with HIV diagnosed in a single year.

Stage of disease at time of diagnosis of HIV infection

Among 33,606 persons aged ≥ 13 years with HIV infection diagnosed during 2021 in 48 jurisdictions with complete reporting of laboratory data to CDC, the stage of disease at time of diagnosis was classified as follows: stage 0 (7.1%), stage 1 (25.3%), stage 2 (31.3%), stage 3 (AIDS) (21.0%), and stage unknown (15.3%). Overall, a higher percentage of persons had HIV diagnosed at an earlier stage (stages 0 or 1, 32.4%) than at the late stage (stage 3 [AIDS]: 21.0%) (Figure 2, Table 1a).

FIGURE 2

Stage of disease at HIV diagnosis during 2021 among persons aged ≥13 years—47 states and the District of Columbia



Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications

Percentage of persons with HIV diagnosed at an earlier stage (0 or 1) compared to the percentage with a late-stage diagnosis, respectively, by selected characteristics, were as follows (Figure 3, Table 1a):

Gender

- Male—31.2% vs 21.3%
- Female—35.5% vs 21.1%
- Transgender women—41.4% vs 12.0%
- Transgender men—61.8% vs 3.6%
- AGI—27.9% vs 14.0%

Age group

- 13-24 years—36.8% vs 9.9%
- 25-34 years—34.7% vs 17.0%
- 35-44 years—30.9% vs 25.5%
- 45-54 years—26.4% vs 32.1% 
- ≥ 55 years—25.5% vs 34.1% 

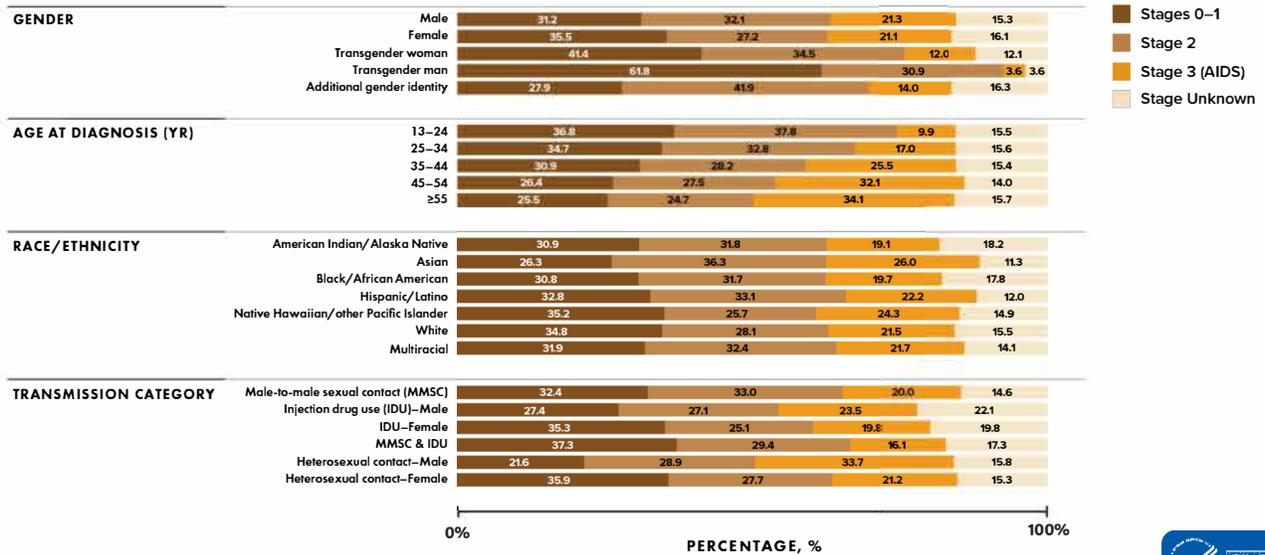
Race/ethnicity

- American Indian/Alaska Native—30.9% vs 19.1%
- Asian—26.3% vs 26.0%
- Black/African American—30.8% vs 19.7%
- Hispanic/Latino—32.8% vs 22.2%
- Native Hawaiian/other Pacific Islander—35.2% vs 24.3%
- White—34.8% vs 21.5%
- Multiracial—31.9% vs 21.7%

ASAB and transmission category

- **Among males**
 - MMSC—32.4% vs 20.0%
 - IDU—27.4% vs 23.5%
 - MMSC and IDU—37.3% vs 16.1%
 - Heterosexual contact—21.6% vs 33.7% 
- **Among females**
 - IDU—35.3% vs 19.8%
 - Heterosexual contact—35.9% vs 21.2%

FIGURE 3
Stage of disease at HIV diagnosis during 2021 among persons aged ≥13 years, by selected characteristics—47 states and the District of Columbia



Note. Data have been statistically adjusted to account for missing transmission category. Diagnosis of HIV infection may not be reported for some groups in 2021. Percentages do not sum to 100%, and percentages for Stage 2 are not presented. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Six areas had an equivalent or higher percentage of persons who received a late-stage diagnosis compared to the percentage that received an earlier-stage diagnosis, respectively (Table 1b): 

- Alaska—33.3% vs 33.3%
- Delaware—29.7% vs 30.9%
- Maine—22.6% vs 45.2%
- Mississippi—20.0% vs 20.8%
- South Dakota—38.7% vs 29.0%
- Vermont—41.6% vs 41.7%

Linkage to HIV medical care within 1 month and viral suppression within 6 months after diagnosis of HIV infection



Linkage to HIV medical care

Among 33,606 persons with HIV infection diagnosed during 2021 in the 48 jurisdictions with complete reporting of laboratory data to CDC, 81.9% were linked to HIV medical care within 1 month of diagnosis (Table 2a).

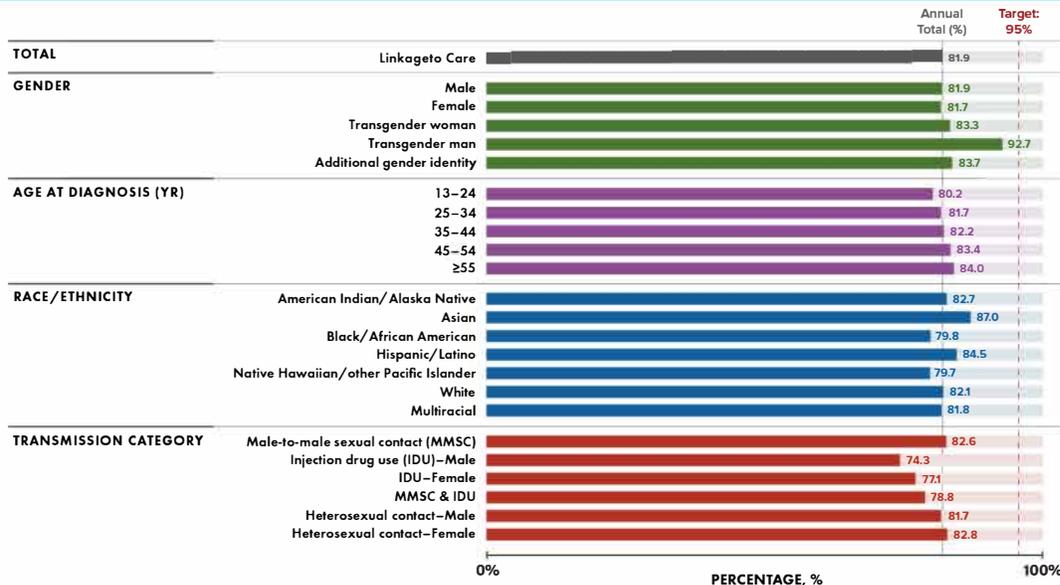
Lowest percentages of persons linked to HIV medical care, by selected characteristics, were as follows (Figure 4, Table 2a):

- Gender—females (81.7%)
- Age group—aged 13–24 years (80.2%)
- Race/ethnicity—Native Hawaiian/other Pacific Islander (79.7%) and Black/African American (79.8%) 🚩
- ASAB and transmission category
 - Male—IDU (74.3%) 🚩
 - Female—IDU (77.1%) 🚩

A closer look at linkage to HIV medical care within 1 month of diagnosis reveals that among 33,606 persons with HIV infection diagnosed during 2021, no demographic group or group with infection attributed to any of the transmission categories met the forthcoming EHE target of 95% by 2025 (Figure 4, Table 2a).

FIGURE 4

Linkage to HIV medical care within 1 month of HIV diagnosis during 2021 among persons aged ≥13 years, by selected characteristics—47 states and the District of Columbia



Note. Data have been statistically adjusted to account for missing transmission category. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications

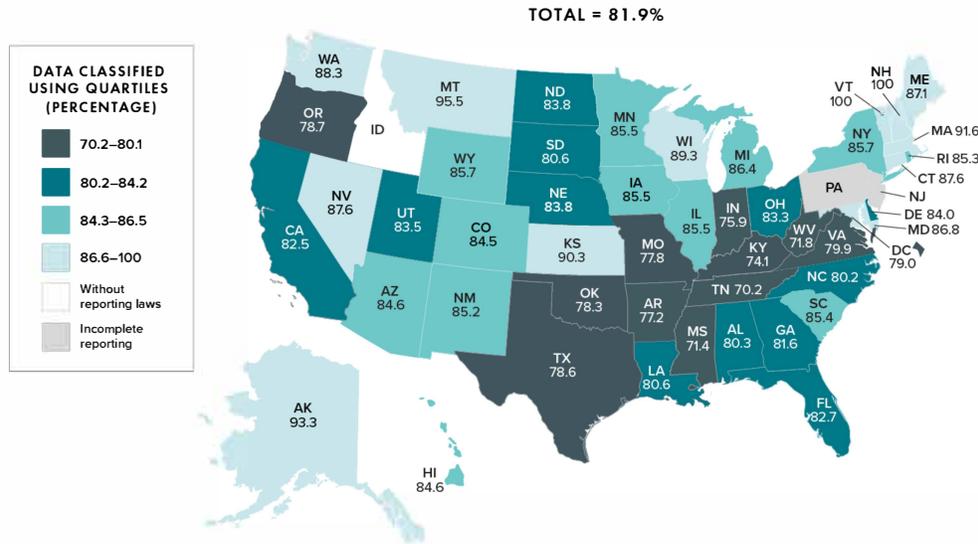


Areas with the lowest percentages of persons linked to HIV medical care were as follows (Figure 5, Table 2b):

- Quartile ≤ 80.1%—Arkansas, Indiana, Kentucky, Mississippi, Missouri, Oklahoma, Oregon, Tennessee, Texas, Virginia, West Virginia, and the District of Columbia

FIGURE 5

Linkage to HIV medical care within 1 month of HIV diagnosis during 2021 among persons aged ≥13 years, by area of residence—47 states and the District of Columbia



Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications



Viral suppression within 6 months



Among 33,606 persons with HIV infection diagnosed during 2021 in the 48 jurisdictions with complete reporting of laboratory data to CDC, viral load was suppressed in 69.0% of persons within 6 months of HIV diagnosis (Table 2a).

Lowest percentages of viral suppression ≤ 6 months after HIV diagnosis were as follows (Table 2a):

- Gender—AGI (67.4%)
- Age group—aged ≥ 55 years (66.7%)
- Race/ethnicity—American Indian/Alaska Native (65.5%)
- ASAB and transmission category
 - Male—IDU (51.2%)
 - Female—IDU (53.8%)

Areas with the lowest percentages of persons with viral suppression were as follows (Table 2b):

- Quartile ≤ 68.3%—Alabama, Arkansas, California, Georgia, Kentucky, Maryland, Mississippi, Oklahoma, South Dakota, Tennessee, Texas, West Virginia, and the District of Columbia

Receipt of HIV medical care and viral suppression



During 2021, 75.3% of 964,002 persons alive at year-end 2021 received any HIV medical care (at least 1 CD4 or viral load test), 53.9% of persons were retained in HIV medical care (at least 2 CD4 or viral load test), and 65.9% of persons had viral suppression at the most recent viral load test in 48 jurisdictions with complete reporting of laboratory data to CDC (Tables 3a and 4a).

Lowest percentages of persons who received any HIV medical care among those aged ≥ 13 years living with diagnosed HIV infection, by selected characteristics, were as follows (Figures 6–9, Table 3a):

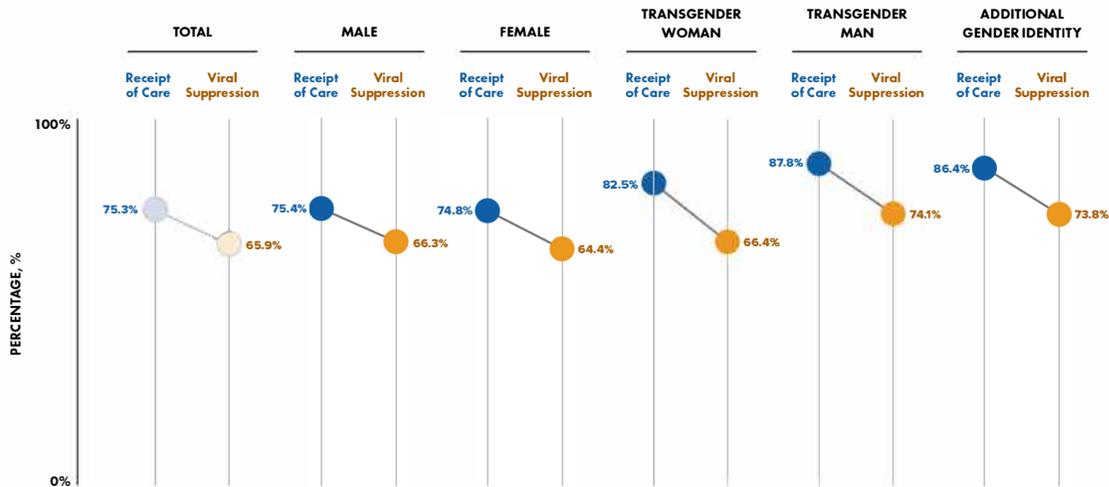
- Gender—females: 74.8%
- Age group—aged ≥ 55 years: 74.4%
- Race/ethnicity—Hispanic/Latino: 72.4%
- ASAB and transmission category
 - Male—IDU: 62.0%
 - Female—IDU: 72.0%

Lowest percentages of persons who had viral suppression at the most recent viral load test among those aged ≥ 13 years living with diagnosed HIV infection, by selected characteristics, were as follows (Figures 6–9, Table 3a):

- Gender—females: 64.4%
- Age group—aged 25–34 years: 63.8%
- Race/ethnicity—Black/African American: 61.6%
- ASAB and transmission category
 - Male—IDU: 52.5%
 - Female—IDU: 60.7%

FIGURE 6

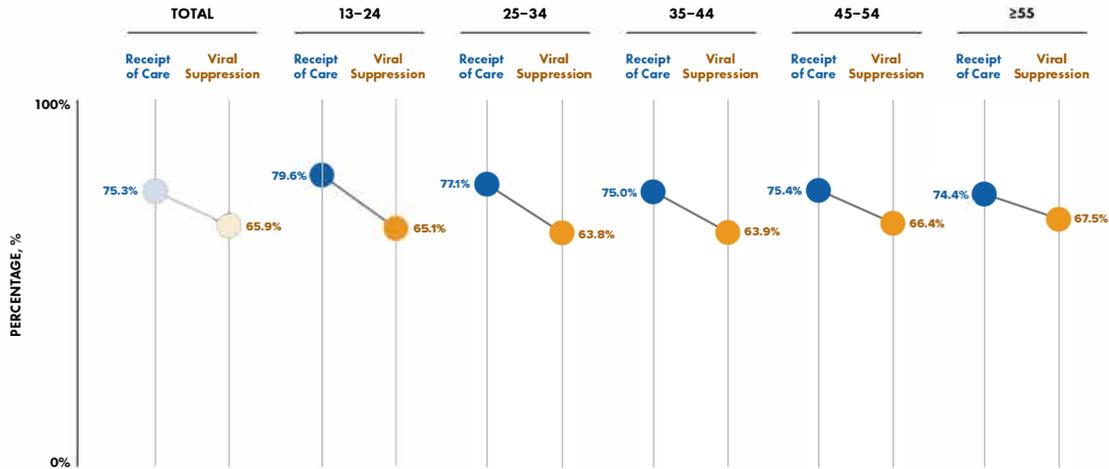
Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by gender—47 states and the District of Columbia



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications

FIGURE 7

Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by age group—47 states and the District of Columbia



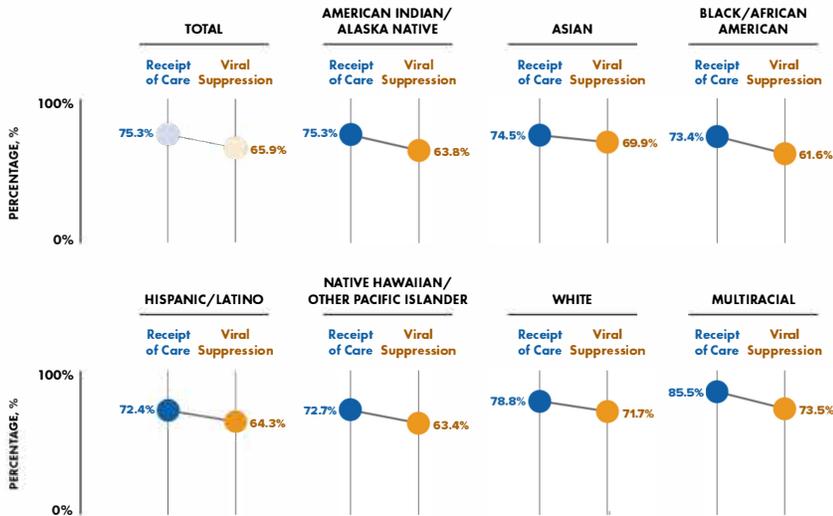
Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications

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FIGURE 8

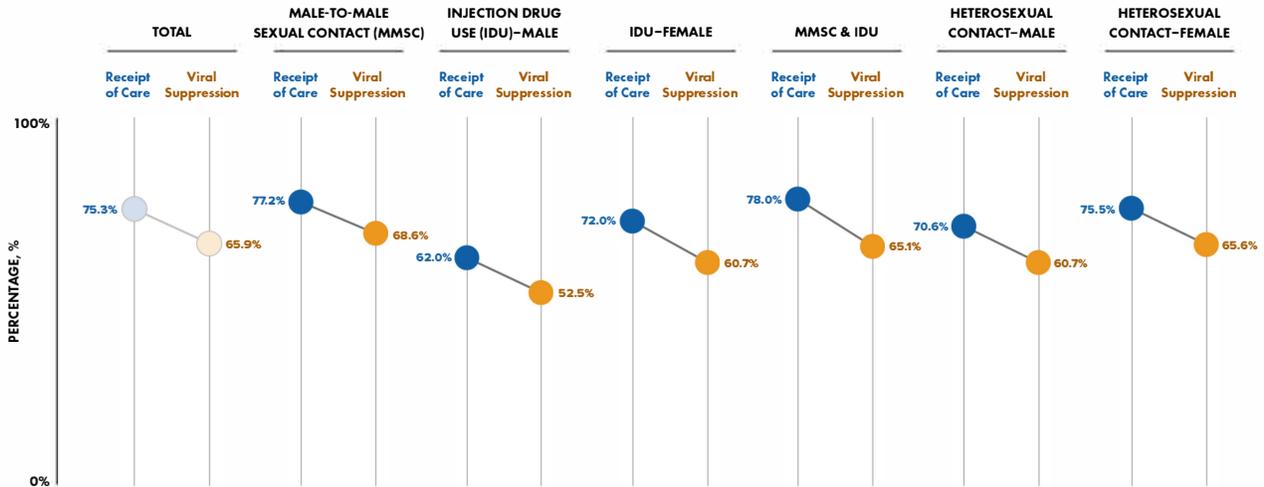
Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by race/ethnicity—47 states and the District of Columbia



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Hispanic/Latino persons can be of any race. Race/ethnicity category for Asian persons includes Asian/Pacific Islander legacy cases. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications

FIGURE 9

Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by transmission category and assigned sex at birth—47 states and the District of Columbia



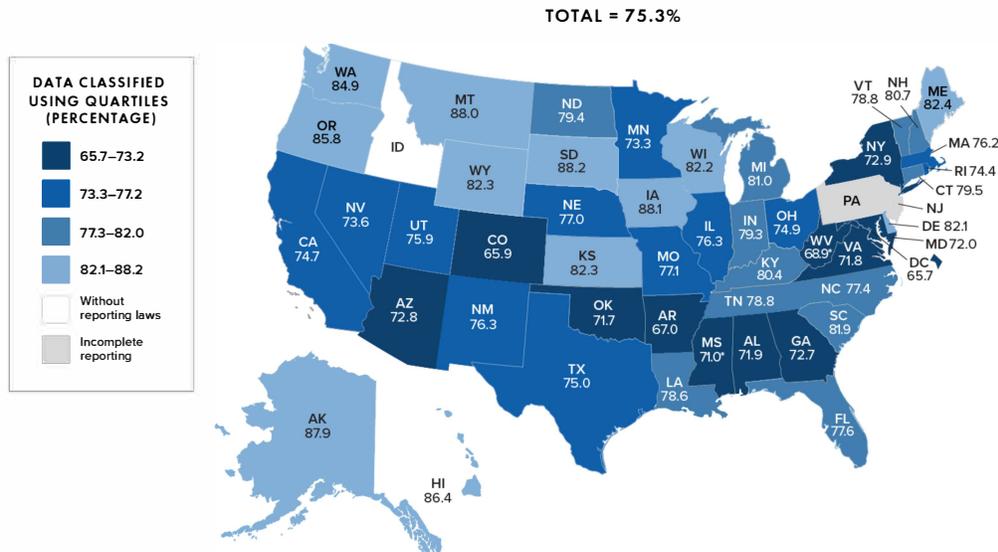
Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Data have been statistically adjusted to account for missing transmission category. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications

Areas with the lowest percentages of persons who received HIV medical care were as follows (Figure 10, Table 3b):

- Quartile ≤ 73.2%—Alabama, Arizona, Arkansas, Colorado, Georgia, Maryland, Mississippi, New York, Oklahoma, Virginia, West Virginia, and the District of Columbia

FIGURE 10

Receipt of HIV medical care during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by area of residence—47 states and the District of Columbia

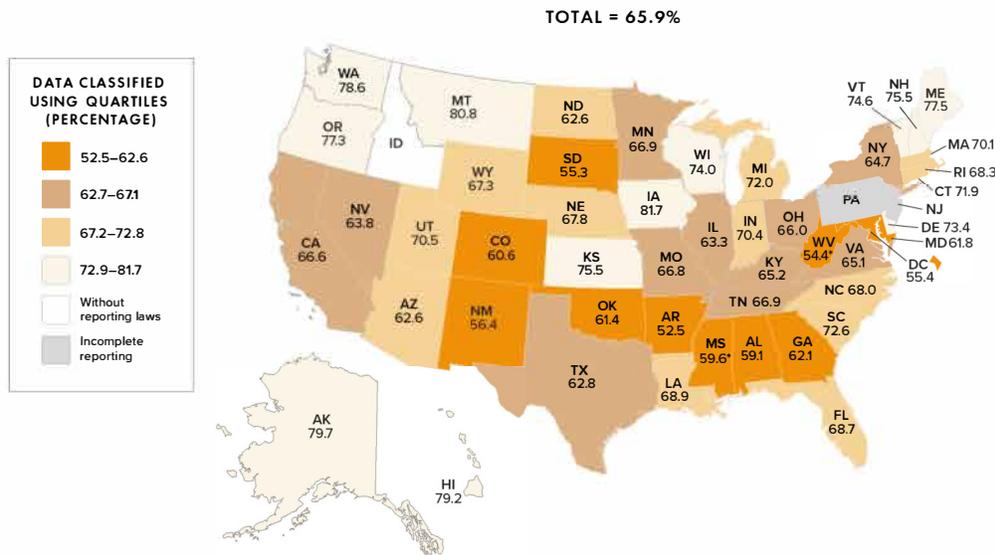


Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. *Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2021. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

Areas with the lowest percentages of persons who had viral suppression were as follows (Figure 11, Table 3b):

- Quartile ≤ 62.6%—Alabama, Arizona, Arkansas, Colorado, Georgia, Maryland, Mississippi, New Mexico, North Dakota, Oklahoma, South Dakota, West Virginia, and the District of Columbia

FIGURE 11
Viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by area of residence—47 states and the District of Columbia

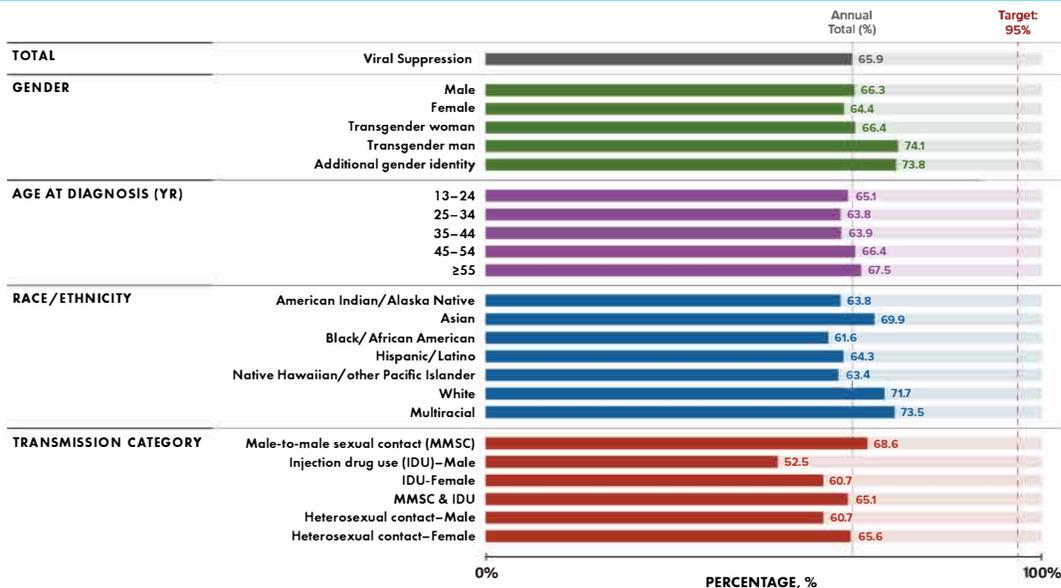


Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. *Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2021. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



A closer look at viral suppression at the most recent viral load test reveals that among 964,002 persons aged ≥ 13 years living with diagnosed HIV infection at year-end 2021, no demographic group or group with infection attributed to any of the transmission categories met the forthcoming EHE target of 95% by 2025 (Figure 12, Table 4a).

FIGURE 12
Viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by selected characteristics—47 states and the District of Columbia



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Race/ethnicity category for Asian persons includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race. Data have been statistically adjusted to account for missing transmission category. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Prevalence-based HIV Care Continuum—Overview

The Prevalence-based HIV Care Continuum describes each step of the continuum as a percentage of the total number of people living with HIV (diagnosed or undiagnosed). The denominator is the estimated number of persons aged ≥ 13 years living with diagnosed or undiagnosed HIV infection at year-end 2021 (calculated by using the first CD4 test after HIV diagnosis and a CD4 depletion model indicating disease progression). The numerator is extrapolated from the 48 jurisdictions with complete CD4 and viral load reporting (apply the percentage from 48 jurisdictions for receipt of care, retention in care, and viral suppression to the total number of people living with diagnosed HIV in the United States). For more information on Definitions and Data Specifications, see Technical Notes.

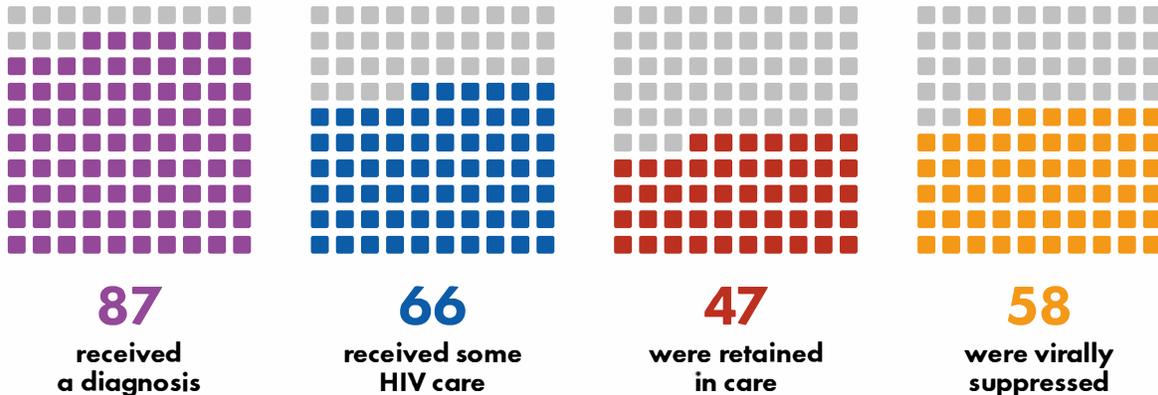
Uses of the prevalence-based continuum include monitoring testing efforts in the United States and demonstrating the importance of diagnosing HIV infections to achieve viral suppression, monitoring how the United States is doing among all persons living with HIV, and comparing United States data to other countries who monitor the continuum among all persons living with HIV.

Among the estimated 1.2 million people living with HIV in the United States, 87% received a diagnosis, 66% received HIV medical care, 47% were retained in HIV medical care, and 58% were virally suppressed in 2021 (Figure 13, Table 5). A higher percentage of females received a diagnosis, received HIV medical care in 2021, were retained in HIV medical care, and were virally suppressed than males (females: 90%, 67%, 49%, 58%; males: 86%, 65%, 47%, 57%; Table 5).

FIGURE 13

Prevalence-based HIV care continuum for persons aged ≥ 13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2021—United States

In 2021, for every 100 people overall living with HIV:



Note. Estimates were calculated by assigned sex at birth and derived from a CD4-based depletion model using HIV surveillance data. Estimates for year 2021 should be interpreted with caution due to adjustments made to the monthly distribution of reported diagnoses during this year to account for the impact of COVID-19 on HIV testing and diagnosis in the United States.



Among persons living with HIV infection (diagnosed or undiagnosed), the lowest percentages that received a diagnosis, received HIV medical care, were retained in HIV medical care, and had viral suppression, by selected characteristics, were as follows (Figures 14–16, Table 5):

Receipt of diagnosis

- Age group—aged 13–24 years (56%)
- Race/ethnicity—American Indian/Alaska Native (80%)
- ASAB and transmission category
 - Male—heterosexual contact (85%)

- Female—heterosexual contact (90%)

Receipt of care

- Age group—aged 13–24 years (45%)
- Race/ethnicity—Native Hawaiian/other Pacific Islander (57%)
- ASAB and transmission category
 - Male—IDU (57%)
 - Female—IDU (67%)

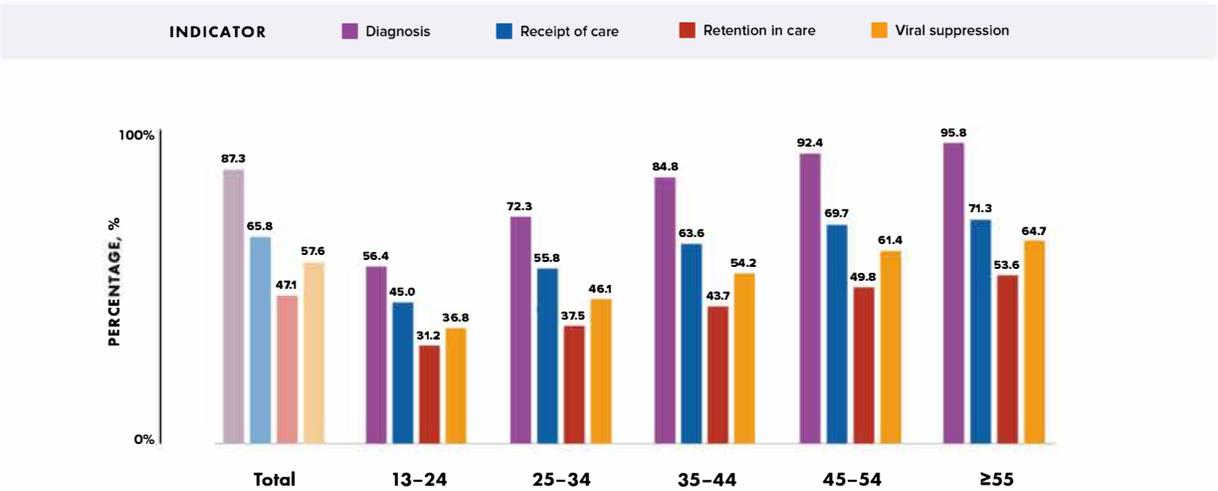
Retention in care

- Age group—aged 13–24 years (31%)
- Race/ethnicity—Native Hawaiian/other Pacific Islander (39%)
- ASAB and transmission category
 - Male—IDU (41%)
 - Female—IDU (48%)

Viral suppression

- Age group—aged 13–24 years (37%)
- Race/ethnicity—American Indian/Alaska Native and Native Hawaiian/other Pacific Islander (50%)
- ASAB and transmission category
 - Male—IDU (48%)
 - Female—IDU (56%)

FIGURE 14
Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2021, by age group—United States

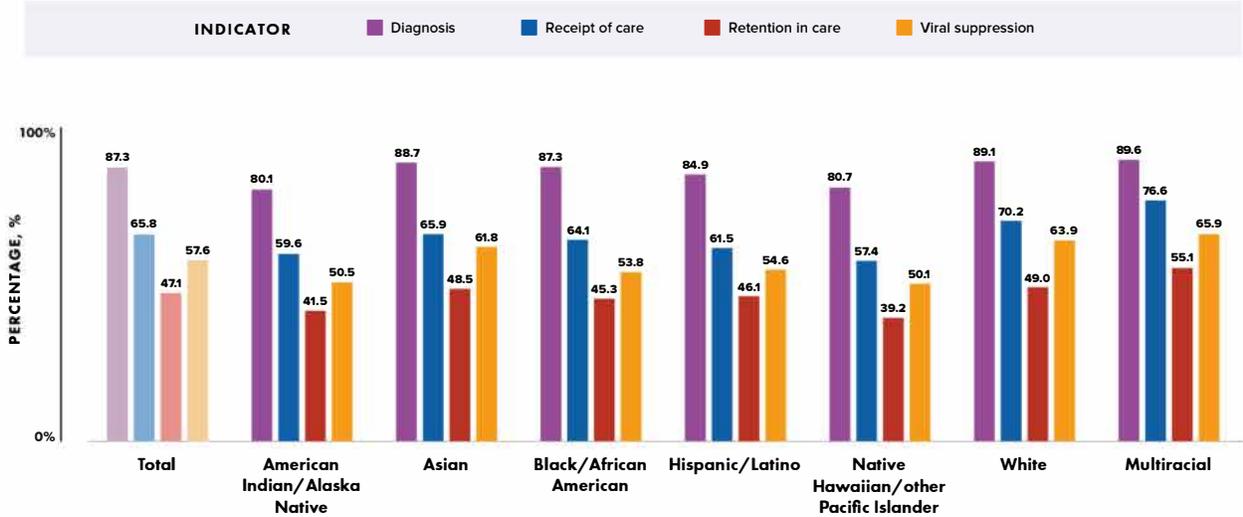


Note. Estimates were calculated by assigned sex at birth and derived from a CD4-based depletion model using HIV surveillance data. Estimates for year 2021 should be interpreted with caution due to adjustments made to the monthly distribution of reported diagnoses during this year to account for the impact of COVID-19 on HIV testing and diagnosis in the United States.



FIGURE 15

Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2021, by race/ethnicity—United States

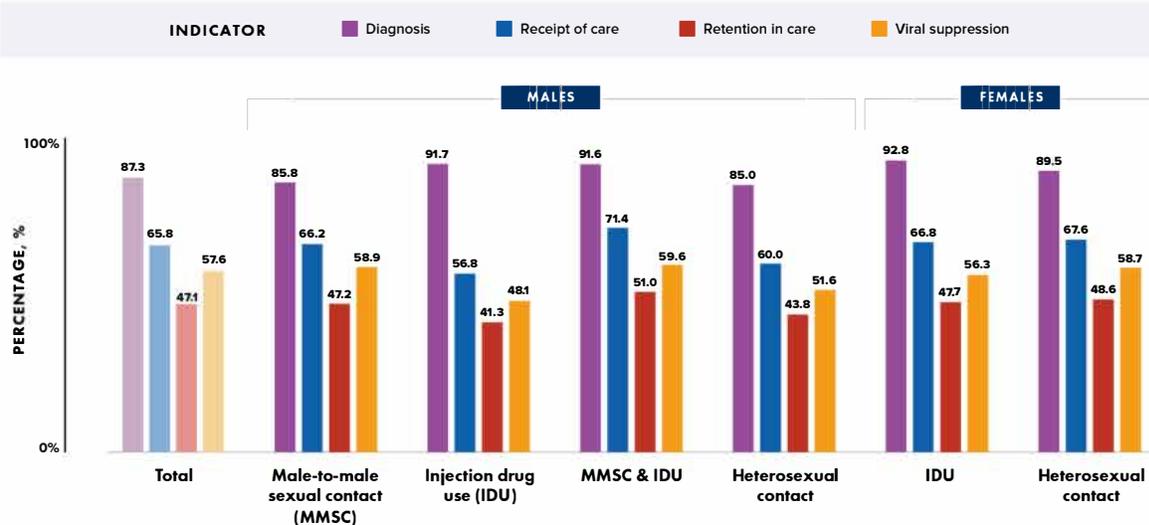


Note. Estimates were calculated by assigned sex at birth and derived from a CD4-based depletion model using HIV surveillance data. Estimates for year 2021 should be interpreted with caution due to adjustments made to the monthly distribution of reported diagnoses during this year to account for the impact of COVID-19 on HIV testing and diagnosis in the United States. Hispanic/Latino persons can be of any race.



FIGURE 16

Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2021, by transmission category and assigned sex at birth—United States



Note. Estimates were calculated by assigned sex at birth and derived from a CD4-based depletion model using HIV surveillance data. Estimates for year 2021 should be interpreted with caution due to adjustments made to the monthly distribution of reported diagnoses during this year to account for the impact of COVID-19 on HIV testing and diagnosis in the United States.



Stage 3 (AIDS) at Time of Diagnosis of HIV Infection, Deaths (Any Cause), and Survival after Diagnosis of HIV Infection

Data from the 50 states, the District of Columbia, and 6 U.S. dependent areas (where indicated) were used for analyses of stage 3 (AIDS) at the time of diagnosis of HIV infection (even when not all CD4 values are reportable), and deaths and survival of persons aged ≥ 13 years with diagnosed HIV infection.

Stage 3 (AIDS) classification at time of diagnosis of HIV infection

Among the 35,716 persons who received an HIV diagnosis during 2021 in the United States, more than 1 in 5 persons (21.1%) received a late-stage diagnosis (stage 3 [AIDS]) (Table 6a).

Highest percentages of a late-stage diagnosis were as follows (Table 6a): 

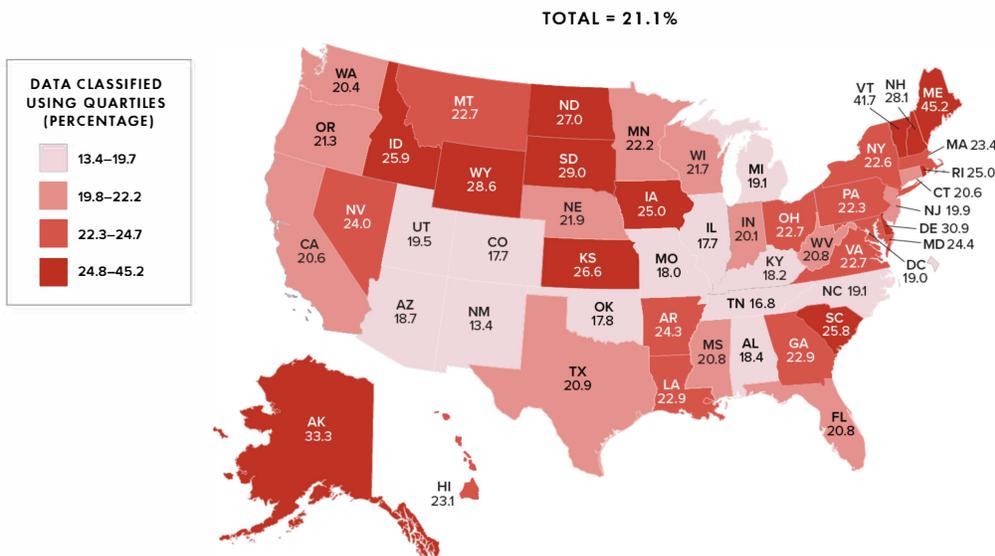
- Gender—males (21.3%)
- Age group—aged ≥ 55 years (34.2%)
- Race/ethnicity—Asian (25.5%)
- ASAB and transmission category
 - Male—heterosexual contact (33.5%)
 - Female—heterosexual contact (21.3%)
- Region of residence—Northeast (22.2%)
- Population area of residence—Nonmetropolitan areas (26.4%)

Areas with the highest percentages of persons who received a late-stage diagnosis were as follows (Figure 17, Table 6c):

- Quartile $\geq 24.8\%$ —Alaska, Delaware, Idaho, Iowa, Kansas, Maine, New Hampshire, North Dakota, Rhode Island, South Carolina, South Dakota, Vermont, and Wyoming

FIGURE 17

Stage 3 (AIDS) at time of diagnosis of HIV infection during 2021 among persons aged ≥ 13 years, by area of residence—United States



Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Deaths (any cause)

Annual rates of death (any cause) among persons aged ≥ 13 years were calculated per 100,000 population and per 1,000 persons with diagnosed HIV infection or with infection ever classified as stage 3 (AIDS). Age-adjusted rates per 100,000 population and per 1,000 persons with diagnosed HIV infection or with infection ever classified as stage 3 (AIDS) were also calculated and are presented by area of residence (Tables 7a-f).

In 2021, the age-adjusted rates in the United States were as follows:

- Among persons with diagnosed HIV infection—7.0 per 100,000 population and 18.0 per 1,000 persons (Table 7a)

- Among persons with stage 3 (AIDS) classification—5.3 per 100,000 population and 27.0 per 1,000 persons (Table 7d)

Survival for > 3 years after receiving a diagnosis of HIV infection or a Stage 3 (AIDS) classification

In the United States and 6 dependent areas, survival for > 3 years after receiving a diagnosis of HIV infection was 95% and remained stable for diagnoses that were made during 2013–2018 (Table 8a).

- Lowest percentages of survival (< 90%) for > 3 years after receiving diagnosis of HIV infection during 2018—persons aged ≥ 55 years and persons with infection attributed to IDU (Tables 8a/b).

In the United States and 6 dependent areas, survival for > 3 years after receiving a stage 3 (AIDS) classification was below 90% and remained stable over time for classifications that were made during 2013–2018 (Table 8d).

- Lowest percentages of survival (< 90%) for > 3 years after receiving a stage 3 (AIDS) classification during 2018—males, females, persons aged ≥ 35 years, each racial/ethnic group (except Asian persons), males and females with infection attributed to any transmission category, and all areas of residence (except Colorado and Minnesota) (Tables 8d–f).

Preexposure Prophylaxis (PrEP) Coverage and Persons Prescribed PrEP

The number of persons in the United States classified as having been prescribed PrEP, the estimated number of persons with PrEP indications, and the percentage of PrEP coverage were produced by using data from several sources: the IQVIA Real-World Longitudinal Prescriptions database, NHSS, National Health and Nutrition Examination Survey (NHANES), and the U.S. Census American Community Survey (ACS). Please note that race/ethnicity data were imputed, and the data source was based on a consumer database, which might underrepresent certain populations. For more information, see Technical Notes.

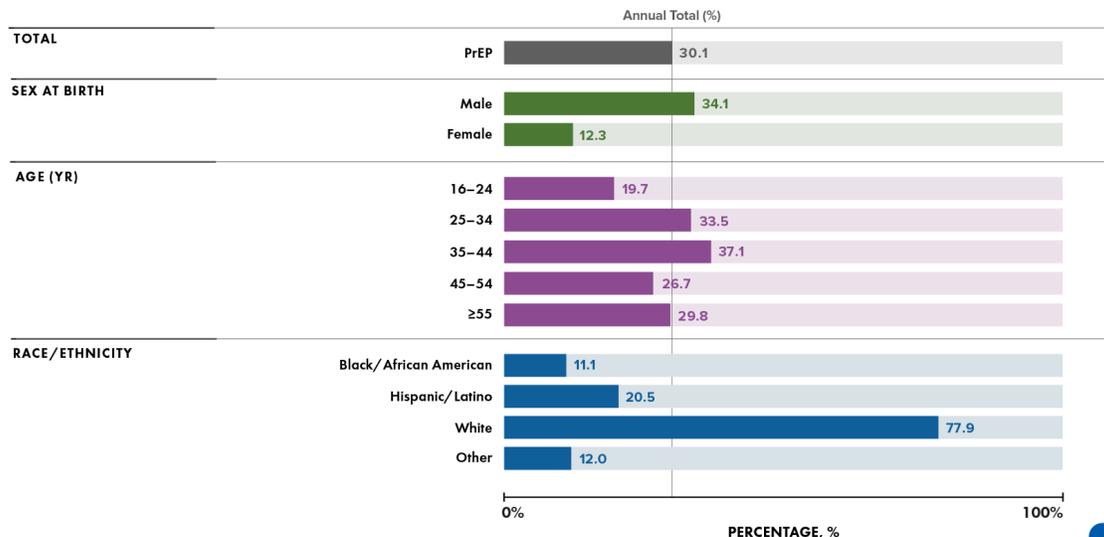
By using pharmacy and other national data sources, it is estimated 1.2 million persons in the United States had indications for PrEP and 30.1% were prescribed PrEP in 2021 (Table 9a).

Lowest percentages of PrEP coverage by selected characteristics were as follows (Figure 18, Table 9a): 

- **ASAB**—females (12.3%)
- **Age group**—aged 16–24 years (19.7%)
- **Race/ethnicity**—Black/African American (11.1%)

FIGURE 18

PrEP coverage during 2021 among persons aged ≥ 16 years, by selected characteristics—United States



Note. Race/ethnicity category for Other includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, and multiracial persons. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

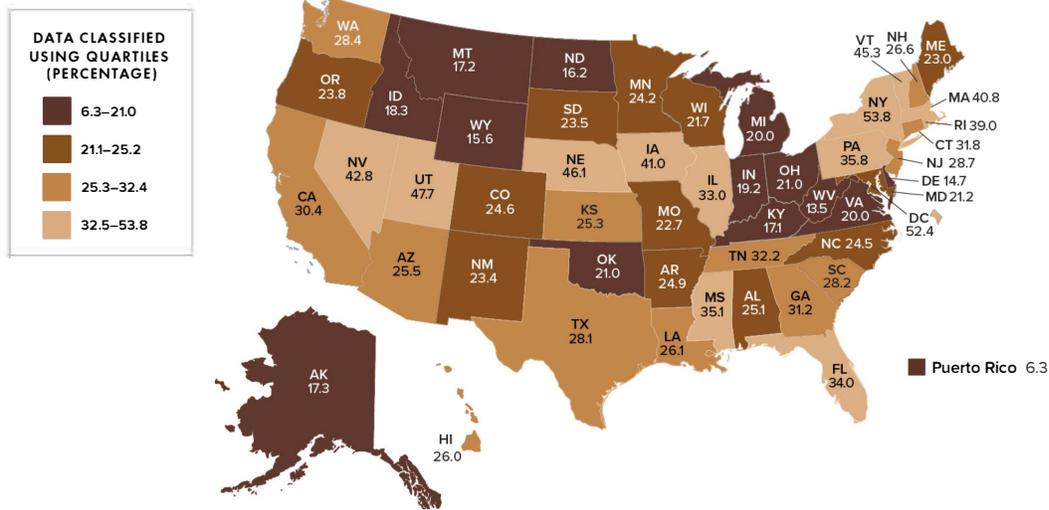


Areas with the lowest percentages of PrEP coverage by area of residence were as follows (Figure 19, Table 9b):

- Quartile $\leq 21.0\%$ —Alaska, Delaware, Idaho, Indiana, Kentucky, Michigan, Montana, North Dakota, Ohio, Oklahoma, Virginia, West Virginia, Wyoming, and Puerto Rico

FIGURE 19

PrEP coverage during 2021 among persons aged ≥ 16 years, by area of residence—United States and Puerto Rico



Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications



Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data—United States and 6 Dependent Areas, 2021: Special Focus Profiles

Special Focus Profiles



Report Contents

Other Reports

The Special Focus Profiles highlight the distribution of HIV care outcomes among persons aged ≥ 13 years with diagnosed HIV (except perinatally acquired infection) and identify potential gaps in these outcomes among 6 populations of interest to HIV prevention programs in state and local health departments: (1) Gay, Bisexual, and Other Men Who Have Sex With Men; (2) Persons Who Inject Drugs (PWID); (3) Transgender and Additional Gender Identity Persons; (4) Women; (5) Persons with Perinatally Acquired HIV Infection; and (6) Young Persons aged 13–24 years. Data by transmission category have been statistically adjusted and the percentages are presented as reported in the tables for each population. The statements in this section, unless otherwise indicated, are based on numbers of 12 or more. See suggested readings from the 2021 HIV Surveillance Report [5] for references and additional information including HIV risk behaviors, barriers to care, and prevention challenges for each population of particular interest.

GAY, BISEXUAL, AND OTHER MEN WHO HAVE SEX WITH MEN



Gay, bisexual, and other men who report male-to-male sexual contact (MSM), based on male assigned sex at birth, are disproportionately affected by HIV in the United States. Stigma, homophobia, and discrimination make MSM of all races/ethnicities susceptible to multiple physical and mental health problems and can affect whether they seek and receive high-quality health services, including HIV testing, treatment, and other prevention services [5].

In 2021 in the United States, infection attributed to MMSC accounted for 66.8% (23,855 MMSC, excluding MMSC *and* IDU) of the 35,716 new HIV diagnoses. Many Black/African American and Hispanic/Latino MSM with HIV, particularly young MSM (aged 13–24 years), are unaware of their HIV infection. Lack of awareness of HIV status among young MSM may be due to recent infection, not getting tested due to underestimation of personal risk, or fewer opportunities to get tested. Persons who do not know they have HIV do not get medical care or receive treatment and can unknowingly transmit infection through sex or sharing needles, syringes, or other drug injection equipment [5].

Stage of disease at time of diagnosis among MSM

In 2021, of 22,659 males with infection attributed to MMSC, 32.4% of infections were diagnosed at an earlier stage (stage 0 or 1) and 20.0% were classified as stage 3 (AIDS) at the time of diagnosis (Table 1a). By race/ethnicity, HIV infections attributed to MMSC were diagnosed at an earlier stage (0 or 1) compared to percentages diagnosed at Stage 3 (AIDS). However, diagnoses of infection attributed to MMSC among males of all races/ethnicities (except for Black/African American MSM) had $\geq 20\%$ of infections classified as stage 3 (AIDS) at the time of diagnosis (Table 1d).

Percentages of MSM with HIV diagnosed at an earlier stage (0 or 1) compared to the percentages with a late-stage diagnosis by race/ethnicity were as follows (Table 1d):

- American Indian/Alaska Native—28.9% vs 20.0%
- Asian—26.8% vs 22.7%
- Black/African American—31.0% vs 17.2%
- Hispanic/Latino—33.2% vs 21.0%
- Native Hawaiian/other Pacific Islander—35.6% vs 23.9%
- White—34.5% vs 22.5%
- multiracial—30.6% vs 21.3%

Linkage to HIV medical care within 1 month of diagnosis and viral suppression within 6 months of diagnosis among MSM

In 2021, of 22,659 males with infection attributed to MMSC, 82.6% were linked to HIV medical care within 1 month of diagnosis and 71.2% had viral suppression within 6 months of diagnosis (Table 2a).

Lowest percentages of linkage to HIV medical care and viral suppression for males with infection attributed to MMSC were as follows (Figure 20, Table 2d): 

Race/ethnicity

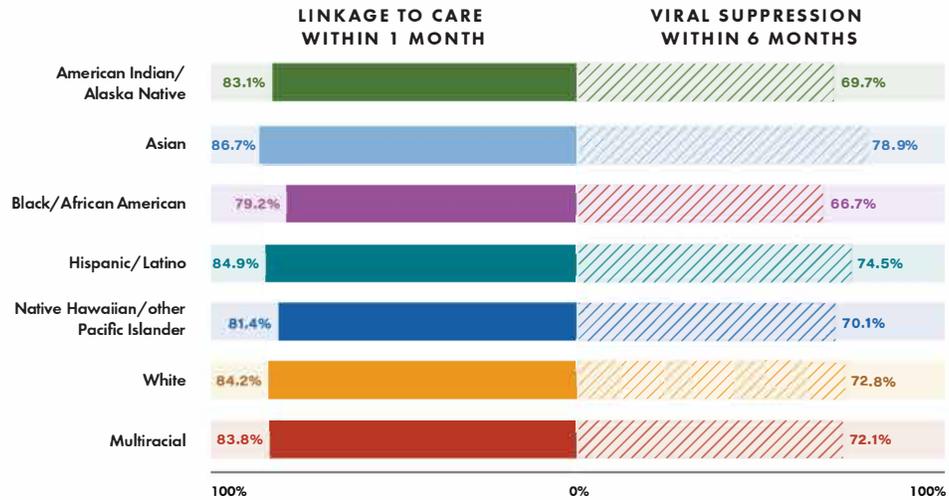
- Linkage to HIV medical care—Black/African American (79.2%)
- Viral suppression—Black/African American (66.7%)

Race/ethnicity and Age group

- Linkage to HIV medical care—Black/African American MSM aged 35–44 years (77.7%)
- Viral suppression—Black/African American MSM aged 35–44 years (63.5%)

FIGURE 20

Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among males, based on assigned sex at birth, with infection attributed to male-to-male sexual contact, by race/ethnicity—47 states and the District of Columbia



Note. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications



Receipt of HIV medical care and viral suppression among MSM

Of 561,493 males with infection attributed to MMSC living with diagnosed HIV at year-end 2021, 77.2% received HIV medical care and 68.6% had viral suppression at the most recent viral load test (Tables 3a and 4a).

Lowest percentages of receipt of any HIV medical care and viral suppression for males with infection attributed to MMSC were as follows (Figure 21, Table 3d): 

Race/ethnicity

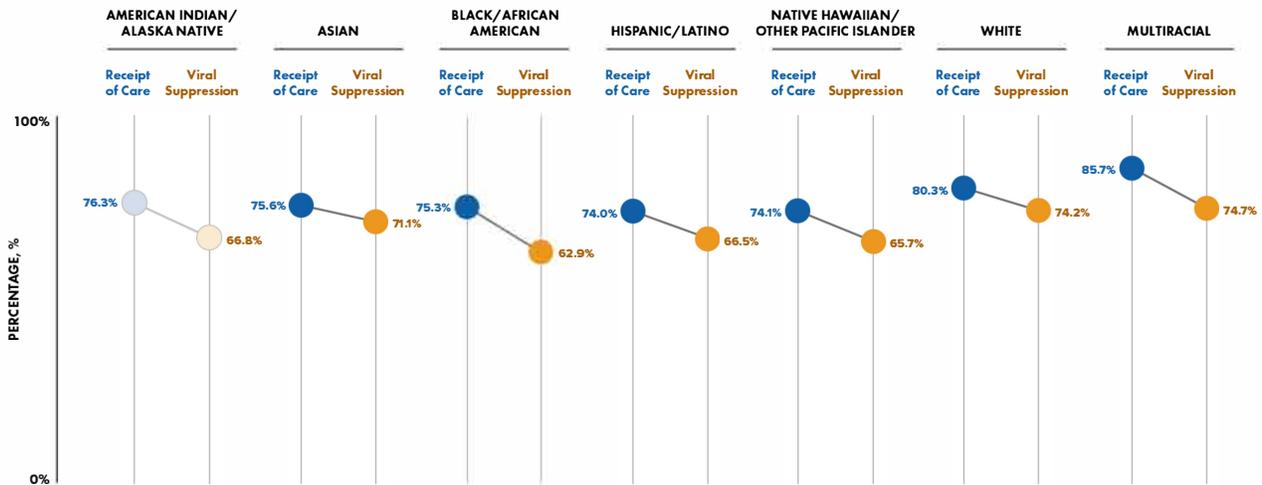
- Receipt of HIV medical care—Hispanic/Latino and Native Hawaiian/other Pacific Islander (74.0% and 74.1%, respectively)
- Viral suppression—Black/African American (62.9%)

Race/ethnicity and Age group

- Receipt of HIV medical care
 - Hispanic/Latino MSM aged ≥ 45 years—71.7%
 - Native Hawaiian/other Pacific Islander MSM aged 13–24 years—63.0%
- Viral suppression
 - Black/African American MSM aged 25–34—61.1%
 - Hispanic/Latino MSM aged ≥ 45 years—71.4%

FIGURE 21

Receipt of HIV medical care and viral suppression during 2021 among males, based on assigned sex at birth, with infection attributed to male-to-male sexual contact, by race/ethnicity—47 states and the District of Columbia



Note. Race/ethnicity category for Asian persons includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



PERSONS WHO INJECT DRUGS



Persons who inject drugs (PWID) can get HIV if they use and share needles, syringes, or other drug injection equipment (e.g., cookers) that someone with HIV has used. In 2021, infections attributed to injection drug use (IDU) accounted for about 1 in 15 HIV diagnoses in the United States. In recent years, the opioid (including prescription and synthetic opioids) and heroin crisis has led to increased numbers of PWID. HIV diagnoses among PWID have increased in the 50 states and District of Columbia. IDU in nonurban areas has created prevention challenges and brought attention to populations who would benefit from HIV prevention efforts [5].

In 2021 in the United States, 7.0% of the 35,716 reported HIV diagnoses were attributed to IDU (1,415 among male and 1,075 among female PWID) [5].

Stage of disease at time of diagnosis of HIV infection attributed to IDU

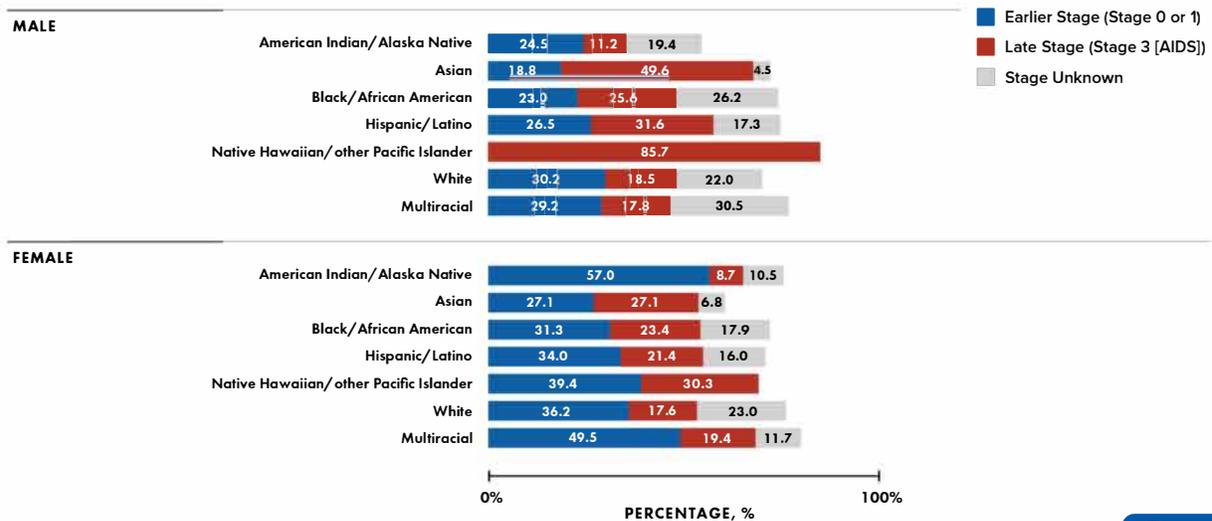
In 2021, of 2,326 persons with infection attributed to IDU, 30.8% of infections were diagnosed at an earlier stage (stage 0 or 1) and 21.8% were classified as stage 3 (AIDS) at the time of diagnosis (Table 1a).

