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HIV SURVEILLANCE REPORT

SUPPLEMENTAL REPORT

Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data

United States and 6 Dependent Areas, 2020

Centers for Disease Control and Prevention
National Center for HIV, Viral Hepatitis, STD, and TB Prevention

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Contents

Commentary 8

National Profile 9

Special Focus Profiles 27

Gay, Bisexual, and Other Men Who Have Sex with Men 29

Persons Who Inject Drugs 27

Transgender and Additional Gender Identity Persons 32

Women (based on sex assigned at birth) 34

Persons with Perinatally Acquired HIV Infection 36

Young Persons Aged 13–24 Years 37

2020 Status and Disparities in Linkage to Care, Viral Suppression, and PrEP Coverage 38

Technical Notes 46

References 54

Figures in the National Profile

1 Status of CD4 and viral load reporting, by area of residence as of December 2021—United States and dependent areas 10

2 Stage of disease at HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years—45 states and the District of Columbia 11

3 Stage of disease at HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia 12

4 Linkage to HIV medical care within 1 month of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia 14

5 Linkage to HIV medical care within 1 month of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by area of residence—45 states and the District of Columbia 15

6a Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by gender—45 states and the District of Columbia 17

6b Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by age group—45 states and the District of Columbia 18

7a Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by race/ethnicity—45 states and the District of Columbia 19

7b Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by transmission category—45 states and the District of Columbia 20

8 Receipt of HIV medical care during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by area of residence—45 states and the District of Columbia 20

9 Viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by area of residence—45 states and the District of Columbia 21

10 Viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by selected characteristics—45 states and the District of Columbia 22

11 Stage 3 (AIDS) at time of diagnosis of HIV infection during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by area of residence—United States 24

12 PrEP coverage during 2020 (COVID-19 pandemic) among persons aged ≥16 years, by selected characteristics—United States and Puerto Rico 26

13 PrEP coverage during 2020 (COVID-19 pandemic) among persons aged ≥16 years, by area of residence—United States and Puerto Rico 26

Figures in the Special Focus Profiles

Section 1 Gay, Bisexual, and Other Men Who Have Sex With Men

14 Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among men who have sex with men (sex assigned at birth), by race/ethnicity—45 states and the District of Columbia 28

15 Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among men who have sex with men (sex assigned at birth), by race/ethnicity—45 states and the District of Columbia 29

Section 2 Persons Who Inject Drugs

16 Earlier and late stage of disease at HIV diagnosis during 2020 (COVID-19 pandemic) among persons who inject drugs, by sex assigned at birth and race/ethnicity—45 states and the District of Columbia 30

17 Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons who inject drugs, by sex assigned at birth and race/ethnicity—45 states and the District of Columbia 31

18 Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons who inject drugs, by sex assigned at birth and race/ethnicity—45 states and the District of Columbia 30

Section 3 Transgender and Additional Gender Identity Persons

19 Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among transgender and additional gender identity persons—45 states and the District of Columbia 31

Section 4 Women

20 Earlier and late stage of disease at HIV diagnosis during 2020 (COVID-19 pandemic) among women (sex assigned at birth), by race/ethnicity—45 states and the District of Columbia 35

21 Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among women (sex assigned at birth), by race/ethnicity—45 states and the District of Columbia 36

Section 5 Persons with Perinatally Acquired HIV Infection

22 Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother's race/ethnicity, 2016–2020—United States 37

Section 6 Young Persons Aged 13–24 Years

23 Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among young persons aged 13–24 years, by sex assigned at birth and race/ethnicity—45 states and the District of Columbia 38

24 Status of linkage to HIV medical care within 1 month of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia 39

25 Status of viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by selected characteristics—45 states and District of Columbia 42

26 Status of PrEP coverage during 2020 (COVID-19 pandemic) among persons aged ≥16 years, by race/ethnicity and sex assigned at birth—United States and Puerto Rico 44

Tables

1a Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia 58

1b Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by area of residence—45 states and the District of Columbia 59

1c Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia 60

1d Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among males (sex assigned at birth) aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—45 states and the District of Columbia 67

1e Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among transgender and additional gender identity persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia 68

2a	Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia	70
2b	Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by area of residence—45 states and the District of Columbia	71
2c	Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia	72
2d	Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among males (sex assigned at birth) aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—45 states and the District of Columbia	79
2e	Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among transgender and additional gender identity persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia	80
3a	Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by selected characteristics—45 states and the District of Columbia	82
3b	Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by area of residence—45 states and the District of Columbia	83
3c	Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by race/ethnicity and selected characteristics—45 states and the District of Columbia	85
3d	Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among males (sex assigned at birth) aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age group—45 states and the District of Columbia	92
3e	Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among transgender and additional gender identity persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by selected characteristics—45 states and the District of Columbia	93
4a	HIV viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by selected characteristics—45 states and the District of Columbia	95
4b	HIV viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by area of residence—45 states and the District of Columbia	96
5a	Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥13 years, by year of diagnosis and selected characteristics, 2016–2020—United States	98
5b	Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥13 years, by year of diagnosis and selected characteristics, 2016–2020—United States and 6 dependent areas	99
5c	Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥13 years, by year of diagnosis and area of residence, 2015–2020—United States and 6 dependent areas	100
5d	Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥13 years, by race/ethnicity and area of residence, 2020 (COVID-19 pandemic)—United States	102
6a	Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and selected characteristics, 2016–2020—United States	103
6b	Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and selected characteristics, 2016–2020—United States and 6 dependent areas	104
6c	Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2016–2020—United States and 6 dependent areas	105
6d	Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and selected characteristics, 2016–2020—United States	110
6e	Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and selected characteristics, 2016–2020—United States and 6 dependent areas	111
6f	Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2016–2020—United States and 6 dependent areas	112

7a Persons aged ≥13 years surviving >3 years after a diagnosis of HIV infection during 2012–2017, by year of diagnosis and selected characteristics—United States 117

7b Persons aged ≥13 years surviving >3 years after a diagnosis of HIV infection during 2012–2017, by year of diagnosis and selected characteristics—United States and 6 dependent areas 118

7c Persons aged ≥13 years surviving >3 years after a diagnosis of HIV infection during 2012–2017, by year of diagnosis and area of residence—United States and 6 dependent areas 119

7d Persons aged ≥13 years with HIV surviving >3 years after stage 3 (AIDS) classification during 2012–2017, by year of diagnosis and selected characteristics—United States 120

7e Persons aged ≥13 years with HIV surviving >3 years after stage 3 (AIDS) classification during 2012–2017, by year of diagnosis and selected characteristics—United States and 6 dependent areas 121

7f Persons aged ≥13 years with HIV surviving >3 years after stage 3 (AIDS) classification during 2012–2017, by year of diagnosis and area of residence—United States and 6 dependent areas 122

8a Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2020 (COVID-19 pandemic) among persons aged ≥16 years, by selected characteristics—United States and Puerto Rico 123

8b Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2020 (COVID-19 pandemic) among persons aged ≥16 years, by area of residence—United States and Puerto Rico 124

9a Perinatally acquired HIV infection, by year of birth and mother's race/ethnicity, 2016–2020—United States 125

9b Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother's race/ethnicity, 2016–2020—United States 125

10 Monitoring national HIV prevention goals by using data from the National HIV Surveillance System (NHSS) and other reporting systems 126

11 Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2021—United States and 6 dependent areas 127

Appendix: Tables for Ending the HIV Epidemic Phase I Jurisdictions

A1 Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions 129

A2 Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions 130

A3 Receipt of HIV medical care among persons aged ≥13 years with infection diagnosed by year-end 2019 and alive at year-end 2020, by area of residence—Ending the HIV Epidemic Phase I jurisdictions 132

A4 HIV viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by area of residence—Ending the HIV Epidemic Phase I jurisdictions 134

A5 Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2020 (COVID-19 pandemic) among persons aged ≥16 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions 136

Guide to Acronyms and Initialisms

ACS	American Community Survey
AGI	additional gender identity
AIDS	acquired immunodeficiency syndrome
ART	antiretroviral therapy
CD4	CD4+ T-lymphocyte count (cells/μL) 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.
HIV	human immunodeficiency virus
IDU	injection drug use
MMSC	male-to-male sexual contact
MMSC-IDU	male-to-male sexual contact *and* injection drug use
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
NIR	no identified risk factor
OI	opportunistic illness
OMB	Office of Management and Budget
PrEP	preexposure prophylaxis
PWID	persons who inject drugs
SDOH	social determinants of health
VS	viral suppression
ZCTA	ZIP Code tabulation area

Commentary

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 2020 *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 also used to monitor progress toward the HIV-related national objectives 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].

Impact of COVID-19 Pandemic

For this report, due to the impact of the COVID-19 pandemic on HIV testing in the United States during 2020, HIV diagnosis, death, and prevalence trends through 2020 are not discussed in the Commentary [7–10]. The overall number of HIV diagnoses in the United States in 2020 (30,403) was 17% lower than in 2019 (36,585) [5]. The steep reduction in diagnoses in 2020 is likely due to disruptions in clinical care services, patient hesitancy in accessing clinical services, and shortages in HIV testing reagents/materials, which causes concern regarding underdiagnosis [7–10]. Although state/local health departments developed innovative strategies for HIV-related testing (self-tests) and care services (telehealth) during the COVID-19 pandemic, these strategies did not make up for declines in laboratory reporting because self-test results are not routinely reported to health departments or CDC [11, 12]. In addition, telehealth visits might not have included orders for laboratory testing during periods of strict social distancing or patients may have been reluctant to complete testing.

As the COVID-19 pandemic is still ongoing, more time and data are needed to accurately assess COVID-19's impact on HIV in the United States. 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. Assessment of trends in HIV diagnoses, deaths, and prevalence that include the year 2020 is discouraged.

Report Changes

- Terminology for gender and transmission category labels were updated.
- Risk factor data for transgender and additional gender identity persons have been added. Data are presented using the exposure category classification, which is meant to convey all the known ways a person could have been exposed to HIV (see Technical Notes for more information on exposure category).
- The Prevalence-based HIV Care Continuum table and associated data are not included in this issue of the report due to the lack of prevalence and knowledge of status estimates for the year 2020.

National Profile

The use of data reported to CDC through December 31, 2021, allows for a 12-month reporting delay, but COVID-related service interruptions impact the assessment of trends through the most recent diagnosis, death, and prevalence year (2020). The statements in this section, unless otherwise indicated, are based on numbers of 12 or more diagnoses. Please use caution when interpreting data on diagnosed HIV infection (see Technical Notes for additional information on definitions and data specifications).

Data from jurisdictions that reported complete CD4 and viral load laboratory results to CDC were used 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 stage 3 (AIDS) at the time of diagnosis of HIV infection (Tables 5a–5d); deaths and survival of persons with diagnosed HIV infection (Tables 6a–7f); and persons with diagnosed, perinatally acquired HIV infection (Tables 9a/b). For tables on PrEP (Tables 8a/b), the number of persons who have been prescribed PrEP, the estimated number with PrEP indications, and the percentage of PrEP coverage are presented. For tables that include data by transmission category, the data were statistically adjusted to account for missing transmission category and are presented based on sex assigned at birth. For a summary of indicators for national goals, EHE, and NHAS, see Table 10.

Please use caution when interpreting data for transgender men, AGI, American Indian/Alaska Native persons, and Native Hawaiian/other Pacific Islander persons: the numbers are small.

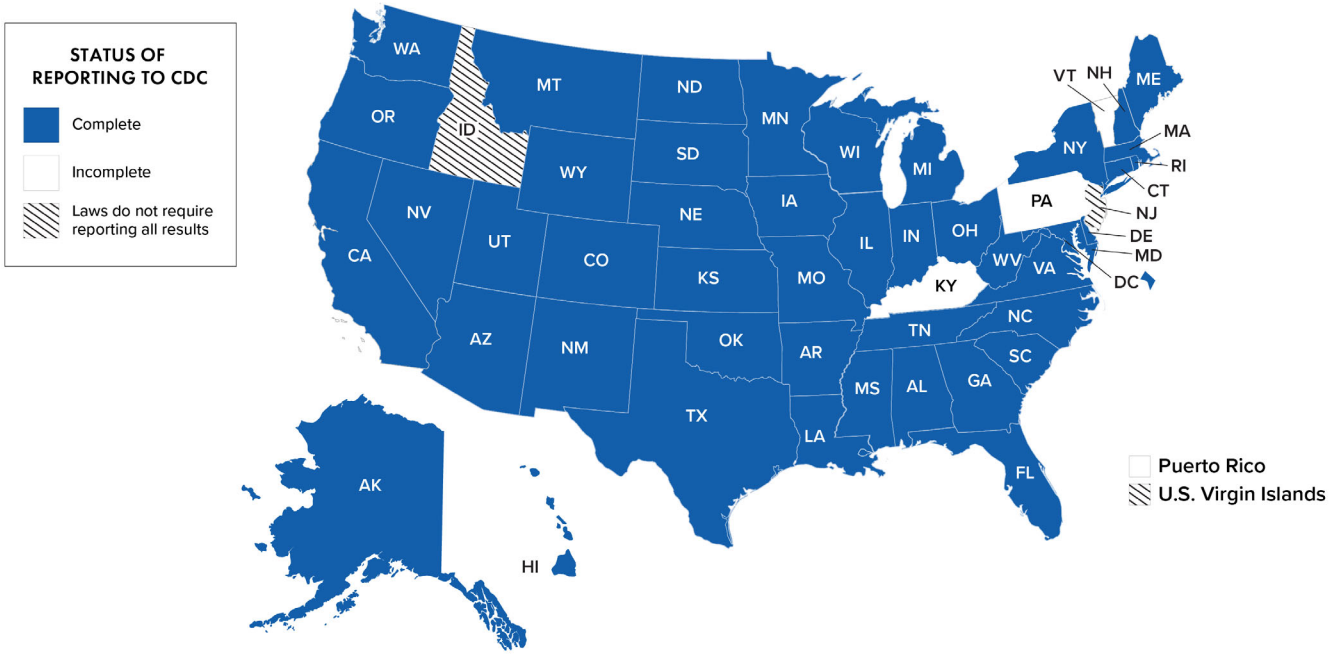
Please read all titles and footnotes carefully to ensure a complete understanding of the displayed data. Please note that we highlight an important point with the magnifying glass icon or call attention to an important finding with the exclamation icon in the text.

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 (on the basis of NHSS data) is dependent upon complete reporting of HIV-related laboratory results (including CD4+ T-lymphocyte [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 2021, 46 jurisdictions (45 states and the District of Columbia) had complete laboratory reporting for all data years examined and specimens collected from at least January 2019 through September 2021 (Figure 1). In comparison with the 2019 report, the 2020 report includes data from 1 additional state (Kansas) that met the criteria. Data for Maryland should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021. Please note that due to incomplete reporting of deaths for the year 2020, data for Kansas, North Carolina, and South Carolina should be interpreted with caution.

Figure 1. Status of CD4 and viral load reporting, by area of residence as of December 2021—United States and dependent areas



Note. 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. See Technical Notes for more information on areas with complete laboratory reporting.

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 2020.

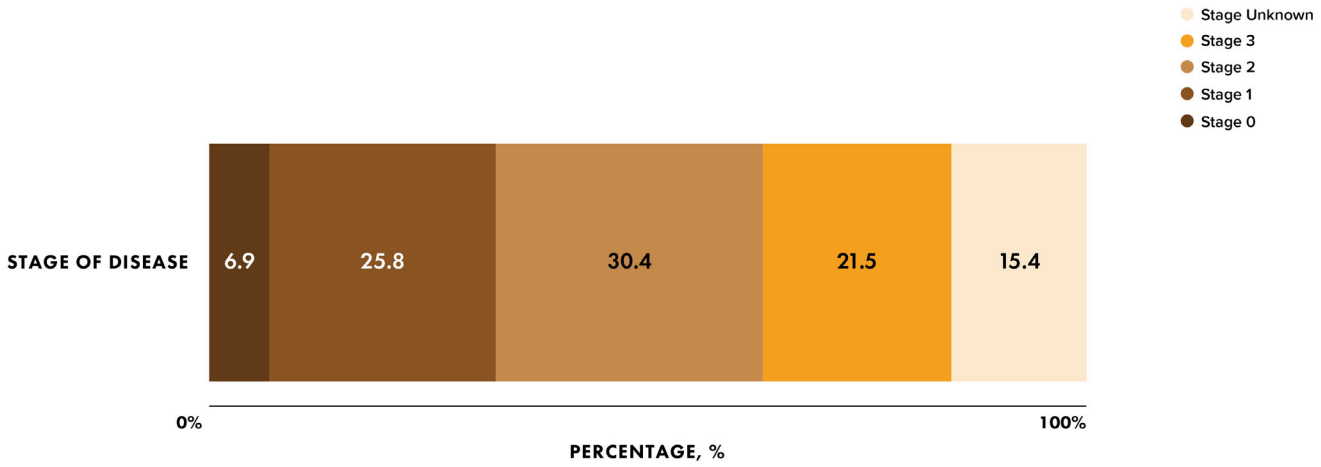
Note. Denominator for stage of disease, linkage to care within 1 month, and viral suppression within 6 months of diagnosis is limited to people with HIV diagnosed in a single year.

Stage of disease at time of diagnosis of HIV infection

Among 28,422 persons aged ≥13 years with HIV infection diagnosed during 2020 in 46 jurisdictions with complete reporting of laboratory data to CDC, the stage of disease at time of diagnosis was classified as follows: stage 0 (6.9%), stage 1 (25.8%), stage 2 (30.4%), stage 3 (AIDS) (21.5%), and stage unknown (15.4%).

- A higher percentage of persons had HIV diagnosed at an earlier stage (stages 0 or 1, 32.7%) than at the late stage (stage 3 [AIDS]: 21.5%) (Figure 2, Table 1a).

Figure 2. Stage of disease at HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years—45 states and the District of Columbia

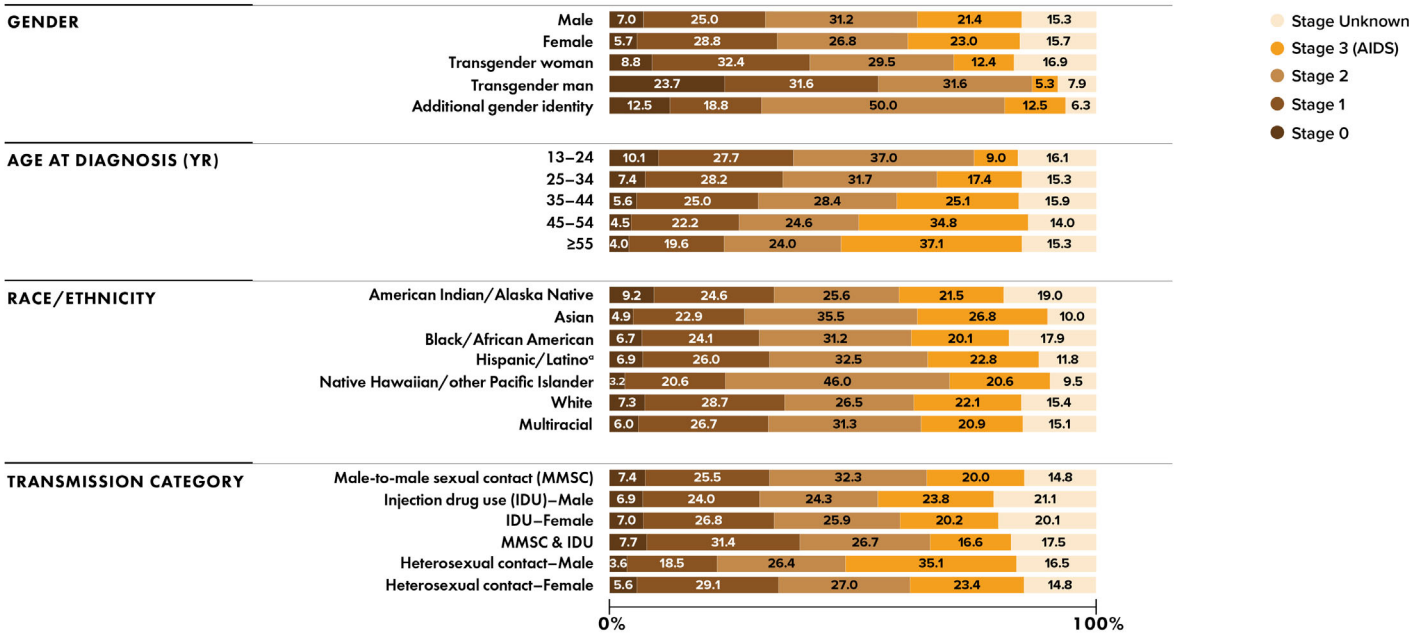


Note. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information 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: 32.0% vs 21.4%
    - Female: 34.5% vs 23.0%
    - Transgender women: 41.2% vs 12.4%
    - Transgender men: 55.3% vs 5.3%
    - AGI persons: 31.3% vs 12.5%
  - Age group—
    - Persons aged 13–24 years: 37.8% vs 9.0%
    - Persons aged 25–34 years: 35.6% vs 17.4%
    - Persons aged 35–44 years: 30.6% vs 25.1%
    - Persons aged 45–54 years: 26.7% vs 34.8%
    - Persons aged ≥55 years: 23.6% vs 37.1%
  - Race/ethnicity—
    - American Indian/Alaska Native persons: 33.8% vs 21.5%
    - Asian persons: 27.8% vs 26.8%
    - Black/African American persons: 30.8% vs 20.1%
    - Hispanic/Latino persons: 32.9% vs 22.8%
    - Native Hawaiian/other Pacific Islander persons: 23.8% vs 20.6%
    - White persons: 36.0% vs 22.1%
    - Multiracial persons: 32.7% vs 20.9%

- Sex assigned at birth and transmission category—
  - Among males (based on sex assigned at birth)
    - Male-to-male sexual contact (MMSC): 32.9% vs 20.0%
    - Injection drug use (IDU): 32.1% vs 22.2%
    - MMSC-IDU: 39.1% vs 16.6%
    - Heterosexual contact: 22.1% vs 35.1%
  - Among females (based on sex assigned at birth)
    - IDU: 33.8% vs 20.2%
    - Heterosexual contact: 34.7% vs 23.4%

Figure 3. Stage of disease at HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia



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

[a] Hispanic/Latino persons can be of any race.

- Area of residence—
  - Five jurisdictions had an equivalent or higher percentage of persons that received a late-stage diagnosis compared to the percentage that received an earlier-stage diagnosis, respectively.
    - Arkansas: 24.4% vs 24.8%
    - Delaware: 26.9% vs 26.9%
    - Maine: 50.0% vs 25.0%
    - Mississippi: 22.4% vs 18.4%
    - North Dakota: 41.7% vs 16.6%

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

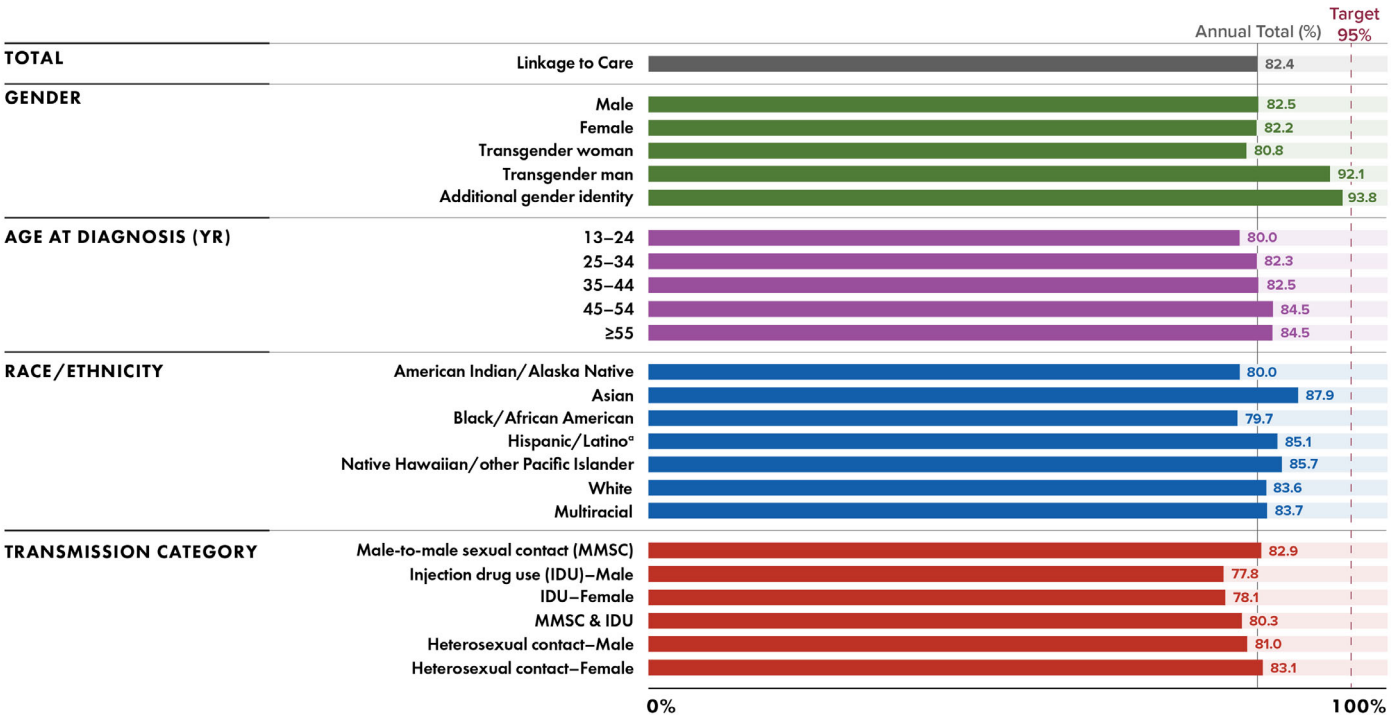
Linkage to HIV medical care

Among 28,422 persons with HIV infection diagnosed during 2020 in the 46 jurisdictions with complete reporting of laboratory data to CDC, 82.4% were linked to HIV medical care within 1 month of diagnosis (Table 2a).

- Highest percentages of linkage to HIV medical care were as follows (Figures 4 and 5, Tables 2a/b):
  - Gender—AGI persons: 93.8% and transgender men: 92.1%
  - Age group—persons aged ≥45 years (45–54 years and ≥55 years): 84.5%
  - Race/ethnicity—Asian persons: 87.9%
  - Sex assigned at birth and transmission category—females with infection attributed to heterosexual contact: 83.1% and males with infection attributed to MMSC: 82.9%
  - Area of residence—Alaska, Colorado, Iowa, Maine, Massachusetts, Minnesota, Montana, Nebraska, Rhode Island, South Carolina, Washington, and Wyoming were in the highest quartile (≥87.7%) of persons linked to HIV medical care within 1 month of diagnosis (Figure 5)
- Lowest percentages of linkage to HIV medical care were as follows (Figures 4 and 5, Tables 2a/b):
  - Gender—transgender women: 80.8%
  - Age group—persons aged 13–24 years: 80.0%
  - Race/ethnicity—Black/African American persons: 79.7%
  - Sex assigned at birth and transmission category—females and males with infection attributed to IDU: 78.1% and 77.8%, respectively
  - Area of residence—Alabama, Arkansas, Delaware, Indiana, Louisiana, Mississippi, Missouri, New Hampshire, Oklahoma, Tennessee, Texas, and West Virginia were in the lowest quartile (≤80.8%) of persons linked to HIV medical care within 1 month of diagnosis (Figure 5)

A closer look at linkage to HIV medical care within 1 month of diagnosis reveals that among 28,422 persons with HIV infection diagnosed during 2020, 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).

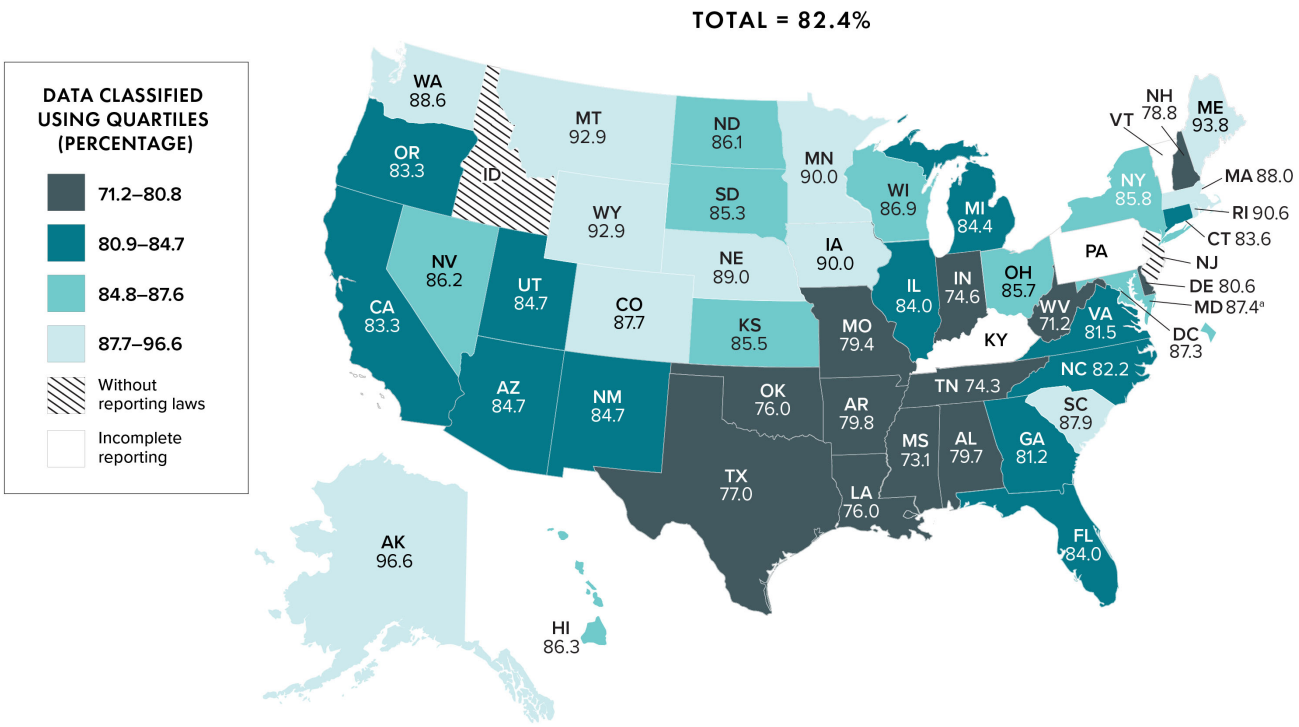
Figure 4. Linkage to HIV medical care within 1 month of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia



Note. Gray line indicates the overall percentage of persons linked to care within 1 month of diagnosis. 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

[a] Hispanic/Latino persons can be of any race.

Figure 5. Linkage to HIV medical care within 1 month of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by area of residence—45 states and the District of Columbia



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

[a] Data for Maryland should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

Viral suppression within 6 months

Among 28,422 persons with HIV infection diagnosed during 2020 in the 46 jurisdictions with complete reporting of laboratory data to CDC, viral load was suppressed in 67.8% of persons within 6 months of HIV diagnosis (Table 2a).

- Highest percentages of viral suppression ≤6 months after HIV diagnosis were as follows (Tables 2a/b):
  - Gender—transgender men: 78.9%
  - Age group—persons aged 13–24 years: 69.4%
  - Race/ethnicity—Asian persons: 79.1%
  - Sex assigned at birth and transmission category—males with infection attributed to MMSC: 69.6% and females with infection attributed to heterosexual contact: 69.5%
  - Area of residence—Alaska, Hawaii, Iowa, Kansas, Maine, Massachusetts, New York, Oregon, Rhode Island, South Carolina, Utah, and Washington were in the highest quartile (≥74.5%) of persons who had viral suppression within 6 months after HIV diagnosis

- Lowest percentages of viral suppression ≤6 months after HIV diagnosis were as follows (Tables 2a/b):
  - Gender—transgender women: 64.3%
  - Age group—persons aged ≥55 years: 64.6%
  - Race/ethnicity—American Indian/Alaska Native persons: 60.0%
  - Sex assigned at birth and transmission category—males and females with infection attributed to IDU: 53.4%
  - Area of residence—Arkansas, Georgia, Illinois, Mississippi, Missouri, New Mexico, Oklahoma, South Dakota, Tennessee, Texas, and West Virginia were in the lowest quartile (≤66.1%) of persons who had viral suppression within 6 months after HIV diagnosis

Receipt of HIV medical care and viral suppression

During 2020, 74.1% of 944,247 persons alive at year-end 2020 received any HIV medical care (at least 1 CD4 or viral load test), 50.6% of persons were retained in HIV medical care, and 64.6% of persons had viral suppression at the most recent viral load test in 46 jurisdictions with complete reporting of laboratory data to CDC (Tables 3a and 4a).