Percentages of HIV infections attributed to IDU diagnosed at an earlier stage (0 or 1) compared to percentages diagnosed at stage 3 (AIDS), respectively, by ASAB and race/ethnicity, were as follows (Figure 22, Table 1c):

- **Among males**
 - American Indian/Alaska Native—24.5% vs 11.2%
 - Asian—18.8% vs 49.6% 🚩
 - Black/African American—23.0% vs 25.6% 🚩
 - Hispanic/Latino—26.5% vs 31.6% 🚩
 - Native Hawaiian/other Pacific Islander—0.0% vs 85.7% 🚩

- White—30.2% vs 18.5%
- multiracial—29.2% vs 17.8%
- **Among females**
 - American Indian/Alaska Native—57.0% vs 8.7%
 - Asian—27.1% vs 27.1% 
 - Black/African American—31.3% vs 23.4%
 - Hispanic/Latino—34.0% vs 21.4%
 - White—36.2% vs 17.6%
 - multiracial—49.5% vs 19.4%

FIGURE 22
Earlier and late stage of disease at HIV diagnosis during 2021 among persons with infection attributed to injection drug use, by assigned sex at birth and race/ethnicity—47 states and the District of Columbia



Note. Diagnosis of HIV infection may not be reported for some groups in 2021. Percentages do not sum to 100%, and percentages for Stage 2 are not presented. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Linkage to HIV medical care within 1 month of diagnosis and viral suppression within 6 months of diagnosis among persons with infection attributed to IDU

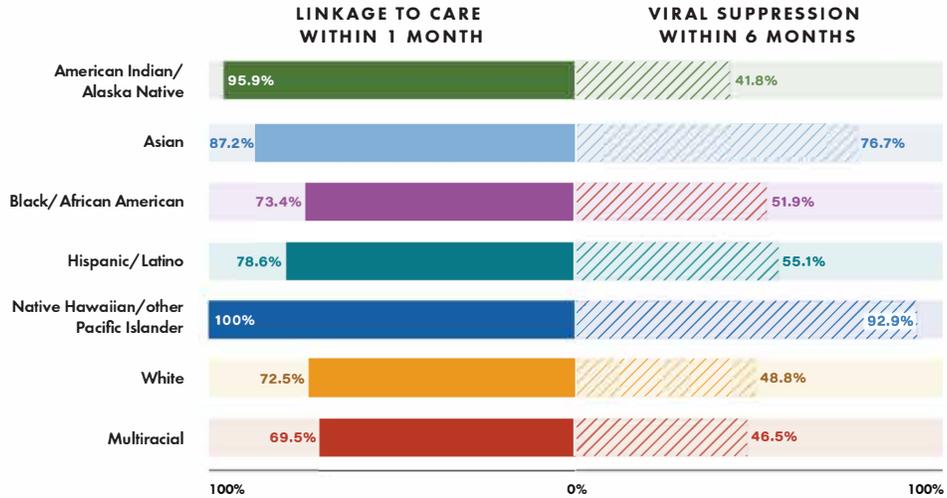
In 2021, of 2,326 persons with infection attributed to IDU, 75.5% were linked to HIV medical care within 1 month of diagnosis and 52.3% had viral suppression within 6 months of diagnosis (Table 2a):

Lowest percentages of linkage to HIV medical care within 1 month of diagnosis and viral suppression within 6 months for persons with infection attributed to IDU, by ASAB and race/ethnicity, were as follows (Figure 23, Table 2c):

- **Male PWID**
 - Linkage to HIV medical care—multiracial (69.5%)
 - Viral suppression—multiracial (46.5%)
- **Female PWID**
 - Linkage to HIV medical care—White (73.3%)
 - Viral suppression—White (47.7%)

FIGURE 23A

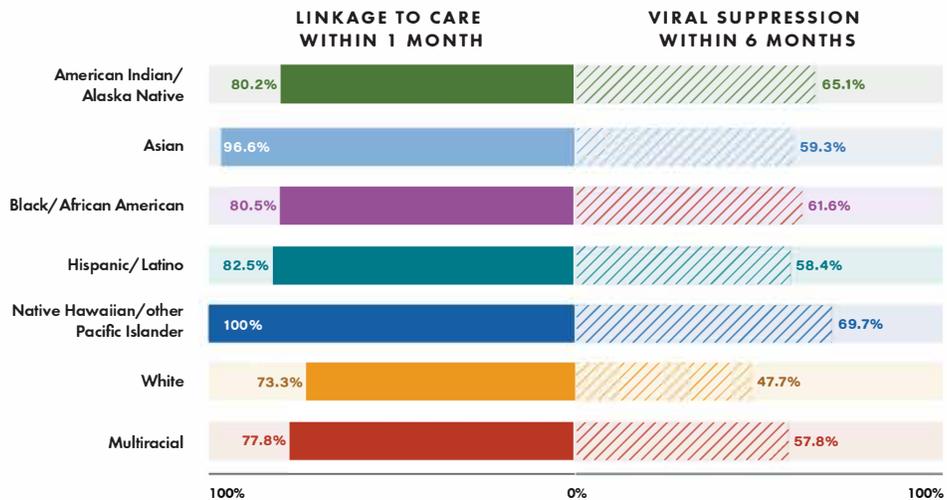
Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among males, based on assigned sex at birth, with infection attributed to injection drug use, by race/ethnicity—47 states and the District of Columbia



Note. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications

FIGURE 23B

Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among females, based on assigned sex at birth, with infection attributed to injection drug use, by race/ethnicity—47 states and the District of Columbia



Note. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications

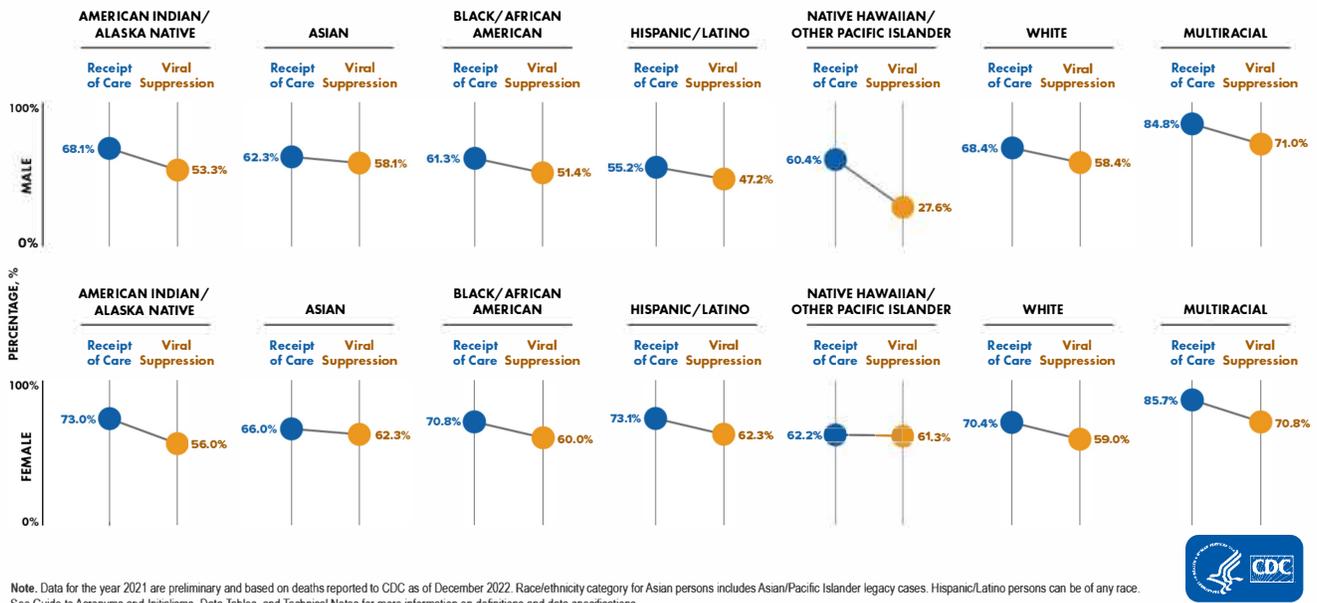
Receipt of HIV medical care and viral suppression among persons with infection attributed to IDU

Of 96,246 persons with infection attributed to IDU and living with diagnosed HIV at year-end 2021, 66.3% received HIV medical care and 56.0% had viral suppression at the most recent viral load test (Tables 3a and 4a).

Lowest percentages of receipt of any HIV medical care and viral suppression for persons with infection attributed to IDU, by ASAB and race/ethnicity, were as follows (Figure 24, Table 3c): 

- Male PWID
 - Receipt of care—Hispanic/Latino (55.2%)
 - Viral suppression—Hispanic/Latino (47.2%)
- Female PWID
 - Receipt of care—Native Hawaiian/other Pacific Islander (62.2%)
 - Viral suppression—American Indian/Alaska Native (56.0%)

FIGURE 24
Receipt of HIV medical care and viral suppression during 2021 among HIV persons with infection attributed to injection drug use, by assigned sex at birth and race/ethnicity—47 states and the District of Columbia



TRANSGENDER AND ADDITIONAL GENDER IDENTITY PERSONS



Transgender is an umbrella term that is used to identify persons whose assigned sex at birth does not match their current gender identity or expression. *Gender identity* refers to one’s internal understanding of one’s own gender, or the gender with which a person identifies. *Additional gender identity (AGI)* is a term used to identify persons assigned “male” or “female” sex at birth who do not identify as male, female, transgender woman, or transgender man (e.g., those identifying as “bigender,” “gender queer,” and “two-spirit”). *Gender expression* is a term used to describe people’s outward presentation of their gender. Gender identity and sexual orientation are different facets of identity. Transgender and AGI persons are understudied in HIV prevention (e.g., PrEP) and treatment interventions and face numerous prevention challenges, including social rejection and exclusion and lack of public/provider knowledge about transgender and AGI issues [5].

In 2021, infections among transgender and AGI persons accounted for 2.6% (911) of 35,716 reported HIV diagnoses in the United States [5].

Stage of disease at time of diagnosis of HIV infection among transgender and AGI persons

In 2021, of 883 transgender and AGI persons with HIV, 42.0% of infections were diagnosed at an earlier stage (stage 0 or 1) compared to 11.6% classified as stage 3 (AIDS) at the time of diagnosis (Table 1e). HIV infections among transgender and AGI persons were diagnosed at an earlier stage (0 or 1) compared to percentages diagnosed at Stage 3 (AIDS) (Table 1e).

Percentages of infections diagnosed at an earlier stage (0 or 1) compared to percentages diagnosed at stage 3 (AIDS), respectively, by gender identity and exposure category, were as follows (Table 1e):

- **Among transgender women**—41.4% vs 12.0%
 - Sexual contact—41.9% vs 11.8%
 - Sexual contact *and* IDU—40.7% vs 11.1%
- **Among transgender men**—61.8% vs 3.6%
 - Sexual contact—63.1% vs 4.3%
- **Among AGI persons**—27.9% vs 14.0%
 - Sexual contact—29.7% vs 13.5%

Linkage to HIV medical care within 1 month and viral suppression within 6 months of diagnosis among transgender and AGI persons

In 2021, of 883 transgender and AGI persons with HIV, 83.9% were linked to HIV medical care and 72.0% had viral suppression within 6 months of diagnosis. Among transgender and AGI persons by gender identity, at least 83% were linked to HIV medical care and 67% had viral suppression within 6 months (Table 2e).

Percentages of linkage to care and viral suppression within 6 months of diagnosis, respectively, among transgender and AGI persons by gender and exposure category were as follows (Table 2e):

- **Among transgender women**—83.3%, 71.0%
 - Sexual contact—84.1%, 73.4%
 - Sexual contact *and* IDU—75.9%, 51.9% 
- **Among transgender men**—92.7%, 90.9%
 - Sexual contact—95.7%, 95.7%
- **Among AGI persons**—83.7%, 67.4%
 - Sexual contact—86.5%, 73.0%

Receipt of HIV medical care and viral suppression among transgender and AGI persons

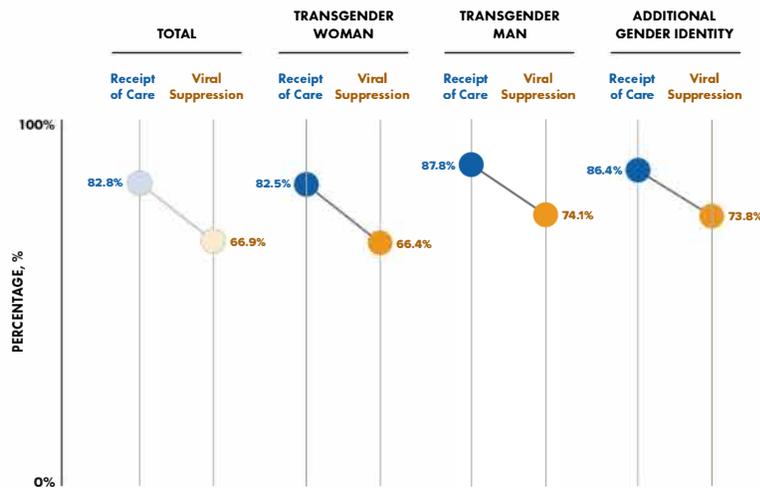
Of 12,475 transgender and AGI persons living with diagnosed HIV at year-end 2021, 82.8% received HIV medical care and 66.9% had viral suppression at their most recent viral load test (Figure 25, Table 3e). Among transgender and AGI persons by gender, at least 82% received HIV medical care and 66% had viral suppression.

Percentages of receipt of any HIV medical care and viral suppression among transgender and AGI persons, by gender identity and exposure category, were as follows (Figure 25, Table 3e):

- **Among transgender women**—82.5%, 66.4% 
 - Sexual contact—82.5%, 67.1%
 - IDU—76.0%, 48.0%
 - Sexual contact *and* IDU—84.9%, 65.1%
- **Among transgender men**—87.8%, 74.1%
 - Sexual contact—88.0%, 76.8%
 - Sexual contact *and* IDU—90.2%, 57.4%
- **Among AGI persons**—86.4%, 73.8%
 - Sexual contact—86.8%, 74.0%

FIGURE 25

Receipt of HIV medical care and viral suppression during 2021 among transgender and additional gender identity persons—47 states and the District of Columbia



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

WOMEN



More than 6,500 women (based on female assigned sex at birth) received an HIV diagnosis in the United States in 2021. One in ten women with HIV are unaware that they have it. Because some women may be unaware of their male partner's risk factors for HIV (such as injection drug use or having sex with men), they may not use condoms or medicines to prevent HIV. Additionally, PrEP is highly effective for preventing HIV, yet PrEP use among women is very low. Additionally, HIV testing rates within the past year were low among women with sexual behaviors that increase their risk of acquiring HIV, especially among those who reported anal sex [5].

Despite prevention efforts to reduce HIV diagnoses and HIV-related disparities, longstanding health disparities in HIV infection and care outcomes persist among women, especially for women of color, due to social and structural determinants of health. These determinants include systemic racism, poverty, educational attainment, employment, housing insecurity, stigma, discrimination, disadvantaged communities, and disproportionate community levels of sexually transmitted infections (STIs) (including HIV). Unequal access to care and treatment must be addressed to reduce racial/ethnic disparities [5].

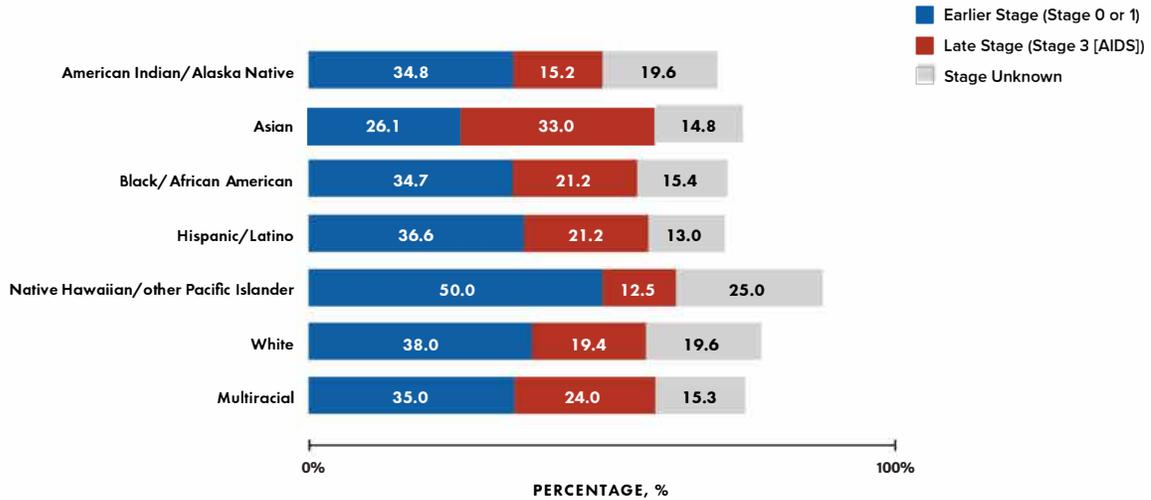
In 2021, infection among females accounted for 18.4% of 35,716 reported HIV diagnoses in the United States [5].

Stage of disease at time of diagnosis of HIV infection among females

In 2021, of 6,069 females with HIV, 35.5% of infections were diagnosed at an earlier stage (stage 0 or 1) and 21.1% were classified as stage 3 (AIDS) at the time of diagnosis (Table 1a).

- A higher percentage (33.0%) of Asian females received a late-stage diagnosis compared to the percentage (26.1%) that received an earlier-stage diagnosis (Figure 26, Table 1c) ⚠️
- Asian, Black/African American, Hispanic/Latino, and multiracial females each had $\geq 20\%$ of infections classified as late stage (stage 3, AIDS) at time of diagnosis (Figure 26, Table 1c) ⚠️

FIGURE 26
 Earlier and late stage of disease at HIV diagnosis during 2021 among females, based on assigned sex at birth, by race/ethnicity—47 states and the District of Columbia



Note. Percentages do not sum to 100%, and percentages for Stage 2 are not presented. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Linkage to HIV medical care within 1 month and viral suppression within 6 months of diagnosis among females

In 2021, of 6,069 females with HIV, 81.7% were linked to HIV medical care within 1 month and 68.0% had viral suppression within 6 months of diagnosis (Table 2a).

Lowest percentages of linkage to HIV medical care and viral suppression for females, by race/ethnicity, were as follows (Table 2c):

- Linkage to HIV medical care—American Indian/Alaska Native (76.1%)
- Viral suppression—White (61.3%)

Receipt of HIV medical care and viral suppression among females

Of 217,656 females living with diagnosed HIV at year-end 2021, 74.8% received HIV medical care and 64.4% had viral suppression at the most recent viral load test (Tables 3a and 4a).

Lowest percentages of receipt of any HIV medical care and viral suppression for females were as follows (Figure 27, Table 3c):



Race/ethnicity

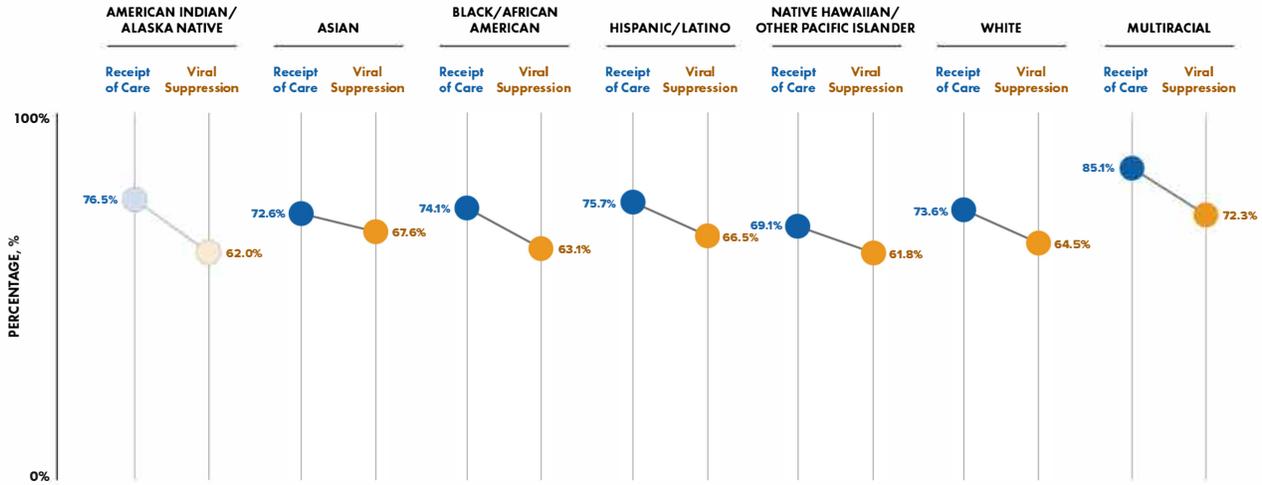
- Native Hawaiian/other Pacific Islander—69.1% and 61.8%, respectively

Race/ethnicity and age group

- Receipt of care—Native Hawaiian/other Pacific Islander females aged 45–54 years (66.7%)
- Viral suppression—Native Hawaiian/other Pacific Islander females aged 45–54 (60.0%)

FIGURE 27

Receipt of HIV medical care and viral suppression during 2021 among females, based on assigned sex at birth, by race/ethnicity—47 states and the District of Columbia



Note. Race/ethnicity category for Asian persons includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



PERSONS WITH PERINATALLY ACQUIRED HIV INFECTION



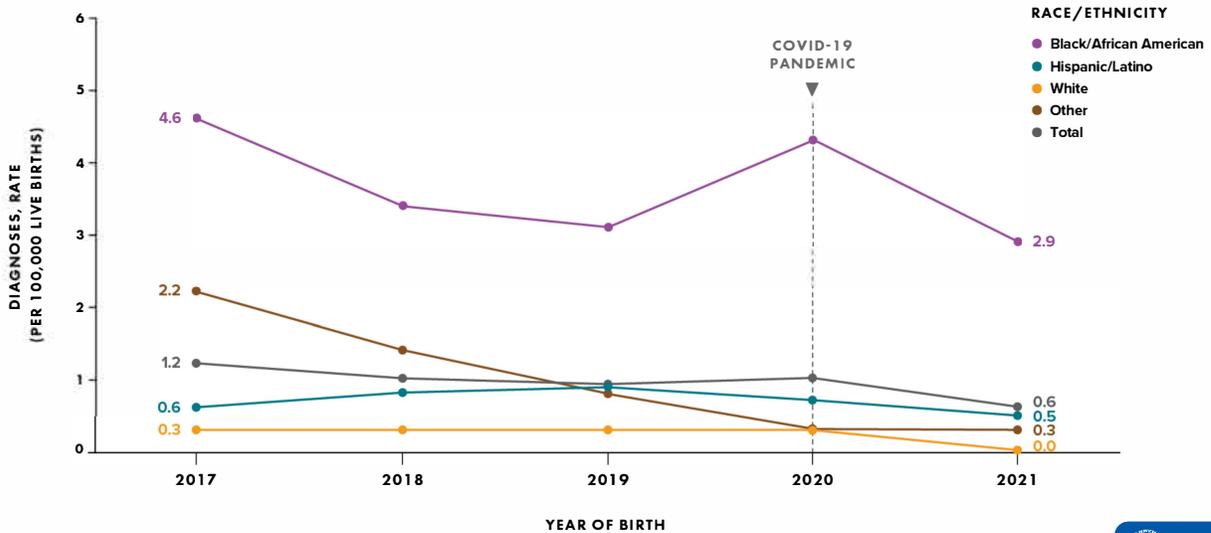
To make informed decisions about antiretroviral therapy to reduce perinatal transmission of HIV to infants, pregnant women should know their HIV infection status. In 1995, the first recommendations for HIV counseling and voluntary testing for pregnant women were published. In 2006, CDC released revised recommendations for HIV testing which specified that opt-out HIV screening should be included in the routine panel of prenatal screening tests for all pregnant women. Because of delays in the reporting to NHSS of births and diagnoses of HIV infection attributed to perinatal exposure, as well as the dynamic nature of surveillance case reporting and investigation, these numbers may be subject to change. Please use caution when interpreting perinatally acquired HIV infection numbers. Additionally, numbers less than 12, and rates based on these numbers, should be interpreted with caution.

In 2021, the overall annual rate of perinatally acquired HIV infections in the United States was 0.6 per 100,000 live births (regardless of place of birth). The rate among Black/African American persons (3.1) was 5.2 times the annual rate (Table 10a).

Among infants born in 2021, the overall annual rate of perinatally acquired HIV infections in the United States was 0.6. The rate among Black/African American persons (2.9) was 4.8 times the annual rate (Figure 28, Table 10b).

FIGURE 28

Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother's race/ethnicity, 2017–2021—United States



Note. Live-birth data reflect race/ethnicity of the infant's mother. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Race/ethnicity category for Other includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, and multiracial persons.



PERSONS AGED 13–24 YEARS



HIV infections among persons aged 13–24 years accounted for 19.4% of reported 35,716 diagnoses of HIV in 2021 in the United States. They are the least likely of any age group to be aware of their HIV infection, be retained in care, or have a suppressed viral load. Lack of awareness of HIV status may be due to recent infection or low rates of HIV testing. Persons who do not know they have HIV do not get medical care or receive treatment and can unknowingly transmit infection to others through sex or any sharing of needle/non-needle injecting equipment. In addition, persons aged 13–24 years have high rates of STIs and low rates of condom use, greatly increasing the chance of getting or transmitting HIV. Addressing HIV among persons aged 13–24 years requires that they have access to the information and tools they need to make healthy decisions, reduce their risk factors, get treatment, and stay in care [5].

Stage of disease at time of diagnosis of HIV infection among young persons aged 13–24 years

In 2021, 36.8% of infections diagnosed at an earlier stage (stage 0 or 1) and 9.9% classified as stage 3 (AIDS) at the time of diagnosis (Table 1a).

Linkage to HIV medical care within 1 month and viral suppression within 6 months of diagnosis among young persons aged 13–24 years

In 2021, 80.2% of young persons with an HIV diagnosis were linked to HIV medical care and 69.9% had viral suppression within 6 months of diagnosis (Table 2a).

Lowest percentages of linkage to HIV medical care and viral suppression among young persons aged 13–24 years by ASAB and race/ethnicity were as follows (Table 2c):

- Linkage to HIV medical care—American Indian/Alaska Native males (76.7%) and multiracial females (73.1%), respectively
- Viral suppression—Black/African American males (67.0%) and White females (64.2%), respectively

Receipt of HIV medical care and viral suppression among young persons aged 13–24 years

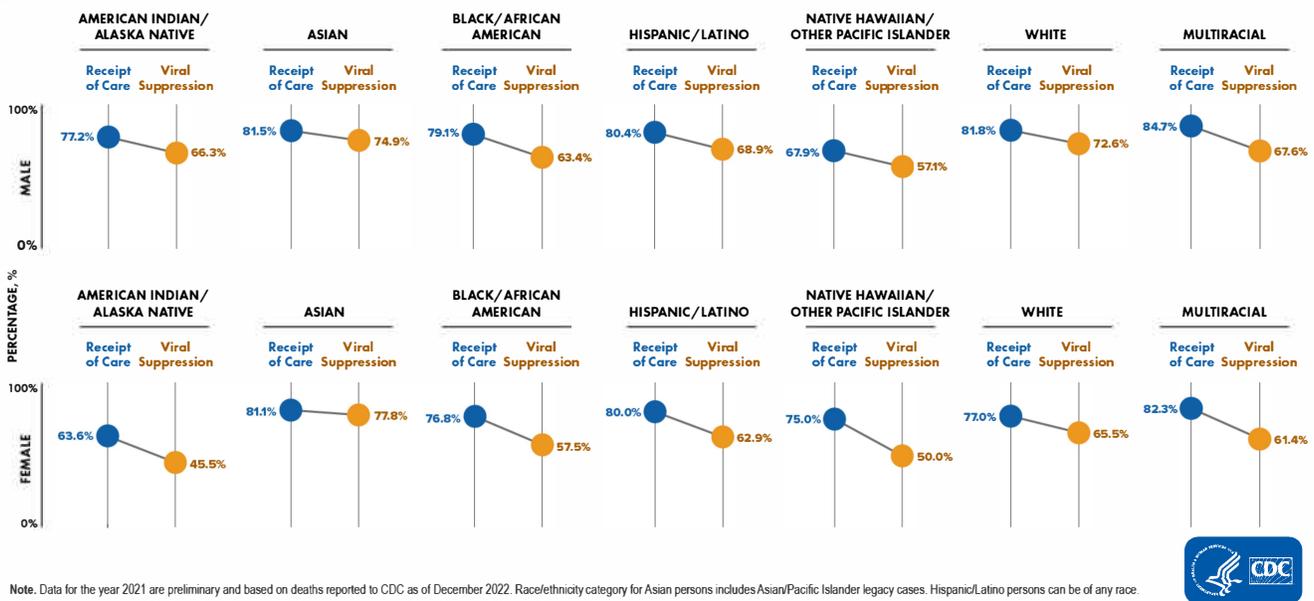
Of 27,140 young persons living with diagnosed HIV at year-end 2021, 79.6% received any HIV medical care and 65.1% had viral suppression at their most recent viral load test (Tables 3a and 4a).

Lowest percentages of receipt of any HIV medical care and viral suppression for young persons aged 13–24 years by assigned sex at birth and race/ethnicity were as follows (Figure 29, Table 3c): 

- Receipt of care—Native Hawaiian/other Pacific males (67.9%) and Black/African American females (76.8%)
- Viral suppression—Native Hawaiian/other Pacific males (57.1%) and Black/African American females (57.5%)

FIGURE 29

Receipt of HIV medical care and viral suppression during 2021 among HIV young persons aged 13–24 years, by assigned sex at birth and race/ethnicity—47 states and the District of Columbia



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Race/ethnicity category for Asian persons includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



2021 STATUS AND DISPARITIES IN LINKAGE TO CARE, VIRAL SUPPRESSION, AND PREP COVERAGE

Achieving equitable health in HIV-related outcomes can reduce new HIV infections and eliminate HIV-related disparities in the United States consistent with the goals of Healthy People 2030, NHAS, and the EHE initiative. This section presents the status and HIV-related disparities for 3 favorable care outcomes: (1) the percentage of persons with newly diagnosed HIV who were linked to care within 1 month of diagnosis during 2021; (2) the percentage of persons with diagnosed HIV who had viral suppression at the most recent test during 2021; and (3) the percentage of persons with indications for PrEP who were prescribed PrEP during 2021. For NHSS, data for other transmission category were excluded from disparity measure calculations. See Technical Notes for additional information on disparity measures.

2021 Status and Disparities in Linkage to HIV Medical Care Within 1 Month of HIV Diagnosis

Ending
the
HIV
Epidemic

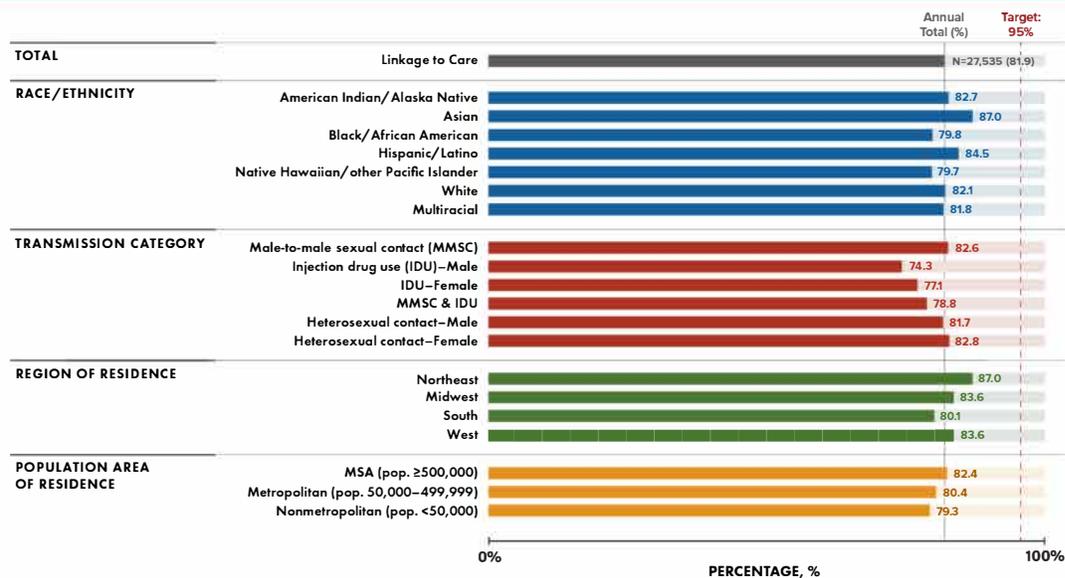
Overall Goal: Increase the percentage of people with diagnosed HIV who are linked to HIV medical care to at least 95% by 2025 and remain at 95% by 2030.



In 2021, 81.9% of persons with an HIV diagnosis were linked to HIV medical care within 1 month of diagnosis (Table 2a). For linkage to HIV medical care, the percentage difference was 13.1% from the 95% target and the percentage ratio was 0.862 times the 95% target. Percentages for linkage to care varied by race/ethnicity, transmission category (ASAB), region of residence, and population area of residence (Figure 30, Table 2a).

FIGURE 30

Status of linkage to HIV medical care within 1 month of HIV diagnosis during 2021 among persons aged ≥13 years, by selected characteristics—47 states and the District of Columbia



Note. Data have been statistically adjusted to account for missing transmission category. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Disparities by race/ethnicity, transmission category, and geographic area were as follows:

Disparities by race/ethnicity: The highest linkage to care group percentage was for Asian persons (87.0%), and the lowest linkage to care group percentage was for Native Hawaiian/other Pacific Islander persons (79.7%) (Figure 30, Table 2a). The average of the percentages of all other racial/ethnic groups (excluding the percentage for Asian persons) was 81.8%.

- **Absolute disparities**

- Absolute (maximal) percentage difference: Asian persons were the closest to the target (8.0%) and had a group percentage higher than the overall linkage to care outcome of 81.9%.

Native Hawaiian/other Pacific Islander persons were the farthest from the target (15.3%) and had a group percentage lower than the overall linkage to care outcome.

The percentage difference between the percentage for Asian persons and Native Hawaiian/other Pacific Islander persons was 7.3%. The percentage difference between the percentage for Asian persons and the average of the percentages of all other racial/ethnic groups was 5.2%.

- **Relative disparities**

- Summary percentage ratio: The percentages for Asian and Native Hawaiian/other Pacific Islander persons were 0.916 and 0.839 times the 95% target, respectively. The average percentage of all other racial/ethnic groups was 0.940 times

the percentage for Asian persons.

- **Maximal percentage ratio:** The percentage for Asian persons was 1.092 times the percentage for Native Hawaiian/other Pacific Islander persons.

Disparities by transmission category (ASAB): The highest linkage to care group percentage was for females with infection attributed to heterosexual contact (82.8%) and the lowest linkage to care group percentage was among males with infection attributed to IDU (74.3%) (Figure 30, Table 2a). The average of the percentages of all other transmission categories (excluding the percentage for females with infection attributed to heterosexual contact) was 78.9%.

- **Absolute disparities**

- **Absolute (maximal) percentage difference:** Females with infection attributed to heterosexual contact were the closest to the target (12.2%) and had a group percentage higher than the overall linkage to care outcome of 81.9%.

Males with infection attributed to IDU were the farthest from the target (20.7%) and had a group percentage lower than the overall linkage to care outcome.

The percentage difference between the percentage for females with infection attributed to heterosexual contact and for males with infection attributed to IDU was 8.5%. The percentage difference between the percentage for females with infection attributed to heterosexual contact and the average of the percentages of all other transmission categories was 3.9%.

- **Relative disparities**

- **Summary percentage ratio:** The percentages for females with infection attributed to heterosexual contact and males with infection attributed to IDU were 0.872 and 0.782 times the 95% target, respectively. The average percentage for all other transmission categories was 0.952 times the percentage for females with infection attributed to heterosexual contact.
- **Maximal percentage ratio:** The percentage for females with infection attributed to heterosexual contact was 1.114 times the percentage for males with infection attributed to IDU.

Disparities by region of residence: The highest linkage to care group percentage was for persons who resided in the Northeast (87.0%) and the lowest linkage to care group percentage was for persons who resided in the South (80.1%) (Figure 30, Table 2b). The average of the percentages of all other regions (excluding the percentage for persons who resided in the Northeast) was 82.4%.

- **Absolute disparities**

- **Absolute (maximal) percentage difference:** Persons who resided in the Northeast were the closest to the target (8.0%) and had a group percentage higher than the overall linkage to care outcome of 81.9%.

Persons who resided in the South were the farthest from the target (14.9%) and had a group percentage lower than the overall linkage to care outcome.

The percentage difference between the percentages for persons who resided in the Northeast and for persons who resided in the South was 6.9%. The percentage difference between the percentage for persons who resided in the Northeast and the average of the percentages of all other regions was 4.6%.

- **Relative disparities**

- **Summary percentage ratio:** The percentages for persons who resided in the Northeast and in the South were 0.916 and 0.843 times the 95% target, respectively. The average percentage of all other geographic areas was 0.947 times the percentage for persons who resided in the Northeast.
- **Maximal percentage ratio:** The percentage for persons who resided in the Northeast was 1.086 times the percentage for persons who resided in the South.

Disparities by population area of residence: Although linkage to care was similar for all geographic areas, the highest linkage to care group percentage was for persons who resided in metropolitan statistical areas (MSA, 82.4%) and the lowest linkage to care group percentage was for persons who resided in nonmetropolitan areas (79.3%) (Figure 30, Table 2a). The average of the percentages of all other geographic areas (excluding the percentage for persons who resided in the MSAs) was 79.9%.

- **Absolute disparities**

- **Absolute (maximal) percentage difference:** Persons who resided in MSAs were the closest to the target (12.6%) and had a group percentage higher than the overall linkage to care outcome of 81.9%.

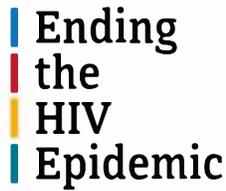
Persons who resided in nonmetropolitan areas were the farthest from the target (15.7%) and had a group percentage lower than the overall linkage to care outcome.

The percentage difference between the percentages for persons who resided in MSAs and for persons who resided in nonmetropolitan areas was 3.1%. The percentage difference between the percentage for persons who resided in the MSAs and the average of the percentages of all other geographic areas was 2.5%.

• **Relative disparities**

- **Summary percentage ratio:** The percentages for persons who resided in the MSAs and in nonmetropolitan areas were 0.867 and 0.835 times the 95% target, respectively. The average percentage of all other geographic areas was 0.970 times the percentage for persons who resided in MSAs.
- **Maximal percentage ratio:** The percentage for persons who resided in the MSAs was 1.039 times the percentage for persons who resided in nonmetropolitan areas.

2021 Status and Disparities in Viral Suppression

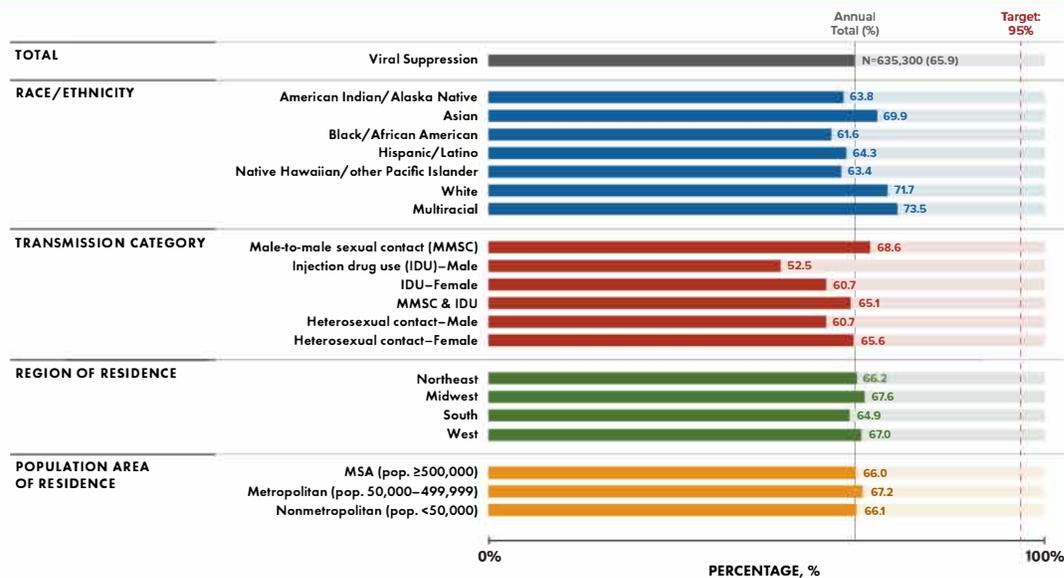


Overall Goal: Increase the percentage of people with diagnosed HIV who are virally suppressed to at least 95% by 2025 and remain at 95% by 2030.



During 2021, 65.9% of persons living with diagnosed HIV infection at year-end had viral suppression at the most recent viral load test (Table 4a). For viral suppression, the percentage difference was 29.1% from the 95% target and the percentage ratio was 0.694 times the 95% target. Percentages for viral suppression varied by race/ethnicity, transmission category (ASAB), region of residence, and population area of residence (Figure 31, Table 4a).

FIGURE 31
Status of viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by selected characteristics—47 states and the District of Columbia



Note. Data have been statistically adjusted to account for missing transmission category. Race/ethnicity category for Asian persons includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Disparities by race/ethnicity, transmission category, and geographic area were as follows:

Disparities by race/ethnicity: The highest viral suppression group percentage was for multiracial persons (73.5%) and the lowest viral suppression group percentage was for Black/African American persons (61.6%) (Figure 31, Table 4a). The average of the percentage of all other racial/ethnic groups (excluding the percentage for multiracial persons) was 65.8%.

- **Absolute disparities**

- **Absolute (maximal) percentage difference:** Multiracial persons were the closest to the target (21.5%) and had a group percentage higher than the overall viral suppression outcome of 65.9%.

Black/African American persons were the farthest from the target (33.4%) and had a group percentage lower than the overall viral suppression outcome.

The percentage difference between the percentage for multiracial persons and for Black/African American persons was 11.9%. The percentage difference between the percentage for multiracial persons and the average of the percentage for all other racial/ethnic groups was 7.7%.

- **Relative disparities**

- **Summary percentage ratio:** The percentages for multiracial and Black/African American persons were 0.774 and 0.648 times the 95% target, respectively. The average percentage of all other racial/ethnic groups was 0.895 times the percentage for multiracial persons.
- **Maximal percentage ratio:** The percentage for multiracial persons was 1.193 times the percentage for Black/African American persons.

Disparities by transmission category (ASAB): The highest viral suppression group percentage was for males with infection attributed to MMSC (68.6%) and the lowest viral suppression group percentage was for males with infection attributed to IDU (52.5%) (Figure 31, Table 4a). The average of the percentages of all other transmission categories (excluding the percentage for males with infection attributed to MMSC) was 60.9%.

- **Absolute disparities**

- **Absolute (maximal) percentage difference:** Males with infection attributed to MMSC were the closest to the target (26.4%) and had a group percentage higher than the overall viral suppression outcome of 65.9%.

Males with infection attributed to IDU were the farthest from the target (42.5%) and had a group percentage lower than the overall viral suppression outcome.

The percentage difference between the percentages for males with infection attributed to MMSC and for males with infection attributed to IDU was 16.1%. The percentage difference between the percentage for males with infection attributed to MMSC and the average of the percentages of all other transmission categories was 7.7%.

- **Relative disparities**

- **Summary percentage ratio:** The percentages for males with infection attributed to MMSC and males with infection attributed to IDU were 0.722 and 0.553 times the 95% target, respectively. The average percentage of all other transmission categories was 0.888 times the percentage for males with infection attributed to MMSC.
- **Maximal percentage ratio:** The percentage for males with infection attributed to MMSC was 1.307 times the percentage for males with infection attributed to IDU.

Disparities by region of residence: The highest viral suppression group percentage was for persons who resided in the Midwest (67.6%) and the lowest viral suppression group percentage was for persons who resided in the South (64.9%) (Figure 31, Table 4b). The average of the percentages of all other regions (excluding the percentage for persons who resided in the Midwest) was 66.0%.

- **Absolute disparities**

- **Absolute (maximal) percentage difference:** Persons who resided in the Midwest were the closest to the target (27.4%) and had a group percentage higher than the overall viral suppression outcome of 65.9%.

Persons who resided in the South were the farthest from the target (30.1%) and had a group percentage lower than the overall viral suppression outcome.

The percentage difference between the percentages for persons who resided in the Midwest and for persons who resided in the South was 2.7%. The percentage difference between the percentage for persons who resided in the Midwest and the average of the percentages of all other regions was 1.6%.

- **Relative disparities**

- **Summary percentage ratio:** The percentages for persons who resided in the Midwest and in the South were 0.712 and 0.683 times the 95% target, respectively. The average percentage of all other geographic areas was 0.976 times the percentage for persons who resided in the Midwest.

- Maximal percentage ratio: The percentage for persons who resided in the Midwest was 1.042 times the percentage for persons who resided in the South.

Disparities by population area of residence: Although viral suppression was similar for all geographic areas, the highest viral suppression group percentage was for persons who resided in metropolitan areas (67.2%) and the lowest viral suppression group percentage was for persons who resided in the MSAs (66.0%) (Figure 31, Table 4a). The average of the percentages of all other geographic areas (excluding the percentage who resided in metropolitan areas) was 66.1%.

• Absolute disparities

- Absolute (maximal) percentage difference: Persons who resided in metropolitan areas were the closest to the target (27.8%) and had a group percentage higher than the overall viral suppression outcome of 65.9%.

Persons who resided in the MSAs were the farthest from the target (29.0%) but had a group percentage higher than the overall viral suppression outcome.

The percentage difference between the percentages for persons who resided in metropolitan and MSAs was 1.2%. The percentage difference between the percentages for persons who resided in metropolitan and in all other geographic areas was 1.1%.

• Relative disparities

- Summary percentage ratio: The percentages for persons who resided in metropolitan areas and in the MSAs were 0.707 and 0.695 times the 95% target, respectively. The average percentage of all other geographic areas was 0.984 times the percentage for persons who resided in metropolitan areas.
- Maximal percentage ratio: The percentage for persons who resided in metropolitan areas was 1.018 times the percentage for persons who resided in the MSAs.

2021 Status and Disparities in PrEP Coverage

Ending
the
HIV
Epidemic

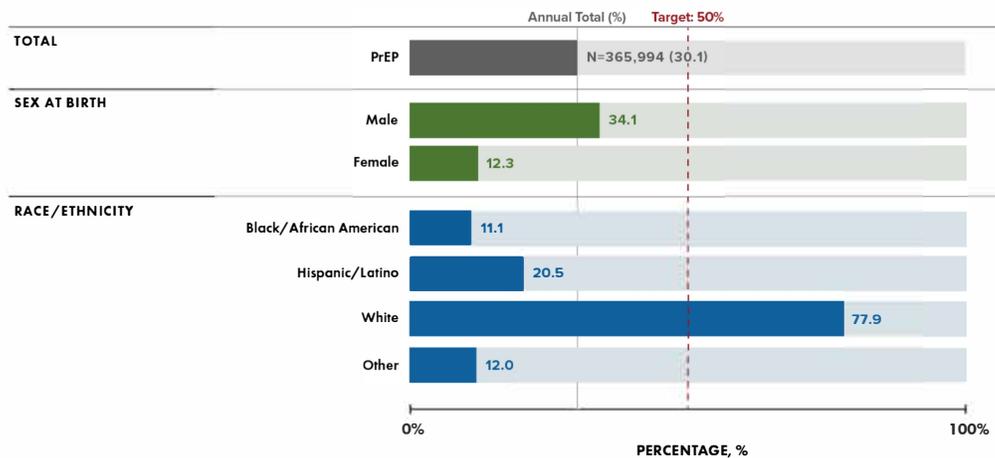
Overall Goal: Increase the estimated percentage of people with indications for PrEP classified as having been prescribed PrEP to at least 50% by 2025 and remain at 50% by 2030.



During 2021, 30.1% of an estimated 1,216,210 persons aged ≥ 16 years with indications, or eligible, for PrEP were prescribed PrEP (Figure 32, Table 9a). For overall PrEP coverage in 2021, the percentage difference was 19.9% from the 50% target and the percentage ratio was 0.602 times the 50% target.

FIGURE 32

Status of PrEP coverage during 2021 among persons aged ≥16 years, by race/ethnicity and assigned sex at birth—United States



Note. Race/ethnicity category for Other includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, and multiracial persons. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Disparities by race/ethnicity and assigned sex at birth were as follows:

Disparities by race/ethnicity: The highest PrEP coverage group percentage was for White persons (77.9%), and the lowest PrEP coverage group percentage was for Black/African American persons (11.1%) (Figure 32, Table 9a). The average of the percentages of all other racial/ethnic groups (excluding the percentage for White persons) was 14.5%.

- **Absolute disparities**

- **Absolute (maximal) percentage difference:** White persons had a group percentage that exceeded the overall PrEP coverage target of 50% (27.9%).

Black/African American persons were the farthest from the target (38.9%) and had a group percentage lower than the overall PrEP coverage outcome.

The percentage difference between the percentage for White and for Black/African American persons was 66.8%. The percentage difference between the percentage for White persons and the average of the percentages of all other racial/ethnic groups was 63.4%.

- **Relative disparities**

- **Summary percentage ratio:** The percentages for White and Black/African American persons were 1.558 and 0.222 times the 50% target, respectively. The average percentage of all other racial/ethnic groups was 0.186 times the percentage for White persons.
- **Maximal percentage ratio:** The percentage for White persons was 7.018 times the percentage for Black/African American persons.

Pairwise Disparities by ASAB: The highest PrEP coverage group percentage was for males (34.1%) and the lowest PrEP coverage group percentage was for females (12.3%) (Figure 32, Table 9a).

- **Absolute disparity**

- **Absolute (maximal) percentage difference:** Males were the closest to the target (15.9%) and had a group percentage lower than the overall PrEP coverage outcome of 50.0%.

Females were the farthest from the target (37.7%) and had a group percentage lower than the overall PrEP coverage outcome.

The absolute percentage difference between the percentages for males and for females was 21.8%.

- **Relative disparity**

- **Summary percentage ratio:** The percentages for males and females were 0.682 and 0.246 times the 50% target, respectively.
- **Maximal percentage ratio:** The percentage for males was 2.77 times the percentage for females.

Last Reviewed: May 23, 2023



Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data—United States and 6 Dependent Areas, 2021: Technical Notes

Technical Notes

Report Contents

Other Reports

A. Surveillance of HIV Infection Overview

This report includes HIV surveillance data through 2021 and reported to CDC's NHSS through December 31, 2022. The data are from 50 states, the District of Columbia, and 6 U.S. dependent areas (American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the Republic of Palau, and the U.S. Virgin Islands) in which laws or regulations require confidential reporting to the jurisdiction (not to CDC), by name, for all persons (adults, adolescents, and children) with confirmed diagnoses of HIV infection. After the removal of personally identifiable information, data from these reports were submitted to CDC.

All data presented in this report are considered provisional (based on a ≥ 12 -month reporting delay) and subject to change as additional reports are submitted for HIV cases and HIV surveillance data quality improves with further evaluation of the surveillance system and data repository. Data are based on a 12-month reporting delay to allow sufficient time for HIV-related laboratory results and deaths to be reported to CDC. Because reporting delays can impact the reliability of data presented in this report, caution should be applied when interpreting the results.

Please use caution when interpreting data on diagnoses of HIV infection. HIV surveillance data on persons with diagnosed HIV infection may not be representative of all persons with HIV because not all infected persons have been (1) tested or (2) tested at a time when the infection could be detected and diagnosed. Also, some states offer anonymous HIV testing and some persons complete self-testing at home or in a private location; the results of anonymous and self-tests are not reported to the confidential name-based HIV registries of state and local health departments [12, 13]. Therefore, reports of confidential test results may not represent all persons who tested positive for HIV infection. In addition, testing patterns are influenced by many factors, including the extent to which testing is routinely offered to specific groups and the availability of, and access to, medical care and testing services. The data presented in this report provide minimum counts of persons for whom HIV infection has been diagnosed and reported to the surveillance system. Finally, although all jurisdictions use a uniform case report form, surveillance practices in data collection and updating of case records may differ among jurisdictions. More information on surveillance limitations can be found in the Technical Notes of the 2021 HIV Surveillance Report at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

Please use caution when interpreting laboratory data for persons with diagnosed HIV infection. Laboratory data presented in this report are from 48 jurisdictions (47 states and the District of Columbia) that reported complete CD4 and viral load test results to CDC as of December 31, 2021. Data from these jurisdictions represent 90% of all persons aged ≥ 13 years living with diagnosed HIV infection at year-end 2021 in the United States.

Caution: Data for the year 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions.

B. Stages of HIV Infection—Case Definitions

Both the 2008 and 2014 HIV case definitions were used to classify HIV infection among adults and adolescents aged ≥ 13 years and among children < 13 years [14, 15].

More information on case definitions can be found in the Technical Notes of the 2021 HIV Surveillance Report at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

C. Areas With Complete Laboratory Reporting

As of December 31, 2022, 48 jurisdictions (47 states and the District of Columbia) had met the following criteria for the collection and reporting of CD4 and viral load test results:

- The jurisdiction's laws/regulations required the reporting of all levels of CD4 and viral load results to the state or local health department (Table 11).
- Laboratories that perform HIV-related testing for the jurisdiction had reported a minimum of 95% of HIV-related test results to the state or local health department.
- By December 31, 2022, the jurisdiction had reported (to CDC) at least 95% of all CD4 and viral load test results received from January 2020 through September 2022.

The 47 states are Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming. Data from these states and the District of Columbia were used to populate Tables 1a–e, 2a–e, 3a–e, and 4a–b.

D. Tabulation and Presentation of Data

D1. Definitions and Data Specifications

D1.1 Stage of disease at time of diagnosis of HIV infection

Data on persons with HIV infection, stage 3 (AIDS), include persons whose infection has ever been classified as stage 3 (AIDS). These data do not necessarily represent the current stage of disease.

The stages of HIV infection in the 2014 case definition are based on age specific CD4 lymphocyte counts or percentages of total lymphocytes and are defined as follows:

- **HIV infection, stage 0:** First positive HIV test result within 6 months after a negative HIV test result. The stage remains stage 0 until 6 months after the first positive test result. After 6 months, the stage may be classified as 1, 2, 3, or unknown based on a CD4 test result or the diagnosis of an opportunistic illness (OI). The diagnosis of an AIDS-defining condition or a low CD4 test result before the 6 months have elapsed does not change the stage from stage 0 to stage 3.
- **HIV infection, stages 1, 2, and 3:** Documentation of an AIDS-defining OI (excluding stage 0 as described above) is stage 3. Otherwise, the stage is determined by the lowest CD4 lymphocyte test result:
 - Stage 1—CD4 lymphocyte count of ≥ 500 or a CD4 percentage of total lymphocytes of ≥ 26
 - Stage 2—CD4 lymphocyte count of 200–499 or a CD4 percentage of total lymphocytes of 14–25
 - Stage 3—CD4 lymphocyte count of < 200 or a CD4 percentage of total lymphocytes of < 14 or documentation of an AIDS-defining condition.
- **HIV infection, stage unknown:** No reported information on AIDS-defining OIs and no information available on CD4 lymphocyte count or percentage.

Because a complete assessment of stage of disease at time of HIV diagnosis relies on complete laboratory data (all CD4 values) so that earlier stages of disease (stage 0 or 1) can be assessed, stage of disease at time of diagnosis was calculated for the 48 jurisdictions that reported complete laboratory data (Tables 1a–e).

Information on stage 3 (AIDS) is available for all 50 states, the District of Columbia, and 6 U.S. dependent areas, even when not all CD4 values are reportable; therefore, stage 3 (AIDS) at time of HIV diagnosis was calculated for persons in all areas (Tables 6a–d).

Stage of disease at time of diagnosis (i.e., HIV infection, stage 0, 1, 2, 3 [AIDS], or unknown; Tables 1a–e) and stage 3 (AIDS) at time of HIV diagnosis (Tables 6a–d) were determined by using the first CD4 test result or documentation of an AIDS-defining condition ≤ 3 months after the HIV diagnosis date during 2021, unless documentation indicated disease stage 0. If ≥ 2 events occurred during the same month and could thus qualify as “first,” the following conditions were applied:

- If an AIDS-defining condition was documented, the AIDS-defining condition was used; if a CD4 count or a CD4 percentage had been reported and an AIDS-defining condition was documented, the AIDS-defining condition was used.
- If an AIDS-defining condition was not documented, but a CD4 count and a CD4 percentage had been reported, the CD4 count was used.
- If an AIDS-defining condition was not documented, but > 1 CD4 count had been reported, the lowest CD4 count (indicative of the most severe disease state) was used.
- If an AIDS-defining condition was not documented and a CD4 count had not been reported, but a CD4 percentage had been reported, the CD4 percentage was used. If > 1 CD4 percentage was reported, the lowest CD4 percentage (indicative of the most severe disease state) was used.

For stage of disease at time of diagnosis, infections were classified as “stage unknown” if the month of HIV diagnosis was missing, or if, ≥ 3 months after HIV diagnosis, neither a CD4 count nor a CD4 percentage had been determined and no AIDS-defining condition was documented.

D1.2 Linkage to, and receipt of, HIV medical care

The data on linkage to HIV medical care were based on persons whose infection was diagnosed during 2021 and who resided in any of the 48 jurisdictions at the time of diagnosis (Tables 2a–e). Linkage to HIV medical care within 1 month after HIV diagnosis was measured by documentation of ≥ 1 CD4 (count or percentage) or viral load tests performed ≤ 1 month after HIV diagnosis, including tests performed on the same date as the date of diagnosis.

The data on receipt of HIV medical care were based on persons whose infection was diagnosed by year-end 2020, who resided in any of the 48 jurisdictions as of their most recent known address, and who were alive at year-end 2021 (Tables 3a–e). Receipt of any HIV medical care was measured by documentation of ≥ 1 CD4 or viral load tests performed during 2021. Retention in care (receipt of continuous HIV medical care) was measured by documentation of ≥ 2 CD4 or viral load tests performed ≥ 3 months apart during 2021.

For analyses of linkage to, and retention in, care, the month and the year of the earliest HIV-positive test result reported to the surveillance system were used to determine the diagnosis date. Test results were excluded if the month of the sample collection was missing. For linkage to care, data were excluded if the month of diagnosis was missing. For receipt of care, retention in care, and viral suppression, data were excluded if the date of death (where applicable) occurred before the year of interest or was missing.

D1.3 Viral suppression

Viral suppression was measured among persons whose infection was diagnosed by year-end 2020, who resided in any of the 48 jurisdictions as of their most recent known address during 2021, and who were alive at year-end 2021 (Tables 4a/b). Viral suppression was defined as a viral load result of < 200 copies/mL at the most recent viral load test. The cutoff value of < 200 copies/mL was based on the following definition of virologic failure: viral load of ≥ 200 copies/mL. If multiple viral load tests were performed during the same month and could thus qualify as “most recent,” the viral load with VL result of < 200 copies/mL was selected. If the numerical result was missing or the result was a logarithmic value, the interpretation of the result (e.g., below limit) was used to determine viral suppression. Virologic failure may indicate lack of adherence to antiretroviral therapy (ART).

Viral suppression within 6 months of diagnosis was measured for persons whose infection was diagnosed during 2021 and who resided in any of the 48 jurisdictions at the time of diagnosis (Tables 2a–e). Viral suppression was defined as a viral load result of < 200 copies/mL at any viral load test within 6 months of an HIV diagnosis made during 2021.

D1.4 Deaths

Monitoring receipt of HIV medical care, retention in HIV medical care, viral suppression at most recent test, deaths (any cause) and survival of persons with diagnosed HIV infection is dependent upon complete death ascertainment conducted by HIV surveillance programs for reporting to CDC. Due to incomplete reporting of deaths for the year 2021, death data for Guam, Mississippi, U.S. Virgin Islands, and West Virginia should be interpreted with caution.

More information on deaths can be found in the Technical Notes of the 2021 HIV Surveillance Report at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

D1.5 Survival analyses

The Kaplan-Meier method was used to estimate the probability of survival (Tables 8a–f) for > 3 years (36 months) for persons with diagnosed HIV infection and for persons whose infection had ever been classified as stage 3 (AIDS). To allow ≥ 3 years from the time of HIV diagnosis to a death date on or before December 31, 2021, tables were limited to data on persons whose diagnosis or stage 3 (AIDS) classification was made during 2013–2018. The results of survival analyses for areas with < 100 diagnoses per year (i.e., 600 during the 6-year period) were unstable and therefore are not presented in this report.

D1.6 Perinatally acquired HIV infection

Table 10a presents data for infants with infection attributed to perinatal transmission and reported to NHSS through December 31, 2022. The data include all persons reported to NHSS with infection attributed to perinatal exposure, regardless of place of birth. Table 10b presents a subset of data from Table 10a: the data include only the persons whose case record denoted the United States as place of birth or residence at birth. The data on persons with perinatally acquired infection that are presented in Table 10b do not include persons who were born in a U.S. dependent area or a foreign country or whose residence at birth was unknown or missing from the case record.

D1.7 Preexposure prophylaxis (PrEP) coverage

PrEP coverage, reported as a percentage, is defined as the number of persons aged ≥ 16 years classified as having been prescribed PrEP during the specified year divided by the estimated number of persons aged ≥ 16 years who had indications for PrEP during the specified year (Tables 9a/b, A5). The number of persons prescribed, which is reported as a case count, is defined as the number of persons aged ≥ 16 years classified as having been prescribed PrEP during the specified year. PrEP coverage is an EHE indicator that is not a reportable disease or condition and is not reported to NHSS. Multiple data sources, described below, are used to calculate PrEP coverage. Please use caution when interpreting PrEP data. Different data sources were used in the numerator and denominator to calculate PrEP coverage.

D1.7.1 Persons prescribed PrEP

National pharmacy data from the IQVIA Real-World Longitudinal Prescriptions database (hereafter, IQVIA database) are used to classify persons aged ≥ 16 years who have been prescribed PrEP in the specific year. The IQVIA database captures prescriptions from all payers and represents approximately 93% of all prescriptions from retail pharmacies and 77% from mail-order outlets in the United States. The database does not include prescriptions from some closed health care systems that do not make their prescription data available to IQVIA. Therefore, these are minimum estimates of PrEP coverage. The database includes antiretroviral drugs prescribed, demographic variables of persons to whom the drugs were prescribed, and medical claims for these persons. IQVIA acquires medical claims and race/ethnicity data from various sources, including ambulatory, hospital, and consumer databases, and links these data to persons in the prescription database. The annual number of persons classified as having been prescribed PrEP was based on a validated algorithm that discerns whether tenofovir disoproxil fumarate and emtricitabine (TDF/FTC) were prescribed for PrEP after excluding prescriptions for HIV treatment, hepatitis B treatment, or HIV postexposure prophylaxis [16–18]. Tenofovir alafenamide and emtricitabine (TAF/FTC) was approved as an alternative drug for PrEP by the U.S. Food and Drug Administration (FDA) in October 2019. Long-acting injectable cabotegravir (CAB-LA) was approved by the FDA as an additional prevention option for PrEP in December 2021. TAF/FTC and injectable cabotegravir were included in the algorithm after their approval to classify the number of persons prescribed PrEP.

The number of persons classified as having been prescribed PrEP is reported by sex, age group, and race/ethnicity. Transmission category data are not available in the IQVIA database, and race/ethnicity data are available for < 40% of persons with PrEP prescriptions. Please use caution when interpreting PrEP data by race/ethnicity. Note that race/ethnicity information were derived from a consumer database and might be biased. Race/ethnicity categories available in the IQVIA

data include White, Black/African American, Hispanic/Latino, and other persons. The number of persons prescribed PrEP for each racial/ethnic group presented in this report was extrapolated by applying the racial/ethnic distribution of known records to those for which data on race/ethnicity were unknown. PrEP prescriptions by race/ethnicity were imputed due to incomplete data. Imputed data should be interpreted with caution and the gap in PrEP coverage across racial/ethnic groups may be over- or under-estimated. Additional methodologic approaches are under consideration in the estimation of race/ethnicity of persons prescribed PrEP.

D1.7.2 Preexposure prophylaxis (PrEP) coverage—geographic designations

In the IQVIA database, a person's location is reported as a 3-digit ZIP code prefix (hereafter, ZIP3) assigned by the U.S. Postal Service. To estimate the number of persons prescribed PrEP at the state or county level, a probability-based approach is used to crosswalk between ZIP3s and states/counties by using data from (a) the U.S. Census Bureau's American Community Survey (ACS) 5-year estimates by ZIP Code Tabulation Area (ZCTA) [19], and (b) the U.S. Department of Housing and Urban Development's ZIP Code Crosswalk Files [20]. Because of reliability concerns, subnational estimates of < 40 are not reported.

D1.7.3 Persons with indications for PrEP

U.S. Census Bureau and their ACS files were used to estimate the number of MSM in a jurisdiction [21, 22]. Next, behavioral data from the National Health and Nutrition Examination Survey (NHANES) were used to estimate the proportion of HIV-negative MSM with indications for PrEP [23].

The number of HIV-negative MSM with indications for PrEP was multiplied by the ratio of percentage of HIV diagnoses during the specified year attributed to other major transmission risk groups compared to the percentage among MSM in a given state or county. The estimated number of persons with indications for PrEP in the 3 major transmission risk groups (MSM, heterosexuals, PWID) in each jurisdiction were then summed to yield a state or county-specific estimate. State estimates were then summed for a national total of persons with indications for PrEP [24]. Jurisdictional estimates were rounded to the nearest 10.

The tables included in this report provide updated data on PrEP coverage for the year 2021 by using the IQVIA data reported through September 2022. IQVIA conducts data quality assurance activities. As a result, the number of persons classified as having been prescribed PrEP in a given year might change from time to time. The impact of the changes may vary by demographic category nationally and by jurisdiction. The data sources used to estimate the number of persons with indications for PrEP have different schedules of availability. Consequently, the availability of a denominator may lag the availability of a numerator. PrEP coverage data with a lagged denominator are considered preliminary.

For this release of the Monitoring report, 2018 denominators were used for 2021 PrEP coverage data. Data for the year 2021 should be interpreted with awareness of the impact of the COVID-19 pandemic on filling PrEP prescriptions in state/local jurisdictions [25].

D1.8 Measures of Disparities

Disparity measures include absolute and relative measures. The literature recommends use of at least one absolute and one relative disparity measure to monitor the magnitude and direction of disparities [26, 27]. The absolute rate difference and the relative rate ratio disparity measures were chosen because they are used by federal initiatives—Healthy People 2030, NHAS, and EHE—to measure progress in the social determinants of health (SDOH) and HIV-related indicators. This report uses the analytic approach used in Healthy People 2030 to assess the status of the overall outcomes relative to the proposed, national targets of 95% for linkage to HIV medical care and viral suppression and 50% for PrEP coverage [2].

We measured disparities for the 3 outcomes by selected characteristics (i.e., race/ethnicity, transmission category, and geographic area) and chose either the 95% outcome target or the group with the highest percentage for each outcome as our reference point to highlight opportunities for improvement. Disparities were measured for linkage to HIV medical care, viral suppression, and PrEP coverage by using the following measures:

- The absolute disparity measure is the absolute or maximal percentage difference that measures HIV-related disparities comparing the difference between the population groups with the highest and lowest percentage for that outcome to their respective targets (e.g., 95% for linkage to care and viral suppression, 50% for PrEP coverage; meeting the target equals 0) and to each other (e.g., between the population group with the highest and lowest percentage for that outcome).
- The relative disparity measures are the maximal percentage ratio and summary percentage ratio.
 - Maximal percentage ratio is the ratio between the group with the highest and lowest percentage for an outcome to their respective targets (e.g., 95% for linkage to care and viral suppression, 50% for PrEP coverage; meeting the target

equals 1) and to each other (e.g., between the population group with the highest and lowest percentage for that outcome).

- Summary percentage ratio is the ratio between the average of the percentages of all other groups [excluding the group with the highest percentage] and the group with the highest percentage for an outcome.
- Please note that comparisons made between only two groups are considered pairwise disparities.

D2. Rates

Rates per 100,000 population were calculated for (1) the numbers of diagnoses of HIV infection, (2) the numbers of deaths of persons with diagnosed HIV infection, and (3) the numbers of persons living with diagnosed HIV infection. In the tables displaying data on perinatally acquired HIV infection (Tables 10a/b), rates were calculated per 100,000 live births [28].

More information on rates can be found in the Technical Notes of the 2021 HIV Surveillance Report at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

D2.1 Rates of deaths (any cause)

In tables displaying data on deaths of persons with diagnosed HIV infection and deaths of persons with infection ever classified as stage 3 (AIDS) (Tables 7a–f), rates were calculated in 3 ways:

- **Rates of deaths per 100,000 population:** Each rate was calculated by dividing the total number of deaths for the calendar year by the population for that calendar year and then multiplying the result by 100,000.
- **Rates of deaths per 1,000 persons living with diagnosed HIV infection or living with infection ever classified as stage 3 (AIDS):** Rates were calculated by dividing the reported total number of deaths of persons with diagnosed HIV infection (or with infection classified as stage 3 [AIDS]) during the calendar year by the sum of the number of persons living with a diagnosis of HIV infection (or with infection classified as stage 3 [AIDS]) at the end of the previous calendar year plus the number of diagnoses of HIV infection (or stage 3 [AIDS] classification) during the current calendar year; the result was then multiplied by 1,000.
- **Age-adjusted rates of deaths per 100,000 population and per 1,000 persons living with diagnosed HIV infection or living with infection ever classified as stage 3 (AIDS):** Tables 7c and 7f include age-adjusted rates by area of residence in addition to crude rates. A standard population distribution was used to adjust death rates per 100,000 population and per 1,000 persons living with diagnosed HIV infection (or with infection ever classified as stage 3 [AIDS]). The age-adjusted rates are rates that would have existed if the age distribution of the designated population and the age distribution of the standard population were the same. The use of the U.S. 2000 standard population in calculating age-adjusted rates was based on recommendations by the National Center for Health Statistics [29, 30].

E. Demographic Information

E1. Age

All tables in this report reflect data on persons aged 13 years and older, with the exception of Tables 9a/b (PrEP coverage) and Tables 10a/b (perinatally acquired HIV infection, birth years 2017–2021).

- Tables 3a–e and 4a/b (receipt of care and viral suppression): age was based on the person's age at year-end 2020.
- Tables 7a–f (deaths): age was based on the person's age at the time of death.
- All other tables: age was based on the person's age at the time of HIV diagnosis.

E2. Sex and Gender

E2.1 Assigned sex at birth

Sex designations in this report are based on a person's assigned sex at birth.

E2.2 Gender

Gender identity refers to a person's internal understanding of their own gender, or gender with which a person identifies.

More information on gender can be found in the Technical Notes of the 2021 HIV Surveillance Report at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

E3. Race and Ethnicity

In the *Federal Register* [31] for October 30, 1997, the Office of Management and Budget (OMB) announced the Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity.

Race and ethnicity are not risk factors but are instead markers for many underlying problems of greater relevance to health, including socioeconomic status and cultural behavior-characteristics, which are social and not biological [32, 33]. Racial and ethnic differences in health are more likely to reflect profound differences in people's experiences based on the relatively advantaged or disadvantaged position in society into which they are born [33, 34]. SDOH factors, shaped by income, education, wealth, and socioeconomic conditions, vary systematically by race and ethnicity and are important in explaining differences in health outcomes [34].

Demographic information for the live birth registry is based on that of the mother [28]. Therefore, Tables 10a/b, which present estimated numbers and rates of perinatally acquired HIV infection, categorize race/ethnicity according to the mother's race/ethnicity.

More information on race and ethnicity can be found in the Technical Notes of the 2021 HIV Surveillance Report at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

E4. Transmission/Exposure Categories

E4.1 Transmission category

Transmission category is the term for the classification of cases that summarizes a person's (aged ≥ 13 years) possible HIV risk factors; the summary classification results from selecting, from the presumed hierarchical order of probability, the 1 (single) risk factor most likely to have been responsible for transmission [35, 36].

More information on transmission categories can be found in the Technical Notes of the 2021 HIV Surveillance Report at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

E4.2 Exposure category

Exposure category is the term for the classification of cases in transgender and AGI persons aged ≥ 13 years based on the risk factors that may have been responsible for HIV transmission; classification has no presumed hierarchical order of probability, except for rare circumstances where route of transmission has been confirmed through investigation. The categories are mutually exclusive. Data were not statistically adjusted to account for missing exposure category.

More information on exposure categories can be found in the Technical Notes of the 2021 HIV Surveillance Report at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

F. Geographic Designation

F1. Area of Residence

Data by area of residence reflect the address at the time of stage 3 (AIDS) classification or at the time of diagnosis of HIV infection for Tables 1b, 2b, 6c/d, 8c/f, and A1–A2. In Tables 3b, 4b, and A3, area of residence is based on most recent known address as of December 31 of the specified year. For the death tables (7c/f), area of residence is based on residence at death. When information on residence at death is not available, the state where a person's death occurred is used. For PrEP data, please see the Preexposure Prophylaxis (PrEP) Coverage—Geographic Designations section.

F2. U.S. Census Regions

Data by region reflect the address at the time of diagnosis of HIV infection for tables that present number of diagnoses (Tables 1b, 2b, 6a/b, 7a/b). In Tables 3b and 4b, region is based on most recent known address as of December 31 of the specified year. For the death tables (7a/b, 7d/e), region is based on residence at death.

More information on U.S. Census regions can be found in the Technical Notes of the 2021 HIV Surveillance Report at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

F3. Population Area of Residence

On March 6, 2020, OMB announced new MSA delineations based on the new standards and Census 2020 data [37]. Data by population area of residence reflect the address at the time of stage 3 (AIDS) classification or at the time of diagnosis of HIV infection for Tables 1a/c, 2a/c, 5a, and 7a/d. For Tables 3a/c and 4a, population area of residence is based on the most recent

known address as of December 31 of the specified year. For the death tables (7a/d), population area of residence is based on residence at death. The MSAs listed in these tables were defined according to OMB's most recent update (March 2020) of statistical areas [37]. In the Federal Register for July 16, 2021, OMB published revised standards for defining MSAs in federal statistical activities [38]. These standards, which provided for the identification of MSAs in the United States and Puerto Rico, replaced the 2010 standards. The adoption of the new standards was effective as of July 16, 2021. OMB plans to publish delineations of areas based on the 2020 standards and Census 2020 data in 2023 [38].

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Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data—United States and 6 Dependent Areas, 2021: Tables

All Tables

Report Contents

Other Reports

Table 1a. Stage of disease at time of diagnosis of HIV infection during 2021 among persons aged ≥ 13 years, by selected characteristics—47 states and the District of Columbia [^](#)

	Total No.	Stage 0 ^a		Stage 1 (CD4 \geq 500 cells/ μ L or \geq 26%)		Stage 2 (CD4 = 200–499 cells/ μ L or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/ μ L or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
Gender											
Male	26,654	1,927	7.2	6,404	24.0	8,564	32.1	5,689	21.3	4,070	15.3
Female	6,069	361	5.9	1,796	29.6	1,651	27.2	1,283	21.1	978	16.1
Transgender woman ^c	785	69	8.8	256	32.6	271	34.5	94	12.0	95	12.1
Transgender man ^c	55	11	20.0	23	41.8	17	30.9	2	3.6	2	3.6
Additional gender identity ^d	43	3	7.0	9	20.9	18	41.9	6	14.0	7	16.3
Age at diagnosis (yr)											
13–24	6,561	648	9.9	1,765	26.9	2,483	37.8	649	9.9	1,016	15.5
25–34	12,337	944	7.7	3,332	27.0	4,042	32.8	2,100	17.0	1,919	15.6
35–44	7,087	437	6.2	1,752	24.7	1,999	28.2	1,806	25.5	1,093	15.4
45–54	4,153	187	4.5	911	21.9	1,140	27.5	1,335	32.1	580	14.0
≥ 55	3,468	155	4.5	728	21.0	857	24.7	1,184	34.1	544	15.7
Race/ethnicity											

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
American Indian/Alaska Native	220	19	8.6	49	22.3	70	31.8	42	19.1	40	18.2
Asian	699	44	6.3	140	20.0	254	36.3	182	26.0	79	11.3
Black/African American	13,650	872	6.4	3,328	24.4	4,330	31.7	2,688	19.7	2,432	17.8
Hispanic/Latino ^e	9,416	740	7.9	2,342	24.9	3,120	33.1	2,088	22.2	1,126	12.0
Native Hawaiian/other Pacific Islander	74	3	4.1	23	31.1	19	25.7	18	24.3	11	14.9
White	8,580	619	7.2	2,372	27.6	2,415	28.1	1,846	21.5	1,328	15.5
Multiracial	967	74	7.7	234	24.2	313	32.4	210	21.7	136	14.1
Transmission category^f											
Male-to-male sexual contact ^g	22,659	1,725	7.6	5,621	24.8	7,479	33.0	4,530	20.0	3,306	14.6
Injection drug use ^h	2,326	134	5.8	582	25.0	610	26.2	508	21.8	492	21.1
Male	1,311	75	5.7	284	21.7	355	27.1	307	23.5	290	22.1
Female	1,015	60	5.9	298	29.4	255	25.1	201	19.8	201	19.8
Male-to-male sexual contact ^g and injection drug use ^h	1,301	106	8.2	379	29.1	383	29.4	209	16.1	224	17.3
Heterosexual contact ⁱ	7,244	401	5.5	1,888	26.1	2,030	28.0	1,807	24.9	1,118	15.4
Male	2,178	92	4.2	380	17.4	629	28.9	733	33.7	345	15.8
Female	5,065	309	6.1	1,508	29.8	1,402	27.7	1,074	21.2	773	15.3
Other ^j	76	5	6.5	19	25.3	19	24.9	20	26.9	12	16.5
Male	27	2	5.6	5	19.2	6	24.1	9	33.1	5	18.0
Female	49	3	6.9	14	28.6	12	25.3	11	23.5	8	15.7
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	27,010	2,011	7.4	6,815	25.2	8,570	31.7	5,517	20.4	4,097	15.2
Metropolitan areas (pop. 50,000–499,999)	4,224	247	5.8	1,098	26.0	1,293	30.6	945	22.4	641	15.2
Nonmetropolitan areas (pop. <50,000)	2,254	107	4.7	551	24.4	621	27.6	593	26.3	382	16.9
Total	33,606	2,371	7.1	8,488	25.3	10,521	31.3	7,074	21.0	5,152	15.3

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic infection (i.e., AIDS-defining condition); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Stage of disease at time of diagnosis of HIV infection is based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection. Data are based on residence at time of diagnosis of HIV infection. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

^a First positive HIV test result is within 6 months after a negative HIV test result. The diagnosis of an AIDS-defining condition or a low CD4 test result before the 6 months have elapsed does not change the stage from stage 0 to stage 3.

^b Includes persons with no CD4 information.

^c “Transgender woman” includes individuals who were assigned “male” sex at birth but have ever identified as “female” gender.

“Transgender man” includes individuals who were assigned “female” sex at birth but have ever identified as “male” gender.

^d Additional gender identity examples include “bigender,” “gender queer,” and “two-spirit.”

^e Hispanic/Latino persons can be of any race.

^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^g Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact)

^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

ⁱ Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

^j Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

Table 1b. Stage of disease at time of diagnosis of HIV infection during 2021 among persons aged \geq 13 years, by area of residence—47 states and the District of Columbia

	Total No.	Stage 0 ^a		Stage 1 (CD4 \geq 500 cells/ μ L or \geq 26%)		Stage 2 (CD4 = 200–499 cells/ μ L or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/ μ L or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
Alabama	625	19	3.0	179	28.6	181	29.0	115	18.4	131	21.0
Alaska	30	6	20.0	4	13.3	9	30.0	10	33.3	1	3.3
Arizona	781	60	7.7	224	28.7	243	31.1	146	18.7	108	13.8
Arkansas	338	6	1.8	88	26.0	84	24.9	82	24.3	78	23.1
California	4,399	332	7.5	1,144	26.0	1,437	32.7	906	20.6	580	13.2
Colorado	406	88	21.7	107	26.4	103	25.4	72	17.7	36	8.9
Connecticut	233	23	9.9	62	26.6	76	32.6	48	20.6	24	10.3
Delaware	81	8	9.9	16	19.8	20	24.7	25	30.9	12	14.8
District of Columbia	195	14	7.2	49	25.1	58	29.7	37	19.0	37	19.0
Florida	4,072	194	4.8	1,116	27.4	1,332	32.7	847	20.8	583	14.3
Georgia	2,371	84	3.5	592	25.0	782	33.0	543	22.9	370	15.6
Hawaii	65	4	6.2	20	30.8	17	26.2	15	23.1	9	13.8
Illinois	1,195	99	8.3	290	24.3	352	29.5	212	17.7	242	20.3
Indiana	528	13	2.5	150	28.4	156	29.5	106	20.1	103	19.5
Iowa	124	5	4.0	37	29.8	41	33.1	31	25.0	10	8.1
Kansas	154	3	1.9	49	31.8	55	35.7	41	26.6	6	3.9
Kentucky	390	42	10.8	93	23.8	114	29.2	71	18.2	70	17.9
Louisiana	899	107	11.9	193	21.5	284	31.6	206	22.9	109	12.1
Maine	31	0	0.0	7	22.6	7	22.6	14	45.2	3	9.7
Maryland	749	74	9.9	199	26.6	222	29.6	183	24.4	71	9.5
Massachusetts	440	23	5.2	133	30.2	145	33.0	103	23.4	36	8.2
Michigan	633	64	10.1	165	26.1	193	30.5	121	19.1	90	14.2
Minnesota	297	27	9.1	64	21.5	94	31.6	66	22.2	46	15.5
Mississippi	419	11	2.6	73	17.4	85	20.3	87	20.8	163	38.9
Missouri	549	21	3.8	121	22.0	150	27.3	99	18.0	158	28.8
Montana	22	3	13.6	6	27.3	6	27.3	5	22.7	2	9.1
Nebraska	105	4	3.8	22	21.0	33	31.4	23	21.9	23	21.9
Nevada	501	27	5.4	139	27.7	169	33.7	120	24.0	46	9.2
New Hampshire	32	2	6.3	11	34.4	9	28.1	9	28.1	1	3.1
New Mexico	149	8	5.4	45	30.2	54	36.2	20	13.4	22	14.8
New York	2,116	216	10.2	523	24.7	702	33.2	479	22.6	196	9.3
North Carolina	1,390	120	8.6	281	20.2	402	28.9	265	19.1	322	23.2
North Dakota	37	0	0.0	15	40.5	10	27.0	10	27.0	2	5.4
Ohio	909	39	4.3	260	28.6	273	30.0	206	22.7	131	14.4
Oklahoma	387	16	4.1	72	18.6	115	29.7	69	17.8	115	29.7

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
Oregon	202	25	12.4	50	24.8	57	28.2	43	21.3	27	13.4
Rhode Island	68	2	2.9	20	29.4	19	27.9	17	25.0	10	14.7
South Carolina	652	30	4.6	161	24.7	218	33.4	168	25.8	75	11.5
South Dakota	31	1	3.2	11	35.5	5	16.1	9	29.0	5	16.1
Tennessee	831	28	3.4	214	25.8	258	31.0	140	16.8	191	23.0
Texas	4,363	376	8.6	1,021	23.4	1,390	31.9	912	20.9	664	15.2
Utah	133	23	17.3	24	18.0	45	33.8	26	19.5	15	11.3
Vermont	12	1	8.3	4	33.3	1	8.3	5	41.7	1	8.3
Virginia	792	62	7.8	197	24.9	231	29.2	180	22.7	122	15.4
Washington	461	32	6.9	140	30.4	158	34.3	94	20.4	37	8.0
West Virginia	149	11	7.4	26	17.4	34	22.8	31	20.8	47	31.5
Wisconsin	253	18	7.1	67	26.5	92	36.4	55	21.7	21	8.3
Wyoming	7	0	0.0	4	57.1	0	0.0	2	28.6	1	14.3
Region of residence^c											
Northeast (excluding NJ & PA)	2,932	267	9.1	760	25.9	959	32.7	675	23.0	271	9.2
Midwest	4,815	294	6.1	1,251	26.0	1,454	30.2	979	20.3	837	17.4
South	18,703	1,202	6.4	4,570	24.4	5,810	31.1	3,961	21.2	3,160	16.9
West (excluding ID)	7,156	608	8.5	1,907	26.6	2,298	32.1	1,459	20.4	884	12.4

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic infection (i.e., AIDS-defining condition); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Stage of disease at time of diagnosis of HIV infection is based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection. Data are based on residence at time of diagnosis of HIV infection. Data not provided for states and associated counties that do not have laws requiring reporting of all CD4 and viral loads, or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico. New Jersey and Pennsylvania recently enacted laws to require laboratories to report all CD4 and VL test results, but a full calendar year of reporting laboratory results to CDC is required before data are included in care analyses.

^a First positive HIV test result is within 6 months after a negative HIV test result. The diagnosis of an AIDS-defining condition or a low CD4 test result before the 6 months have elapsed does not change the stage from stage 0 to stage 3.

^b Includes persons with no CD4 information.

^c Data should be interpreted with caution as areas with incomplete reporting to CDC are not included.

Table 1c. Stage of disease at time of diagnosis of HIV infection during 2021 among persons aged ≥ 13 years, by race/ethnicity and selected characteristics—47 states and the District of Columbia

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
American Indian/Alaska Native											
Gender											
Male	164	14	8.5	35	21.3	53	32.3	33	20.1	29	17.7
Female	46	4	8.7	12	26.1	14	30.4	7	15.2	9	19.6
Transgender woman ^c	10	1	10.0	2	20.0	3	30.0	2	20.0	2	20.0

	Stage 0 ^a			Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/ μL or <14%)		Stage unknown ^b	
	Total No.	No.	%	No.	%	No.	%	No.	%	No.	%
Transgender man ^c	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Additional gender identity ^d	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Male sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13-24	30	3	10.0	7	23.3	8	26.7	3	10.0	9	30.0
25-34	73	7	9.6	12	16.4	29	39.7	15	20.5	10	13.7
35-44	40	3	7.5	17	42.5	7	17.5	7	17.5	6	15.0
45-54	18	1	5.6	1	5.6	9	50.0	5	27.8	2	11.1
≥55	13	1	7.7	0	0.0	3	23.1	5	38.5	4	30.8
Transmission category^e											
Male-to-male sexual contact ^f	139	13	9.4	27	19.5	46	33.3	28	20.0	25	17.8
Injection drug use ^g	10	0	0.0	2	21.4	4	44.9	1	11.2	2	19.4
Male-to-male sexual contact ^f and injection drug use ^g	16	0	0.0	6	37.6	3	19.7	3	19.7	3	20.4
Heterosexual contact ^h	10	1	12.2	2	20.4	2	23.5	3	31.6	1	12.2
Other ⁱ	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	96	8	8.3	17	17.7	34	35.4	16	16.7	21	21.9
Metropolitan areas (pop. 50,000- 499,999)	33	4	12.1	11	33.3	8	24.2	6	18.2	4	12.1
Nonmetropolitan areas (pop. <50,000)	45	3	6.7	9	20.0	14	31.1	13	28.9	6	13.3
Subtotal	174	15	8.6	37	21.3	56	32.2	35	20.1	31	17.8
Female sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13-24	3	1	33.3	1	33.3	0	0.0	0	0.0	1	33.3
25-34	17	2	11.8	5	29.4	4	23.5	2	11.8	4	23.5
35-44	9	0	0.0	3	33.3	4	44.4	2	22.2	0	0.0
45-54	14	1	7.1	2	14.3	4	28.6	3	21.4	4	28.6
≥55	3	0	0.0	1	33.3	2	66.7	0	0.0	0	0.0
Transmission category^e											
Injection drug use ^g	17	4	23.3	6	33.7	4	23.8	2	8.7	2	10.5
Heterosexual contact ^h	29	0	0.0	6	21.5	10	34.4	6	19.1	7	25.0
Other ⁱ	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	25	2	8.0	8	32.0	7	28.0	2	8.0	6	24.0
Metropolitan areas (pop. 50,000- 499,999)	9	1	11.1	1	11.1	2	22.2	3	33.3	2	22.2
Nonmetropolitan areas (pop. <50,000)	12	1	8.3	3	25.0	5	41.7	2	16.7	1	8.3
Subtotal	46	4	8.7	12	26.1	14	30.4	7	15.2	9	19.6
Total	220	19	8.6	49	22.3	70	31.8	42	19.1	40	18.2
Asian											

	Stage 0 ^a		Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/ μL or <14%)		Stage unknown ^b		
	Total No.	No.	%	No.	%	No.	%	No.	%	No.	%
Gender											
Male	594	39	6.6	116	19.5	223	37.5	150	25.3	66	11.1
Female	86	3	3.5	20	23.3	21	24.4	29	33.7	13	15.1
Transgender woman ^c	17	2	11.8	4	23.5	8	47.1	3	17.6	0	0.0
Transgender man ^c	2	0	0.0	0	0.0	2	100	0	0.0	0	0.0
Additional gender identity ^d	0	0	0.0	0	0.0	0	0	0	0.0	0	0.0
Male sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13-24	105	7	6.7	22	21.0	51	48.6	11	10.5	14	13.3
25-34	240	23	9.6	54	22.5	91	37.9	43	17.9	29	12.1
35-44	135	7	5.2	30	22.2	52	38.5	34	25.2	12	8.9
45-54	82	1	1.2	11	13.4	25	30.5	38	46.3	7	8.5
≥55	49	3	6.1	3	6.1	12	24.5	27	55.1	4	8.2
Transmission category^e											
Male-to-male sexual contact ^f	545	37	6.8	109	20.0	215	39.3	124	22.7	61	11.1
Injection drug use ^g	13	0	0.0	2	18.0	4	27.1	7	49.6	1	4.5
Male-to-male sexual contact ^f and injection drug use ^g	16	2	12.8	4	25.0	6	35.9	3	17.9	1	8.3
Heterosexual contact ^h	36	2	4.7	5	12.4	7	19.9	20	54.1	3	8.8
Other ⁱ	1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	556	38	6.8	113	20.3	207	37.2	139	25.0	59	10.6
Metropolitan areas (pop. 50,000- 499,999)	44	2	4.5	6	13.6	20	45.5	11	25.0	5	11.4
Nonmetropolitan areas (pop. <50,000)	9	1	11.1	1	11.1	3	33.3	3	33.3	1	11.1
Subtotal	611	41	6.7	120	19.6	231	37.8	153	25.0	66	10.8
Female sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13-24	9	0	0.0	2	22.2	4	44.4	2	22.2	1	11.1
25-34	21	1	4.8	8	38.1	8	38.1	4	19.0	0	0.0
35-44	31	2	6.5	5	16.1	6	19.4	10	32.3	8	25.8
45-54	12	0	0.0	3	25.0	3	25.0	4	33.3	2	16.7
≥55	15	0	0.0	2	13.3	2	13.3	9	60.0	2	13.3
Transmission category^e											
Injection drug use ^g	6	0	1.7	2	25.4	2	39.0	2	27.1	0	6.8
Heterosexual contact ^h	80	3	3.5	17	21.6	21	25.8	27	33.5	13	15.6
Other ⁱ	2	0	4.8	1	57.1	0	4.8	1	28.6	0	4.8
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	70	2	2.9	15	21.4	19	27.1	22	31.4	12	17.1
Metropolitan areas (pop. 50,000- 499,999)	14	1	7.1	4	28.6	4	28.6	5	35.7	0	0.0

	Stage 0 ^a		Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/ μL or <14%)		Stage unknown ^b		
	Total No.	No.	%	No.	%	No.	%	No.	%	No.	%
Nonmetropolitan areas (pop. <50,000)	4	0	0.0	1	25.0	0	0.0	2	50.0	1	25.0
Subtotal	88	3	3.4	20	22.7	23	26.1	29	33.0	13	14.8
Total	699	44	6.3	140	20.0	254	36.3	182	26.0	79	11.3
Black/African American											
Gender											
Male	9,985	660	6.6	2,251	22.5	3,253	32.6	1,944	19.5	1,877	18.8
Female	3,274	175	5.3	958	29.3	935	28.6	699	21.4	507	15.5
Transgender woman ^c	363	33	9.1	110	30.3	133	36.6	43	11.8	44	12.1
Transgender man ^c	17	4	23.5	8	47.1	4	23.5	0	0.0	1	5.9
Additional gender identity ^d	11	0	0.0	1	9.1	5	45.5	2	18.2	3	27.3
Male sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13-24	3,059	291	9.5	770	25.2	1,171	38.3	282	9.2	545	17.8
25-34	4,035	275	6.8	953	23.6	1,374	34.1	725	18.0	708	17.5
35-44	1,605	62	3.9	350	21.8	429	26.7	425	26.5	339	21.1
45-54	801	28	3.5	137	17.1	227	28.3	257	32.1	152	19.0
≥55	858	37	4.3	152	17.7	189	22.0	300	35.0	180	21.0
Transmission category^e											
Male-to-male sexual contact ^f	8,451	605	7.2	2,015	23.8	2,848	33.7	1,452	17.2	1,531	18.1
Injection drug use ^g	336	19	5.6	59	17.4	85	25.2	86	25.6	88	26.2
Male-to-male sexual contact ^f and injection drug use ^g	226	15	6.5	61	26.9	65	28.9	31	13.9	54	23.8
Heterosexual contact ^h	1,333	55	4.1	226	16.9	388	29.1	416	31.2	249	18.6
Other ⁱ	13	0	0.0	2	15.1	4	31.7	4	29.4	3	20.6
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	8,497	591	7.0	1,933	22.7	2,826	33.3	1,592	18.7	1,555	18.3
Metropolitan areas (pop. 50,000- 499,999)	1,206	75	6.2	292	24.2	374	31.0	233	19.3	232	19.2
Nonmetropolitan areas (pop. <50,000)	619	27	4.4	131	21.2	176	28.4	158	25.5	127	20.5
Subtotal	10,358	693	6.7	2,362	22.8	3,390	32.7	1,989	19.2	1,924	18.6
Female sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13-24	452	36	8.0	139	30.8	148	32.7	47	10.4	82	18.1
25-34	885	60	6.8	285	32.2	269	30.4	126	14.2	145	16.4
35-44	811	40	4.9	217	26.8	230	28.4	207	25.5	117	14.4
45-54	601	28	4.7	155	25.8	159	26.5	179	29.8	80	13.3
≥55	543	15	2.8	170	31.3	134	24.7	140	25.8	84	15.5
Transmission category^e											
Injection drug use ^g	276	9	3.3	77	28.0	76	27.4	65	23.4	50	17.9
Heterosexual contact ^h	2,983	167	5.6	881	29.5	856	28.7	626	21.0	452	15.2
Other ⁱ	33	3	8.3	7	22.3	8	25.7	8	24.5	6	19.3
Population area of residence											

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
Metropolitan statistical areas (pop. ≥500,000)	2,676	154	5.8	799	29.9	753	28.1	555	20.7	415	15.5
Metropolitan areas (pop. 50,000-499,999)	410	15	3.7	118	28.8	128	31.2	98	23.9	51	12.4
Nonmetropolitan areas (pop. <50,000)	193	9	4.7	47	24.4	56	29.0	45	23.3	36	18.7
Subtotal	3,292	179	5.4	966	29.3	940	28.6	699	21.2	508	15.4
Total	13,650	872	6.4	3,328	24.4	4,330	31.7	2,688	19.7	2,432	17.8
Hispanic/Latino^j											
Gender											
Male	8,101	656	8.1	1,928	23.8	2,722	33.6	1,833	22.6	962	11.9
Female	1,041	63	6.1	316	30.4	305	29.3	221	21.2	136	13.1
Transgender woman ^c	246	19	7.7	89	36.2	83	33.7	29	11.8	26	10.6
Transgender man ^c	14	2	14.3	5	35.7	4	28.6	2	14.3	1	7.1
Additional gender identity ^d	14	0	0.0	4	28.6	6	42.9	3	21.4	1	7.1
Male sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13-24	1,602	183	11.4	412	25.7	650	40.6	182	11.4	175	10.9
25-34	3,479	288	8.3	893	25.7	1,230	35.4	613	17.6	455	13.1
35-44	1,867	134	7.2	435	23.3	562	30.1	548	29.4	188	10.1
45-54	894	42	4.7	196	21.9	235	26.3	324	36.2	97	10.9
≥55	518	28	5.4	85	16.4	134	25.9	197	38.0	74	14.3
Transmission category^e											
Male-to-male sexual contact ^f	7,340	613	8.4	1,819	24.8	2,509	34.2	1,544	21.0	855	11.7
Injection drug use ^g	282	19	6.7	56	19.8	69	24.6	89	31.6	49	17.3
Male-to-male sexual contact ^f and injection drug use ^g	314	27	8.5	83	26.4	101	32.1	63	20.2	40	12.8
Heterosexual contact ^h	418	16	3.9	62	14.9	130	31.2	165	39.6	44	10.5
Other ⁱ	6	0	0.0	2	26.2	2	24.6	2	35.4	1	10.8
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	7,343	615	8.4	1,779	24.2	2,475	33.7	1,607	21.9	867	11.8
Metropolitan areas (pop. 50,000-499,999)	694	44	6.3	162	23.3	234	33.7	171	24.6	83	12.0
Nonmetropolitan areas (pop. <50,000)	290	11	3.8	75	25.9	92	31.7	80	27.6	32	11.0
Subtotal	8,360	675	8.1	2,021	24.2	2,811	33.6	1,864	22.3	989	11.8
Female sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13-24	140	14	10.0	61	43.6	31	22.1	15	10.7	19	13.6
25-34	301	21	7.0	97	32.2	98	32.6	47	15.6	38	12.6
35-44	274	20	7.3	83	30.3	81	29.6	53	19.3	37	13.5
45-54	198	6	3.0	44	22.2	65	32.8	56	28.3	27	13.6
≥55	143	4	2.8	36	25.2	34	23.8	53	37.1	16	11.2
Transmission category^e											

	Stage 0 ^a		Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/ μL or <14%)		Stage unknown ^b		
	Total No.	No.	%	No.	%	No.	%	No.	%	No.	%
Injection drug use ^g	151	12	8.2	39	25.8	43	28.5	32	21.4	24	16.0
Heterosexual contact ^h	899	52	5.8	279	31.0	265	29.4	191	21.2	112	12.5
Other ⁱ	6	0	0.0	3	54.4	1	19.3	1	14.0	1	8.8
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	915	59	6.4	279	30.5	265	29.0	188	20.5	124	13.6
Metropolitan areas (pop. 50,000-499,999)	106	5	4.7	32	30.2	34	32.1	26	24.5	9	8.5
Nonmetropolitan areas (pop. <50,000)	33	1	3.0	10	30.3	9	27.3	9	27.3	4	12.1
Subtotal	1,056	65	6.2	321	30.4	309	29.3	224	21.2	137	13.0
Total	9,416	740	7.9	2,342	24.9	3,120	33.1	2,088	22.2	1,126	12.0
Native Hawaiian/other Pacific Islander											
Gender											
Male	60	3	5.0	18	30.0	16	26.7	15	25.0	8	13.3
Female	8	0	0.0	4	50.0	1	12.5	1	12.5	2	25.0
Transgender woman ^c	6	0	0.0	1	16.7	2	33.3	2	33.3	1	16.7
Transgender man ^c	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Additional gender identity ^d	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Male sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13-24	10	1	10.0	2	20.0	5	50.0	1	10.0	1	10.0
25-34	26	2	7.7	10	38.5	6	23.1	3	11.5	5	19.2
35-44	17	0	0.0	2	11.8	5	29.4	8	47.1	2	11.8
45-54	7	0	0.0	2	28.6	2	28.6	3	42.9	0	0.0
≥55	6	0	0.0	3	50.0	0	0.0	2	33.3	1	16.7
Transmission category^e											
Male-to-male sexual contact ^f	59	3	5.1	18	30.5	16	27.1	14	23.9	8	13.3
Injection drug use ^g	1	0	0.0	0	0.0	0	0.0	1	85.7	0	0.0
Male-to-male sexual contact ^f and injection drug use ^g	4	0	0.0	1	31.4	1	28.6	0	11.4	1	28.6
Heterosexual contact ^h	3	0	0.0	0	0.0	1	40.0	1	56.0	0	0.0
Other ⁱ	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	56	2	3.6	18	32.1	15	26.8	14	25.0	7	12.5
Metropolitan areas (pop. 50,000-499,999)	4	1	25.0	1	25.0	1	25.0	1	25.0	0	0.0
Nonmetropolitan areas (pop. <50,000)	6	0	0.0	0	0.0	2	33.3	2	33.3	2	33.3
Subtotal	66	3	4.5	19	28.8	18	27.3	17	25.8	9	13.6
Female sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13-24	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
25-34	2	0	0.0	1	50.0	0	0.0	0	0.0	1	50.0

	Stage 0 ^a			Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/ μL or <14%)		Stage unknown ^b	
	Total No.	No.	%	No.	%	No.	%	No.	%	No.	%
35–44	4	0	0.0	2	50.0	1	25.0	0	0.0	1	25.0
45–54	2	0	0.0	1	50.0	0	0.0	1	50.0	0	0.0
≥55	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Transmission category^e											
Injection drug use ^g	3	0	0.0	1	39.4	1	30.3	1	30.3	0	0.0
Heterosexual contact ^h	5	0	0.0	3	57.4	0	0.0	0	0.0	2	42.6
Other ⁱ	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	7	0	0.0	3	42.9	1	14.3	1	14.3	2	28.6
Metropolitan areas (pop. 50,000–499,999)	1	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
Nonmetropolitan areas (pop. <50,000)	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Subtotal	8	0	0.0	4	50.0	1	12.5	1	12.5	2	25.0
Total	74	3	4.1	23	31.1	19	25.7	18	24.3	11	14.9
White											
Gender											
Male	6,999	497	7.1	1,885	26.9	2,040	29.1	1,554	22.2	1,023	14.6
Female	1,435	104	7.2	436	30.4	329	22.9	282	19.7	284	19.8
Transgender woman ^c	112	11	9.8	38	33.9	34	30.4	10	8.9	19	17.0
Transgender man ^c	19	4	21.1	9	47.4	6	31.6	0	0.0	0	0.0
Additional gender identity ^d	15	3	20.0	4	26.7	6	40.0	0	0.0	2	13.3
Male sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13–24	769	76	9.9	233	30.3	276	35.9	71	9.2	113	14.7
25–34	2,493	203	8.1	778	31.2	728	29.2	397	15.9	387	15.5
35–44	1,697	114	6.7	445	26.2	483	28.5	390	23.0	265	15.6
45–54	1,136	63	5.5	263	23.2	314	27.6	345	30.4	151	13.3
≥55	1,029	55	5.3	207	20.1	279	27.1	361	35.1	127	12.3
Transmission category^e											
Male-to-male sexual contact ^f	5,478	399	7.3	1,490	27.2	1,611	29.4	1,230	22.5	749	13.7
Injection drug use ^g	631	35	5.6	155	24.6	185	29.3	117	18.5	139	22.0
Male-to-male sexual contact ^f and injection drug use ^g	675	60	8.9	205	30.3	194	28.7	102	15.1	115	17.0
Heterosexual contact ^h	333	16	4.8	75	22.5	90	27.0	113	33.9	39	11.8
Other ⁱ	6	1	13.1	1	21.3	1	9.8	2	36.1	1	19.7
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	5,074	402	7.9	1,394	27.5	1,486	29.3	1,056	20.8	736	14.5
Metropolitan areas (pop. 50,000–499,999)	1,234	71	5.8	322	26.1	376	30.5	285	23.1	180	14.6
Nonmetropolitan areas (pop. <50,000)	796	38	4.8	203	25.5	212	26.6	221	27.8	122	15.3
Subtotal	7,124	511	7.2	1,926	27.0	2,080	29.2	1,564	22.0	1,043	14.6

	Stage 0 ^a			Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/ μL or <14%)		Stage unknown ^b	
	Total No.	No.	%	No.	%	No.	%	No.	%	No.	%
Female sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13-24	148	11	7.4	58	39.2	43	29.1	10	6.8	26	17.6
25-34	408	35	8.6	137	33.6	88	21.6	56	13.7	92	22.5
35-44	407	39	9.6	118	29.0	87	21.4	76	18.7	87	21.4
45-54	278	13	4.7	80	28.8	66	23.7	80	28.8	39	14.0
≥55	215	10	4.7	53	24.7	51	23.7	60	27.9	41	19.1
Transmission category^e											
Injection drug use ^g	529	30	5.7	161	30.5	123	23.2	93	17.6	122	23.0
Heterosexual contact ^h	919	77	8.4	283	30.7	210	22.9	187	20.3	163	17.7
Other ⁱ	8	0	0.0	2	30.3	2	30.3	2	26.3	1	9.2
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	955	81	8.5	278	29.1	232	24.3	173	18.1	191	20.0
Metropolitan areas (pop. 50,000-499,999)	315	14	4.4	112	35.6	66	21.0	69	21.9	54	17.1
Nonmetropolitan areas (pop. <50,000)	179	13	7.3	53	29.6	36	20.1	40	22.3	37	20.7
Subtotal	1,456	108	7.4	446	30.6	335	23.0	282	19.4	285	19.6
Total	8,580	619	7.2	2,372	27.6	2,415	28.1	1,846	21.5	1,328	15.5
Multiracial											
Gender											
Male	751	58	7.7	171	22.8	257	34.2	160	21.3	105	14.0
Female	179	12	6.7	50	27.9	46	25.7	44	24.6	27	15.1
Transgender woman ^c	31	3	9.7	12	38.7	8	25.8	5	16.1	3	9.7
Transgender man ^c	3	1	33.3	1	33.3	1	33.3	0	0.0	0	0.0
Additional gender identity ^d	3	0	0.0	0	0.0	1	33.3	1	33.3	1	33.3
Male sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13-24	208	23	11.1	47	22.6	89	42.8	25	12.0	24	11.5
25-34	303	22	7.3	82	27.1	99	32.7	61	20.1	39	12.9
35-44	140	12	8.6	31	22.1	41	29.3	32	22.9	24	17.1
45-54	79	2	2.5	10	12.7	25	31.6	29	36.7	13	16.5
≥55	54	2	3.7	13	24.1	12	22.2	19	35.2	8	14.8
Transmission category^e											
Male-to-male sexual contact ^f	647	55	8.5	143	22.1	235	36.2	138	21.3	77	12.0
Injection drug use ^g	38	1	3.1	10	26.1	9	22.5	7	17.8	12	30.5
Male-to-male sexual contact ^f and injection drug use ^g	52	2	4.6	20	37.5	13	25.6	6	12.1	11	20.2
Heterosexual contact ^h	45	3	5.5	10	22.9	10	20.9	15	32.4	8	18.3
Other ⁱ	1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	603	48	8.0	140	23.2	217	36.0	121	20.1	77	12.8

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/ μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
Metropolitan areas (pop. 50,000-499,999)	123	11	8.9	29	23.6	34	27.6	29	23.6	20	16.3
Nonmetropolitan areas (pop. <50,000)	53	2	3.8	13	24.5	14	26.4	13	24.5	11	20.8
Subtotal	784	61	7.8	183	23.3	266	33.9	166	21.2	108	13.8
Female sex at birth, adult or adolescent											
Age at diagnosis (yrs)											
13-24	26	2	7.7	11	42.3	7	26.9	0	0.0	6	23.1
25-34	54	5	9.3	17	31.5	18	33.3	8	14.8	6	11.1
35-44	50	4	8.0	14	28.0	11	22.0	14	28.0	7	14.0
45-54	31	2	6.5	6	19.4	6	19.4	11	35.5	6	19.4
≥55	22	0	0.0	3	13.6	5	22.7	11	50.0	3	13.6
Transmission category^c											
Injection drug use ^d	33	4	11.7	12	37.8	6	19.4	6	19.4	4	11.7
Heterosexual contact ^h	150	9	6.1	39	25.8	40	26.9	38	25.1	24	16.1
Other ⁱ	1	0	0.0	0	0.0	1	55.6	0	0.0	0	0.0
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	137	9	6.6	39	28.5	33	24.1	31	22.6	25	18.2
Metropolitan areas (pop. 50,000-499,999)	31	3	9.7	7	22.6	12	38.7	8	25.8	1	3.2
Nonmetropolitan areas (pop. <50,000)	15	1	6.7	5	33.3	2	13.3	5	33.3	2	13.3
Subtotal	183	13	7.1	51	27.9	47	25.7	44	24.0	28	15.3
Total	967	74	7.7	234	24.2	313	32.4	210	21.7	136	14.1

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic infection (i.e., AIDS-defining condition); pop, population; CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Stage of disease at time of diagnosis of HIV infection is based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection. Data are based on residence at time of diagnosis of HIV infection. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

^a First positive HIV test result is within 6 months after a negative HIV test result. The diagnosis of an AIDS-defining condition or a low CD4 test result before the 6 months have elapsed does not change the stage from stage 0 to stage 3.

^b Includes persons with no CD4 information.

^c "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.

"Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.

^d Additional gender identity examples include "bigender," "gender queer," and "two-spirit."

^e Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^f Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^g Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^h Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

ⁱ Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^j Hispanic/Latino persons can be of any race.

Table 1d. Stage of disease at time of diagnosis of HIV infection during 2021 among males, based on assigned sex at birth, aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—47 states and the District of Columbia

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
American Indian/Alaska Native											
13–24	29	3	10.5	7	23.1	8	26.9	3	10.1	8	29.4
25–34	58	6	10.1	8	13.5	23	40.6	13	21.9	8	13.9
35–44	32	3	9.5	13	40.0	7	22.2	5	17.1	4	11.1
45–54	11	1	7.2	0	0.0	6	55.0	3	23.4	2	14.4
≥55	10	1	5.1	0	0.0	2	20.2	4	42.4	3	32.3
Subtotal	139	13	9.4	27	19.5	46	33.3	28	20.0	25	17.8
Asian											
13–24	101	7	6.9	21	20.8	50	49.6	9	8.8	14	13.9
25–34	224	22	9.8	47	21.1	86	38.5	40	17.7	29	12.9
35–44	115	5	4.4	29	25.0	46	40.2	25	22.1	10	8.3
45–54	71	1	1.1	11	14.9	24	34.5	30	41.7	6	7.8
≥55	35	2	6.8	2	5.4	8	22.4	20	57.2	3	8.2
Subtotal	545	37	6.8	109	20.0	215	39.3	124	22.7	61	11.1
Black/African American											
13–24	2,888	279	9.7	733	25.4	1,105	38.3	265	9.2	506	17.5
25–34	3,525	246	7.0	847	24.0	1,207	34.2	625	17.7	599	17.0
35–44	1,143	43	3.8	266	23.2	317	27.7	281	24.6	237	20.7
45–54	488	16	3.2	90	18.5	136	28.0	146	30.0	99	20.3
≥55	407	21	5.0	79	19.4	83	20.4	135	33.1	90	22.0
Subtotal	8,451	605	7.2	2,015	23.8	2,848	33.7	1,452	17.2	1,531	18.1
Hispanic/Latino^c											
13–24	1,496	174	11.6	384	25.6	611	40.8	165	11.0	162	10.8
25–34	3,134	259	8.3	819	26.1	1,105	35.3	549	17.5	402	12.8
35–44	1,602	122	7.6	384	24.0	492	30.7	445	27.8	159	9.9
45–54	729	38	5.2	166	22.8	199	27.3	247	33.8	79	10.9
≥55	379	21	5.5	65	17.3	102	26.9	138	36.5	53	13.9
Subtotal	7,340	613	8.4	1,819	24.8	2,509	34.2	1,544	21.0	855	11.7
Native Hawaiian/other Pacific Islander											
13–24	8	1	12.5	2	25.0	4	50.0	1	12.5	0	0.0
25–34	24	2	8.4	9	37.8	5	21.0	3	11.8	5	21.0
35–44	16	0	0.0	2	12.3	5	30.1	7	45.4	2	12.3
45–54	7	0	0.0	2	28.4	2	29.9	3	41.8	0	0.0
≥55	4	0	0.0	3	78.9	0	0.0	0	0.0	1	21.1
Subtotal	59	3	5.1	18	30.5	16	27.1	14	23.9	8	13.3
White											
13–24	669	67	10.0	206	30.7	245	36.5	59	8.9	92	13.8
25–34	1,921	155	8.1	597	31.1	580	30.2	321	16.7	268	13.9

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
35–44	1,199	88	7.3	318	26.5	317	26.5	302	25.2	174	14.5
45–54	863	48	5.6	201	23.3	241	27.9	256	29.7	117	13.6
≥55	827	41	4.9	169	20.4	228	27.6	291	35.2	98	11.8
Subtotal	5,478	399	7.3	1,490	27.2	1,611	29.4	1,230	22.5	749	13.7
Multiracial											
13–24	194	21	10.6	42	21.6	86	44.4	25	12.8	21	10.6
25–34	250	21	8.3	59	23.6	87	34.9	55	22.1	28	11.1
35–44	106	10	9.4	22	21.1	34	32.4	24	23.0	15	14.2
45–54	60	2	3.3	8	14.0	19	32.1	23	37.6	8	13.0
≥55	38	2	4.2	11	30.0	8	20.3	11	29.2	6	16.3
Subtotal	647	55	8.5	143	22.1	235	36.2	138	21.3	77	12.0
All											
13–24	5,384	552	10.2	1,394	25.9	2,109	39.2	527	9.8	803	14.9
25–34	9,135	711	7.8	2,387	26.1	3,094	33.9	1,605	17.6	1,339	14.7
35–44	4,212	270	6.4	1,033	24.5	1,218	28.9	1,091	25.9	600	14.2
45–54	2,228	106	4.7	478	21.5	627	28.2	707	31.7	310	13.9
≥55	1,699	86	5.1	329	19.4	431	25.3	600	35.3	253	14.9
Total	22,659	1,725	7.6	5,621	24.8	7,479	33.0	4,530	20.0	3,306	14.6

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic infection (i.e., AIDS-defining condition); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Stage of disease at time of diagnosis of HIV infection is based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection.

Data are based on residence at time of diagnosis of HIV infection. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total. Persons whose transmission category is classified as male-to-male sexual contact are presented based on assigned sex at birth and include transgender and additional gender identity persons.

^a First positive HIV test result is within 6 months after a negative HIV test result. The diagnosis of an AIDS-defining condition or a low CD4 test result before the 6 months have elapsed does not change the stage from stage 0 to stage 3.

^b Includes persons with no CD4 information.

^c Hispanic/Latino persons can be of any race..

Table 1e. Stage of disease at time of diagnosis of HIV infection during 2021 among transgender and additional gender identity persons aged ≥13 years, by selected characteristics—47 states and the District of Columbia

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
Transgender woman^c											
Age at diagnosis (yr)											
13–24	280	27	9.6	97	34.6	103	36.8	17	6.1	36	12.9

	Stage 0 ^a			Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/μL or <14%)		Stage unknown ^b	
	Total No.	No.	%	No.	%	No.	%	No.	%	No.	%
25-34	323	32	9.9	107	33.1	104	32.2	44	13.6	36	11.1
35-44	125	7	5.6	35	28.0	43	34.4	24	19.2	16	12.8
45-54	36	2	5.6	10	27.8	16	44.4	5	13.9	3	8.3
≥55	21	1	4.8	7	33.3	5	23.8	4	19.0	4	19.0
Race/ethnicity											
American Indian/Alaska Native	10	1	10.0	2	20.0	3	30.0	2	20.0	2	20.0
Asian	17	2	11.8	4	23.5	8	47.1	3	17.6	0	0.0
Black/African American	363	33	9.1	110	30.3	133	36.6	43	11.8	44	12.1
Hispanic/Latino ^d	246	19	7.7	89	36.2	83	33.7	29	11.8	26	10.6
Native Hawaiian/other Pacific Islander	6	0	0.0	1	16.7	2	33.3	2	33.3	1	16.7
White	112	11	9.8	38	33.9	34	30.4	10	8.9	19	17.0
Multiple races	31	3	9.7	12	38.7	8	25.8	5	16.1	3	9.7
Exposure category^e											
Sexual contact ^f	692	61	8.8	229	33.1	245	35.4	82	11.8	75	10.8
Injection drug use ^g	3	0	0.0	0	0.0	1	33.3	0	0.0	2	66.7
Sexual contact ^f & injection drug use ^g	54	8	14.8	14	25.9	14	25.9	6	11.1	12	22.2
Other ^h	36	0	0.0	13	36.1	11	30.6	6	16.7	6	16.7
Subtotal	785	69	8.8	256	32.6	271	34.5	94	12.0	95	12.1
Transgender man^c											
Age at diagnosis (yr)											
13-24	14	1	7.1	3	21.4	7	50.0	2	14.3	1	7.1
25-34	30	6	20.0	15	50.0	8	26.7	0	0.0	1	3.3
35-44	8	3	37.5	4	50.0	1	12.5	0	0.0	0	0.0
45-54	1	0	0.0	1	100	0	0.0	0	0.0	0	0.0
≥55	2	1	50.0	0	0.0	1	50.0	0	0.0	0	0.0
Race/ethnicity											
American Indian/Alaska Native	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Asian	2	0	0.0	0	0.0	2	100	0	0.0	0	0.0
Black/African American	17	4	23.5	8	47.1	4	23.5	0	0.0	1	5.9
Hispanic/Latino ^d	14	2	14.3	5	35.7	4	28.6	2	14.3	1	7.1
Native Hawaiian/other Pacific Islander	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
White	19	4	21.1	9	47.4	6	31.6	0	0.0	0	0.0
Multiple races	3	1	33.3	1	33.3	1	33.3	0	0.0	0	0.0
Exposure category^e											
Sexual contact ^f	46	8	17.4	21	45.7	14	30.4	2	4.3	1	2.2
Injection drug use ^g	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Sexual contact ^f & injection drug use ^g	1	0	0.0	1	100	0	0.0	0	0.0	0	0.0
Other ^h	8	3	37.5	1	12.5	3	37.5	0	0.0	1	12.5
Subtotal	55	11	20.0	23	41.8	17	30.9	2	3.6	2	3.6

	Stage 0 ^a			Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/μL or <14%)		Stage unknown ^b	
	Total No.	No.	%	No.	%	No.	%	No.	%	No.	%
Additional gender identity^a											
Age at diagnosis (yr)											
13-24	25	3	12.0	4	16.0	9	36.0	5	20.0	4	16.0
25-34	11	0	0.0	3	27.3	7	63.6	0	0.0	1	9.1
35-44	3	0	0.0	0	0.0	1	33.3	0	0.0	2	66.7
45-54	4	0	0.0	2	50.0	1	25.0	1	25.0	0	0.0
≥55	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Race/ethnicity											
American Indian/Alaska Native	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Asian	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Black/African American	11	0	0.0	1	9.1	5	45.5	2	18.2	3	27.3
Hispanic/Latino ^d	14	0	0.0	4	28.6	6	42.9	3	21.4	1	7.1
Native Hawaiian/other Pacific Islander	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
White	15	3	20.0	4	26.7	6	40.0	0	0.0	2	13.3
Multiple races	3	0	0.0	0	0.0	1	33.3	1	33.3	1	33.3
Exposure category^e											
Sexual contact ^f	37	3	8.1	8	21.6	15	40.5	5	13.5	6	16.2
Injection drug use ^g	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Sexual contact ^f & injection drug use ^g	5	0	0.0	0	0.0	3	60.0	1	20.0	1	20.0
Other ^h	1	0	0.0	1	100	0	0.0	0	0.0	0	0.0
Subtotal	43	3	7.0	9	20.9	18	41.9	6	14.0	7	16.3
Total	883	83	9.4	288	32.6	306	34.7	102	11.6	104	11.8

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic infection (i.e., AIDS-defining condition); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Stage of disease at time of diagnosis of HIV infection is based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection. Data are based on residence at time of diagnosis of HIV infection. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

^a First positive HIV test result is within 6 months after a negative HIV test result. The diagnosis of an AIDS-defining condition or a low CD4 test result before the 6 months have elapsed does not change the stage from stage 0 to stage 3.

^b Includes persons with no CD4 information.

^c “Transgender woman” includes individuals who were assigned “male” sex at birth but have ever identified as “female” gender.

“Transgender man” includes individuals who were assigned “female” sex at birth but have ever identified as “male” gender.

^d Hispanic/Latino persons can be of any race.

^e Risk factor data for transgender and additional gender identity persons aged ≥ 13 years are presented using the exposure category classification, which is meant to convey all the known ways the person could have been exposed to HIV. Exposure categories are mutually exclusive and have no presumed hierarchical order of probability, except for rare circumstances where route of transmission has been confirmed through investigation. See Technical Notes for more information on exposure categories.

^f For persons assigned “male” sex at birth, sexual contact with any person. For persons assigned “female” sex at birth, sexual contact with a person assigned “male” sex at birth.