•Highest percentages of persons who received any HIV medical care and had viral suppression at the most recent viral load test were as follows (Figures 6a/b–7a/b, Table 3a):

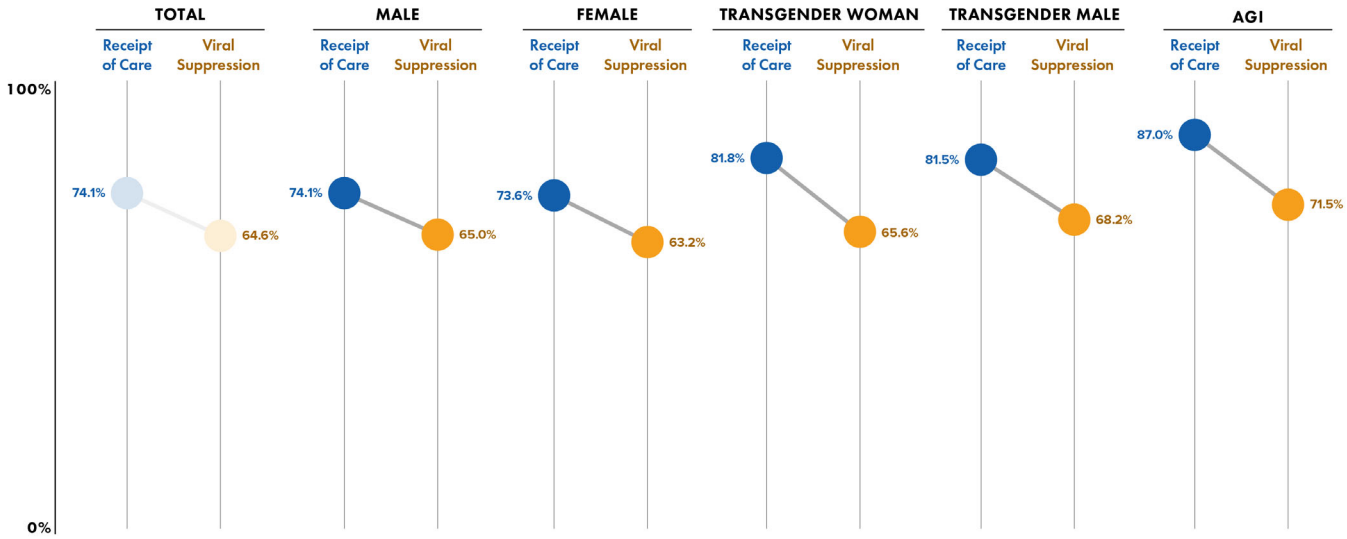
- Gender—AGI persons: 87.0%, 71.5%, respectively
- Age group—persons aged 13–24 years: 78.1%; persons aged ≥55 years: 66.3%, respectively
- Race/ethnicity—multiracial persons: 84.0%, 72.2%, respectively
- Sex assigned at birth and transmission category—males with infection attributed to MMSC-IDU: 77.2% and females with infection attributed to heterosexual contact: 74.3%; males with infection attributed to MMSC: 67.2% and females with infection attributed to heterosexual contact: 64.4%, respectively
- Area of residence—
  - Alaska, Hawaii, Iowa, Kansas, Maine, Montana, Oregon, South Carolina, South Dakota, Tennessee, Washington, and Wyoming were in the highest quartile (≥80.4%) of persons who received any HIV medical care (Figure 8)
  - Alaska, Delaware, Hawaii, Iowa, Kansas, Maine, Montana, New Hampshire, Oregon, South Carolina, Washington, and Wisconsin were in the highest quartile (≥71.8%) of persons who had viral suppression at the most recent viral load test (Figure 9)

- Lowest percentages of persons who received any HIV medical care and had viral suppression at the most recent viral load test were as follows (Figures 6a/b–7a/b, Table 3a):
  - Gender—females: 73.6%, 63.2%, respectively
  - Age group—persons aged ≥55 years: 73.2%; persons aged 25–34 years: 62.0%, respectively
  - Race/ethnicity—Native Hawaiian/other Pacific Islander persons: 71.2%; Black/African American persons: 60.4%, respectively
  - Sex assigned at birth and transmission category—males with infection attributed to IDU: 61.5% and females with infection attributed to IDU: 71.0%; males with infection attributed to IDU: 52.0% and females with infection attributed to IDU: 59.6%, respectively

○ Area of residence—

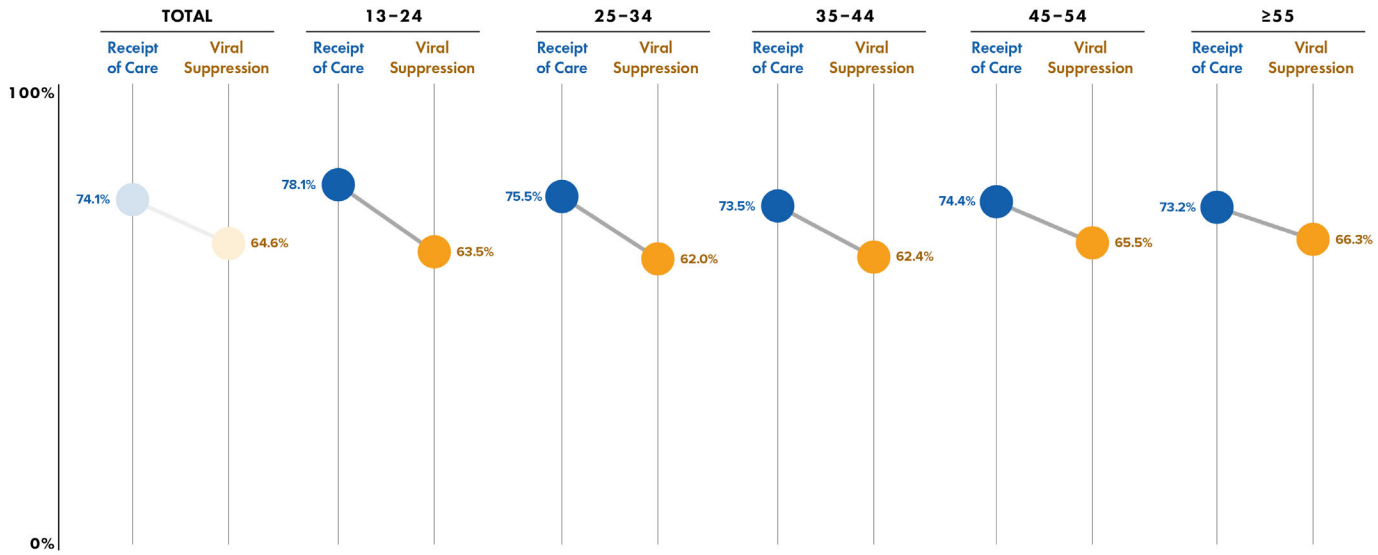
- Arkansas, Colorado, Georgia, Maryland, Mississippi, Nevada, New York, Oklahoma, Texas, Virginia, West Virginia, and the District of Columbia were in the lowest quartile (≤73.5) of persons who received any HIV medical care (Figure 8)
- Arkansas, Colorado, Georgia, Maryland, Mississippi, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, West Virginia, and the District of Columbia were in the lowest quartile (≤62.3%) of persons who had viral suppression at the most recent viral load test (Figure 9)

Figure 6a. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by gender—45 states and the District of Columbia



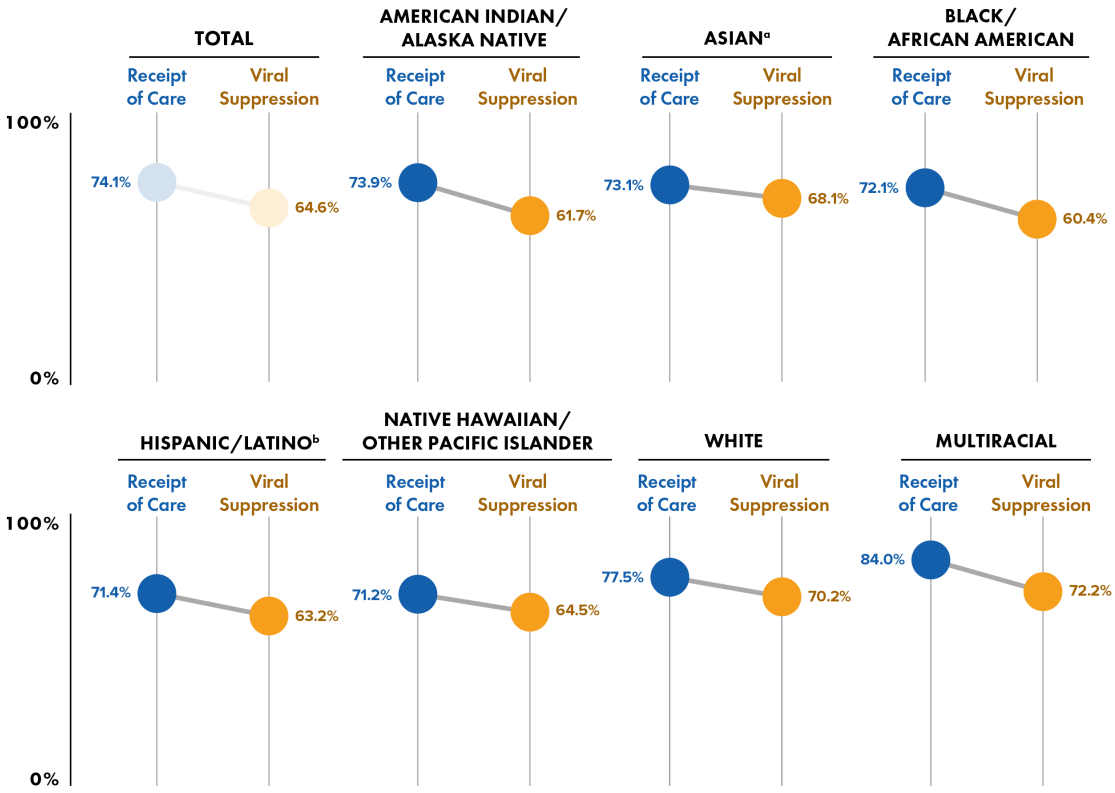
Note. Data for the year 2020 are preliminary and based on deaths reported to CDC as of December 2021. Data for 2020 should also be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

Figure 6b. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by age group—45 states and the District of Columbia



Note. Data for the year 2020 are preliminary and based on deaths reported to CDC as of December 2021. Data for 2020 should also 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

Figure 7a. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by race/ethnicity—45 states and the District of Columbia

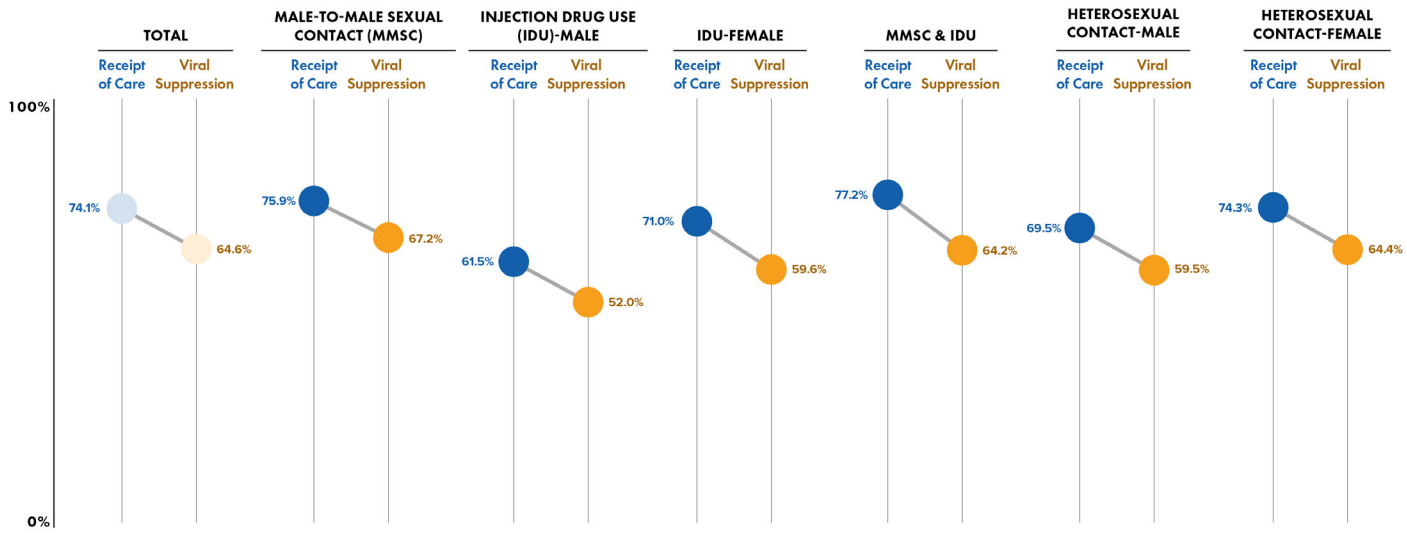


Note. Data for the year 2020 are preliminary and based on deaths reported to CDC as of December 2021. Data for 2020 should also be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

[a] Includes Asian/Pacific Islander legacy cases.

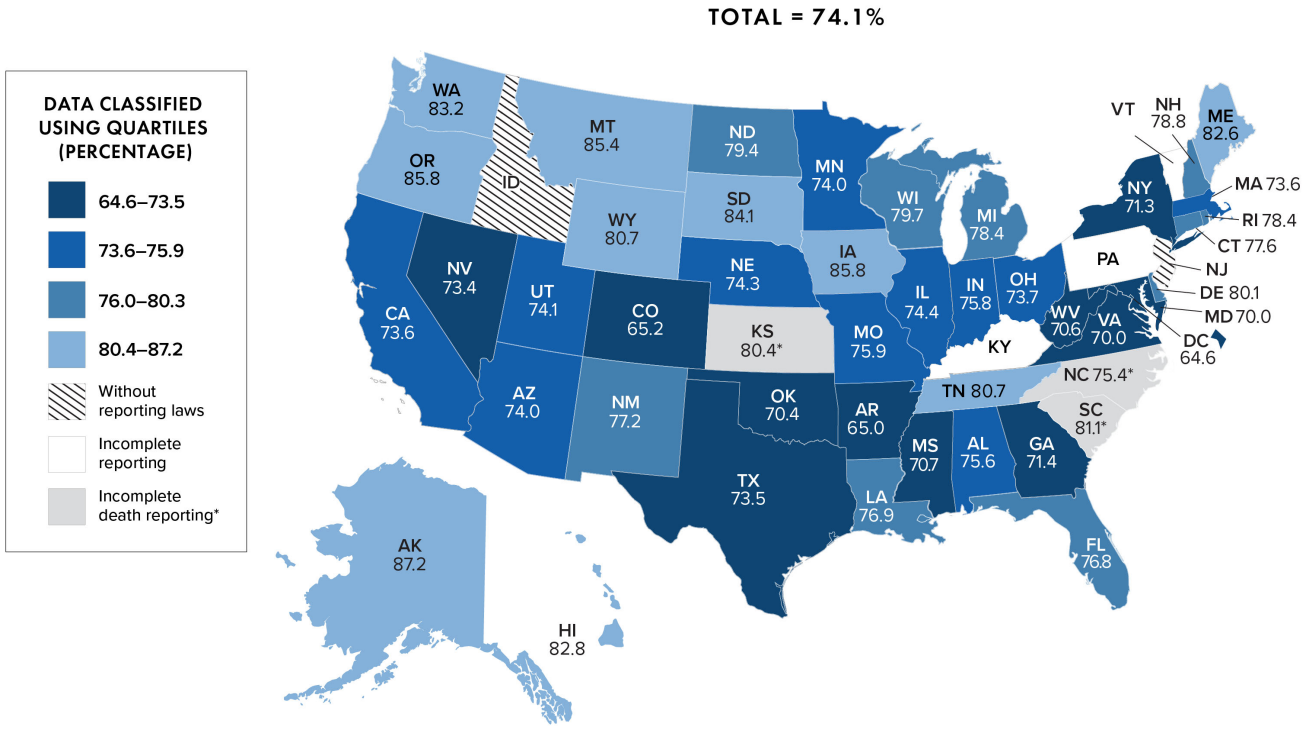
[b] Hispanic/Latino persons can be of any race.

Figure 7b. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by transmission category—45 states and the District of Columbia



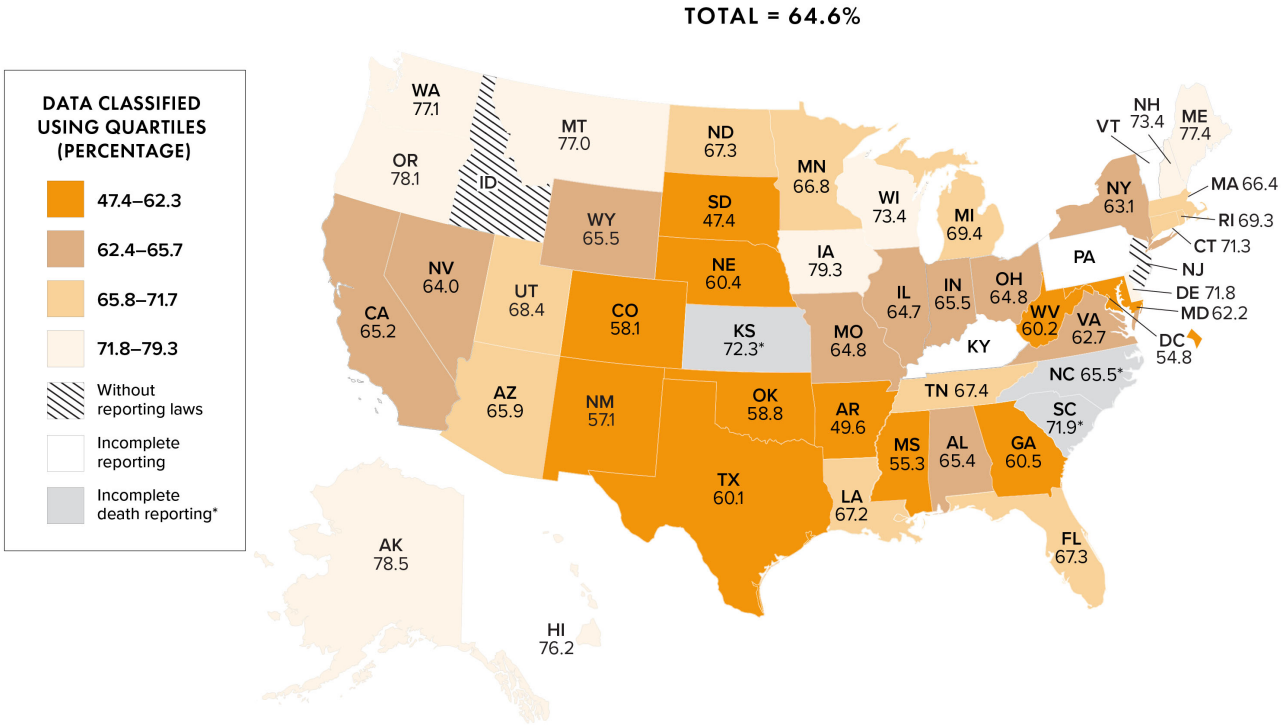
Note. Data for the year 2020 are preliminary and based on deaths reported to CDC as of December 2021. Data for 2020 should also be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. 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 during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by area of residence—45 states and the District of Columbia



Note. Data for the year 2020 are preliminary and based on deaths reported to CDC as of December 2021. Data for Maryland should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021. Data for 2020 should also 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

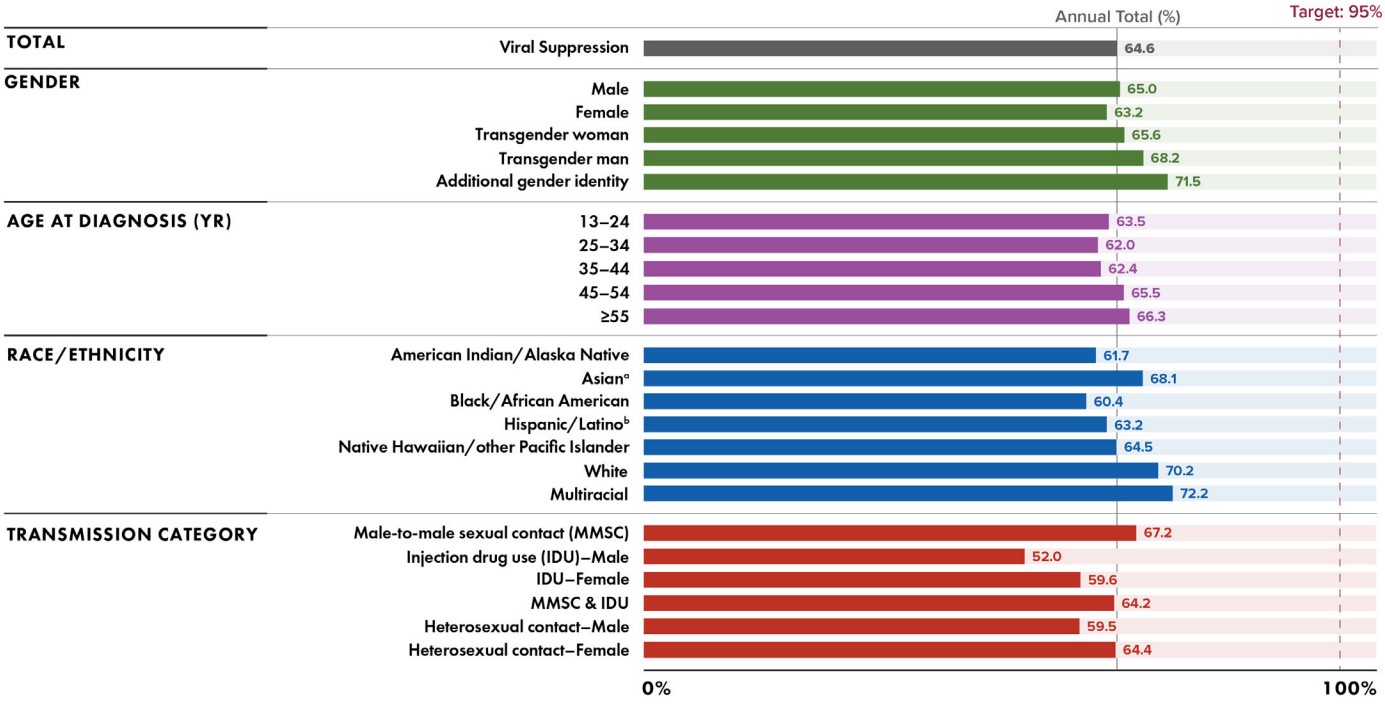
Figure 9. Viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by area of residence—45 states and the District of Columbia



Note. Data for the year 2020 are preliminary and based on deaths reported to CDC as of December 2021. Data for Maryland should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021. Data for 2020 should also 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. 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 944,247 persons aged ≥13 years living with diagnosed HIV infection at year-end 2020, no demographic group or group with infection attributed to any of the transmission categories met the forthcoming EHE target of 95% by 2025 (Figure 10).

Figure 10. Viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by selected characteristics—45 states and the District of Columbia



Note. Gray line indicates overall percentage of persons who had viral suppression at the most recent viral load test. Data for the year 2020 are preliminary and based on deaths reported to CDC as of December 2021. Data for 2020 should also 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

[a] Includes Asian/Pacific Islander legacy cases.

[b] Hispanic/Latino persons can be of any race.

Stage 3 (AIDS) at Time of Diagnosis of HIV Infection, and Death and Survival after Diagnosis of HIV Infection

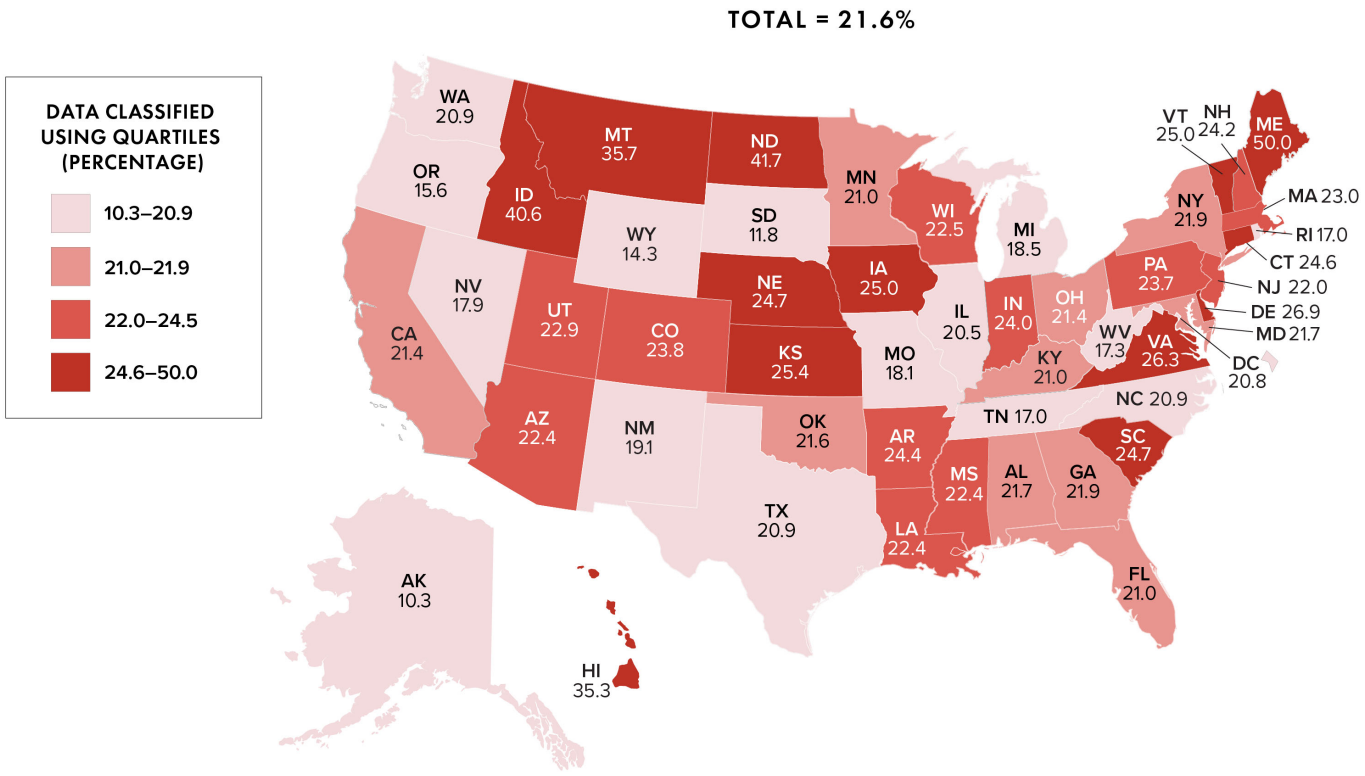
Data from the 50 states, the District of Columbia, and 6 U.S. dependent areas (where indicated) were used for analyses of stage 3 (AIDS) at the time of diagnosis of HIV infection (even when not all CD4 values are reportable), and deaths and survival of persons aged ≥13 years with diagnosed HIV infection.

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

Among the 30,346 persons who received an HIV diagnosis during 2020 in the United States, more than 1 in 5 persons (21.6%) received a late-stage diagnosis (stage 3, AIDS) (Table 5a).

- Highest percentages of a late-stage diagnosis were as follows (Table 5a/c):
  - Gender—female: 23.2%
  - Age group—persons aged ≥55 years: 37.1%
  - Race/ethnicity—Asian persons: 27.7%
  - Transmission category—males with infection attributed to heterosexual contact: 35.5%
  - Area of residence—Connecticut, Delaware, Hawaii, Idaho, Iowa, Kansas, Maine, Montana, Nebraska, North Dakota, South Carolina, Vermont, and Virginia had the highest quartile (≥24.6%) of persons who received a late-stage diagnosis (Figure 11)
  - Region of residence—Northeast: 22.5%
  - Population area of residence—Rural areas: 26.9%
- Lowest percentages of a late-stage diagnosis were as follows (Table 5a/c):
  - Gender—transgender men: 5.0%
  - Age group—persons aged 13–24 years: 9.1%
  - Race/ethnicity—Black/African American persons: 20.0% and Native Hawaiian/other Pacific Islander persons: 20.0%
  - Transmission category—males with infection attributed to MMSC-IDU: 16.9%
  - Area of residence—Alaska, Illinois, Michigan, Missouri, Nevada, New Mexico, North Carolina, Oregon, Rhode Island, South Dakota, Tennessee, Texas, Washington, West Virginia, Wyoming, and the District of Columbia had the lowest quartile (≤20.9%) of persons who received a late-stage diagnosis (Figure 14)
  - Region of residence—Midwest: 21.2%
  - Population area of residence—metropolitan areas: 20.9%

Figure 11. Stage 3 (AIDS) at time of diagnosis of HIV infection during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by area of residence—United States



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

DEATHS

Annual rates of death 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 6a–f).

Deaths of persons with diagnosed HIV infection

In 2020, the age-adjusted rates in the United States were 6.5 per 100,000 population and 16.9 per 1,000 persons with diagnosed HIV infection (Table 6a).

Deaths of persons with stage 3 (AIDS) classification

In 2020, the age-adjusted rates in the United States were 5.0 per 100,000 population and 25.4 per 1,000 persons with infection ever classified as stage 3 (AIDS) (Table 6d).

Survival for >3 years after diagnosis of HIV infection

In the United States and 6 dependent areas, survival for >3 years after a diagnosis of HIV infection was above 94% and remained stable for diagnoses that were made during 2012–2017 (Table 7a).

- Lowest percentages of survival (<90%) for >3 years after diagnosis of HIV infection—persons aged ≥55 years, males with infection attributed to IDU, and among persons residing in Puerto Rico (Tables 7a/c).

Survival for >3 years after stage 3 (AIDS) classification was below 90% and remained stable over time (Table 7d).

- Lowest percentages of survival (<90%) for >3 years after stage 3 (AIDS) classification—males, females, persons aged ≥35 years, each racial/ethnic group (except for American Indian/Alaska Native persons), males and females with infection attributed to any transmission category, and all areas of residence (Tables 7d/f).

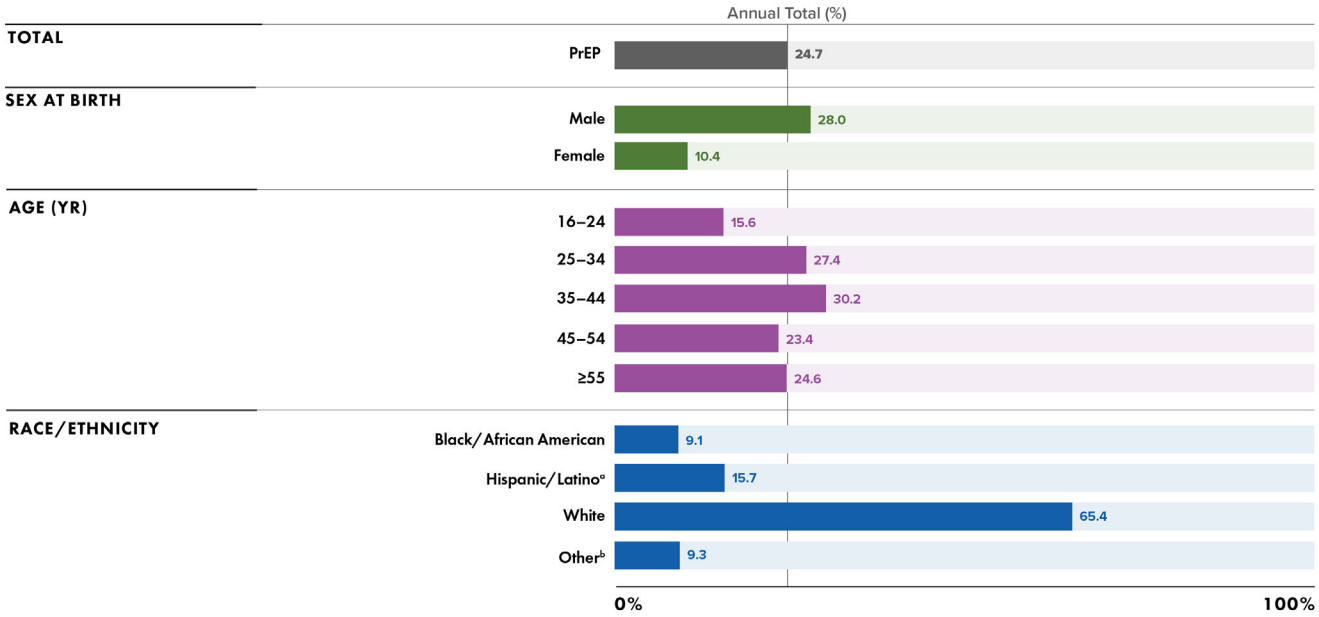
PREEXPOSURE PROPHYLAXIS (PREP) COVERAGE AND PERSONS PRESCRIBED PREP

The number of persons in the United States and Puerto Rico 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). For more information, see Technical Notes.

By using pharmacy and other national data sources, we estimated 1.2 million persons in the United States and Puerto Rico had indications for PrEP and 24.7% were prescribed PrEP in 2020 (Table 8a).

- Highest percentages of PrEP coverage were as follows (Figure 12, Tables 8a/b):
  - Sex assigned at birth—males: 28.0%
  - Age group—persons aged 35–44 years: 30.2%
  - Race/ethnicity—White persons: 65.4%
  - Area of residence—California, Connecticut, Florida, Illinois, Iowa, Massachusetts, Nebraska, New York, Pennsylvania, Rhode Island, Utah, Vermont, and District of Columbia were in the highest quartile (≥25.3%) of PrEP coverage (Figure 13)
- Lowest percentages of PrEP coverage were as follows (Figure 12, Tables 8a/b):
  - Sex assigned at birth—females: 10.4%
  - Age group—persons aged 16–24 years: 15.6%
  - Race/ethnicity—Black/African American persons: 9.1%
  - Area of residence—Alaska, Delaware, Idaho, Indiana, Kentucky, Michigan, Montana, North Dakota, Oklahoma, South Dakota, Virginia, West Virginia, Wyoming, and Puerto Rico were in the lowest quartile (≤16.3%) of PrEP coverage (Figure 13)

Figure 12. PrEP coverage during 2020 (COVID-19 pandemic) among persons aged ≥16 years, by selected characteristics—United States and Puerto Rico

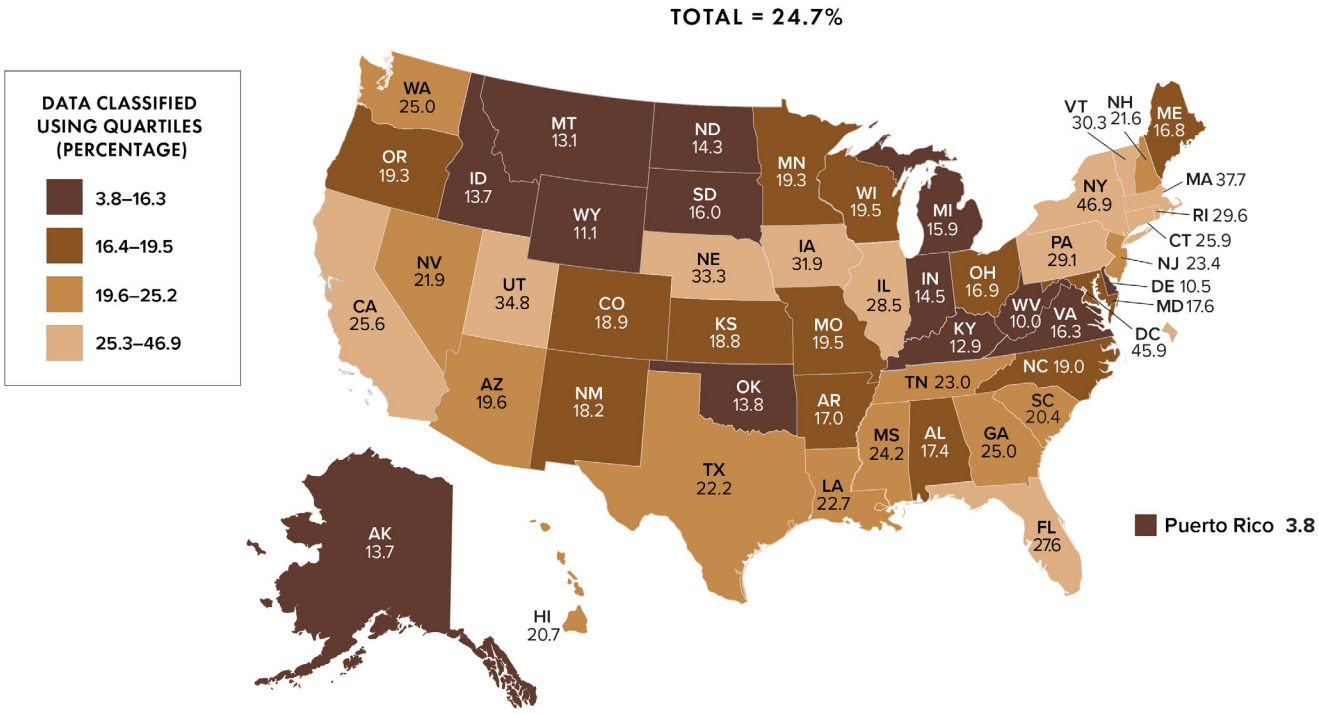


Note. Data for 2020 should also be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

[a] Hispanic/Latino persons can be of any race.

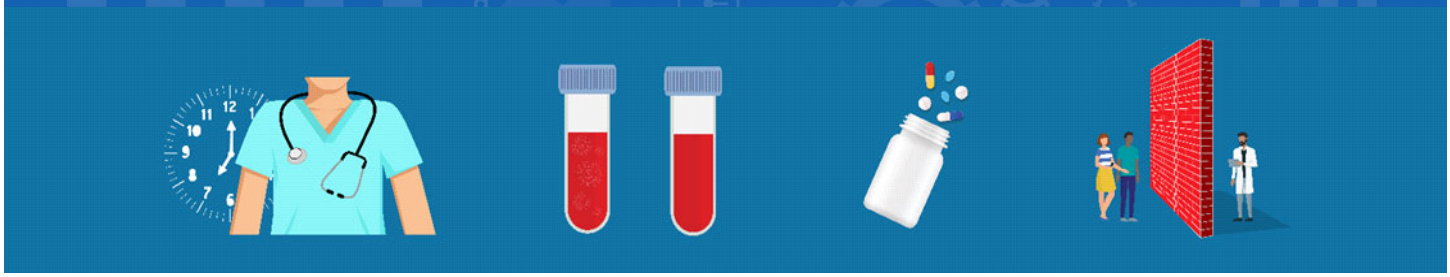
[b] Includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, and multiracial persons.

Figure 13. PrEP coverage during 2020 (COVID-19 pandemic) among persons aged ≥16 years, by area of residence—United States and Puerto Rico



Note. Data for 2020 should also 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

Special Focus Profiles



The Special Focus Profiles highlight the distribution of the diagnosis-based HIV care outcomes 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 (MSM); (2) Persons Who Inject Drugs (PWID); (3) Transgender and Additional Gender Identity Persons; (4) Women (based on sex assigned at birth); (5) Persons with Perinatally Acquired HIV Infection; and (6) Young Persons aged 13–24 years.

Gay, Bisexual, and Other Men Who Have Sex with Men

Gay, bisexual, and other men who have sex with men (MSM) have been disproportionately affected by HIV in the United States. Longstanding inequities in access to and delivery of needed care and prevention services among MSM have persisted despite focused efforts to prevent HIV. Root causes that include systemic racism, stigma, homophobia, discrimination, poverty, housing insecurity, and unequal access to care and treatment must be addressed to reduce these inequities and other disparities that impact MSM.

Of the 30,403 reported HIV diagnoses in the United States in 2020, MSM accounted for 67.7% (20,572 males with infection attributed to MMSC, excluding MMSC/IDU) [5].

Stage of disease at time of diagnosis of HIV infection among MSM: 32.9% of infections diagnosed at an earlier stage (stage 0 or 1) and 20.0% classified as stage 3 (AIDS) at the time of diagnosis (Table 1a). All racial/ethnic MSM (except for Black/African American MSM) had ≥20% of infections classified as stage 3 (AIDS) at the time of diagnosis (Table 1d).

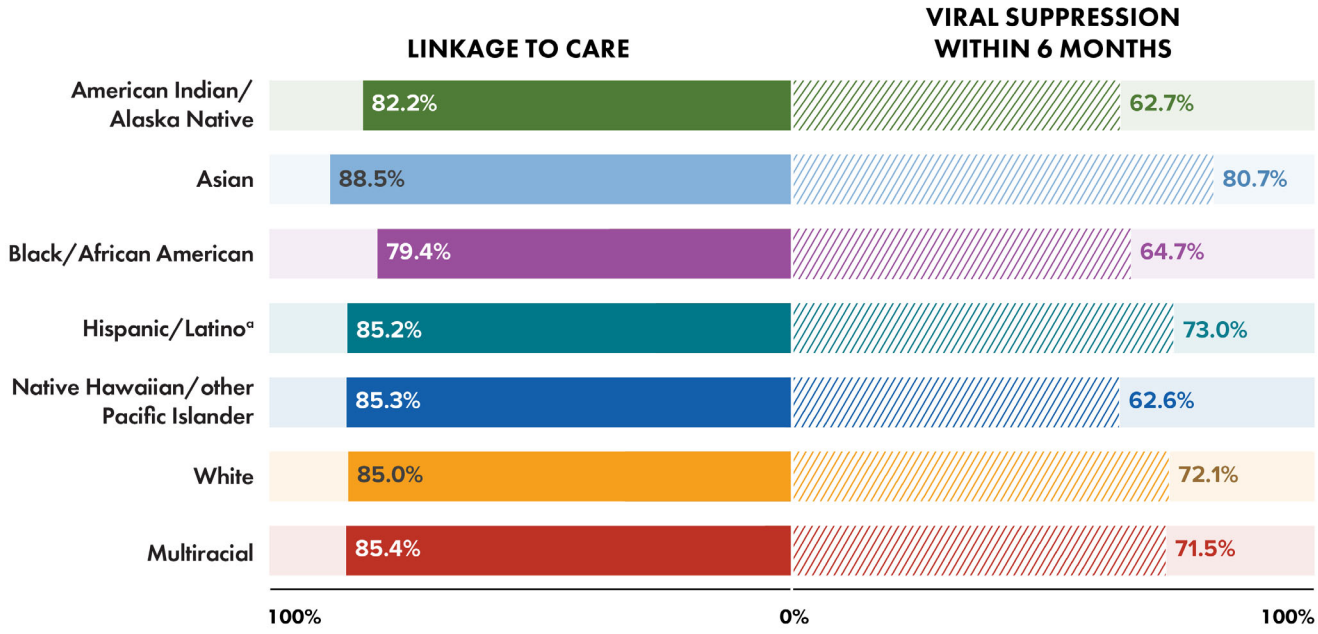
- Percentage of MSM with HIV diagnosed at an earlier stage (0 or 1) compared to the percentage with a late-stage diagnosis by race/ethnicity were as follows (Table 1d):
  - American Indian/Alaska Native persons: 34.7% vs 23.4%
  - Asian persons: 28.9% vs 24.6%
  - Black/African American persons: 31.0% vs 17.1%
  - Hispanic/Latino persons: 33.7% vs 20.9%
  - Native Hawaiian/other Pacific Islander persons: 17.1% vs 21.0%
  - White persons: 35.6% vs 22.7%
  - multiracial persons: 33.7% vs 20.5%

Linkage to HIV medical care within 1 month of diagnosis and viral suppression within 6 months of diagnosis among MSM: Of 19,414 males with infection attributed to MMSC, 82.9% were linked to HIV

medical care within 1 month of diagnosis and 69.6% had viral suppression within 6 months of diagnosis (Table 2a):

- Highest percentages of linkage to HIV medical care and viral suppression for MSM by race/ethnicity were as follows (Figure 14, Table 2d):
  - Race/ethnicity—Asian MSM: 88.5%, 80.7% respectively
- Lowest percentages of linkage to HIV medical care and viral suppression for MSM by race/ethnicity were as follows (Figure 14, Table 2d):
  - Race/ethnicity—Black/African American MSM: 79.4%; Native Hawaiian/other Pacific Islander MSM: 62.6%
    - Among Black/African American MSM, MSM aged 13–34 years had the lowest percentage linked to care within 1 month of diagnosis (13–24 years: 78.6%, 25–34 years: 79.6%).
    - Among Native Hawaiian/other Pacific Islander MSM, MSM aged 35–44 years had the lowest percentage who had viral suppression within 6 months of diagnosis (54.2%).

Figure 14. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among men who have sex with men (sex assigned at birth), by race/ethnicity—45 states and the District of Columbia



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

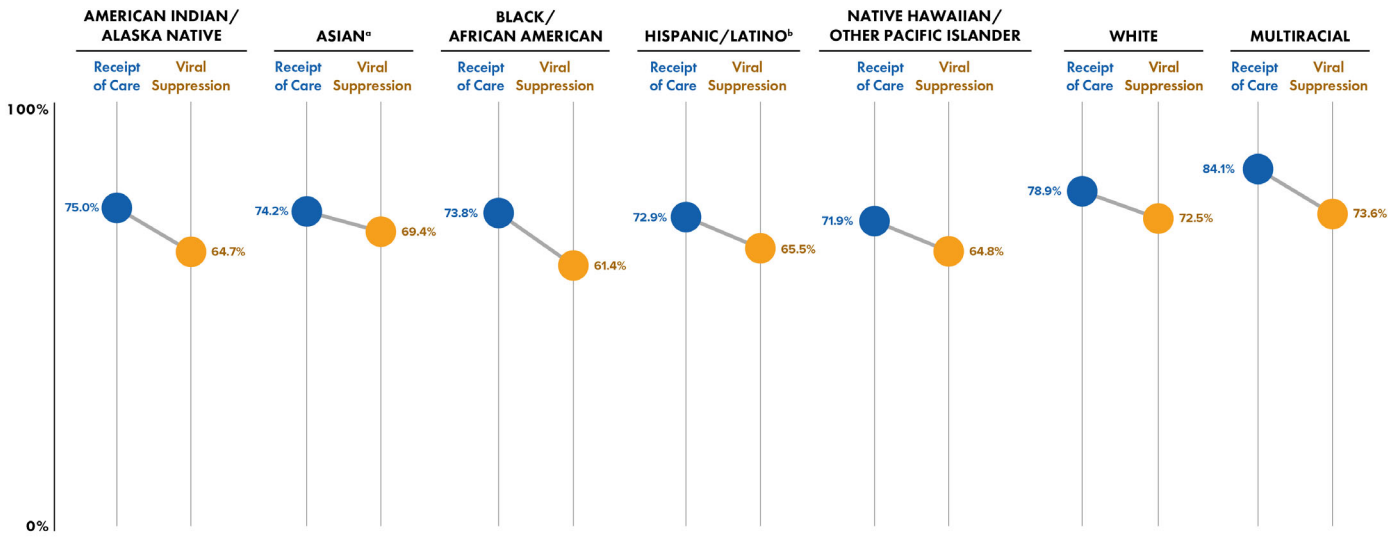
[a] Hispanic/Latino persons can be of any race.

Receipt of HIV medical care and viral suppression among MSM by race/ethnicity: Of 544,758 males with infection attributed to MMSC living with diagnosed HIV at year-end 2020, 75.9% received HIV medical care and 67.2% had viral suppression at the most recent viral load test (Tables 3a and 4a):

- Highest percentages of MSM who received any HIV medical care and had viral suppression were as follows (Figure 15, Table 3d):
  - Race/ethnicity—multiracial MSM: 84.1%, 73.6% respectively

- Lowest percentages of MSM who received any HIV medical care and had viral suppression at the most recent viral load test were as follows (Figure 15, Table 3d):
  - Race/ethnicity—Native Hawaiian/other Pacific Islander MSM: 71.9%; Black/African American MSM: 61.4%
    - Among Native Hawaiian/other Pacific Islander MSM, MSM aged 35–44 years had the lowest percentage of receiving any HIV medical care (70.3%)
    - Among Black/African American MSM, MSM aged 25–34 had the lowest percentage of viral suppression at the most recent viral load test (59.5%)

Figure 15. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among men who have sex with men (sex assigned at birth), by race/ethnicity—45 states and the District of Columbia



Note. Data for the year 2020 are preliminary and based on deaths reported to CDC as of December 2021. Data for 2020 should also 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

[a] Includes Asian/Pacific Islander legacy cases.

[b] Hispanic/Latino persons can be of any race.

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. PWID account 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. Injection drug use (IDU) in rural areas has created prevention challenges and placed new populations at risk for HIV.

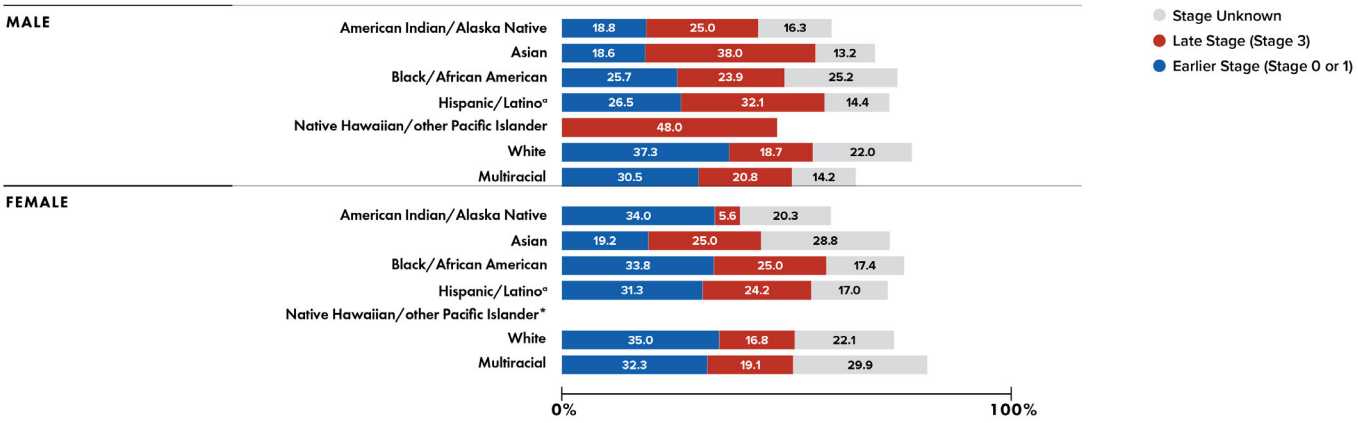
In 2020, PWID accounted for 6.7% of the 30,403 reported HIV diagnoses in the United States [5].

Stage of disease at time of diagnosis of HIV infection among PWID: 32.1% of infections diagnosed at an earlier stage (stage 0 or 1) and 22.2% classified as stage 3 (AIDS) at the time of diagnosis (Table 1a).

- Percentage of PWID with HIV diagnosed at an earlier stage (0 or 1) compared to the percentage with a late-stage diagnosis by sex assigned at birth and race/ethnicity, respectively, were as follows (Figure 16, Table 1c):

- Among males (based on sex at birth)
  - American Indian/Alaska Native persons: 18.8% vs 25.0%
  - Asian persons: 18.6% vs 38.0%
  - Black/African American persons: 25.7% vs 23.9%
  - Hispanic/Latino persons: 26.5% vs 32.1%
  - Native Hawaiian/other Pacific Islander persons: 0.0% vs 48.0%
  - White persons: 37.3% vs 18.7%
  - multiracial persons: 30.5% vs 20.8%
- Among females (based on sex at birth)
  - American Indian/Alaska Native persons: 34.0% vs 5.6%
  - Asian persons: 19.2% vs 25.0%
  - Black/African American persons: 33.8% vs 25.0%
  - Hispanic/Latino persons: 31.3% vs 24.2%
  - White persons: 35.0% vs 16.8%
  - multiracial persons: 32.3% vs 19.1%

Figure 16. Earlier and late stage of disease at HIV diagnosis during 2020 (COVID-19 pandemic) among persons who inject drugs, by sex assigned at birth and race/ethnicity—45 states and the District of Columbia



Note. 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications. Diagnosis of HIV infection may not be reported for some groups in 2020.

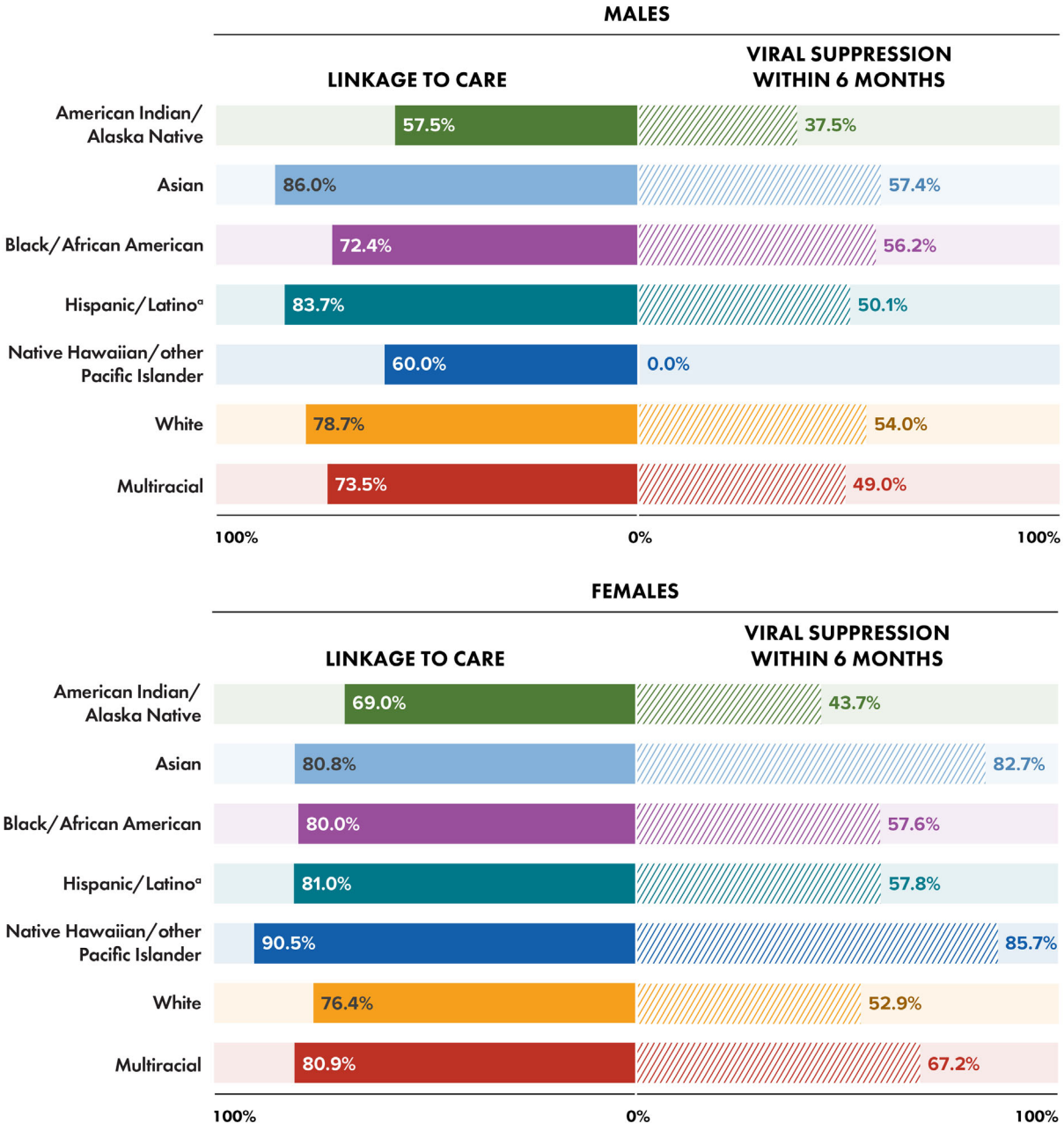
[a] Hispanic/Latino persons can be of any race.

Linkage to HIV medical care within 1 month of diagnosis and viral suppression within 6 months of diagnosis among PWID: 77.9% were linked to HIV medical care within 1 month of diagnosis and 54.3% had viral suppression within 6 months of diagnosis (Table 2a):

- Highest and lowest percentages of linkage to HIV medical care for PWID by sex assigned at birth and race/ethnicity were as follows (Figure 17, Table 2c):
  - Asian male PWID: 86.0% and Native Hawaiian/other Pacific Islander female PWID: 90.5%
  - American Indian/Alaska Native male and female PWID: 57.5%, 69.0%, respectively

- Highest and lowest percentages of viral suppression for PWID by sex assigned at birth and race/ethnicity were as follows (Figure 17, Table 2c):
  - Asian male PWID: 57.4% and Native Hawaiian/other Pacific Islander female PWID: 85.7%
  - American Indian/Alaska Native male and female PWID: 37.5%, 43.7%, respectively

Figure 17. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons who inject drugs, by sex assigned at birth and race/ethnicity—45 states and the District of Columbia



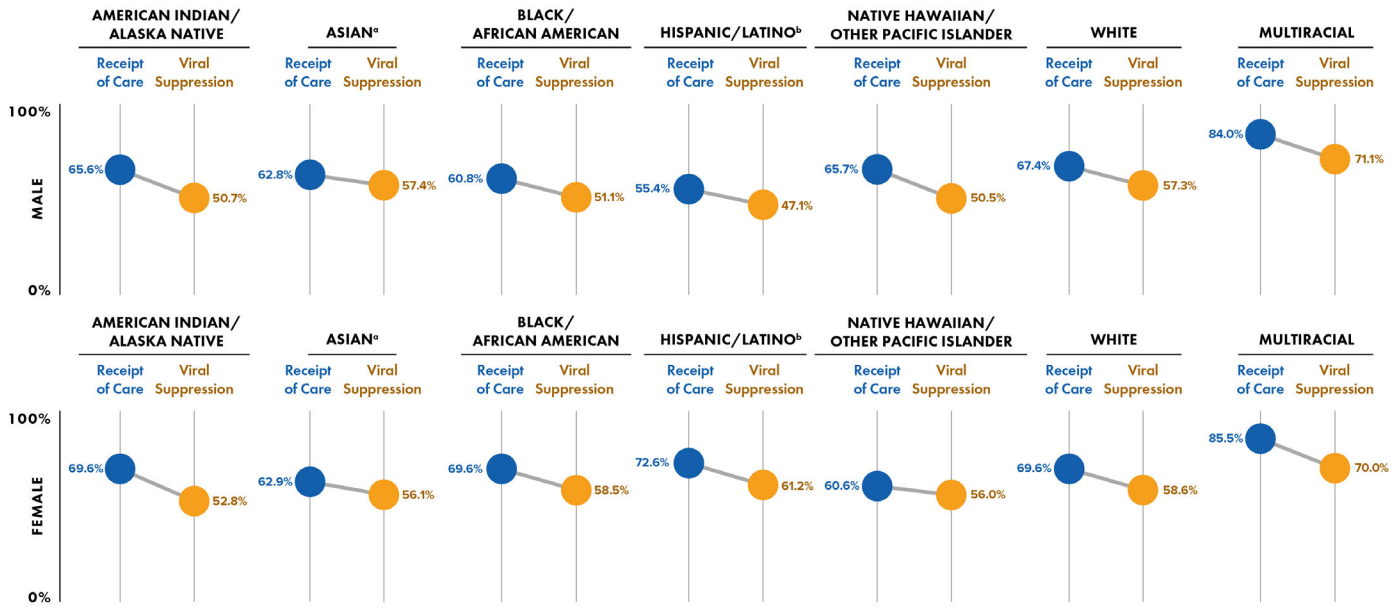
Note. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications. Diagnosis of HIV infection may not be reported for some groups in 2020.

[a] Hispanic/Latino persons can be of any race.

Receipt of HIV medical care and viral suppression among PWID: Of 97,081 persons with infection attributed to IDU living with diagnosed HIV at year-end 2020, 65.6% received HIV medical care and 55.3% had viral suppression at the most recent viral load test (Tables 3a and 4a):

- Highest percentages of PWID by sex assigned at birth and race/ethnicity who received any HIV medical care and had viral suppression were as follows (Figure 18, Table 3c):
  - Male PWID—multiracial: 84.0%, 71.1%, respectively
  - Female PWID—multiracial: 85.5%, 70.0%, respectively
- Lowest percentages of PWID by sex assigned at birth and race/ethnicity who received any HIV medical care and had viral suppression were as follows (Figure 18, Table 3c):
  - Male PWID—Hispanic/Latino: 55.4%, 47.1%, respectively
  - Female PWID—Native Hawaiian/other Pacific Islander: 60.6%; American Indian/Alaska Native: 52.8%; respectively

Figure 18. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons who inject drugs, by sex assigned at birth and race/ethnicity—45 states and the District of Columbia



Note. Data for the year 2020 are preliminary and based on deaths reported to CDC as of December 2021. Data for 2020 should also 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

[a] Includes Asian/Pacific Islander legacy cases.

[b] Hispanic/Latino persons can be of any race.

Transgender and Additional Gender Identity Persons

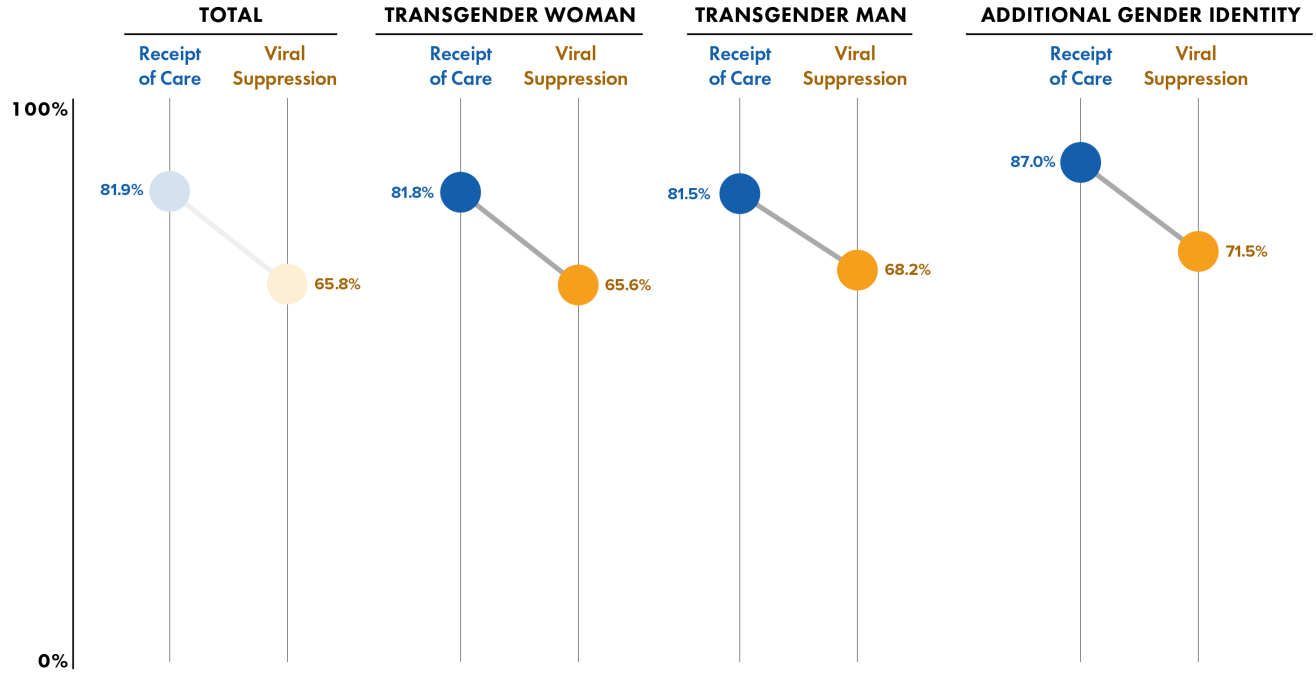
Transgender is an umbrella term that is used to identify persons whose sex assigned at birth does not match their current gender identity or expression. *Gender identity* refers to one's internal understanding of one's own gender, or the gender with which a person identifies. *Gender expression* is a term used to describe people's outward presentation of their gender. Gender identity and sexual orientation are different facets of identity. Everyone has a gender identity and a sexual orientation, but a person's gender does not determine a person's sexual orientation. Transgender persons and persons of additional gender identity (AGI) may identify as heterosexual, homosexual, bisexual, or none of the above. Transgender and AGI persons face numerous prevention challenges,

including lack of public/provider knowledge about transgender issues and social rejection and exclusion, and are understudied in HIV prevention (e.g., PrEP) and treatment interventions.

In 2020, transgender and AGI persons accounted for 2.3% of 30,403 reported HIV diagnoses in the United States [5].

- **Stage of disease at time of diagnosis of HIV infection among transgender and AGI persons**: 41.8% of infections diagnosed at an earlier stage (stage 0 or 1) compared to 11.9% classified as stage 3 (AIDS) at the time of diagnosis, respectively, by gender and exposure category (Table 1e).
  - Gender and exposure category—
    - Among transgender women: 41.2% vs 12.4%
      - Sexual contact: 41.5% vs 12.0%
      - Sexual contact and injection drug use: 38.7% vs 9.7%
    - Among transgender men: 55.3% vs 5.3%
      - Sexual contact: 55.5% vs 7.4%
    - Among AGI persons: 31.3% vs 12.5%
      - Sexual contact: 30.8% vs 7.7%
- **Linkage to HIV medical care within 1 month and viral suppression within 6 months of diagnosis among transgender and AGI persons**: 81.8% were linked to HIV medical care and 65.4% had viral suppression within 6 months of diagnosis (Table 2e).
  - Percentages of transgender and AGI persons who were linked to HIV medical care and had viral suppression, respectively, by gender and exposure category were as follows (Table 2e):
    - Among transgender women: 80.8%, 64.3%
      - Sexual contact: 81.2%, 65.2%
      - Sexual contact and injection drug use: 77.4%, 61.3%
    - Among transgender men: 92.1%, 78.9%
      - Sexual contact: 88.9%, 81.5%
    - Among AGI persons: 93.8%, 75.0%
      - Sexual contact: 92.3%, 69.2%
- **Receipt of HIV medical care and viral suppression among transgender and AGI persons**: Of 11,276 transgender and additional gender identity persons living with diagnosed HIV at year-end 2020, 81.9% received HIV medical care and 65.8% had viral suppression at their most recent viral load test (Figure 19, Tables 3e).
  - Percentages of transgender and AGI persons received HIV medical care and had viral suppression, respectively, by gender and exposure category were as follows (Figure 19, Table 2e):
    - Among transgender women: 81.8%, 65.6%
      - Sexual contact: 81.8%, 66.2%
      - Sexual contact and injection drug use: 84.3%, 63.9%
    - Among transgender men: 81.5%, 68.2%
      - Sexual contact: 81.4%, 71.3%
    - Among AGI persons: 87.0%, 71.5%
      - Sexual contact: 87.9%, 73.1%

Figure 19. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among transgender and additional gender identity persons—45 states and the District of Columbia



Note. Data for the year 2020 are preliminary and based on deaths reported to CDC as of December 2021. Data for 2020 should also 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

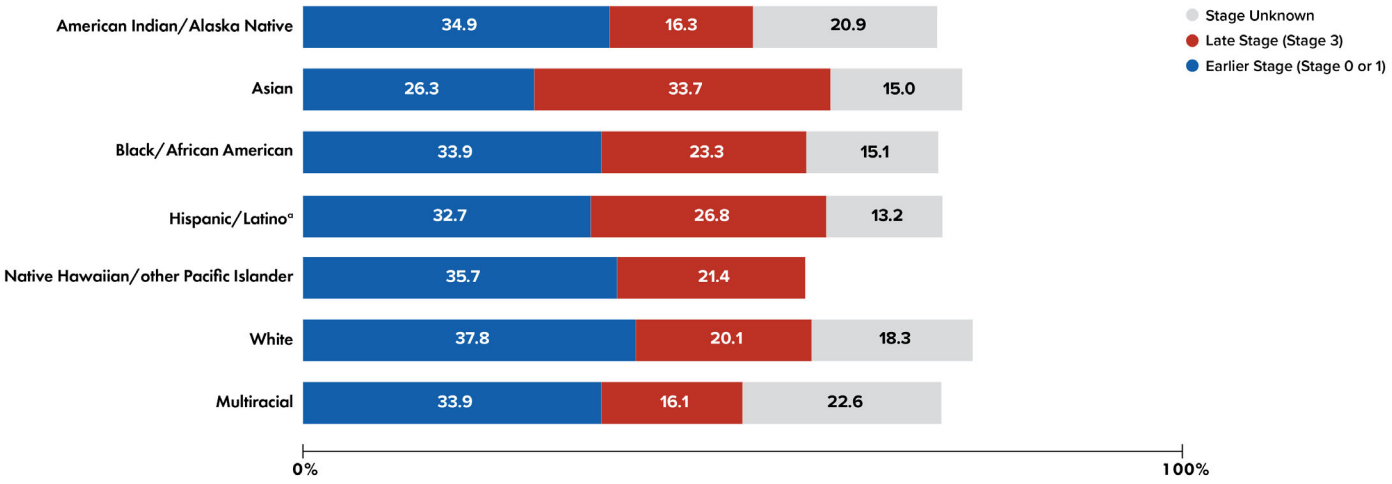
WOMEN (BASED ON SEX ASSIGNED AT BIRTH)

In 2020, 5,520 women received an HIV diagnosis in the United States and 6 dependent areas [5]. Because some women may be unaware of their 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. 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 STIs (including HIV), and unequal access to care and treatment must be addressed to reduce racial/ethnic disparities.

In 2020, women aged ≥13 years accounted for 18.0% of 30,403 reported HIV diagnoses in the United States [5].

- **Stage of disease at time of diagnosis of HIV infection among women**: 34.7% of infections were diagnosed at an earlier stage (stage 0 or 1) and 22.9% classified as stage 3 (AIDS) at the time of diagnosis (Table 1a).
  - Asian women had a higher percentage of persons that received a late-stage diagnosis compared to the percentage that received an earlier-stage diagnosis
    - Asian women: 33.7% vs 26.3%, respectively
  - Women of all racial/ethnic groups (except for American Indian/Alaska Native and multiracial persons) had ≥20% of infections classified as late stage (stage 3, AIDS) at time of diagnosis (Figure 18, Table 1c)
    - Asian: 33.7%, Black/African American: 23.3%, Hispanic/Latino: 26.8%, Native Hawaiian/other Pacific Islander: 21.4%, and White: 20.1%

Figure 20. Earlier and late stage of disease at HIV diagnosis during 2020 (COVID-19 pandemic) among women (sex assigned at birth), by race/ethnicity—45 states and the District of Columbia



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

[a] Hispanic/Latino persons can be of any race.

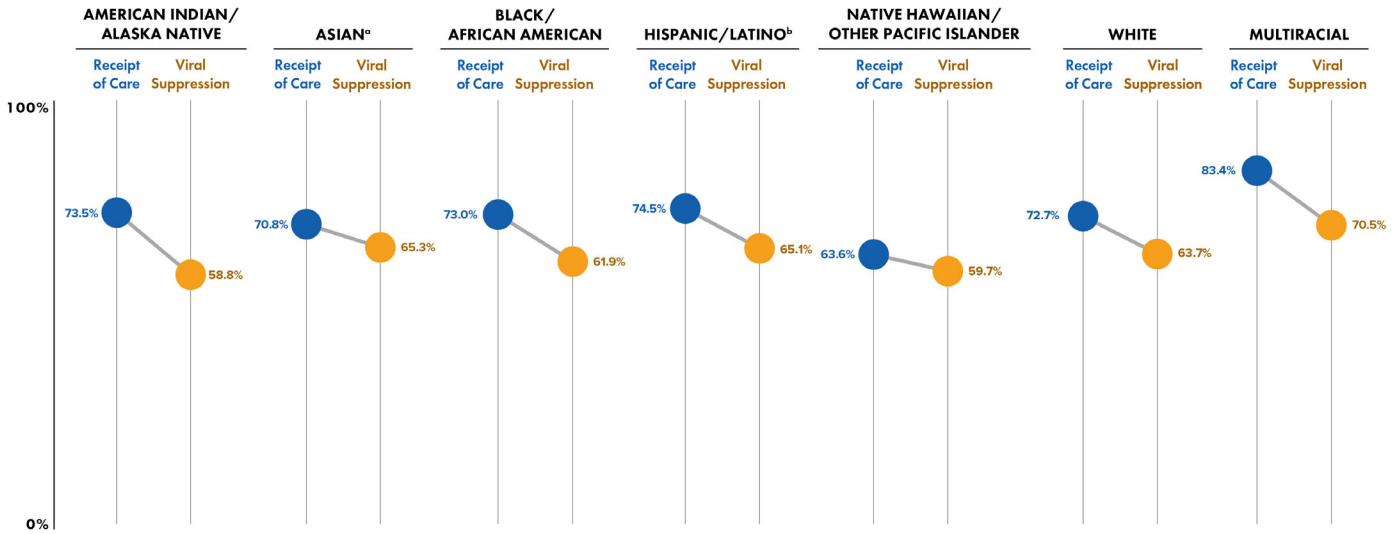
Linkage to HIV medical care within 1 month and viral suppression within 6 months of diagnosis among women: 82.3% were linked to HIV medical care within 1 month and 67.4% had viral suppression within 6 months of diagnosis (Table 2a).