^g Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^h Other risk factors, including perinatal, hemophilia, blood transfusion, and risk factor not reported or not identified. Data were not statistically adjusted to account for missing exposure category; therefore, case counts for “Other” might be high.

ⁱ Additional gender identity examples include “bigender,” “gender queer,” and “two-spirit.”

Table 2a. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among persons aged ≥13 years, by selected characteristics—47 states and the District of Columbia

	Linkage to Care						Viral Suppression	
	Total diagnoses	≤1 month				VL <200 copies/mL ≤6 months		
		≥1 CD4 or VL tests	No CD4 or VL test		No.		%	
	No.	No.	%	No.	%	No.	%	
Gender								
Male	26,654	21,833	81.9	4,821	18.1	18,413	69.1	
Female	6,069	4,961	81.7	1,108	18.3	4,126	68.0	
Transgender woman ^a	785	654	83.3	131	16.7	557	71.0	
Transgender man ^a	55	51	92.7	4	7.3	50	90.9	
Additional gender identity ^b	43	36	83.7	7	16.3	29	67.4	
Age at diagnosis (yr)								
13–24	6,561	5,263	80.2	1,298	19.8	4,589	69.9	
25–34	12,337	10,074	81.7	2,263	18.3	8,546	69.3	
35–44	7,087	5,824	82.2	1,263	17.8	4,847	68.4	
45–54	4,153	3,462	83.4	691	16.6	2,880	69.3	
≥55	3,468	2,912	84.0	556	16.0	2,313	66.7	
Race/ethnicity								
American Indian/Alaska Native	220	182	82.7	38	17.3	144	65.5	
Asian	699	608	87.0	91	13.0	542	77.5	
Black/African American	13,650	10,889	79.8	2,761	20.2	9,022	66.1	
Hispanic/Latino ^c	9,416	7,958	84.5	1,458	15.5	6,897	73.2	
Native Hawaiian/other Pacific Islander	74	59	79.7	15	20.3	51	68.9	
White	8,580	7,048	82.1	1,532	17.9	5,854	68.2	
Multiracial	967	791	81.8	176	18.2	665	68.8	
Transmission category^d								
Male-to-male sexual contact ^e	22,659	18,717	82.6	3,942	17.4	16,124	71.2	
Injection drug use ^f	2,326	1,757	75.5	569	24.5	1,217	52.3	
Male	1,311	975	74.3	337	25.7	671	51.2	
Female	1,015	783	77.1	232	22.9	546	53.8	
Male-to-male sexual contact ^e and injection drug use ^f	1,301	1,026	78.8	276	21.2	811	62.3	
Heterosexual contact ^g	7,244	5,972	82.4	1,272	17.6	4,967	68.6	
Male	2,178	1,779	81.7	399	18.3	1,370	62.9	
Female	5,065	4,192	82.8	873	17.2	3,597	71.0	
Other ^h	76	63	83.7	12	16.3	55	73.0	
Male	27	23	87.2	3	12.8	19	72.2	
Female	49	40	81.8	9	18.2	36	73.5	
Population area of residence								
Metropolitan statistical areas (pop. ≥500,000)	27,010	22,266	82.4	4,744	17.6	18,755	69.4	
Metropolitan areas (pop. 50,000–499,999)	4,224	3,395	80.4	829	19.6	2,831	67.0	

	Linkage to Care					Viral Suppression	
	Total diagnoses	≤1 month			VL <200 copies/mL ≤6 months		
		≥1 CD4 or VL tests	No CD4 or VL test				
	No.	No.	%	No.	%	No.	%
Nonmetropolitan areas (pop. <50,000)	2,254	1,787	79.3	467	20.7	1,507	66.9
Total	33,606	27,535	81.9	6,071	18.1	23,175	69.0

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after diagnosis of HIV infection. A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are within 6 months of diagnosis of HIV infection during 2021. Data are based on residence at time of diagnosis of HIV infection. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

^a “Transgender woman” includes individuals who were assigned “male” sex at birth but have ever identified as “female” gender.

“Transgender man” includes individuals who were assigned “female” sex at birth but have ever identified as “male” gender.

^b Additional gender identity examples include “bigender,” “gender queer,” and “two-spirit.”

^c Hispanic/Latino persons can be of any race.

^d Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^e Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^f Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^g Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

^h Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

Table 2b. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among persons aged ≥13 years, by area of residence—47 states and the District of Columbia

	Linkage to Care					Viral Suppression	
	Total diagnoses	≤1 month			VL <200 copies/mL ≤6 months		
		≥1 CD4 or VL tests	No CD4 or VL test				
	No.	No.	%	No.	%	No.	%
Alabama	625	502	80.3	123	19.7	427	68.3
Alaska	30	28	93.3	2	6.7	27	90.0
Arizona	781	661	84.6	120	15.4	557	71.3
Arkansas	338	261	77.2	77	22.8	200	59.2
California	4,399	3,628	82.5	771	17.5	2,984	67.8
Colorado	406	343	84.5	63	15.5	318	78.3
Connecticut	233	204	87.6	29	12.4	174	74.7
Delaware	81	68	84.0	13	16.0	58	71.6
District of Columbia	195	154	79.0	41	21.0	126	64.6
Florida	4,072	3,366	82.7	706	17.3	2,828	69.4
Georgia	2,371	1,934	81.6	437	18.4	1,585	66.8
Hawaii	65	55	84.6	10	15.4	45	69.2
Illinois	1,195	1,022	85.5	173	14.5	845	70.7
Indiana	528	401	75.9	127	24.1	373	70.6
Iowa	124	106	85.5	18	14.5	106	85.5

	Linkage to Care					Viral Suppression	
	Total diagnoses	≤1 month			VL <200 copies/mL ≤6 months		
		≥1 CD4 or VL tests	No CD4 or VL test		No.	%	
	No.	No.	%	No.	%	No.	%
Kansas	154	139	90.3	15	9.7	127	82.5
Kentucky	390	289	74.1	101	25.9	202	51.8
Louisiana	899	725	80.6	174	19.4	615	68.4
Maine	31	27	87.1	4	12.9	26	83.9
Maryland	749	650	86.8	99	13.2	511	68.2
Massachusetts	440	403	91.6	37	8.4	357	81.1
Michigan	633	547	86.4	86	13.6	478	75.5
Minnesota	297	254	85.5	43	14.5	216	72.7
Mississippi	419	299	71.4	120	28.6	249	59.4
Missouri	549	427	77.8	122	22.2	388	70.7
Montana	22	21	95.5	1	4.5	18	81.8
Nebraska	105	88	83.8	17	16.2	75	71.4
Nevada	501	439	87.6	62	12.4	384	76.6
New Hampshire	32	32	100	0	0.0	25	78.1
New Mexico	149	127	85.2	22	14.8	106	71.1
New York	2,116	1,814	85.7	302	14.3	1,624	76.7
North Carolina	1,390	1,115	80.2	275	19.8	986	70.9
North Dakota	37	31	83.8	6	16.2	26	70.3
Ohio	909	757	83.3	152	16.7	623	68.5
Oklahoma	387	303	78.3	84	21.7	254	65.6
Oregon	202	159	78.7	43	21.3	142	70.3
Rhode Island	68	58	85.3	10	14.7	50	73.5
South Carolina	652	557	85.4	95	14.6	494	75.8
South Dakota	31	25	80.6	6	19.4	17	54.8
Tennessee	831	583	70.2	248	29.8	530	63.8
Texas	4,363	3,431	78.6	932	21.4	2,723	62.4
Utah	133	111	83.5	22	16.5	100	75.2
Vermont	12	12	100	0	0.0	10	83.3
Virginia	792	633	79.9	159	20.1	557	70.3
Washington	461	407	88.3	54	11.7	352	76.4
West Virginia	149	107	71.8	42	28.2	48	32.2
Wisconsin	253	226	89.3	27	10.7	204	80.6
Wyoming	7	6	85.7	1	14.3	5	71.4
Region of residence^a							
Northeast (excluding NJ and PA)	2,932	2,550	87.0	382	13.0	2,266	77.3
Midwest	4,815	4,023	83.6	792	16.4	3,478	72.2
South	18,703	14,977	80.1	3,726	19.9	12,393	66.3
West (excluding ID)	7,156	5,985	83.6	1,171	16.4	5,038	70.4

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after diagnosis of HIV infection. A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are within 6 months of diagnosis of HIV infection during 2021. Data are based on residence at time of diagnosis of HIV infection. Data not provided for states and associated counties that do not have

laws requiring reporting of all CD4 and viral loads, or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico. New Jersey and Pennsylvania recently enacted laws to require laboratories to report all CD4 and viral load test results, but a full calendar year of reporting laboratory results to CDC is required before data are included in care analyses.

^a Data should be interpreted with caution as areas with incomplete reporting to CDC are included.

Table 2c. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among persons aged ≥13 years, by race/ethnicity and selected characteristics—47 states and the District of Columbia

	Total diagnoses	Linkage to Care				Viral Suppression	
		≤1 month				VL <200 copies/mL ≤6 months	
		≥ CD4 or VL tests	No CD4 or VL test		No.		%
No.	No.	%	No.	%	No.	%	
American Indian/Alaska Native							
Gender							
Male	164	138	84.1	26	15.9	108	65.9
Female	46	35	76.1	11	23.9	29	63.0
Transgender woman ^a	10	9	90.0	1	10.0	7	70.0
Transgender man ^a	0	0	0.0	0	0.0	0	0.0
Additional gender identity ^b	0	0	0.0	0	0.0	0	0.0
Male sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	30	23	76.7	7	23.3	22	73.3
25-34	73	61	83.6	12	16.4	46	63.0
35-44	40	35	87.5	5	12.5	28	70.0
45-54	18	18	100	0	0.0	12	66.7
≥55	13	10	76.9	3	23.1	7	53.8
Transmission category^c							
Male-to-male sexual contact ^d	139	115	83.1	24	16.9	97	69.7
Injection drug use ^e	10	9	95.9	0	0.0	4	41.8
Male-to-male sexual contact ^d and injection drug use ^e	16	14	89.2	2	10.8	10	62.4
Heterosexual contact ^f	10	8	85.7	1	14.3	4	44.9
Other ^g	0	0	0.0	0	0.0	0	0.0
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	96	78	81.3	18	18.8	65	67.7
Metropolitan areas (pop. 50,000-499,999)	33	29	87.9	4	12.1	24	72.7
Nonmetropolitan areas (pop. <50,000)	45	40	88.9	5	11.1	26	57.8
Subtotal	174	147	84.5	27	15.5	115	66.1
Female sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	3	1	33.3	2	66.7	2	66.7
25-34	17	13	76.5	4	23.5	10	58.8
35-44	9	8	88.9	1	11.1	6	66.7
45-54	14	10	71.4	4	28.6	8	57.1
≥55	3	3	100	0	0.0	3	100
Transmission category^c							

	Total diagnoses	Linkage to Care				Viral Suppression	
		≤1 month					
		≥ CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
No.	No.	%	No.	%	No.	%	
Injection drug use ^e	17	14	80.2	3	19.8	11	65.1
Heterosexual contact ^f	29	21	73.6	8	26.4	18	61.8
Other ^g	0	0	0.0	0	0.0	0	0.0
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	25	19	76.0	6	24.0	14	56.0
Metropolitan areas (pop. 50,000-499,999)	9	7	77.8	2	22.2	6	66.7
Nonmetropolitan areas (pop. <50,000)	12	9	75.0	3	25.0	9	75.0
Subtotal	46	35	76.1	11	23.9	29	63.0
Total	220	182	82.7	38	17.3	144	65.5
Asian							
Gender							
Male	594	516	86.9	78	13.1	465	78.3
Female	86	75	87.2	11	12.8	61	70.9
Transgender woman ^a	17	15	88.2	2	11.8	14	82.4
Transgender man ^a	2	2	100	0	0.0	2	100
Additional gender identity ^b	0	0	0.0	0	0.0	0	0.0
Male sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	105	87	82.9	18	17.1	81	77.1
25-34	240	208	86.7	32	13.3	195	81.3
35-44	135	119	88.1	16	11.9	113	83.7
45-54	82	74	90.2	8	9.8	59	72.0
≥55	49	43	87.8	6	12.2	31	63.3
Transmission category^c							
Male-to-male sexual contact ^d	545	473	86.7	73	13.3	430	78.9
Injection drug use ^e	13	12	87.2	2	12.8	10	76.7
Male-to-male sexual contact ^d and injection drug use ^e	16	14	92.9	1	7.1	11	69.9
Heterosexual contact ^f	36	32	87.6	5	12.4	27	74.9
Other ^g	1	0	0.0	0	0.0	0	0.0
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	556	482	86.7	74	13.3	438	78.8
Metropolitan areas (pop. 50,000-499,999)	44	40	90.9	4	9.1	35	79.5
Nonmetropolitan areas (pop. <50,000)	9	8	88.9	1	11.1	5	55.6
Subtotal	611	531	86.9	80	13.1	479	78.4
Female sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	9	9	100	0	0.0	9	100
25-34	21	20	95.2	1	4.8	18	85.7
35-44	31	26	83.9	5	16.1	23	74.2
45-54	12	10	83.3	2	16.7	4	33.3
≥55	15	12	80.0	3	20.0	9	60.0
Transmission category^c							
Injection drug use ^e	6	6	96.6	0	0.0	4	59.3

	Total diagnoses	Linkage to Care				Viral Suppression	
		≤1 month					
		≥ CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
No.	No.	%	No.	%	No.	%	
Heterosexual contact ^f	80	69	86.6	11	13.4	57	71.9
Other ^g	2	2	95.2	0	0.0	2	95.2
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	70	60	85.7	10	14.3	48	68.6
Metropolitan areas (pop. 50,000-499,999)	14	14	100	0	0.0	13	92.9
Nonmetropolitan areas (pop. <50,000)	4	3	75.0	1	25.0	2	50.0
Subtotal	88	77	87.5	11	12.5	63	71.6
Total	699	608	87.0	91	13.0	542	77.5
Black/African American							
Gender							
Male	9,985	7,858	78.7	2,127	21.3	6,478	64.9
Female	3,274	2,710	82.8	564	17.2	2,275	69.5
Transgender woman ^a	363	297	81.8	66	18.2	246	67.8
Transgender man ^a	17	15	88.2	2	11.8	16	94.1
Additional gender identity ^b	11	9	81.8	2	18.2	7	63.6
Male sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	3,059	2,387	78.0	672	22.0	2,050	67.0
25-34	4,035	3,214	79.7	821	20.3	2,651	65.7
35-44	1,605	1,242	77.4	363	22.6	984	61.3
45-54	801	640	79.9	161	20.1	514	64.2
≥55	858	680	79.3	178	20.7	531	61.9
Transmission category^c							
Male-to-male sexual contact ^d	8,451	6,690	79.2	1,761	20.8	5,637	66.7
Injection drug use ^e	336	246	73.4	89	26.6	174	51.9
Male-to-male sexual contact ^d and injection drug use ^e	226	162	71.8	64	28.2	120	53.0
Heterosexual contact ^f	1,333	1,054	79.1	279	20.9	790	59.2
Other ^g	13	11	84.1	2	15.9	10	78.6
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	8,497	6,746	79.4	1,751	20.6	5,541	65.2
Metropolitan areas (pop. 50,000-499,999)	1,206	927	76.9	279	23.1	776	64.3
Nonmetropolitan areas (pop. <50,000)	619	465	75.1	154	24.9	391	63.2
Subtotal	10,358	8,163	78.8	2,195	21.2	6,730	65.0
Female sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	452	364	80.5	88	19.5	314	69.5
25-34	885	733	82.8	152	17.2	617	69.7
35-44	811	675	83.2	136	16.8	559	68.9
45-54	601	501	83.4	100	16.6	441	73.4
≥55	543	453	83.4	90	16.6	361	66.5
Transmission category^c							
Injection drug use ^e	276	222	80.5	54	19.5	170	61.6
Heterosexual contact ^f	2,983	2,477	83.0	506	17.0	2,098	70.3

		Linkage to Care				Viral Suppression	
		≤1 month					
	Total diagnoses	≥ CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
	No.	No.	%	No.	%	No.	%
Other ^g	33	26	80.1	7	19.9	24	72.2
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	2,676	2,224	83.1	452	16.9	1,872	70.0
Metropolitan areas (pop. 50,000-499,999)	410	346	84.4	64	15.6	281	68.5
Nonmetropolitan areas (pop. <50,000)	193	148	76.7	45	23.3	132	68.4
Subtotal	3,292	2,726	82.8	566	17.2	2,292	69.6
Total	13,650	10,889	79.8	2,761	20.2	9,022	66.1
Hispanic/Latino^h							
Gender							
Male	8,101	6,859	84.7	1,242	15.3	5,925	73.1
Female	1,041	861	82.7	180	17.3	760	73.0
Transgender woman ^a	246	212	86.2	34	13.8	189	76.8
Transgender man ^a	14	13	92.9	1	7.1	13	92.9
Additional gender identity ^b	14	13	92.9	1	7.1	10	71.4
Male sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	1,602	1,342	83.8	260	16.2	1,178	73.5
25-34	3,479	2,915	83.8	564	16.2	2,572	73.9
35-44	1,867	1,627	87.1	240	12.9	1,390	74.5
45-54	894	760	85.0	134	15.0	643	71.9
≥55	518	439	84.7	79	15.3	340	65.6
Transmission category^c							
Male-to-male sexual contact ^d	7,340	6,233	84.9	1,106	15.1	5,467	74.5
Injection drug use ^e	282	221	78.6	60	21.4	155	55.1
Male-to-male sexual contact ^d and injection drug use ^e	314	265	84.5	49	15.5	208	66.3
Heterosexual contact ^f	418	357	85.4	61	14.6	289	69.2
Other ^g	6	6	93.8	0	0.0	4	53.8
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	7,343	6,244	85.0	1,099	15.0	5,422	73.8
Metropolitan areas (pop. 50,000-499,999)	694	565	81.4	129	18.6	481	69.3
Nonmetropolitan areas (pop. <50,000)	290	246	84.8	44	15.2	193	66.6
Subtotal	8,360	7,083	84.7	1,277	15.3	6,123	73.2
Female sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	140	117	83.6	23	16.4	108	77.1
25-34	301	249	82.7	52	17.3	227	75.4
35-44	274	229	83.6	45	16.4	201	73.4
45-54	198	165	83.3	33	16.7	134	67.7
≥55	143	115	80.4	28	19.6	104	72.7
Transmission category^c							
Injection drug use ^e	151	124	82.5	26	17.5	88	58.4
Heterosexual contact ^f	899	745	82.8	154	17.2	681	75.8
Other ^g	6	6	96.5	0	0.0	5	80.7

	Total diagnoses	Linkage to Care				Viral Suppression	
		≤1 month					
		≥ CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
No.	No.	%	No.	%	No.	%	
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	915	758	82.8	157	17.2	674	73.7
Metropolitan areas (pop. 50,000-499,999)	106	89	84.0	17	16.0	77	72.6
Nonmetropolitan areas (pop. <50,000)	33	26	78.8	7	21.2	21	63.6
Subtotal	1,056	875	82.9	181	17.1	774	73.3
Total	9,416	7,958	84.5	1,458	15.5	6,897	73.2
Native Hawaiian/other Pacific Islander							
Gender							
Male	60	48	80.0	12	20.0	42	70.0
Female	8	6	75.0	2	25.0	5	62.5
Transgender woman ^a	6	5	83.3	1	16.7	4	66.7
Transgender man ^a	0	0	0.0	0	0.0	0	0.0
Additional gender identity ^b	0	0	0.0	0	0.0	0	0.0
Male sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	10	9	90.0	1	10.0	8	80.0
25-34	26	18	69.2	8	30.8	17	65.4
35-44	17	14	82.4	3	17.6	11	64.7
45-54	7	6	85.7	1	14.3	6	85.7
≥55	6	6	100	0	0.0	4	66.7
Transmission category^c							
Male-to-male sexual contact ^d	59	48	81.4	11	18.6	41	70.1
Injection drug use ^e	1	1	100	0	0.0	1	92.9
Male-to-male sexual contact ^d and injection drug use ^e	4	1	40.0	2	60.0	1	34.3
Heterosexual contact ^f	3	3	100	0	0.0	2	96.0
Other ^g	0	0	0.0	0	0.0	0	0.0
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	56	46	82.1	10	17.9	39	69.6
Metropolitan areas (pop. 50,000-499,999)	4	2	50.0	2	50.0	2	50.0
Nonmetropolitan areas (pop. <50,000)	6	5	83.3	1	16.7	5	83.3
Subtotal	66	53	80.3	13	19.7	46	69.7
Female sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	0	0	0.0	0	0.0	0	0.0
25-34	2	1	50.0	1	50.0	1	50.0
35-44	4	3	75.0	1	25.0	3	75.0
45-54	2	2	100	0	0.0	1	50.0
≥55	0	0	0.0	0	0.0	0	0.0
Transmission category^c							
Injection drug use ^e	3	3	100	0	0.0	2	69.7
Heterosexual contact ^f	5	3	57.4	2	42.6	3	57.4
Other ^g	0	0	0.0	0	0.0	0	0.0
Population area of residence							

	Total diagnoses	Linkage to Care				Viral Suppression	
		≤1 month					
		≥ CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
No.	No.	%	No.	%	No.	%	
Metropolitan statistical areas (pop. ≥500,000)	7	5	71.4	2	28.6	4	57.1
Metropolitan areas (pop. 50,000-499,999)	1	1	100	0	0.0	1	100
Nonmetropolitan areas (pop. <50,000)	0	0	0.0	0	0.0	0	0.0
Subtotal	8	6	75.0	2	25.0	5	62.5
Total	74	59	79.7	15	20.3	51	68.9
White							
Gender							
Male	6,999	5,800	82.9	1,199	17.1	4,876	69.7
Female	1,435	1,130	78.7	305	21.3	875	61.0
Transgender woman ^a	112	88	78.6	24	21.4	77	68.8
Transgender man ^a	19	18	94.7	1	5.3	16	84.2
Additional gender identity ^b	15	12	80.0	3	20.0	10	66.7
Male sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	769	617	80.2	152	19.8	552	71.8
25-34	2,493	2,029	81.4	464	18.6	1,711	68.6
35-44	1,697	1,381	81.4	316	18.6	1,158	68.2
45-54	1,136	962	84.7	174	15.3	807	71.0
≥55	1,029	910	88.4	119	11.6	734	71.3
Transmission category^c							
Male-to-male sexual contact ^d	5,478	4,616	84.2	863	15.8	3,986	72.8
Injection drug use ^e	631	458	72.5	173	27.5	308	48.8
Male-to-male sexual contact ^d and injection drug use ^e	675	529	78.4	146	21.6	432	64.0
Heterosexual contact ^f	333	291	87.4	42	12.6	230	69.2
Other ^g	6	5	90.2	1	9.8	5	82.0
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	5,074	4,244	83.6	830	16.4	3,541	69.8
Metropolitan areas (pop. 50,000-499,999)	1,234	994	80.6	240	19.4	842	68.2
Nonmetropolitan areas (pop. <50,000)	796	648	81.4	148	18.6	565	71.0
Subtotal	7,124	5,899	82.8	1,225	17.2	4,962	69.7
Female sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	148	121	81.8	27	18.2	95	64.2
25-34	408	314	77.0	94	23.0	238	58.3
35-44	407	311	76.4	96	23.6	243	59.7
45-54	278	226	81.3	52	18.7	177	63.7
≥55	215	177	82.3	38	17.7	139	64.7
Transmission category^c							
Injection drug use ^e	529	388	73.3	141	26.7	252	47.7
Heterosexual contact ^f	919	755	82.2	164	17.8	634	69.0
Other ^g	8	6	76.3	2	23.7	5	68.4
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	955	752	78.7	203	21.3	579	60.6

	Linkage to Care					Viral Suppression	
	Total diagnoses	≤1 month			VL <200 copies/mL ≤6 months		
		≥ CD4 or VL tests	No CD4 or VL test		No.	%	No.
	No.	No.	%	No.	%	No.	%
Metropolitan areas (pop. 50,000-499,999)	315	253	80.3	62	19.7	191	60.6
Nonmetropolitan areas (pop. <50,000)	179	139	77.7	40	22.3	117	65.4
Subtotal	1,456	1,149	78.9	307	21.1	892	61.3
Total	8,580	7,048	82.1	1,532	17.9	5,854	68.2
Multiracial							
Gender							
Male	751	614	81.8	137	18.2	519	69.1
Female	179	144	80.4	35	19.6	121	67.6
Transgender woman ^a	31	28	90.3	3	9.7	20	64.5
Transgender man ^a	3	3	100	0	0.0	3	100
Additional gender identity ^b	3	2	66.7	1	33.3	2	66.7
Male sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	208	167	80.3	41	19.7	152	73.1
25-34	303	254	83.8	49	16.2	203	67.0
35-44	140	112	80.0	28	20.0	97	69.3
45-54	79	66	83.5	13	16.5	54	68.4
≥55	54	45	83.3	9	16.7	35	64.8
Transmission category^c							
Male-to-male sexual contact ^d	647	543	83.8	105	16.2	467	72.1
Injection drug use ^e	38	27	69.5	12	30.5	18	46.5
Male-to-male sexual contact ^d and injection drug use ^e	52	40	76.2	12	23.8	29	56.2
Heterosexual contact ^f	45	35	76.2	11	23.8	27	58.6
Other ^g	1	1	75.0	0	0.0	0	0.0
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	603	499	82.8	104	17.2	426	70.6
Metropolitan areas (pop. 50,000-499,999)	123	101	82.1	22	17.9	81	65.9
Nonmetropolitan areas (pop. <50,000)	53	39	73.6	14	26.4	30	56.6
Subtotal	784	644	82.1	140	17.9	541	69.0
Female sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	26	19	73.1	7	26.9	18	69.2
25-34	54	45	83.3	9	16.7	40	74.1
35-44	50	42	84.0	8	16.0	31	62.0
45-54	31	22	71.0	9	29.0	20	64.5
≥55	22	19	86.4	3	13.6	15	68.2
Transmission category^c							
Injection drug use ^e	33	25	77.8	7	22.2	19	57.8
Heterosexual contact ^f	150	121	80.9	29	19.1	105	69.9
Other ^g	1	1	66.7	0	0.0	1	66.7
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	137	109	79.6	28	20.4	92	67.2
Metropolitan areas (pop. 50,000-499,999)	31	27	87.1	4	12.9	21	67.7

	Linkage to Care					Viral Suppression	
	Total diagnoses	≤1 month			VL <200 copies/mL ≤6 months		
		≥ CD4 or VL tests	No CD4 or VL test				
	No.	No.	%	No.	%	No.	%
Nonmetropolitan areas (pop. <50,000)	15	11	73.3	4	26.7	11	73.3
Subtotal	183	147	80.3	36	19.7	124	67.8
Total	967	791	81.8	176	18.2	665	68.8

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); pop, population; CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after diagnosis of HIV infection. A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are within 6 months of diagnosis of HIV infection during 2021. Data are based on residence at time of diagnosis of HIV infection. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

^a “Transgender woman” includes individuals who were assigned “male” sex at birth but have ever identified as “female” gender.

“Transgender man” includes individuals who were assigned “female” sex at birth but have ever identified as “male” gender.

^b Additional gender identity examples include “bigender,” “gender queer,” and “two-spirit.”

^c Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^d Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^e Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^f Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

^g Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^h Hispanic/Latino persons can be of any race.

Table 2d. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among males, based on assigned sex at birth, aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—47 states and the District of Columbia

	Linkage to Care					Viral Suppression	
	Total diagnoses	≤1 month			VL <200 copies/mL ≤6 months		
		≥ CD4 or VL tests	No CD4 or VL test				
	No.	No.	%	No.	%	No.	%
American Indian/Alaska Native							
13–24	29	22	77.6	6	22.4	22	75.
25–34	58	47	80.9	11	19.1	38	65.
35–44	32	28	88.9	4	11.1	24	77.
45–54	11	11	100	0	0.0	7	64.
≥55	10	7	73.7	3	26.3	6	58.
Subtotal	139	115	83.1	24	16.9	97	69.
Asian							
13–24	101	84	83.2	17	16.8	77	76.
25–34	224	193	86.3	31	13.7	181	81.
35–44	115	102	89.1	13	10.9	98	85.
45–54	71	63	89.3	8	10.7	52	73.
≥55	35	31	86.4	5	13.6	23	63.

	Linkage to Care					Viral Suppression	
	Total diagnoses	≤1 month			VL <200 copies/mL ≤6 months		
		≥ CD4 or VL tests	No CD4 or VL test				
	No.	No.	%	No.	%	No.	%
Subtotal	545	473	86.7	73	13.3	430	78.
Black/African American							
13-24	2,888	2,264	78.4	624	21.6	1,962	68.
25-34	3,525	2,831	80.3	694	19.7	2,372	67.
35-44	1,143	888	77.7	255	22.3	726	63.
45-54	488	386	79.1	102	20.9	316	64.
≥55	407	321	78.9	86	21.1	260	64.
Subtotal	8,451	6,690	79.2	1,761	20.8	5,637	66.
Hispanic/Latino^a							
13-24	1,496	1,253	83.7	243	16.3	1,108	74.
25-34	3,134	2,639	84.2	495	15.8	2,365	75.
35-44	1,602	1,398	87.2	204	12.8	1,204	75.
45-54	729	619	84.9	110	15.1	535	73.
≥55	379	325	85.8	54	14.2	255	67.
Subtotal	7,340	6,233	84.9	1,106	15.1	5,467	74.
Native Hawaiian/other Pacific Islander							
13-24	8	8	100	0	0.0	7	87.
25-34	24	17	70.6	7	29.4	16	66.
35-44	16	13	81.6	3	18.4	11	65.
45-54	7	6	86.6	1	13.4	6	85.
≥55	4	4	100	0	0.0	2	52.
Subtotal	59	48	81.4	11	18.6	41	70.
White							
13-24	669	545	81.4	124	18.6	492	73.
25-34	1,921	1,608	83.7	314	16.3	1,394	72.
35-44	1,199	997	83.2	202	16.8	861	71.
45-54	863	728	84.4	135	15.6	629	72.
≥55	827	738	89.3	88	10.7	610	73.
Subtotal	5,478	4,616	84.2	863	15.8	3,986	72.
Multiracial							
13-24	194	159	81.8	35	18.2	144	74.
25-34	250	215	86.0	35	14.0	177	71.
35-44	106	87	82.0	19	18.0	79	74.
45-54	60	52	86.0	8	14.0	43	72.
≥55	38	31	81.1	7	18.9	23	61.
Subtotal	647	543	83.8	105	16.2	467	72.
All							
13-24	5,384	4,334	80.5	1,050	19.5	3,811	70.
25-34	9,135	7,549	82.6	1,586	17.4	6,543	71.
35-44	4,212	3,513	83.4	699	16.6	3,003	71.
45-54	2,228	1,865	83.7	364	16.3	1,588	71.
≥55	1,699	1,457	85.7	243	14.3	1,179	69.
Total	22,659	18,717	82.6	3,942	17.4	16,124	71.

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/ μ L) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Linkage to HIV medical care was measured by documentation of ≥ 1 CD4 or VL tests ≤ 1 month after diagnosis of HIV infection. A VL test result of < 200 copies/mL indicates HIV viral suppression. VL test results are within 6 months of diagnosis of HIV infection during 2021. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total. Persons whose transmission category is classified as male-to-male sexual contact are presented based on assigned sex at birth and include transgender and additional gender identity persons. Data are based on residence at time of diagnosis of HIV infection. Data not provided for states and associated counties that do not have laws requiring reporting of all CD4 and viral loads, or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

^a Hispanic/Latino persons can be of any race.

Table 2e. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among transgender and additional gender identity persons aged ≥ 13 years, by selected characteristics—47 states and the District of Columbia 

	Linkage to Care						Viral Suppression	
	Total diagnoses	≤ 1 month				VL < 200 copies/mL ≤ 6 months		
		\geq CD4 or VL tests	No CD4 or VL test					
No.	No.	%	No.	%	No.	%		
Transgender woman^a								
Age at diagnosis (yr)								
13-24	280	225	80.4	55	19.6	193	68.9	
25-34	323	272	84.2	51	15.8	228	70.6	
35-44	125	106	84.8	19	15.2	95	76.0	
45-54	36	32	88.9	4	11.1	26	72.2	
≥ 55	21	19	90.5	2	9.5	15	71.4	
Race/ethnicity								
American Indian/Alaska Native	10	9	90.0	1	10.0	7	70.0	
Asian	17	15	88.2	2	11.8	14	82.4	
Black/African American	363	297	81.8	66	18.2	246	67.8	
Hispanic/Latino ^b	246	212	86.2	34	13.8	189	76.8	
Native Hawaiian/other Pacific Islander	6	5	83.3	1	16.7	4	66.7	
White	112	88	78.6	24	21.4	77	68.8	
Multiple races	31	28	90.3	3	9.7	20	64.5	
Exposure category^c								
Sexual contact ^d	692	582	84.1	110	15.9	508	73.4	
Injection drug use ^e	3	1	33.3	2	66.7	0	0.0	
Sexual contact ^d & injection drug use ^e	54	41	75.9	13	24.1	28	51.9	
Other ^f	36	30	83.3	6	16.7	21	58.3	
Subtotal	785	654	83.3	131	16.7	557	71.0	
Transgender man^a								
Age at diagnosis (yr)								
13-24	14	13	92.9	1	7.1	12	85.7	
25-34	30	28	93.3	2	6.7	28	93.3	
35-44	8	8	100	0	0.0	8	100	
45-54	1	1	100	0	0.0	1	100	
≥ 55	2	1	50.0	1	50.0	1	50.0	

	Linkage to Care					Viral Suppression	
	Total diagnoses	≤1 month				VL <200 copies/mL ≤6 months	
		≥ CD4 or VL tests	No CD4 or VL test		VL <200 copies/mL ≤6 months		
	No.	No.	%	No.	%	No.	%
Race/ethnicity							
American Indian/Alaska Native	0	0	0.0	0	0.0	0	0.0
Asian	2	2	100	0	0.0	2	100
Black/African American	17	15	88.2	2	11.8	16	94.1
Hispanic/Latino ^b	14	13	92.9	1	7.1	13	92.9
Native Hawaiian/other Pacific Islander	0	0	0.0	0	0.0	0	0.0
White	19	18	94.7	1	5.3	16	84.2
Multiple races	3	3	100	0	0.0	3	100
Exposure category^c							
Sexual contact ^d	46	44	95.7	2	4.3	44	95.7
Injection drug use ^e	0	0	0.0	0	0.0	0	0.0
Sexual contact ^d & injection drug use ^e	1	1	100	0	0.0	1	100
Other ^f	8	6	75.0	2	25.0	5	62.5
Subtotal	55	51	92.7	4	7.3	50	90.9
Additional gender identity^g							
Age at diagnosis (yr)							
13-24	25	21	84.0	4	16.0	17	68.0
25-34	11	10	90.9	1	9.1	7	63.6
35-44	3	1	33.3	2	66.7	1	33.3
45-54	4	4	100	0	0.0	4	100
≥55	0	0	0.0	0	0.0	0	0.0
Race/ethnicity							
American Indian/Alaska Native	0	0	0.0	0	0.0	0	0.0
Asian	0	0	0.0	0	0.0	0	0.0
Black/African American	11	9	81.8	2	18.2	7	63.6
Hispanic/Latino ^b	14	13	92.9	1	7.1	10	71.4
Native Hawaiian/other Pacific Islander	0	0	0.0	0	0.0	0	0.0
White	15	12	80.0	3	20.0	10	66.7
Multiple races	3	2	66.7	1	33.3	2	66.7
Exposure category^c							
Sexual contact ^d	37	32	86.5	5	13.5	27	73.0
Injection drug use ^e	0	0	0.0	0	0.0	0	0.0
Sexual contact ^d & injection drug use ^e	5	4	80.0	1	20.0	2	40.0
Other ^f	1	0	0.0	1	100	0	0.0
Subtotal	43	36	83.7	7	16.3	8729	67.4
Total	883	741	83.9	142	16.1	636	72.0

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after diagnosis of HIV infection. A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are within 6 months of diagnosis of HIV infection during 2021. Data are based on residence at time of diagnosis of HIV infection. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

^a “Transgender woman” includes individuals who were assigned “male” sex at birth but have ever identified as “female” gender.

“Transgender man” includes individuals who were assigned “female” sex at birth but have ever identified as “male” gender.

^b Hispanic/Latino persons can be of any race.

^c Risk factor data for transgender and additional gender identity persons aged ≥ 13 years are presented using the exposure category classification, which is meant to convey all the known ways the person could have been exposed to HIV. Exposure categories are mutually exclusive and have no presumed hierarchical order of probability, except for rare circumstances where route of transmission has been confirmed through investigation. See Technical Notes for more information on exposure categories.

^d For persons assigned “male” sex at birth, sexual contact with any person. For persons assigned “female” sex at birth, sexual contact with a person assigned “male” sex at birth.

^e Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^f Other risk factors, including perinatal, hemophilia, blood transfusion, and risk factor not reported or not identified. Data were not statistically adjusted to account for missing exposure category; therefore, case counts for “Other” might be high.

^g Additional gender identity examples include “bigender,” “gender queer,” and “two-spirit.”

Table 3a. Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥13 years with HIV infection diagnosed by year-end 2020 and alive at year-end 2021, by selected characteristics—47 states and the District of Columbia

	Persons alive at year-end 2021	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b		
	Total No.	No.	%	No.	%	No.	%	
Gender								
Male	733,871	553,173	75.4	395,057	53.8	486,719	66.3	
Female	217,656	162,841	74.8	116,999	53.8	140,231	64.4	
Transgender woman ^c	11,674	9,627	82.5	7,058	60.5	7,757	66.4	
Transgender man ^c	499	438	87.8	298	59.7	370	74.1	
Additional gender identity ^d	302	261	86.4	213	70.5	223	73.8	
Age at year-end 2020 (yr)								
13–24	27,140	21,599	79.6	15,013	55.3	17,677	65.1	
25–34	152,935	117,976	77.1	79,208	51.8	97,532	63.8	
35–44	183,689	137,728	75.0	94,672	51.5	117,369	63.9	
45–54	233,009	175,697	75.4	125,588	53.9	154,813	66.4	
≥55	367,229	273,340	74.4	205,144	55.9	247,909	67.5	
Race/ethnicity								
American Indian/Alaska Native	2,992	2,254	75.3	1,569	52.4	1,908	63.8	
Asian ^e	15,188	11,321	74.5	8,327	54.8	10,614	69.9	
Black/African American	386,688	283,784	73.4	200,781	51.9	238,353	61.6	
Hispanic/Latino ^f	227,387	164,738	72.4	123,552	54.3	146,163	64.3	
Native Hawaiian/other Pacific Islander	855	622	72.7	424	49.6	542	63.4	
White	280,199	220,753	78.8	154,168	55.0	200,892	71.7	
Multiracial	50,067	42,824	85.5	30,769	61.5	36,786	73.5	
Transmission category^g								
Male-to-male sexual contact ^h	561,493	433,734	77.2	308,936	55.0	385,254	68.6	
Injection drug use ⁱ	96,246	63,798	66.3	45,988	47.8	53,923	56.0	
Male	54,849	33,996	62.0	24,719	45.1	28,778	52.5	
Female	41,397	29,802	72.0	21,269	51.4	25,145	60.7	
Male-to-male sexual contact ^h and injection drug use ⁱ	53,043	41,363	78.0	29,568	55.7	34,514	65.1	
Heterosexual contact ^j	239,228	177,248	74.1	127,973	53.5	153,516	64.2	
Male	69,386	48,979	70.6	35,713	51.5	42,133	60.7	
Female	169,842	128,269	75.5	92,260	54.3	111,383	65.6	

	Persons alive at year-end 2021	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%
Other ^k	13,992	10,198	72.9	7,160	51.2	8,094	57.8
Male	7,039	4,960	70.5	3,364	47.8	3,996	56.8
Female	6,953	5,239	75.3	3,796	54.6	4,099	58.9
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	792,024	597,277	75.4	428,524	54.1	522,654	66.0
Metropolitan areas (pop. 50,000–499,999)	94,410	72,773	77.1	51,794	54.9	63,423	67.2
Nonmetropolitan areas (pop. <50,000)	56,132	42,356	75.5	30,416	54.2	37,105	66.1
Total^l	964,002	726,340	75.3	519,625	53.9	635,300	65.9

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); pop, population; CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Data for the year 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Data are based on address of residence as of December 31, 2021 (i.e., most recent known address). A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2021. Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

^a Performed ≥3 months apart during 2021.

^b A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2021.

^c “Transgender woman” includes individuals who were assigned “male” sex at birth but have ever identified as “female” gender.

“Transgender man” includes individuals who were assigned “female” sex at birth but have ever identified as “male” gender.

^d Additional gender identity examples include “bigender,” “gender queer,” and “two-spirit.”

^e Includes Asian/Pacific Islander legacy cases (see Technical Notes).

^f Hispanic/Latino persons can be of any race.

^g Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^h Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

ⁱ Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^j Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

^k Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^l Includes 626 persons of unknown race/ethnicity.

Table 3b. Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥13 years with HIV infection diagnosed by year-end 2020 and alive at year-end 2021, by area of residence—47 states and the District of Columbia

	Persons alive at year-end 2021	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%
Alabama	13,774	9,898	71.9	6,336	46.0	8,146	59.1
Alaska	718	631	87.9	411	57.2	572	79.
Arizona	17,490	12,733	72.8	9,464	54.1	10,955	62.
Arkansas	5,900	3,953	67.0	2,691	45.6	3,097	52.
California	131,709	98,344	74.7	69,411	52.7	87,675	66.
Colorado	13,022	8,584	65.9	5,449	41.8	7,890	60.
Connecticut	10,406	8,270	79.5	5,877	56.5	7,484	71.
Delaware	3,439	2,822	82.1	1,924	55.9	2,525	73.

	Persons alive at year-end 2021		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
District of Columbia	13,401	8,798	65.7	5,699	42.5	7,418	55.	
Florida	113,218	87,864	77.6	70,379	62.2	77,793	68.	
Georgia	57,083	41,473	72.7	31,048	54.4	35,470	62.	
Hawaii	2,323	2,007	86.4	1,450	62.4	1,839	79.	
Illinois	34,556	26,373	76.3	16,789	48.6	21,881	63.	
Indiana	11,821	9,376	79.3	6,371	53.9	8,322	70.	
Iowa	2,923	2,576	88.1	1,844	63.1	2,389	81.	
Kansas	3,340	2,749	82.3	2,112	63.2	2,523	75.	
Kentucky	7,759	6,236	80.4	4,265	55.0	5,062	65.	
Louisiana	20,700	16,273	78.6	12,330	59.6	14,263	68.	
Maine	1,650	1,360	82.4	950	57.6	1,279	77.	
Maryland	32,719	23,559	72.0	15,589	47.6	20,214	61.	
Massachusetts	20,672	15,742	76.2	10,192	49.3	14,483	70.	
Michigan	16,652	13,486	81.0	8,702	52.3	11,987	72.	
Minnesota	8,915	6,531	73.3	3,464	38.9	5,962	66.	
Mississippi ^c	9,474	6,727	71.0	4,524	47.8	5,646	59.	
Missouri	12,570	9,697	77.1	6,772	53.9	8,403	66.	
Montana	698	614	88.0	430	61.6	564	80.	
Nebraska	2,274	1,751	77.0	1,057	46.5	1,541	67.	
Nevada	10,921	8,033	73.6	5,566	51.0	6,971	63.	
New Hampshire	1,333	1,076	80.7	700	52.5	1,006	75.	
New Mexico	3,873	2,957	76.3	1,812	46.8	2,183	56.	
New York	122,351	89,211	72.9	70,433	57.6	79,119	64.	
North Carolina	32,933	25,496	77.4	17,097	51.9	22,383	68.	
North Dakota	506	402	79.4	262	51.8	317	62.	
Ohio	23,181	17,368	74.9	10,995	47.4	15,307	66.	
Oklahoma	6,585	4,720	71.7	3,548	53.9	4,046	61.	
Oregon	7,268	6,237	85.8	3,451	47.5	5,616	77.	
Rhode Island	2,647	1,969	74.4	893	33.7	1,809	68.	
South Carolina	17,474	14,315	81.9	11,139	63.7	12,679	72.	
South Dakota	687	606	88.2	394	57.4	380	55.	
Tennessee	17,938	14,133	78.8	10,326	57.6	12,005	66.	
Texas	96,292	72,212	75.0	51,418	53.4	60,494	62.	
Utah	3,317	2,518	75.9	1,610	48.5	2,338	70.	
Vermont	712	561	78.8	354	49.7	531	74.	
Virginia	23,635	16,959	71.8	11,574	49.0	15,378	65.	
Washington	14,141	12,012	84.9	7,711	54.5	11,121	78.	
West Virginia ^c	2,056	1,417	68.9	838	40.8	1,118	54.	
Wisconsin	6,579	5,409	82.2	3,765	57.2	4,869	74.	
Wyoming	367	302	82.3	209	56.9	247	67.	
Region of residence^d								
Northeast (excluding NJ & PA)	159,771	118,189	74.0	89,399	56.0	105,711	66.	
Midwest	124,004	96,324	77.7	62,527	50.4	83,881	67.	
South	474,380	356,855	75.2	260,725	55.0	307,737	64.	
West (excluding ID)	205,847	154,972	75.3	106,974	52.0	137,971	67.	

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/ μ L) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Data for the year 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Data are based on address of residence as of December 31, 2021 (i.e., most recent known address). Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico. New Jersey and Pennsylvania recently enacted laws to require laboratories to report all CD4 and VL test results, but a full calendar year of reporting laboratory results to CDC is required before data are included in care analyses.

^a Performed ≥ 3 months apart during 2021.

^b A VL test result of < 200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2021.

^c Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2021.

^d Data should be interpreted with caution as areas with incomplete reporting to CDC are not included.

Table 3c. Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥ 13 years with HIV infection diagnosed by year-end 2020 and alive at year-end 2021, by race/ethnicity and selected characteristics—47 states and the District of Columbia

	Persons alive at year-end 2021	≥ 1 CD4 or VL tests		≥ 2 CD4 or VL tests ^a		VL < 200 copies/mL ^b		
	Total No.	No.	%	No.	%	No.	%	
American Indian/Alaska Native								
Gender								
Male	2,203	1,647	74.8	1,148	52.1	1,416	64.3	
Female	731	559	76.5	389	53.2	453	62.0	
Transgender woman ^c	53	44	83.0	29	54.7	35	66.0	
Transgender man ^c	4	3	75.0	3	75.0	3	75.0	
Additional Gender identity ^d	1	1	100	0	0.0	1	100	
Male sex at birth, adult or adolescent								
Age at diagnosis (yrs)								
13-24	92	71	77.2	42	45.7	61	66.3	
25-34	503	405	80.5	270	53.7	327	65.0	
35-44	527	402	76.3	282	53.5	348	66.0	
45-54	534	397	74.3	281	52.6	347	65.0	
≥ 55	601	417	69.4	302	50.2	369	61.4	
Transmission category^e								
Male-to-male sexual contact ^f	1,614	1,231	76.3	859	53.2	1,078	66.8	
Injection drug use ^g	212	144	68.1	97	46.0	113	53.3	
Male-to-male sexual contact ^f and injection drug use ^g	275	203	73.8	145	52.8	168	61.0	
Heterosexual contact ^h	139	100	72.0	69	49.6	82	58.8	
Other ⁱ	17	14	81.8	7	38.8	12	68.2	
Population area of residence								
Metropolitan statistical areas (pop. $\geq 500,000$)	1,225	877	71.6	624	50.9	771	62.9	
Metropolitan areas (pop. 50,000-499,999)	389	325	83.5	232	59.6	271	69.7	
Nonmetropolitan areas (pop. $< 50,000$)	597	459	76.9	304	50.9	385	64.5	
Subtotal	2,257	1,692	75.0	1,177	52.1	1,452	64.3	
Female sex at birth, adult or adolescent								
Age at diagnosis (yrs)								
13-24	11	7	63.6	5	45.5	5	45.5	

	Persons alive at year-end 2021	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%
25-34	93	62	66.7	44	47.3	49	52.7
35-44	190	156	82.1	103	54.2	112	58.9
45-54	201	148	73.6	98	48.8	123	61.2
≥55	240	189	78.8	142	59.2	167	69.6
Transmission category^e							
Injection drug use ^g	248	181	73.0	120	48.3	139	56.0
Heterosexual contact ^h	470	372	79.2	268	57.1	311	66.2
Other ⁱ	17	9	53.2	4	23.7	6	35.3
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	345	239	69.3	158	45.8	203	58.8
Metropolitan areas (pop. 50,000-499,999)	146	126	86.3	101	69.2	100	68.5
Nonmetropolitan areas (pop. <50,000)	226	183	81.0	127	56.2	144	63.7
Subtotal	735	562	76.5	392	53.3	456	62.0
Total	2,992	2,254	75.3	1,569	52.4	1,908	63.8
Asiani^j							
Gender							
Male	12,402	9,278	74.8	6,805	54.9	8,709	70.2
Female	2,577	1,870	72.6	1,394	54.1	1,741	67.6
Transgender woman ^c	195	162	83.1	120	61.5	154	79.0
Transgender man ^c	9	7	77.8	4	44.4	7	77.8
Additional Gender identity ^d	5	4	80.0	4	80.0	3	60.0
Male sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	410	334	81.5	227	55.4	307	74.9
25-34	2,574	1,984	77.1	1,412	54.9	1,862	72.3
35-44	2,940	2,211	75.2	1,583	53.8	2,077	70.6
45-54	3,596	2,746	76.4	2,019	56.1	2,575	71.6
≥55	3,081	2,168	70.4	1,687	54.8	2,044	66.3
Transmission category^e							
Male-to-male sexual contact ^f	10,714	8,104	75.6	5,922	55.3	7,617	71.1
Injection drug use ^g	415	258	62.3	191	46.0	241	58.1
Male-to-male sexual contact ^f and injection drug use ^g	406	300	73.9	208	51.3	277	68.2
Heterosexual contact ^h	947	695	73.4	546	57.6	652	68.9
Other ⁱ	120	86	71.8	61	50.9	78	64.8
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	11,520	8,668	75.2	6,393	55.5	8,156	70.8
Metropolitan areas (pop. 50,000-499,999)	695	516	74.2	363	52.2	474	68.2
Nonmetropolitan areas (pop. <50,000)	186	135	72.6	97	52.2	122	65.6
Subtotal	12,601	9,443	74.9	6,928	55.0	8,865	70.4
Female sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	90	73	81.1	46	51.1	70	77.8
25-34	276	213	77.2	165	59.8	195	70.7
35-44	757	561	74.1	407	53.8	528	69.7
45-54	736	514	69.8	381	51.8	477	64.8

	Persons alive at year-end 2021	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%
≥55	728	517	71.0	400	54.9	479	65.8
Transmission category^e							
Injection drug use ^g	172	113	66.0	82	47.6	107	62.3
Heterosexual contact ^h	2,294	1,676	73.1	1,253	54.7	1,557	67.9
Other ⁱ	122	89	73.2	64	52.5	85	70.2
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	2,213	1,611	72.8	1,212	54.8	1,504	68.0
Metropolitan areas (pop. 50,000-499,999)	235	167	71.1	127	54.0	154	65.5
Nonmetropolitan areas (pop. <50,000)	75	58	77.3	38	50.7	51	68.0
Subtotal	2,587	1,878	72.6	1,399	54.1	1,749	67.6
Total	15,188	11,321	74.5	8,327	54.8	10,614	69.9
Black/African American							
Gender							
Male	253,694	184,743	72.8	129,892	51.2	154,389	60.9
Female	127,294	94,348	74.1	67,611	53.1	80,324	63.1
Transgender woman ^c	5,376	4,417	82.2	3,087	57.4	3,424	63.7
Transgender man ^c	203	179	88.2	114	56.2	138	68.0
Additional Gender identity ^d	121	97	80.2	77	63.6	78	64.5
Male sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	11,858	9,379	79.1	6,354	53.6	7,517	63.4
25-34	59,288	45,006	75.9	29,707	50.1	35,646	60.1
35-44	48,584	36,386	74.9	24,807	51.1	29,810	61.4
45-54	52,037	38,257	73.5	27,490	52.8	32,632	62.7
≥55	87,410	60,219	68.9	44,688	51.1	52,278	59.8
Transmission category^e							
Male-to-male sexual contact ^f	173,951	130,922	75.3	90,775	52.2	109,425	62.9
Injection drug use ^g	24,920	15,274	61.3	11,069	44.4	12,810	51.4
Male-to-male sexual contact ^f and injection drug use ^g	13,950	10,450	74.9	7,562	54.2	8,338	59.8
Heterosexual contact ^h	43,066	30,348	70.5	22,086	51.3	25,611	59.5
Other ⁱ	3,290	2,253	68.5	1,555	47.3	1,699	51.6
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	215,118	157,504	73.2	109,976	51.1	131,215	61.0
Metropolitan areas (pop. 50,000-499,999)	23,830	17,579	73.8	12,732	53.4	14,740	61.9
Nonmetropolitan areas (pop. <50,000)	14,181	10,467	73.8	7,937	56.0	8,839	62.3
Subtotal	259,177	189,247	73.0	133,046	51.3	157,883	60.9
Female sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	3,270	2,511	76.8	1,836	56.1	1,879	57.5
25-34	14,204	10,408	73.3	6,951	48.9	8,021	56.5
35-44	26,435	19,126	72.4	13,065	49.4	15,721	59.5
45-54	35,772	26,725	74.7	19,004	53.1	22,990	64.3
≥55	47,830	35,767	74.8	26,879	56.2	31,859	66.6
Transmission category^e							
Injection drug use ^g	19,231	13,623	70.8	9,768	50.8	11,534	60.0

	Persons alive at year-end 2021	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%
Heterosexual contact ^h	104,386	78,028	74.7	55,873	53.5	66,764	64.0
Other ⁱ	3,893	2,887	74.1	2,094	53.8	2,172	55.8
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	106,083	78,592	74.1	56,178	53.0	66,816	63.0
Metropolitan areas (pop. 50,000-499,999)	12,212	9,420	77.1	6,907	56.6	8,043	65.9
Nonmetropolitan areas (pop. <50,000)	6,388	4,722	73.9	3,481	54.5	4,080	63.9
Subtotal	127,511	94,537	74.1	67,735	53.1	80,470	63.1
Total	386,688	283,784	73.4	200,781	51.9	238,353	61.6
Hispanic/Latino^k							
Gender							
Male	183,521	131,299	71.5	97,966	53.4	116,938	63.7
Female	39,790	30,121	75.7	22,992	57.8	26,469	66.5
Transgender woman ^c	3,884	3,149	81.1	2,464	63.4	2,609	67.2
Transgender man ^c	112	96	85.7	70	62.5	83	74.1
Additional Gender identity ^d	80	73	91.3	60	75.0	64	80.0
Male sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	5,498	4,418	80.4	3,144	57.2	3,788	68.9
25-34	35,257	27,732	78.7	19,404	55.0	23,935	67.9
35-44	43,547	31,296	71.9	22,780	52.3	27,479	63.1
45-54	48,006	33,507	69.8	25,354	52.8	30,027	62.5
≥55	55,168	37,559	68.1	29,801	54.0	34,375	62.3
Transmission category^e							
Male-to-male sexual contact ^f	143,970	106,515	74.0	79,380	55.1	95,745	66.5
Injection drug use ^g	15,510	8,566	55.2	6,574	42.4	7,326	47.2
Male-to-male sexual contact ^f and injection drug use ^g	12,456	9,295	74.6	6,896	55.4	7,679	61.6
Heterosexual contact ^h	14,058	9,118	64.9	6,909	49.1	8,049	57.3
Other ⁱ	1,482	1,018	68.7	724	48.9	806	54.3
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	165,997	120,863	72.8	90,822	54.7	107,615	64.8
Metropolitan areas (pop. 50,000-499,999)	12,290	8,374	68.1	5,992	48.8	7,379	60.0
Nonmetropolitan areas (pop. <50,000)	6,525	3,717	57.0	2,674	41.0	3,235	49.6
Subtotal	187,476	134,512	71.7	100,483	53.6	119,604	63.8
Female sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	965	772	80.0	568	58.9	607	62.9
25-34	4,287	3,264	76.1	2,338	54.5	2,687	62.7
35-44	8,010	5,914	73.8	4,306	53.8	5,031	62.8
45-54	11,025	8,361	75.8	6,331	57.4	7,341	66.6
≥55	15,624	11,915	76.3	9,526	61.0	10,893	69.7
Transmission category^e							
Injection drug use ^g	8,021	5,866	73.1	4,500	56.1	4,995	62.3
Heterosexual contact ^h	30,418	23,209	76.3	17,709	58.2	20,674	68.0
Other ⁱ	1,471	1,151	78.2	860	58.5	890	60.5
Population area of residence							

	Persons alive at year-end 2021		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
Metropolitan statistical areas (pop. ≥500,000)	35,193	26,762	76.0	20,576	58.5	23,526	66.8	
Metropolitan areas (pop. 50,000-499,999)	2,678	2,076	77.5	1,510	56.4	1,820	68.0	
Nonmetropolitan areas (pop. <50,000)	1,343	958	71.3	713	53.1	832	62.0	
Subtotal	39,911	30,226	75.7	23,069	57.8	26,559	66.5	
Total	227,387	164,738	72.4	123,552	54.3	146,163	64.3	
Native Hawaiian/other Pacific Islander								
Gender								
Male	686	505	73.6	342	49.9	439	64.0	
Female	136	94	69.1	67	49.3	84	61.8	
Transgender woman ^c	33	23	69.7	15	45.5	19	57.6	
Transgender man ^c	0	0	0.0	0	0.0	0	0.0	
Additional Gender identity ^d	0	0	0.0	0	0.0	0	0.0	
Male sex at birth, adult or adolescent								
Age at diagnosis (yrs)								
13-24	28	19	67.9	9	32.1	16	57.1	
25-34	168	124	73.8	74	44.0	107	63.7	
35-44	197	136	69.0	89	45.2	115	58.4	
45-54	151	118	78.1	82	54.3	106	70.2	
≥55	175	131	74.9	103	58.9	114	65.1	
Transmission category^e								
Male-to-male sexual contact ^f	615	455	74.1	310	50.4	404	65.7	
Injection drug use ^g	22	13	60.4	9	41.0	6	27.6	
Male-to-male sexual contact ^f and injection drug use ^g	49	34	70.6	19	39.1	29	60.3	
Heterosexual contact ^h	30	21	70.7	17	58.2	15	51.9	
Other ⁱ	4	4	100	2	50.0	3	73.8	
Population area of residence								
Metropolitan statistical areas (pop. ≥500,000)	592	430	72.6	295	49.8	376	63.5	
Metropolitan areas (pop. 50,000-499,999)	79	63	79.7	42	53.2	55	69.6	
Nonmetropolitan areas (pop. <50,000)	34	27	79.4	16	47.1	21	61.8	
Subtotal	719	528	73.4	357	49.7	458	63.7	
Female sex at birth, adult or adolescent								
Age at diagnosis (yrs)								
13-24	4	3	75.0	2	50.0	2	50.0	
25-34	19	14	73.7	7	36.8	12	63.2	
35-44	33	23	69.7	17	51.5	21	63.6	
45-54	30	20	66.7	15	50.0	18	60.0	
≥55	50	34	68.0	26	52.0	31	62.0	
Transmission category^e								
Injection drug use ^g	23	14	62.2	11	47.4	14	61.3	
Heterosexual contact ^h	112	79	70.8	56	49.9	70	62.1	
Other ⁱ	1	0	0.0	0	0.0	0	0.0	
Population area of residence								
Metropolitan statistical areas (pop. ≥500,000)	96	65	67.7	47	49.0	57	59.4	
Metropolitan areas (pop. 50,000-499,999)	22	17	77.3	11	50.0	15	68.2	
Nonmetropolitan areas (pop. <50,000)	13	9	69.2	7	53.8	9	69.2	

	Persons alive at year-end 2021	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%
Subtotal	136	94	69.1	67	49.3	84	61.8
Total	855	622	72.7	424	49.6	542	63.4
White							
Gender							
Male	243,121	193,315	79.5	135,703	55.8	176,842	72.7
Female	35,681	26,251	73.6	17,603	49.3	23,012	64.5
Transgender woman ^c	1,212	1,021	84.2	742	61.2	886	73.1
Transgender man ^c	122	109	89.3	74	60.7	99	81.1
Additional Gender identity ^d	63	57	90.5	46	73.0	53	84.1
Male sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	2,865	2,344	81.8	1,605	56.0	2,080	72.6
25-34	23,716	18,882	79.6	12,372	52.2	16,656	70.2
35-44	35,276	27,965	79.3	18,205	51.6	24,825	70.4
45-54	58,758	47,120	80.2	32,233	54.9	42,754	72.8
≥55	123,773	98,076	79.2	72,070	58.2	91,461	73.9
Transmission category^e							
Male-to-male sexual contact ^f	201,273	161,582	80.3	113,955	56.6	149,247	74.2
Injection drug use ^g	11,488	7,855	68.4	5,357	46.6	6,704	58.4
Male-to-male sexual contact ^f and injection drug use ^g	21,626	17,367	80.3	12,013	55.5	14,979	69.3
Heterosexual contact ^h	8,342	6,373	76.4	4,399	52.7	5,746	68.9
Other ⁱ	1,659	1,210	73.0	761	45.9	1,100	66.3
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	188,320	149,089	79.2	105,170	55.8	136,883	72.7
Metropolitan areas (pop. 50,000-499,999)	30,651	25,111	81.9	17,517	57.1	22,637	73.9
Nonmetropolitan areas (pop. <50,000)	18,962	15,582	82.2	10,883	57.4	14,102	74.4
Subtotal	244,388	194,387	79.5	136,485	55.8	177,776	72.7
Female sex at birth, adult or adolescent							
Age at diagnosis (yrs)							
13-24	718	553	77.0	392	54.6	470	65.5
25-34	3,949	2,875	72.8	1,791	45.4	2,304	58.3
35-44	6,883	4,966	72.1	3,123	45.4	4,176	60.7
45-54	9,720	7,168	73.7	4,695	48.3	6,244	64.2
≥55	14,541	10,804	74.3	7,682	52.8	9,922	68.2
Transmission category^e							
Injection drug use ^g	11,037	7,766	70.4	5,143	46.6	6,507	59.0
Heterosexual contact ^h	23,786	17,885	75.2	12,046	50.6	15,973	67.2
Other ⁱ	988	715	72.4	494	50.0	636	64.4
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	23,930	17,437	72.9	11,829	49.4	15,342	64.1
Metropolitan areas (pop. 50,000-499,999)	6,200	4,785	77.2	3,201	51.6	4,128	66.6
Nonmetropolitan areas (pop. <50,000)	4,450	3,347	75.2	2,180	49.0	2,947	66.2
Subtotal	35,811	26,366	73.6	17,683	49.4	23,116	64.5
Total	280,199	220,753	78.8	154,168	55.0	200,892	71.7
Multiracial							

	Persons alive at year-end 2021	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b		
	Total No.	No.	%	No.	%	No.	%	
Gender								
Male	37,789	32,347	85.6	23,171	61.3	27,949	74.0	
Female	11,276	9,593	85.1	6,938	61.5	8,143	72.2	
Transgender woman ^c	921	811	88.1	601	65.3	630	68.4	
Transgender man ^c	49	44	89.8	33	67.3	40	81.6	
Additional Gender identity ^d	32	29	90.6	26	81.3	24	75.0	
Male sex at birth, adult or adolescent								
Age at diagnosis (yrs)								
13-24	976	827	84.7	576	59.0	660	67.6	
25-34	7,277	5,948	81.7	3,925	53.9	4,906	67.4	
35-44	7,891	6,618	83.9	4,550	57.7	5,512	69.9	
45-54	9,173	7,935	86.5	5,693	62.1	6,902	75.2	
≥55	13,421	11,855	88.3	9,050	67.4	10,619	79.1	
Transmission category^e								
Male-to-male sexual contact ^f	29,045	24,894	85.7	17,713	61.0	21,708	74.7	
Injection drug use ^g	2,218	1,882	84.8	1,419	64.0	1,575	71.0	
Male-to-male sexual contact ^f and injection drug use ^g	4,241	3,711	87.5	2,723	64.2	3,042	71.7	
Heterosexual contact ^h	2,780	2,322	83.5	1,686	60.6	1,976	71.1	
Other ⁱ	455	374	82.2	253	55.6	297	65.4	
Population area of residence								
Metropolitan statistical areas (pop. ≥500,000)	31,949	27,417	85.8	19,639	61.5	23,618	73.9	
Metropolitan areas (pop. 50,000-499,999)	3,664	3,133	85.5	2,275	62.1	2,695	73.6	
Nonmetropolitan areas (pop. <50,000)	2,282	1,996	87.5	1,450	63.5	1,748	76.6	
Subtotal	38,738	33,183	85.7	23,794	61.4	28,599	73.8	
Female sex at birth, adult or adolescent								
Age at diagnosis (yrs)								
13-24	350	288	82.3	207	59.1	215	61.4	
25-34	1,312	1,058	80.6	747	56.9	824	62.8	
35-44	2,395	1,967	82.1	1,354	56.5	1,613	67.3	
45-54	3,148	2,672	84.9	1,904	60.5	2,268	72.0	
≥55	4,124	3,656	88.7	2,763	67.0	3,267	79.2	
Transmission category^e								
Injection drug use ^g	2,611	2,238	85.7	1,645	63.0	1,848	70.8	
Heterosexual contact ^h	8,270	7,016	84.8	5,051	61.1	6,031	72.9	
Other ⁱ	448	387	86.4	279	62.3	308	68.9	
Population area of residence								
Metropolitan statistical areas (pop. ≥500,000)	8,969	7,679	85.6	5,570	62.1	6,530	72.8	
Metropolitan areas (pop. 50,000-499,999)	1,288	1,081	83.9	784	60.9	912	70.8	
Nonmetropolitan areas (pop. <50,000)	832	696	83.7	509	61.2	590	70.9	
Subtotal	11,329	9,641	85.1	6,975	61.6	8,187	72.3	
Total	50,067	42,824	85.5	30,769	61.5	36,786	73.5	

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Data for the year 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Data are based on address of residence as of December 31, 2021 (i.e., most recent known address). Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

^a Performed ≥3 months apart during 2021.