- Highest percentages of linkage to HIV medical care and viral suppression for women by race/ethnicity were as follows (Table 2c):
  - Race/ethnicity—Native Hawaiian/other Pacific Islander women: 92.9%, 85.7%, respectively
- Lowest percentages of linkage to HIV medical care and viral suppression for women by race/ethnicity were as follows (Table 2c):
  - Race/ethnicity—American Indian/Alaska Native women: 74.4%, 55.8%, respectively

Receipt of HIV medical care and viral suppression among women: Of 215,536 women living with diagnosed HIV at year-end 2020, 73.6% received HIV medical care and 63.2% had viral suppression at the most recent viral load test (Tables 3 and 4a):

- Highest percentages of women who received any HIV medical care and had viral suppression at the most recent viral load test by race/ethnicity were as follows (Figure 21, Table 3c):
  - multiracial: 83.4%, 70.5%, respectively
- Lowest percentages of women who received any HIV medical care and had viral suppression at the most recent viral load test by race/ethnicity were as follows (Figure 21, Table 3c):
  - Native Hawaiian/other Pacific Islander: 63.6%; American Indian/Alaska Native: 58.6%, respectively
    - Among Native Hawaiian/other Pacific Islander women, women aged 45–54 years had the lowest percentage that received HIV medical care (56.7%)
    - Among American Indian/Alaska Native women, women aged 25–34 years had the lowest percentage of viral suppression at the most recent viral load test (43.6%)

Figure 21. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among women (sex assigned at birth), by race/ethnicity—45 states and the District of Columbia



Note. Data for the year 2020 are preliminary and based on deaths reported to CDC as of December 2021. Data for 2020 should also 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

[a] Includes Asian/Pacific Islander legacy cases.

[b] Hispanic/Latino persons can be of any race.

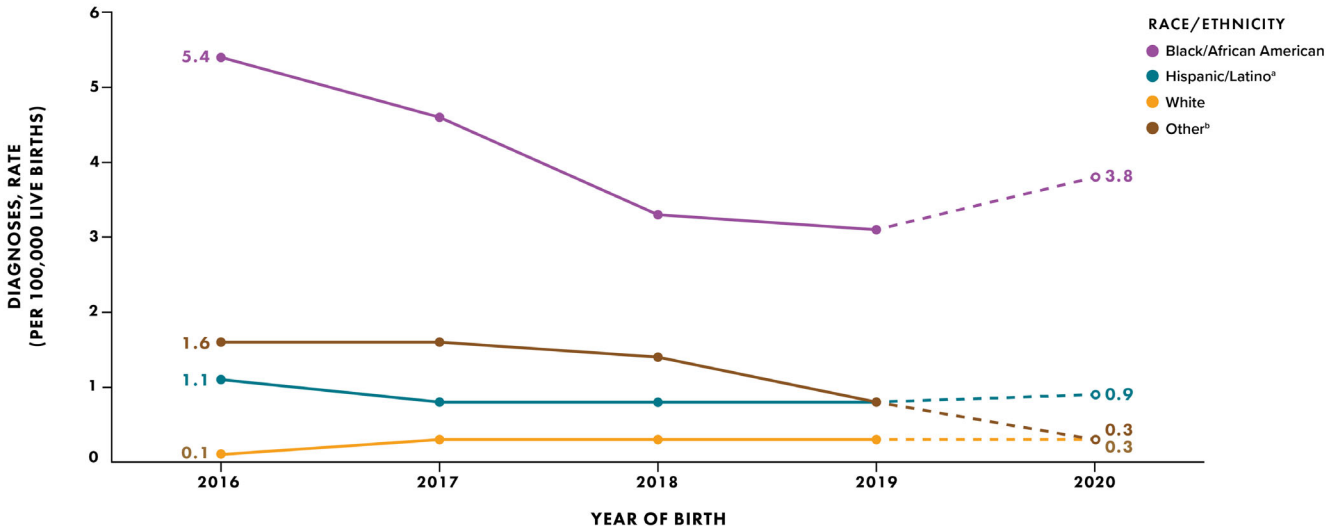
Persons with Perinatally Acquired HIV Infection

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 2020, the overall annual rate of perinatally acquired HIV infections in the United States was 1.0 (regardless of place of birth). By race/ethnicity, the rate among Black/African American persons (4.0) was 4 and 13 times the rates among Hispanic/Latino (0.9) and White persons (0.3), respectively (Table 9a).

Among infants born in 2020, the overall annual rate of perinatally acquired HIV infections in the United States was 1.0. By race/ethnicity, the rate among Black/African American persons (3.8) was 4 and nearly 13 times the rates among Hispanic/Latino (0.9) and White persons (0.3), respectively (Figure 22, Table 9b).

Figure 22. Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother's race/ethnicity, 2016–2020—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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

[a] Hispanic/Latino persons can be of any race.

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

Young Persons Aged 13–24 Years

Young persons (persons aged 13–24 years) accounted for 20.0% of reported 30,692 diagnoses of HIV infection in 2020 in the United States and 6 dependent areas [5]. Young persons are the least likely of any age group to be aware of their HIV infection. 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 infect others. In addition, young persons have higher rates of STDs and lower rates of condom use, greatly increasing the chance of getting or transmitting HIV. Addressing HIV among this group requires that they have access to the information and tools they need to make healthy decisions, reduce their risk, get treatment, and stay in care.

Stage of disease at time of diagnosis of HIV infection among young persons aged 13–24 years: 37.8% of infections diagnosed at an earlier stage (stage 0 or 1) and 9.0% classified as stage 3 (AIDS) at the time of diagnosis (Table 1a).

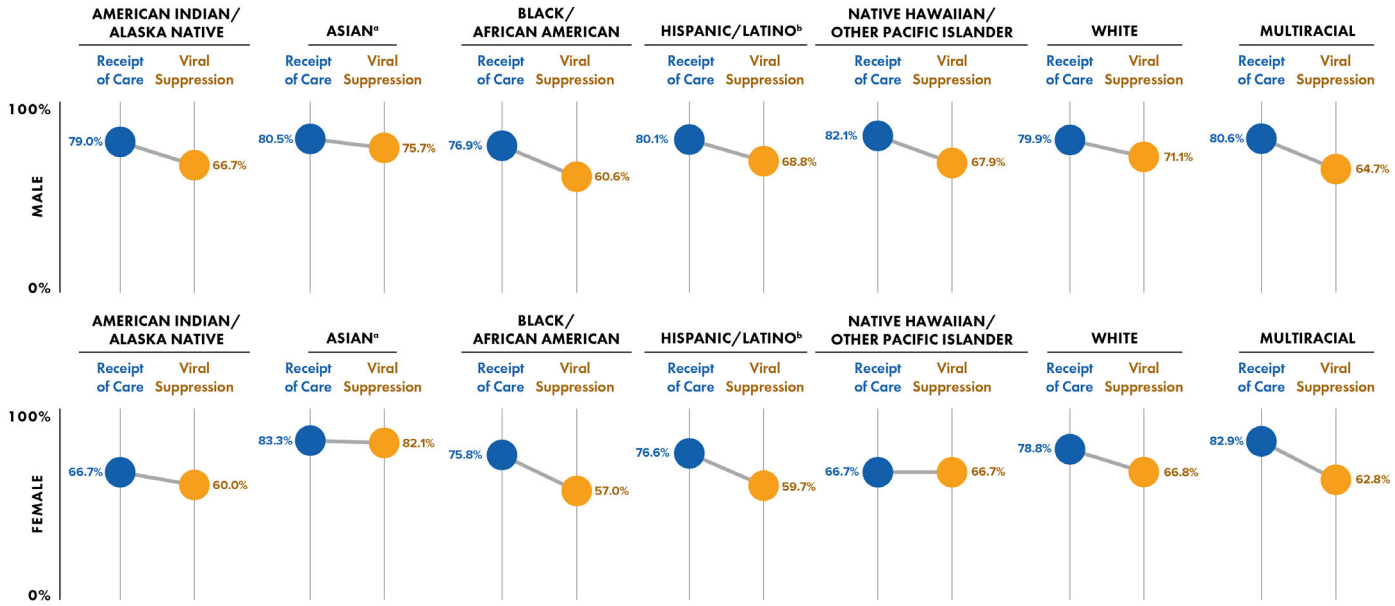
Linkage to HIV medical care within 1 month and viral suppression within 6 months of diagnosis among young persons aged 13–24 years: 80.0% were linked to HIV medical care and 69.4% had viral suppression (Table 2a):

- Highest percentages of linkage to HIV medical care and viral suppression among young persons aged 13–24 years by sex assigned at birth and race/ethnicity were as follows (Table 2c):
  - Asian males: 91.1%; multiracial females: 88.5%, respectively
  - Asian males: 79.7%; multiracial females: 84.6%, respectively
- Lowest percentages of linkage to HIV medical care and viral suppression among young persons aged 13–24 years by sex assigned at birth and race/ethnicity were as follows (Table 2c):
  - Black/African American males and females: 78.2%, 79.2%, respectively
  - American Indian/Alaska Native males: 63.6%; Black/African American females: 71.8%, respectively

Receipt of HIV medical care and viral suppression among young persons aged 13–24 years: Of 28,697 young persons living with diagnosed HIV at year-end 2020, 78.1% received any HIV medical care and 63.5% had viral suppression at their most recent viral load test (Tables 3a and 4a):

- Highest percentages of young persons aged 13–24 years who received any HIV medical care and had viral suppression at the most recent viral load test by sex assigned at birth and race/ethnicity were as follows (Figure 23, Table 3c):
  - Native Hawaiian/other Pacific Islander males: 82.1%; Asian females: 83.3%, respectively
  - Asian males and females: 75.7%, 82.1%, respectively
- Lowest percentages of young persons aged 13–24 years who received any HIV medical care and had viral suppression at the most recent viral load test were as follows (Figure 23, Table 3c):
  - Black/African American males and females: 76.9%, 75.8%, respectively
  - Black/African American males and females: 60.6%, 57.0%, respectively

Figure 23. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among young persons aged 13–24 years, by sex assigned at birth and race/ethnicity—45 states and the District of Columbia



Note. Data for the year 2020 are preliminary and based on deaths reported to CDC as of December 2021. Data for 2020 should also 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

[a] Includes Asian/Pacific Islander legacy cases.

[b] Hispanic/Latino persons can be of any race.

2020 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 present the current 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; (2) the percentage of persons living with diagnosed HIV who had viral suppression at the most recent test during

2020; and (3) the percentage of persons with indications for PrEP who were prescribed PrEP during 2020. See Technical Notes for additional information on disparity measures.

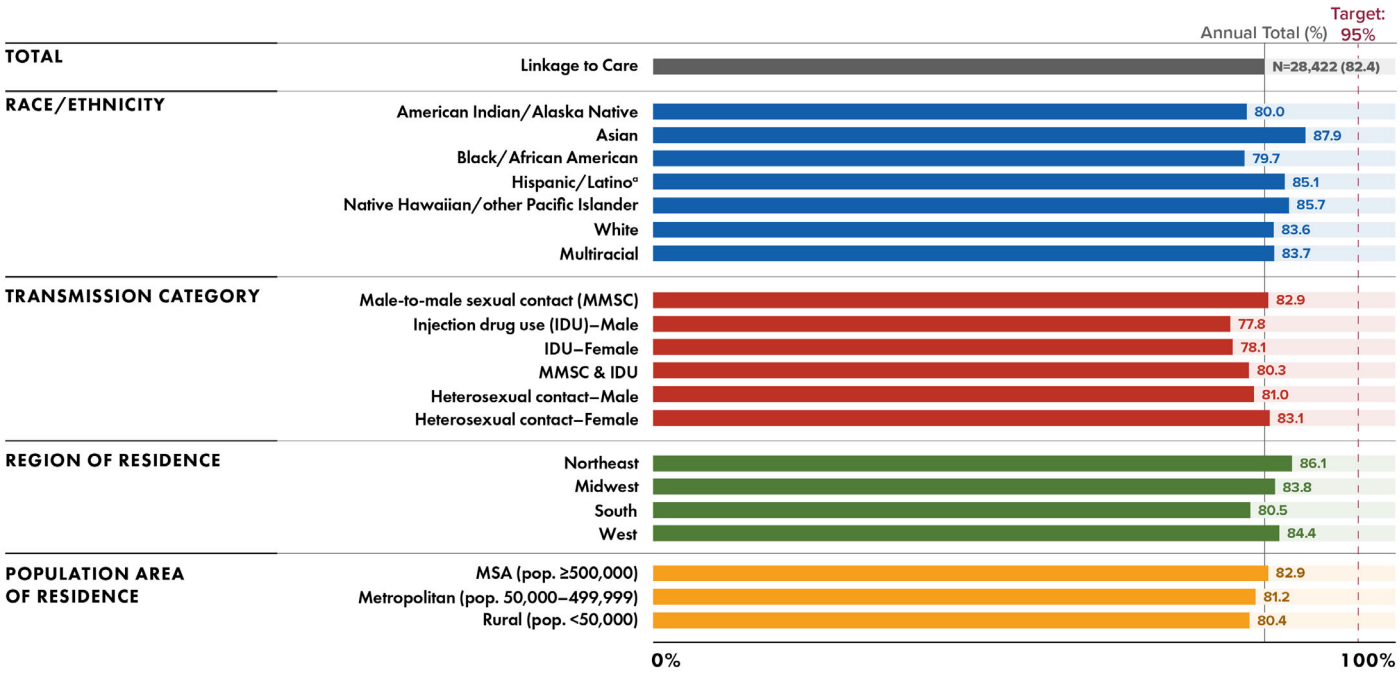
2020 Status and Disparities in Linkage to HIV Medical Care Within 1 Month of HIV Diagnosis

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 2020, 82.4% 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 maximal percentage difference was 12.6% from the 95% target and the maximal percentage ratio was 0.867 times the 95% target. Percentages for linkage to care varied by race/ethnicity, transmission category (sex assigned at birth), region of residence, and population area of residence (Figure 24, Table 2a).

Figure 24. Status of linkage to HIV medical care within 1 month of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia



Note. Gray line indicates the overall percentage of persons linked to care within 1 month of diagnosis. 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

[a] Hispanic/Latino persons can be of any race.

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 (87.9%) and the lowest linkage to care group percentage was for Black/African American persons (79.7%) (Figure 24, Table 2a). The average percentage for all other racial/ethnic groups (excluding the percentage for Asian persons) was 83.0%.

- **Absolute disparities**
  - **Absolute (maximal) percentage difference**: Asian persons were the closest to the target (7.1%) and had a group percentage higher than the overall linkage to care outcome of 82.4%.

    Black/African American 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 Black/African American persons was 8.2%. The percentage difference between the percentage for Asian persons and the average percentage for all other racial/ethnic groups was 4.9%.
- **Relative disparities**
  - **Summary percentage ratio**: The percentages for Asian and Black/African American persons were 0.925 and 0.839 times the 95% target, respectively. The average percentage for all other racial/ethnic groups was 0.874 times the percentage for Asian persons.
  - **Maximal percentage ratio**: The percentage for Asian persons was 1.103 times the percentage for Black/African American persons.

Disparities by transmission category (sex assigned at birth): The highest linkage to care group percentage was for females with infection attributed to heterosexual contact (83.1%) and the lowest linkage to care group percentage was among males with infection attributed to IDU (77.8%) (Figure 24, Table 2a). The average percentage for all other transmission categories (excluding the percentage for females with infection attributed to heterosexual contact) was 80.0%.

- **Absolute disparities**
  - **Absolute (maximal) percentage difference**: Females with infection attributed to heterosexual contact were the closest to the target (11.9%) and had a group percentage higher than the overall linkage to care outcome of 82.4%.

    Males with infection attributed to IDU were the farthest from the target (17.2%) 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 5.3%. The percentage difference between the percentage for females with infection attributed to heterosexual contact and the average percentage for all other transmission categories was 3.1%.
- **Relative disparities**
  - **Summary percentage ratio**: The percentages for females with infection attributed to heterosexual contact and males with infection attributed to IDU were 0.875 and 0.819 times the 95% target, respectively. The average percentage for all other transmission categories was 0.963 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 1.068 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 (86.1%) and the lowest linkage to care group percentage was for persons who resided in the South (80.5%) (Figure 24, Table 2a). The average percentage for all other regions (excluding the percentage for persons who resided in the Northeast) was 82.9%.

- **Absolute disparities**
  - **Absolute (maximal) percentage difference**: Persons who resided in the Northeast were the closest to the target (8.9%) and had a group percentage higher than the overall linkage to care outcome of 82.4%.

    Persons who resided in the South were the farthest from the target (14.5%) 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 5.6%. The percentage difference between the percentage for persons who resided in the Northeast and the average percentage for all other regions was 3.2%.

- **Relative disparities**
  - **Summary percentage ratio**: The percentages for persons who resided in the Northeast and in the South were 0.906 and 0.847 times the 95% target, respectively. The average percentage for all other geographic areas was 0.963 times the percentage for persons who resided in the Northeast.
  - **Maximal percentage ratio**: The percentage for persons who resided in the Northeast was 1.070 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, 82.9%) and the lowest linkage to care group percentage was for persons who resided in rural areas (80.4%) (Figure 24, Table 2a). The average percentage for all other geographic areas (excluding the percentage for persons who resided in MSAs) was 80.8%.

- **Absolute disparities**
  - **Absolute (maximal) percentage difference**: Persons who resided in MSAs were the closest to the target (12.1%) and had a group percentage higher than the overall linkage to care outcome of 82.4%.

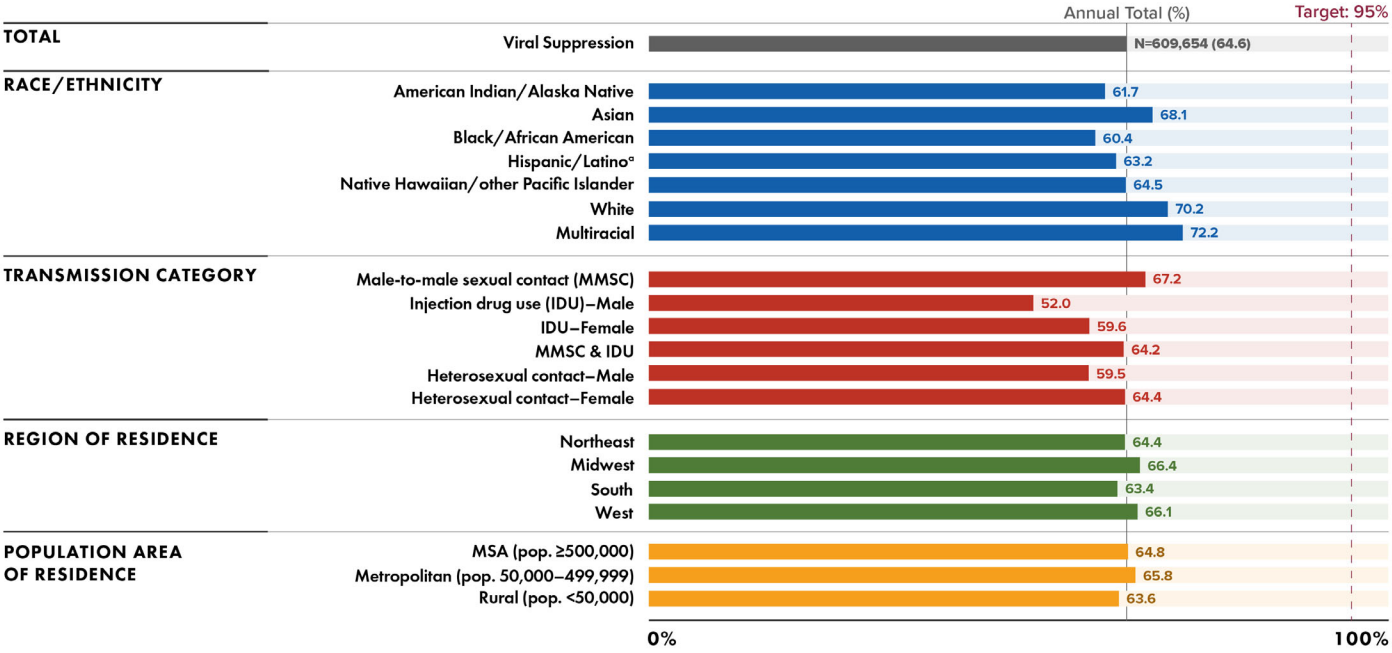
    Persons who resided in rural areas were the farthest from the target (14.6%) and had a group percentage lower than the overall linkage to care outcome.

    The percentage difference between the percentages for persons who resided in MSAs and for persons who resided in rural areas was 2.5%. The percentage difference between the percentage for persons who resided in MSAs and the average percentage for all other geographic areas was 2.1%.
- **Relative disparities**
  - **Summary percentage ratio**: The percentages for persons who resided in MSAs and in rural areas were 0.873 and 0.846 times the 95% target, respectively. The average percentage for all other geographic areas was 0.975 times the percentage for persons who resided in MSAs.
  - **Maximal percentage ratio**: The percentage for persons who resided in MSAs was 1.031 times the percentage for persons who resided in rural areas.

2020 Status and Disparities in Viral Suppression

During 2020, 64.6% 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 maximal percentage difference was 30.4% from the 95% target and the maximal percentage ratio was 0.680 times the 95% target. Percentages for viral suppression varied by race/ethnicity, transmission category (sex assigned at birth), region of residence, and population area of residence (Figure 25, Table 4a).

Figure 25. Status of viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years living with diagnosed HIV infection, by selected characteristics—45 states and District of Columbia



Note. Gray line indicates the overall percentage of persons who had viral suppression at the most recent viral load test. Data for the year 2020 are preliminary and based on deaths reported to CDC as of December 2021. Data for 2020 should also 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

[a] Hispanic/Latino persons can be of any race.

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 (72.2%) and the lowest viral suppression group percentage was for Black/African American persons (60.4%) (Figure 25, Table 4a). The average percentage for all other racial/ethnic groups (excluding the percentage for multiracial persons) was 64.7%.

- **Absolute disparities**
  - **Absolute (maximal) percentage difference**: Multiracial persons were the closest to the target (22.8%) and had a group percentage higher than the overall viral suppression outcome of 64.6%.

    Black/African American persons were the farthest from the target (34.6%) 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 11.8%. The percentage difference between the percentage for multiracial persons and the average percentage for all other racial/ethnic groups was 7.5%.
- **Relative disparities**
  - **Summary percentage ratio**: The percentages for multiracial and Black/African American persons were 0.760 and 0.636 times the 95% target, respectively. The average percentage for all other racial/ethnic groups was 0.896 times the percentage for multiracial persons.
  - **Maximal percentage ratio**: The percentage for multiracial persons was 1.195 times the percentage for Black/African American persons.

Disparities by transmission category (sex assigned at birth): The highest viral suppression group percentage was for males with infection attributed to MMSC (67.2%) and the lowest viral suppression

group percentage was for males with infection attributed to IDU (52.0%) (Figure 25, Table 4a). The average percentage for all other transmission categories (excluding the percentage for males with infection attributed to MMSC) was 59.9%.

- **Absolute disparities**
  - **Absolute (maximal) percentage difference**: Males with infection attributed to MMSC were the closest to the target (27.8%) and had a group percentage higher than the overall viral suppression outcome of 64.6%.

    Males with infection attributed to IDU were the farthest from the target (43.0%) 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 15.2%. The percentage difference between the percentage for males with infection attributed to MMSC and the average percentage for all other transmission categories was 7.3%.
- **Relative disparities**
  - **Summary percentage ratio**: The percentages for males with infection attributed to MMSC and males with infection attributed to IDU were 0.707 and 0.547 times the 95% target, respectively. The average percentage for all other transmission categories was 0.892 times the percentage for males with infection attributed to MMSC.
  - **Maximal percentage ratio**: The percentage for males with infection attributed to MMSC was 1.292 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 (66.4%) and the lowest viral suppression group percentage was for persons who resided in the South (63.4%) (Figure 25, Table 4a). The average percentage for all other regions (excluding the percentage for persons who resided in the Midwest) was 64.6%.

- **Absolute disparities**
  - **Absolute (maximal) percentage difference**: Persons who resided in the Midwest were the closest to the target (28.6%) and had a group percentage higher than the overall viral suppression outcome of 64.6%.

    Persons who resided in the South were the farthest from the target (31.6%) 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 3.0%. The percentage difference between the percentage for persons who resided in the Midwest and the average percentage for all other regions was 1.8%.
- **Relative disparities**
  - **Summary percentage ratio**: The percentages for persons who resided in the Midwest and in the South were 0.699 and 0.667 times the 95% target, respectively. The average percentage for all other geographic areas was 0.973 times the percentage for persons who resided in the Midwest.
  - **Maximal percentage ratio**: The percentage for persons who resided in the Midwest was 1.047 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 (65.8%) and the lowest viral suppression group percentage was for persons who resided in rural areas (63.6%) (Figure 25, Table 4a). The average percentage for all other geographic areas (including the percentage for persons who resided in MSAs and rural areas and excluding the percentage who resided in metropolitan areas) was 64.2%.

- **Absolute disparities**
  - **Absolute (maximal) percentage difference**: Persons who resided in metropolitan areas were the closest to the target (29.2%) and had a group percentage higher than the overall viral suppression outcome of 64.6%.

    Persons who resided in rural areas were the farthest from the target (31.4%) and had a group percentage lower than the overall viral suppression outcome.

    The percentage difference between the percentages for persons who resided in metropolitan and rural areas was 2.2%. The percentage difference between the percentages for persons who resided in metropolitan and in all other geographic areas was 1.6%.
- **Relative disparities**
  - **Summary percentage ratio**: The percentages for persons who resided in metropolitan areas and in rural areas were 0.693 and 0.669 times the 95% target, respectively. The average percentage for all other geographic areas was 0.976 times the percentage for persons who resided in metropolitan areas.
  - **Maximal percentage ratio**: The percentage for persons who resided in metropolitan areas was 1.035 times the percentage for persons who resided in rural areas.

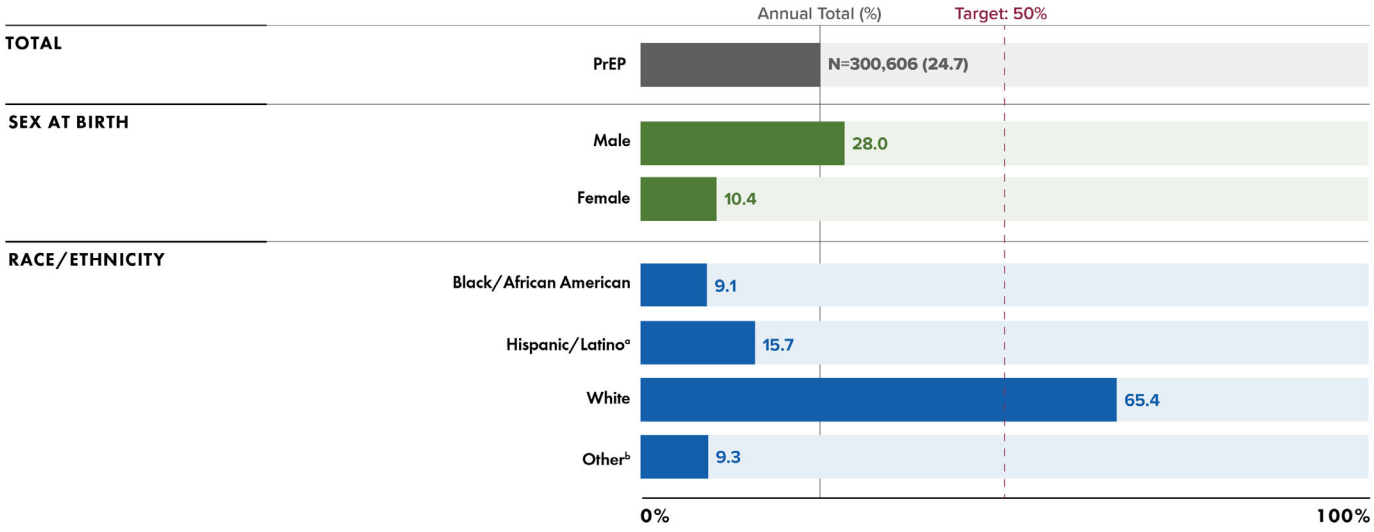
2020 Status and Disparities in PrEP Coverage

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 2020, 24.7% of an estimated 1,216,210 persons aged ≥16 years with indications, or eligible, for PrEP were prescribed PrEP (Table 8a). For PrEP coverage, the maximal percentage difference was 25.3% from the 50% target and the maximal percentage ratio was 0.494 times the 50% target. Percentages for PrEP coverage suppression varied by race/ethnicity and sex assigned at birth (Figure 26, Table 8a).

Figure 26. Status of PrEP coverage during 2020 (COVID-19 pandemic) among persons aged ≥16 years, by race/ethnicity and sex assigned at birth—United States and Puerto Rico



Note. Gray line indicates the overall percentage of persons with indications for PrEP prescribed PrEP. 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. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

[a] Hispanic/Latino persons can be of any race.

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

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

Disparities by race/ethnicity: The highest PrEP coverage group percentage was for White persons (65.4%) and the lowest PrEP coverage group percentage was for Black/African American persons (9.1%) (Figure 26, Table 8a). The average percentage for all other racial/ethnic groups (excluding the percentage for White persons) was 11.4%.

- **Absolute disparities**
  - **Absolute (maximal) percentage difference**: White persons had a group percentage that exceeded the overall PrEP coverage target of 50% (15.4%).

    Black/African American persons were the farthest from the target (40.9%) 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 56.3%. The percentage difference between the percentage for White persons and the average percentage for all other racial/ethnic groups was 54.0%.
- **Relative disparities**
  - **Summary percentage ratio**: The percentages for White and Black/African American persons were 1.308 and 0.182 times the 50% target, respectively. The average percentage for all other racial/ethnic groups was 0.174 times the percentage for White persons.
  - **Maximal percentage ratio**: The percentage for White persons was 7.187 times the percentage for Black/African American persons.

Disparities by sex assigned at birth: The highest PrEP coverage group percentage was for males (28.0%) and the lowest PrEP coverage group percentage was for females (10.4%) (Figure 26, Table 8a).

- **Absolute disparities**
  - Absolute (maximal) percentage difference: Males were the closest to the target (22.0%) and had a group percentage lower than the overall PrEP coverage outcome of 50.0%.

    Females were the farthest from the target (39.6%) 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 17.6%.
- **Relative disparities**
  - **Summary percentage ratio**: The percentages for males and females were 0.560 and 0.208 times the 50% target, respectively.
  - **Maximal percentage ratio**: The percentage for males was 2.692 times the percentage for females.

Technical Notes

A. Surveillance of HIV Infection Overview

This report includes data reported to CDC through December 31, 2021, from all 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). After the removal of personally identifiable information, data 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 [11, 12]. 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.

Please use caution when interpreting laboratory data for persons with diagnosed HIV infection. Laboratory data presented in this report are from 46 jurisdictions (45 states and the District of Columbia) that reported complete CD4+ T-lymphocyte (CD4) and viral load test results to CDC as of December 31, 2021. Data from these jurisdictions represent 89% of all persons aged ≥13 years living with diagnosed HIV infection at year-end 2020 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 [13, 14].

More information on case definitions can be found in the Technical Notes of the 2020 HIV Surveillance Report at https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html.

C. Areas with Complete Laboratory Reporting

As of December 31, 2021, 46 jurisdictions (45 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, 2021, the jurisdiction had reported (to CDC) at least 95% of all CD4 and viral load test results received from January 2020 through September 2021.

The 45 states are Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, 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, 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 if based on a CD4 test result or the diagnosis of an 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 46 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 5a–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 5a–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 2020, 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 2020 and who resided in any of the 46 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 2019, who resided in any of the 46 jurisdictions as of their most recent known address, and who were alive at year-end 2020 (Tables 3a–e). Receipt of any HIV medical care was measured by documentation of ≥1 CD4 or viral load tests performed during 2020. 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 2020.

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 2019, who resided in any of the 46 jurisdictions as of their most recent known address during 2020, and who were alive at year-end 2020 (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 highest viral load (most severe) 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 ART.

Viral suppression within 6 months of diagnosis was measured for persons whose infection was diagnosed during 2020 and who resided in any of the 46 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 2020.

D1.4 Deaths

Monitoring receipt of HIV medical care, retention in HIV medical care, viral suppression at most recent test, deaths 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 2020, death data for Guam, Kansas, North Carolina, Puerto Rico, South Carolina, and Vermont should be interpreted with caution.

More information on deaths can be found in the Technical Notes of the 2020 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 7a–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, 2020, tables were limited to data on persons whose diagnosis or stage 3 (AIDS) classification was made during 2012–2017. 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 9a presents data for infants with infection attributed to perinatal transmission and reported to NHSS through December 2021. The data include all persons reported to NHSS with infection attributed to perinatal exposure, regardless of place of birth. Table 9b presents a subset of data from Table 9a: 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 9b 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 8a/b, A5).

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 92% of all prescriptions from retail pharmacies and 60%–86% 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 [15–17]. 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. Starting in 2019, TAF/FTC was included in the algorithm 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. Race/ethnicity categories available in the IQVIA data include White, Black, Hispanic/Latino, and other. 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.

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 used to crosswalk between ZIP3s and states/counties by using the most recent data from (a) U.S Census Bureau's American Community Survey (ACS) 5-year estimates by ZIP code Tabulate Area (ZCTA) [18], and (b) the U.S. Department of Housing and Urban Development's ZIP Code Crosswalk Files [19]. Because of reliability concerns, subnational estimates of <50 are not included in this report.

D1.7.3 Persons with indications for PrEP

ACS and U.S. Census Bureau files were used to estimate the number of MSM (men who have sex with men) in a jurisdiction [20, 21]. 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 [22]. For 2018 denominator, this proportion was updated with recent NHANES data.

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 [persons who inject drugs]) 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 [23]. Jurisdictional estimates were rounded to the nearest 10.

The tables included in this report provide updated data on PrEP coverage for the year 2020 by using the IQVIA data reported through September 2021. 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 lags the availability of a numerator by approximately 1 year. PrEP coverage data with a lagged denominator are considered preliminary. For this release of the Monitoring report, 2018 denominators were used for 2018, 2019, and 2020 PrEP coverage data. In addition to being preliminary, data for the year 2020 should be interpreted with awareness of the impact of the COVID-19 pandemic on filling PrEP prescriptions in state/local jurisdictions [24].

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 [25, 26]. 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 2 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 care, viral suppression, and PrEP coverage using the following measures:

1) 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).
2) 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.

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 9a/b), rates were calculated per 100,000 live births [27].

More information on rates can be found in the Technical Notes of the 2020 HIV Surveillance Report at https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html.

D2.1 Rates of deaths

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 6a–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 per-

sons 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 6c and 6f 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 [28, 29].

E. Demographic Information

E1. Age

All tables in this report reflect data on persons aged 13 years and older, with the exception of Tables 8a/b (PrEP coverage) and Tables 9a/b (perinatally acquired HIV infection, birth years 2016–2020).

- Tables 3a–e and 4a/b (receipt of care and viral suppression): age was based on the person's age at year-end 2019.
- Tables 6a–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 Sex assigned at birth

Sex designations in this report are based on a person's sex assigned 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 2020 HIV Surveillance Report at https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html.

E3. Race and Ethnicity

In the *Federal Register* [30] 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 [31, 32]. 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 [32, 33]. 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 [33].

Demographic information for the live birth registry is based on that of the mother [27]. Therefore, Tables 9a/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 2020 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 [34, 35].

More information on transmission categories can be found in the Technical Notes of the 2020 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 2020 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, 5c/d, 7c/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 (6c/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, 5a/b, 7a/b, 7d/e). 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 (6a/b, 6d/e), region is based on residence at death.

F3. Population Area of Residence

In the Federal Register for July 16, 2021, OMB published revised standards for defining metropolitan statistical areas (MSAs) in federal statistical activities [36]. 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. 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 (6a/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].

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Table 1a. Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia

		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	22,727	1,600	7.0	5,678	25.0	7,098	31.2	4,866	21.4	3,485	15.3
Female	5,042	289	5.7	1,451	28.8	1,349	26.8	1,161	23.0	792	15.7
Transgender woman[c]	599	53	8.8	194	32.4	177	29.5	74	12.4	101	16.9
Transgender man[c]	38	9	23.7	12	31.6	12	31.6	2	5.3	3	7.9
Additional gender identity[d]	16	2	12.5	3	18.8	8	50.0	2	12.5	1	6.3
Age at diagnosis (yr)											
13–24	5,728	581	10.1	1,588	27.7	2,117	37.0	518	9.0	924	16.1
25–34	10,570	783	7.4	2,976	28.2	3,354	31.7	1,840	17.4	1,617	15.3
35–44	5,545	309	5.6	1,389	25.0	1,573	28.4	1,390	25.1	884	15.9
45–54	3,644	163	4.5	810	22.2	895	24.6	1,267	34.8	509	14.0
≥55	2,935	117	4.0	575	19.6	705	24.0	1,090	37.1	448	15.3
Race/ethnicity											
American Indian/Alaska Native	195	18	9.2	48	24.6	50	25.6	42	21.5	37	19.0
Asian	612	30	4.9	140	22.9	217	35.5	164	26.8	61	10.0
Black/African American	12,069	807	6.7	2,912	24.1	3,766	31.2	2,421	20.1	2,163	17.9
Hispanic/Latino[e]	7,498	519	6.9	1,949	26.0	2,434	32.5	1,709	22.8	887	11.8
Native Hawaiian/ other Pacific Islander	63	2	3.2	13	20.6	29	46.0	13	20.6	6	9.5
White	7,256	533	7.3	2,081	28.7	1,920	26.5	1,604	22.1	1,118	15.4
Multiracial	729	44	6.0	195	26.7	228	31.3	152	20.9	110	15.1
Transmission category[f]											
Male-to-male sexual contact	19,414	1,438	7.4	4,958	25.5	6,265	32.3	3,873	20.0	2,880	14.8
Injection drug use	1,846	128	6.9	465	25.2	462	25.0	410	22.2	381	20.7
Male	1,052	72	6.9	252	24.0	256	24.3	250	23.8	222	21.1
Female	794	56	7.0	213	26.8	206	25.9	160	20.2	159	20.1
Male-to-male sexual contact and injection drug use	1,023	79	7.7	321	31.4	273	26.7	170	16.6	179	17.5
Heterosexual contact[g]	6,058	303	5.0	1,571	25.9	1,626	26.8	1,629	26.9	929	15.3
Male	1,826	65	3.6	338	18.5	482	26.4	640	35.1	301	16.5
Female	4,231	238	5.6	1,233	29.1	1,144	27.0	988	23.4	628	14.8
Other[h]	82	5	6.4	24	28.9	17	21.4	23	28.1	12	15.2
Male	27	1	3.4	6	23.2	6	21.7	9	32.6	5	19.1
Female	55	4	7.8	17	31.7	12	21.3	14	25.9	7	13.3
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	22,809	1,601	7.0	6,004	26.3	7,029	30.8	4,737	20.8	3,438	15.1
Metropolitan areas (pop. 50,000–499,999)	3,629	253	7.0	873	24.1	1,065	29.3	851	23.4	587	16.2
Nonmetropolitan areas (pop. < 50,000)	1,846	91	4.9	435	23.6	521	28.2	495	26.8	304	16.5
Total	**28,422**	**1,953**	**6.9**	**7,338**	**25.8**	**8,644**	**30.4**	**6,105**	**21.5**	**4,382**	**15.4**

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

Note. 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. Stage of disease at 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. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, 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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[g] Sexual 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 1b. Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by area of residence—45 states and the District of Columbia

		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.	%
Alabama	585	39	6.7	134	22.9	188	32.1	127	21.7	97	16.6
Alaska	29	6	20.7	5	17.2	12	41.4	3	10.3	3	10.3
Arizona	662	57	8.6	180	27.2	179	27.0	148	22.4	98	14.8
Arkansas	242	6	2.5	54	22.3	73	30.2	59	24.4	50	20.7
California	3,924	322	8.2	1,094	27.9	1,176	30.0	839	21.4	493	12.6
Colorado	324	8	2.5	93	28.7	114	35.2	77	23.8	32	9.9
Connecticut	171	11	6.4	48	28.1	47	27.5	42	24.6	23	13.5
Delaware	93	2	2.2	23	24.7	26	28.0	25	26.9	17	18.3
District of Columbia	197	9	4.6	50	25.4	73	37.1	41	20.8	24	12.2
Florida	3,408	162	4.8	1,031	30.3	995	29.2	714	21.0	506	14.8
Georgia	1,977	65	3.3	501	25.3	678	34.3	433	21.9	300	15.2
Hawaii	51	0	0.0	20	39.2	8	15.7	18	35.3	5	9.8
Illinois	1,096	101	9.2	231	21.1	318	29.0	225	20.5	221	20.2
Indiana	433	1	0.2	128	29.6	112	25.9	104	24.0	88	20.3
Iowa	100	4	4.0	26	26.0	37	37.0	25	25.0	8	8.0
Kansas	138	7	5.1	39	28.3	45	32.6	35	25.4	12	8.7
Louisiana	722	81	11.2	160	22.2	197	27.3	162	22.4	122	16.9
Maine	16	0	0.0	4	25.0	3	18.8	8	50.0	1	6.3
Maryland[c]	706	66	9.3	195	27.6	227	32.2	153	21.7	65	9.2
Massachusetts	434	18	4.1	127	29.3	142	32.7	100	23.0	47	10.8
Michigan	519	63	12.1	133	25.6	159	30.6	96	18.5	68	13.1
Minnesota	229	20	8.7	52	22.7	78	34.1	48	21.0	31	13.5
Mississippi	402	14	3.5	60	14.9	89	22.1	90	22.4	149	37.1
Missouri	359	10	2.8	73	20.3	108	30.1	65	18.1	103	28.7
Montana	14	2	14.3	4	28.6	2	14.3	5	35.7	1	7.1
Nebraska	73	4	5.5	17	23.3	22	30.1	18	24.7	12	16.4
Nevada	392	13	3.3	125	31.9	146	37.2	70	17.9	38	9.7
New Hampshire	33	4	12.1	10	30.3	8	24.2	8	24.2	3	9.1
New Mexico	131	4	3.1	33	25.2	39	29.8	25	19.1	30	22.9
New York	1,963	183	9.3	495	25.2	647	33.0	430	21.9	208	10.6
North Carolina	1,079	112	10.4	207	19.2	307	28.5	225	20.9	228	21.1
North Dakota	36	3	8.3	3	8.3	12	33.3	15	41.7	3	8.3
Ohio	888	16	1.8	250	28.2	298	33.6	190	21.4	134	15.1
Oklahoma	333	19	5.7	63	18.9	79	23.7	72	21.6	100	30.0
Oregon	180	27	15.0	56	31.1	51	28.3	28	15.6	18	10.0
Rhode Island	53	4	7.5	18	34.0	16	30.2	9	17.0	6	11.3
South Carolina	655	34	5.2	178	27.2	227	34.7	162	24.7	54	8.2
South Dakota	34	2	5.9	12	35.3	12	35.3	4	11.8	4	11.8
Tennessee	647	45	7.0	152	23.5	200	30.9	110	17.0	140	21.6
Texas	3,548	284	8.0	839	23.6	1,060	29.9	740	20.9	625	17.6
Utah	131	3	2.3	35	26.7	46	35.1	30	22.9	17	13.0
Virginia	628	55	8.8	163	26.0	162	25.8	165	26.3	83	13.2
Washington	421	41	9.7	121	28.7	135	32.1	88	20.9	36	8.6
West Virginia	139	14	10.1	30	21.6	21	15.1	24	17.3	50	36.0
Wisconsin	213	12	5.6	62	29.1	62	29.1	48	22.5	29	13.6
Wyoming	14	0	0.0	4	28.6	8	57.1	2	14.3	0	0.0
Region of residence[d]											
Northeast (*excluding NJ, PA, VT*)	2,670	220	8.2	702	26.3	863	32.3	597	22.4	288	10.8
Midwest (*excluding KS*)	4,118	243	5.9	1,026	24.9	1,263	30.7	873	21.2	713	17.3
Southeast (*excluding KY*)	15,361	1,007	6.6	3,840	25.0	4,602	30.0	3,302	21.5	2,610	17.0
West (*excluding ID*)	6,273	483	7.7	1,770	28.2	1,916	30.5	1,333	21.2	771	12.3

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

Note. 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. Stage of disease at 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. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, 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] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

[d] Data should be interpreted with caution and are based on areas with laws and complete reporting to CDC.

Table 1c. Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia

		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.	%
	American Indian/Alaska Native										
Gender											
Male	144	17	11.8	31	21.5	38	26.4	33	22.9	25	17.4
Female	43	1	2.3	14	32.6	12	27.9	7	16.3	9	20.9
Transgender woman[c]	8	0	0.0	3	37.5	0	0.0	2	25.0	3	37.5
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											
(≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	33	6	18.2	11	33.3	11	33.3	0	0.0	5	15.2
25–34	54	4	7.4	12	22.2	11	20.4	14	25.9	13	24.1
35–44	33	6	18.2	6	18.2	9	27.3	4	12.1	8	24.2
45–54	22	1	4.5	3	13.6	4	18.2	13	59.1	1	4.5
≥55	10	0	0.0	2	20.0	3	30.0	4	40.0	1	10.0
Transmission category[e]											
Male-to-male sexual contact	121	14	11.3	28	23.4	29	24.3	28	23.4	21	17.6
Injection drug use	8	1	12.5	1	6.3	3	40.0	2	25.0	1	16.3
Male-to-male sexual contact and injection drug use	20	2	11.9	5	23.4	5	26.4	3	12.4	5	25.9
Heterosexual contact[f]	3	0	0.0	1	17.9	0	0.0	2	71.4	0	0.0
Other[g]	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)	80	8	10.0	22	27.5	14	17.5	21	26.3	15	18.8
Metropolitan areas (pop. 50,000–499,999)	30	5	16.7	3	10.0	9	30.0	8	26.7	5	16.7
Nonmetropolitan areas (pop. < 50,000)	42	4	9.5	9	21.4	15	35.7	6	14.3	8	19.0
Subtotal	152	17	11.2	34	22.4	38	25.0	35	23.0	28	18.4
Female sex at birth											
(≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
25–34	16	1	6.3	6	37.5	4	25.0	1	6.3	4	25.0
35–44	18	0	0.0	7	38.9	5	27.8	4	22.2	2	11.1
45–54	5	0	0.0	1	20.0	1	20.0	1	20.0	2	40.0
≥55	4	0	0.0	0	0.0	2	50.0	1	25.0	1	25.0
Transmission category[e]											
Injection drug use	20	1	5.1	6	28.9	8	40.1	1	5.6	4	20.3
Heterosexual contact[f]	23	0	0.0	8	35.6	4	17.6	6	25.3	5	21.5
Other[g]	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)	20	0	0.0	10	50.0	4	20.0	3	15.0	3	15.0
Metropolitan areas (pop. 50,000–499,999)	11	1	9.1	1	9.1	5	45.5	1	9.1	3	27.3
Nonmetropolitan areas (pop. < 50,000)	12	0	0.0	3	25.0	3	25.0	3	25.0	3	25.0
Subtotal	43	1	2.3	14	32.6	12	27.9	7	16.3	9	20.9
Total	**195**	**18**	**9.2**	**48**	**24.6**	**50**	**25.6**	**42**	**21.5**	**37**	**19.0**

Table 1c. Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

		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.	%
	Asian										
Gender											
Male	515	26	5.0	118	22.9	190	36.9	134	26.0	47	9.1
Female	80	3	3.8	18	22.5	20	25.0	27	33.7	12	15.0
Transgender woman[c]	16	1	6.3	4	25.0	6	37.5	3	18.8	2	12.5
Transgender man[c]	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Additional gender identity[d]	1	0	0.0	0	0.0	1	100	0	0.0	0	0.0
Male sex at birth (≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	79	6	7.6	15	19.0	41	51.9	13	16.5	4	5.1
25–34	225	12	5.3	65	28.9	87	38.7	41	18.2	20	8.9
35–44	101	2	2.0	24	23.8	36	35.6	29	28.7	10	9.9
45–54	79	6	7.6	13	16.5	23	29.1	29	36.7	8	10.1
≥55	48	1	2.1	5	10.4	10	20.8	25	52.1	7	14.6
Transmission category[e]											
Male-to-male sexual contact	477	26	5.4	112	23.5	180	37.7	117	24.6	43	8.9
Injection drug use	13	0	0.0	2	18.6	4	28.7	5	38.0	2	13.2
Male-to-male sexual contact and injection drug use	12	0	0.0	3	28.8	6	47.5	2	18.6	1	4.2
Heterosexual contact[f]	28	1	3.9	4	14.8	8	27.6	12	41.0	4	12.7
Other[g]	2	0	0.0	0	0.0	0	0.0	1	45.0	1	35.0
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	477	25	5.2	112	23.5	176	36.9	120	25.2	44	9.2
Metropolitan areas (pop. 50,000–499,999)	37	1	2.7	9	24.3	14	37.8	10	27.0	3	8.1
Nonmetropolitan areas (pop. < 50,000)	17	1	5.9	1	5.9	7	41.2	7	41.2	1	5.9
Subtotal	532	27	5.1	122	22.9	197	37.0	137	25.8	49	9.2
Female sex at birth (≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	3	0	0.0	0	0.0	1	33.3	1	33.3	1	33.3
25–34	22	2	9.1	6	27.3	6	27.3	4	18.2	4	18.2
35–44	20	1	5.0	5	25.0	5	25.0	9	45.0	0	0.0
45–54	18	0	0.0	4	22.2	3	16.7	7	38.9	4	22.2
≥55	17	0	0.0	3	17.6	5	29.4	6	35.3	3	17.6
Transmission category[e]											
Injection drug use	5	0	0.0	1	19.2	1	26.9	1	25.0	2	28.8
Heterosexual contact[f]	74	3	4.1	17	22.4	19	25.3	25	34.6	10	13.6
Other[g]	1	0	0.0	1	38.5	0	0.0	0	0.0	1	38.5
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	72	3	4.2	14	19.4	20	27.8	23	31.9	12	16.7
Metropolitan areas (pop. 50,000–499,999)	4	0	0.0	2	50.0	0	0.0	2	50.0	0	0.0
Nonmetropolitan areas (pop. < 50,000)	4	0	0.0	2	50.0	0	0.0	2	50.0	0	0.0
Subtotal	80	3	3.8	18	22.5	20	25.0	27	33.7	12	15.0
Total	**612**	**30**	**4.9**	**140**	**22.9**	**217**	**35.5**	**164**	**26.8**	**61**	**10.0**

Table 1c. Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

		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.	%
	Black/African American										
Gender											
Male	8,991	623	6.9	2,032	22.6	2,909	32.4	1,742	19.4	1,685	18.7
Female	2,771	156	5.6	783	28.3	769	27.8	645	23.3	418	15.1
Transgender woman[c]	288	26	9.0	92	31.9	80	27.8	32	11.1	58	20.1
Transgender man[c]	11	2	18.2	3	27.3	4	36.4	1	9.1	1	9.1
Additional gender identity[d]	8	0	0.0	2	25.0	4	50.0	1	12.5	1	12.5
Male sex at birth (≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	2,724	276	10.1	649	23.8	1,028	37.7	252	9.3	519	19.1
25–34	3,705	256	6.9	923	24.9	1,192	32.2	654	17.7	680	18.4
35–44	1,375	64	4.7	295	21.5	397	28.9	360	26.2	259	18.8
45–54	775	25	3.2	146	18.8	190	24.5	272	35.1	142	18.3
≥55	708	28	4.0	113	16.0	186	26.3	237	33.5	144	20.3
Transmission category[e]											
Male-to-male sexual contact	7,634	570	7.5	1,796	23.5	2,557	33.5	1,309	17.1	1,403	18.4
Injection drug use	283	19	6.7	54	19.0	71	25.1	68	23.9	71	25.2
Male-to-male sexual contact and injection drug use	213	17	7.8	66	31.0	57	26.7	28	13.3	45	21.1
Heterosexual contact[f]	1,143	43	3.7	207	18.1	304	26.6	366	32.0	222	19.5
Other[g]	14	1	3.7	3	23.5	4	26.5	4	29.4	2	16.9
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	7,533	548	7.3	1,748	23.2	2,459	32.6	1,375	18.3	1,403	18.6
Metropolitan areas (pop. 50,000–499,999)	1,111	71	6.4	247	22.2	349	31.4	246	22.1	198	17.8
Nonmetropolitan areas (pop. < 50,000)	592	26	4.4	124	20.9	176	29.7	145	24.5	121	20.4
Subtotal	9,287	649	7.0	2,126	22.9	2,993	32.2	1,775	19.1	1,744	18.8
Female sex at birth (≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	390	40	10.3	139	35.6	125	32.1	33	8.5	53	13.6
25–34	805	55	6.8	255	31.7	244	30.3	133	16.5	118	14.7
35–44	622	26	4.2	170	27.3	166	26.7	156	25.1	104	16.7
45–54	511	16	3.1	128	25.0	125	24.5	171	33.5	71	13.9
≥55	454	21	4.6	94	20.7	113	24.9	153	33.7	73	16.1
Transmission category[e]											
Injection drug use	232	18	7.6	61	26.2	55	23.8	58	25.0	41	17.4
Heterosexual contact[f]	2,511	137	5.4	715	28.5	708	28.2	578	23.0	374	14.9
Other[g]	38	4	9.7	10	27.2	9	24.3	10	26.4	5	12.5
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	2,220	130	5.9	648	29.2	604	27.2	506	22.8	332	15.0
Metropolitan areas (pop. 50,000–499,999)	395	20	5.1	100	25.3	119	30.1	98	24.8	58	14.7
Nonmetropolitan areas (pop. < 50,000)	156	8	5.1	35	22.4	48	30.8	40	25.6	25	16.0
Subtotal	2,782	158	5.7	786	28.3	773	27.8	646	23.2	419	15.1
Total	**12,069**	**807**	**6.7**	**2,912**	**24.1**	**3,766**	**31.2**	**2,421**	**20.1**	**2,163**	**17.9**

Table 1c. Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

		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.	%
	Hispanic/Latino[h]										
Gender											
Male	6,475	457	7.1	1,655	25.6	2,142	33.1	1,469	22.7	752	11.6
Female	821	36	4.4	232	28.3	225	27.4	220	26.8	108	13.2
Transgender woman[c]	189	20	10.6	57	30.2	66	34.9	19	10.1	27	14.3
Transgender man[c]	10	4	40.0	5	50.0	1	10.0	0	0.0	0	0.0
Additional gender identity[d]	3	2	66.7	0	0.0	0	0.0	1	33.3	0	0.0
Male sex at birth (≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	1,314	140	10.7	354	26.9	521	39.6	130	9.9	169	12.9
25–34	2,748	218	7.9	768	27.9	954	34.7	511	18.6	297	10.8
35–44	1,415	74	5.2	344	24.3	432	30.5	376	26.6	189	13.4
45–54	771	33	4.3	174	22.6	191	24.8	296	38.4	77	10.0
≥55	419	14	3.3	72	17.2	110	26.3	176	42.0	47	11.2
Transmission category[e]											
Male-to-male sexual contact	5,842	442	7.6	1,526	26.1	1,978	33.9	1,221	20.9	676	11.6
Injection drug use	232	11	4.5	51	22.0	63	26.9	75	32.1	33	14.4
Male-to-male sexual contact and injection drug use	245	17	7.0	75	30.8	69	28.0	49	20.0	35	14.3
Heterosexual contact[f]	345	10	2.8	59	17.2	98	28.4	143	41.7	34	9.9
Other[g]	4	0	0.0	1	17.1	1	28.6	1	31.4	1	17.1
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	5,875	427	7.3	1,541	26.2	1,968	33.5	1,277	21.7	662	11.3
Metropolitan areas (pop. 50,000–499,999)	534	41	7.7	109	20.4	176	33.0	139	26.0	69	12.9
Nonmetropolitan areas (pop. < 50,000)	221	10	4.5	58	26.2	55	24.9	67	30.3	31	14.0
Subtotal	6,667	479	7.2	1,712	25.7	2,208	33.1	1,489	22.3	779	11.7
Female sex at birth (≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	130	10	7.7	48	36.9	45	34.6	10	7.7	17	13.1
25–34	225	9	4.0	84	37.3	62	27.6	43	19.1	27	12.0
35–44	216	14	6.5	44	20.4	61	28.2	66	30.6	31	14.4
45–54	141	5	3.5	31	22.0	37	26.2	50	35.5	18	12.8
≥55	119	2	1.7	30	25.2	21	17.6	51	42.9	15	12.6
Transmission category[e]											
Injection drug use	123	10	7.9	29	23.4	34	27.6	30	24.2	21	17.0
Heterosexual contact[f]	703	30	4.3	206	29.3	191	27.2	189	26.9	87	12.3
Other[g]	5	0	0.0	2	40.7	1	14.8	2	27.8	1	9.3
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	721	37	5.1	201	27.9	193	26.8	194	26.9	96	13.3
Metropolitan areas (pop. 50,000–499,999)	69	1	1.4	28	40.6	21	30.4	12	17.4	7	10.1
Nonmetropolitan areas (pop. < 50,000)	36	1	2.8	6	16.7	12	33.3	14	38.9	3	8.3
Subtotal	831	40	4.8	237	28.5	226	27.2	220	26.5	108	13.0
Total	**7,498**	**519**	**6.9**	**1,949**	**26.0**	**2,434**	**32.5**	**1,709**	**22.8**	**887**	**11.8**

Table 1c. Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

		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.	%
	Native Hawaiian/other Pacific Islander										
Gender											
Male	46	2	4.3	7	15.2	23	50.0	9	19.6	5	10.9
Female	14	0	0.0	5	35.7	6	42.9	3	21.4	0	0.0
Transgender woman[c]	3	0	0.0	1	33.3	0	0.0	1	33.3	1	33.3
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 (≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	9	0	0.0	2	22.2	6	66.7	0	0.0	1	11.1
25–34	22	0	0.0	4	18.2	11	50.0	4	18.2	3	13.6
35–44	13	1	7.7	2	15.4	6	46.2	3	23.1	1	7.7
45–54	4	1	25.0	0	0.0	0	0.0	2	50.0	1	25.0
≥55	1	0	0.0	0	0.0	0	0.0	1	100	0	0.0
Transmission category[e]											
Male-to-male sexual contact	41	0	0.0	7	17.1	21	50.4	9	21.0	5	11.5
Injection drug use	3	0	0.0	0	0.0	1	44.0	1	48.0	0	0.0
Male-to-male sexual contact and injection drug use	3	1	30.3	1	30.3	0	0.0	0	0.0	1	33.3
Heterosexual contact[f]	2	1	43.5	0	0.0	1	47.8	0	8.7	0	0.0
Other[g]	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)	41	2	4.9	7	17.1	18	43.9	9	22.0	5	12.2
Metropolitan areas (pop. 50,000–499,999)	5	0	0.0	1	20.0	3	60.0	0	0.0	1	20.0
Nonmetropolitan areas (pop. < 50,000)	3	0	0.0	0	0.0	2	66.7	1	33.3	0	0.0
Subtotal	49	2	4.1	8	16.3	23	46.9	10	20.4	6	12.2
Female sex at birth (≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	3	0	0.0	3	100	0	0.0	0	0.0	0	0.0
25–34	2	0	0.0	1	50.0	1	50.0	0	0.0	0	0.0
35–44	2	0	0.0	0	0.0	1	50.0	1	50.0	0	0.0
45–54	3	0	0.0	0	0.0	2	66.7	1	33.3	0	0.0
≥55	4	0	0.0	1	25.0	2	50.0	1	25.0	0	0
Transmission category[e]											
Injection drug use	2	0	0.0	0	0.0	1	66.7	0	0.0	0	0.0
Heterosexual contact[f]	12	0	0.0	5	40.0	4	38.3	3	21.7	0	0.0
Other[g]	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)	9	0	0.0	3	33.3	4	44.4	2	22.2	0	0.0
Metropolitan areas (pop. 50,000–499,999)	3	0	0.0	2	66.7	1	33.3	0	0.0	0	0.0
Nonmetropolitan areas (pop. < 50,000)	2	0	0.0	0	0.0	1	50.0	1	50.0	0	0.0
Subtotal	14	0	0.0	5	35.7	6	42.9	3	21.4	0	0.0
Total	**63**	**2**	**3.2**	**13**	**20.6**	**29**	**46.0**	**13**	**20.6**	**6**	**9.5**

Table 1c. Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

		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.	%
	White										
Gender											
Male	5,981	442	7.4	1,684	28.2	1,609	26.9	1,357	22.7	889	14.9
Female	1,189	85	7.1	365	30.7	283	23.8	239	20.1	217	18.3
Transgender woman[c]	68	4	5.9	28	41.2	19	27.9	7	10.3	10	14.7
Transgender man[c]	14	2	14.3	3	21.4	6	42.9	1	7.1	2	14.3
Additional gender identity[d]	4	0	0.0	1	25.0	3	75.0	0	0.0	0	0.0
Male sex at birth (≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	734	77	10.5	248	33.8	244	33.2	55	7.5	110	15.0
25–34	2,112	177	8.4	661	31.3	602	28.5	339	16.1	333	15.8
35–44	1,293	94	7.3	359	27.8	347	26.8	301	23.3	192	14.8
45–54	999	63	6.3	240	24.0	238	23.8	315	31.5	143	14.3
≥55	915	35	3.8	205	22.4	200	21.9	354	38.7	121	13.2
Transmission category[e]											
Male-to-male sexual contact	4,795	355	7.4	1,350	28.2	1,332	27.8	1,086	22.7	671	14.0
Injection drug use	475	40	8.4	137	28.9	104	22.0	89	18.7	104	22.0
Male-to-male sexual contact and injection drug use	492	40	8.2	158	32.2	131	26.7	77	15.6	86	17.4
Heterosexual contact[f]	284	10	3.6	65	22.7	63	22.0	110	38.8	37	12.9
Other[g]	7	0	0.0	2	31.9	1	13.0	2	31.9	1	20.3
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	4,419	333	7.5	1,299	29.4	1,215	27.5	927	21.0	645	14.6
Metropolitan areas (pop. 50,000–499,999)	1,032	80	7.8	257	24.9	262	25.4	262	25.4	171	16.6
Nonmetropolitan areas (pop. < 50,000)	574	31	5.4	150	26.1	146	25.4	170	29.6	77	13.4
Subtotal	6,053	446	7.4	1,713	28.3	1,631	26.9	1,364	22.5	899	14.9
Female sex at birth (≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	129	13	10.1	59	45.7	30	23.3	7	5.4	20	15.5
25–34	364	32	8.8	124	34.1	91	25.0	44	12.1	73	20.1
35–44	290	20	6.9	93	32.1	71	24.5	45	15.5	61	21.0
45–54	236	11	4.7	52	22.0	55	23.3	81	34.3	37	15.7
≥55	184	11	6.0	40	21.7	42	22.8	63	34.2	28	15.2
Transmission category[e]											
Injection drug use	391	26	6.5	111	28.5	102	26.1	66	16.8	86	22.1
Heterosexual contact[f]	803	61	7.6	253	31.5	186	23.1	172	21.4	131	16.4
Other[g]	9	0	0.0	4	43.0	1	16.3	2	25.6	1	14.0
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	781	56	7.2	251	32.1	172	22.0	163	20.9	139	17.8
Metropolitan areas (pop. 50,000–499,999)	285	25	8.8	82	28.8	75	26.3	47	16.5	56	19.6
Nonmetropolitan areas (pop. < 50,000)	134	6	4.5	33	24.6	41	30.6	30	22.4	24	17.9
Subtotal	1,203	87	7.2	368	30.6	289	24.0	240	20.0	219	18.2
Total	**7,256**	**533**	**7.3**	**2,081**	**28.7**	**1,920**	**26.5**	**1,604**	**22.1**	**1,118**	**15.4**

Table 1c. Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

		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.	%
	Multiracial										
Gender											
Male	575	33	5.7	151	26.3	187	32.5	122	21.2	82	14.3
Female	124	8	6.5	34	27.4	34	27.4	20	16.1	28	22.6
Transgender woman[c]	27	2	7.4	9	33.3	6	22.2	10	37.0	0	0.0
Transgender man[c]	3	1	33.3	1	33.3	1	33.3	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 (≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	154	11	7.1	51	33.1	57	37.0	16	10.4	19	12.3
25–34	226	15	6.6	54	23.9	78	34.5	47	20.8	32	14.2
35–44	123	6	4.9	33	26.8	31	25.2	31	25.2	22	17.9
45–54	63	1	1.6	14	22.2	19	30.2	25	39.7	4	6.3
≥55	36	2	5.6	8	22.2	8	22.2	13	36.1	5	13.9
Transmission category[e]											
Male-to-male sexual contact	505	32	6.2	139	27.5	169	33.6	103	20.5	62	12.2
Injection drug use	39	1	3.6	7	18.3	10	25.5	11	27.8	10	24.7
Male-to-male sexual contact and injection drug use	37	1	3.5	12	32.4	6	15.0	11	30.5	7	18.5
Heterosexual contact[f]	22	1	3.7	2	10.2	8	38.0	7	30.1	4	18.1
Other[g]	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)	474	25	5.3	123	25.9	157	33.1	105	22.2	64	13.5
Metropolitan areas (pop. 50,000–499,999)	85	7	8.2	26	30.6	23	27.1	21	24.7	8	9.4
Nonmetropolitan areas (pop. < 50,000)	41	3	7.3	10	24.4	13	31.7	6	14.6	9	22.0
Subtotal	602	35	5.8	160	26.6	193	32.1	132	21.9	82	13.6
Female sex at birth (≥13 years at diagnosis)											
Age at diagnosis (yr)											
13–24	26	2	7.7	9	34.6	8	30.8	1	3.8	6	23.1
25–34	44	2	4.5	13	29.5	11	25.0	5	11.4	13	29.5
35–44	24	1	4.2	7	29.2	6	25.0	5	20.8	5	20.8
45–54	17	1	5.9	4	23.5	7	41.2	4	23.5	1	5.9
≥55	16	3	18.8	2	12.5	3	18.8	5	31.3	3	18.8
Transmission category[e]											
Injection drug use	20	2	8.8	5	23.5	4	18.6	4	19.1	6	29.9
Heterosexual contact[f]	106	7	6.7	30	28.1	31	29.5	16	15.2	22	20.4
Other[g]	1	0	0.0	1	55.6	0	0.0	0	0.0	0	0.0
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	87	7	8.0	25	28.7	25	28.7	12	13.8	18	20.7
Metropolitan areas (pop. 50,000–499,999)	28	1	3.6	6	21.4	8	28.6	5	17.9	8	28.6
Nonmetropolitan areas (pop. < 50,000)	12	1	8.3	4	33.3	2	16.7	3	25.0	2	16.7
Subtotal	127	9	7.1	35	27.6	35	27.6	20	15.7	28	22.0
Total	**729**	**44**	**6.0**	**195**	**26.7**	**228**	**31.3**	**152**	**20.9**	**110**	**15.1**

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

Note. 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. Stage of disease at time of HIV diagnosis is based on the 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. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, 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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[f] Sexual 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. Data not displayed because the numbers were too small to be meaningful.

[h] Hispanic/Latino persons can be of any race.