^b A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2021.

^c “Transgender male-to-female” includes individuals who were assigned “male” sex at birth but have ever identified as “female” gender.

“Transgender female-to-male” includes individuals who were assigned “female” sex at birth but have ever identified as “male” gender.

^d Additional gender identity examples include “bigender,” “gender queer,” and “two-spirit.”

^e Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^f Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^g Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^h Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

ⁱ Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^j Includes Asian/Pacific Islander legacy cases (see Technical Notes).

^k Hispanic/Latino persons can be of any race.

Table 3d. Receipt of HIV medical care and viral suppression during 2021 among males, based on assigned sex at birth, aged ≥ 13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age group—47 states and the District of Columbia

	Males alive at year-end 2021		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
American Indian/Alaska Native								
13–24	75	58	77.5	35	46.7	49	65.5	
25–34	408	330	80.9	218	53.4	272	66.7	
35–44	403	309	76.7	215	53.3	275	68.1	
45–54	368	275	74.6	199	53.9	249	67.7	
≥55	360	259	71.9	193	53.5	233	64.8	
Subtotal	1,614	1,231	76.3	859	53.2	1,078	66.8	
Asian^c								
13–24	340	277	81.4	183	53.8	256	75.3	
25–34	2,412	1,862	77.2	1,328	55.1	1,751	72.6	
35–44	2,573	1,936	75.2	1,392	54.1	1,816	70.6	
45–54	2,976	2,290	76.9	1,671	56.1	2,146	72.1	
≥55	2,412	1,740	72.1	1,349	55.9	1,648	68.3	
Subtotal	10,714	8,104	75.6	5,922	55.3	7,617	71.1	
Black/African American								
13–24	9,983	8,013	80.3	5,429	54.4	6,479	64.9	
25–34	52,325	40,119	76.7	26,454	50.6	31,976	61.1	
35–44	38,284	29,114	76.0	19,756	51.6	24,016	62.7	
45–54	32,854	24,573	74.8	17,577	53.5	21,235	64.6	
≥55	40,504	29,103	71.9	21,558	53.2	25,720	63.5	
Subtotal	173,951	130,922	75.3	90,775	52.2	109,425	62.9	
Hispanic/Latino^d								
13–24	4,800	3,900	81.2	2,789	58.1	3,384	70.5	

	Males alive at year-end 2021		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
25-34	31,135	24,688	79.3	17,334	55.7	21,567	69.3	
35-44	35,995	26,386	73.3	19,308	53.6	23,488	65.3	
45-54	36,435	26,108	71.7	19,799	54.3	23,724	65.1	
≥55	35,606	25,433	71.4	20,150	56.6	23,583	66.2	
Subtotal	143,970	106,515	74.0	79,380	55.1	95,745	66.5	
Native Hawaiian/other Pacific Islander								
13-24	24	15	63.0	8	33.6	13	54.6	
25-34	143	110	77.2	66	46.0	96	67.5	
35-44	177	124	69.9	84	47.5	108	60.9	
45-54	128	100	78.1	68	53.2	90	70.5	
≥55	143	106	74.3	84	58.6	97	67.6	
Subtotal	615	455	74.1	310	50.4	404	65.7	
White								
13-24	2,310	1,924	83.3	1,326	57.4	1,719	74.4	
25-34	19,500	15,594	80.0	10,265	52.6	14,020	71.9	
35-44	28,456	22,645	79.6	14,768	51.9	20,435	71.8	
45-54	48,023	38,685	80.6	26,550	55.3	35,487	73.9	
≥55	102,983	82,734	80.3	61,045	59.3	77,587	75.3	
Subtotal	201,273	161,582	80.3	113,955	56.6	149,247	74.2	
Multiracial								
13-24	764	653	85.4	460	60.2	525	68.7	
25-34	6,294	5,160	82.0	3,403	54.1	4,298	68.3	
35-44	6,407	5,370	83.8	3,686	57.5	4,530	70.7	
45-54	6,782	5,894	86.9	4,202	61.9	5,224	77.0	
≥55	8,797	7,818	88.9	5,962	67.8	7,131	81.1	
Subtotal	29,045	24,894	85.7	17,713	61.0	21,708	74.7	
All races								
13-24	18,297	14,840	81.1	10,229	55.9	12,423	67.9	
25-34	112,216	87,863	78.3	59,068	52.6	73,979	65.9	
35-44	112,306	85,885	76.5	59,210	52.7	74,668	66.5	
45-54	127,623	97,931	76.7	70,072	54.9	88,162	69.1	
≥55	191,051	147,215	77.1	110,357	57.8	136,021	71.2	
Total	561,493	433,734	77.2	308,936	55.0	385,254	68.6	

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Data are for those diagnosed by year-end 2020, and age groups are based on age at year-end 2020. Data for the year 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Data are based on address of residence as of December 31, 2021 (i.e., most recent known address). Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total. Persons whose transmission category is classified as male-to-male sexual contact are presented based on assigned sex at birth and include transgender and additional gender identity persons. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

^a Performed ≥3 months apart during 2021.

^b A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2021.

^c Includes Asian/Pacific Islander legacy cases (see Technical Notes).

^d Hispanic/Latino persons can be of any race.

Table 3e. Receipt of HIV medical care and viral suppression during 2021 among transgender and additional gender identity persons aged ≥ 13 years with HIV infection diagnosed by year-end 2020 and alive at year-end 2021, by selected characteristics—47 states and the District of Columbia

	Persons alive at year-end 2021		≥ 1 CD4 or VL tests		≥ 2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
Transgender woman^c								
Age at year-end 2020 (yr)								
13–24	790	654	82.8	432	54.7	472	59.7	
25–34	4,197	3,435	81.8	2,393	57.0	2,641	62.9	
35–44	3,093	2,515	81.3	1,881	60.8	2,033	65.7	
45–54	2,150	1,797	83.6	1,383	64.3	1,531	71.2	
≥ 55	1,444	1,226	84.9	969	67.1	1,080	74.8	
Race/ethnicity								
American Indian/Alaska Native	53	44	83.0	29	54.7	35	66.0	
Asian ^d	195	162	83.1	120	61.5	154	79.0	
Black/African American	5,376	4,417	82.2	3,087	57.4	3,424	63.7	
Hispanic/Latino ^e	3,884	3,149	81.1	2,464	63.4	2,609	67.2	
Native Hawaiian/other Pacific Islander	33	23	69.7	15	45.5	19	57.6	
White	1,212	1,021	84.2	742	61.2	886	73.1	
Multiracial	921	811	88.1	601	65.3	630	68.4	
Exposure category^f								
Sexual contact ^g	9,909	8,176	82.5	5,978	60.3	6,647	67.1	
Injection drug use ^h	25	19	76.0	14	56.0	12	48.0	
Sexual contact ^g and injection drug use ^h	1,531	1,300	84.9	975	63.7	996	65.1	
Other ⁱ	209	132	63.2	91	43.5	102	48.8	
Subtotal	11,674	9,627	82.5	7,058	60.5	7,757	66.4	
Transgender man^c								
Age at year-end 2020 (yr)								
13–24	42	37	88.1	31	73.8	32	76.2	
25–34	161	142	88.2	94	58.4	119	73.9	
35–44	127	111	87.4	79	62.2	100	78.7	
45–54	96	82	85.4	55	57.3	69	71.9	
≥ 55	73	66	90.4	39	53.4	50	68.5	
Race/ethnicity								
American Indian/Alaska Native	4	3	75.0	3	75.0	3	75.0	
Asian ^d	9	7	77.8	4	44.4	7	77.8	
Black/African American	203	179	88.2	114	56.2	138	68.0	
Hispanic/Latino ^e	112	96	85.7	70	62.5	83	74.1	
Native Hawaiian/other Pacific Islander	0	0	0.0	0	0.0	0	0.0	
White	122	109	89.3	74	60.7	99	81.1	
Multiracial	49	44	89.8	33	67.3	40	81.6	
Exposure category^f								

	Persons alive at year-end 2021		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
Sexual contact ^g	375	330	88.0	223	59.5	288	76.8	
Injection drug use ^h	10	8	80.0	5	50.0	6	60.0	
Sexual contact ^g and injection drug use ^h	61	55	90.2	38	62.3	35	57.4	
Other ⁱ	53	45	84.9	32	60.4	41	77.4	
Subtotal	499	438	87.8	298	59.7	370	74.1	
Additional gender identity^j								
Age at year-end 2020 (yr)								
13–24	40	34	85.0	29	72.5	32	80.0	
25–34	119	107	89.9	76	63.9	89	74.8	
35–44	59	51	86.4	45	76.3	43	72.9	
45–54	48	39	81.3	34	70.8	32	66.7	
≥55	36	30	83.3	29	80.6	27	75.0	
Race/ethnicity								
American Indian/Alaska Native	1	1	100	0	0.0	1	100	
Asian ^d	5	4	80.0	4	80.0	3	60.0	
Black/African American	121	97	80.2	77	63.6	78	64.5	
Hispanic/Latino ^e	80	73	91.3	60	75.0	64	80.0	
Native Hawaiian/other Pacific Islander	0	0	0.0	0	0.0	0	0.0	
White	63	57	90.5	46	73.0	53	84.1	
Multiracial	32	29	90.6	26	81.3	24	75.0	
Exposure category^f								
Sexual contact ^g	265	230	86.8	185	69.8	196	74.0	
Injection drug use ^h	1	1	100	1	100	1	100	
Sexual contact ^g and injection drug use ^h	25	23	92.0	20	80.0	19	76.0	
Other ⁱ	11	7	63.6	7	63.6	7	63.6	
Subtotal	302	261	86.4	213	70.5	223	73.8	
Total	12,475	10,326	82.8	7,569	60.7	8,350	66.9	

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Data for the year 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Data are based on address of residence as of December 31, 2021 (i.e., most recent known address). Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

^a Performed ≥3 months apart during 2021.

^b A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2021.

^c “Transgender woman” includes individuals who were assigned “male” sex at birth but have ever identified as “female” gender.

“Transgender man” includes individuals who were assigned “female” sex at birth but have ever identified as “male” gender.

^d Includes Asian/Pacific Islander legacy cases (see Technical Notes).

^e Hispanic/Latino persons can be of any race.

^f Risk factor data for transgender and additional gender identity persons aged ≥ 13 years are presented using the exposure category classification, which is meant to convey all the known ways the person could have been exposed to HIV. Exposure categories are mutually exclusive and have no presumed hierarchical order of probability, except for rare circumstances where route of transmission has been confirmed through investigation. See Technical Notes for more information on exposure categories.

^g For persons assigned “male” sex at birth, sexual contact with any person. For persons assigned “female” sex at birth, sexual contact with a person assigned “male” sex at birth.

^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

ⁱ Other risk factors, including perinatal, hemophilia, blood transfusion, and risk factor not reported or not identified. Data were not statistically adjusted to account for missing exposure category; therefore, case counts for “Other” might be high.

^j Additional gender identity examples include “bigender,” “gender queer,” and “two-spirit.”

Table 4a. HIV viral suppression during 2021 among persons aged ≥13 years with HIV infection diagnosed by year-end 2020 and alive at year-end 2021, by selected characteristics—47 states and the District of Columbia

	Persons alive at year-end 2021		Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		VL <200 copies/mL			
							Among persons alive at year-end 2021	Among persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests	
	No.	%a	No.	%	No.	%	No.	%	%	%
Gender										
Male	733,871	76.1	553,173	75.4	531,938	72.5	486,719	66.3	88.0	91.5
Female	217,656	22.6	162,841	74.8	156,749	72.0	140,231	64.4	86.1	89.5
Transgender woman ^b	11,674	1.2	9,627	82.5	9,334	80.0	7,757	66.4	80.6	83.1
Transgender man ^b	499	0.1	438	87.8	417	83.6	370	74.1	84.5	88.7
Additional gender identity ^c	302	0.0	261	86.4	259	85.8	223	73.8	85.4	86.1
Age at year-end (yr)										
13-24	27,140	2.8	21,599	79.6	20,925	77.1	17,677	65.1	81.8	84.5
25-34	152,935	15.9	117,976	77.1	113,823	74.4	97,532	63.8	82.7	85.7
35-44	183,689	19.1	137,728	75.0	132,453	72.1	117,369	63.9	85.2	88.6
45-54	233,009	24.2	175,697	75.4	169,154	72.6	154,813	66.4	88.1	91.5
≥55	367,229	38.1	273,340	74.4	262,342	71.4	247,909	67.5	90.7	94.5
Race/ethnicity										
American Indian/Alaska Native	2,992	0.3	2,254	75.3	2,171	72.6	1,908	63.8	84.6	87.9
Asian ^d	15,188	1.6	11,321	74.5	10,924	71.9	10,614	69.9	93.8	97.2
Black/African American	386,688	40.1	283,784	73.4	272,495	70.5	238,353	61.6	84.0	87.5
Hispanic/Latino ^e	227,387	23.6	164,738	72.4	159,325	70.1	146,163	64.3	88.7	91.7
Native Hawaiian/Other Pacific Islander	855	0.1	622	72.7	591	69.1	542	63.4	87.1	91.7
White	280,199	29.1	220,753	78.8	211,960	75.6	200,892	71.7	91.0	94.8
Multiracial	50,067	5.2	42,824	85.5	41,189	82.3	36,786	73.5	85.9	89.3
Transmission category^f										
Male-to-male sexual contact ^g	561,493	58.2	433,734	77.2	417,648	74.4	385,253	68.6	88.8	92.2
Injection drug use ^h	96,246	10.0	63,798	66.3	61,096	63.5	53,923	56.0	84.5	88.3
Male	54,849	5.7	33,996	62.0	32,460	59.2	28,778	52.5	84.7	88.7
Female	41,397	4.3	29,802	72.0	28,636	69.2	25,145	60.7	84.4	87.8
Male-to-male sexual contact ^g and injection drug use ^h	53,043	5.5	41,363	78.0	39,633	74.7	34,514	65.1	83.4	87.1
Heterosexual contact ⁱ	239,228	24.8	177,248	74.1	170,438	71.2	153,516	64.2	86.6	90.1
Male	69,386	7.2	48,979	70.6	46,955	67.7	42,133	60.7	86.0	89.7
Female	169,842	17.6	128,269	75.5	123,483	72.7	111,383	65.6	86.8	90.2
Other ^j	13,992	1.5	10,198	72.9	9,882	70.6	8,094	57.8	79.4	81.9
Male	7,039	0.7	4,960	70.5	4,805	68.3	3,996	56.8	80.6	83.2

	VL <200 copies/mL									
	Persons alive at year-end 2021		Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		Persons with ≥1 VL tests	Among persons alive at year-end 2021	Among persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests
	No.	% ^a	No.	%	No.	%		No.	%	%
Female	6,953	0.7	5,239	75.3	5,077	73.0	4,098	58.9	78.2	80.7
Population area of residence										
Metropolitan statistical areas (pop. ≥500,000)	792,024	82.2	597,277	75.4	575,011	72.6	522,654	66.0	87.5	90.9
Metropolitan areas (pop. 50,000-499,999)	94,410	9.8	72,773	77.1	69,769	73.9	63,423	67.2	87.2	90.9
Nonmetropolitan areas (pop. <50,000)	56,132	5.8	42,356	75.5	40,645	72.4	37,105	66.1	87.6	91.3
Total^k	964,002	100	726,340	75.3	698,697	72.5	635,300	65.9	87.5	90.9

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); pop, population; CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Data for the year 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Data are based on address of residence as of December 31, 2021 (i.e., most recent known address). A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2021. Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

- ^a Represents percentage of the total number for the column.
- ^b “Transgender woman” includes individuals who were assigned “male” sex at birth but have ever identified as “female” gender. “Transgender man” includes individuals who were assigned “female” sex at birth but have ever identified as “male” gender.
- ^c Additional gender identity examples include “bigender,” “gender queer,” and “two-spirit.”
- ^d Includes Asian/Pacific Islander legacy cases (see Technical Notes).
- ^e Hispanic/Latino persons can be of any race.
- ^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.
- ^g Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).
- ^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).
- ⁱ Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.
- ^j Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.
- ^k Includes 626 persons of unknown race/ethnicity. .

Table 4b. HIV viral suppression during 2021 among persons aged ≥13 years with HIV infection diagnosed by year-end 2020 and alive at year-end 2021, by area of residence—47 states and the District of Columbia

	VL <200 copies/mL									
	Persons alive at year-end 2021		Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		Persons with ≥1 VL tests	Among persons alive at year-end 2021	Among persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests
	No.	%	No.	%	No.	%		No.	%	%
Alabama	13,774		9,898	71.9	9,180	66.6	8,146	59.1	82.3	88.7
Alaska	718		631	87.9	614	85.5	572	79.7	90.6	93.2
Arizona	17,490		12,733	72.8	11,875	67.9	10,955	62.6	86.0	92.3
Arkansas	5,900		3,953	67.0	3,502	59.4	3,097	52.5	78.3	88.4
California	131,709		98,344	74.7	94,179	71.5	87,675	66.6	89.2	93.1

	VL <200 copies/mL								
	Persons alive at year-end 2021	Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		No.	Among persons alive at year-end 2021	Among persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests
		No.	No.	%	No.		%	%	%
Colorado	13,022	8,584	65.9	8,291	63.7	7,890	60.6	91.9	95.2
Connecticut	10,406	8,270	79.5	8,022	77.1	7,484	71.9	90.5	93.3
Delaware	3,439	2,822	82.1	2,772	80.6	2,525	73.4	89.5	91.1
District of Columbia	13,401	8,798	65.7	8,302	62.0	7,418	55.4	84.3	89.4
Florida	113,218	87,864	77.6	85,233	75.3	77,793	68.7	88.5	91.3
Georgia	57,083	41,473	72.7	40,137	70.3	35,470	62.1	85.5	88.4
Hawaii	2,323	2,007	86.4	1,973	84.9	1,839	79.2	91.6	93.2
Illinois	34,556	26,373	76.3	24,329	70.4	21,881	63.3	83.0	89.9
Indiana	11,821	9,376	79.3	9,125	77.2	8,322	70.4	88.8	91.2
Iowa	2,923	2,576	88.1	2,546	87.1	2,389	81.7	92.7	93.8
Kansas	3,340	2,749	82.3	2,716	81.3	2,523	75.5	91.8	92.9
Kentucky	7,759	6,236	80.4	5,558	71.6	5,062	65.2	81.2	91.1
Louisiana	20,700	16,273	78.6	16,063	77.6	14,263	68.9	87.6	88.8
Maine	1,650	1,360	82.4	1,336	81.0	1,279	77.5	94.0	95.7
Maryland	32,719	23,559	72.0	22,366	68.4	20,214	61.8	85.8	90.4
Massachusetts	20,672	15,742	76.2	15,203	73.5	14,483	70.1	92.0	95.3
Michigan	16,652	13,486	81.0	13,125	78.8	11,987	72.0	88.9	91.3
Minnesota	8,915	6,531	73.3	6,378	71.5	5,962	66.9	91.3	93.5
Mississippi ^a	9,474	6,727	71.0	6,406	67.6	5,646	59.6	83.9	88.1
Missouri	12,570	9,697	77.1	9,260	73.7	8,403	66.8	86.7	90.7
Montana	698	614	88.0	599	85.8	564	80.8	91.9	94.2
Nebraska	2,274	1,751	77.0	1,641	72.2	1,541	67.8	88.0	93.9
Nevada	10,921	8,033	73.6	7,593	69.5	6,971	63.8	86.8	91.8
New Hampshire	1,333	1,076	80.7	1,047	78.5	1,006	75.5	93.5	96.1
New Mexico	3,873	2,957	76.3	2,407	62.1	2,183	56.4	73.8	90.7
New York	122,351	89,211	72.9	88,096	72.0	79,119	64.7	88.7	89.8
North Carolina	32,933	25,496	77.4	24,833	75.4	22,383	68.0	87.8	90.1
North Dakota	506	402	79.4	352	69.6	317	62.6	78.9	90.1
Ohio	23,181	17,368	74.9	16,871	72.8	15,307	66.0	88.1	90.7
Oklahoma	6,585	4,720	71.7	4,520	68.6	4,046	61.4	85.7	89.5
Oregon	7,268	6,237	85.8	5,943	81.8	5,616	77.3	90.0	94.5
Rhode Island	2,647	1,969	74.4	1,889	71.4	1,809	68.3	91.9	95.8
South Carolina	17,474	14,315	81.9	13,875	79.4	12,679	72.6	88.6	91.4
South Dakota	687	606	88.2	433	63.0	380	55.3	62.7	87.8
Tennessee	17,938	14,133	78.8	13,624	76.0	12,005	66.9	84.9	88.1
Texas	96,292	72,212	75.0	68,304	70.9	60,494	62.8	83.8	88.6
Utah	3,317	2,518	75.9	2,480	74.8	2,338	70.5	92.9	94.3
Vermont	712	561	78.8	556	78.1	531	74.6	94.7	95.5
Virginia	23,635	16,959	71.8	16,653	70.5	15,378	65.1	90.7	92.3
Washington	14,141	12,012	84.9	11,761	83.2	11,121	78.6	92.6	94.6
West Virginia ^a	2,056	1,417	68.9	1,256	61.1	1,118	54.4	78.9	89.0
Wisconsin	6,579	5,409	82.2	5,207	79.1	4,869	74.0	90.0	93.5

	VL <200 copies/mL								
	Persons alive at year-end 2021	Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests			Among persons alive at year-end 2021	Among persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests
	No.	No.	%	No.	%	No.	%	%	%
Wyoming	367	302	82.3	266	72.5	247	67.3	81.8	92.9
Region of residence^b									
Northeast (excluding NJ & PA)	159,771	118,189	74.0	116,149	72.7	105,711	66.2	89.4	91.0
Midwest	124,004	96,324	77.7	91,983	74.2	83,881	67.6	87.1	91.2
South	474,380	356,855	75.2	342,584	72.2	307,737	64.9	86.2	89.8
West (excluding ID)	205,847	154,972	75.3	147,981	71.9	137,971	67.0	89.0	93.2

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Data for the year 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Data are based on address of residence as of December 31, 2021 (i.e., most recent known address). A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2021. Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico. New Jersey and Pennsylvania recently enacted laws to require laboratories to report all CD4 and VL test results, but a full calendar year of reporting laboratory results to CDC is required before data are included in care analyses.

^a Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2021.

^b Data should be interpreted with caution as areas with incomplete reporting to CDC are not included.

Table 5. Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2021, by selected characteristics—United States

	Persons with HIV infection alive at year-end 2021 ^a	Persons with diagnosed HIV infection alive at year-end 2021 ^b		Receipt of care ^c		Retention in care ^c		Viral suppression ^c	
	Total No.	No.	%	No.	%	No.	%	No.	%
Sex at birth									
Male	946,500	819,141	87	618,451	65	441,517	47	543,090	57
Female	265,900	239,759	90	179,340	67	128,990	49	154,645	58
Age at year-end 2021 (yr)									
13–24	41,900	23,671	56	18,842	45	13,090	31	15,410	37
25–34	217,100	157,035	72	121,074	56	81,344	37	100,188	46
35–44	238,300	202,019	85	151,514	64	104,040	44	129,090	54
45–54	263,000	243,001	92	183,223	70	130,978	50	161,353	61
≥55	452,000	433,174	96	322,281	71	242,144	54	292,392	65
Race/ethnicity									
American Indian/Alaska Native	4,100	3,245	80	2,443	60	1,700	41	2,070	50
Asian ^d	18,600	16,455	89	12,259	66	9,017	48	11,502	62
Black/African American	487,500	425,519	87	312,331	64	220,844	45	262,120	54
Hispanic/Latino ^e	297,200	252,342	85	182,696	61	137,022	46	162,256	55
Native Hawaiian/other Pacific Islander	1,200	948	81	689,196	57	470	39	601	50
White	342,000	304,871	89	240,238	70	167,679	49	218,593	64

	Persons with HIV infection alive at year-end 2021 ^a			Persons with diagnosed HIV infection alive at year-end 2021 ^b			Receipt of care ^c		Retention in care ^c		Viral suppression ^c	
	Total No.	No.	%	No.	%	No.	%	No.	%	No.	%	
Multiracial	61,200	54,864	90	46,909	77	33,741	55	40,325	66			
Transmission category^f												
Male-to-male sexual contact ^g	716,900	615,019	86	474,795	66	338,260	47	421,903	59			
Injection drug use ^h	121,900	112,395	92	74,518	61	53,725	44	62,941	52			
Male	70,400	64,530	92	40,009	57	29,103	41	33,878	48			
Female	51,600	47,864	93	34,462	67	24,602	48	29,053	56			
Male-to-male sexual contact ^g and injection drug use ^h	62,900	57,559	92	44,896	71	32,060	51	37,471	60			
Heterosexual contact ⁱ	306,700	270,255	88	200,259	65	144,586	47	173,504	57			
Male	94,100	79,991	85	56,474	60	41,195	44	48,555	52			
Female	212,600	190,265	90	143,650	68	103,314	49	124,814	59			
Total^j	1,212,400	1,058,900	87	797,352	66	570,747	47	697,815	58			

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; RSE, relative standard error [footnotes only].

^a Estimates derived by using HIV surveillance and CD4 data for persons aged ≥13 years at diagnosis (i.e., persons living with diagnosed or undiagnosed HIV infection). Estimates for year 2021 should be interpreted with caution due to adjustments made to the CD4+ T-lymphocyte (CD4)-based depletion model to account for the impact of COVID-19 on HIV testing and diagnosis in the United States. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤ 1,000 to reflect model uncertainty. Estimates with a relative standard error 30%-50% are preceded by an asterisk (*) and should be interpreted with caution because they do not meet the standard of reliability. Estimates with an RSE of >50% are not shown and replaced by an ellipsis (...). Data previously published in the HIV Surveillance Supplemental Report 2023;28(No. 3). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

^b Reported to National HIV Surveillance System. Data previously published in the HIV Surveillance Supplemental Report 2021;28(No. 3). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

^c Estimates are the result of extrapolating data from the 48 jurisdictions with complete CD4 and viral load reporting by applying the percentage in the 48 jurisdictions (found in Tables 4a and 5a) to the total number of people living with diagnosed HIV in the United States. Estimates were calculated by sex at birth and are rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤1,000 to reflect model uncertainty.

^d Includes Asian/Pacific Islander legacy cases (see Technical Notes).

^e Hispanic/Latino persons can be of any race.

^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^g Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

ⁱ Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

^j Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

Table 6a. Stage 3 (AIDS) at time of diagnosis of HIV infection among persons aged ≥13 years, by year of diagnosis and selected characteristics, 2017–2021—United States

	2017			2018			2019			2020 (COVID-19 pandemic)			2021		
	Stage 3 (AIDS) at diagnosis ^a			Stage 3 (AIDS) at diagnosis ^a			Stage 3 (AIDS) at diagnosis ^a			Stage 3 (AIDS) at diagnosis ^a			Stage 3 (AIDS) at diagnosis ^a		
	Total No.	No.	%												
Gender															
Male	30,398	6,315	20.8	29,563	6,129	20.7	28,779	5,906	20.5	24,148	5,206	21.6	28,283	6,031	21.3
Female	7,229	1,598	22.1	7,008	1,532	21.9	6,873	1,415	20.6	5,387	1,236	22.9	6,522	1,385	21.2
Transgender woman ^b	651	84	12.9	661	85	12.9	692	94	13.6	676	82	12.1	811	96	11.8

	2017			2018			2019			2020 (COVID-19 pandemic)			2021		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
Transgender man ^b	32	5	15.6	48	2	4.2	45	5	11.1	41	2	4.9	56	2	3.6
Additional gender identity ^c	18	3	16.7	19	1	5.3	32	0	0.0	23	4	17.4	44	6	13.6
Age at diagnosis (yr)															
13–24	8,297	741	8.9	7,865	710	9.0	7,660	634	8.3	6,125	560	9.1	6,927	688	9.9
25–34	13,400	2,153	16.1	13,346	2,119	15.9	13,027	2,125	16.3	11,279	1,949	17.3	13,081	2,208	16.9
35–44	7,235	1,869	25.8	7,150	1,846	25.8	7,048	1,780	25.3	5,874	1,490	25.4	7,543	1,914	25.4
45–54	5,563	1,880	33.8	5,194	1,746	33.6	4,874	1,555	31.9	3,872	1,368	35.3	4,442	1,438	32.4
≥55	3,833	1,362	35.5	3,744	1,328	35.5	3,812	1,326	34.8	3,125	1,163	37.2	3,723	1,272	34.2
Race/ethnicity															
American Indian/Alaska Native	193	41	21.2	170	28	16.5	193	26	13.5	189	42	22.2	223	43	19.3
Asian	911	231	25.4	844	224	26.5	722	175	24.2	610	168	27.5	737	188	25.5
Black/African American	16,107	3,227	20.0	15,593	3,077	19.7	15,296	2,956	19.3	12,643	2,528	20.0	14,522	2,882	19.8
Hispanic/Latino ^d	9,995	2,104	21.1	9,921	2,148	21.7	9,851	2,098	21.3	8,037	1,831	22.8	10,059	2,227	22.1
Native Hawaiian/other Pacific Islander	46	12	26.1	57	12	21.1	59	11	18.6	63	12	19.0	76	18	23.7
White	9,543	2,087	21.9	9,323	2,009	21.5	8,985	1,889	21.0	7,732	1,745	22.6	9,058	1,938	21.4
Multiracial	1,533	303	19.8	1,391	251	18.0	1,315	265	20.2	1,001	204	20.4	1,041	224	21.5
Transmission category^e															
Male-to-male sexual contact ^f	25,345	4,813	19.0	24,464	4,717	19.3	23,870	4,491	18.8	20,460	4,102	20.0	23,855	4,753	19.9
Injection drug use ^g	2,400	563	23.5	2,493	555	22.3	2,545	551	21.6	2,064	462	22.4	2,490	543	21.8
Male	1,291	348	26.9	1,376	326	23.7	1,362	340	25.0	1,170	276	23.6	1,415	330	23.3
Female	1,109	215	19.4	1,117	229	20.5	1,182	210	17.8	895	186	20.8	1,075	213	19.9
Male-to-male sexual contact ^f and injection drug use ^g	1,517	223	14.7	1,531	222	14.5	1,581	261	16.5	1,185	193	16.3	1,373	215	15.7
Heterosexual contact ^h	8,988	2,385	26.5	8,731	2,235	25.6	8,339	2,093	25.1	6,500	1,753	27.0	7,916	1,986	25.1
Male	2,882	1,009	35.0	2,839	943	33.2	2,643	893	33.8	2,006	709	35.4	2,460	825	33.5
Female	6,106	1,377	22.5	5,892	1,292	21.9	5,695	1,200	21.1	4,494	1,044	23.2	5,456	1,161	21.3
Other ⁱ	78	21	26.4	80	19	23.7	87	24	27.8	66	20	29.7	83	22	26.6
Male	32	10	30.1	32	6	17.6	42	14	34.1	26	11	41.6	29	9	30.1
Female	46	11	23.9	48	13	27.9	45	10	22.0	41	9	22.2	54	13	24.7
Region of residence															
Northeast	5,988	1,286	21.5	5,552	1,257	22.6	5,317	1,161	21.8	4,241	948	22.4	4,988	1,107	22.2
Midwest	5,099	1,084	21.3	4,941	1,109	22.4	4,767	997	20.9	4,106	875	21.3	4,815	979	20.3
South	19,645	4,154	21.1	19,225	3,898	20.3	18,950	3,841	20.3	15,537	3,360	21.6	18,703	3,961	21.2
West	7,596	1,481	19.5	7,581	1,485	19.6	7,387	1,421	19.2	6,391	1,347	21.1	7,210	1,473	20.4
Population area of residence															
Metropolitan statistical areas (pop. ≥500,000)	31,366	6,319	20.1	30,411	6,105	20.1	29,658	5,884	19.8	24,446	5,089	20.8	28,822	5,886	20.4
Metropolitan areas (pop. 50,000–499,999)	4,475	1,042	23.3	4,462	1,027	23.0	4,347	951	21.9	3,738	890	23.8	4,478	1,009	22.5

	2017			2018			2019			2020 (COVID-19 pandemic)			2021		
	Stage 3 (AIDS) at diagnosis ^a			Stage 3 (AIDS) at diagnosis ^a			Stage 3 (AIDS) at diagnosis ^a			Stage 3 (AIDS) at diagnosis ^a			Stage 3 (AIDS) at diagnosis ^a		
	Total No.	No.	%												
Nonmetropolitan areas (pop. <50,000)	2,249	596	26.5	2,318	604	26.1	2,280	569	25.0	1,940	525	27.1	2,290	605	26.4
Total	38,328	8,005	20.9	37,299	7,749	20.8	36,421	7,420	20.4	30,275	6,530	21.6	35,716	7,520	21.1

Abbreviations: pop, population; CD4, CD4+ T-lymphocyte count (cells/μL) or percentage [footnotes only].

Note. Data are based on residence at time of diagnosis of HIV infection. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions.

^a Based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection.

^b “Transgender woman” includes individuals who were assigned “male” sex at birth but have ever identified as “female” gender.

“Transgender man” includes individuals who were assigned “female” sex at birth but have ever identified as “male” gender.

^c Additional gender identity examples include “bigender,” “gender queer,” and “two-spirit.”

^d Hispanic/Latino persons can be of any race.

^e Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^f Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^g Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^h Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

ⁱ Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

Table 6b. Stage 3 (AIDS) at time of diagnosis of HIV infection among persons aged ≥13 years, by year of diagnosis and selected characteristics, 2017–2021—United States and 6 dependent areas

	2017			2018			2019			2020 (COVID-19 pandemic)			2021		
	Stage 3 (AIDS) at diagnosis ^a			Stage 3 (AIDS) at diagnosis ^a			Stage 3 (AIDS) at diagnosis ^a			Stage 3 (AIDS) at diagnosis ^a			Stage 3 (AIDS) at diagnosis ^a		
	Total No.	No.	%												
Gender															
Male	30,765	6,380	20.7	29,941	6,214	20.8	29,118	5,982	20.5	24,409	5,262	21.6	28,620	6,113	21.4
Female	7,323	1,622	22.1	7,089	1,549	21.9	6,956	1,442	20.7	5,433	1,248	23.0	6,604	1,404	21.3
Transgender woman ^b	653	84	12.9	665	86	12.9	694	94	13.5	679	83	12.2	812	96	11.8
Transgender man ^b	32	5	15.6	48	2	4.2	45	5	11.1	41	2	4.9	56	2	3.6
Additional gender identity ^c	18	3	16.7	19	1	5.3	32	0	0.0	23	4	17.4	44	6	13.6
Age at diagnosis (yr)															
13–24	8,376	746	8.9	7,948	715	9.0	7,724	640	8.3	6,177	563	9.1	6,987	693	9.9
25–34	13,523	2,171	16.1	13,482	2,137	15.9	13,145	2,148	16.3	11,361	1,958	17.2	13,204	2,233	16.9
35–44	7,323	1,893	25.9	7,227	1,867	25.8	7,126	1,797	25.2	5,940	1,508	25.4	7,634	1,935	25.3
45–54	5,655	1,903	33.7	5,289	1,775	33.6	4,943	1,583	32.0	3,926	1,387	35.3	4,519	1,467	32.5
≥55	3,914	1,381	35.3	3,816	1,358	35.6	3,907	1,355	34.7	3,181	1,183	37.2	3,792	1,293	34.1
Race/ethnicity															
American Indian/Alaska Native	193	41	21.2	170	28	16.5	193	26	13.5	189	42	22.2	223	43	19.3

	2017			2018			2019			2020 (COVID-19 pandemic)			2021		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
Asian	914	233	25.5	848	224	26.4	729	178	24.4	610	168	27.5	738	188	25.5
Black/African American	16,112	3,228	20.0	15,605	3,080	19.7	15,304	2,959	19.3	12,650	2,528	20.0	14,528	2,883	19.8
Hispanic/Latino ^d	10,441	2,187	20.9	10,359	2,245	21.7	10,250	2,193	21.4	8,338	1,900	22.8	10,467	2,326	22.2
Native Hawaiian/other Pacific Islander	49	14	28.6	59	14	23.7	63	12	19.0	64	12	18.8	76	18	23.7
White	9,547	2,088	21.9	9,329	2,010	21.5	8,991	1,890	21.0	7,733	1,745	22.6	9,063	1,939	21.4
Multiracial	1,535	303	19.7	1,392	251	18.0	1,315	265	20.2	1,001	204	20.4	1,041	224	21.5
Transmission category^e															
Male-to-male sexual contact ^f	25,587	4,851	19.0	24,742	4,766	19.3	24,110	4,533	18.8	20,660	4,130	20.0	24,107	4,810	20.0
Injection drug use ^g	2,444	569	23.3	2,521	563	22.3	2,572	561	21.8	2,087	470	22.5	2,512	550	21.9
Male	1,325	354	26.7	1,401	335	23.9	1,385	348	25.2	1,189	284	23.9	1,436	337	23.5
Female	1,118	215	19.3	1,120	229	20.4	1,188	213	17.9	898	186	20.7	1,077	213	19.8
Male-to-male sexual contact ^f and injection drug use ^g	1,529	224	14.7	1,542	228	14.8	1,594	265	16.7	1,190	194	16.3	1,375	215	15.7
Heterosexual contact ^h	9,153	2,428	26.5	8,877	2,275	25.6	8,482	2,139	25.2	6,582	1,785	27.1	8,059	2,023	25.1
Male	2,962	1,028	34.7	2,906	966	33.2	2,709	915	33.8	2,046	729	35.6	2,523	843	33.4
Female	6,190	1,401	22.6	5,970	1,309	21.9	5,773	1,224	21.2	4,536	1,056	23.3	5,536	1,180	21.3
Other ⁱ	79	21	26.2	80	19	23.7	87	24	27.7	66	20.0	29.6	83	22	26.6
Male	33	10	30.0	32	6	17.6	42	14	34.1	26	11	41.4	29	9	30.0
Female	46	11	23.5	48	13	27.9	45	10	21.9	41	9	22.1	54	13	24.7
Region of residence															
Northeast	5,988	1,286	21.5	5,552	1,257	22.6	5,317	1,161	21.8	4,241	948	22.4	4,988	1,107	22.2
Midwest	5,099	1,084	21.3	4,941	1,109	22.4	4,767	997	20.9	4,106	875	21.3	4,815	979	20.3
South	19,645	4,154	21.1	19,225	3,898	20.3	18,950	3,841	20.3	15,537	3,36	21.6	18,703	3,961	21.2
West	7,596	1,481	19.5	7,581	1,485	19.6	7,387	1,421	19.2	6,391	1,347	21.1	7,210	1,473	20.4
U.S. dependent areas	463	89	19.2	463	103	22.2	424	103	24.3	310	69	22.3	420	101	24.0
Total	38,791	8,094	20.9	37,762	7,852	20.8	36,845	7,523	20.4	30,585	6,599	21.6	36,136	7,621	21.1

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/ μ L) or percentage [footnotes only].

Note. Data are based on residence at time of diagnosis of HIV infection. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions.

^a Based on first CD4 test performed or documentation of an AIDS-defining condition \leq 3 months after a diagnosis of HIV infection.

^b "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.

"Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.

^c Additional gender identity examples include "bigender," "gender queer," and "two-spirit."

^d Hispanic/Latino persons can be of any race.

^e Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^f Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^g Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection

of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^h Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

ⁱ Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

Table 6c. Stage 3 (AIDS) at time of diagnosis of HIV infection among persons aged ≥13 years, by year of diagnosis and area of residence, 2017–2021—United States and 6 dependent areas

	2017			2018			2019			2020 (COVID-19 pandemic)			2021		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
Alabama	647	141	21.8	606	128	21.1	635	135	21.3	590	126	21.4	625	115	18.4
Alaska	29	7	24.1	23	4	17.4	27	2	7.4	29	3	10.3	30	10	33.3
Arizona	721	134	18.6	752	159	21.1	748	134	17.9	657	146	22.2	781	146	18.7
Arkansas	285	50	17.5	283	60	21.2	289	72	24.9	245	60	24.5	338	82	24.3
California	4,856	923	19.0	4,764	884	18.6	4,508	836	18.5	4,010	851	21.2	4,399	906	20.6
Colorado	433	78	18.0	400	95	23.8	463	85	18.4	327	69	21.1	406	72	17.7
Connecticut	274	65	23.7	258	64	24.8	213	60	28.2	171	42	24.6	233	48	20.6
Delaware	125	32	25.6	92	22	23.9	93	20	21.5	92	26	28.3	81	25	30.9
District of Columbia	315	40	12.7	278	43	15.5	248	36	14.5	194	41	21.1	195	37	19.0
Florida	4,546	973	21.4	4,352	928	21.3	4,150	910	21.9	3,230	707	21.9	4,072	847	20.8
Georgia	2,607	567	21.7	2,505	495	19.8	2,408	491	20.4	1,974	435	22.0	2,371	543	22.9
Hawaii	76	13	17.1	72	15	20.8	63	13	20.6	50	18	36.0	65	15	23.1
Idaho	45	11	24.4	36	14	38.9	34	14	41.2	35	13	37.1	54	14	25.9
Illinois	1,382	295	21.3	1,379	277	20.1	1,281	246	19.2	1,081	224	20.7	1,195	212	17.7
Indiana	514	126	24.5	514	127	24.7	484	100	20.7	430	104	24.2	528	106	20.1
Iowa	125	31	24.8	114	26	22.8	101	22	21.8	100	25	25.0	124	31	25.0
Kansas	119	25	21.0	155	40	25.8	132	26	19.7	140	35	25.0	154	41	26.6
Kentucky	368	88	23.9	377	76	20.2	326	68	20.9	300	63	21.0	390	71	18.2
Louisiana	987	226	22.9	954	182	19.1	879	183	20.8	718	159	22.1	899	206	22.9
Maine	29	11	37.9	31	10	32.3	30	11	36.7	16	8	50.0	31	14	45.2
Maryland	1,014	249	24.6	994	202	20.3	914	206	22.5	709	152	21.4	749	183	24.4
Massachusetts	600	123	20.5	645	150	23.3	537	112	20.9	430	99	23.0	440	103	23.4
Michigan	771	153	19.8	718	167	23.3	675	148	21.9	517	97	18.8	633	121	19.1
Minnesota	278	76	27.3	288	68	23.6	276	64	23.2	230	47	20.4	297	66	22.2
Mississippi	431	116	26.9	475	129	27.2	469	119	25.4	404	90	22.3	419	87	20.8
Missouri	505	84	16.6	449	96	21.4	488	88	18.0	369	68	18.4	549	99	18.0
Montana	29	6	20.7	24	5	20.8	25	5	20.0	14	5	35.7	22	5	22.7
Nebraska	87	13	14.9	77	25	32.5	80	21	26.3	73	18	24.7	105	23	21.9
Nevada	497	107	21.5	498	95	19.1	517	120	23.2	397	71	17.9	501	120	24.0
New Hampshire	32	5	15.6	38	10	26.3	31	5	16.1	32	8	25.0	32	9	28.1
New Jersey	1,110	239	21.5	1,015	234	23.1	1,084	234	21.6	799	175	21.9	1,143	228	19.9
New Mexico	148	30	20.3	155	37	23.9	176	29	16.5	129	24	18.6	149	20	13.4
New York	2,741	567	20.7	2,454	541	22.0	2,345	494	21.1	1,975	430	21.8	2,116	479	22.6
North Carolina	1,289	264	20.5	1,180	204	17.3	1,367	213	15.6	1,079	226	20.9	1,390	265	19.1

	2017			2018			2019			2020 (COVID-19 pandemic)			2021		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
North Dakota	39	10	25.6	35	5	14.3	40	9	22.5	37	16	43.2	37	10	27.0
Ohio	980	212	21.6	977	225	23.0	965	213	22.1	882	189	21.4	909	206	22.7
Oklahoma	302	63	20.9	278	61	21.9	346	55	15.9	342	71	20.8	387	69	17.8
Oregon	203	49	24.1	227	51	22.5	198	49	24.7	179	28	15.6	202	43	21.3
Pennsylvania	1,097	243	22.2	1,018	218	21.4	994	229	23.0	753	175	23.2	913	204	22.3
Rhode Island	85	24	28.2	75	22	29.3	72	14	19.4	52	8	15.4	68	17	25.0
South Carolina	704	178	25.3	726	174	24.0	721	164	22.7	660	163	24.7	652	168	25.8
South Dakota	41	8	19.5	29	7	24.1	34	8	23.5	34	4	11.8	31	9	29.0
Tennessee	720	123	17.1	740	145	19.6	768	133	17.3	646	109	16.9	831	140	16.8
Texas	4,363	857	19.6	4,429	858	19.4	4,350	843	19.4	3,596	744	20.7	4,363	912	20.9
Utah	116	22	19.0	121	17	14.0	135	27	20.0	133	30	22.6	133	26	19.5
Vermont	20	9	45.0	18	8	44.4	11	2	18.2	13	3	23.1	12	5	41.7
Virginia	864	169	19.6	863	170	19.7	832	169	20.3	618	164	26.5	792	180	22.7
Washington	433	97	22.4	497	108	21.7	480	105	21.9	417	87	20.9	461	94	20.4
West Virginia	78	18	23.1	93	21	22.6	155	24	15.5	140	24	17.1	149	31	20.8
Wisconsin	258	51	19.8	206	46	22.3	211	52	24.6	213	48	22.5	253	55	21.7
Wyoming	10	4	40.0	12	1	8.3	13	2	15.4	14	2	14.3	7	2	28.6
Total	38,328	8,005	20.9	37,299	7,749	20.8	36,421	7,420	20.4	30,275	6,530	21.6	35,716	7,520	21.1
U.S. dependent areas															
American Samoa	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Guam	6	4	66.7	7	3	42.9	11	3	27.3	1	0	0.0	0	0	0.0
Northern Mariana Islands	1	0	0.0	1	0	0.0	2	1	50.0	0	0	0.0	0	0	0.0
Puerto Rico	447	84	18.8	437	96	22.0	396	93	23.5	300	69	23.0	410	100	24.4
Republic of Palau	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
U.S. Virgin Islands	9	1	11.1	18	4	22.2	15	6	40.0	9	0	0.0	10	1	10.0
Subtotal	463	89	19.2	463	103	22.2	424	103	24.3	310	69	22.3	420	101	24.0
Total	38,791	8,094	20.9	37,762	7,852	20.8	36,845	7,523	20.4	30,585	6,599	21.6	36,136	7,621	21.1

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage [footnotes only].

Note. Data are based on residence at time of diagnosis of HIV infection. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions.

^a Based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection.

Table 6d. Stage 3 (AIDS) at time of diagnosis of HIV infection among persons aged ≥ 13 years, by race/ethnicity and area of residence, 2021—United States ↗

	Black/African American			Hispanic/Latino ^a			White			Other ^b		
	Total No.	Stage 3 (AIDS) at diagnosis ^c		Total No.	Stage 3 (AIDS) at diagnosis ^c		Total No.	Stage 3 (AIDS) at diagnosis ^c		Total No.	Stage 3 (AIDS) at diagnosis ^c	
		No.	%		No.	%		No.	%		No.	%
Alabama	380	65	17.1	26	6	23.1	189	38	20.1	30	6	20.0
Alaska	2	0	0.0	4	2	50.0	13	4	30.8	11	4	36.4
Arizona	125	23	18.4	355	66	18.6	244	46	18.9	57	11	19.3
Arkansas	150	36	24.0	28	7	25.0	138	34	24.6	22	5	22.7
California	754	133	17.6	2,285	505	22.1	1,005	190	18.9	355	78	22.0
Colorado	68	11	16.2	130	23	17.7	187	34	18.2	21	4	19.0
Connecticut	84	11	13.1	74	21	28.4	69	14	20.3	6	2	33.3
Delaware	44	15	34.1	12	3	25.0	21	7	33.3	4	0	0.0
District of Columbia	135	25	18.5	29	5	17.2	20	5	25.0	11	2	18.2
Florida	1,671	342	20.5	1,434	279	19.5	878	197	22.4	89	29	32.6
Georgia	1,690	374	22.1	245	66	26.9	345	80	23.2	91	23	25.3
Hawaii	6	0	0.0	11	1	9.1	18	2	11.1	30	12	40.0
Idaho	3	2	66.7	14	6	42.9	35	6	17.1	2	0	0.0
Illinois	531	84	15.8	311	58	18.6	270	51	18.9	83	19	22.9
Indiana	209	39	18.7	78	18	23.1	219	46	21.0	22	3	13.6
Iowa	29	9	31.0	20	5	25.0	63	14	22.2	12	3	25.0
Kansas	35	8	22.9	36	11	30.6	76	20	26.3	7	2	28.6
Kentucky	118	18	15.3	30	12	40.0	221	40	18.1	21	1	4.8
Louisiana	578	119	20.6	73	26	35.6	229	54	23.6	19	7	36.8
Maine	4	0	0.0	1	0	0.0	22	11	50.0	4	3	75.0
Maryland	529	125	23.6	102	32	31.4	87	16	18.4	31	10	32.3
Massachusetts	148	52	35.1	119	24	20.2	155	23	14.8	18	4	22.2
Michigan	343	62	18.1	45	11	24.4	217	42	19.4	28	6	21.4
Minnesota	124	30	24.2	43	14	32.6	103	14	13.6	27	8	29.6
Mississippi	309	67	21.7	13	0	0.0	93	17	18.3	4	3	75.0
Missouri	244	32	13.1	52	9	17.3	220	53	24.1	33	5	15.2
Montana	0	0	0.0	1	0	0	18	4	22.2	3	1	33.3
Nebraska	23	2	8.7	20	7	35.0	53	13	24.5	9	1	11.1
Nevada	149	31	20.8	182	40	22.0	131	40	30.5	39	9	23.1
New Hampshire	3	2	66.7	2	1	50.0	26	5	19.2	1	1	100
New Jersey	450	91	20.2	457	96	21.0	170	27	15.9	66	14	21.2
New Mexico	7	2	28.6	80	11	13.8	34	2	5.9	28	5	17.9
New York	827	166	20.1	773	178	23.0	341	92	27.0	175	43	24.6
North Carolina	804	145	18.0	214	45	21.0	296	65	22.0	76	10	13.2
North Dakota	12	4	33.3	3	1	33.3	17	4	23.5	5	1	20.0
Ohio	448	92	20.5	56	17	30.4	362	88	24.3	43	9	20.9
Oklahoma	109	18	16.5	70	12	17.1	144	30	20.8	64	9	14.1
Oregon	16	2	12.5	53	11	20.8	113	25	22.1	20	5	25.0
Pennsylvania	419	101	24.1	172	37	21.5	273	59	21.6	49	7	14.3
Rhode Island	13	4	30.8	24	4	16.7	29	9	31.0	2	0	0.0
South Carolina	361	86	23.8	74	21	28.4	157	41	26.1	60	20	33.3

	Black/African American			Hispanic/Latino ^a			White			Other ^b		
	Total No.	Stage 3 (AIDS) at diagnosis ^c		Total No.	Stage 3 (AIDS) at diagnosis ^c		Total No.	Stage 3 (AIDS) at diagnosis ^c		Total No.	Stage 3 (AIDS) at diagnosis ^c	
		No.	%		No.	%		No.	%		No.	%
South Dakota	4	1	25.0	2	0	0.0	13	4	30.8	12	4	33.3
Tennessee	444	60	13.5	87	21	24.1	275	52	18.9	25	7	28.0
Texas	1,467	264	18.0	1,880	428	22.8	788	167	21.2	228	53	23.2
Utah	9	1	11.1	55	13	23.6	59	9	15.3	10	3	30.0
Vermont	3	0	0.0	1	1	100	8	4	50.0	0	0	0.0
Virginia	440	94	21.4	95	27	28.4	213	51	23.9	44	8	18.2
Washington	96	18	18.8	121	26	21.5	185	41	22.2	59	9	15.3
West Virginia	13	3	23.1	6	2	33.3	124	24	19.4	6	2	33.3
Wisconsin	92	13	14.1	59	17	28.8	87	23	26.4	15	2	13.3
Wyoming	0	0	0.0	2	1	50.0	5	1	20.0	0	0	0.0
Total	14,522	2,882	19.8	10,059	2,227	22.1	9,058	1,938	21.4	2,077	473	22.8
Region of residence												
Northeast	1,951	427	21.9	1,623	362	22.3	1,093	244	22.3	321	74	23.1
Midwest	2,094	376	18.0	725	168	23.2	1,700	372	21.9	296	63	21.3
South	9,242	1,856	20.1	4,418	992	22.5	4,218	918	21.8	825	195	23.6
West	1,235	223	18.1	3,293	705	21.4	2,047	404	19.7	635	141	22.2

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage [footnotes only].

Note. Data are based on residence at time of diagnosis of HIV infection.

^a Hispanic/Latino persons can be of any race.

^b Includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, and multiracial persons.

^c Based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection.