Table 1d. Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among males (sex assigned at birth) aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—45 states and the District of Columbia

		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.	%
American Indian/Alaska Native											
13–24	28	5	18.1	10	34.8	9	32.6	0	0.0	4	14.5
25–34	44	3	6.9	11	25.3	7	15.4	13	29.4	10	23.0
35–44	24	5	19.3	4	14.3	7	28.7	4	16.0	5	21.7
45–54	17	1	5.3	3	15.9	4	21.2	9	51.8	1	5.9
≥55	8	0	0.0	2	18.1	3	36.1	3	33.7	1	12.0
Subtotal	121	14	11.3	28	23.4	29	24.3	28	23.4	21	17.6
Asian											
13–24	76	6	7.9	15	19.8	38	50.1	13	16.9	4	5.3
25–34	209	11	5.1	60	28.5	81	38.5	39	18.8	19	9.1
35–44	92	2	2.2	23	24.9	34	36.6	24	26.6	9	9.7
45–54	67	6	8.8	11	15.6	21	30.5	25	36.8	6	8.3
≥55	33	1	3.0	4	11.8	7	21.5	16	48.9	5	14.8
Subtotal	477	26	5.4	112	23.5	180	37.7	117	24.6	43	8.9
Black/African American											
13–24	2,548	260	10.2	604	23.7	975	38.3	232	9.1	478	18.8
25–34	3,250	230	7.1	816	25.1	1,065	32.8	563	17.3	576	17.7
35–44	1,015	53	5.2	229	22.5	301	29.7	248	24.5	184	18.1
45–54	487	17	3.6	92	18.9	129	26.5	153	31.3	96	19.7
≥55	335	10	3.1	56	16.7	87	26.0	113	33.8	69	20.5
Subtotal	7,634	570	7.5	1,796	23.5	2,557	33.5	1,309	17.1	1,403	18.4
Hispanic/Latino[c]											
13–24	1,233	131	10.7	330	26.7	490	39.7	122	9.9	160	13.0
25–34	2,483	207	8.3	683	27.5	881	35.5	449	18.1	264	10.6
35–44	1,197	63	5.2	309	25.8	366	30.6	302	25.2	158	13.2
45–54	617	30	4.8	145	23.6	159	25.7	223	36.1	61	9.8
≥55	312	11	3.6	59	18.9	83	26.6	125	40.2	34	10.8
Subtotal	5,842	442	7.6	1,526	26.1	1,978	33.9	1,221	20.9	676	11.6
Native Hawaiian/other Pacific Islander											
13–24	9	0	0.0	2	22.2	6	66.7	0	0.0	1	11.1
25–34	18	0	0.0	3	16.9	10	55.4	3	16.4	2	11.3
35–44	11	0	0.0	2	18.7	5	44.9	3	27.1	1	9.3
45–54	3	0	0.0	0	0.0	0	0.0	2	72.0	1	28.0
≥55	1	0	0.0	0	0.0	0	0.0	1	100	0	0.0
Subtotal	41	0	0.0	7	17.1	21	50.4	9	21.0	5	11.5
White											
13–24	655	64	9.8	223	34.0	220	33.6	48	7.3	100	15.3
25–34	1,673	148	8.8	501	29.9	499	29.8	281	16.8	245	14.7
35–44	932	69	7.4	257	27.5	260	27.9	228	24.5	119	12.8
45–54	785	45	5.7	197	25.1	186	23.7	245	31.2	112	14.2
≥55	750	30	3.9	173	23.1	168	22.4	284	37.9	95	12.6
Subtotal	4,795	355	7.4	1,350	28.2	1,332	27.8	1,086	22.7	671	14.0
Multiracial											
13–24	138	11	8.0	45	32.4	52	37.9	13	9.5	17	12.3
25–34	195	14	7.2	50	25.3	71	36.1	37	18.9	24	12.5
35–44	96	4	4.4	30	31.4	24	25.0	23	24.3	14	14.9
45–54	49	1	2.0	9	18.0	17	35.5	19	39.3	3	5.1
≥55	27	1	4.9	6	21.3	5	20.1	11	40.3	4	13.4
Subtotal	505	32	6.2	139	27.5	169	33.6	103	20.5	62	12.2
All											
13–24	4,686	478	10.2	1,227	26.2	1,790	38.2	427	9.1	764	16.3
25–34	7,872	612	7.8	2,123	27.0	2,612	33.2	1,385	17.6	1,141	14.5
35–44	3,365	195	5.8	852	25.3	996	29.6	832	24.7	490	14.6
45–54	2,025	100	4.9	457	22.6	515	25.4	675	33.3	278	13.7
≥55	1,466	53	3.6	299	20.4	353	24.1	554	37.8	207	14.1
Total	**19,414**	**1,438**	**7.4**	**4,958**	**25.5**	**6,265**	**32.3**	**3,873**	**20.0**	**2,880**	**14.8**

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

Note. 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. Stage of disease at time of HIV diagnosis is based on the 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. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, and Puerto Rico. 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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total. Data presented based on sex at birth and includes transgender 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 HIV diagnosis during 2020 (COVID-19 pandemic) among transgender and additional gender identity persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia

		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 woman[c]											
Age at diagnosis (yr)											
13–24	161	27	16.8	48	29.8	48	29.8	13	8.1	25	15.5
25–34	301	20	6.6	98	32.6	92	30.6	42	14.0	49	16.3
35–44	79	3	3.8	30	38.0	20	25.3	9	11.4	17	21.5
45–54	45	3	6.7	13	28.9	12	26.7	9	20.0	8	17.8
≥55	13	0	0.0	5	38.5	5	38.5	1	7.7	2	15.4
Race/ethnicity											
American Indian/Alaska Native	8	0	0.0	3	37.5	0	0.0	2	25.0	3	37.5
Asian	16	1	6.3	4	25.0	6	37.5	3	18.8	2	12.5
Black/African American	288	26	9.0	92	31.9	80	27.8	32	11.1	58	20.1
Hispanic/Latino[d]	189	20	10.6	57	30.2	66	34.9	19	10.1	27	14.3
Native Hawaiian/ other Pacific Islander	3	0	0.0	1	33.3	0	0.0	1	33.3	1	33.3
White	68	4	5.9	28	41.2	19	27.9	7	10.3	10	14.7
Multiracial	27	2	7.4	9	33.3	6	22.2	10	37.0	0	0.0
Exposure category[e]											
Sexual contact[f]	543	47	8.7	178	32.8	166	30.6	65	12.0	87	16.0
Injection drug use	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Sexual contact[f] and injection drug use	31	4	12.9	8	25.8	7	22.6	3	9.7	9	29.0
Other[g]	25	2	8.0	8	32.0	4	16.0	6	24.0	5	20.0
Subtotal	599	53	8.8	194	32.4	177	29.5	74	12.4	101	16.9
Transgender man[c]											
Age at diagnosis (yr)											
13–24	12	3	25.0	5	41.7	3	25.0	1	8.3	0	0.0
25–34	17	4	23.5	5	29.4	5	29.4	0	0.0	3	17.6
35–44	7	2	28.6	2	28.6	2	28.6	1	14.3	0	0.0
45–54	2	0	0.0	0	0.0	2	100	0	0.0	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	2	18.2	3	27.3	4	36.4	1	9.1	1	9.1
Hispanic/Latino[d]	10	4	40.0	5	50.0	1	10.0	0	0.0	0	0.0
Native Hawaiian/ other Pacific Islander	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
White	14	2	14.3	3	21.4	6	42.9	1	7.1	2	14.3
Multiracial	3	1	33.3	1	33.3	1	33.3	0	0.0	0	0.0
Exposure category[e]											
Sexual contact[f]	27	8	29.6	7	25.9	8	29.6	2	7.4	2	7.4
Injection drug use	1	0	0.0	0	0.0	0	0.0	0	0.0	1	100
Sexual contact[f] and injection drug use	5	1	20.0	3	60.0	1	20.0	0	0.0	0	0.0
Other[g]	5	0	0.0	2	40.0	3	60.0	0	0.0	0	0.0
Subtotal	38	9	23.7	12	31.6	12	31.6	2	5.3	3	7.9

Table 1e. Stage of disease at time of HIV diagnosis during 2020 (COVID-19 pandemic) among transgender and additional gender identity persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia *(cont)*

		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[h]											
Age at diagnosis (yr)											
13–24	8	1	12.5	1	12.5	4	50.0	2	25.0	0	0.0
25–34	6	0	0.0	2	33.3	3	50.0	0	0.0	1	16.7
35–44	2	1	50.0	0	0.0	1	50.0	0	0.0	0	0.0
45–54	0	0	0.0	0	0.0	0	0.0	0	0.0	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	1	0	0.0	0	0.0	1	100	0	0.0	0	0.0
Black/African American	8	0	0.0	2	25.0	4	50.0	1	12.5	1	12.5
Hispanic/Latino[d]	3	2	66.7	0	0.0	0	0.0	1	33.3	0	0.0
Native Hawaiian/ other Pacific Islander	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
White	4	0	0.0	1	25.0	3	75.0	0	0.0	0	0.0
Multiracial	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Exposure category[e]											
Sexual contact[f]	13	1	7.7	3	23.1	7	53.8	1	7.7	1	7.7
Injection drug use	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Sexual contact[f] and injection drug use	1	0	0.0	0	0.0	1	100	0	0.0	0	0.0
Other[g]	2	1	50.0	0	0.0	0	0.0	1	50.0	0	0.0
Subtotal	16	2	12.5	3	18.8	8	50.0	2	12.5	1	6.3
Total	**653**	**64**	**9.8**	**209**	**32.0**	**197**	**30.2**	**78**	**11.9**	**105**	**16.1**

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

Note. 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. Stage of disease at time of HIV diagnosis is based on the 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. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, 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] 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.

[h] 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 2020 (COVID-19 pandemic) among persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia

		Linkage to care ≤1 month				Viral suppression	
	Total diagnoses	≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤ 6 months	
	No.	No.	%	No.	%	No.	%
Gender							
Male	22,727	18,739	82.5	3,988	17.5	15,449	68.0
Female	5,042	4,146	82.2	896	17.8	3,392	67.3
Transgender woman[a]	599	484	80.8	115	19.2	385	64.3
Transgender man[a]	38	35	92.1	3	7.9	30	78.9
Additional gender identity[b]	16	15	93.8	1	6.3	12	75.0
Age at diagnosis (yr)							
13–24	5,728	4,585	80.0	1,143	20.0	3,973	69.4
25–34	10,570	8,701	82.3	1,869	17.7	7,194	68.1
35–44	5,545	4,573	82.5	972	17.5	3,719	67.1
45–54	3,644	3,081	84.5	563	15.5	2,485	68.2
≥55	2,935	2,479	84.5	456	15.5	1,897	64.6
Race/ethnicity							
American Indian/Alaska Native	195	156	80.0	39	20.0	117	60.0
Asian	612	538	87.9	74	12.1	484	79.1
Black/African American	12,069	9,615	79.7	2,454	20.3	7,816	64.8
Hispanic/Latino[c]	7,498	6,380	85.1	1,118	14.9	5,354	71.4
Native Hawaiian/other Pacific Islander	63	54	85.7	9	14.3	42	66.7
White	7,256	6,066	83.6	1,190	16.4	4,953	68.3
Multiracial	729	610	83.7	119	16.3	502	68.9
Transmission category[d]							
Male-to-male sexual contact	19,414	16,097	82.9	3,317	17.1	13,507	69.6
Injection drug use	1,846	1,439	77.9	407	22.1	1,002	54.3
Male	1,052	819	77.8	234	22.2	562	53.4
Female	794	620	78.1	174	21.9	440	55.4
Male-to-male sexual contact and injection drug use	1,023	821	80.3	202	19.7	608	59.4
Heterosexual contact[e]	6,058	4,994	82.4	1,064	17.6	4,094	67.6
Male	1,826	1,479	81.0	347	19.0	1,152	63.1
Female	4,231	3,515	83.1	717	16.9	2,942	69.5
Other contact[f]	82	68	83.1	14	16.9	57	70.1
Male	27	22	80.5	5	19.5	18	66.3
Female	55	46	84.3	9	15.7	40	71.9
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	22,809	18,905	82.9	3,904	17.1	15,638	68.6
Metropolitan areas (pop. 50,000–499,999)	3,629	2,945	81.2	684	18.8	2,358	65.0
Nonmetropolitan areas (pop. < 50,000)	1,846	1,484	80.4	362	19.6	1,207	65.4
Total	**28,422**	**23,419**	**82.4**	**5,003**	**17.6**	**19,268**	**67.8**

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. 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. Data are based on residence at time of diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after HIV diagnosis. 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 2020. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, 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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[e] Sexual contact with a person known to have, or with a risk factor for, HIV infection.

[f] 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 2b. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by area of residence—45 states and the District of Columbia

		Linkage to care ≤1 month				Viral suppression	
	Total diagnoses	≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
	No.	No.	%	No.	%	No.	%
Alabama	585	466	79.7	119	20.3	387	66.2
Alaska	29	28	96.6	1	3.4	22	75.9
Arizona	662	561	84.7	101	15.3	458	69.2
Arkansas	242	193	79.8	49	20.2	142	58.7
California	3,924	3,269	83.3	655	16.7	2,614	66.6
Colorado	324	284	87.7	40	12.3	231	71.3
Connecticut	171	143	83.6	28	16.4	120	70.2
Delaware	93	75	80.6	18	19.4	67	72.0
District of Columbia	197	172	87.3	25	12.7	142	72.1
Florida	3,408	2,863	84.0	545	16.0	2,331	68.4
Georgia	1,977	1,605	81.2	372	18.8	1,306	66.1
Hawaii	51	44	86.3	7	13.7	38	74.5
Illinois	1,096	921	84.0	175	16.0	721	65.8
Indiana	433	323	74.6	110	25.4	291	67.2
Iowa	100	90	90.0	10	10.0	76	76.0
Kansas	138	118	85.5	20	14.5	110	79.7
Louisiana	722	549	76.0	173	24.0	489	67.7
Maine	16	15	93.8	1	6.3	12	75.0
Maryland[a]	706	617	87.4	89	12.6	508	72.0
Massachusetts	434	382	88.0	52	12.0	334	77.0
Michigan	519	438	84.4	81	15.6	373	71.9
Minnesota	229	206	90.0	23	10.0	167	72.9
Mississippi	402	294	73.1	108	26.9	256	63.7
Missouri	359	285	79.4	74	20.6	236	65.7
Montana	14	13	92.9	1	7.1	10	71.4
Nebraska	73	65	89.0	8	11.0	45	61.6
Nevada	392	338	86.2	54	13.8	271	69.1
New Hampshire	33	26	78.8	7	21.2	22	66.7
New Mexico	131	111	84.7	20	15.3	83	63.4
New York	1,963	1,685	85.8	278	14.2	1,472	75.0
North Carolina	1,079	887	82.2	192	17.8	757	70.2
North Dakota	36	31	86.1	5	13.9	25	69.4
Ohio	888	761	85.7	127	14.3	629	70.8
Oklahoma	333	253	76.0	80	24.0	181	54.4
Oregon	180	150	83.3	30	16.7	147	81.7
Rhode Island	53	48	90.6	5	9.4	40	75.5
South Carolina	655	576	87.9	79	12.1	491	75.0
South Dakota	34	29	85.3	5	14.7	15	44.1
Tennessee	647	481	74.3	166	25.7	406	62.8
Texas	3,548	2,731	77.0	817	23.0	2,149	60.6
Utah	131	111	84.7	20	15.3	102	77.9
Virginia	628	512	81.5	116	18.5	441	70.2
Washington	421	373	88.6	48	11.4	328	77.9
West Virginia	139	99	71.2	40	28.8	55	39.6
Wisconsin	213	185	86.9	28	13.1	158	74.2
Wyoming	14	13	92.9	1	7.1	10	71.4
Region of residence[b]							
Northeast (*excluding NJ, PA, VT*)	2,670	2,299	86.1	371	13.9	2,000	74.9
Midwest (*excluding KS*)	4,118	3,452	83.8	666	16.2	2,846	69.1
Southeast (*excluding KY*)	15,361	12,373	80.5	2,988	19.5	10,108	65.8
West (*excluding ID*)	6,273	5,295	84.4	978	15.6	4,314	68.8

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 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 residence at time of diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after HIV diagnosis. 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 2020. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, and Puerto Rico.

[a] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

[b] Data should be interpreted with caution and are based on areas with laws and complete reporting to CDC.

Table 2c. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia

		Linkage to care				Viral suppression	
		≤1 month					
	Total diagnoses	≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
	No.	No.	%	No.	%	No.	%
	American Indian/Alaska Native						
Gender							
Male	144	118	81.9	26	18.1	90	62.5
Female	43	32	74.4	11	25.6	24	55.8
Transgender woman[a]	8	6	75.0	2	25.0	3	37.5
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 (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	33	28	84.8	5	15.2	21	63.6
25–34	54	41	75.9	13	24.1	33	61.1
35–44	33	26	78.8	7	21.2	17	51.5
45–54	22	21	95.5	1	4.5	15	68.2
≥55	10	8	80.0	2	20.0	7	70.0
Transmission category[c]							
Male-to-male sexual contact	121	99	82.2	22	17.8	76	62.7
Injection drug use	8	5	57.5	3	42.5	3	37.5
Male-to-male sexual contact and injection drug use	20	18	87.6	3	12.4	14	67.2
Heterosexual contact[d]	3	3	89.3	0	0.0	1	28.6
Other[e]	0	0	0.0	0	0.0	0	0.0
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	80	66	82.5	14	17.5	46	57.5
Metropolitan areas (pop. 50,000–499,999)	30	24	80.0	6	20.0	22	73.3
Nonmetropolitan areas (pop. < 50,000)	42	34	81.0	8	19.0	25	59.5
Subtotal	152	124	81.6	28	18.4	93	61.2
Female sex at birth (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	0	0	0.0	0	0.0	0	0.0
25–34	16	10	62.5	6	37.5	7	43.8
35–44	18	16	88.9	2	11.1	14	77.8
45–54	5	4	80.0	1	20.0	2	40.0
≥55	4	2	50.0	2	50.0	1	25.0
Transmission category[c]							
Injection drug use	20	14	69.0	6	31.0	9	43.7
Heterosexual contact[d]	23	18	79.0	5	21.0	15	66.1
Other[e]	0	0	0.0	0	0.0	0	0.0
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	20	18	90.0	2	10.0	15	75.0
Metropolitan areas (pop. 50,000–499,999)	11	6	54.5	5	45.5	4	36.4
Nonmetropolitan areas (pop. < 50,000)	12	8	66.7	4	33.3	5	41.7
Subtotal	43	32	74.4	11	25.6	24	55.8
Total	**195**	**156**	**80.0**	**39**	**20.0**	**117**	**60.0**

Table 2c. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

		Linkage to care				Viral suppression	
		≤1 month					
	Total diagnoses	≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
	No.	No.	%	No.	%	No.	%
	Asian						
Gender							
Male	515	455	88.3	60	11.7	408	79.2
Female	80	68	85.0	12	15.0	62	77.5
Transgender woman[a]	16	14	87.5	2	12.5	13	81.3
Transgender man[a]	0	0	0.0	0	0.0	0	0.0
Additional gender identity[b]	1	1	100	0	0.0	1	100
Male sex at birth (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	79	72	91.1	7	8.9	63	79.7
25–34	225	203	90.2	22	9.8	181	80.4
35–44	101	86	85.1	15	14.9	83	82.2
45–54	79	69	87.3	10	12.7	65	82.3
≥55	48	40	83.3	8	16.7	30	62.5
Transmission category[c]							
Male-to-male sexual contact	477	422	88.5	55	11.5	385	80.7
Injection drug use	13	11	86.0	2	14.0	7	57.4
Male-to-male sexual contact and injection drug use	12	11	94.9	1	5.1	8	72.0
Heterosexual contact[d]	28	24	85.5	4	14.5	21	73.1
Other[e]	2	1	65.0	1	35.0	1	30.0
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	477	421	88.3	56	11.7	383	80.3
Metropolitan areas (pop. 50,000–499,999)	37	32	86.5	5	13.5	26	70.3
Nonmetropolitan areas (pop. < 50,000)	17	17	100	0	0.0	13	76.5
Subtotal	532	470	88.3	62	11.7	422	79.3
Female sex at birth (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	3	2	66.7	1	33.3	2	66.7
25–34	22	18	81.8	4	18.2	17	77.3
35–44	20	18	90.0	2	10.0	18	90.0
45–54	18	15	83.3	3	16.7	14	77.8
≥55	17	15	88.2	2	11.8	11	64.7
Transmission category[c]							
Injection drug use	5	4	80.8	1	19.2	4	82.7
Heterosexual contact[d]	74	63	85.4	11	14.6	57	77.6
Other[e]	1	1	76.9	0	0.0	1	53.8
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	72	60	83.3	12	16.7	56	77.8
Metropolitan areas (pop. 50,000–499,999)	4	4	100	0	0.0	3	75.0
Nonmetropolitan areas (pop. < 50,000)	4	4	100	0	0.0	3	75.0
Subtotal	80	68	85.0	12	15.0	62	77.5
Total	**612**	**538**	**87.9**	**74**	**12.1**	**484**	**79.1**

Table 2c. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

		Linkage to care				Viral suppression	
		≤1 month					
	Total diagnoses	≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
	No.	No.	%	No.	%	No.	%
	Black/African American						
Gender							
Male	8,991	7,092	78.9	1,899	21.1	5,746	63.9
Female	2,771	2,276	82.1	495	17.9	1,878	67.8
Transgender woman[a]	288	230	79.9	58	20.1	177	61.5
Transgender man[a]	11	10	90.9	1	9.1	9	81.8
Additional gender identity[b]	8	7	87.5	1	12.5	6	75.0
Male sex at birth (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	2,724	2,129	78.2	595	21.8	1,782	65.4
25–34	3,705	2,927	79.0	778	21.0	2,390	64.5
35–44	1,375	1,086	79.0	289	21.0	859	62.5
45–54	775	624	80.5	151	19.5	490	63.2
≥55	708	563	79.5	145	20.5	408	57.6
Transmission category[c]							
Male-to-male sexual contact	7,634	6,060	79.4	1,575	20.6	4,942	64.7
Injection drug use	283	205	72.4	78	27.6	159	56.2
Male-to-male sexual contact and injection drug use	213	161	75.6	52	24.4	130	60.7
Heterosexual contact[d]	1,143	891	78.0	251	22.0	689	60.3
Other[e]	14	11	83.8	2	16.2	10	71.3
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	7,533	5,981	79.4	1,552	20.6	4,824	64.0
Metropolitan areas (pop. 50,000–499,999)	1,111	878	79.0	233	21.0	733	66.0
Nonmetropolitan areas (pop. < 50,000)	592	440	74.3	152	25.7	353	59.6
Subtotal	9,287	7,329	78.9	1,958	21.1	5,929	63.8
Female sex at birth (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	390	309	79.2	81	20.8	280	71.8
25–34	805	662	82.2	143	17.8	546	67.8
35–44	622	511	82.2	111	17.8	414	66.6
45–54	511	428	83.8	83	16.2	343	67.1
≥55	454	376	82.8	78	17.2	304	67.0
Transmission category[c]							
Injection drug use	232	186	80.0	47	20.0	134	57.6
Heterosexual contact[d]	2,511	2,068	82.3	444	17.7	1,725	68.7
Other[e]	38	32	84.3	6	15.7	28	74.2
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	2,220	1,839	82.8	381	17.2	1,517	68.3
Metropolitan areas (pop. 50,000–499,999)	395	315	79.7	80	20.3	261	66.1
Nonmetropolitan areas (pop. < 50,000)	156	125	80.1	31	19.9	103	66.0
Subtotal	2,782	2,286	82.2	496	17.8	1,887	67.8
Total	**12,069**	**9,615**	**79.7**	**2,454**	**20.3**	**7,816**	**64.8**

Table 2c. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

		Linkage to care				Viral suppression	
		≤1 month					
	Total diagnoses	≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
	No.	No.	%	No.	%	No.	%
	Hispanic/Latino[f]						
Gender							
Male	6,475	5,524	85.3	951	14.7	4,620	71.4
Female	821	693	84.4	128	15.6	597	72.7
Transgender woman[a]	189	152	80.4	37	19.6	129	68.3
Transgender man[a]	10	8	80.0	2	20.0	6	60.0
Additional gender identity[b]	3	3	100	0	0.0	2	66.7
Male sex at birth (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	1,314	1,069	81.4	245	18.6	958	72.9
25–34	2,748	2,378	86.5	370	13.5	1,979	72.0
35–44	1,415	1,197	84.6	218	15.4	1,000	70.7
45–54	771	670	86.9	101	13.1	537	69.6
≥55	419	365	87.1	54	12.9	277	66.1
Transmission category[c]							
Male-to-male sexual contact	5,842	4,975	85.2	867	14.8	4,263	73.0
Injection drug use	232	194	83.7	38	16.3	116	50.1
Male-to-male sexual contact and injection drug use	245	205	83.8	40	16.2	144	58.7
Heterosexual contact[d]	345	301	87.4	43	12.6	226	65.5
Other[e]	4	3	85.7	1	14.3	3	71.4
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	5,875	5,041	85.8	834	14.2	4,255	72.4
Metropolitan areas (pop. 50,000–499,999)	534	439	82.2	95	17.8	334	62.5
Nonmetropolitan areas (pop. < 50,000)	221	181	81.9	40	18.1	144	65.2
Subtotal	6,667	5,679	85.2	988	14.8	4,751	71.3
Female sex at birth (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	130	114	87.7	16	12.3	103	79.2
25–34	225	190	84.4	35	15.6	165	73.3
35–44	216	177	81.9	39	18.1	151	69.9
45–54	141	122	86.5	19	13.5	103	73.0
≥55	119	98	82.4	21	17.6	81	68.1
Transmission category[c]							
Injection drug use	123	99	81.0	23	19.0	71	57.8
Heterosexual contact[d]	703	598	85.1	105	14.9	529	75.3
Other[e]	5	4	70.4	2	29.6	3	57.4
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	721	601	83.4	120	16.6	520	72.1
Metropolitan areas (pop. 50,000–499,999)	69	64	92.8	5	7.2	52	75.4
Nonmetropolitan areas (pop. < 50,000)	36	34	94.4	2	5.6	29	80.6
Subtotal	831	701	84.4	130	15.6	603	72.6
Total	**7,498**	**6,380**	**85.1**	**1,118**	**14.9**	**5,354**	**71.4**

Table 2c. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

		Linkage to care				Viral suppression	
		≤1 month					
	Total diagnoses	≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
	No.	No.	%	No.	%	No.	%
	Native Hawaiian/other Pacific Islander						
Gender							
Male	46	39	84.8	7	15.2	28	60.9
Female	14	13	92.9	1	7.1	12	85.7
Transgender woman[a]	3	2	66.7	1	33.3	2	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 (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	9	7	77.8	2	22.2	8	88.9
25–34	22	17	77.3	5	22.7	12	54.5
35–44	13	12	92.3	1	7.7	7	53.8
45–54	4	4	100	0	0.0	2	50.0
≥55	1	1	100	0	0.0	1	100
Transmission category[c]							
Male-to-male sexual contact	41	35	85.3	6	14.7	26	62.6
Injection drug use	3	2	60.0	1	40.0	0	0.0
Male-to-male sexual contact and injection drug use	3	2	69.7	1	30.3	2	66.7
Heterosexual contact[d]	2	2	100	0	0.0	2	87.0
Other[e]	0	0	0.0	0	0.0	0	0.0
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	41	34	82.9	7	17.1	25	61.0
Metropolitan areas (pop. 50,000–499,999)	5	4	80.0	1	20.0	3	60.0
Nonmetropolitan areas (pop. < 50,000)	3	3	100	0	0.0	2	66.7
Subtotal	49	41	83.7	8	16.3	30	61.2
Female sex at birth (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	3	2	66.7	1	33.3	3	100
25–34	2	2	100	0	0.0	1	50.0
35–44	2	2	100	0	0.0	2	100
45–54	3	3	100	0	0.0	3	100
≥55	4	4	100	0	0.0	3	75.0
Transmission category[c]							
Injection drug use	2	2	90.5	0	0.0	2	85.7
Heterosexual contact[d]	12	11	93.0	1	7.0	10	86.1
Other[e]	0	0	0.0	0	0.0	0	0.0
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	9	8	88.9	1	11.1	7	77.8
Metropolitan areas (pop. 50,000–499,999)	3	3	100	0	0.0	3	100
Nonmetropolitan areas (pop. < 50,000)	2	2	100	0	0.0	2	100
Subtotal	14	13	92.9	1	7.1	12	85.7
Total	**63**	**54**	**85.7**	**9**	**14.3**	**42**	**66.7**

Table 2c. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

		Linkage to care				Viral suppression	
		≤1 month					
	Total diagnoses	≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
	No.	No.	%	No.	%	No.	%
	White						
Gender							
Male	5,981	5,030	84.1	951	15.9	4,162	69.6
Female	1,189	961	80.8	228	19.2	730	61.4
Transgender woman[a]	68	57	83.8	11	16.2	46	67.6
Transgender man[a]	14	14	100	0	0.0	12	85.7
Additional gender identity[b]	4	4	100	0	0.0	3	75.0
Male sex at birth (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	734	597	81.3	137	18.7	534	72.8
25–34	2,112	1,741	82.4	371	17.6	1,466	69.4
35–44	1,293	1,091	84.4	202	15.6	880	68.1
45–54	999	858	85.9	141	14.1	710	71.1
≥55	915	804	87.9	111	12.1	621	67.9
Transmission category[c]							
Male-to-male sexual contact	4,795	4,075	85.0	719	15.0	3,456	72.1
Injection drug use	475	374	78.7	101	21.3	256	54.0
Male-to-male sexual contact and injection drug use	492	395	80.3	97	19.7	294	59.7
Heterosexual contact[d]	284	241	84.8	43	15.2	201	70.6
Other[e]	7	5	79.7	1	20.3	5	65.2
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	4,419	3,732	84.5	687	15.5	3,107	70.3
Metropolitan areas (pop. 50,000–499,999)	1,032	852	82.6	180	17.4	682	66.1
Nonmetropolitan areas (pop. < 50,000)	574	484	84.3	90	15.7	406	70.7
Subtotal	6,053	5,091	84.1	962	15.9	4,211	69.6
Female sex at birth (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	129	106	82.2	23	17.8	93	72.1
25–34	364	290	79.7	74	20.3	214	58.8
35–44	290	227	78.3	63	21.7	175	60.3
45–54	236	194	82.2	42	17.8	142	60.2
≥55	184	158	85.9	26	14.1	118	64.1
Transmission category[c]							
Injection drug use	391	299	76.4	93	23.6	207	52.9
Heterosexual contact[d]	803	668	83.2	135	16.8	529	65.9
Other[e]	9	8	91.9	1	8.1	6	70.9
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	781	631	80.8	150	19.2	487	62.4
Metropolitan areas (pop. 50,000–499,999)	285	230	80.7	55	19.3	169	59.3
Nonmetropolitan areas (pop. < 50,000)	134	111	82.8	23	17.2	83	61.9
Subtotal	1,203	975	81.0	228	19.0	742	61.7
Total	**7,256**	**6,066**	**83.6**	**1,190**	**16.4**	**4,953**	**68.3**

Table 2c. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

		Linkage to care				Viral suppression	
		≤1 month					
	Total diagnoses	≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
	No.	No.	%	No.	%	No.	%
	Multiracial						
Gender							
Male	575	481	83.7	94	16.3	395	68.7
Female	124	103	83.1	21	16.9	89	71.8
Transgender woman[a]	27	23	85.2	4	14.8	15	55.6
Transgender man[a]	3	3	100	0	0.0	3	100
Additional gender identity[b]	0	0	0.0	0	0.0	0	0.0
Male sex at birth (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	154	127	82.5	27	17.5	104	67.5
25–34	226	186	82.3	40	17.7	154	68.1
35–44	123	104	84.6	19	15.4	83	67.5
45–54	63	56	88.9	7	11.1	47	74.6
≥55	36	31	86.1	5	13.9	22	61.1
Transmission category[c]							
Male-to-male sexual contact	505	431	85.4	74	14.6	361	71.5
Injection drug use	39	29	73.5	10	26.5	19	49.0
Male-to-male sexual contact and injection drug use	37	28	75.2	9	24.8	16	44.4
Heterosexual contact[d]	22	17	77.8	5	22.2	14	63.4
Other[e]	0	0	0.0	0	0.0	0	0.0
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	474	399	84.2	75	15.8	327	69.0
Metropolitan areas (pop. 50,000–499,999)	85	72	84.7	13	15.3	52	61.2
Nonmetropolitan areas (pop. < 50,000)	41	31	75.6	10	24.4	30	73.2
Subtotal	602	504	83.7	98	16.3	410	68.1
Female sex at birth (≥13 years at diagnosis)							
Age at diagnosis (yr)							
13–24	26	23	88.5	3	11.5	22	84.6
25–34	44	36	81.8	8	18.2	29	65.9
35–44	24	20	83.3	4	16.7	16	66.7
45–54	17	13	76.5	4	23.5	12	70.6
≥55	16	14	87.5	2	12.5	13	81.3
Transmission category[c]							
Injection drug use	20	16	80.9	4	19.1	14	67.2
Heterosexual contact[d]	106	89	83.8	17	16.2	77	73.2
Other[e]	1	1	100	0	0.0	1	100
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	87	74	85.1	13	14.9	69	79.3
Metropolitan areas (pop. 50,000–499,999)	28	22	78.6	6	21.4	14	50.0
Nonmetropolitan areas (pop. < 50,000)	12	10	83.3	2	16.7	9	75.0
Subtotal	127	106	83.5	21	16.5	92	72.4
Total	**729**	**610**	**83.7**	**119**	**16.3**	**502**	**68.9**

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 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 residence at time of diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after HIV diagnosis. 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 2020. 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 the CDC. Areas without laws: Idaho and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, 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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[d] Sexual contact with a person known to have, or with a risk factor for, HIV infection.

[e] 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.

[f] 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 2020 (COVID-19 pandemic) among males (sex assigned at birth) aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—45 states and the District of Columbia

	Total diagnoses	Linkage to care ≤1 month				Viral suppression	
		≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
	No.	No.	%	No.	%	No.	%
American Indian/Alaska Native							
13–24	28	23	81.9	5	18.1	17	61.6
25–34	44	36	81.6	8	18.4	28	63.4
35–44	24	18	75.0	6	25.0	13	51.6
45–54	17	16	94.1	1	5.9	12	70.6
≥55	8	7	83.1	1	16.9	7	78.3
Subtotal	121	99	82.2	22	17.8	76	62.7
Asian							
13–24	76	69	90.8	7	9.2	61	80.4
25–34	209	189	90.4	20	9.6	171	81.5
35–44	92	78	85.0	14	15.0	75	81.7
45–54	67	59	88.1	8	11.9	57	84.8
≥55	33	27	82.2	6	17.8	21	64.4
Subtotal	477	422	88.5	55	11.5	385	80.7
Black/African American							
13–24	2,548	2,001	78.6	546	21.4	1,688	66.3
25–34	3,250	2,588	79.6	663	20.4	2,118	65.2
35–44	1,015	811	80.0	203	20.0	638	62.9
45–54	487	391	80.3	96	19.7	309	63.5
≥55	335	269	80.2	66	19.8	189	56.5
Subtotal	7,634	6,060	79.4	1,575	20.6	4,942	64.7
Hispanic/Latino[a]							
13–24	1,233	1,005	81.5	228	18.5	912	74.0
25–34	2,483	2,149	86.5	334	13.5	1,827	73.6
35–44	1,197	1,012	84.6	185	15.4	876	73.2
45–54	617	538	87.2	79	12.8	431	69.9
≥55	312	271	86.9	41	13.1	216	69.3
Subtotal	5,842	4,975	85.2	867	14.8	4,263	73.0
Native Hawaiian/other Pacific Islander							
13–24	9	7	77.8	2	22.2	8	88.9
25–34	18	15	83.1	3	16.9	10	55.4
35–44	11	10	90.7	1	9.3	6	54.2
45–54	3	3	100	0	0.0	1	40.0
≥55	1	1	100	0	0.0	1	100
Subtotal	41	35	85.3	6	14.7	26	62.6
White							
13–24	655	536	81.9	119	18.1	487	74.3
25–34	1,673	1,408	84.2	265	15.8	1,211	72.4
35–44	932	800	85.9	131	14.1	673	72.2
45–54	785	672	85.5	114	14.5	567	72.1
≥55	750	659	87.9	90	12.1	519	69.2
Subtotal	4,795	4,075	85.0	719	15.0	3,456	72.1
Multiracial							
13–24	138	117	84.9	21	15.1	98	70.7
25–34	195	163	83.4	32	16.6	138	70.8
35–44	96	84	88.2	11	11.8	70	72.8
45–54	49	43	87.9	6	12.1	40	80.9
≥55	27	24	88.1	3	11.9	16	59.0
Subtotal	505	431	85.4	74	14.6	361	71.5
All							
13–24	4,686	3,758	80.2	928	19.8	3,270	69.8
25–34	7,872	6,546	83.2	1,325	16.8	5,502	69.9
35–44	3,365	2,814	83.6	551	16.4	2,350	69.8
45–54	2,025	1,721	85.0	304	15.0	1,416	69.9
≥55	1,466	1,257	85.8	208	14.2	969	66.1
Total	**19,414**	**16,097**	**82.9**	**3,317**	**17.1**	**13,507**	**69.6**

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 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. Data presented based on sex at birth and include transgender persons. Data are based on residence at time of diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after HIV diagnosis. 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 2020. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total. Data presented based on sex at birth and include transgender persons. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, 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 2020 (COVID-19 pandemic) among transgender and additional gender identity persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia

		Linkage to care				Viral suppression	
		≤1 month					
	Total diagnoses	≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤ 6 months	
	No.	No.	%	No.	%	No.	%
Transgender woman[a]							
Age at diagnosis (yr)							
13–24	161	125	77.6	36	22.4	102	63.4
25–34	301	249	82.7	52	17.3	193	64.1
35–44	79	64	81.0	15	19.0	47	59.5
45–54	45	35	77.8	10	22.2	35	77.8
≥55	13	11	84.6	2	15.4	8	61.5
Race/ethnicity							
American Indian/Alaska Native	8	6	75.0	2	25.0	3	37.5
Asian	16	14	87.5	2	12.5	13	81.3
Black/African American	288	230	79.9	58	20.1	177	61.5
Hispanic/Latino[b]	189	152	80.4	37	19.6	129	68.3
Native Hawaiian/other Pacific Islander	3	2	66.7	1	33.3	2	66.7
White	68	57	83.8	11	16.2	46	67.6
Multiracial	27	23	85.2	4	14.8	15	55.6
Exposure category[c]							
Sexual contact[d]	543	441	81.2	102	18.8	354	65.2
Injection drug use	0	0	0.0	0	0.0	0	0.0
Sexual contact[d] and injection drug use	31	24	77.4	7	22.6	19	61.3
Other[e]	25	19	76.0	6	24.0	12	48.0
Subtotal	599	484	80.8	115	19.2	385	64.3
Transgender man[a]							
Age at diagnosis (yr)							
13–24	12	11	91.7	1	8.3	10	83.3
25–34	17	15	88.2	2	11.8	12	70.6
35–44	7	7	100	0	0.0	7	100
45–54	2	2	100	0	0.0	1	50.0
≥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	10	90.9	1	9.1	9	81.8
Hispanic/Latino[b]	10	8	80.0	2	20.0	6	60.0
Native Hawaiian/other Pacific Islander	0	0	0.0	0	0.0	0	0.0
White	14	14	100	0	0.0	12	85.7
Multiracial	3	3	100	0	0.0	3	100
Exposure category[c]							
Sexual contact[d]	27	24	88.9	3	11.1	22	81.5
Injection drug use	1	1	100	0	0.0	1	100
Sexual contact[d] and injection drug use	5	5	100	0	0.0	2	40.0
Other[e]	5	5	100	0	0.0	5	100
Subtotal	38	35	92.1	3	7.9	30	78.9

Table 2e. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among transgender and additional gender identity persons aged ≥13 years, by selected characteristics—45 states and the District of Columbia *(cont)*

		Linkage to care				Viral suppression	
		≤1 month					
	Total diagnoses	≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤ 6 months	
	No.	No.	%	No.	%	No.	%
Additional gender identity[f]							
Age at diagnosis (yr)							
13–24	8	8	100	0	0.0	7	87.5
25–34	6	5	83.3	1	16.7	5	83.3
35–44	2	2	100	0	0.0	0	0.0
45–54	0	0	0.0	0	0.0	0	0.0
≥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	1	1	100	0	0.0	1	100
Black/African American	8	7	87.5	1	12.5	6	75.0
Hispanic/Latino[b]	3	3	100	0	0.0	2	66.7
Native Hawaiian/other Pacific Islander	0	0	0.0	0	0.0	0	0.0
White	4	4	100	0	0.0	3	75.0
Multiracial	0	0	0.0	0	0.0	0	0.0
Exposure category[c]							
Sexual contact[d]	13	12	92.3	1	7.7	9	69.2
Injection drug use	0	0	0.0	0	0.0	0	0.0
Sexual contact[d] and injection drug use	1	1	100	0	0.0	1	100
Other[e]	2	2	100	0	0.0	2	100
Subtotal	16	15	93.8	1	6.3	12	75.0
Total	**653**	**534**	**81.8**	**119**	**18.2**	**427**	**65.4**

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. 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. Data are based on residence at time of diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after HIV diagnosis. 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 2020. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, 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 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] 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.

[f] Additional gender identity examples include "bigender," "gender queer," and "two-spirit."

Table 3a. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by selected characteristics—45 states and the District of Columbia

	Persons alive at year-end 2020	≥1 CD4 or VL tests		≥2 CD4 or VL tests[a]		VL <200 copies/mL[b]	
	Total No.	No.	%	No.	%	No.	%
Gender							
Male	717,879	531,998	74.1	363,048	50.6	466,295	65.0
Female	215,092	158,356	73.6	107,874	50.2	135,941	63.2
Transgender woman[c]	10,625	8,691	81.8	6,093	57.3	6,967	65.6
Transgender man[c]	444	362	81.5	235	52.9	303	68.2
Additional gender identity[d]	207	180	87.0	138	66.7	148	71.5
Age at year-end 2019 (yr)							
13–24	28,697	22,402	78.1	15,136	52.7	18,236	63.5
25–34	150,764	113,838	75.5	73,880	49.0	93,549	62.0
35–44	178,445	131,102	73.5	86,484	48.5	111,292	62.4
45–54	243,064	180,910	74.4	123,290	50.7	159,138	65.5
≥55	343,277	251,335	73.2	178,598	52.0	227,439	66.3
Race/ethnicity							
American Indian/Alaska Native	2,988	2,207	73.9	1,433	48.0	1,844	61.7
Asian[e]	14,655	10,716	73.1	7,259	49.5	9,987	68.1
Black/African American	382,521	275,796	72.1	187,003	48.9	230,853	60.4
Hispanic/Latino[f]	220,065	157,172	71.4	112,478	51.1	139,001	63.2
Native Hawaiian/other Pacific Islander	845	602	71.2	400	47.3	545	64.5
White	275,950	213,956	77.5	142,009	51.5	193,780	70.2
Multiracial	46,546	39,089	84.0	26,772	57.5	33,597	72.2
Transmission category[g]							
Male-to-male sexual contact	544,758	413,448	75.9	280,673	51.5	366,068	67.2
Injection drug use	97,081	63,656	65.6	43,945	45.3	53,638	55.3
Male	55,700	34,257	61.5	23,936	43.0	28,955	52.0
Female	41,380	29,398	71.0	20,009	48.4	24,683	59.6
Male-to-male sexual contact and injection drug use	51,989	40,159	77.2	27,948	53.8	33,361	64.2
Heterosexual contact[h]	236,672	172,527	72.9	118,191	49.9	148,910	62.9
Male	69,303	48,196	69.5	33,558	48.4	41,204	59.5
Female	167,368	124,331	74.3	84,633	50.6	107,706	64.4
Other[i]	13,748	9,798	71.3	6,631	48.2	7,677	55.8
Male	6,932	4,786	69.0	3,146	45.4	3,804	54.9
Female	6,817	5,012	73.5	3,485	51.1	3,874	56.8
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	774,569	574,276	74.1	391,927	50.6	501,543	64.8
Metropolitan areas (pop. 50,000–499,999)	94,638	71,812	75.9	49,285	52.1	62,264	65.8
Nonmetropolitan areas (pop. <50,000)	53,978	40,042	74.2	27,727	51.4	34,306	63.6
Total[j]	**944,247**	**699,587**	**74.1**	**477,388**	**50.6**	**609,654**	**64.6**

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 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, 2020 (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 2020. Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, and Puerto Rico.

[a] Performed ≥3 months apart during 2020.

[b] A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2020.

[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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[h] Sexual 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 677 persons of unknown race/ethnicity.

Table 3b. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by area of residence—45 states and the District of Columbia

	Persons alive at year-end 2020	≥1 CD4 or VL tests		≥2 CD4 or VL tests[a]		VL <200 copies/mL[b]	
	Total No.	No.	%	No.	%	No.	%
Alabama	13,579	10,272	75.6	7,046	51.9	8,875	65.4
Alaska	701	611	87.2	358	51.1	550	78.5
Arizona	17,060	12,624	74.0	9,413	55.2	11,242	65.9
Arkansas	5,821	3,783	65.0	2,592	44.5	2,885	49.6
California	130,455	95,969	73.6	65,152	49.9	85,115	65.2
Colorado	12,928	8,430	65.2	5,048	39.0	7,512	58.1
Connecticut	10,402	8,074	77.6	5,365	51.6	7,418	71.3
Delaware	3,349	2,681	80.1	1,656	49.4	2,405	71.8
District of Columbia	13,596	8,787	64.6	5,473	40.3	7,444	54.8
Florida	111,231	85,400	76.8	66,418	59.7	74,884	67.3
Georgia	55,634	39,747	71.4	27,990	50.3	33,659	60.5
Hawaii	2,330	1,930	82.8	1,423	61.1	1,776	76.2
Illinois	34,712	25,822	74.4	15,728	45.3	22,449	64.7
Indiana	11,440	8,668	75.8	5,133	44.9	7,493	65.5
Iowa	2,836	2,432	85.8	1,547	54.5	2,248	79.3
Kansas[c]	3,213	2,584	80.4	1,848	57.5	2,324	72.3
Louisiana	20,676	15,905	76.9	11,618	56.2	13,895	67.2
Maine	1,635	1,351	82.6	869	53.1	1,266	77.4
Maryland[d]	32,715	22,914	70.0	14,660	44.8	20,335	62.2
Massachusetts	20,602	15,169	73.6	8,761	42.5	13,685	66.4
Michigan	16,352	12,820	78.4	7,864	48.1	11,342	69.4
Minnesota	8,771	6,494	74.0	3,464	39.5	5,858	66.8
Mississippi	9,326	6,594	70.7	4,434	47.5	5,156	55.3
Missouri	12,511	9,497	75.9	6,399	51.1	8,108	64.8
Montana	671	573	85.4	385	57.4	517	77.0
Nebraska	2,248	1,670	74.3	918	40.8	1,357	60.4
Nevada	10,656	7,823	73.4	5,467	51.3	6,818	64.0
New Hampshire	1,296	1,021	78.8	647	49.9	951	73.4
New Mexico	3,811	2,942	77.2	1,848	48.5	2,176	57.1
New York	123,315	87,926	71.3	64,098	52.0	77,805	63.1
North Carolina[c]	32,498	24,493	75.4	15,330	47.2	21,291	65.5
North Dakota	490	389	79.4	250	51.0	330	67.3
Ohio	22,818	16,823	73.7	9,869	43.3	14,775	64.8
Oklahoma	6,281	4,421	70.4	3,057	48.7	3,696	58.8
Oregon	7,164	6,147	85.8	3,455	48.2	5,597	78.1
Rhode Island	2,615	2,050	78.4	1,019	39.0	1,812	69.3
South Carolina[c]	17,283	14,018	81.1	10,739	62.1	12,434	71.9

Table 3b. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by area of residence—45 states and the District of Columbia *(cont)*

	Persons alive at year-end 2020	≥1 CD4 or VL tests		≥2 CD4 or VL tests[a]		VL <200 copies/mL[b]	
	Total No.	No.	%	No.	%	No.	%
South Dakota	660	555	84.1	310	47.0	313	47.4
Tennessee	17,572	14,176	80.7	9,881	56.2	11,841	67.4
Texas	93,839	68,963	73.5	46,181	49.2	56,378	60.1
Utah	3,132	2,321	74.1	1,368	43.7	2,142	68.4
Virginia	23,425	16,399	70.0	11,275	48.1	14,683	62.7
Washington	13,877	11,541	83.2	6,776	48.8	10,697	77.1
West Virginia	1,951	1,377	70.6	800	41.0	1,175	60.2
Wisconsin	6,428	5,125	79.7	3,269	50.9	4,718	73.4
Wyoming	342	276	80.7	187	54.7	224	65.5
Region of residence[e]							
Northeast (*excluding NJ, PA, VT*)	159,865	115,591	72.3	80,759	50.5	102,937	64.4
Midwest (*excluding KS*)	122,479	92,879	75.8	56,599	46.2	81,315	66.4
South (*excluding KY*)	458,776	339,930	74.1	239,150	52.1	291,036	63.4
West (*excluding ID*)	203,127	151,187	74.4	100,880	49.7	134,366	66.1

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 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, 2020 (i.e., most recent known address). Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, and Puerto Rico.

[a] Performed ≥3 months apart during 2020.

[b] A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2020.

[c] Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2020.

[d] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

[e] Data should be interpreted with caution and are based on areas with laws and complete reporting to CDC.

Table 3c. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by race/ethnicity and selected characteristics—45 states and the District of Columbia

	Persons alive at year-end 2020	≥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	2,201	1,624	73.8	1,043	47.4	1,378	62.6
Female	735	540	73.5	358	48.7	432	58.8
Transgender woman[c]	47	39	83.0	30	63.8	32	68.1
Transgender man[c]	4	3	75.0	2	50.0	1	25.0
Additional gender identity[d]	1	1	100	0	0.0	1	100
Male sex at birth (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	105	83	79.0	48	45.7	70	66.7
25–34	498	377	75.7	225	45.2	302	60.6
35–44	498	381	76.5	243	48.8	320	64.3
45–54	569	424	74.5	282	49.6	362	63.6
≥55	579	399	68.9	275	47.5	357	61.7
Transmission category[e]							
Male-to-male sexual contact	1,598	1,198	75.0	774	48.5	1,034	64.7
Injection drug use	215	141	65.6	90	41.7	109	50.7
Male-to-male sexual contact and injection drug use	278	204	73.6	133	47.9	166	59.9
Heterosexual contact[f]	142	108	75.8	68	47.6	91	63.8
Other[g]	16	13	78.1	8	51.9	11	65.6
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	1,227	885	72.1	590	48.1	770	62.8
Metropolitan areas (pop. 50,000–499,999)	382	307	80.4	203	53.1	265	69.4
Nonmetropolitan areas (pop. <50,000)	594	444	74.7	263	44.3	352	59.3
Subtotal	2,249	1,664	74.0	1,073	47.7	1,411	62.7
Female sex at birth (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	15	10	66.7	8	53.3	9	60.0
25–34	94	64	68.1	44	46.8	41	43.6
35–44	191	139	72.8	82	42.9	101	52.9
45–54	204	147	72.1	98	48.0	123	60.3
≥55	235	183	77.9	128	54.5	159	67.7
Transmission category[e]							
Injection drug use	244	170	69.6	115	47.3	129	52.8
Heterosexual contact[f]	476	361	75.9	238	50.1	296	62.1
Other[g]	19	12	61.9	6	33.9	9	45.5
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	350	235	67.1	157	44.9	192	54.9
Metropolitan areas (pop. 50,000–499,999)	148	121	81.8	91	61.5	105	70.9
Nonmetropolitan areas (pop. <50,000)	222	172	77.5	104	46.8	130	58.6
Subtotal	739	543	73.5	360	48.7	433	58.6
Total	**2,988**	**2,207**	**73.9**	**1,433**	**48.0**	**1,844**	**61.7**

Table 3c. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

	Persons alive at year-end 2020	≥1 CD4 or VL tests		≥2 CD4 or VL tests[a]		VL <200 copies/mL[b]	
	Total No.	No.	%	No.	%	No.	%
	Asian[h]						
Gender							
Male	11,977	8,807	73.5	6,005	50.1	8,230	68.7
Female	2,495	1,766	70.8	1,167	46.8	1,629	65.3
Transgender woman[c]	172	134	77.9	80	46.5	119	69.2
Transgender man[c]	8	7	87.5	5	62.5	7	87.5
Additional gender identity[d]	3	2	66.7	2	66.7	2	66.7
Male sex at birth (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	436	351	80.5	244	56.0	330	75.7
25–34	2,487	1,873	75.3	1,244	50.0	1,755	70.6
35–44	2,873	2,116	73.7	1,418	49.4	1,946	67.7
45–54	3,556	2,668	75.0	1,835	51.6	2,506	70.5
≥55	2,800	1,935	69.1	1,346	48.1	1,814	64.8
Transmission category[e]							
Male-to-male sexual contact	10,314	7,657	74.2	5,193	50.4	7,156	69.4
Injection drug use	398	250	62.8	162	40.7	228	57.4
Male-to-male sexual contact and injection drug use	391	292	74.5	213	54.4	274	69.9
Heterosexual contact[f]	936	664	70.9	462	49.4	618	66.0
Other[g]	113	80	71.3	57	50.5	75	66.5
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	11,093	8,198	73.9	5,581	50.3	7,670	69.1
Metropolitan areas (pop. 50,000–499,999)	683	493	72.2	329	48.2	451	66.0
Nonmetropolitan areas (pop. <50,000)	158	112	70.9	88	55.7	106	67.1
Subtotal	12,152	8,943	73.6	6,087	50.1	8,351	68.7
Female sex at birth (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	84	70	83.3	59	70.2	69	82.1
25–34	306	236	77.1	167	54.6	213	69.6
35–44	736	533	72.4	331	45.0	498	67.7
45–54	686	474	69.1	286	41.7	436	63.6
≥55	691	460	66.6	329	47.6	420	60.8
Transmission category[e]							
Injection drug use	165	104	62.9	74	45.0	93	56.1
Heterosexual contact[f]	2,228	1,588	71.3	1,033	46.4	1,465	65.8
Other[g]	110	81	73.6	65	58.5	78	70.7
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	2,144	1,526	71.2	1,017	47.4	1,409	65.7
Metropolitan areas (pop. 50,000–499,999)	223	154	69.1	98	43.9	141	63.2
Nonmetropolitan areas (pop. <50,000)	73	54	74.0	36	49.3	49	67.1
Subtotal	2,503	1,773	70.8	1,172	46.8	1,636	65.4
Total	**14,655**	**10,716**	**73.1**	**7,259**	**49.5**	**9,987**	**68.1**

Table 3c. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

	Persons alive at year-end 2020	≥1 CD4 or VL tests		≥2 CD4 or VL tests[a]		VL <200 copies/mL[b]	
	Total No.	No.	%	No.	%	No.	%
	Black/African American						
Gender							
Male	250,370	178,921	71.5	121,255	48.4	148,977	59.5
Female	126,989	92,682	73.0	62,924	49.6	78,662	61.9
Transgender woman[c]	4,894	3,976	81.2	2,679	54.7	3,043	62.2
Transgender man[c]	193	156	80.8	101	52.3	123	63.7
Additional gender identity[d]	75	61	81.3	44	58.7	48	64.0
Male sex at birth (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	12,418	9,555	76.9	6,280	50.6	7,528	60.6
25–34	58,449	43,294	74.1	27,689	47.4	34,123	58.4
35–44	46,101	33,789	73.3	22,438	48.7	27,643	60.0
45–54	55,344	40,085	72.4	27,642	49.9	34,021	61.5
≥55	83,018	56,228	67.7	39,923	48.1	48,748	58.7
Transmission category[e]							
Male-to-male sexual contact	169,016	124,690	73.8	83,257	49.3	103,721	61.4
Injection drug use	25,743	15,651	60.8	10,955	42.6	13,149	51.1
Male-to-male sexual contact and injection drug use	13,889	10,300	74.2	7,313	52.6	8,302	59.8
Heterosexual contact[f]	43,464	30,179	69.4	21,006	48.3	25,324	58.3
Other[g]	3,217	2,131	66.2	1,442	44.8	1,568	48.7
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	210,280	150,938	71.8	101,387	48.2	125,608	59.7
Metropolitan areas (pop. 50,000–499,999)	24,502	17,771	72.5	12,376	50.5	14,697	60.0
Nonmetropolitan areas (pop. <50,000)	14,160	10,326	72.9	7,672	54.2	8,520	60.2
Subtotal	255,330	182,951	71.7	123,972	48.6	152,063	59.6
Female sex at birth (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	3,581	2,716	75.8	1,916	53.5	2,040	57.0
25–34	14,707	10,523	71.6	6,864	46.7	8,007	54.4
35–44	27,356	19,477	71.2	12,579	46.0	15,940	58.3
45–54	36,619	26,913	73.5	18,234	49.8	23,142	63.2
≥55	44,928	33,216	73.9	23,438	52.2	29,661	66.0
Transmission category[e]							
Injection drug use	19,599	13,647	69.6	9,323	47.6	11,470	58.5
Heterosexual contact[f]	103,750	76,418	73.7	51,761	49.9	65,253	62.9
Other[g]	3,842	2,780	72.4	1,947	50.7	2,067	53.8
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	104,910	76,410	72.8	51,565	49.2	64,867	61.8
Metropolitan areas (pop. 50,000–499,999)	12,801	9,708	75.8	6,821	53.3	8,243	64.4
Nonmetropolitan areas (pop. <50,000)	6,424	4,734	73.7	3,390	52.8	3,971	61.8
Subtotal	127,191	92,845	73.0	63,031	49.6	78,790	61.9
Total	**382,521**	**275,796**	**72.1**	**187,003**	**48.9**	**230,853**	**60.4**

Table 3c. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

	Persons alive at year-end 2020	≥1 CD4 or VL tests		≥2 CD4 or VL tests[a]		VL <200 copies/mL[b]	
	Total No.	No.	%	No.	%	No.	%
	Hispanic/Latino[i]						
Gender							
Male	177,143	124,946	70.5	89,209	50.4	110,956	62.6
Female	39,204	29,197	74.5	21,038	53.7	25,539	65.1
Transgender woman[c]	3,562	2,893	81.2	2,136	60.0	2,391	67.1
Transgender man[c]	95	80	84.2	51	53.7	70	73.7
Additional gender identity[d]	61	56	91.8	44	72.1	45	73.8
Male sex at birth (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	5,786	4,635	80.1	3,203	55.4	3,980	68.8
25–34	34,085	26,287	77.1	17,854	52.4	22,652	66.5
35–44	41,631	29,285	70.3	20,336	48.8	25,597	61.5
45–54	48,820	33,803	69.2	24,489	50.2	30,233	61.9
≥55	50,436	33,878	67.2	25,501	50.6	30,924	61.3
Transmission category[e]							
Male-to-male sexual contact	137,515	100,252	72.9	71,419	51.9	90,015	65.5
Injection drug use	15,765	8,740	55.4	6,374	40.4	7,424	47.1
Male-to-male sexual contact and injection drug use	12,156	9,031	74.3	6,522	53.7	7,372	60.6
Heterosexual contact[f]	13,847	8,835	63.8	6,376	46.0	7,761	56.0
Other[g]	1,476	1,030	69.8	692	46.9	814	55.2
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	160,056	114,849	71.8	82,373	51.5	102,132	63.8
Metropolitan areas (pop. 50,000–499,999)	11,864	8,019	67.6	5,593	47.1	6,984	58.9
Nonmetropolitan areas (pop. <50,000)	6,212	3,461	55.7	2,435	39.2	2,922	47.0
Subtotal	180,758	127,888	70.8	91,383	50.6	113,386	62.7
Female sex at birth (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	1,068	818	76.6	585	54.8	638	59.7
25–34	4,282	3,186	74.4	2,163	50.5	2,577	60.2
35–44	8,164	5,857	71.7	3,988	48.8	4,938	60.5
45–54	11,181	8,450	75.6	6,083	54.4	7,428	66.4
≥55	14,612	10,973	75.1	8,276	56.6	10,034	68.7
Transmission category[e]							
Injection drug use	8,029	5,833	72.6	4,157	51.8	4,916	61.2
Heterosexual contact[f]	29,840	22,349	74.9	16,148	54.1	19,848	66.5
Other[g]	1,438	1,103	76.6	790	54.9	852	59.2
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	34,670	25,971	74.9	18,814	54.3	22,726	65.5
Metropolitan areas (pop. 50,000–499,999)	2,665	1,988	74.6	1,425	53.5	1,764	66.2
Nonmetropolitan areas (pop. <50,000)	1,269	890	70.1	582	45.9	745	58.7
Subtotal	39,307	29,284	74.5	21,095	53.7	25,615	65.2
Total	**220,065**	**157,172**	**71.4**	**112,478**	**51.1**	**139,001**	**63.2**

Table 3c. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

	Persons alive at year-end 2020	≥1 CD4 or VL tests		≥2 CD4 or VL tests[a]		VL <200 copies/mL[b]	
	Total No.	No.	%	No.	%	No.	%
	Native Hawaiian/other Pacific Islander						
Gender							
Male	684	495	72.4	325	47.5	445	65.1
Female	129	82	63.6	57	44.2	77	59.7
Transgender woman[c]	32	25	78.1	18	56.3	23	71.9
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 (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	28	23	82.1	13	46.4	19	67.9
25–34	168	122	72.6	79	47.0	103	61.3
35–44	182	126	69.2	73	40.1	111	61.0
45–54	172	126	73.3	94	54.7	118	68.6
≥55	166	123	74.1	84	50.6	117	70.5
Transmission category[e]							
Male-to-male sexual contact	619	445	71.9	291	47.0	401	64.8
Injection drug use	20	13	65.7	10	49.0	10	50.5
Male-to-male sexual contact and injection drug use	43	35	80.1	21	48.8	32	72.9
Heterosexual contact[f]	30	23	76.9	19	64.9	21	70.2
Other[g]	5	4	97.8	2	51.1	4	97.8
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	583	422	72.4	284	48.7	381	65.4
Metropolitan areas (pop. 50,000–499,999)	79	57	72.2	39	49.4	51	64.6
Nonmetropolitan areas (pop. <50,000)	39	32	82.1	17	43.6	27	69.2
Subtotal	716	520	72.6	343	47.9	468	65.4
Female sex at birth (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	3	2	66.7	2	66.7	2	66.7
25–34	21	14	66.7	9	42.9	14	66.7
35–44	32	23	71.9	14	43.8	20	62.5
45–54	30	17	56.7	13	43.3	16	53.3
≥55	43	26	60.5	19	44.2	25	58.1
Transmission category[e]							
Injection drug use	22	13	60.6	8	37.2	12	56.0
Heterosexual contact[f]	106	68	64.4	49	46.0	64	60.7
Other[g]	1	1	41.7	0	0.0	1	41.7
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	92	60	65.2	43	46.7	55	59.8
Metropolitan areas (pop. 50,000–499,999)	21	15	71.4	8	38.1	15	71.4
Nonmetropolitan areas (pop. <50,000)	12	6	50.0	5	41.7	6	50.0
Subtotal	129	82	63.6	57	44.2	77	59.7
Total	**845**	**602**	**71.2**	**400**	**47.3**	**545**	**64.5**

Table 3c. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

	Persons alive at year-end 2020	≥1 CD4 or VL tests		≥2 CD4 or VL tests[a]		VL <200 copies/mL[b]	
	Total No.	No.	%	No.	%	No.	%
	White						
Gender							
Male	239,835	187,591	78.2	124,923	52.1	170,680	71.2
Female	34,875	25,338	72.7	16,373	46.9	22,203	63.7
Transgender woman[c]	1,096	909	82.9	634	57.8	791	72.2
Transgender man[c]	104	83	79.8	51	49.0	75	72.1
Additional gender identity[d]	40	35	87.5	28	70.0	31	77.5
Male sex at birth (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	3,092	2,472	79.9	1,644	53.2	2,199	71.1
25–34	23,616	18,540	78.5	11,610	49.2	16,226	68.7
35–44	34,342	26,764	77.9	16,902	49.2	23,660	68.9
45–54	63,626	50,312	79.1	32,631	51.3	45,529	71.6
≥55	116,287	90,442	77.8	62,795	54.0	83,884	72.1
Transmission category[e]							
Male-to-male sexual contact	198,553	156,634	78.9	104,506	52.6	144,001	72.5
Injection drug use	11,326	7,633	67.4	5,003	44.2	6,486	57.3
Male-to-male sexual contact and injection drug use	21,188	16,859	79.6	11,252	53.1	14,403	68.0
Heterosexual contact[f]	8,242	6,227	75.5	4,109	49.9	5,556	67.4
Other[g]	1,653	1,177	71.2	712	43.1	1,052	63.6
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	186,920	145,629	77.9	97,127	52.0	133,120	71.2
Metropolitan areas (pop. 50,000–499,999)	30,484	24,625	80.8	16,511	54.2	22,130	72.6
Nonmetropolitan areas (pop. <50,000)	17,796	14,338	80.6	9,512	53.5	12,763	71.7
Subtotal	240,963	188,530	78.2	125,582	52.1	171,498	71.2
Female sex at birth (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	758	597	78.8	394	52.0	506	66.8
25–34	3,906	2,780	71.2	1,704	43.6	2,219	56.8
35–44	6,852	4,886	71.3	3,001	43.8	4,063	59.3
45–54	9,959	7,223	72.5	4,593	46.1	6,345	63.7
≥55	13,512	9,940	73.6	6,735	49.8	9,149	67.7
Transmission category[e]							
Injection drug use	10,757	7,485	69.6	4,846	45.1	6,306	58.6
Heterosexual contact[f]	23,251	17,258	74.2	11,165	48.0	15,387	66.2
Other[g]	980	683	69.7	416	42.4	588	60.1
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	23,493	16,892	71.9	10,926	46.5	14,822	63.1
Metropolitan areas (pop. 50,000–499,999)	6,194	4,698	75.8	3,120	50.4	4,117	66.5
Nonmetropolitan areas (pop. <50,000)	4,237	3,167	74.7	2,000	47.2	2,768	65.3
Subtotal	34,987	25,426	72.7	16,427	47.0	22,282	63.7
Total	**275,950**	**213,956**	**77.5**	**142,009**	**51.5**	**193,780**	**70.2**

Table 3c. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by race/ethnicity and selected characteristics—45 states and the District of Columbia *(cont)*

	Persons alive at year-end 2020	≥1 CD4 or VL tests		≥2 CD4 or VL tests[a]		VL <200 copies/mL[b]	
	Total No.	No.	%	No.	%	No.	%
	Multiracial						
Gender							
Male	35,173	29,573	84.1	20,260	57.6	25,590	72.8
Female	10,484	8,743	83.4	5,951	56.8	7,391	70.5
Transgender woman[c]	822	715	87.0	516	62.8	568	69.1
Transgender man[c]	40	33	82.5	25	62.5	27	67.5
Additional gender identity[d]	27	25	92.6	20	74.1	21	77.8
Male sex at birth (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	985	794	80.6	540	54.8	637	64.7
25–34	6,879	5,569	81.0	3,553	51.6	4,568	66.4
35–44	7,160	5,892	82.3	3,885	54.3	4,961	69.3
45–54	9,123	7,723	84.7	5,305	58.1	6,712	73.6
≥55	11,871	10,331	87.0	7,510	63.3	9,297	78.3
Transmission category[e]							
Male-to-male sexual contact	26,797	22,541	84.1	15,212	56.8	19,710	73.6
Injection drug use	2,173	1,826	84.0	1,340	61.6	1,545	71.1
Male-to-male sexual contact and injection drug use	3,997	3,436	86.0	2,494	62.4	2,811	70.3
Heterosexual contact[f]	2,613	2,156	82.5	1,516	58.0	1,830	70.0
Other[g]	438	349	79.7	231	52.8	279	63.7
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	29,887	25,215	84.4	17,286	57.8	21,839	73.1
Metropolitan areas (pop. 50,000–499,999)	3,348	2,844	84.9	1,967	58.8	2,451	73.2
Nonmetropolitan areas (pop. <50,000)	2,010	1,701	84.6	1,199	59.7	1,429	71.1
Subtotal	36,018	30,309	84.1	20,793	57.7	26,175	72.7
Female sex at birth (≥13 yrs at diagnosis)							
Age at year-end 2019 (yr)							
13–24	333	276	82.9	200	60.1	209	62.8
25–34	1,251	972	77.7	675	54.0	748	59.8
35–44	2,302	1,832	79.6	1,192	51.8	1,492	64.8
45–54	3,016	2,536	84.1	1,698	56.3	2,159	71.6
≥55	3,626	3,164	87.3	2,214	61.1	2,814	77.6
Transmission category[e]							
Injection drug use	2,509	2,144	85.5	1,484	59.1	1,755	70.0
Heterosexual contact[f]	7,606	6,283	82.6	4,234	55.7	5,388	70.8
Other[g]	413	353	85.5	261	63.3	279	67.7
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	8,350	6,997	83.8	4,743	56.8	5,905	70.7
Metropolitan areas (pop. 50,000–499,999)	1,209	1,012	83.7	704	58.2	850	70.3
Nonmetropolitan areas (pop. <50,000)	731	605	82.8	424	58.0	518	70.9
Subtotal	10,528	8,780	83.4	5,979	56.8	7,422	70.5
Total	**46,546**	**39,089**	**84.0**	**26,772**	**57.5**	**33,597**	**72.2**

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 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, 2020 (i.e., most recent known address). Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, and Puerto Rico.

[a] Performed ≥3 months apart during 2020.

[b] A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2020.

[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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[f] Sexual 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. Data not displayed because the numbers were too small to be meaningful.

[h] Includes Asian/Pacific Islander legacy cases (see Technical Notes).

[i] Hispanic/Latino persons can be of any race.

Table 3d. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among males (sex assigned at birth) aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age group—45 states and the District of Columbia

	Males alive at year-end 2020	≥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	84	66	78.8	38	44.9	58	68.7
25–34	410	314	76.6	185	45.2	252	61.5
35–44	371	286	77.2	180	48.4	250	67.4
45–54	392	295	75.3	201	51.1	259	66.1
≥55	341	237	69.4	171	50.1	215	63.1
Subtotal	1,598	1,198	75.0	774	48.5	1,034	64.7
Asian[c]							
13–24	366	295	80.7	200	54.6	281	76.7
25–34	2,326	1,754	75.4	1,163	50.0	1,641	70.5
35–44	2,482	1,830	73.7	1,221	49.2	1,682	67.8
45–54	2,942	2,222	75.5	1,522	51.7	2,083	70.8
≥55	2,199	1,557	70.8	1,087	49.4	1,470	66.8
Subtotal	10,314	7,657	74.2	5,193	50.4	7,156	69.4
Black/African American							
13–24	10,435	8,142	78.0	5,306	50.8	6,477	62.1
25–34	51,382	38,536	75.0	24,627	47.9	30,563	59.5
35–44	35,582	26,494	74.5	17,538	49.3	21,869	61.5
45–54	34,240	25,189	73.6	17,251	50.4	21,646	63.2
≥55	37,378	26,330	70.4	18,535	49.6	23,165	62.0
Subtotal	169,016	124,690	73.8	83,257	49.3	103,721	61.4
Hispanic/Latino[d]							
13–24	5,013	4,045	80.7	2,810	56.1	3,523	70.3
25–34	29,985	23,326	77.8	15,895	53.0	20,349	67.9
35–44	33,961	24,370	71.8	16,926	49.8	21,616	63.6
45–54	36,706	26,081	71.1	18,925	51.6	23,758	64.7
≥55	31,850	22,430	70.4	16,863	52.9	20,769	65.2
Subtotal	137,515	100,252	72.9	71,419	51.9	90,015	65.5
Native Hawaiian/other Pacific Islander							
13–24	25	20	80.6	11	44.4	16	64.5
25–34	147	105	71.7	68	46.2	89	60.9
35–44	165	116	70.3	65	39.6	102	61.8
45–54	146	105	72.0	77	52.4	98	67.2
≥55	136	99	72.6	70	51.4	96	70.4
Subtotal	619	445	71.9	291	47.0	401	64.8
White							
13–24	2,514	2,037	81.0	1,368	54.4	1,829	72.7
25–34	19,570	15,363	78.5	9,577	48.9	13,707	70.0
35–44	27,795	21,692	78.0	13,688	49.2	19,518	70.2
45–54	52,093	41,356	79.4	26,797	51.4	37,829	72.6
≥55	96,581	76,185	78.9	53,077	55.0	71,118	73.6
Subtotal	198,553	156,634	78.9	104,506	52.6	144,001	72.5
Multiracial							
13–24	778	631	81.1	429	55.1	515	66.1
25–34	5,923	4,796	81.0	3,054	51.6	3,969	67.0
35–44	5,756	4,742	82.4	3,084	53.6	4,067	70.7
45–54	6,673	5,662	84.8	3,836	57.5	5,001	74.9
≥55	7,666	6,711	87.5	4,809	62.7	6,158	80.3
Subtotal	26,797	22,541	84.1	15,212	56.8	19,710	73.6
All							
13–24	19,214	15,236	79.3	10,161	52.9	12,699	66.1
25–34	109,742	84,194	76.7	54,570	49.7	70,571	64.3
35–44	106,123	79,531	74.9	52,703	49.7	69,104	65.1
45–54	133,272	100,917	75.7	68,614	51.5	90,681	68.0
≥55	176,405	133,569	75.7	94,626	53.6	123,013	69.7
Total	**544,758**	**413,448**	**75.9**	**280,673**	**51.5**	**366,068**	**67.2**

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 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 presented based on sex at birth and include transgender persons. Data are based on address of residence as of December 31, 2020 (i.e., most recent known address). Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, and Puerto Rico.

[a] Performed ≥3 months apart during 2020.

[b] A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2020.