Table 7a. Deaths (any cause) of persons aged ≥13 years with diagnosed HIV infection, by year of death and selected characteristics, 2017–2021—United States

	2017			2018			2019			2020 (COVID-19 pandemic)			2021
	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	
Gender													
Male	12,239	–	16.1	12,102	–	15.5	12,307	–	15.4	14,208	–	17.5	14,663
Female	3,988	–	16.8	3,985	–	16.5	3,841	–	15.7	4,627	–	18.7	4,742
Transgender woman ^b	108	–	9.9	118	–	10.3	145	–	12.0	207	–	16.4	215
Transgender man ^b	5	–	12.3	5	–	11.1	5	–	10.1	10	–	18.9	2
Additional gender identity ^c	3	–	12.4	1	–	3.8	2	–	6.8	0	–	0.0	1
Age at death (yr)													
13–24	152	0.3	3.5	130	0.3	3.1	135	0.3	3.4	153	0.3	4.1	109
25–34	1,047	2.3	6.5	1,034	2.3	6.2	1,100	2.4	6.4	1,258	2.8	7.2	1,360
35–44	1,833	4.5	9.5	1,774	4.3	9.1	1,795	4.3	9.1	2,074	4.8	10.4	2,247

	2017			2018			2019			2020 (COVID-19 pandemic)			2
	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	
45–54	4,469	10.6	14.6	4,183	10.1	14.1	3,648	8.9	12.8	3,858	9.4	14.2	3,783
≥55	8,842	9.5	29.1	9,090	9.6	27.4	9,622	10.0	26.7	11,709	12.0	30.1	12,124
Race/ethnicity													
American Indian/Alaska Native	47	2.4	16.8	49	2.5	16.8	57	2.9	18.6	82	4.1	25.6	80
Asian ^d	88	0.6	6.4	83	0.5	5.7	100	0.6	6.5	103	0.6	6.5	125
Black/African American	7,193	21.6	17.6	6,981	20.7	16.7	7,008	20.6	16.4	8,327	24.2	19.2	8,402
Hispanic/Latino ^e	2,693	6.0	11.8	2,838	6.2	12.0	2,770	5.9	11.3	3,452	7.1	13.8	3,498
Native Hawaiian/other Pacific Islander	9	1.9	12.0	13	2.7	16.2	14	2.8	16.5	11	2.2	12.3	14
White	5,234	3.1	17.6	5,150	3.0	17.0	5,256	3.1	17.2	5,754	3.3	18.6	6,025
Multiracial	1,077	23.7	19.0	1,097	23.3	19.2	1,091	22.4	19.0	1,322	26.1	23.0	1,478
Transmission category^f													
Male-to-male sexual contact ^g	7,010	–	12.6	6,888	–	12.0	7,184	–	12.1	8,237	–	13.6	8,672
Injection drug use ^h	3,527	–	29.3	3,504	–	29.3	3,403	–	28.7	3,922	–	33.4	3,801
Male	2,154	–	30.8	2,169	–	31.3	2,087	–	30.4	2,427	–	35.8	2,335
Female	1,373	–	27.3	1,335	–	26.6	1,316	–	26.3	1,494	–	30.1	1,466
Male-to-male sexual contact ^g and injection drug use ^h	1,383	–	23.3	1,453	–	24.4	1,395	–	23.4	1,665	–	28.0	1,687
Heterosexual contact ⁱ	4,242	–	16.3	4,194	–	15.9	4,157	–	15.4	5,021	–	18.5	5,262
Male	1,694	–	21.6	1,600	–	20.1	1,688	–	20.8	1,961	–	24.1	2,071
Female	2,548	–	14.1	2,594	–	14.0	2,470	–	13.1	3,060	–	16.1	3,191
Other ^j	180	–	12.3	172	–	11.6	161	–	10.6	206	–	13.4	201
Male	108	–	14.3	110	–	14.4	100	–	12.9	124	–	15.8	113
Female	72	–	10.2	62	–	8.6	61	–	8.2	82	–	10.8	87
Region of residence													
Northeast	3,693	7.7	15.7	3,522	7.4	14.9	3,653	7.6	15.3	4,522	9.2	19.0	4,324
Midwest	1,914	3.4	15.9	2,003	3.5	16.2	1,960	3.4	15.6	2,316	4.0	18.0	2,284
South	7,996	7.8	17.5	7,880	7.6	16.8	7,916	7.5	16.4	9,076	8.6	18.5	9,539
West	2,740	4.3	13.8	2,806	4.3	13.7	2,771	4.2	13.2	3,138	4.8	14.7	3,476
Total^k	16,343	6.0	16.2	16,211	5.9	15.7	16,300	5.9	15.4	19,052	6.8	17.8	19,623

Abbreviations: pop, population; PWDH, persons with diagnosed HIV infection; CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Deaths of persons with diagnosed HIV infection may be due to any cause. Data are based on residence at death. When information on residence at death was unavailable, state at death (where a person's death occurred) was used. When information on both residence at death and state at death (where a person's death occurred) are not available, the most recent known address on or before the date of death is used. Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsr/covid19/excess_deaths.htm.

- ^a Denominator was calculated as (No. PWDH at the end of [year X – 1]) + (No. new diagnoses during year X).
- ^b “Transgender woman” includes individuals who were assigned “male” sex at birth but have ever identified as “female” gender.
- “Transgender man” includes individuals who were assigned “female” sex at birth but have ever identified as “male” gender.
- ^c Additional gender identity examples include “bigender,” “gender queer,” and “two-spirit.”
- ^d Includes Asian/Pacific Islander legacy cases (see Technical Notes).
- ^e Hispanic/Latino persons can be of any race.
- ^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.
- ^g Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).
- ^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).
- ⁱ Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.
- ^j Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.
- ^k Includes persons of unknown race/ethnicity.

Table 7b. Deaths (any cause) of persons aged ≥ 13 years with diagnosed HIV infection, by year of death and selected characteristics, 2017–2021—United States and 6 dependent areas

	2017			2018			2019			2020 (COVID-19 pandemic)			2	
	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a		No.
Gender														
Male	12,540	–	16.2	12,392	–	15.7	12,583	–	15.6	14,482	–	17.6	14,942	
Female	4,096	–	16.9	4,061	–	16.5	3,920	–	15.7	4,713	–	18.7	4,824	
Transgender woman ^b	110	–	10.1	119	–	10.3	147	–	12.1	208	–	16.4	216	
Transgender man ^b	5	–	12.3	5	–	11.0	5	–	10.1	10	–	18.8	2	
Additional gender identity ^c	3	–	12.4	1	–	3.8	2	–	6.8	0	–	0.0	1	
Age at death (yr)														
13–24	154	0.3	3.5	134	0.3	3.2	137	0.3	3.4	155	0.3	4.1	110	
25–34	1,068	2.3	6.6	1,054	2.3	6.2	1,118	2.4	6.4	1,266	2.7	7.2	1,373	
35–44	1,883	4.6	9.6	1,822	4.4	9.2	1,851	4.4	9.2	2,128	4.9	10.5	2,290	
45–54	4,598	10.8	14.7	4,272	10.2	14.1	3,757	9.1	13.0	3,939	9.5	14.3	3,854	
≥55	9,051	9.6	29.1	9,296	9.7	27.4	9,794	10.0	26.6	11,925	12.1	30.1	12,358	
Race/ethnicity														
American Indian/Alaska Native	47	–	16.8	49	–	16.7	57	–	18.6	82	–	25.6	80	
Asian ^d	88	–	6.4	83	–	5.7	100	–	6.5	104	–	6.5	125	
Black/African American	7,198	–	17.6	6,981	–	16.7	7,009	–	16.4	8,330	–	19.2	8,405	
Hispanic/Latino ^e	3,098	–	12.7	3,200	–	12.7	3,119	–	12.0	3,807	–	14.3	3,857	
Native Hawaiian/other Pacific Islander	9	–	11.5	16	–	19.2	16	–	18.1	11	–	11.8	14	
White	5,235	–	17.6	5,151	–	17.0	5,258	–	17.2	5,756	–	18.6	6,025	
Multiracial	1,077	–	19.0	1,098	–	19.2	1,094	–	19.0	1,322	–	23.0	1,478	
Transmission category^f														

	2017			2018			2019			2020 (COVID-19 pandemic)			2021	
	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a	No.	Rate per 100,000 population	Rate per 1,000 PWDH ^a		No.
Male-to-male sexual contact ^g	7,081	-	12.6	6,967	-	12.0	7,257	-	12.1	8,319	-	13.6	8,730	
Injection drug use ^h	3,694	-	29.6	3,658	-	29.5	3,555	-	28.9	4,055	-	33.3	3,937	
Male	2,286	-	31.1	2,290	-	31.5	2,209	-	30.7	2,534	-	35.7	2,451	
Female	1,409	-	27.4	1,368	-	26.7	1,345	-	26.4	1,521	-	30.0	1,486	
Male-to-male sexual contact ^g and injection drug use ^h	1,408	-	23.4	1,475	-	24.4	1,420	-	23.5	1,695	-	28.1	1,714	
Heterosexual contact ⁱ	4,387	-	16.5	4,297	-	15.9	4,260	-	15.5	5,134	-	18.4	5,402	
Male	1,768	-	21.8	1,663	-	20.2	1,744	-	20.9	2,015	-	24.0	2,149	
Female	2,620	-	14.2	2,635	-	14.0	2,517	-	13.1	3,119	-	16.0	3,253	
Other ^j	182	-	12.2	181	-	11.9	165	-	10.7	210	-	13.3	202	
Male	109	-	14.2	117	-	15.0	102	-	12.9	127	-	15.9	114	
Female	73	-	10.1	64	-	8.7	63	-	8.3	83	-	10.7	87	
Region of residence														
Northeast	3,693	7.7	15.7	3,522	7.4	14.9	3,653	7.6	15.3	4,522	9.2	19.0	4,324	
Midwest	1,914	3.4	15.9	2,003	3.5	16.2	1,960	3.4	15.6	2,316	4.0	18.0	2,284	
South	7,996	7.8	17.5	7,880	7.6	16.8	7,916	7.5	16.4	9,076	8.6	18.5	9,539	
West	2,740	4.3	13.8	2,806	4.3	13.7	2,771	4.2	13.2	3,138	4.8	14.7	3,476	
U.S. dependent areas	411	12.9	24.3	367	11.8	21.9	357	11.4	21.2	361	11.2	21.5	362	
Total^k	16,754	6.1	16.3	16,578	6.0	15.8	16,657	6.0	15.5	19,413	6.9	17.8	19,985	

Abbreviations: pop, population; PWDH, persons with diagnosed HIV infection; CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Deaths of persons with diagnosed HIV infection may be due to any cause. Data are based on residence at death. When information on residence at death was unavailable, state at death (where a person's death occurred) was used. When information on both residence at death and state at death (where a person's death occurred) are not available, the most recent known address on or before the date of death is used. Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm.

^a Denominator was calculated as (No. PWDH at the end of [year X - 1]) + (No. new diagnoses during year X).

^b "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.

"Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.

^c Additional gender identity examples include "bigender," "gender queer," and "two-spirit."

^d Includes Asian/Pacific Islander legacy cases (see Technical Notes).

^e Hispanic/Latino persons can be of any race.

^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^g Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

ⁱ Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

^j Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^k Includes persons of unknown race/ethnicity.

Table 7c. Deaths (any cause) of persons aged ≥ 13 years with diagnosed HIV infection, by year of death and area of residence, 2017–2021—United States and 6 dependent areas

	2017					2018					2019				
	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWDH ^a	Age-adjusted rate per 1,000 PWDH	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWDH ^a	Age-adjusted rate per 1,000 PWDH	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWDH ^a	
Alabama	261	6.4	6.3	19.7	18.1	236	5.7	5.5	17.3	15.4	271	6.6	6.2	19.2	
Alaska	7	1.2	1.2	9.7	8.6	9	1.5	1.4	12.7	9.4	12	2.0	2.0	16.4	
Arizona	248	4.2	4.0	15.5	13.8	251	4.2	4.0	15.1	12.7	233	3.8	3.7	13.4	
Arkansas	105	4.2	4.1	18.7	17.0	83	3.3	3.4	14.5	12.9	112	4.4	4.3	18.8	
California	1,723	5.2	5.0	13.3	11.1	1,732	5.3	4.9	13.1	10.6	1,764	5.3	5.0	13.1	
Colorado	133	2.8	2.7	10.9	8.5	142	3.0	2.9	11.2	8.5	131	2.7	2.6	10.1	
Connecticut	199	6.5	5.4	18.9	15.1	182	5.9	5.0	17.1	11.7	204	6.7	5.5	18.9	
Delaware	67	8.3	7.0	20.1	13.8	68	8.3	7.1	20.3	14.9	77	9.3	8.6	22.3	
District of Columbia	234	39.1	41.3	16.3	13.3	203	33.6	36.8	14.3	11.5	203	33.5	35.6	14.3	
Florida	2,045	11.4	10.2	18.4	15.0	1,941	10.6	9.4	17.2	13.7	1,996	10.8	9.3	17.3	
Georgia	839	9.7	9.4	15.7	14.8	863	9.9	9.5	15.5	14.3	836	9.4	9.0	14.5	
Hawaii	37	3.1	2.9	15.3	15.7	36	3.0	2.6	15.2	10.4	44	3.7	3.1	18.3	
Idaho	20	1.4	1.4	17.7	13.9	16	1.1	1.1	13.6	9.7	11	0.7	0.7	8.8	
Illinois	507	4.7	4.4	14.4	13.2	559	5.2	4.8	15.5	13.8	550	5.2	4.7	15.2	
Indiana	210	3.8	3.7	18.8	16.9	195	3.5	3.4	16.9	15.0	165	2.9	2.8	14.1	
Iowa	44	1.7	1.7	16.3	13.2	50	1.9	1.8	17.8	14.2	61	2.3	2.0	20.9	
Kansas	47	2.0	1.9	15.4	14.3	51	2.1	2.0	16.3	14.8	57	2.4	2.3	17.8	
Kentucky	139	3.7	3.5	19.6	16.9	136	3.6	3.5	18.5	16.2	109	2.9	2.7	14.3	
Louisiana	411	10.6	10.5	20.0	18.7	429	11.1	10.8	20.4	18.3	380	9.8	9.7	17.7	
Maine	34	2.9	2.3	21.4	15.0	20	1.7	1.5	12.3	8.4	41	3.5	2.9	24.5	
Maryland	603	11.9	10.9	18.2	14.9	635	12.5	11.1	18.8	15.3	614	12.1	10.7	18.1	
Massachusetts	305	5.2	4.6	14.8	11.6	305	5.1	4.6	14.6	10.9	300	5.0	4.5	14.2	
Michigan	276	3.3	3.1	17.4	15.8	313	3.7	3.3	19.3	17.2	277	3.3	3.0	16.5	
Minnesota	91	2.0	1.9	10.9	9.4	85	1.8	1.7	9.9	7.7	83	1.8	1.7	9.4	
Mississippi ^b	218	8.8	8.7	23.2	21.3	229	9.2	9.2	23.9	21.2	192	7.7	7.6	19.5	
Missouri	213	4.2	4.0	17.1	14.6	234	4.6	4.3	18.3	15.6	231	4.5	4.2	17.8	
Montana	15	1.7	1.7	24.1	21.3	13	1.5	1.4	20.2	16.5	13	1.4	1.4	19.4	
Nebraska	33	2.1	2.0	15.4	14.5	31	2.0	1.8	14.2	12.9	33	2.1	2.1	14.7	
Nevada	176	7.1	6.6	18.3	16.5	160	6.3	5.9	15.7	13.7	155	6.0	5.8	14.4	
New Hampshire	21	1.8	1.6	17.6	13.8	18	1.5	1.4	14.3	15.5	18	1.5	1.4	13.7	
New Jersey	646	8.6	7.5	18.5	14.0	635	8.5	7.3	18.1	13.7	626	8.3	7.0	17.6	
New Mexico	62	3.6	3.3	17.9	13.6	76	4.3	4.3	20.7	16.3	57	3.2	3.0	14.9	
New York	1,797	10.8	9.6	14.2	10.8	1,737	10.5	9.2	13.6	10.1	1,807	10.9	9.4	14.2	
North Carolina	552	6.4	5.9	17.7	15.4	532	6.1	5.5	16.5	13.8	508	5.7	5.2	15.2	
North Dakota	3	0.5	0.4	7.2	8.7	8	1.3	1.3	17.5	23.8	5	0.8	0.8	10.0	
Ohio	380	3.9	3.7	17.2	15.7	373	3.8	3.6	16.5	14.2	399	4.0	3.8	17.0	
Oklahoma	108	3.3	3.4	17.7	16.9	117	3.6	3.4	18.7	17.3	144	4.4	4.2	22.1	

	2017					2018					2019				
	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWDH ^a	Age-adjusted rate per 1,000 PWDH	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWDH ^a	Age-adjusted rate per 1,000 PWDH	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWDH ^a	
Oregon	116	3.3	3.0	16.7	12.6	106	3.0	2.7	14.9	12.6	129	3.6	3.3	17.5	
Pennsylvania	645	5.9	5.3	18.1	14.6	573	5.2	4.7	15.8	12.6	603	5.5	4.9	16.3	
Rhode Island	34	3.7	3.3	13.2	9.8	41	4.5	4.0	15.6	10.9	41	4.5	3.7	15.2	
South Carolina	338	8.0	7.2	20.2	17.7	316	7.4	6.9	18.4	15.6	313	7.2	6.5	17.7	
South Dakota	9	1.3	1.3	15.5	12.5	13	1.8	1.9	20.9	16.3	11	1.5	1.7	16.7	
Tennessee	334	5.9	5.6	19.6	18.2	359	6.3	6.0	20.3	18.2	315	5.5	5.2	17.4	
Texas	1,413	6.1	6.2	15.8	15.1	1,379	5.9	5.9	14.8	14.0	1,472	6.2	6.2	15.3	
Utah	22	0.9	1.0	7.9	8.4	45	1.8	2.0	15.1	13.3	37	1.5	1.5	11.8	
Vermont	12	2.2	1.9	17.4	11.6	11	2.0	1.5	15.6	9.4	13	2.4	2.1	18.1	
Virginia	298	4.2	3.8	13.2	10.9	308	4.3	4.0	13.3	11.3	327	4.5	4.1	13.7	
Washington	176	2.8	2.6	13.3	10.5	213	3.4	3.1	15.5	12.0	180	2.8	2.6	12.8	
West Virginia ^b	31	2.0	1.8	16.9	13.9	46	3.0	2.7	23.6	20.5	47	3.1	2.8	22.9	
Wisconsin	101	2.1	1.9	16.3	12.9	91	1.9	1.7	14.4	12.1	88	1.8	1.6	13.5	
Wyoming	5	1.0	0.9	15.1	25.3	7	1.5	1.4	19.7	15.3	5	1.0	0.8	14.2	
Subtotal	16,343	6.0	5.6	16.2	13.7	16,211	5.9	5.5	15.7	13.0	16,300	5.9	5.4	15.4	
U.S. dependent area															
American Samoa	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	2	5.5	6.6	666.7	
Guam ^b	0	0.0	0.0	0.0	0.0	4	3.1	3.7	37.4	38.6	4	3.1	3.2	34.8	
Northern Mariana Islands	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	
Puerto Rico	405	14.0	13.1	24.9	19.4	359	12.8	11.6	22.3	18.6	351	12.5	11.9	21.7	
Republic of Palau	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	
U.S. Virgin Islands ^b	6	6.8	6.5	11.1	8.6	4	4.5	3.1	7.2	4.6	0	0.0	0.0	0.0	
Subtotal	411	12.9	12.0	24.3	18.9	367	11.8	10.8	21.9	18.3	357	11.4	10.9	21.2	
Total	16,754	6.1	5.7	16.3	13.8	16,578	6.0	5.5	15.8	13.1	16,657	6.0	5.5	15.5	

	2020 (COVID-19 pandemic)					2021				
	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWDH ^a	Age-adjusted rate per 1,000 PWDH	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWDH ^a	Age-adjusted rate per 1,000 PWDH
Alabama	288	6.8	6.4	20.0	17.9	331	7.8	7.1	22.4	18.9
Alaska	16	2.7	2.6	21.5	17.3	18	3.0	3.0	23.5	18.8
Arizona	286	4.7	4.5	16.0	13.2	339	5.5	5.1	18.3	14.9
Arkansas	109	4.3	4.1	17.9	16.5	124	4.9	4.7	19.5	16.9
California	1,982	6.0	5.5	14.5	11.5	2,149	6.5	6.0	15.5	12.0
Colorado	176	3.6	3.5	13.2	10.4	185	3.7	3.5	13.6	11.6
Connecticut	216	7.0	5.8	20.0	13.3	209	6.7	5.5	19.3	13.3
Delaware	75	8.9	7.7	21.4	19.1	75	8.8	6.9	20.9	14.2
District of Columbia	264	44.7	46.6	18.8	13.5	265	46.3	48.4	19.1	15.0
Florida	2,251	12.1	10.4	19.2	14.9	2,429	12.9	11.0	20.3	15.4

	2020 (COVID-19 pandemic)					2021				
	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWDH ^a	Age-adjusted rate per 1,000 PWDH	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWDH ^a	Age-adjusted rate per 1,000 PWDH
Georgia	919	10.3	9.8	15.6	14.1	967	10.7	10.0	16.0	14.0
Hawaii	39	3.2	2.8	16.2	16.4	48	3.9	3.3	19.7	12.7
Idaho	21	1.4	1.2	16.3	11.0	19	1.2	1.1	14.3	10.9
Illinois	709	6.6	5.9	19.5	16.6	609	5.7	5.2	16.8	13.8
Indiana	222	3.9	3.7	18.4	15.2	228	4.0	3.7	18.1	16.2
Iowa	63	2.4	2.3	21.1	17.2	44	1.6	1.4	14.2	11.1
Kansas	62	2.5	2.4	18.4	14.8	63	2.6	2.4	17.7	14.2
Kentucky	159	4.2	4.1	19.9	17.7	152	4.0	3.8	18.3	15.6
Louisiana	467	12.1	11.7	21.5	19.5	501	13.0	12.6	22.7	19.6
Maine	25	2.1	1.7	15.0	9.3	44	3.7	2.7	25.3	15.9
Maryland	657	12.7	11.3	19.3	15.5	692	13.3	11.8	20.3	15.5
Massachusetts	313	5.2	4.5	14.7	10.3	340	5.6	4.9	15.8	10.8
Michigan	350	4.1	3.7	20.4	17.4	295	3.5	3.1	16.8	14.2
Minnesota	96	2.0	1.7	10.6	9.1	107	2.2	2.1	11.5	9.6
Mississippi ^b	244	9.9	9.2	24.6	21.4	197	8.0	7.7	19.6	16.6
Missouri	247	4.8	4.4	18.9	15.9	278	5.4	4.9	20.8	17.2
Montana	6	0.7	0.7	8.7	17.4	13	1.4	1.3	17.7	14.3
Nebraska	27	1.7	1.6	11.5	9.4	39	2.4	2.2	16.1	13.1
Nevada	179	6.8	6.3	16.1	13.6	207	7.8	7.3	17.8	14.5
New Hampshire	20	1.7	1.4	15.0	11.2	22	1.8	1.5	15.9	9.8
New Jersey	724	9.2	7.8	20.3	15.0	723	9.2	7.8	20.1	14.7
New Mexico	88	4.9	4.6	22.1	16.9	83	4.6	4.5	20.2	16.5
New York	2,443	14.3	12.2	19.2	14.0	2,211	13.1	11.1	17.4	12.3
North Carolina	657	7.4	6.6	19.2	16.1	654	7.3	6.6	18.7	15.2
North Dakota	8	1.2	1.2	15.2	14.1	6	0.9	0.8	11.0	10.9
Ohio	422	4.2	3.9	17.6	15.1	511	5.1	4.7	20.8	17.3
Oklahoma	156	4.8	4.5	23.1	19.9	147	4.4	4.4	20.7	17.5
Oregon	126	3.5	3.0	16.9	13.0	141	3.9	3.4	18.5	13.0
Pennsylvania	718	6.5	5.6	19.3	15.1	721	6.5	5.6	19.2	14.2
Rhode Island	50	5.3	4.6	18.4	12.5	42	4.4	3.7	15.2	10.0
South Carolina	375	8.6	7.7	20.7	16.6	411	9.3	8.2	22.2	17.9
South Dakota	6	0.8	0.9	8.6	6.5	15	2.0	2.1	20.4	15.5
Tennessee	441	7.6	7.1	23.5	21.0	439	7.5	7.1	22.9	19.4
Texas	1,565	6.5	6.5	15.8	14.2	1,748	7.2	7.1	17.1	15.2
Utah	30	1.1	1.3	9.1	7.3	43	1.6	1.8	12.3	9.8
Vermont	13	2.3	1.9	18.1	13.4	12	2.1	1.9	16.2	12.5
Virginia	398	5.5	5.0	16.4	13.4	351	4.8	4.3	14.2	11.3
Washington	182	2.8	2.6	12.6	10.7	228	3.5	3.2	15.4	11.9
West Virginia ^b	51	3.3	3.4	23.5	20.1	56	3.7	3.5	24.9	22.9
Wisconsin	104	2.1	1.9	15.5	11.7	89	1.8	1.6	12.9	10.5
Wyoming	7	1.4	1.3	19.3	15.0	3	0.6	0.7	7.9	6.2
Subtotal	19,052	6.8	6.2	17.8	14.4	19,623	7.0	6.3	18.0	14.2
U.S. dependent area										

	2020 (COVID-19 pandemic)					2021				
	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWDH ^a	Age-adjusted rate per 1,000 PWDH	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWDH ^a	Age-adjusted rate per 1,000 PWDH
American Samoa	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Guam ^b	1	0.8	0.8	9.1	6.6	0	0.0	0.0	0.0	0.0
Northern Mariana Islands	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Puerto Rico	353	12.1	10.9	22.0	16.9	359	12.3	10.7	22.2	16.3
Republic of Palau	1	5.5	6.0	100	87.5	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands ^b	6	6.8	6.1	10.7	8.6	3	3.4	2.2	5.3	2.9
Subtotal	361	11.2	10.1	21.5	16.6	362	11.2	9.8	21.5	15.7
Total	19,413	6.9	6.2	17.8	14.4	19,985	7.1	6.4	18.0	14.2

Abbreviations: PWDH, persons with diagnosed HIV infection; pop, population; CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Deaths of persons with diagnosed HIV infection may be due to any cause. Data are based on residence at death. When information on residence at death was unavailable, state at death (where a person's death occurred) was used. When information on both residence at death and state at death (where a person's death occurred) are not available, the most recent known address on or before the date of death is used. Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm.

^a Denominator was calculated as (No. PWDH at the end of [year X – 1]) + (No. new diagnoses during year X).

^b Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2021.

Table 7d. Deaths (any cause) of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and selected characteristics, 2017–2021—United States

	2017			2018			2019			2020 (COVID-19 pandemic)			2021	
	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population
Gender														
Male	9,655	–	24.0	9,448	–	23.3	9,449	–	23.1	10,832	–	26.4	11,051	–
Female	3,090	–	24.4	3,115	–	24.4	2,925	–	22.8	3,470	–	26.9	3,565	–
Transgender woman ^b	77	–	15.3	88	–	16.8	105	–	19.5	151	–	27.4	141	–
Transgender man ^b	4	–	22.7	2	–	11.2	3	–	16.0	6	–	31.9	2	–
Additional gender identity ^c	3	–	31.6	1	–	10.4	2	–	20.4	0	–	0.0	0	–
Age at death (yr)														
13–24	89	0.2	10.8	77	0.2	10.5	72	0.1	11.2	74	0.1	13.2	48	0.1
25–34	710	1.6	14.2	722	1.6	14.5	714	1.6	14.5	755	1.7	15.7	787	1.7
35–44	1,403	3.4	15.3	1,341	3.3	15.1	1,296	3.1	14.8	1,487	3.5	17.4	1,502	3.5
45–54	3,615	8.6	19.6	3,371	8.1	19.2	2,892	7.1	17.5	3,034	7.4	19.7	2,923	7.4
≥55	7,012	7.6	35.1	7,143	7.6	32.9	7,510	7.8	32.1	9,109	9.3	36.3	9,499	9.6
Race/ethnicity														

	2017			2018			2019			2020 (COVID-19 pandemic)			2021	
	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population
American Indian/Alaska Native	36	1.8	26.0	35	1.8	24.9	44	2.2	30.7	56	2.8	38.2	54	2.6
Asian ^d	67	0.4	10.7	64	0.4	9.8	76	0.5	11.3	77	0.5	11.1	104	0.6
Black/African American	5,641	16.9	26.2	5,451	16.2	25.1	5,365	15.8	24.5	6,277	18.2	28.5	6,273	18.7
Hispanic/Latino ^e	2,242	5.0	18.0	2,307	5.0	18.2	2,227	4.7	17.4	2,740	5.7	21.1	2,771	5.6
Native Hawaiian/other Pacific Islander	8	1.7	21.4	9	1.9	23.4	12	2.4	30.3	10	2.0	25.2	11	2.7
White	3,940	2.3	25.6	3,881	2.3	25.2	3,860	2.3	25.1	4,223	2.5	27.5	4,375	2.5
Multiracial	895	19.7	27.5	907	19.3	27.9	899	18.5	27.7	1,076	21.2	33.3	1,171	22.4
Transmission category^f														
Male-to-male sexual contact ^g	5,432	-	20.0	5,241	-	19.0	5,404	-	19.3	6,175	-	21.9	6,398	-
Injection drug use ^h	2,844	-	36.6	2,775	-	36.3	2,643	-	35.1	3,037	-	41.0	2,937	-
Male	1,752	-	37.4	1,724	-	37.5	1,632	-	36.1	1,882	-	42.6	1,814	-
Female	1,092	-	35.5	1,051	-	34.5	1,012	-	33.5	1,154	-	38.7	1,123	-
Male-to-male sexual contact ^g and injection drug use ^h	1,145	-	31.3	1,227	-	33.8	1,130	-	31.5	1,328	-	37.4	1,292	-
Heterosexual contact ⁱ	3,255	-	23.2	3,266	-	23.0	3,167	-	22.1	3,734	-	25.9	3,963	-
Male	1,318	-	27.5	1,251	-	25.9	1,305	-	26.7	1,489	-	30.5	1,596	-
Female	1,937	-	21.0	2,015	-	21.6	1,861	-	19.7	2,245	-	23.6	2,367	-
Other ^j	152	-	17.8	146	-	17.0	140	-	16.3	185	-	21.5	169	-
Male	87	-	19.3	94	-	20.7	86	-	18.9	109	-	24.0	92	-
Female	64	-	16.2	52	-	12.9	55	-	13.4	76	-	18.7	77	-
Region of residence														
Northeast	2,881	6.0	21.7	2,750	5.7	20.8	2,849	6.0	21.6	3,484	7.1	26.7	3,318	6.8
Midwest	1,446	2.5	24.0	1,532	2.7	25.1	1,447	2.5	23.5	1,733	3.0	27.9	1,669	2.9
South	6,264	6.1	26.6	6,094	5.8	25.6	6,022	5.7	24.9	6,804	6.4	27.9	7,124	6.7
West	2,238	3.5	21.1	2,278	3.5	21.3	2,166	3.3	20.1	2,438	3.7	22.6	2,648	4.0
Population area of residence														
Metropolitan statistical areas (pop. ≥500,000)	8,356	4.5	19.2	8,117	4.3	18.6	8,367	4.4	18.8	9,444	4.9	21.2	9,587	5.0
Metropolitan areas (pop. 50,000-499,999)	1,154	2.4	23.1	1,150	2.4	22.6	1,193	2.5	22.7	1,247	2.6	23.6	1,344	2.8
Nonmetropolitan areas (pop. <50,000)	758	2.0	25.4	670	1.7	22.3	734	1.9	23.9	806	2.1	26.0	856	2.7
Total^k	12,829	4.7	24.0	12,654	4.6	23.5	12,484	4.5	23.0	14,459	5.2	26.6	14,759	5.3

Abbreviations: pop, population; PWA, persons with diagnosed HIV infection ever classified as stage 3 (AIDS); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Deaths of persons with diagnosed HIV infection may be due to any cause. Data are based on residence at death. When information on residence at death was unavailable, state at death (where a person's death occurred) was used. When information on both residence at death and state at death (where a person's death occurred) are not available, the most recent known address on or before the date of death is used. Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm.

- ^a Denominator was calculated as (No. PWA at the end of [year X – 1]) + (No. new diagnoses during year X).
- ^b "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.
- "Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.
- ^c Additional gender identity examples include "bigender," "gender queer," and "two-spirit."
- ^d Includes Asian/Pacific Islander legacy cases (see Technical Notes).
- ^e Hispanic/Latino persons can be of any race.
- ^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.
- ^g Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).
- ^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).
- ⁱ Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.
- ^j Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.
- ^k Includes persons of unknown race/ethnicity.

Table 7e. Deaths (any cause) of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and selected characteristics, 2017–2021—United States and 6 dependent areas

	2017			2018			2019			2020 (COVID-19 pandemic)			2021	
	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population
Gender														
Male	9,861	-	24.1	9,645	-	23.4	9,641	-	23.2	11,024	-	26.5	11,233	-
Female	3,163	-	24.4	3,163	-	24.3	2,980	-	22.7	3,523	-	26.8	3,617	-
Transgender woman ^b	79	-	15.6	89	-	17.0	107	-	19.8	152	-	27.5	141	-
Transgender man ^b	4	-	22.6	2	-	11.1	3	-	15.9	6	-	31.7	2	-
Additional gender identity ^c	3	-	31.6	1	-	10.4	2	-	20.4	0	-	0.0	0	-
Age at death (yr)														
13–24	91	0.2	10.9	81	0.2	10.9	73	0.1	11.3	74	0.1	13.1	49	0.1
25–34	724	1.6	14.4	735	1.6	14.7	723	1.6	14.5	760	1.6	15.6	792	1.7
35–44	1,438	3.5	15.5	1,374	3.3	15.2	1,325	3.1	15.0	1,520	3.5	17.6	1,526	3.5
45–54	3,701	8.7	19.7	3,430	8.2	19.2	2,974	7.2	17.7	3,089	7.4	19.7	2,971	7.2
≥55	7,156	7.6	35.1	7,280	7.6	32.9	7,638	7.8	32.0	9,262	9.4	36.2	9,655	9.7
Race/ethnicity														
American Indian/Alaska Native	36	-	26.0	35	-	24.9	44	-	30.7	56	-	38.1	54	-
Asian ^d	67	-	10.6	64	-	9.8	76	-	11.2	78	-	11.2	104	-
Black/African American	5,644	-	26.2	5,451	-	25.1	5,365	-	24.4	6,279	-	28.5	6,273	-

	2017			2018			2019			2020 (COVID-19 pandemic)			2021	
	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population	Rate per 1,000 PWA ^a	No.	Rate per 100,000 population
Hispanic/Latino ^e	2,520	-	18.9	2,549	-	18.8	2,470	-	18.0	2,982	-	21.6	3,005	-
Native Hawaiian/other Pacific Islander	8	-	20.5	11	-	27.2	14	-	33.7	10	-	24.2	11	-
White	3,940	-	25.6	3,882	-	25.2	3,861	-	25.1	4,224	-	27.5	4,375	-
Multiracial	895	-	27.5	908	-	27.9	902	-	27.8	1,076	-	33.3	1,171	-
Transmission category^f														
Male-to-male sexual contact ^g	5,483	-	20.0	5,292	-	19.0	5,460	-	19.4	6,232	-	21.9	6,439	-
Injection drug use ^h	2,954	-	36.7	2,879	-	36.3	2,746	-	35.2	3,127	-	40.8	3,022	-
Male	1,841	-	37.6	1,805	-	37.5	1,714	-	36.3	1,957	-	42.3	1,888	-
Female	1,113	-	35.4	1,073	-	34.5	1,032	-	33.5	1,169	-	38.5	1,134	-
Male-to-male sexual contact ^g and injection drug use ^h	1,164	-	31.3	1,244	-	33.8	1,146	-	31.5	1,349	-	37.5	1,307	-
Heterosexual contact ⁱ	3,355	-	23.4	3,332	-	23.0	3,238	-	22.1	3,811	-	25.8	4,055	-
Male	1,366	-	27.7	1,293	-	26.0	1,342	-	26.8	1,528	-	30.4	1,647	-
Female	1,989	-	21.1	2,039	-	21.4	1,895	-	19.7	2,283	-	23.5	2,408	-
Other ^j	154	-	17.7	154	-	17.6	143	-	16.3	186	-	21.2	170	-
Male	88	-	19.1	100	-	21.6	88	-	18.9	110	-	23.8	93	-
Female	65	-	16.1	54	-	13.1	56	-	13.4	76	-	18.3	77	-
Region of residence														
Northeast	2,881	6.0	21.7	2,750	5.7	20.8	2,849	6.0	21.6	3,484	7.1	26.7	3,318	6.8
Midwest	1,446	2.5	24.0	1,532	2.7	25.1	1,447	2.5	23.5	1,733	3.0	27.9	1,669	2.9
South	6,264	6.1	26.6	6,094	5.8	25.6	6,022	5.7	24.9	6,804	6.4	27.9	7,124	6.7
West	2,238	3.5	21.1	2,278	3.5	21.3	2,166	3.3	20.1	2,438	3.7	22.6	2,648	4.0
U.S. dependent areas	281	8.8	30.8	246	7.9	27.4	249	8.0	27.7	246	7.6	27.6	234	7.3
Total^k	13,110	4.8	24.1	12,900	4.7	23.6	12,733	4.6	23.1	14,705	5.2	26.6	14,993	5.3

Abbreviations: pop, population; PWA, persons with diagnosed HIV infection ever classified as stage 3 (AIDS); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Deaths of persons with diagnosed HIV infection may be due to any cause. Data are based on residence at death. When information on residence at death was unavailable, state at death (where a person's death occurred) was used. When information on both residence at death and state at death (where a person's death occurred) are not available, the most recent known address on or before the date of death is used. Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm.

^a Denominator was calculated as (No. PWA at the end of [year X - 1]) + (No. new diagnoses during year X).

^b "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.

^c "Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.

^d Additional gender identity examples include "bigender," "gender queer," and "two-spirit."

^e Includes Asian/Pacific Islander legacy cases (see Technical Notes).

^f Hispanic/Latino persons can be of any race.

^g Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is

determined based on the person's assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^a Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^b Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

ⁱ Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

^j Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^k Includes persons of unknown race/ethnicity.

Table 7f. Deaths (any cause) of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2017–2021—United States and 6 dependent areas

	2017					2018					2019				
	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWA ^a	Age-adjusted rate per 1,000 PWA	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWA ^a	Age-adjusted rate per 1,000 PWA	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWA ^a	Age-adjusted rate per 1,000 PWA
Alabama	199	4.9	4.8	33.6	28.4	169	4.1	3.9	27.9	24.6	171	4.1	4.0	27.6	27.6
Alaska	4	0.7	0.7	10.2	7.6	8	1.3	1.2	20.9	13.4	9	1.5	1.4	23.7	18.8
Arizona	195	3.3	3.1	25.3	26.0	200	3.3	3.2	25.4	22.9	170	2.8	2.7	21.1	19.4
Arkansas	79	3.2	3.1	30.5	25.6	62	2.5	2.5	23.8	20.7	79	3.1	3.0	29.2	30.1
California	1,433	4.4	4.2	20.2	17.3	1,412	4.3	4.0	19.9	17.3	1,383	4.2	3.9	19.4	19.4
Colorado	107	2.3	2.2	19.9	18.9	115	2.4	2.3	20.9	15.0	100	2.1	2.0	17.9	17.9
Connecticut	160	5.2	4.3	24.6	23.0	147	4.8	4.0	22.6	14.0	168	5.5	4.5	25.8	17.9
Delaware	58	7.1	6.0	28.3	18.0	54	6.6	5.6	26.6	18.1	64	7.7	7.4	30.9	27.2
District of Columbia	161	26.9	28.4	21.0	18.1	156	25.8	28.1	20.3	19.2	148	24.4	26.2	19.6	13.2
Florida	1,643	9.1	8.2	27.2	21.9	1,537	8.4	7.4	25.4	20.1	1,558	8.4	7.2	25.5	20.1
Georgia	655	7.6	7.3	23.9	21.6	662	7.6	7.3	23.6	20.1	642	7.3	6.9	22.5	19.4
Hawaii	31	2.6	2.5	22.0	36.3	31	2.6	2.2	22.7	15.5	39	3.3	2.7	28.6	27.2
Idaho	15	1.1	1.1	26.6	20.2	13	0.9	0.9	22.4	14.9	11	0.7	0.7	17.7	17.7
Illinois	381	3.6	3.3	21.4	19.2	429	4.0	3.7	23.9	20.2	413	3.9	3.5	23.2	19.4
Indiana	164	3.0	2.8	29.2	26.2	144	2.6	2.5	25.1	23.5	131	2.3	2.2	22.8	16.8
Iowa	30	1.1	1.2	19.9	13.9	37	1.4	1.3	24.1	16.2	45	1.7	1.5	29.3	20.1
Kansas	37	1.5	1.5	23.3	25.7	40	1.7	1.5	24.7	26.7	42	1.7	1.7	26.0	27.2
Kentucky	108	2.9	2.7	30.4	23.3	101	2.7	2.6	28.4	25.1	84	2.2	2.1	23.2	18.8
Louisiana	313	8.1	8.0	29.2	28.6	330	8.5	8.3	30.5	26.0	298	7.7	7.6	27.2	26.0
Maine	24	2.1	1.7	29.7	22.9	16	1.4	1.3	19.4	13.9	32	2.7	2.3	38.1	34.1
Maryland	476	9.4	8.6	26.7	19.7	502	9.9	8.8	28.0	21.9	459	9.0	8.0	25.8	19.4
Massachusetts	232	3.9	3.4	20.3	13.0	230	3.9	3.4	20.2	13.4	224	3.8	3.3	19.7	14.4
Michigan	225	2.7	2.5	27.4	23.3	242	2.9	2.5	29.2	24.8	217	2.6	2.2	25.8	22.2
Minnesota	70	1.5	1.4	18.0	14.7	66	1.4	1.3	16.7	12.1	58	1.2	1.2	14.5	14.4
Mississippi ^b	173	7.0	7.0	36.8	31.8	187	7.5	7.6	39.3	34.5	135	5.4	5.4	28.1	27.2
Missouri	154	3.0	2.9	23.9	18.4	179	3.5	3.2	27.4	23.6	168	3.3	3.0	25.6	26.0
Montana	13	1.5	1.4	37.7	37.5	10	1.1	1.0	28.4	21.3	9	1.0	1.0	26.2	18.8
Nebraska	23	1.5	1.4	21.5	17.2	24	1.5	1.4	22.3	17.3	17	1.1	1.1	15.6	10.0
Nevada	138	5.6	5.2	29.4	29.6	135	5.3	4.9	27.7	24.7	119	4.6	4.4	23.6	27.2

	2017					2018					2019				
	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWA ^a	Age-adjusted rate per 1,000 PWA	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWA ^a	Age-adjusted rate per 1,000 PWA	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWA ^a	Age-adjusted rate per 1,000 PWA
New Hampshire	15	1.3	1.1	24.6	19.0	15	1.3	1.2	24.0	14.2	14	1.2	1.1	22.0	13.0
New Jersey	475	6.3	5.5	26.0	18.8	471	6.3	5.4	25.9	22.1	474	6.3	5.3	26.2	19.0
New Mexico	49	2.8	2.5	25.7	16.6	53	3.0	3.0	26.9	23.5	38	2.2	2.0	18.9	14.0
New York	1,468	8.8	7.8	19.9	15.0	1,409	8.5	7.4	19.2	13.3	1,448	8.7	7.5	20.0	14.0
North Carolina	392	4.5	4.2	27.7	23.7	363	4.1	3.8	25.0	19.3	355	4.0	3.7	23.8	19.0
North Dakota	3	0.5	0.4	15.2	14.3	6	1.0	0.9	28.8	24.4	5	0.8	0.8	22.1	17.0
Ohio	279	2.8	2.7	26.3	22.7	289	2.9	2.8	26.8	23.1	277	2.8	2.6	24.9	23.0
Oklahoma	82	2.5	2.6	27.5	25.2	86	2.6	2.5	28.2	32.7	120	3.7	3.5	38.6	37.0
Oregon	85	2.4	2.2	21.6	14.2	89	2.5	2.3	22.4	15.7	105	2.9	2.7	25.9	19.0
Pennsylvania	474	4.3	3.9	24.1	18.9	422	3.9	3.4	21.3	14.9	444	4.1	3.5	22.2	19.0
Rhode Island	28	3.1	2.6	19.4	14.3	32	3.5	3.1	22.0	13.7	35	3.8	3.0	24.0	19.0
South Carolina	263	6.2	5.6	28.9	23.3	240	5.6	5.3	26.0	19.7	232	5.3	4.8	24.8	18.0
South Dakota	3	0.4	0.5	11.2	8.0	11	1.5	1.6	37.8	32.8	8	1.1	1.2	26.1	16.0
Tennessee	259	4.6	4.4	30.4	27.2	275	4.8	4.6	31.4	27.1	246	4.3	4.1	27.9	27.0
Texas	1,147	5.0	5.0	25.0	23.5	1,108	4.8	4.8	23.7	22.7	1,143	4.8	4.8	24.0	27.0
Utah	19	0.8	0.8	13.5	9.5	35	1.4	1.6	23.8	37.8	31	1.2	1.3	20.8	19.0
Vermont	5	0.9	0.8	13.6	11.2	8	1.5	1.1	21.1	11.2	10	1.8	1.6	26.6	17.0
Virginia	231	3.2	2.9	21.3	18.0	225	3.1	2.9	20.3	17.9	255	3.5	3.2	22.5	18.0
Washington	145	2.3	2.2	20.3	14.7	170	2.7	2.5	23.4	16.7	148	2.3	2.1	20.2	18.0
West Virginia ^b	25	1.6	1.5	24.6	19.0	37	2.4	2.1	35.5	36.1	33	2.1	1.8	31.4	27.0
Wisconsin	77	1.6	1.5	25.2	18.0	65	1.3	1.2	21.2	17.4	66	1.3	1.2	21.0	19.0
Wyoming	4	0.8	0.7	22.3	51.7	7	1.5	1.4	38.7	25.6	4	0.8	0.6	22.0	17.0
Subtotal	12,829	4.7	4.4	24.0	20.1	12,654	4.6	4.3	23.5	19.4	12,484	4.5	4.1	23.0	19.0
U.S. dependent area															
American Samoa	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	2	5.5	6.6	1,000	36.0
Guam ^b	0	0.0	0.0	0.0	0.0	3	2.4	3.0	66.7	84.1	4	3.1	3.2	88.9	53.0
Northern Mariana Islands	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	(
Puerto Rico	277	9.6	8.9	31.5	28.9	241	8.6	7.8	27.9	32.1	243	8.6	8.0	28.2	24.0
Republic of Palau	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	(
U.S. Virgin Islands ^b	4	4.5	4.0	13.8	10.4	2	2.3	1.5	6.8	3.7	0	0.0	0.0	0.0	(
Subtotal	281	8.8	8.2	30.8	28.2	246	7.9	7.2	27.4	31.4	249	8.0	7.4	27.7	24.0
Total	13,110	4.8	4.4	24.1	20.2	12,900	4.7	4.3	23.6	19.5	12,733	4.6	4.2	23.1	19.0

	2020 (COVID-19 pandemic)					2021				
	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWA ^a	Age-adjusted rate per 1,000 PWA	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWA ^a	Age-adjusted rate per 1,000 PWA
Alabama	183	4.3	4.1	29.0	25.1	228	5.4	4.9	35.6	26.4
Alaska	11	1.8	1.8	28.9	22.3	16	2.7	2.6	41.7	32.6

	2020 (COVID-19 pandemic)					2021				
	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWA ^a	Age-adjusted rate per 1,000 PWA	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWA ^a	Age-adjusted rate per 1,000 PWA
Arizona	204	3.4	3.1	24.8	21.0	258	4.2	3.8	30.7	23.9
Arkansas	77	3.1	2.8	27.9	25.5	90	3.6	3.2	31.9	27.4
California	1,572	4.7	4.4	22.1	18.3	1,640	5.0	4.5	23.1	18.3
Colorado	120	2.5	2.4	21.2	19.4	145	2.9	2.7	25.6	21.7
Connecticut	166	5.4	4.5	25.7	16.5	156	5.0	4.0	24.4	22.0
Delaware	57	6.8	5.8	27.3	27.6	58	6.8	5.0	27.1	16.9
District of Columbia	197	33.4	35.3	26.5	17.7	199	34.8	36.5	26.8	17.7
Florida	1,767	9.5	8.2	28.9	22.9	1,866	9.9	8.3	30.3	24.0
Georgia	721	8.1	7.7	24.8	22.5	731	8.1	7.5	24.8	20.5
Hawaii	29	2.4	2.1	21.5	16.7	41	3.4	2.8	30.6	18.1
Idaho	12	0.8	0.7	19.0	11.7	12	0.8	0.7	18.9	11.3
Illinois	534	5.0	4.5	30.0	23.9	446	4.2	3.8	25.4	20.6
Indiana	152	2.7	2.5	26.0	19.0	164	2.9	2.7	27.2	28.9
Iowa	50	1.9	1.8	32.5	25.3	33	1.2	1.0	21.3	15.4
Kansas	46	1.9	1.7	27.2	18.5	44	1.8	1.6	25.1	17.8
Kentucky	118	3.1	3.1	31.6	29.6	100	2.6	2.5	26.3	19.8
Louisiana	338	8.7	8.5	30.8	26.6	360	9.3	9.0	32.7	26.8
Maine	18	1.5	1.1	21.5	11.8	30	2.5	1.9	34.3	20.5
Maryland	496	9.6	8.5	27.9	21.3	514	9.9	8.7	29.1	20.0
Massachusetts	234	3.9	3.3	20.7	13.5	240	4.0	3.4	21.3	13.8
Michigan	260	3.0	2.7	30.7	27.8	221	2.6	2.3	25.9	20.6
Minnesota	69	1.4	1.2	17.0	12.4	69	1.4	1.3	16.8	15.9
Mississippi ^b	173	7.0	6.7	35.9	31.8	139	5.6	5.3	28.8	21.7
Missouri	189	3.7	3.3	28.8	26.3	212	4.1	3.6	32.2	29.4
Montana	4	0.4	0.4	11.3	6.0	8	0.9	0.8	21.3	13.5
Nebraska	23	1.4	1.4	20.1	15.8	30	1.9	1.7	25.7	21.9
Nevada	148	5.7	5.1	28.6	25.1	166	6.3	5.8	31.3	23.7
New Hampshire	14	1.2	0.8	21.8	14.9	15	1.2	1.1	22.6	13.8
New Jersey	527	6.7	5.7	29.3	22.3	541	6.9	5.8	30.3	21.8
New Mexico	62	3.5	3.2	30.3	19.5	56	3.1	2.9	27.1	22.6
New York	1,956	11.4	9.7	27.3	20.3	1,768	10.5	8.8	25.1	18.1
North Carolina	442	5.0	4.4	29.1	22.8	445	5.0	4.5	29.0	21.8
North Dakota	7	1.1	1.0	28.9	25.6	6	0.9	0.8	25.1	19.2
Ohio	322	3.2	2.9	28.6	25.4	369	3.7	3.4	32.4	26.7
Oklahoma	122	3.7	3.5	38.4	34.5	105	3.2	3.1	32.7	29.7
Oregon	101	2.8	2.4	25.4	21.4	114	3.1	2.7	28.7	19.0
Pennsylvania	519	4.7	4.0	26.1	18.3	532	4.8	4.1	26.7	17.6
Rhode Island	41	4.3	3.6	28.4	16.3	29	3.1	2.3	20.2	10.0
South Carolina	283	6.5	5.9	29.9	24.4	319	7.2	6.3	33.2	28.4
South Dakota	3	0.4	0.5	9.8	6.7	14	1.9	2.0	41.3	25.6
Tennessee	305	5.2	4.9	33.7	30.7	317	5.4	5.1	35.0	26.8
Texas	1,197	5.0	4.9	24.8	21.4	1,346	5.6	5.5	27.5	22.7
Utah	22	0.8	0.9	14.4	10.5	30	1.1	1.2	18.8	13.0

	2020 (COVID-19 pandemic)					2021				
	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWA ^a	Age-adjusted rate per 1,000 PWA	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PWA ^a	Age-adjusted rate per 1,000 PWA
Vermont	9	1.6	1.4	23.7	23.9	7	1.2	1.0	18.2	9.4
Virginia	295	4.1	3.6	25.7	21.3	269	3.7	3.3	23.0	18.4
Washington	146	2.2	2.1	19.9	16.9	159	2.4	2.2	21.4	18.0
West Virginia ^b	33	2.1	2.0	31.0	27.6	38	2.5	2.1	34.9	24.5
Wisconsin	78	1.6	1.4	24.4	16.5	61	1.2	1.1	19.1	13.0
Wyoming	7	1.4	1.3	37.4	28.5	3	0.6	0.7	15.9	12.7
Subtotal	14,459	5.2	4.7	26.6	21.6	14,759	5.3	4.7	27.0	21.0
U.S. dependent area										
American Samoa	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Guam ^b	1	0.8	0.8	23.8	13.8	0	0.0	0.0	0.0	0.0
Northern Mariana Islands	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Puerto Rico	240	8.3	7.3	28.1	21.0	233	8.0	6.8	27.4	24.5
Republic of Palau	1	5.5	6.0	166.7	87.5	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands ^b	4	4.6	4.7	13.6	15.1	1	1.1	0.7	3.4	1.6
Subtotal	246	7.6	6.8	27.6	20.7	234	7.3	6.2	26.4	23.5
Total	14,705	5.2	4.7	26.6	21.6	14,993	5.3	4.7	27.0	21.0

Abbreviations: PWA, persons with diagnosed HIV infection ever classified as stage 3 (AIDS); pop, population; CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Deaths of persons with diagnosed HIV infection may be due to any cause. Data are based on residence at death. When information on residence at death was unavailable, state at death (where a person's death occurred) was used. When information on both residence at death and state at death (where a person's death occurred) are not available, the most recent known address on or before the date of death is used. Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm.

^a Denominator was calculated as (No. PWA at the end of [year X - 1]) + (No. new diagnoses during year X).

^b Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2021.

Table 8a. Persons aged ≥13 years surviving >3 years after a diagnosis of HIV infection during 2013–2018, by year of diagnosis and selected characteristics—United States

	No.	Proportion survived >3 years					
		2013	2014	2015	2016	2017	2018
Gender							
Male	184,437	0.94	0.95	0.95	0.95	0.95	0.95
Female	43,828	0.92	0.94	0.94	0.94	0.94	0.94
Transgender woman ^a	3,784	0.98	0.98	0.97	0.97	0.98	0.98
Transgender man ^a	182	*	*	*	*	*	*
Additional gender identity ^b	95	*	*	*	*	*	*
Age at diagnosis							
13-24	51,459	0.99	0.99	0.99	0.99	0.99	0.99
25-34	77,163	0.97	0.97	0.98	0.98	0.97	0.97
35-44	44,967	0.94	0.95	0.95	0.95	0.95	0.95

	No.	Proportion survived >3 years					
		2013	2014	2015	2016	2017	2018
45-54	36,084	0.90	0.91	0.92	0.91	0.91	0.91
≥55	22,653	0.80	0.82	0.82	0.83	0.84	0.85
Race/ethnicity							
American Indian/Alaska Native	1,023	0.89	0.94	0.94	0.95	0.91	0.91
Asian	5,116	0.96	0.97	0.97	0.96	0.97	0.97
Black/African American	97,919	0.94	0.95	0.95	0.95	0.95	0.96
Hispanic/Latino ^c	58,439	0.95	0.96	0.96	0.96	0.96	0.96
Native Hawaiian/other Pacific Islander	282	*	*	*	*	*	*
White	58,877	0.93	0.94	0.94	0.93	0.93	0.93
Multiracial	10,670	0.95	0.96	0.95	0.95	0.96	0.95
Transmission category^d							
Male-to-male sexual contact ^e	152,545	0.95	0.96	0.96	0.96	0.96	0.96
Injection drug use ^f	14,010	0.86	0.87	0.89	0.88	0.88	0.88
Male	7,643	0.85	0.86	0.88	0.87	0.87	0.88
Female	6,368	0.88	0.89	0.91	0.89	0.90	0.88
Male-to-male sexual contact ^e and injection drug use ^f	9,331	0.94	0.96	0.95	0.95	0.95	0.94
Heterosexual contact ^e	55,984	0.92	0.93	0.93	0.94	0.93	0.94
Male	18,596	0.89	0.91	0.91	0.91	0.91	0.91
Female	37,389	0.93	0.95	0.95	0.95	0.94	0.95
Other ^h	456	*	*	*	*	*	*
Male	196	*	*	*	*	*	*
Female	259	*	*	*	*	*	*
Region of residence							
Northeast	37,557	0.94	0.95	0.95	0.95	0.95	0.95
Midwest	30,634	0.94	0.95	0.95	0.95	0.95	0.95
South	118,795	0.94	0.94	0.95	0.95	0.95	0.95
West	45,340	0.94	0.95	0.95	0.95	0.95	0.96
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	190,785	0.94	0.95	0.95	0.95	0.95	0.95
Metropolitan areas (pop. 50,000-499,999)	26,305	0.92	0.93	0.94	0.94	0.94	0.94
Nonmetropolitan areas (pop. <50,000)	13,878	0.90	0.92	0.92	0.93	0.93	0.94
Total	232,326	0.94	0.95	0.95	0.95	0.95	0.95

Abbreviation: pop, population.

Note. Data are based on residence at time of diagnosis of HIV infection. Data exclude persons whose month of diagnosis or month of death is unknown. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Asterisk (*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

^a "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.

"Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.

^b Additional gender identity examples include "bigender," "gender queer," and "two-spirit."

^c Hispanic/Latino persons can be of any race.

^d Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^e Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^f Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection

of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^g Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

^h Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified. Data not displayed because the numbers were too small to be meaningful.

Table 8b. Persons aged ≥ 13 years surviving >3 years after a diagnosis of HIV infection during 2013–2018, by year of diagnosis and selected characteristics—United States and 6 dependent areas

	No.	Proportion survived >3 years					
		2013	2014	2015	2016	2017	2018
Gender							
Male	187,086	0.94	0.95	0.95	0.95	0.95	0.95
Female	44,522	0.92	0.94	0.94	0.94	0.94	0.94
Transgender woman ^a	3,803	0.98	0.98	0.97	0.97	0.98	0.98
Transgender man ^a	183	*	*	*	*	*	*
Additional gender identity ^b	96	*	*	*	*	*	*
Age at diagnosis							
13-24	52,028	0.99	0.99	0.99	0.99	0.99	0.99
25-34	78,044	0.97	0.97	0.98	0.98	0.97	0.97
35-44	45,666	0.94	0.95	0.95	0.95	0.95	0.95
45-54	36,764	0.90	0.91	0.92	0.91	0.91	0.91
≥ 55	23,188	0.80	0.81	0.82	0.83	0.84	0.84
Race/ethnicity							
American Indian/Alaska Native	1,023	0.89	0.94	0.94	0.95	0.91	0.91
Asian	5,130	0.96	0.97	0.97	0.96	0.97	0.97
Black/African American	97,984	0.94	0.95	0.95	0.95	0.95	0.96
Hispanic/Latino ^c	61,678	0.94	0.95	0.96	0.96	0.96	0.96
Native Hawaiian/other Pacific Islander	296	*	*	*	*	*	*
White	58,902	0.93	0.94	0.94	0.93	0.93	0.93
Multiracial	10,677	0.95	0.96	0.95	0.95	0.96	0.95
Transmission category^d							
Male-to-male sexual contact ^e	154,296	0.95	0.96	0.96	0.96	0.96	0.96
Injection drug use ^f	14,359	0.86	0.87	0.89	0.87	0.88	0.88
Male	7,919	0.84	0.85	0.88	0.86	0.86	0.88
Female	6,439	0.88	0.89	0.91	0.89	0.90	0.88
Male-to-male sexual contact ^e and injection drug use ^f	9,423	0.94	0.96	0.95	0.94	0.95	0.94
Heterosexual contact ^g	57,156	0.91	0.93	0.93	0.94	0.93	0.94
Male	19,144	0.89	0.91	0.90	0.91	0.91	0.91
Female	38,011	0.93	0.94	0.94	0.95	0.94	0.95
Other ^h	457	*	*	*	*	*	*
Male	197	*	*	*	*	*	*
Female	260	*	*	*	*	*	*
Region of residence							
Northeast	37,557	0.94	0.95	0.95	0.95	0.95	0.95
Midwest	30,634	0.94	0.95	0.95	0.95	0.95	0.95
South	118,795	0.94	0.94	0.95	0.95	0.95	0.95

	No.	Proportion survived >3 years					
		2013	2014	2015	2016	2017	2018
West	45,340	0.94	0.95	0.95	0.95	0.95	0.96
U.S. dependent areas	3,364	0.86	0.89	0.90	0.88	0.90	0.91
Total	235,690	0.94	0.95	0.95	0.95	0.95	0.95

Note. Data are based on residence at time of diagnosis of HIV infection. Data exclude persons whose month of diagnosis or month of death is unknown. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Asterisk (*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

^a “Transgender woman” includes individuals who were assigned “male” sex at birth but have ever identified as “female” gender.

“Transgender man” includes individuals who were assigned “female” sex at birth but have ever identified as “male” gender.

^b Additional gender identity examples include “bigender,” “gender queer,” and “two-spirit.”

^c Hispanic/Latino persons can be of any race.

^d Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^e Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^f Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^g Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

^h Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified. Data not displayed because the numbers were too small to be meaningful.

Table 8c. Persons aged ≥13 years surviving >3 years after a diagnosis of HIV infection during 2013–2018, by year of diagnosis and area of residence—United States and 6 dependent areas

Area of residence	No.	Proportion survived >3 years					
		2013	2014	2015	2016	2017	2018
Alabama	3,850	0.93	0.92	0.94	0.95	0.95	0.93
Alaska	173	*	*	*	*	*	*
Arizona	4,278	0.94	0.95	0.94	0.94	0.94	0.96
Arkansas	1,716	0.92	0.92	0.93	0.95	0.96	0.94
California	29,219	0.94	0.95	0.96	0.96	0.96	0.96
Colorado	2,310	0.97	0.95	0.95	0.95	0.97	0.97
Connecticut	1,669	0.94	0.96	0.99	0.98	0.92	0.97
Delaware	659	0.96	0.96	0.97	0.94	0.94	0.95
District of Columbia	2,188	0.96	0.96	0.96	0.96	0.96	0.94
Florida	26,801	0.93	0.94	0.94	0.95	0.95	0.95
Georgia	14,890	0.94	0.95	0.94	0.95	0.95	0.95
Hawaii	530	*	*	*	*	*	*
Idaho	213	*	*	*	*	*	*
Illinois	8,874	0.95	0.95	0.96	0.96	0.96	0.96
Indiana	3,080	0.93	0.94	0.94	0.95	0.94	0.94
Iowa	705	0.92	0.93	0.97	0.95	0.92	0.93
Kansas	850	0.90	0.96	0.94	0.95	0.97	0.96
Kentucky	2,112	0.92	0.92	0.95	0.93	0.93	0.95
Louisiana	6,423	0.94	0.94	0.94	0.95	0.95	0.94
Maine	256	*	*	*	*	*	*
Maryland	6,752	0.94	0.96	0.96	0.96	0.94	0.95

Area of residence	No.	Proportion survived >3 years					
		2013	2014	2015	2016	2017	2018
Massachusetts	3,773	0.97	0.97	0.97	0.95	0.96	0.96
Michigan	4,479	0.93	0.95	0.95	0.95	0.95	0.95
Minnesota	1,766	0.93	0.95	0.97	0.98	0.97	0.96
Mississippi ^a	2,768	0.92	0.93	0.93	0.92	0.94	0.93
Missouri	2,849	0.94	0.96	0.96	0.95	0.93	0.95
Montana	127	*	*	*	*	*	*
Nebraska	484	*	*	*	*	*	*
Nevada	2,833	0.94	0.95	0.95	0.94	0.94	0.97
New Hampshire	209	*	*	*	*	*	*
New Jersey	6,847	0.91	0.94	0.95	0.95	0.94	0.94
New Mexico	840	0.94	0.93	0.91	0.99	0.94	0.93
New York	17,399	0.95	0.95	0.96	0.95	0.96	0.95
North Carolina	7,752	0.95	0.95	0.94	0.95	0.96	0.96
North Dakota	178	*	*	*	*	*	*
Ohio	5,798	0.95	0.94	0.94	0.93	0.95	0.94
Oklahoma	1,816	0.92	0.94	0.94	0.95	0.92	0.93
Oregon	1,338	0.96	0.93	0.96	0.95	0.94	0.96
Pennsylvania	6,863	0.93	0.93	0.94	0.96	0.96	0.94
Rhode Island	457	*	*	*	*	*	*
South Carolina	4,287	0.93	0.93	0.94	0.94	0.94	0.96
South Dakota	197	*	*	*	*	*	*
Tennessee	4,418	0.92	0.93	0.93	0.95	0.94	0.95
Texas	26,476	0.94	0.95	0.95	0.95	0.95	0.95
Utah	717	0.94	0.98	0.97	0.94	0.97	0.96
Vermont	84	*	*	*	*	*	*
Virginia	5,419	0.95	0.96	0.97	0.95	0.96	0.96
Washington	2,676	0.95	0.95	0.98	0.95	0.97	0.95
West Virginia ^a	468	*	*	*	*	*	*
Wisconsin	1,374	0.95	0.94	0.98	0.97	0.93	0.98
Wyoming	86	*	*	*	*	*	*
Subtotal	232,326	0.94	0.95	0.95	0.95	0.95	0.95
U.S. dependent areas							
American Samoa	0	*	*	*	*	*	*
Guam ^a	28	*	*	*	*	*	*
Northern Mariana Islands	5	*	*	*	*	*	*
Puerto Rico	3,223	0.86	0.89	0.90	0.88	0.89	0.91
Republic of Palau	3	*	*	*	*	*	*
U.S. Virgin Islands ^a	105	*	*	*	*	*	*
Subtotal	3,364	0.86	0.89	0.90	0.88	0.90	0.91
Total	235,690	0.94	0.95	0.95	0.95	0.95	0.95

Abbreviation: pop, population.

Note. Data are based on residence at time of diagnosis of HIV infection. Data exclude persons whose month of diagnosis or month of death is unknown. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Asterisk (*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

^a Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2021.

Table 8d. Persons aged ≥ 13 years with HIV surviving >3 years after stage 3 (AIDS) classification during 2013–2018, by year of diagnosis and selected characteristics—United States

	No.	Proportion survived >3 years					
		2013	2014	2015	2016	2017	2018
Gender							
Male	85,480	0.86	0.85	0.86	0.86	0.86	0.86
Female	27,437	0.84	0.84	0.84	0.86	0.84	0.83
Transgender woman ^a	1,498	0.93	0.92	0.91	0.92	0.93	0.90
Transgender man ^a	52	*	*	*	*	*	*
Additional gender identity ^b	30	*	*	*	*	*	*
Age at diagnosis							
13-24	9,624	0.96	0.94	0.95	0.96	0.94	0.95
25-34	29,675	0.92	0.92	0.92	0.93	0.92	0.92
35-44	27,792	0.89	0.88	0.88	0.88	0.88	0.89
45-54	27,967	0.83	0.83	0.83	0.83	0.83	0.83
≥ 55	19,439	0.71	0.68	0.70	0.71	0.72	0.70
Race/ethnicity							
American Indian/Alaska Native	434	*	*	*	*	*	*
Asian	1,921	0.90	0.91	0.91	0.89	0.92	0.92
Black/African American	52,096	0.85	0.84	0.86	0.86	0.86	0.86
Hispanic/Latino ^c	25,810	0.89	0.87	0.87	0.89	0.88	0.89
Native Hawaiian/other Pacific Islander	110	*	*	*	*	*	*
White	27,493	0.84	0.83	0.82	0.82	0.82	0.81
Multiracial	6,633	0.89	0.88	0.87	0.86	0.85	0.85
Transmission category^d							
Male-to-male sexual contact ^e	62,520	0.88	0.87	0.87	0.88	0.88	0.88
Injection drug use ^f	11,040	0.77	0.76	0.76	0.76	0.76	0.76
Male	6,042	0.75	0.74	0.74	0.73	0.75	0.76
Female	4,998	0.79	0.77	0.78	0.79	0.77	0.77
Male-to-male sexual contact ^e and injection drug use ^f	5,466	0.84	0.85	0.85	0.84	0.85	0.82
Heterosexual contact ^g	34,351	0.84	0.84	0.85	0.86	0.85	0.84
Male	12,449	0.82	0.82	0.83	0.83	0.83	0.83
Female	21,903	0.85	0.85	0.86	0.87	0.86	0.85
Other ^h	1,120	0.93	0.90	0.93	0.90	0.91	0.91
Male	527	*	*	*	*	*	*
Female	592	*	*	*	*	*	*
Region of residence							
Northeast	19,994	0.87	0.87	0.87	0.87	0.87	0.87
Midwest	14,848	0.88	0.87	0.87	0.87	0.86	0.87
South	60,138	0.85	0.84	0.84	0.85	0.85	0.85
West	19,517	0.87	0.86	0.85	0.86	0.85	0.85
Population area of residence							
Metropolitan statistical areas (pop. $\geq 500,000$)	92,647	0.87	0.86	0.86	0.86	0.86	0.86

	No.	Proportion survived >3 years					
		2013	2014	2015	2016	2017	2018
Metropolitan areas (pop. 50,000-499,999)	13,418	0.83	0.82	0.84	0.83	0.83	0.84
Nonmetropolitan areas (pop. <50,000)	7,889	0.82	0.81	0.81	0.84	0.82	0.84
Total	114,497	0.86	0.85	0.85	0.86	0.86	0.86

Abbreviation: pop, population.

Note. Data are based on residence when infection was classified as stage 3 (AIDS) classification. Data exclude persons whose month of diagnosis or month of death is unknown. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Asterisk (*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

^a "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.

"Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.

^b Additional gender identity examples include "bigender," "gender queer," and "two-spirit."

^c Hispanic/Latino persons can be of any race.

^d Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^e Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^f Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^g Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

^h Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified. Data not displayed because the numbers were too small to be meaningful.

Table 8e. Persons aged ≥13 years with HIV surviving >3 years after stage 3 (AIDS) classification during 2013–2018, by year of diagnosis and selected characteristics—United States and 6 dependent areas

	No.	Proportion survived >3 years					
		2013	2014	2015	2016	2017	2018
Gender							
Male	86,799	0.86	0.85	0.85	0.86	0.86	0.86
Female	27,922	0.84	0.84	0.84	0.86	0.84	0.83
Transgender woman ^a	1,503	0.93	0.92	0.91	0.92	0.93	0.90
Transgender man ^a	52	*	*	*	*	*	*
Additional gender identity ^b	30	*	*	*	*	*	*
Age at diagnosis							
13-24	9,730	0.96	0.94	0.95	0.95	0.94	0.95
25-34	29,975	0.92	0.92	0.92	0.93	0.92	0.92
35-44	28,248	0.89	0.87	0.88	0.88	0.88	0.89
45-54	28,512	0.83	0.83	0.82	0.83	0.83	0.83
≥55	19,841	0.71	0.68	0.70	0.71	0.72	0.70
Race/ethnicity							
American Indian/Alaska Native	434	*	*	*	*	*	*
Asian	1,927	0.90	0.91	0.91	0.89	0.92	0.92
Black/African American	52,133	0.85	0.84	0.86	0.86	0.86	0.86
Hispanic/Latino ^c	27,553	0.88	0.86	0.86	0.88	0.87	0.88
Native Hawaiian/other Pacific Islander	122	*	*	*	*	*	*

	No.	Proportion survived >3 years					
		2013	2014	2015	2016	2017	2018
White	27,502	0.84	0.83	0.82	0.82	0.82	0.81
Multiracial	6,635	0.89	0.88	0.87	0.86	0.85	0.85
Transmission category^d							
Male-to-male sexual contact ^e	63,108	0.88	0.87	0.87	0.88	0.87	0.88
Injection drug use ^f	11,430	0.77	0.75	0.75	0.76	0.75	0.76
Male	6,339	0.75	0.74	0.73	0.73	0.75	0.75
Female	5,091	0.79	0.77	0.78	0.79	0.77	0.77
Male-to-male sexual contact ^e and injection drug use ^f	5,548	0.84	0.85	0.84	0.84	0.85	0.82
Heterosexual contact ^g	35,077	0.84	0.84	0.85	0.86	0.85	0.84
Male	12,798	0.82	0.81	0.83	0.83	0.83	0.83
Female	22,280	0.85	0.85	0.85	0.87	0.86	0.85
Other ^h	1,143	0.93	0.90	0.92	0.91	0.91	0.90
Male	535	*	*	*	*	*	*
Female	608	0.93	0.92	0.90	0.93	0.92	0.94
Region of residence							
Northeast	19,994	0.87	0.87	0.87	0.87	0.87	0.87
Midwest	14,848	0.88	0.87	0.87	0.87	0.86	0.87
South	60,138	0.85	0.84	0.84	0.85	0.85	0.85
West	19,517	0.87	0.86	0.85	0.86	0.85	0.85
U.S. dependent areas	1,809	0.77	0.74	0.72	0.74	0.79	0.77
Total	116,306	0.86	0.85	0.85	0.86	0.85	0.85

Note. Data are based on residence when infection was classified as stage 3 (AIDS) classification. Data exclude persons whose month of diagnosis or month of death is unknown. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Asterisk (*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

^a "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.

"Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.

^b Additional gender identity examples include "bigender," "gender queer," and "two-spirit."

^c Hispanic/Latino persons can be of any race.

^d Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's assigned sex at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^e Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^f Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^g Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

^h Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified. Data not displayed because the numbers were too small to be meaningful.

Table 8f. Persons aged ≥ 13 years with HIV surviving >3 years after stage 3 (AIDS) classification during 2013–2018, by year of diagnosis and area of residence—United States and 6 dependent areas

Area of residence	No.	Proportion survived >3 years					
		2013	2014	2015	2016	2017	2018
Alabama	1,929	0.82	0.81	0.83	0.85	0.86	0.85
Alaska	91	*	*	*	*	*	*

Area of residence	No.	Proportion survived >3 years					
		2013	2014	2015	2016	2017	2018
Arizona	1,825	0.84	0.85	0.81	0.83	0.83	0.86
Arkansas	783	0.87	0.77	0.84	0.89	0.88	0.82
California	12,209	0.87	0.85	0.86	0.86	0.85	0.84
Colorado	1,091	0.89	0.88	0.84	0.87	0.89	0.92
Connecticut	937	0.88	0.88	0.93	0.91	0.84	0.88
Delaware	413	*	*	*	*	*	*
District of Columbia	1,221	0.88	0.82	0.85	0.90	0.83	0.88
Florida	13,834	0.82	0.81	0.83	0.84	0.84	0.84
Georgia	7,506	0.86	0.86	0.87	0.87	0.87	0.87
Hawaii	241	*	*	*	*	*	*
Idaho	122	*	*	*	*	*	*
Illinois	4,165	0.89	0.86	0.87	0.87	0.87	0.89
Indiana	1,475	0.85	0.86	0.84	0.84	0.82	0.86
Iowa	374	*	*	*	*	*	*
Kansas	404	*	*	*	*	*	*
Kentucky	980	0.81	0.84	0.81	0.86	0.85	0.83
Louisiana	3,236	0.84	0.81	0.84	0.86	0.86	0.86
Maine	132	*	*	*	*	*	*
Maryland	3,786	0.87	0.88	0.87	0.85	0.86	0.87
Massachusetts	1,769	0.91	0.90	0.92	0.88	0.87	0.87
Michigan	2,201	0.85	0.88	0.83	0.87	0.83	0.86
Minnesota	906	0.90	0.90	0.91	0.96	0.95	0.91
Mississippi ^a	1,741	0.84	0.81	0.83	0.82	0.83	0.84
Missouri	1,344	0.87	0.90	0.88	0.86	0.88	0.82
Montana	65	*	*	*	*	*	*
Nebraska	263	*	*	*	*	*	*
Nevada	1,296	0.87	0.83	0.83	0.82	0.83	0.84
New Hampshire	97	*	*	*	*	*	*
New Jersey	3,584	0.84	0.86	0.85	0.85	0.87	0.85
New Mexico	365	*	*	*	*	*	*
New York	9,606	0.88	0.86	0.86	0.88	0.87	0.87
North Carolina	3,944	0.87	0.84	0.83	0.83	0.86	0.86
North Dakota	76	*	*	*	*	*	*
Ohio	2,901	0.89	0.85	0.89	0.85	0.87	0.85
Oklahoma	908	0.76	0.84	0.86	0.87	0.83	0.73
Oregon	694	0.88	0.86	0.89	0.86	0.82	0.86
Pennsylvania	3,585	0.85	0.86	0.86	0.88	0.86	0.87
Rhode Island	226	*	*	*	*	*	*
South Carolina	2,349	0.84	0.82	0.85	0.84	0.83	0.88
South Dakota	104	*	*	*	*	*	*
Tennessee	2,297	0.85	0.83	0.83	0.85	0.86	0.82
Texas	12,488	0.86	0.85	0.85	0.86	0.86	0.86
Utah	279	*	*	*	*	*	*
Vermont	58	*	*	*	*	*	*
Virginia	2,479	0.90	0.84	0.85	0.87	0.85	0.84

Area of residence	No.	Proportion survived >3 years					
		2013	2014	2015	2016	2017	2018
Washington	1,195	0.91	0.89	0.86	0.88	0.87	0.83
West Virginia ^a	244	*	*	*	*	*	*
Wisconsin	635	0.85	0.82	0.91	0.86	0.83	0.86
Wyoming	44	*	*	*	*	*	*
Subtotal	114,497	0.86	0.85	0.85	0.86	0.86	0.86
U.S. dependent areas							
American Samoa	0	*	*	*	*	*	*
Guam ^a	17	*	*	*	*	*	*
Northern Mariana Islands	5	*	*	*	*	*	*
Puerto Rico	1,729	0.76	0.73	0.72	0.74	0.79	0.76
Republic of Palau	1	*	*	*	*	*	*
U.S. Virgin Islands ^a	57	*	*	*	*	*	*
Subtotal	1,809	0.77	0.74	0.72	0.74	0.79	0.77
Total	116,306	0.86	0.85	0.85	0.86	0.85	0.85

Note. Data are based on residence when infection was classified as stage 3 (AIDS) classification. Data exclude persons whose month of diagnosis or month of death is unknown. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Asterisk (*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

^a Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2021.

Table 9a. Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2021 among persons aged ≥ 16 years, by selected characteristics—United States

	Persons prescribed PrEP ^a	Persons with PrEP indications ^b	PrEP coverage ^c (%)
Sex at birth			
Male	337,697	989,200	34.1
Female	28,014	227,010	12.3
Age (yr)			
16–24	48,552	246,290	19.7
25–34	145,758	434,680	33.5
35–44	88,516	238,470	37.1
45–54	46,224	173,420	26.7
≥ 55	36,740	123,350	29.8
Race/ethnicity^d			
Black/African American	51,878	468,540	11.1
Hispanic/Latino ^e	64,018	312,820	20.5
Other	15,779	131,180	12.0
White	234,318	300,650	77.9
Total	365,994	1,216,210	30.1

Abbreviations: PrEP, preexposure prophylaxis; n/a, not available; FDA, Food and Drug Administration [footnotes only].

Note. PrEP coverage data are considered preliminary. Data for year 2021 should be interpreted with caution due to the impact of the COVID-19 pandemic on filling PrEP prescriptions in state/local jurisdictions.

^a Estimated by using data from IQVIA pharmacy database reported through September 2022 based on an algorithm that included FDA-approved drugs for PrEP. Data for which values are unknown were not reported; therefore, values may not sum to column total.

^b Estimated by using 2018 data from National HIV Surveillance System (NHSS), National Health and Nutrition Examination Survey, and U.S. Census Bureau's American Community Survey (ACS). Data are rounded to the nearest 10. Data for which values are unknown were not reported; thus, values may not sum to column total. The data sources used to estimate the number of persons with indications for PrEP have different schedules of data availability. Consequently, the availability of a denominator may lag the availability of a numerator.

^c PrEP coverage, reported as a percentage, was calculated as the number who have been prescribed PrEP divided by the estimated number of persons who had indications for PrEP.

^d Race/ethnicity data were only available for <40% of persons prescribed PrEP in each year. Race/ethnicity data were imputed, and the data source was based on a consumer database which might underrepresent certain populations. Number prescribed PrEP and PrEP coverage for race/ethnicity reported in the table were adjusted by applying the distribution of records with known race/ethnicity to records with missing race/ethnicity.

^e Hispanic/Latino persons can be of any race.

Table 9b. Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2021 among persons aged ≥ 16 years, by area of residence—United States and Puerto Rico

Area of residence	Persons prescribed PrEP ^a	Persons with PrEP indications ^b	PrEP coverage ^c (%)
Alabama	2,764	11,020	25.1
Alaska	308	1,780	17.3
Arizona	6,571	25,780	25.5
Arkansas	1,275	5,130	24.9
California	50,239	165,030	30.4
Colorado	6,187	25,120	24.6
Connecticut	3,036	9,560	31.8
Delaware	645	4,400	14.7
District of Columbia	6,790	12,950	52.4
Florida	42,584	125,330	34.0
Georgia	12,173	39,030	31.2
Hawaii	1,134	4,360	26.0
Idaho	878	4,790	18.3
Illinois	18,417	55,860	33.0
Indiana	4,261	22,170	19.2
Iowa	1,951	4,760	41.0
Kansas	1,278	5,060	25.3
Kentucky	2,225	12,990	17.1
Louisiana	4,152	15,920	26.1
Maine	908	3,950	23.0
Maryland	5,793	27,300	21.2
Massachusetts	10,164	24,900	40.8
Michigan	5,900	29,570	20.0
Minnesota	5,251	21,720	24.2
Mississippi	1,592	4,530	35.1
Missouri	4,173	18,370	22.7
Montana	395	2,290	17.2
Nebraska	1,004	2,180	46.1
Nevada	4,877	11,390	42.8
New Hampshire	803	3,020	26.6
New Jersey	7,267	25,280	28.7

Area of residence	Persons prescribed PrEP ^a	Persons with PrEP indications ^b	PrEP coverage ^c (%)
New Mexico	1,594	6,800	23.4
New York	39,082	72,640	53.8
North Carolina	7,964	32,490	24.5
North Dakota	246	1,520	16.2
Ohio	8,465	40,320	21.0
Oklahoma	2,321	11,030	21.0
Oregon	4,691	19,750	23.8
Pennsylvania	13,049	36,490	35.8
Puerto Rico	608	9,700	6.3
Rhode Island	1,512	3,880	39.0
South Carolina	2,934	10,390	28.2
South Dakota	214	910	23.5
Tennessee	7,227	22,460	32.2
Texas	34,728	123,790	28.1
Utah	3,262	6,840	47.7
Vermont	480	1,060	45.3
Virginia	6,280	31,430	20.0
Washington	11,377	40,050	28.4
West Virginia	707	5,250	13.5
Wisconsin	2,816	12,980	21.7
Wyoming	139	890	15.6

Abbreviations: PrEP, preexposure prophylaxis; n/a, not available.

Note. PrEP coverage data are considered preliminary. Data for year 2021 should be interpreted with caution due to the impact of the COVID-19 pandemic on filling PrEP prescriptions in state/local jurisdictions.

^a Estimated by using data from IQVIA pharmacy database reported through September 2022 based on an algorithm that included FDA-approved drugs for PrEP. Data for which values are unknown were not reported.

^b Estimated by using 2018 data from National HIV Surveillance System (NHSS), National Health and Nutrition Examination Survey, and U.S. Census Bureau's American Community Survey (ACS). Data are rounded to the nearest 10. Data for which values are unknown were not reported; thus, values may not sum to column total. The data sources used to estimate the number of persons with indications for PrEP have different schedules of data availability. Consequently, the availability of a denominator may lag the availability of a numerator.

^c PrEP coverage, reported as a percentage, was calculated as the number who have been prescribed PrEP divided by the estimated number of persons who had indications for PrEP.

Table 10a. Perinatally acquired HIV infection, by year of birth and mother's race/ethnicity, 2017–2021—United States

Race/ethnicity ^a	2017		2018		2019		2020 (COVID-19 pandemic)		2021	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Black/African American	29	5.2	22	4.0	17	3.1	24	4.5	16	3.1
Hispanic/Latino ^b	7	0.8	7	0.8	8	0.9	6	0.7	5	0.5
White	7	0.4	6	0.3	5	0.3	7	0.4	0	0.0
Other ^c	8	2.2	7	1.9	3	0.8	1	0.3	1	0.3
Total	51	1.3	42	1.1	33	0.9	38	1.1	22	0.6

Note. Rates are per 100,000 live births. Because of delays in the reporting of births and diagnoses of HIV infection attributed to perinatal exposure, these numbers may be subject to change. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Please use caution when interpreting perinatally acquired HIV infection numbers.

^a Live-birth data reflect race/ethnicity of the infant's mother.

^b Hispanic/Latino persons can be of any race.

^c Includes American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander, and multiracial persons.

Table 10b. Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother's race/ethnicity, 2017–2021—United States

Race/ethnicity ^a	2017		2018		2019		2020 (COVID-19 pandemic)		2021	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Black/African American	26	4.6	19	3.4	17	3.1	23	4.3	15	2.9
Hispanic/Latino ^b	5	0.6	7	0.8	8	0.9	6	0.7	5	0.5
White	6	0.3	6	0.3	5	0.3	6	0.3	0	0.0
Other ^c	8	2.2	5	1.4	3	0.8	1	0.3	1	0.3
Total	45	1.2	37	1.0	33	0.9	36	1.0	21	0.6

Note. Rates are per 100,000 live births. Because of delays in the reporting of births and diagnoses of HIV infection attributed to perinatal exposure, these numbers may be subject to change. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Please use caution when interpreting perinatally acquired HIV infection numbers.

^a Live-birth data reflect race/ethnicity of the infant's mother.

^b Hispanic/Latino persons can be of any race.

^c Includes American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander, and multiracial persons.

Table 11. Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2022—United States and 6 dependent areas

	CD4 count (cells/μL) or CD4 percentage		Viral load	
	Lab reporting required ^a	Reportable level ^b	Lab reporting required ^a	Reportable level ^b
Alabama	Yes	All values	Yes	Any result
Alaska	Yes	All values	Yes	Any result
American Samoa	No	—	No	—
Arizona	Yes	All values	Yes	Any result
Arkansas	Yes	All values	Yes	Any result
California	Yes	All values	Yes	Any result
Colorado	Yes	All values	Yes	Any result
Connecticut	Yes	All values	Yes	Any result
Delaware	Yes	All values	Yes	Any result
District of Columbia	Yes	All values	Yes	Any result
Federated States of Micronesia	No	—	No	—
Florida	Yes	All values	Yes	Any result
Georgia	Yes	All values	Yes	Any result
Guam	Yes	All values	Yes	Any result
Hawaii	Yes	All values	Yes	Any result
Idaho	Yes	<200 or <14%	Yes	Detectable
Illinois	Yes	All values	Yes	Any result
Indiana	Yes	All values	Yes	Any result
Iowa	Yes	All values	Yes	Any result

	CD4 count (cells/ μ L) or CD4 percentage		Viral load	
	Lab reporting required ^a	Reportable level ^b	Lab reporting required ^a	Reportable level ^b
Kansas	Yes	All values	Yes	Any result
Kentucky	Yes	All values	Yes	Any result
Louisiana	Yes	All values	Yes	Any result
Maine	Yes	All values	Yes	Any result
Marshall Islands	No	—	No	—
Maryland	Yes	All values	Yes	Any result
Massachusetts	Yes	All values	Yes	Any result
Michigan	Yes	All values	Yes	Any result
Minnesota	Yes	All values	Yes	Any result
Mississippi	Yes	All values	Yes	Any result
Missouri	Yes	All values	Yes	Any result
Montana	Yes	All values	Yes	Any result
Nebraska	Yes	All values	Yes	Any result
Nevada	Yes	All values	Yes	Any result
New Hampshire	Yes	All values	Yes	Any result
New Jersey	Yes	All values	Yes	Any result
New Mexico	Yes	All values	Yes	Any result
New York	Yes	All values	Yes	Any result
North Carolina	Yes	All values	Yes	Any result
North Dakota	Yes	All values	Yes	Any result
Northern Mariana Islands	No	—	No	—
Ohio	Yes	All values	Yes	Any result
Oklahoma	Yes	All values	Yes	Any result
Oregon	Yes	All values	Yes	Any result
Pennsylvania	Yes	All values	Yes	Any result
Puerto Rico	Yes	All values	Yes	Any result
Republic of Palau	No	—	No	—
Rhode Island	Yes	All values	Yes	Any result
South Carolina	Yes	All values	Yes	Any result
South Dakota	Yes	All values	Yes	Any result
Tennessee	Yes	All values	Yes	Any result
Texas	Yes	All values	Yes	Any result
U.S. Virgin Islands	Yes	<200 or <14%	Yes	Detectable
Utah	Yes	All values	Yes	Any result
Vermont	Yes	All values	Yes	Any result
Virginia	Yes	All values	Yes	Any result
Washington	Yes	All values	Yes	Any result
West Virginia	Yes	All values	Yes	Any result
Wisconsin	Yes	All values	Yes	Any result
Wyoming	Yes	All values	Yes	Any result

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/ μ L) or percentage.

^a Laws, regulations, or statutes in most areas require laboratories to report, but in some instances the language is not specific.

^b Level at which CD4 or viral load reporting is required by laws, regulations, or statutes.

Table A1. Stage of disease at time of diagnosis of HIV infection during 2021 among persons aged ≥ 13 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions 

Area of residence	Total No.	Stage 0 ^a		Stage 1 (CD4 \geq 500 cells/ μ L or \geq 26%)		Stage 2 (CD4 = 200–499 cells/ μ L or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/ μ L or <14%)		Stage unknown ^b		
		No.	%	No.	%	No.	%	No.	%	No.	%	
Arizona												
Maricopa County	518	52	10.0	128	24.7	165	31.9	109	21.0	64	12.4	
California												
Alameda County	185	9	4.9	57	30.8	53	28.6	43	23.2	23	12.4	
Los Angeles County	1,486	123	8.3	354	23.8	486	32.7	301	20.3	222	14.9	
Orange County	266	28	10.5	63	23.7	91	34.2	56	21.1	28	10.5	
Riverside County	258	15	5.8	62	24.0	85	32.9	56	21.7	40	15.5	
Sacramento County	175	12	6.9	38	21.7	68	38.9	40	22.9	17	9.7	
San Bernardino County	301	23	7.6	78	25.9	93	30.9	56	18.6	51	16.9	
San Diego County	369	13	3.5	125	33.9	99	26.8	85	23.0	47	12.7	
San Francisco County	185	33	17.8	54	29.2	59	31.9	28	15.1	11	5.9	
District of Columbia	195	14	7.2	49	25.1	58	29.7	37	19.0	37	19.0	
Florida												
Broward County	570	12	2.1	156	27.4	196	34.4	110	19.3	96	16.8	
Duval County	280	18	6.4	62	22.1	77	27.5	66	23.6	57	20.4	
Hillsborough County	294	24	8.2	61	20.7	100	34.0	67	22.8	42	14.3	
Miami-Dade County	937	47	5.0	277	29.6	311	33.2	167	17.8	135	14.4	
Orange County	416	24	5.8	143	34.4	128	30.8	64	15.4	57	13.7	
Palm Beach County	273	3	1.1	72	26.4	99	36.3	65	23.8	34	12.5	
Pinellas County	122	5	4.1	30	24.6	39	32.0	28	23.0	20	16.4	
Georgia												
Cobb County	152	7	4.6	35	23.0	57	37.5	35	23.0	18	11.8	
DeKalb County	342	11	3.2	90	26.3	126	36.8	69	20.2	46	13.5	
Fulton County	525	17	3.2	141	26.9	187	35.6	102	19.4	78	14.9	
Gwinnett County	165	5	3.0	36	21.8	63	38.2	38	23.0	23	13.9	
Illinois												
Cook County	843	80	9.5	217	25.7	244	28.9	143	17.0	159	18.9	
Indiana												
Marion County	216	5	2.3	62	28.7	72	33.3	40	18.5	37	17.1	
Louisiana												
East Baton Rouge Parish	141	24	17.0	25	17.7	50	35.5	25	17.7	17	12.1	
Orleans Parish	145	23	15.9	38	26.2	47	32.4	30	20.7	7	4.8	
Maryland												
Baltimore City	156	21	13.5	43	27.6	47	30.1	27	17.3	18	11.5	
Montgomery County	96	9	9.4	24	25.0	27	28.1	30	31.3	6	6.3	
Prince George's County	229	17	7.4	68	29.7	67	29.3	58	25.3	19	8.3	
Massachusetts												

Area of residence	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥ 500 cells/μL or ≥ 26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
Suffolk County	132	11	8.3	48	36.4	44	33.3	20	15.2	9	6.8
Michigan											
Wayne County	256	26	10.2	68	26.6	83	32.4	54	21.1	25	9.8
Nevada											
Clark County	445	25	5.6	123	27.6	155	34.8	100	22.5	42	9.4
New York											
Bronx County	416	49	11.8	106	25.5	137	32.9	89	21.4	35	8.4
Kings County	441	47	10.7	124	28.1	144	32.7	94	21.3	32	7.3
New York County	317	25	7.9	85	26.8	107	33.8	57	18.0	43	13.6
Queens County	333	33	9.9	84	25.2	108	32.4	73	21.9	35	10.5
North Carolina											
Mecklenburg County	278	28	10.1	48	17.3	80	28.8	43	15.5	79	28.4
Ohio											
Cuyahoga County	164	3	1.8	63	38.4	55	33.5	29	17.7	14	8.5
Franklin County	187	8	4.3	54	28.9	58	31.0	46	24.6	21	11.2
Hamilton County	122	7	5.7	29	23.8	41	33.6	32	26.2	13	10.7
Pennsylvania											
Philadelphia County	360	33	9.2	97	26.9	107	29.7	70	19.4	53	14.7
Tennessee											
Shelby County	294	10	3.4	72	24.5	95	32.3	33	11.2	84	28.6
Texas											
Bexar County	328	37	11.3	64	19.5	104	31.7	57	17.4	66	20.1
Dallas County	798	83	10.4	186	23.3	239	29.9	145	18.2	145	18.2
Harris County	1,161	81	7.0	274	23.6	362	31.2	246	21.2	198	17.1
Tarrant County	302	31	10.3	80	26.5	96	31.8	59	19.5	36	11.9
Travis County	225	30	13.3	48	21.3	87	38.7	37	16.4	23	10.2
Washington											
King County	218	22	10.1	65	29.8	73	33.5	42	19.3	16	7.3

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic infection (i.e., AIDS-defining condition); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Stage of disease at time of diagnosis of HIV infection is based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection. Data are based on residence at time of diagnosis of HIV infection. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

^a First positive HIV test result is within 6 months after a negative HIV test result. The diagnosis of an AIDS-defining condition or a low CD4 test result before the 6 months have elapsed does not change the stage from stage 0 to stage 3.

^b Includes persons with no CD4 information.

Table A2. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among persons aged ≥13 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions

Area of residence	Total No.	Linkage to Care				Viral Suppression	
		≤1 month				VL <200 copies/mL ≤6 months	
		≥ 1 CD4 or VL tests		No CD4 or VL test			
No.	%	No.	%	No.	%		
Arizona							
Maricopa County	518	446	86.1	72	13.9	363	70.1
California							
Alameda County	185	162	87.6	23	12.4	139	75.1
Los Angeles County	1,486	1,194	80.3	292	19.7	994	66.9
Orange County	266	230	86.5	36	13.5	204	76.7
Riverside County	258	199	77.1	59	22.9	172	66.7
Sacramento County	175	151	86.3	24	13.7	124	70.9
San Bernardino County	301	230	76.4	71	23.6	195	64.8
San Diego County	369	307	83.2	62	16.8	235	63.7
San Francisco County	185	174	94.1	11	5.9	145	78.4
District of Columbia	195	154	79.0	41	21.0	126	64.6
Florida							
Broward County	570	467	81.9	103	18.1	375	65.8
Duval County	280	222	79.3	58	20.7	188	67.1
Hillsborough County	294	234	79.6	60	20.4	202	68.7
Miami-Dade County	937	768	82.0	169	18.0	640	68.3
Orange County	416	340	81.7	76	18.3	288	69.2
Palm Beach County	273	231	84.6	42	15.4	187	68.5
Pinellas County	122	99	81.1	23	18.9	90	73.8
Georgia							
Cobb County	152	131	86.2	21	13.8	107	70.4
DeKalb County	342	283	82.7	59	17.3	236	69.0
Fulton County	525	438	83.4	87	16.6	351	66.9
Gwinnett County	165	144	87.3	21	12.7	124	75.2
Illinois							
Cook County	843	730	86.6	113	13.4	588	69.8
Indiana							
Marion County	216	170	78.7	46	21.3	162	75.0
Louisiana							
East Baton Rouge Parish	141	112	79.4	29	20.6	98	69.5
Orleans Parish	145	131	90.3	14	9.7	108	74.5
Maryland							
Baltimore City	156	133	85.3	23	14.7	96	61.5
Montgomery County	96	85	88.5	11	11.5	63	65.6
Prince George's County	229	198	86.5	31	13.5	162	70.7
Massachusetts							
Suffolk County	132	127	96.2	5	3.8	108	81.8
Michigan							
Wayne County	256	216	84.4	40	15.6	178	69.5
Nevada							
Clark County	445	387	87.0	58	13.0	343	77.1

Area of residence	Total No.	Linkage to Care				Viral Suppression	
		≤1 month				VL <200 copies/mL ≤6 months	
		≥ 1 CD4 or VL tests		No CD4 or VL test		No.	%
	No.	%	No.	%	No.	%	
New York							
Bronx County	416	359	86.3	57	13.7	322	77.4
Kings County	441	378	85.7	63	14.3	338	76.6
New York County	317	262	82.6	55	17.4	237	74.8
Queens County	333	285	85.6	48	14.4	268	80.5
North Carolina							
Mecklenburg County	278	226	81.3	52	18.7	206	74.1
Ohio							
Cuyahoga County	164	146	89.0	18	11.0	120	73.2
Franklin County	187	161	86.1	26	13.9	136	72.7
Hamilton County	122	109	89.3	13	10.7	89	73.0
Pennsylvania							
Philadelphia County	360	301	83.6	59	16.4	237	65.8
Tennessee							
Shelby County	294	177	60.2	117	39.8	177	60.2
Texas							
Bexar County	328	263	80.2	65	19.8	190	57.9
Dallas County	798	613	76.8	185	23.2	456	57.1
Harris County	1,161	873	75.2	288	24.8	723	62.3
Tarrant County	302	236	78.1	66	21.9	191	63.2
Travis County	225	195	86.7	30	13.3	172	76.4
Washington							
King County	218	194	89.0	24	11.0	176	80.7

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Data are based on residence at time of diagnosis of HIV infection. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after diagnosis of HIV infection. A VL test result of < 200 copies/mL indicates HIV viral suppression. VL test results are within 6 months of diagnosis of HIV infection during 2021. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

Table A3. Receipt of HIV medical care during 2021 among persons aged ≥13 years with HIV infection diagnosed by year-end 2020 and alive at year-end 2021, by area of residence—Ending the HIV Epidemic Phase I jurisdictions

Area of residence	Persons alive at year-end 2021		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
Arizona								
Maricopa County	11,910	8,896	74.7	6,635	55.7	7,494	62.9	
California								
Alameda County	5,808	4,607	79.3	3,067	52.8	4,152	71.5	
Los Angeles County	49,007	35,526	72.5	26,579	54.2	31,877	65.0	
Orange County	6,963	4,854	69.7	3,711	53.3	4,557	65.4	

Area of residence	Persons alive at year-end 2021	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%
Riverside County	9,862	8,185	83.0	5,904	59.9	7,691	78.0
Sacramento County	4,467	3,538	79.2	2,228	49.9	3,128	70.0
San Bernardino County	4,769	3,265	68.5	2,221	46.6	2,919	61.2
San Diego County	13,163	9,475	72.0	6,315	48.0	7,748	58.9
San Francisco County	11,437	9,185	80.3	6,168	53.9	8,350	73.0
<i>District of Columbia</i>	13,401	8,798	65.7	5,699	42.5	7,418	55.4
<i>Florida</i>							
Broward County	19,788	15,644	79.1	12,730	64.3	13,586	68.7
Duval County	6,218	5,081	81.7	3,898	62.7	4,324	69.5
Hillsborough County	7,162	5,831	81.4	4,747	66.3	5,196	72.5
Miami-Dade County	26,224	18,450	70.4	14,748	56.2	16,142	61.6
Orange County	8,938	7,129	79.8	5,544	62.0	6,433	72.0
Palm Beach County	7,887	5,778	73.3	4,621	58.6	5,100	64.7
Pinellas County	4,812	4,127	85.8	3,524	73.2	3,745	77.8
<i>Georgia</i>							
Cobb County	3,501	2,643	75.5	1,926	55.0	2,332	66.6
DeKalb County	8,802	6,546	74.4	4,827	54.8	5,637	64.0
Fulton County	15,851	11,745	74.1	8,646	54.5	9,885	62.4
Gwinnett County	3,199	2,393	74.8	1,787	55.9	2,147	67.1
<i>Illinois</i>							
Cook County	24,919	18,811	75.5	11,406	45.8	15,173	60.9
<i>Indiana</i>							
Marion County	4,752	3,900	82.1	2,739	57.6	3,507	73.8
<i>Louisiana</i>							
East Baton Rouge Parish	3,983	3,412	85.7	2,867	72.0	3,021	75.8
Orleans Parish	4,721	3,640	77.1	2,629	55.7	3,199	67.8
<i>Maryland</i>							
Baltimore City	10,110	7,405	73.2	4,924	48.7	6,303	62.3
Montgomery County	3,850	2,366	61.5	1,608	41.8	2,028	52.7
Prince George's County	7,865	5,608	71.3	3,831	48.7	4,763	60.6
<i>Massachusetts</i>							
Suffolk County	5,527	4,076	73.7	2,621	47.4	3,765	68.1
<i>Michigan</i>							
Wayne County	6,974	5,547	79.5	3,452	49.5	4,767	68.4
<i>Nevada</i>							
Clark County	9,255	6,790	73.4	4,702	50.8	5,909	63.8
<i>New York</i>							
Bronx County	26,854	20,781	77.4	16,915	63.0	17,245	64.2
Kings County	25,601	18,516	72.3	14,836	58.0	16,330	63.8
New York County	25,777	17,436	67.6	13,708	53.2	15,598	60.5
Queens County	15,810	10,978	69.4	8,805	55.7	10,089	63.8
<i>North Carolina</i>							
Mecklenburg County	6,013	4,667	77.6	3,249	54.0	4,025	66.9
<i>Ohio</i>							
Cuyahoga County	4,810	3,636	75.6	2,425	50.4	3,132	65.1

Area of residence	Persons alive at year-end 2021		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
Franklin County	5,072	4,012	79.1	2,494	49.2	3,581	70.6	
Hamilton County	3,037	2,247	74.0	1,351	44.5	1,954	64.3	
<i>Pennsylvania</i>								
Philadelphia County	16,404	11,545	70.4	8,099	49.4	10,051	61.3	
<i>Tennessee</i>								
Shelby County	6,278	4,873	77.6	3,770	60.1	4,007	63.8	
<i>Texas</i>								
Bexar County	6,596	4,685	71.0	2,834	43.0	4,112	62.3	
Dallas County	18,809	14,704	78.2	10,972	58.3	11,348	60.3	
Harris County	26,727	19,882	74.4	14,088	52.7	17,120	64.1	
Tarrant County	6,120	4,854	79.3	3,720	60.8	4,162	68.0	
Travis County	5,032	4,057	80.6	2,665	53.0	3,506	69.7	
<i>Washington</i>								
King County	6,965	6,081	87.3	3,829	55.0	5,707	81.9	

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Data for the year 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Data are based on address of residence as of December 31, 2021 (i.e., most recent known address). Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

^a Performed ≥3 months apart during 2021.

^b A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2021.

Table A4. HIV viral suppression during 2021 among persons aged ≥13 years with HIV infection diagnosed by year-end 2020 and alive at year-end 2021, by area of residence— Ending the HIV Epidemic Phase I jurisdictions

Area of residence	Persons alive at year-end 2021	Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		Total	VL <200 copies/mL		
		No.	%	No.	%		Among persons alive at year-end 2021	Among Persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests
	No.	No.	%	No.	%	No.	%	%	%
<i>Arizona</i>									
Maricopa County	11,910	8,896	74.7	8,158	68.5	7,494	62.9	84.2	91.9
<i>California</i>									
Alameda County	5,808	4,607	79.3	4,466	76.9	4,152	71.5	90.1	93.0
Los Angeles County	49,007	35,526	72.5	34,598	70.6	31,877	65.0	89.7	92.1
Orange County	6,963	4,854	69.7	4,807	69.0	4,557	65.4	93.9	94.8
Riverside County	9,862	8,185	83.0	8,085	82.0	7,691	78.0	94.0	95.1
Sacramento County	4,467	3,538	79.2	3,406	76.2	3,128	70.0	88.4	91.8
San Bernardino County	4,769	3,265	68.5	3,176	66.6	2,919	61.2	89.4	91.9

Area of residence	VL <200 copies/mL								
	Persons alive at year-end 2021	Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		Total	Among persons alive at year-end 2021	Among Persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests
	No.	No.	%	No.	%	No.	%	%	%
San Diego County	13,163	9,475	72.0	8,264	62.8	7,748	58.9	81.8	93.8
San Francisco County	11,437	9,185	80.3	8,890	77.7	8,350	73.0	90.9	93.9
<i>District of Columbia</i>	13,401	8,798	65.7	8,302	62.0	7,418	55.4	84.3	89.4
<i>Florida</i>									
Broward County	19,788	15,644	79.1	14,692	74.2	13,586	68.7	86.8	92.5
Duval County	6,218	5,081	81.7	4,952	79.6	4,324	69.5	85.1	87.3
Hillsborough County	7,162	5,831	81.4	5,741	80.2	5,196	72.5	89.1	90.5
Miami-Dade County	26,224	18,450	70.4	17,775	67.8	16,142	61.6	87.5	90.8
Orange County	8,938	7,129	79.8	7,010	78.4	6,433	72.0	90.2	91.8
Palm Beach County	7,887	5,778	73.3	5,658	71.7	5,100	64.7	88.3	90.1
Pinellas County	4,812	4,127	85.8	4,016	83.5	3,745	77.8	90.7	93.3
<i>Georgia</i>									
Cobb County	3,501	2,643	75.5	2,578	73.6	2,332	66.6	88.2	90.5
DeKalb County	8,802	6,546	74.4	6,326	71.9	5,637	64.0	86.1	89.1
Fulton County	15,851	11,745	74.1	11,324	71.4	9,885	62.4	84.2	87.3
Gwinnett County	3,199	2,393	74.8	2,340	73.1	2,147	67.1	89.7	91.8
<i>Illinois</i>									
Cook County	24,919	18,811	75.5	17,013	68.3	15,173	60.9	80.7	89.2
<i>Indiana</i>									
Marion County	4,752	3,900	82.1	3,858	81.2	3,507	73.8	89.9	90.9
<i>Louisiana</i>									
East Baton Rouge Parish	3,983	3,412	85.7	3,380	84.9	3,021	75.8	88.5	89.4
Orleans Parish	4,721	3,640	77.1	3,596	76.2	3,199	67.8	87.9	89.0
<i>Maryland</i>									
Baltimore City	10,110	7,405	73.2	7,123	70.5	6,303	62.3	85.1	88.5
Montgomery County	3,850	2,366	61.5	2,213	57.5	2,028	52.7	85.7	91.6
Prince George's County	7,865	5,608	71.3	5,229	66.5	4,763	60.6	84.9	91.1
<i>Massachusetts</i>									
Suffolk County	5,527	4,076	73.7	3,974	71.9	3,765	68.1	92.4	94.7
<i>Michigan</i>									
Wayne County	6,974	5,547	79.5	5,413	77.6	4,767	68.4	85.9	88.1
<i>Nevada</i>									
Clark County	9,255	6,790	73.4	6,432	69.5	5,909	63.8	87.0	91.9
<i>New York</i>									
Bronx County	26,854	20,781	77.4	20,463	76.2	17,245	64.2	83.0	84.3
Kings County	25,601	18,516	72.3	18,322	71.6	16,330	63.8	88.2	89.1
New York County	25,777	17,436	67.6	17,151	66.5	15,598	60.5	89.5	90.9

Area of residence	VL <200 copies/mL								
	Persons alive at year-end 2021	Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		Total	Among persons alive at year-end 2021	Among Persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests
	No.	No.	%	No.	%	No.	%	%	%
Queens County	15,810	10,978	69.4	10,873	68.8	10,089	63.8	91.9	92.8
North Carolina									
Mecklenburg County	6,013	4,667	77.6	4,510	75.0	4,025	66.9	86.2	89.2
Ohio									
Cuyahoga County	4,810	3,636	75.6	3,494	72.6	3,132	65.1	86.1	89.6
Franklin County	5,072	4,012	79.1	3,933	77.5	3,581	70.6	89.3	91.1
Hamilton County	3,037	2,247	74.0	2,192	72.2	1,954	64.3	87.0	89.1
Pennsylvania									
Philadelphia County	16,404	11,545	70.4	11,279	68.8	10,051	61.3	87.1	89.1
Tennessee									
Shelby County	6,278	4,873	77.6	4,804	76.5	4,007	63.8	82.2	83.4
Texas									
Bexar County	6,596	4,685	71.0	4,585	69.5	4,112	62.3	87.8	89.7
Dallas County	18,809	14,704	78.2	13,178	70.1	11,348	60.3	77.2	86.1
Harris County	26,727	19,882	74.4	19,544	73.1	17,120	64.1	86.1	87.6
Tarrant County	6,120	4,854	79.3	4,694	76.7	4,162	68.0	85.7	88.7
Travis County	5,032	4,057	80.6	3,734	74.2	3,506	69.7	86.4	93.9
Washington									
King County	6,965	6,081	87.3	6,030	86.6	5,707	81.9	93.8	94.6

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Data are based on address of residence as of December 31, 2021 (i.e., most recent known address). Data for the year 2021 are preliminary and based on death data received by CDC as of December 2022. A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results during 2021. Data not provided for states and associated jurisdictions that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico.

Table A5. Number of persons prescribed preexposure prophylaxis (PrEP), number of persons with PrEP indications, and PrEP coverage in 2021 among persons aged ≥16 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions

Area of residence	2021			
	No. prescribed PrEP ^a	No. with PrEP indications ^b	PrEP coverage ^c (%)	
Arizona				
Maricopa County		5,026	22,720	22.1
California				
Alameda County		2,217	8,930	24.8
Los Angeles County		18,457	67,450	27.4
Orange County		2,832	10,510	26.9
Riverside County		2,538	11,080	22.9

2021			
Area of residence	No. prescribed PrEP ^a	No. with PrEP indications ^b	PrEP coverage ^c (%)
Sacramento County	1,103	5,920	18.6
San Bernardino County	1,190	11,890	10.0
San Diego County	4,430	14,500	30.6
San Francisco County	8,189	10,840	75.5
<i>District of Columbia</i>	6,790	12,950	52.4
<i>Florida</i>			
Broward County	8,328	20,470	40.7
Duval County	883	8,970	9.8
Hillsborough County	2,043	12,910	15.8
Miami-Dade County	11,410	21,760	52.4
Orange County	4,722	15,310	30.8
Palm Beach County	2,760	9,170	30.1
Pinellas County	1,655	9,530	17.4
<i>Georgia</i>			
Cobb County	812	3,070	26.4
DeKalb County	2,016	6,290	32.1
Fulton County	4,269	13,120	32.5
Gwinnett County	1,005	3,240	31.0
<i>Illinois</i>			
Cook County	14,755	39,060	37.8
<i>Indiana</i>			
Marion County	1,591	9,150	17.4
<i>Louisiana</i>			
East Baton Rouge Parish	584	1,810	32.3
Orleans Parish	1,517	4,590	33.1
<i>Maryland</i>			
Baltimore City	974	6,330	15.4
Montgomery County	1,151	5,770	19.9
Prince George's County	984	4,040	24.4
<i>Massachusetts</i>			
Suffolk County	2,809	6,520	43.1
<i>Michigan</i>			
Wayne County	1,554	9,270	16.8
<i>Nevada</i>			
Clark County	4,284	11,670	36.7
<i>New Jersey</i>			
Essex County	836	4,090	20.4
Hudson County	1,301	4,650	28.0
<i>New York</i>			
Bronx County	2,074	5,570	37.2
Kings County	8,871	15,650	56.7
New York County	15,745	15,540	101.3
Queens County	4,279	9,230	46.4
<i>North Carolina</i>			
Mecklenburg County	1,974	8,450	23.4

2021			
Area of residence	No. prescribed PrEP ^a	No. with PrEP indications ^b	PrEP coverage ^c (%)
Ohio			
Cuyahoga County	1,261	7,520	16.8
Franklin County	2,731	11,620	23.5
Hamilton County	815	7,720	10.6
Pennsylvania			
Philadelphia County	4,049	9,840	41.1
Tennessee			
Shelby County	941	6,450	14.6
Texas			
Bexar County	2,355	11,920	19.8
Dallas County	6,544	28,670	22.8
Harris County	7,479	40,670	18.4
Tarrant County	2,104	11,340	18.6
Travis County	5,784	11,590	49.9
Washington			
King County	7,634	17,890	42.7
Puerto Rico			
San Juan Municipio	62	2,190	2.8

Abbreviations: PrEP, preexposure prophylaxis; n/a, not available; FDA, Food and Drug Administration [footnotes only].

^a Estimated by using data from IQVIA pharmacy database reported through September 2022 based on an algorithm that included FDA-approved drugs for PrEP. Data for which values are unknown were not reported.

^b Estimated by using 2018 data from National HIV Surveillance System (NHSS), National Health and Nutrition Examination Survey, and U.S. Census Bureau's American Community Survey (ACS). Data are rounded to the nearest 10. Data for which values are unknown were not reported; thus, values may not sum to column total. The data sources used to estimate the number of persons with indications for PrEP have different schedules of data availability. Consequently, the availability of a denominator may lag the availability of a numerator.

^c PrEP coverage, reported as a percentage, was calculated as the number who have been prescribed PrEP divided by the estimated number of persons who had indications for PrEP.

Last Reviewed: May 31, 2023

Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data—United States and 6 Dependent Areas, 2021: Figures

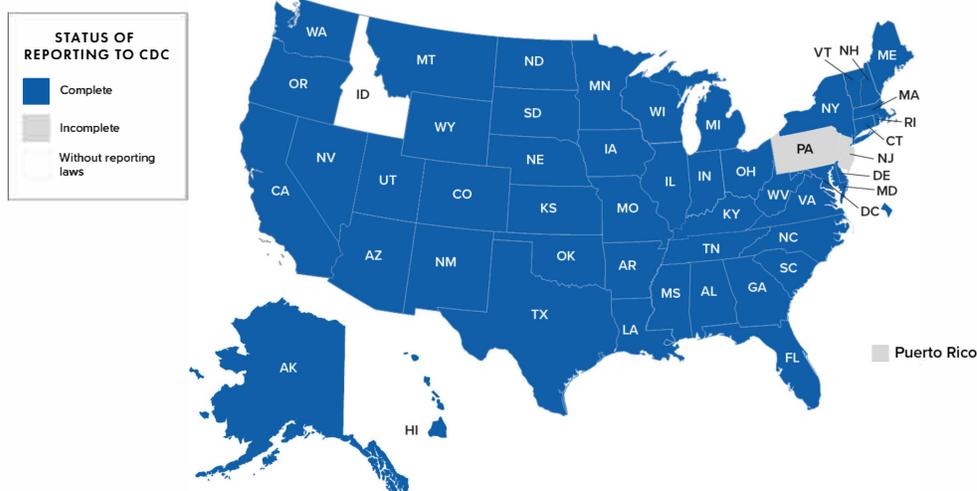
All Figures

Report Contents

Other Reports

Figure 1. Status of CD4 and viral load reporting, by area of residence as of December 2022 — United States and Puerto Rico

FIGURE 1
Status of CD4 and viral load reporting, by area of residence as of December 2022—United States and Puerto Rico

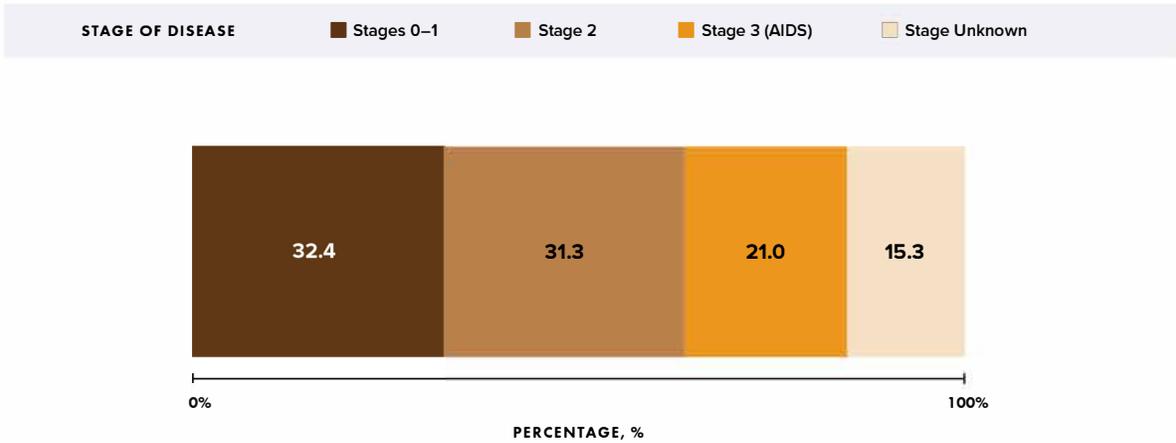


Note. New Jersey and Pennsylvania recently enacted laws to require laboratories to report all CD4 and viral load test results, but a full calendar year of reporting laboratory results to CDC is required before data are included in care analyses.



Figure 2. Stage of disease at HIV diagnosis during 2021 among persons aged ≥ 13 years — 47 states and the District of Columbia

FIGURE 2
Stage of disease at HIV diagnosis during 2021 among persons aged ≥ 13 years—47 states and the District of Columbia



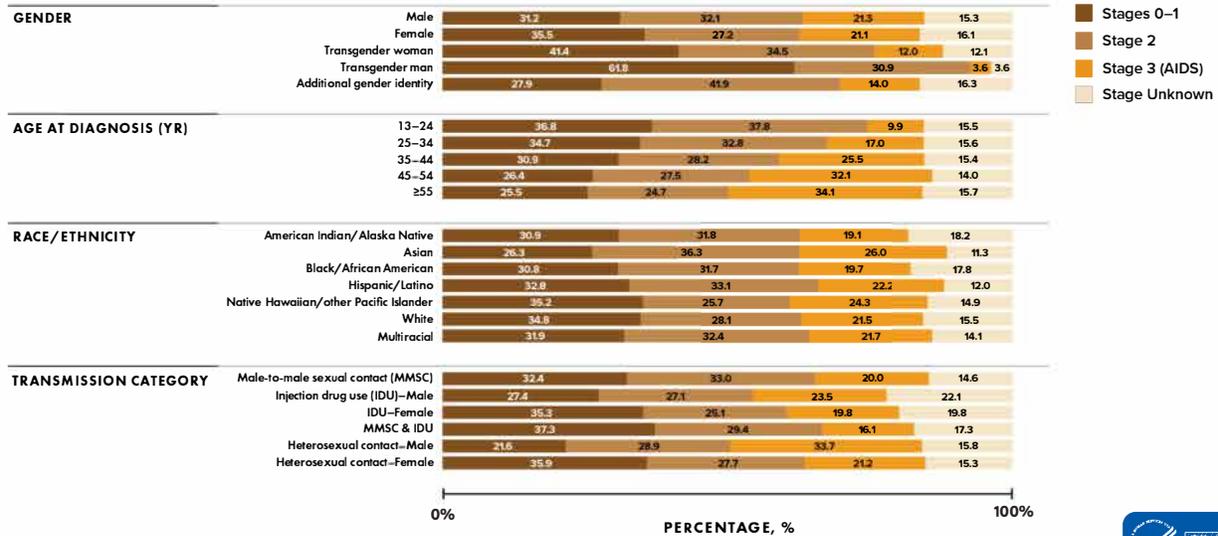
Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications



Figure 3. Stage of disease at HIV diagnosis during 2021 among persons aged ≥ 13 years, by selected characteristics — 47 states and the District of Columbia

FIGURE 3

Stage of disease at HIV diagnosis during 2021 among persons aged ≥13 years, by selected characteristics—47 states and the District of Columbia



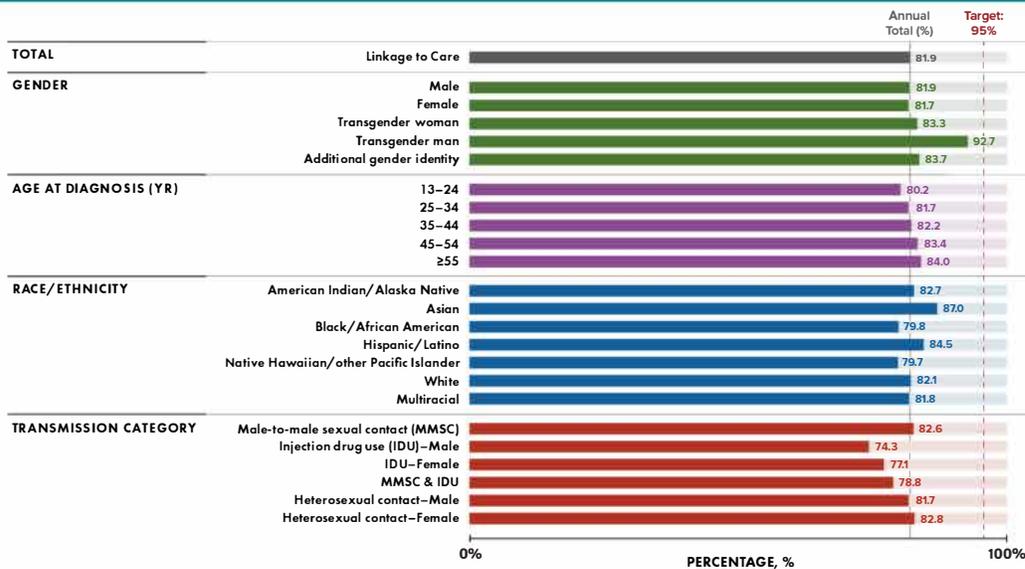
Note. Data have been statistically adjusted to account for missing transmission category. Diagnosis of HIV infection may not be reported for some groups in 2021. Percentages do not sum to 100%, and percentages for Stage 2 are not presented. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 4. Linkage to HIV medical care within 1 month of HIV diagnosis during 2021 among persons aged ≥13 years, by selected characteristics — 47 states and the District of Columbia

FIGURE 4

Linkage to HIV medical care within 1 month of HIV diagnosis during 2021 among persons aged ≥13 years, by selected characteristics—47 states and the District of Columbia

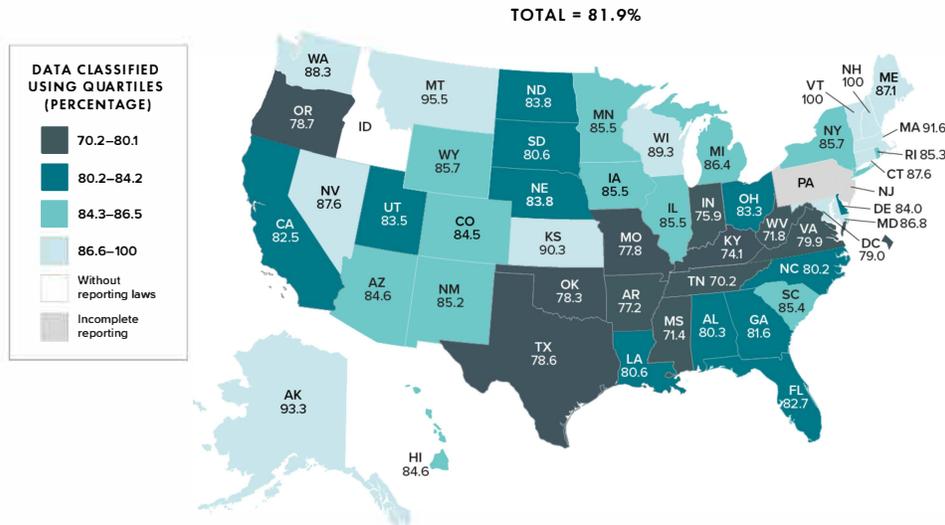


Note. Data have been statistically adjusted to account for missing transmission category. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 5. Linkage to HIV medical care within 1 month of HIV diagnosis during 2021 among persons aged ≥13 years, by area of residence — 47 states and the District of Columbia

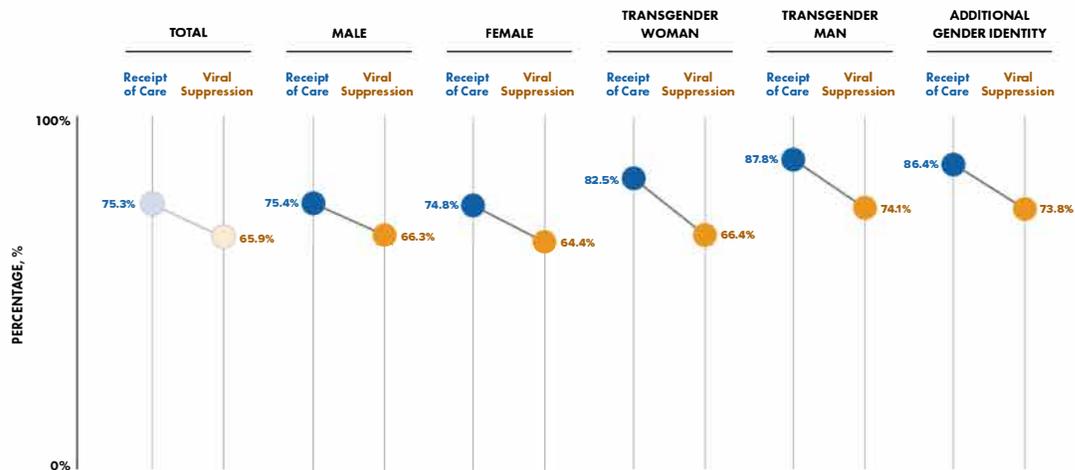
FIGURE 5
Linkage to HIV medical care within 1 month of HIV diagnosis during 2021 among persons aged ≥13 years, by area of residence—47 states and the District of Columbia



Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

Figure 6. Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by gender — 47 states and the District of Columbia

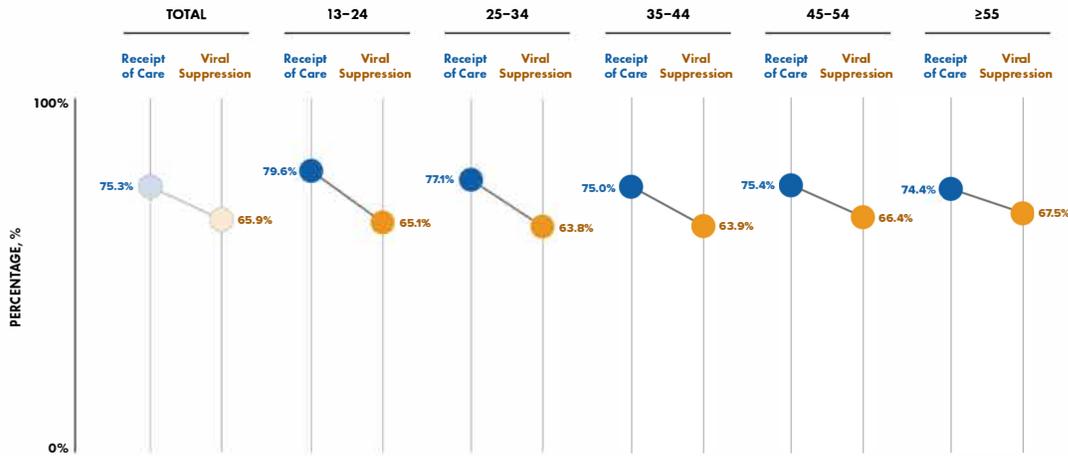
FIGURE 6
Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by gender—47 states and the District of Columbia



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

Figure 7. Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥ 13 years living with diagnosed HIV infection, by age group — 47 states and the District of Columbia

FIGURE 7
Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥ 13 years living with diagnosed HIV infection, by age group—47 states and the District of Columbia

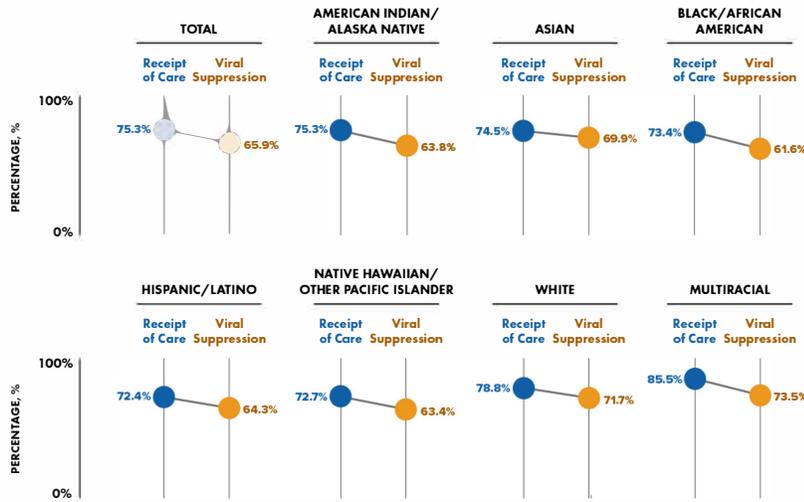


Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

Figure 8. Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥ 13 years living with diagnosed HIV infection, by race/ethnicity — 47 states and the District of Columbia

FIGURE 8

Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by race/ethnicity—47 states and the District of Columbia



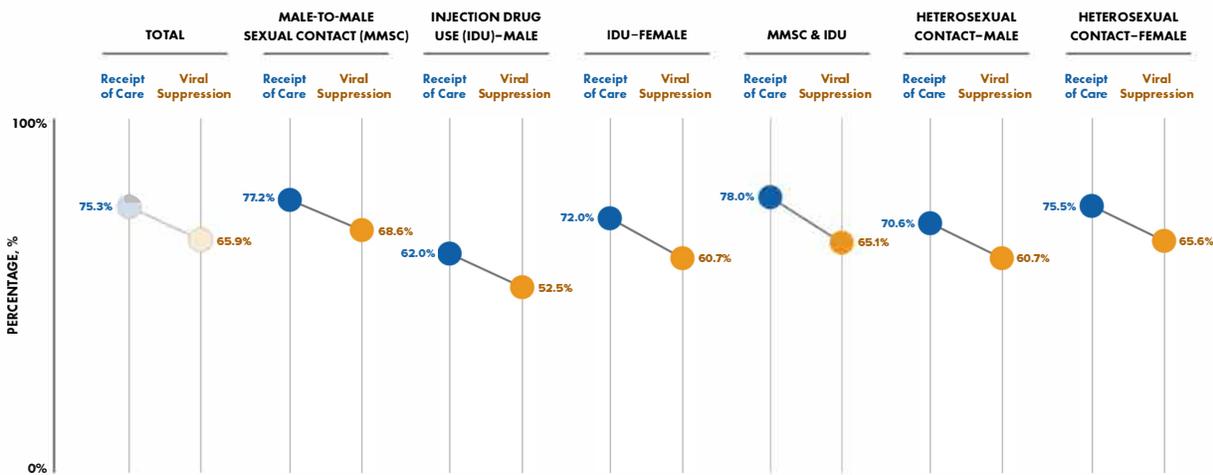
Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Hispanic/Latino persons can be of any race. Race/ethnicity category for Asian persons includes Asian/Pacific Islander legacy cases. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 9. Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by transmission category and assigned sex at birth — 47 states and the District of Columbia

FIGURE 9

Receipt of HIV medical care and viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by transmission category and assigned sex at birth—47 states and the District of Columbia

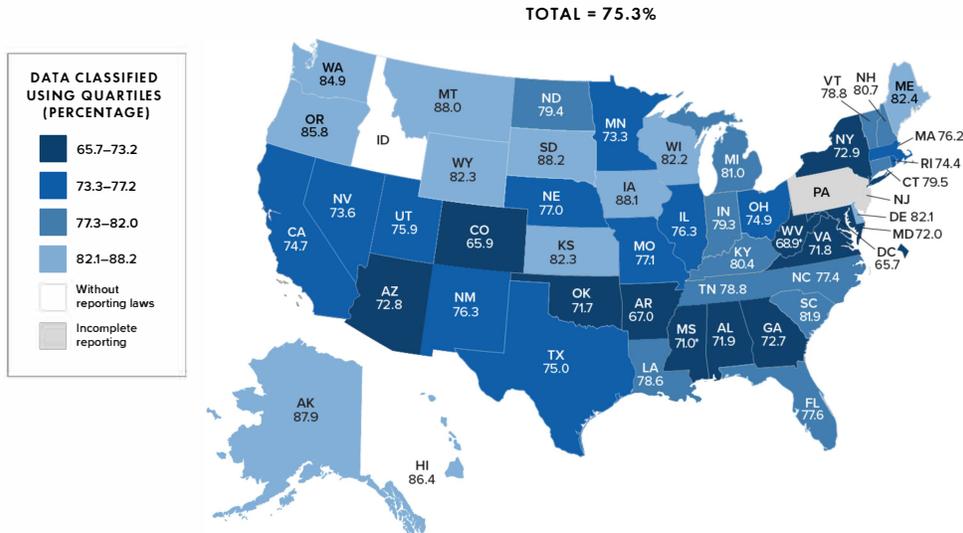


Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Data have been statistically adjusted to account for missing transmission category. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 10. Receipt of HIV medical care during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by area of residence — 47 states and the District of Columbia

FIGURE 10
Receipt of HIV medical care during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by area of residence—47 states and the District of Columbia

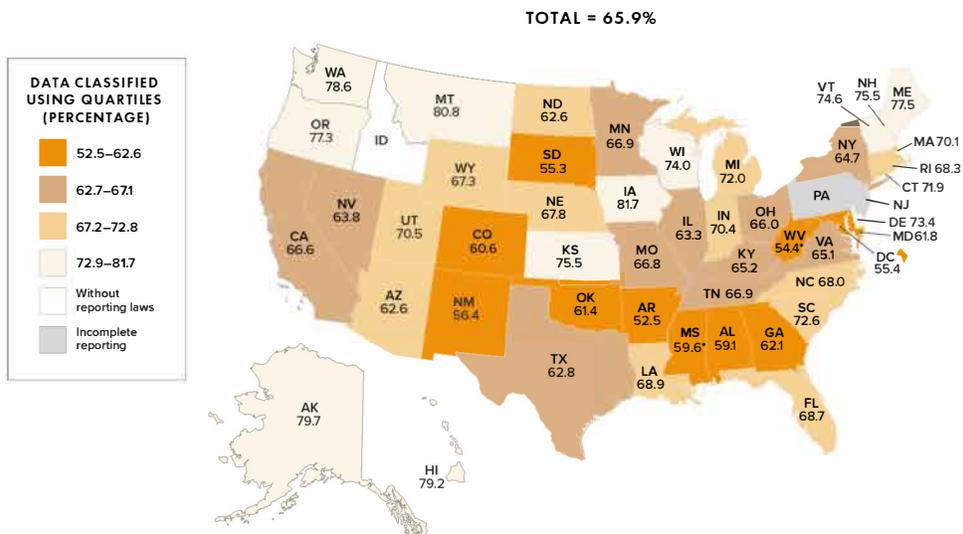


Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. *Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2021. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 11. Viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by area of residence — 47 states and the District of Columbia

FIGURE 11
Viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by area of residence—47 states and the District of Columbia

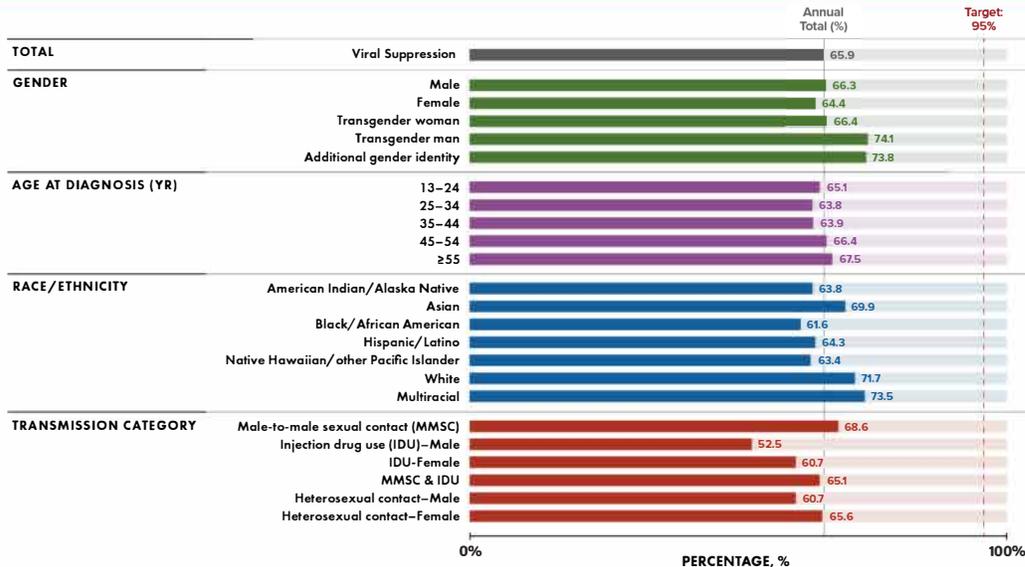


Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. *Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2021. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 12. Viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by selected characteristics — 47 states and the District of Columbia

FIGURE 12
Viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by selected characteristics—47 states and the District of Columbia



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Race/ethnicity category for Asian persons includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race. Data have been statistically adjusted to account for missing transmission category. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

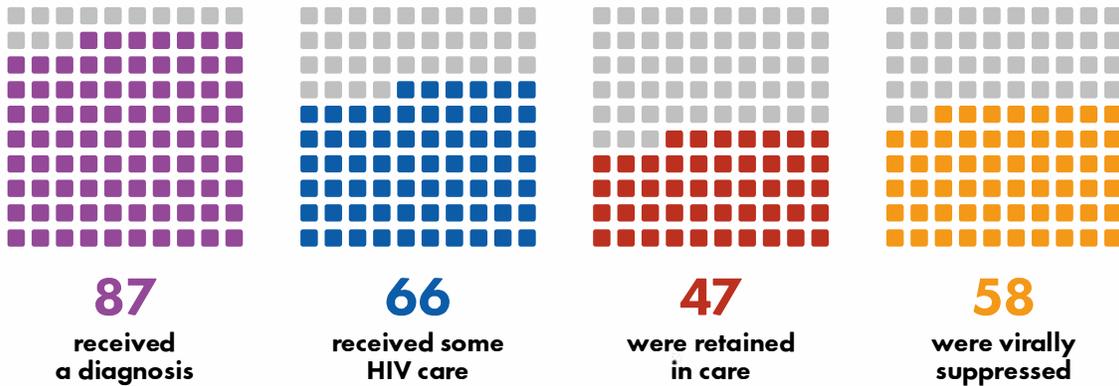


Figure 13. Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2021—United States

FIGURE 13

Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2021—United States

In 2021, for every 100 people overall living with HIV:



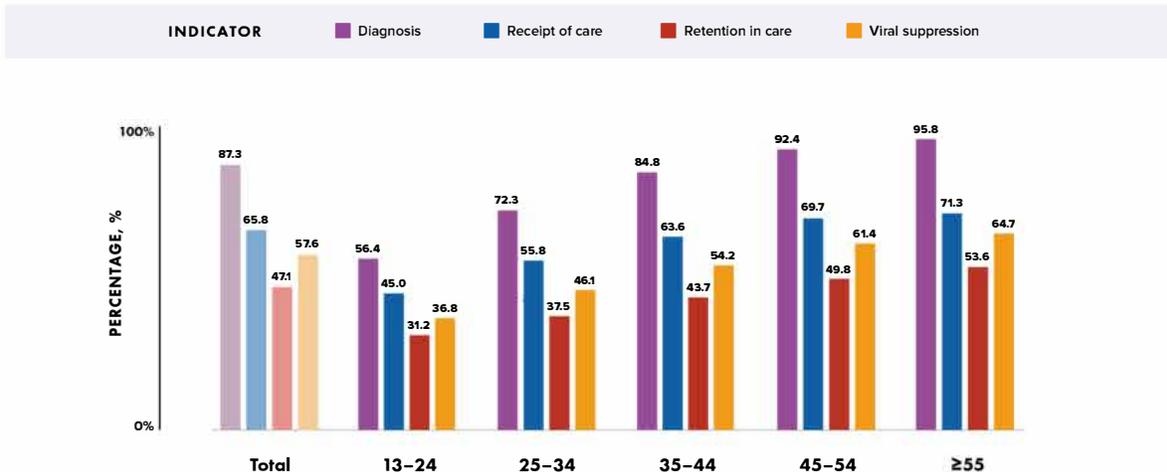
Note. Estimates were calculated by assigned sex at birth and derived from a CD4-based depletion model using HIV surveillance data. Estimates for year 2021 should be interpreted with caution due to adjustments made to the monthly distribution of reported diagnoses during this year to account for the impact of COVID-19 on HIV testing and diagnosis in the United States.



Figure 14. Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2021, by age group—United States

FIGURE 14

Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2021, by age group—United States

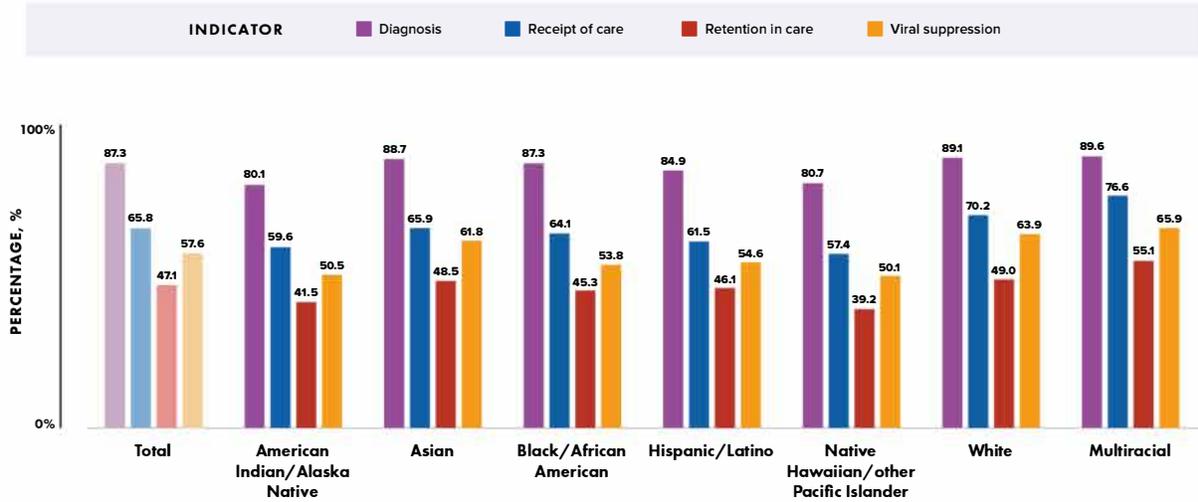


Note. Estimates were calculated by assigned sex at birth and derived from a CD4-based depletion model using HIV surveillance data. Estimates for year 2021 should be interpreted with caution due to adjustments made to the monthly distribution of reported diagnoses during this year to account for the impact of COVID-19 on HIV testing and diagnosis in the United States.



Figure 15. Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2021, by race/ethnicity—United States

FIGURE 15
Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2021, by race/ethnicity—United States

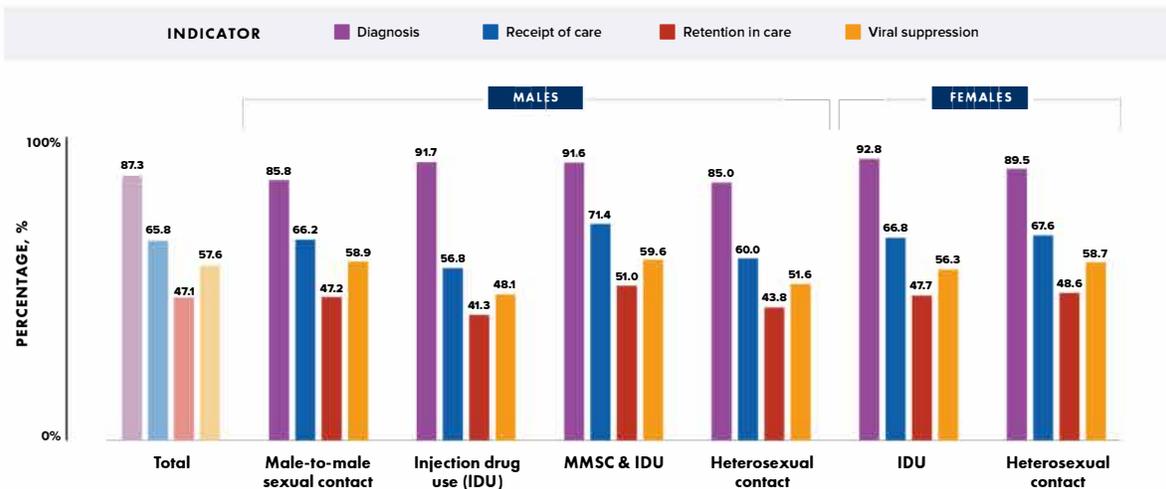


Note. Estimates were calculated by assigned sex at birth and derived from a CD4-based depletion model using HIV surveillance data. Estimates for year 2021 should be interpreted with caution due to adjustments made to the monthly distribution of reported diagnoses during this year to account for the impact of COVID-19 on HIV testing and diagnosis in the United States. Hispanic/Latino persons can be of any race.



Figure 16. Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2021, by transmission category and assigned sex at birth—United States

FIGURE 16
Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2021, by transmission category and assigned sex at birth—United States



Note. Estimates were calculated by assigned sex at birth and derived from a CD4-based depletion model using HIV surveillance data. Estimates for year 2021 should be interpreted with caution due to adjustments made to the monthly distribution of reported diagnoses during this year to account for the impact of COVID-19 on HIV testing and diagnosis in the United States.



Figure 17. Stage 3 (AIDS) at time of diagnosis of HIV infection during 2021 among persons aged ≥ 13 years, by area of residence — United States

FIGURE 17
Stage 3 (AIDS) at time of diagnosis of HIV infection during 2021 among persons aged ≥ 13 years, by area of residence—United States

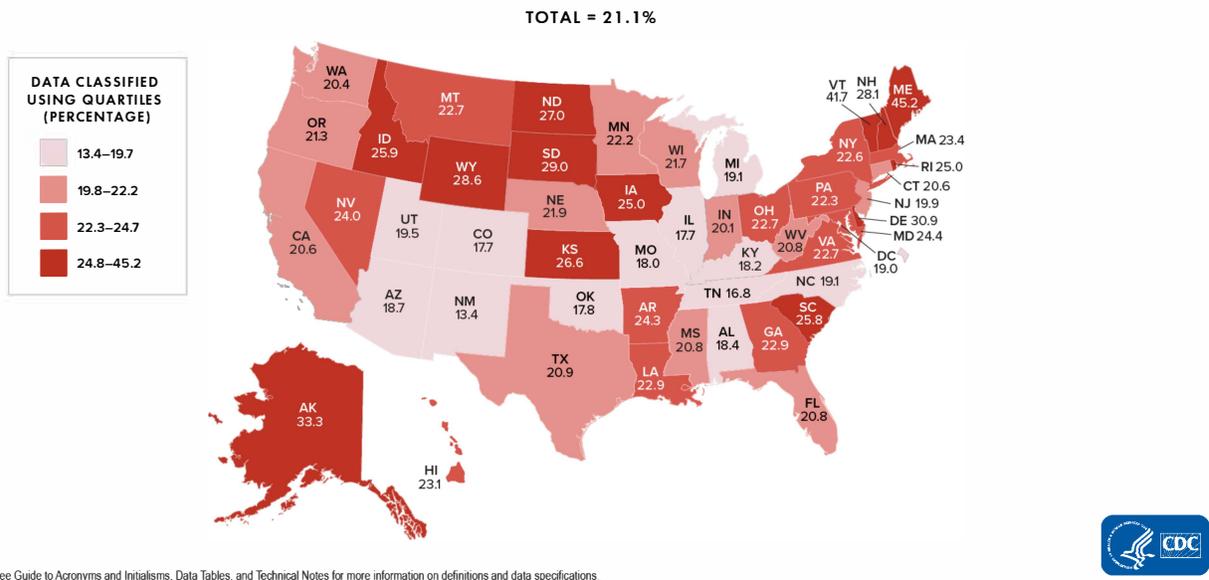
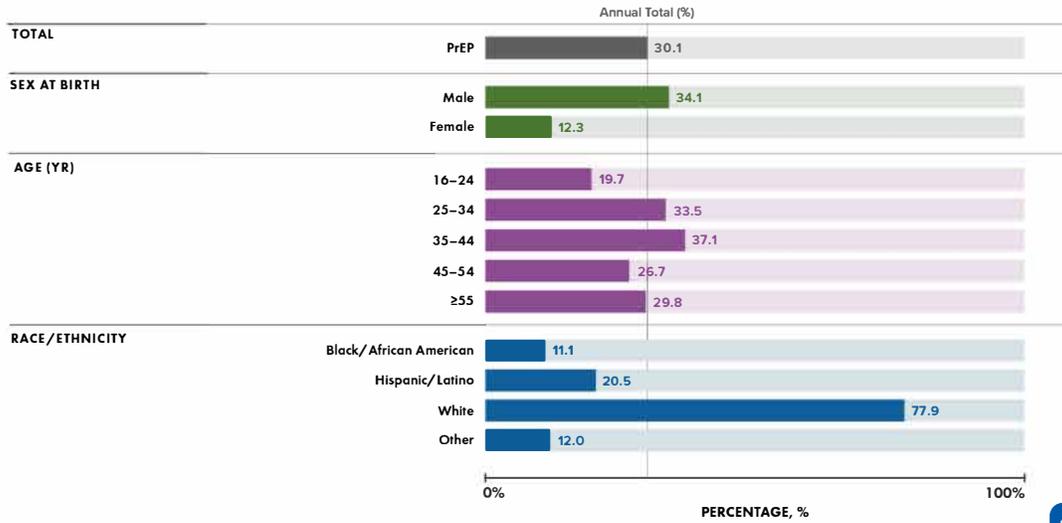


Figure 18. PrEP coverage during 2021 among persons aged ≥ 16 years, by selected characteristics — United States

FIGURE 18
PrEP coverage during 2021 among persons aged ≥ 16 years, by selected characteristics—United States

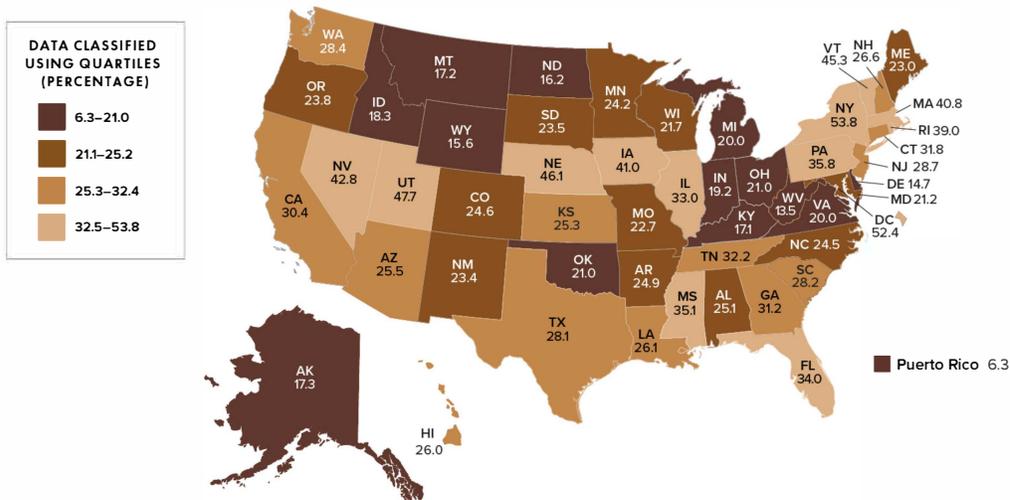


Note. Race/ethnicity category for Other includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, and multiracial persons. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 19. PrEP coverage during 2021 among persons aged ≥ 16 years, by area of residence — United States and Puerto Rico

FIGURE 19
PrEP coverage during 2021 among persons aged ≥ 16 years, by area of residence—United States and Puerto Rico

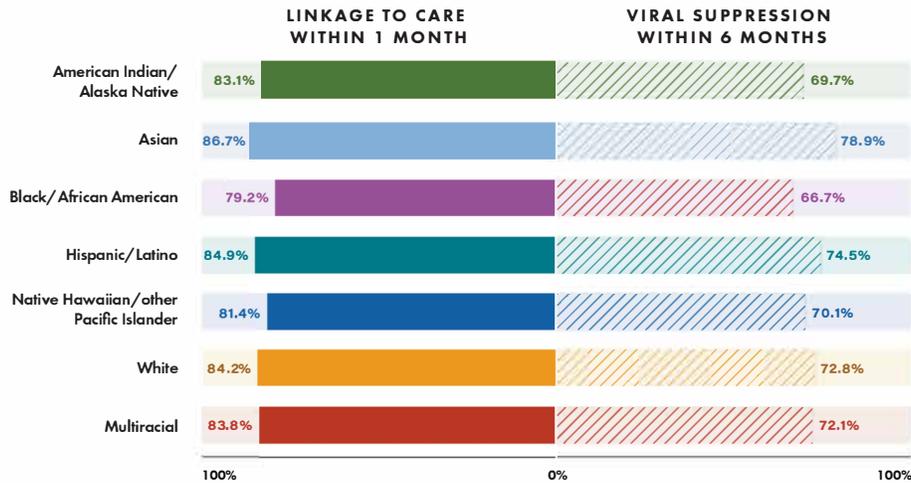


Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 20. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among males, based on assigned sex at birth, with infection attributed to male-to-male sexual contact, by race/ethnicity — 47 states and the District of Columbia

FIGURE 20
Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among males, based on assigned sex at birth, with infection attributed to male-to-male sexual contact, by race/ethnicity—47 states and the District of Columbia

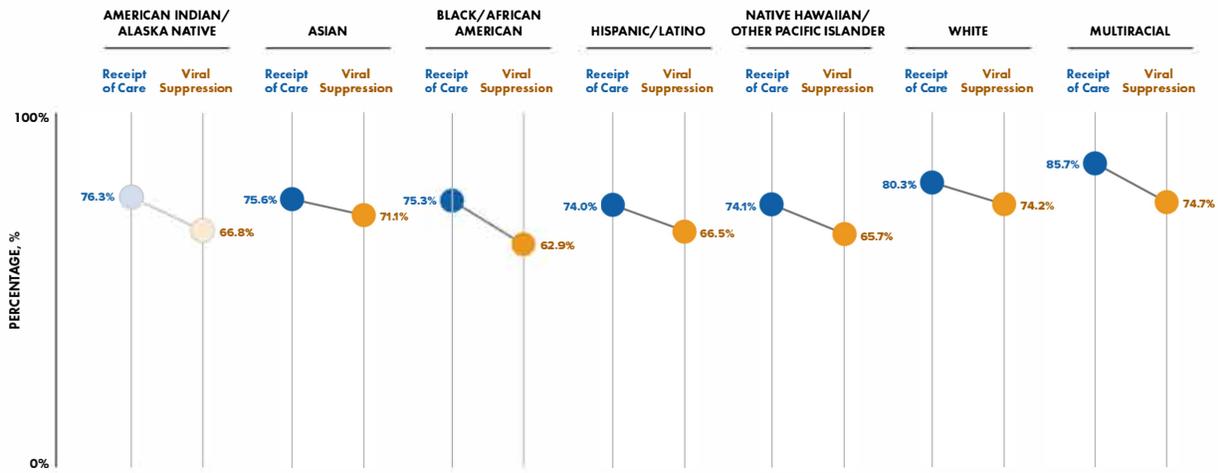


Note. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 21. Receipt of HIV medical care and viral suppression during 2021 among males, based on assigned sex at birth, with infection attributed to male-to-male sexual contact, by race/ethnicity — 47 states and the District of Columbia

FIGURE 21
 Receipt of HIV medical care and viral suppression during 2021 among males, based on assigned sex at birth, with infection attributed to male-to-male sexual contact, by race/ethnicity—47 states and the District of Columbia

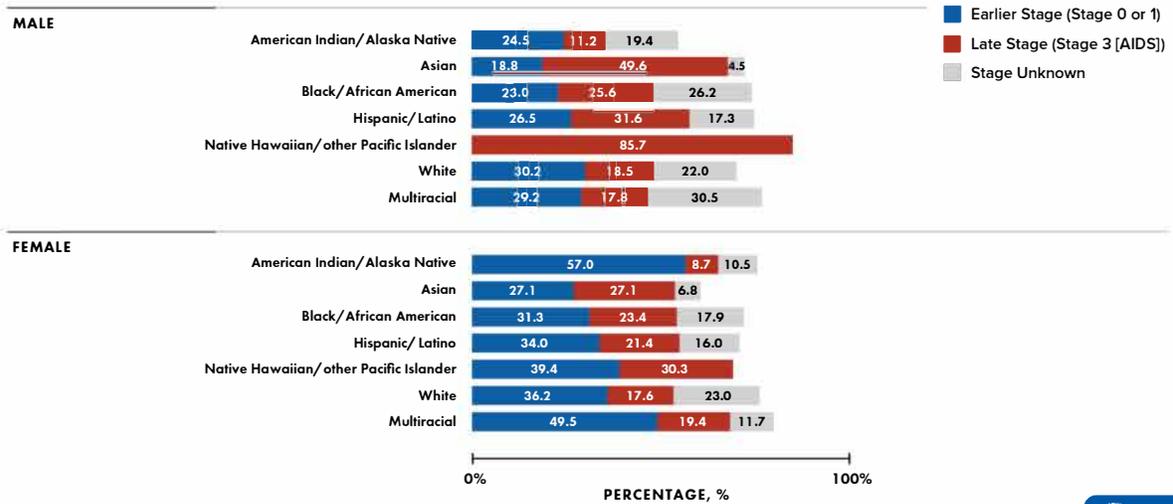


Note. Race/ethnicity category for Asian persons includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 22. Earlier and late stage of disease at HIV diagnosis during 2021 among persons with infection attributed to injection drug use, by assigned sex at birth and race/ethnicity — 47 states and the District of Columbia

FIGURE 22
 Earlier and late stage of disease at HIV diagnosis during 2021 among persons with infection attributed to injection drug use, by assigned sex at birth and race/ethnicity—47 states and the District of Columbia

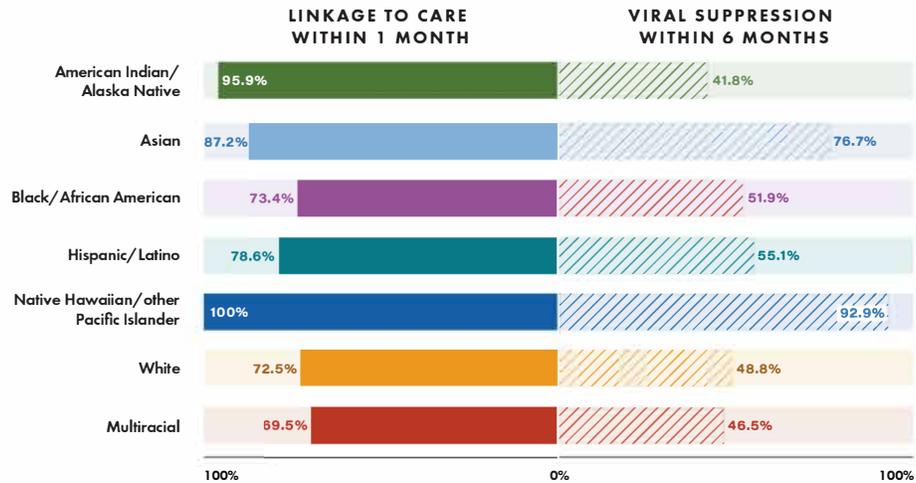


Note. Diagnosis of HIV infection may not be reported for some groups in 2021. Percentages do not sum to 100%, and percentages for Stage 2 are not presented. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 23a. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among males, based on assigned sex at birth, with infection attributed to injection drug use, by race/ethnicity — 47 states and the District of Columbia

FIGURE 23A
Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among males, based on assigned sex at birth, with infection attributed to injection drug use, by race/ethnicity—47 states and the District of Columbia

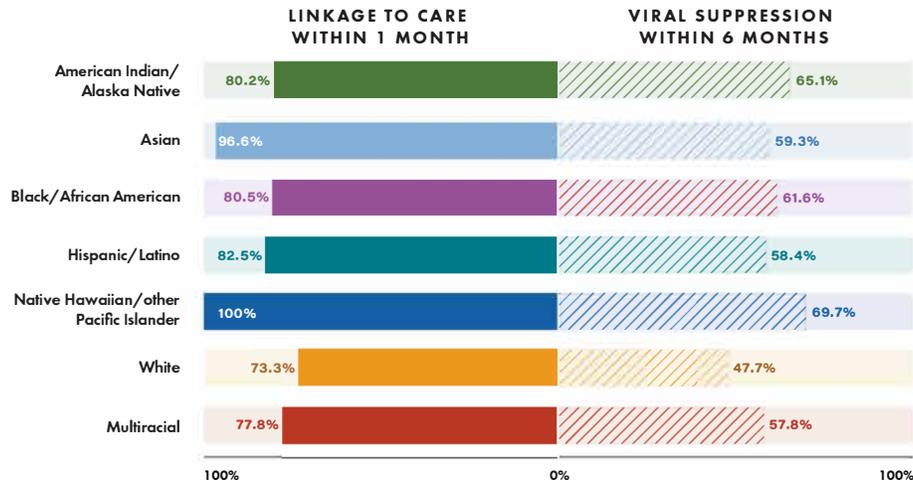


Note. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications



Figure 23b. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among females, based on assigned sex at birth, with infection attributed to injection drug use, by race/ethnicity — 47 states and the District of Columbia

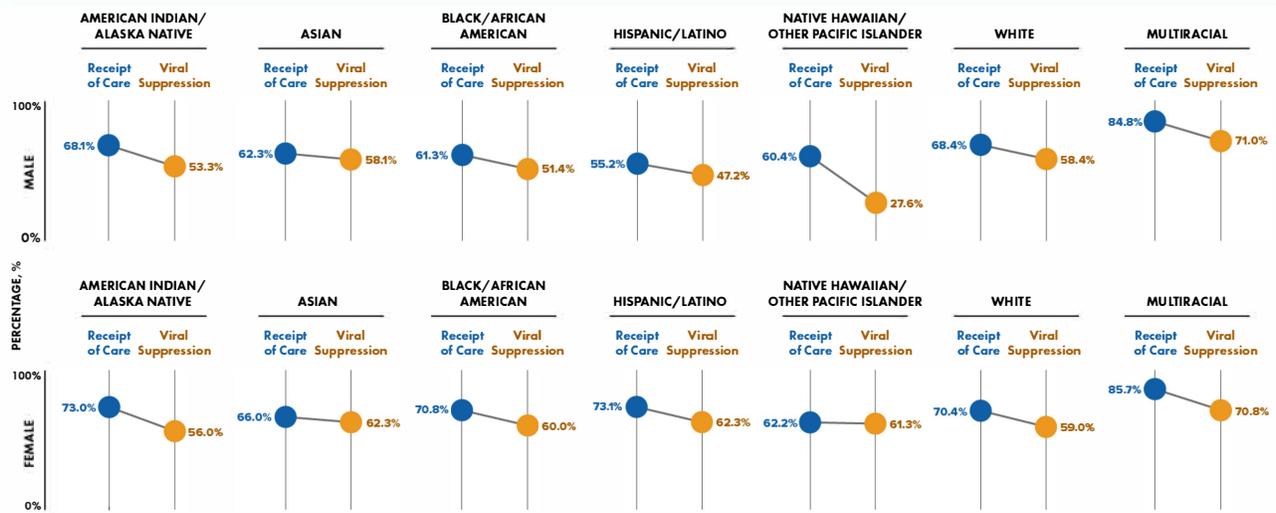
FIGURE 23B
 Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among females, based on assigned sex at birth, with infection attributed to injection drug use, by race/ethnicity—47 states and the District of Columbia



Note. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

Figure 24. Receipt of HIV medical care and viral suppression during 2021 among persons with infection attributed to injection drug use, by assigned sex at birth and race/ethnicity — 47 states and the District of Columbia

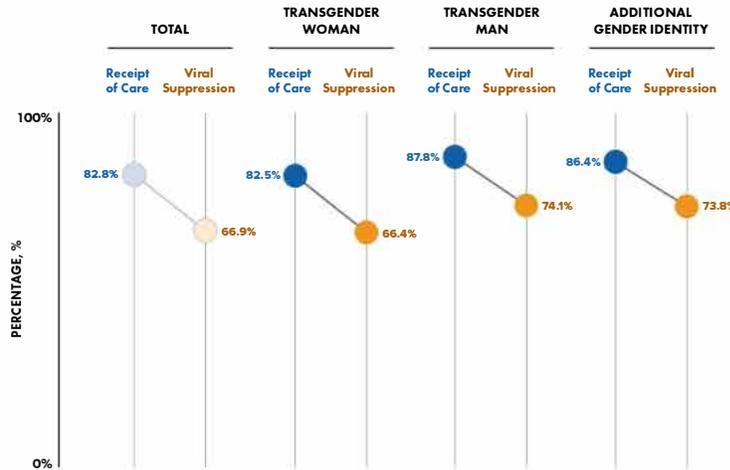
FIGURE 24
 Receipt of HIV medical care and viral suppression during 2021 among persons with infection attributed to injection drug use, by assigned sex at birth and race/ethnicity—47 states and the District of Columbia



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Race/ethnicity category for Asian persons includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

Figure 25. Receipt of HIV medical care and viral suppression during 2021 among transgender and additional gender identity persons — 47 states and the District of Columbia

FIGURE 25
Receipt of HIV medical care and viral suppression during 2021 among transgender and additional gender identity persons—47 states and the District of Columbia

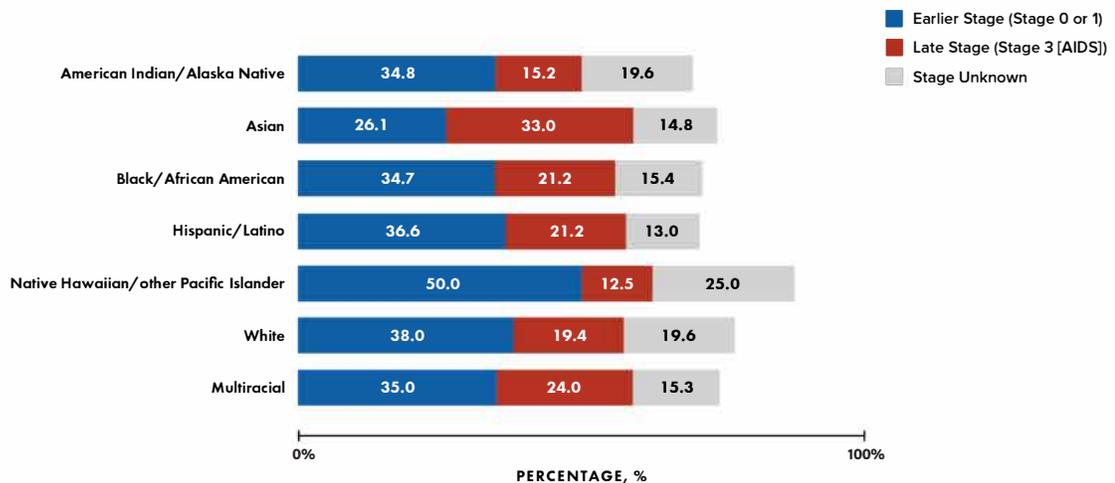


Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 26. Earlier and late stage of disease at HIV diagnosis during 2021 among females, based on assigned sex at birth, by race/ethnicity — 47 states and the District of Columbia

FIGURE 26
Earlier and late stage of disease at HIV diagnosis during 2021 among females, based on assigned sex at birth, by race/ethnicity—47 states and the District of Columbia

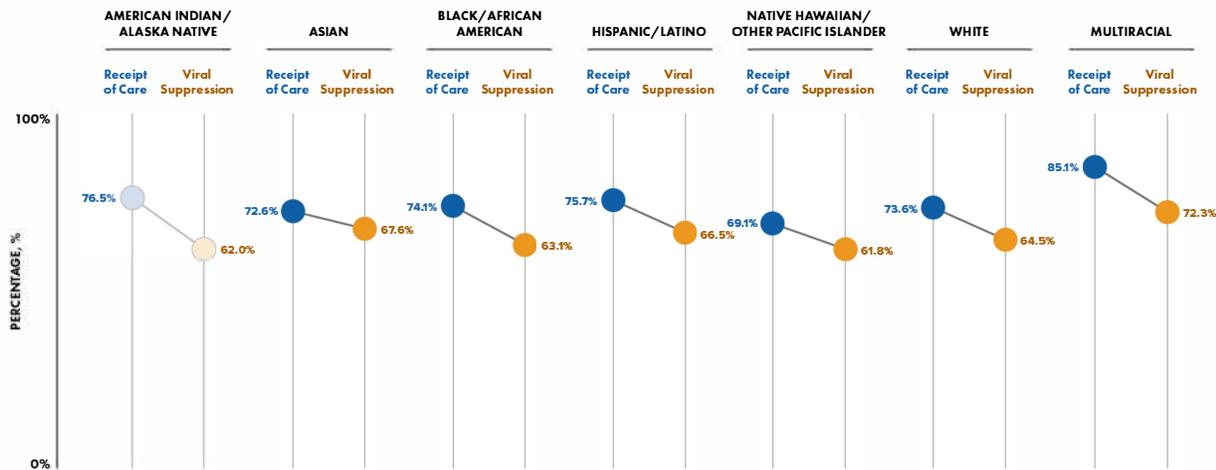


Note. Percentages do not sum to 100%, and percentages for Stage 2 are not presented. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 27. Receipt of HIV medical care and viral suppression during 2021 among females, based on assigned sex at birth, by race/ethnicity — 47 states and the District of Columbia

FIGURE 27
Receipt of HIV medical care and viral suppression during 2021 among females, based on assigned sex at birth, by race/ethnicity— 47 states and the District of Columbia



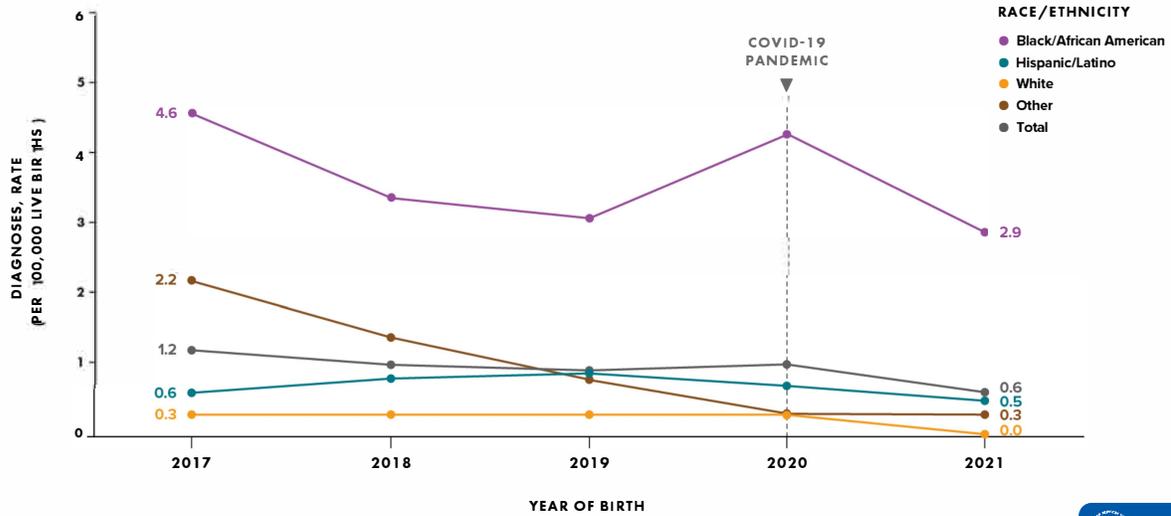
Note. Race/ethnicity category for Asian persons includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 28. Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother's race/ethnicity, 2017–2021 — United States

FIGURE 28

Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother's race/ethnicity, 2017–2021—United States



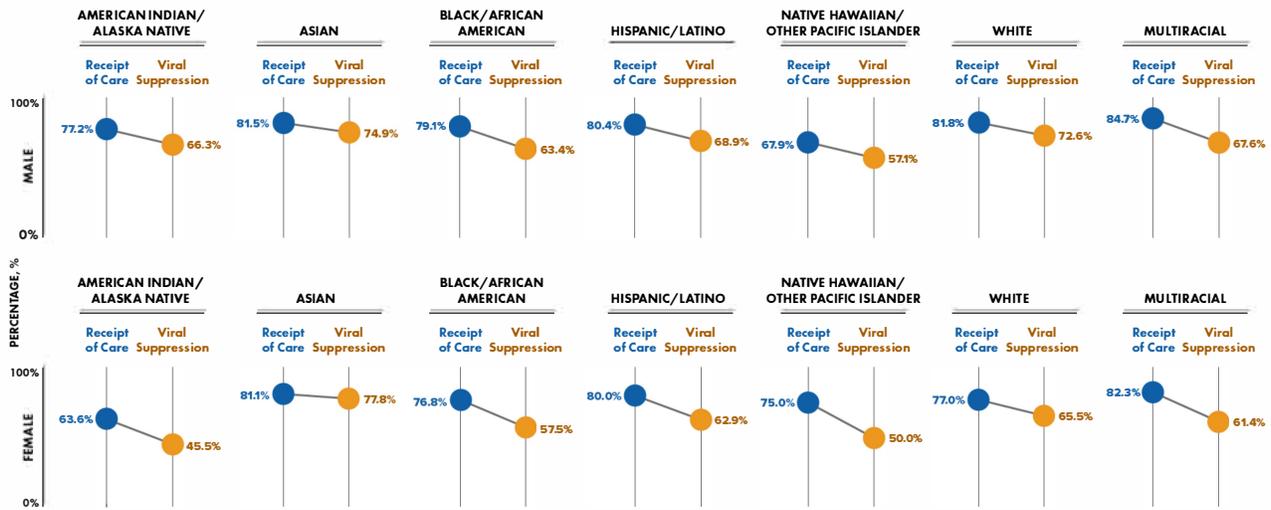
Note. Live-birth data reflect race/ethnicity of the infant's mother. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Race/ethnicity category for Other includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, and multiracial persons.



Figure 29. Receipt of HIV medical care and viral suppression during 2021 among young persons aged 13–24 years, by assigned sex at birth and race/ethnicity — 47 states and the District of Columbia

FIGURE 29

Receipt of HIV medical care and viral suppression during 2021 among young persons aged 13–24 years, by assigned sex at birth and race/ethnicity—47 states and the District of Columbia

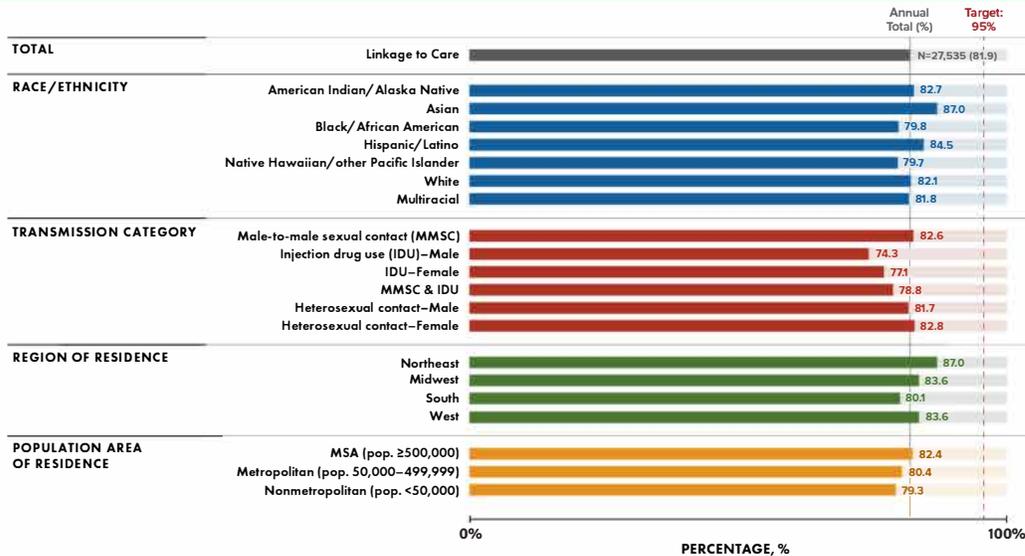


Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Race/ethnicity category for Asian persons includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 30. Status of linkage to HIV medical care within 1 month of HIV diagnosis during 2021 among persons aged ≥13 years, by selected characteristics — 47 states and the District of Columbia

FIGURE 30
Status of linkage to HIV medical care within 1 month of HIV diagnosis during 2021 among persons aged ≥13 years, by selected characteristics— 47 states and the District of Columbia

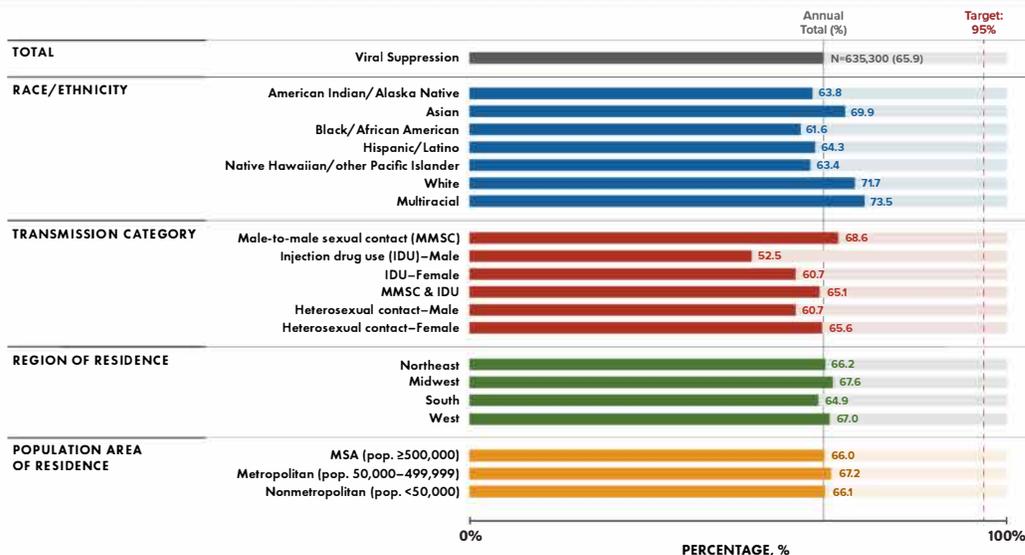


Note. Data have been statistically adjusted to account for missing transmission category. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 31. Status of viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by selected characteristics — 47 states and the District of Columbia

FIGURE 31
Status of viral suppression during 2021 among persons aged ≥13 years living with diagnosed HIV infection, by selected characteristics— 47 states and the District of Columbia

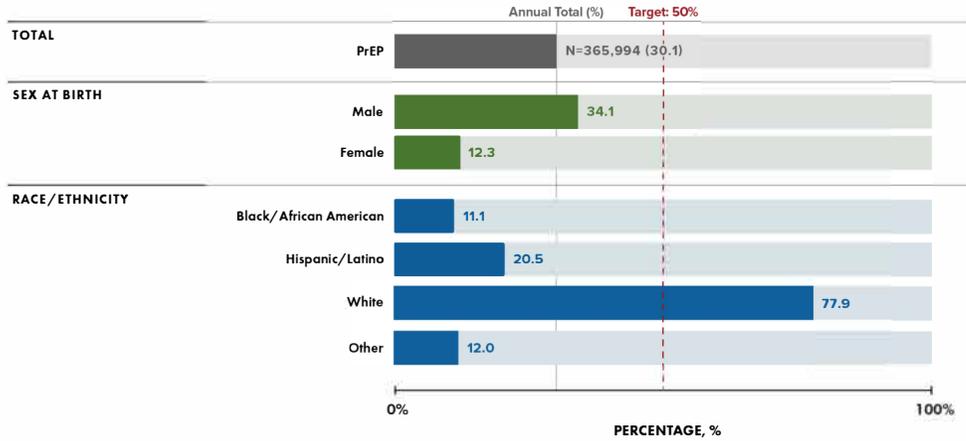


Note. Data have been statistically adjusted to account for missing transmission category. Race/ethnicity category for Asian persons includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Figure 32. Status of PrEP coverage during 2021 among persons aged ≥16 years, by race/ethnicity and assigned sex at birth — United States

FIGURE 32
Status of PrEP coverage during 2021 among persons aged ≥16 years, by race/ethnicity and assigned sex at birth—United States



Note. Race/ethnicity category for Other includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, and multiracial persons. Hispanic/Latino persons can be of any race. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



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Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data—United States and 6 Dependent Areas, 2021: Guide to Acronyms and Initialisms

ACS	American Community Survey
AGI	additional gender identity
AIDS	acquired immunodeficiency syndrome
ART	antiretroviral therapy
ASAB	assigned sex at birth
CD4	CD4+ T-lymphocyte count (cells/ μ L) or percentage
CDC	Centers for Disease Control and Prevention
COVID-19	coronavirus disease 2019
DHP	Division of HIV Prevention
EHE	Ending the HIV Epidemic in the U.S.
FDA	Food and Drug Administration
HIV	human immunodeficiency virus
IDU	injection drug use
MMSC	male-to-male sexual contact
MSA	metropolitan statistical area
MSM	gay, bisexual, and other men who have sex with men
NHANES	National Health and Nutrition Examination Survey
NHSS	National HIV Surveillance System
OI	opportunistic illness

OMB	Office of Management and Budget
PrEP	preexposure prophylaxis
PWID	persons who inject drugs
SDOH	social determinants of health
STI	sexually transmitted infection
VS	viral suppression
ZCTA	ZIP Code Tabulation Area

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