[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 2020 (COVID-19 pandemic) among transgender and additional gender identity persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by selected characteristics—45 states and the District of Columbia

	Persons alive at year-end 2020	≥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 2019 (yr)							
13–24	757	596	78.7	361	47.7	427	56.4
25–34	3,785	3,075	81.2	2,052	54.2	2,329	61.5
35–44	2,771	2,250	81.2	1,615	58.3	1,793	64.7
45–54	2,032	1,694	83.4	1,249	61.5	1,470	72.3
≥55	1,280	1,076	84.1	816	63.8	948	74.1
Race/ethnicity							
American Indian/Alaska Native	47	39	83.0	30	63.8	32	68.1
Asian[d]	172	134	77.9	80	46.5	119	69.2
Black/African American	4,894	3,976	81.2	2,679	54.7	3,043	62.2
Hispanic/Latino[e]	3,562	2,893	81.2	2,136	60.0	2,391	67.1
Native Hawaiian/other Pacific Islander	32	25	78.1	18	56.3	23	71.9
White	1,096	909	82.9	634	57.8	791	72.2
Multiracial	822	715	87.0	516	62.8	568	69.1
Exposure category[f]							
Sexual contact[g]	8,962	7,328	81.8	5,077	56.7	5,937	66.2
Injection drug use	21	15	71.4	11	52.4	10	47.6
Sexual contact[g] and injection drug use	1,451	1,223	84.3	912	62.9	927	63.9
Other[h]	191	125	65.4	93	48.7	93	48.7
Subtotal	10,625	8,691	81.8	6,093	57.3	6,967	65.6
Transgender man[c]							
Age at year-end 2019 (yr)							
13–24	33	25	75.8	18	54.5	23	69.7
25–34	144	121	84.0	83	57.6	102	70.8
35–44	111	89	80.2	57	51.4	77	69.4
45–54	94	76	80.9	47	50.0	58	61.7
≥55	62	51	82.3	30	48.4	43	69.4
Race/ethnicity							
American Indian/Alaska Native	4	3	75.0	2	50.0	1	25.0
Asian[d]	8	7	87.5	5	62.5	7	87.5
Black/African American	193	156	80.8	101	52.3	123	63.7
Hispanic/Latino[e]	95	80	84.2	51	53.7	70	73.7
Native Hawaiian/other Pacific Islander	0	0	0.0	0	0.0	0	0.0
White	104	83	79.8	51	49.0	75	72.1
Multiracial	40	33	82.5	25	62.5	27	67.5
Exposure category[f]							
Sexual contact[g]	334	272	81.4	176	52.7	238	71.3
Injection drug use	9	8	88.9	4	44.4	7	77.8
Sexual contact[g] and injection drug use	54	42	77.8	25	46.3	24	44.4
Other[h]	47	40	85.1	30	63.8	34	72.3
Subtotal	444	362	81.5	235	52.9	303	68.2

Table 3e. Receipt of HIV medical care and viral suppression during 2020 (COVID-19 pandemic) among transgender and additional gender identity persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by selected characteristics—45 states and the District of Columbia *(cont)*

	Persons alive at year-end 2020	≥1 CD4 or VL tests		≥2 CD4 or VL tests[a]		VL <200 copies/mL[b]	
	Total No.	No.	%	No.	%	No.	%
Additional gender identity[i]							
Age at year-end 2019 (yr)							
13–24	27	24	88.9	18	66.7	22	81.5
25–34	75	66	88.0	52	69.3	56	74.7
35–44	42	37	88.1	29	69.0	24	57.1
45–54	33	29	87.9	23	69.7	25	75.8
≥55	30	24	80.0	16	53.3	21	70.0
Race/ethnicity							
American Indian/Alaska Native	1	1	100	0	0.0	1	100
Asian[d]	3	2	66.7	2	66.7	2	66.7
Black/African American	75	61	81.3	44	58.7	48	64.0
Hispanic/Latino[e]	61	56	91.8	44	72.1	45	73.8
Native Hawaiian/other Pacific Islander	0	0	0.0	0	0.0	0	0.0
White	40	35	87.5	28	70.0	31	77.5
Multiracial	27	25	92.6	20	74.1	21	77.8
Exposure category[f]							
Sexual contact[g]	182	160	87.9	125	68.7	133	73.1
Injection drug use	1	0	0.0	0	0.0	0	0.0
Sexual contact[g] and injection drug use	19	17	89.5	11	57.9	12	63.2
Other[h]	5	3	60.0	2	40.0	3	60.0
Subtotal	207	180	87.0	138	66.7	148	71.5
Total	**11,276**	**9,233**	**81.9**	**6,466**	**57.3**	**7,418**	**65.8**

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 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, 2020 (i.e., most recent known address). Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, and Puerto Rico.

[a] Performed ≥3 months apart during 2020.

[b] A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2020.

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

[i] Additional gender identity examples include "bigender," "gender queer," and "two-spirit."

Table 4a. HIV viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by selected characteristics—45 states and the District of Columbia

	Persons alive at year-end 2020		Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		VL of <200 copies/mL			
								Among persons alive at year-end 2020	Among persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests
	No.	%[a]	No.	%	No.	%	No.	%	%	%
Gender										
Male	717,879	76.0	531,998	74.1	511,888	71.3	466,295	65.0	87.6	91.1
Female	215,092	22.8	158,356	73.6	153,093	71.2	135,941	63.2	85.8	88.8
Transgender woman[b]	10,625	1.1	8,691	81.8	8,440	79.4	6,967	65.6	80.2	82.5
Transgender man[b]	444	0.0	362	81.5	350	78.8	303	68.2	83.7	86.6
Additional gender identity[c]	207	0.0	180	87.0	178	86.0	148	71.5	82.2	83.1
Age at year-end 2019 (yr)										
13–24	28,697	3.0	22,402	78.1	21,762	75.8	18,236	63.5	81.4	83.8
25–34	150,764	16.0	113,838	75.5	110,025	73.0	93,549	62.0	82.2	85.0
35–44	178,445	18.9	131,102	73.5	126,344	70.8	111,292	62.4	84.9	88.1
45–54	243,064	25.7	180,910	74.4	174,454	71.8	159,138	65.5	88.0	91.2
≥55	343,277	36.4	251,335	73.2	241,364	70.3	227,439	66.3	90.5	94.2
Race/ethnicity										
American Indian/Alaska Native	2,988	0.3	2,207	73.9	2,098	70.2	1,844	61.7	83.6	87.9
Asian[d]	14,655	1.6	10,716	73.1	10,358	70.7	9,987	68.1	93.2	96.4
Black/African American	382,521	40.5	275,796	72.1	265,694	69.5	230,853	60.4	83.7	86.9
Hispanic/Latino[e]	220,065	23.3	157,172	71.4	152,271	69.2	139,001	63.2	88.4	91.3
Native Hawaiian/other Pacific Islander	845	0.1	602	71.2	578	68.4	545	64.5	90.5	94.3
White	275,950	29.2	213,956	77.5	205,166	74.3	193,780	70.2	90.6	94.5
Multiracial	46,546	4.9	39,089	84.0	37,736	81.1	33,597	72.2	86.0	89.0
Transmission category[f]										
Male-to-male sexual contact	544,758	57.7	413,448	75.9	398,417	73.1	366,068	67.2	88.5	91.9
Injection drug use	97,081	10.3	63,656	65.6	61,096	62.9	53,638	55.3	84.3	87.8
Male	55,700	5.9	34,257	61.5	32,737	58.8	28,955	52.0	84.5	88.4
Female	41,380	4.4	29,398	71.0	28,359	68.5	24,683	59.6	84.0	87.0
Male-to-male sexual contact and injection drug use	51,989	5.5	40,159	77.2	38,457	74.0	33,360	64.2	83.1	86.7
Heterosexual contact[g]	236,672	25.1	172,527	72.9	166,477	70.3	148,910	62.9	86.3	89.4
Male	69,303	7.3	48,196	69.5	46,245	66.7	41,204	59.5	85.5	89.1
Female	167,368	17.7	124,331	74.3	120,232	71.8	107,706	64.4	86.6	89.6
Other[h]	13,748	1.5	9,798	71.3	9,501	69.1	7,677	55.8	78.4	80.8
Male	6,932	0.7	4,786	69.0	4,626	66.7	3,803	54.9	79.5	82.2
Female	6,817	0.7	5,012	73.5	4,875	71.5	3,874	56.8	77.3	79.5
Population area of residence										
Metropolitan statistical areas (pop. ≥500,000)	774,569	82.0	574,276	74.1	554,367	71.6	501,543	64.8	87.3	90.5
Metropolitan areas (pop. 50,000–499,999)	94,638	10.0	71,812	75.9	68,843	72.7	62,264	65.8	86.7	90.4
Nonmetropolitan areas (pop. <50,000)	53,978	5.7	40,042	74.2	37,957	70.3	34,306	63.6	85.7	90.4
Total[i]	**944,247**	**100**	**699,587**	**74.1**	**673,949**	**71.4**	**609,654**	**64.6**	**87.1**	**90.5**

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 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, 2020 (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 2020. Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, 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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[g] Sexual 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.

[i] Includes 677 persons of unknown race/ethnicity.

Table 4b. HIV viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by area of residence—45 states and the District of Columbia

	Persons alive at year-end 2020	Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		VL of <200 copies/mL			
							Among persons alive at year-end 2020	Among persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests
	No.	No.	%	No.	%	No.	%	%	%
Alabama	13,579	10,272	75.6	9,942	73.2	8,875	65.4	86.4	89.3
Alaska	701	611	87.2	592	84.5	550	78.5	90.0	92.9
Arizona	17,060	12,624	74.0	12,090	70.9	11,242	65.9	89.1	93.0
Arkansas	5,821	3,783	65.0	3,313	56.9	2,885	49.6	76.3	87.1
California	130,455	95,969	73.6	91,662	70.3	85,115	65.2	88.7	92.9
Colorado	12,928	8,430	65.2	8,089	62.6	7,512	58.1	89.1	92.9
Connecticut	10,402	8,074	77.6	7,959	76.5	7,418	71.3	91.9	93.2
Delaware	3,349	2,681	80.1	2,627	78.4	2,405	71.8	89.7	91.5
District of Columbia	13,596	8,787	64.6	8,386	61.7	7,444	54.8	84.7	88.8
Florida	111,231	85,400	76.8	82,794	74.4	74,884	67.3	87.7	90.4
Georgia	55,634	39,747	71.4	38,158	68.6	33,659	60.5	84.7	88.2
Hawaii	2,330	1,930	82.8	1,896	81.4	1,776	76.2	92.0	93.7
Illinois	34,712	25,822	74.4	24,910	71.8	22,449	64.7	86.9	90.1
Indiana	11,440	8,668	75.8	8,198	71.7	7,493	65.5	86.4	91.4
Iowa	2,836	2,432	85.8	2,399	84.6	2,248	79.3	92.4	93.7
Kansas[a]	3,213	2,584	80.4	2,537	79.0	2,324	72.3	89.9	91.6
Louisiana	20,676	15,905	76.9	15,646	75.7	13,895	67.2	87.4	88.8
Maine	1,635	1,351	82.6	1,322	80.9	1,266	77.4	93.7	95.8
Maryland[b]	32,715	22,914	70.0	22,407	68.5	20,335	62.2	88.7	90.8
Massachusetts	20,602	15,169	73.6	14,506	70.4	13,685	66.4	90.2	94.3
Michigan	16,352	12,820	78.4	12,426	76.0	11,342	69.4	88.5	91.3
Minnesota	8,771	6,494	74.0	6,276	71.6	5,858	66.8	90.2	93.3
Mississippi	9,326	6,594	70.7	6,047	64.8	5,156	55.3	78.2	85.3
Missouri	12,511	9,497	75.9	9,006	72.0	8,108	64.8	85.4	90.0
Montana	671	573	85.4	559	83.3	517	77.0	90.2	92.5
Nebraska	2,248	1,670	74.3	1,503	66.9	1,357	60.4	81.3	90.3
Nevada	10,656	7,823	73.4	7,415	69.6	6,818	64.0	87.2	91.9
New Hampshire	1,296	1,021	78.8	1,001	77.2	951	73.4	93.1	95.0
New Mexico	3,811	2,942	77.2	2,395	62.8	2,176	57.1	74.0	90.9
New York	123,315	87,926	71.3	86,794	70.4	77,805	63.1	88.5	89.6
North Carolina[a]	32,498	24,493	75.4	23,730	73.0	21,291	65.5	86.9	89.7
North Dakota	490	389	79.4	364	74.3	330	67.3	84.8	90.7
Ohio	22,818	16,823	73.7	16,302	71.4	14,775	64.8	87.8	90.6
Oklahoma	6,281	4,421	70.4	4,218	67.2	3,696	58.8	83.6	87.6
Oregon	7,164	6,147	85.8	5,912	82.5	5,597	78.1	91.1	94.7

Table 4b. HIV viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by area of residence—45 states and the District of Columbia *(cont)*

	Persons alive at year-end 2020	Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		VL of <200 copies/mL			
							Among persons alive at year-end 2020	Among persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests
	No.	No.	%	No.	%	No.	%	%	%
Rhode Island	2,615	2,050	78.4	1,934	74.0	1,812	69.3	88.4	93.7
South Carolina[a]	17,283	14,018	81.1	13,675	79.1	12,434	71.9	88.7	90.9
South Dakota	660	555	84.1	362	54.8	313	47.4	56.4	86.5
Tennessee	17,572	14,176	80.7	13,459	76.6	11,841	67.4	83.5	88.0
Texas	93,839	68,963	73.5	64,872	69.1	56,378	60.1	81.8	86.9
Utah	3,132	2,321	74.1	2,267	72.4	2,142	68.4	92.3	94.5
Virginia	23,425	16,399	70.0	16,035	68.5	14,683	62.7	89.5	91.6
Washington	13,877	11,541	83.2	11,345	81.8	10,697	77.1	92.7	94.3
West Virginia	1,951	1,377	70.6	1,329	68.1	1,175	60.2	85.3	88.4
Wisconsin	6,428	5,125	79.7	5,051	78.6	4,718	73.4	92.1	93.4
Wyoming	342	276	80.7	239	69.9	224	65.5	81.2	93.7
Puerto Rico[a]	15,526	7,971	51.3	7,746	49.9	7,034	45.3	88.2	90.8
Region of residence[c]									
Northeast (*excluding NJ, PA, VT*)	159,865	115,591	72.3	113,516	71.0	102,937	64.4	89.1	90.7
Midwest (*excluding KS*)	122,479	92,879	75.8	89,334	72.9	81,315	66.4	87.5	91.0
Southeast (*excluding KY*)	458,776	339,930	74.1	326,638	71.2	291,036	63.4	85.6	89.1
West (*excluding ID*)	203,127	151,187	74.4	144,461	71.1	134,366	66.1	88.9	93.0

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. 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. Data are based on address of residence as of December 31, 2020 (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 2020. Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021. 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 and New Jersey. Areas with incomplete reporting: Kentucky, Pennsylvania, Vermont, and Puerto Rico.

[a] Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2020.

[b] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

[c] Data should be interpreted with caution and are based on areas with laws and complete reporting to CDC.

Table 5a. Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥13 years, by year of diagnosis and selected characteristics, 2016–2020—United States

	2016			2017			2018			2019			2020 (COVID-19 pandemic)		
	Total	Stage 3 (AIDS) at diagnosis[a]		Total	Stage 3 (AIDS) at diagnosis[a]		Total	Stage 3 (AIDS) at diagnosis[a]		Total	Stage 3 (AIDS) at diagnosis[a]			Stage 3 (AIDS) at diagnosis[a]	
	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	Total No.	No.	%
Gender															
Male	31,268	6,599	21.1	30,414	6,319	20.8	29,690	6,139	20.7	28,918	5,925	20.5	24,242	5,208	21.5
Female	7,447	1,657	22.3	7,242	1,603	22.1	7,037	1,530	21.7	6,890	1,419	20.6	5,409	1,256	23.2
Transgender woman[b]	674	92	13.6	612	83	13.6	627	82	13.1	652	90	13.8	638	77	12.1
Transgender man[b]	22	4	18.2	33	5	15.2	48	2	4.2	45	5	11.1	40	2	5.0
Additional gender identity[c]	11	3	27.3	15	3	20.0	15	1	6.7	23	0	0.0	17	2	11.8
Age at diagnosis (yr)															
13–24	8,656	751	8.7	8,277	742	9.0	7,848	715	9.1	7,638	633	8.3	6,082	553	9.1
25–34	13,588	2,219	16.3	13,395	2,155	16.1	13,384	2,125	15.9	13,075	2,139	16.4	11,258	1,959	17.4
35–44	7,455	2,019	27.1	7,240	1,875	25.9	7,180	1,847	25.7	7,114	1,790	25.2	5,924	1,491	25.2
45–54	5,902	1,965	33.3	5,567	1,880	33.8	5,235	1,744	33.3	4,887	1,553	31.8	3,929	1,372	34.9
≥55	3,821	1,401	36.7	3,837	1,361	35.5	3,770	1,323	35.1	3,814	1,324	34.7	3,153	1,170	37.1
Race/ethnicity															
American Indian/Alaska Native	216	50	23.1	200	45	22.5	173	28	16.2	204	27	13.2	200	43	21.5
Asian	923	216	23.4	923	234	25.4	862	225	26.1	733	178	24.3	635	176	27.7
Black/African American	16,723	3,393	20.3	16,223	3,251	20.0	15,736	3,102	19.7	15,471	2,993	19.3	12,824	2,569	20.0
Hispanic/Latino[d]	10,083	2,195	21.8	9,925	2,098	21.1	9,945	2,143	21.5	9,889	2,093	21.2	7,999	1,821	22.8
Native Hawaiian/other Pacific Islander	38	8	21.1	50	13	26.0	61	13	21.3	66	11	16.7	65	13	20.0
White	9,865	2,188	22.2	9,628	2,099	21.8	9,433	2,023	21.4	9,063	1,913	21.1	7,831	1,758	22.4
Multiracial	1,574	305	19.4	1,367	273	20.0	1,207	220	18.2	1,102	224	20.3	792	165	20.8
Transmission category[e]															
Male-to-male sexual contact	25,948	4,972	19.2	25,346	4,823	19.0	24,545	4,720	19.2	23,975	4,514	18.8	20,572	4,096	19.9
Injection drug use	2,223	542	24.4	2,378	559	23.5	2,512	545	21.7	2,536	548	21.6	2,033	454	22.3
Male	1,189	328	27.6	1,292	342	26.5	1,407	325	23.1	1,381	343	24.8	1,178	280	23.8
Female	1,034	215	20.8	1,086	217	20.0	1,105	220	19.9	1,154	205	17.8	855	174	20.3
Male-to-male sexual contact and injection drug use	1,539	259	16.8	1,470	215	14.6	1,465	207	14.2	1,524	248	16.3	1,105	187	16.9
Heterosexual contact[f]	9,631	2,558	26.6	9,033	2,393	26.5	8,805	2,259	25.7	8,400	2,102	25.0	6,549	1,784	27.2
Male	3,251	1,125	34.6	2,902	1,015	35.0	2,877	961	33.4	2,669	895	33.5	2,012	715	35.5
Female	6,380	1,433	22.5	6,131	1,378	22.5	5,928	1,297	21.9	5,730	1,207	21.1	4,536	1,069	23.6
Other[g]	80	25	30.4	89	23	25.6	89	23	26.1	94	26	28.2	88	25	28.2
Male	25	11	45.7	31	9	30.2	37	9	24.3	39	15	37.4	29	10	34.0
Female	56	13	23.7	58	13	23.2	53	14	27.5	54	12	21.5	59	15	25.3
Region of residence															
Northeast	6,198	1,355	21.9	5,977	1,290	21.6	5,557	1,256	22.6	5,305	1,164	21.9	4,262	961	22.5
Midwest	5,141	1,161	22.6	5,096	1,080	21.2	4,927	1,111	22.5	4,740	992	20.9	4,118	873	21.2
South	20,209	4,278	21.2	19,662	4,160	21.2	19,364	3,899	20.1	19,149	3,848	20.1	15,661	3,365	21.5
West	7,874	1,561	19.8	7,581	1,483	19.6	7,569	1,488	19.7	7,334	1,435	19.6	6,305	1,346	21.3
Population area of residence															
Metropolitan statistical areas (pop. ≥500,000)	32,145	6,576	20.5	31,220	6,299	20.2	30,428	6,090	20	29,649	5,886	19.9	24,464	5,101	20.9
Metropolitan areas (pop. 50,000–499,999)	4,640	1,104	23.8	4,604	1,069	23.2	4,557	1,046	23.0	4,449	974	21.9	3,799	900	23.7
Nonmetropolitan areas (pop. < 50,000)	2,321	630	27.1	2,245	596	26.5	2,324	605	26	2,274	570	25.1	1,939	522	26.9
Total	**39,422**	**8,355**	**21.2**	**38,316**	**8,013**	**20.9**	**37,417**	**7,754**	**20.7**	**36,528**	**7,439**	**20.4**	**30,346**	**6,545**	**21.6**

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

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

[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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[f] Sexual 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.

Table 5b. Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥13 years, by year of diagnosis and selected characteristics, 2016–2020—United States and 6 dependent areas

	2016			2017			2018			2019			2020 (COVID-19 pandemic)		
	Total	Stage 3 (AIDS) at diagnosis[a]		Total	Stage 3 (AIDS) at diagnosis[a]		Total	Stage 3 (AIDS) at diagnosis[a]		Total	Stage 3 (AIDS) at diagnosis[a]			Stage 3 (AIDS) at diagnosis[a]	
	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	Total No.	No.	%
Gender															
Male	31,710	6,712	21.2	30,778	6,382	20.7	30,058	6,222	20.7	29,247	6,000	20.5	24,488	5,261	21.5
Female	7,552	1,679	22.2	7,336	1,627	22.2	7,117	1,547	21.7	6,971	1,446	20.7	5,450	1,269	23.3
Transgender woman[b]	677	92	13.6	614	83	13.5	629	82	13.0	654	90	13.8	640	78	12.2
Transgender man[b]	22	4	18.2	33	5	15.2	49	3	6.1	45	5	11.1	40	2	5.0
Additional gender identity[c]	11	3	27.3	15	3	20.0	15	1	6.7	23	0	0.0	17	2	11.8
Age at diagnosis (yr)															
13–24	8,739	759	8.7	8,355	747	8.9	7,927	720	9.1	7,701	639	8.3	6,135	556	9.1
25–34	13,724	2,237	16.3	13,520	2,173	16.1	13,519	2,143	15.9	13,191	2,162	16.4	11,336	1,968	17.4
35–44	7,582	2,055	27.1	7,327	1,899	25.9	7,255	1,868	25.7	7,192	1,807	25.1	5,985	1,508	25.2
45–54	6,006	2,002	33.3	5,658	1,902	33.6	5,328	1,773	33.3	4,954	1,582	31.9	3,977	1,391	35.0
≥55	3,921	1,437	36.6	3,916	1,379	35.2	3,839	1,351	35.2	3,902	1,351	34.6	3,202	1,189	37.1
Race/ethnicity															
American Indian/Alaska Native	216	50	23.1	200	45	22.5	173	28	16.2	204	27	13.2	200	43	21.5
Asian	924	216	23.4	926	236	25.5	866	225	26.0	740	181	24.5	635	176	27.7
Black/African American	16,729	3,395	20.3	16,227	3,252	20.0	15,744	3,103	19.7	15,476	2,996	19.4	12,827	2,569	20.0
Hispanic/Latino[d]	10,618	2,325	21.9	10,371	2,181	21.0	10,377	2,240	21.6	10,280	2,187	21.3	8,285	1,888	22.8
Native Hawaiian/other Pacific Islander	43	9	20.9	51	13	25.5	63	15	23.8	70	12	17.1	65	13	20.0
White	9,867	2,189	22.2	9,633	2,100	21.8	9,436	2,024	21.4	9,068	1,914	21.1	7,831	1,758	22.4
Multiracial	1,575	306	19.4	1,368	273	20.0	1,209	220	18.2	1,102	224	20.3	792	165	20.8
Transmission category[e]															
Male-to-male sexual contact	26,244	5,024	19.1	25,580	4,859	19.0	24,810	4,766	19.2	24,204	4,557	18.8	20,758	4,123	19.9
Injection drug use	2,271	561	24.7	2,421	565	23.4	2,537	554	21.8	2,566	559	21.8	2,055	461	22.5
Male	1,225	344	28.1	1,326	349	26.3	1,431	334	23.3	1,406	351	24.9	1,198	288	24.0
Female	1,046	217	20.7	1,095	217	19.8	1,107	220	19.9	1,160	208	18.0	857	174	20.3
Male-to-male sexual contact and injection drug use	1,551	264	17.0	1,483	216	14.6	1,477	214	14.5	1,536	252	16.4	1,109	188	16.9
Heterosexual contact[f]	9,826	2616	26.6	9,203	2,436	26.5	8,954	2,298	25.7	8,539	2,147	25.1	6,626	1,815	27.4
Male	3,353	1,164	34.7	2,987	1,035	34.6	2,947	983	33.4	2,734	916	33.5	2,051	733	35.7
Female	6,473	1,453	22.4	6,216	1,402	22.6	6,008	1,315	21.9	5,805	1,231	21.2	4,575	1,082	23.7
Other[g]	81	25	30.4	89	23	25.5	90	24	26.2	94	27	28.3	88	25.0	28.2
Male	25	11	45.6	31	9	30.1	37	9	24.5	40	15	37.9	29	10	34.0
Female	56	13	23.7	58	13	23.1	53	14	27.5	55	12	21.4	59	15	25.3
Region of residence															
Northeast	6,198	1,355	21.9	5,977	1,290	21.6	5,557	1,256	22.6	5,305	1,164	21.9	4,262	961	22.5
Midwest	5,141	1,161	22.6	5,096	1,080	21.2	4,927	1,111	22.5	4,740	992	20.9	4,118	873	21.2
South	20,209	4,278	21.2	19,662	4,160	21.2	19,364	3,899	20.1	19,149	3,848	20.1	15,661	3,365	21.5
West	7,874	1,561	19.8	7,581	1,483	19.6	7,569	1,488	19.7	7,334	1,435	19.6	6,305	1,346	21.3
U.S. dependent areas	550	135	24.5	460	87	18.9	451	101	22.4	412	102	24.8	289	67	23.2
Total	**39,972**	**8,490**	**21.2**	**38,776**	**8,100**	**20.9**	**37,868**	**7,855**	**20.7**	**36,940**	**7,541**	**20.4**	**30,635**	**6,612**	**21.6**

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

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

[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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[f] Sexual 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.

Table 5c. Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥13 years, by year of diagnosis and area of residence, 2015–2020—United States and 6 dependent areas

	2016			2017			2018			2019			2020 (COVID-19 pandemic)		
		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.	%	Total No.	No.	%	Total No.	No.	%	Total No.	No.	%	Total No.	No.	%
Alabama	653	142	21.7	647	141	21.8	604	127	21.0	635	135	21.3	585	127	21.7
Alaska	37	6	16.2	30	7	23.3	23	4	17.4	27	2	7.4	29	3	10.3
Arizona	714	143	20.0	720	135	18.7	752	159	21.1	747	135	18.1	662	148	22.4
Arkansas	314	68	21.7	287	50	17.4	286	60	21.0	289	72	24.9	242	59	24.4
California	5,092	973	19.1	4,839	924	19.1	4,749	883	18.6	4,454	834	18.7	3,924	839	21.4
Colorado	421	84	20.0	434	79	18.2	403	96	23.8	465	101	21.7	324	77	23.8
Connecticut	256	66	25.8	274	65	23.7	259	64	24.7	212	60	28.3	171	42	24.6
Delaware	111	35	31.5	125	32	25.6	91	22	24.2	94	20	21.3	93	25	26.9
District of Columbia	351	58	16.5	316	40	12.7	280	43	15.4	250	37	14.8	197	41	20.8
Florida	4,659	985	21.1	4,558	973	21.3	4,515	926	20.5	4,361	914	21.0	3,408	714	21.0
Georgia	2,523	469	18.6	2,606	569	21.8	2,486	495	19.9	2,407	490	20.4	1,977	433	21.9
Hawaii	76	11	14.5	76	13	17.1	72	15	20.8	64	13	20.3	51	18	35.3
Idaho	46	7	15.2	45	11	24.4	37	15	40.5	33	14	42.4	32	13	40.6
Illinois	1,476	308	20.9	1,372	291	21.2	1,369	275	20.1	1,257	241	19.2	1,096	225	20.5
Indiana	486	108	22.2	515	126	24.5	511	128	25.0	486	100	20.6	433	104	24.0
Iowa	132	32	24.2	125	31	24.8	114	26	22.8	100	22	22.0	100	25	25.0
Kansas	149	34	22.8	120	25	20.8	157	42	26.8	132	26	19.7	138	35	25.4
Kentucky	338	109	32.2	367	88	24.0	378	76	20.1	328	70	21.3	300	63	21.0
Louisiana	1,106	256	23.1	989	226	22.9	957	183	19.1	880	186	21.1	722	162	22.4
Maine	53	12	22.6	29	11	37.9	31	10	32.3	30	11	36.7	16	8	50.0
Maryland[b]	1,093	227	20.8	1,020	248	24.3	990	202	20.4	915	206	22.5	706	153	21.7
Massachusetts	640	138	21.6	602	124	20.6	648	150	23.1	538	111	20.6	434	100	23.0
Michigan	745	177	23.8	773	154	19.9	719	168	23.4	674	148	22.0	519	96	18.5
Minnesota	297	67	22.6	278	75	27.0	286	68	23.8	273	63	23.1	229	48	21.0
Mississippi	424	119	28.1	429	115	26.8	475	129	27.2	471	120	25.5	402	90	22.4
Missouri	511	119	23.3	505	84	16.6	450	96	21.3	487	89	18.3	359	65	18.1
Montana	20	3	15.0	31	6	19.4	24	5	20.8	25	5	20.0	14	5	35.7
Nebraska	74	18	24.3	87	13	14.9	77	25	32.5	81	21	25.9	73	18	24.7
Nevada	508	114	22.4	497	107	21.5	497	95	19.1	518	120	23.2	392	70	17.9
New Hampshire	39	11	28.2	32	5	15.6	38	10	26.3	31	5	16.1	33	8	24.2
New Jersey	1,184	275	23.2	1,105	240	21.7	1,020	235	23.0	1,083	238	22.0	805	177	22.0
New Mexico	149	32	21.5	148	30	20.3	155	38	24.5	174	28	16.1	131	25	19.1
New York	2,822	567	20.1	2,736	568	20.8	2,449	539	22.0	2,336	494	21.1	1,963	430	21.9
North Carolina	1,384	274	19.8	1,291	264	20.4	1,180	205	17.4	1,365	213	15.6	1,079	225	20.9

Table 5c. Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥13 years, by year of diagnosis and area of residence, 2015–2020—United States and 6 dependent areas *(cont)*

	2016			2017			2018			2019			2020 (COVID-19 pandemic)		
		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.	%	Total No.	No.	%	Total No.	No.	%	Total No.	No.	%	Total No.	No.	%
North Dakota	46	12	26.1	38	10	26.3	36	5	13.9	40	9	22.5	36	15	41.7
Ohio	954	228	23.9	982	212	21.6	973	225	23.1	965	213	22.1	888	190	21.4
Oklahoma	293	74	25.3	300	63	21.0	278	61	21.9	336	54	16.1	333	72	21.6
Oregon	228	54	23.7	203	49	24.1	229	52	22.7	199	49	24.6	180	28	15.6
Pennsylvania	1,127	264	23.4	1,093	244	22.3	1,018	218	21.4	993	229	23.1	775	184	23.7
Rhode Island	72	19	26.4	86	24	27.9	76	22	28.9	71	14	19.7	53	9	17.0
South Carolina	744	179	24.1	708	179	25.3	725	174	24.0	722	165	22.9	655	162	24.7
South Dakota	42	12	28.6	41	8	19.5	29	7	24.1	33	8	24.2	34	4	11.8
Tennessee	712	115	16.2	721	123	17.1	742	145	19.5	773	134	17.3	647	110	17.0
Texas	4,532	957	21.1	4,356	857	19.7	4,425	859	19.4	4,342	839	19.3	3,548	740	20.9
Utah	139	24	17.3	113	22	19.5	120	17	14.2	135	27	20.0	131	30	22.9
Vermont	5	3	60.0	20	9	45.0	18	8	44.4	11	2	18.2	12	3	25.0
Virginia	904	191	21.1	865	170	19.7	866	171	19.7	833	170	20.4	628	165	26.3
Washington	423	102	24.1	435	96	22.1	496	108	21.8	480	105	21.9	421	88	20.9
West Virginia	68	20	29.4	77	22	28.6	86	21	24.4	148	23	15.5	139	24	17.3
Wisconsin	229	46	20.1	260	51	19.6	206	46	22.3	212	52	24.5	213	48	22.5
Wyoming	21	8	38.1	10	4	40.0	12	1	8.3	13	2	15.4	14	2	14.3
Subtotal	39,422	8,355	21.2	38,316	8,013	20.9	37,417	7,754	20.7	36,528	7,439	20.4	30,346	6,545	21.6
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	4	2	50.0	4	2	50.0	7	3	42.9	11	3	27.3	0	0	0.0
Northern Mariana Islands	0	0	0.0	1	0	0.0	1	0	0.0	2	1	50.0	0	0	0.0
Puerto Rico	532	128	24.1	447	84	18.8	431	96	22.3	391	94	24.0	286	67	23.4
Republic of Palau	2	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
U.S. Virgin Islands	12	5	41.7	8	1	12.5	12	2	16.7	8	4	50.0	3	0	0.0
Subtotal	550	135	24.5	460	87	18.9	451	101	22.4	412	102	24.8	289	67	23.2
Total	**39,972**	**8,490**	**21.2**	**38,776**	**8,100**	**20.9**	**37,868**	**7,855**	**20.7**	**36,940**	**7,541**	**20.4**	**30,635**	**6,612**	**21.6**

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

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

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

[b] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

Table 5d. Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥13 years, by race/ethnicity and area of residence, 2020 (COVID-19 pandemic)—United States

	Black/African American			Hispanic/Latino[a]			White			Other[b]		
		Stage 3 (AIDS) at diagnosis[c]			Stage 3 (AIDS) at diagnosis[c]			Stage 3 (AIDS) at diagnosis[c]			Stage 3 (AIDS) at diagnosis[c]	
	Total No.	No.	%	Total No.	No.	%	Total No.	No.	%	Total No.	No.	%
Alabama	402	80	19.9	28	7	25.0	140	36	25.7	15	4	26.7
Alaska	1	0	0.0	4	2	50.0	9	1	11.1	15	0	0.0
Arizona	96	18	18.8	265	61	23.0	236	51	21.6	65	18	27.7
Arkansas	113	29	25.7	24	4	16.7	101	26	25.7	4	0	0.0
California	682	121	17.7	1,966	451	22.9	946	176	18.6	330	91	27.6
Colorado	62	15	24.2	103	28	27.2	146	32	21.9	13	2	15.4
Connecticut	55	16	29.1	59	7	11.9	52	17	32.7	5	2	40.0
Delaware	50	15	30.0	13	3	23.1	27	7	25.9	3	0	0.0
District of Columbia	141	28	19.9	22	3	13.6	27	6	22.2	7	4	57.1
Florida	1,367	293	21.4	1,171	241	20.6	783	162	20.7	87	18	20.7
Georgia	1,438	304	21.1	178	41	23.0	319	75	23.5	42	13	31.0
Hawaii	1	1	100	7	2	28.6	12	5	41.7	31	10	32.3
Idaho	2	0	0.0	8	7	87.5	20	5	25.0	2	1	50.0
Illinois	571	104	18.2	235	56	23.8	220	49	22.3	70	16	22.9
Indiana	177	33	18.6	51	19	37.3	185	47	25.4	20	5	25.0
Iowa	25	8	32.0	5	1	20.0	56	16	28.6	14	0	0.0
Kansas	41	14	34.1	21	3	14.3	70	17	24.3	6	1	16.7
Kentucky	66	13	19.7	28	6	21.4	183	38	20.8	23	6	26.1
Louisiana	505	98	19.4	62	21	33.9	144	41	28.5	11	2	18.2
Maine	4	2	50.0	0	0	0.0	12	6	50.0	0	0	0.0
Maryland[d]	501	98	19.6	86	23	26.7	85	24	28.2	34	8	23.5
Massachusetts	136	38	27.9	115	22	19.1	168	36	21.4	15	4	26.7
Michigan	320	48	15.0	38	10	26.3	141	35	24.8	20	3	15.0
Minnesota	97	24	24.7	34	7	20.6	72	14	19.4	26	3	11.5
Mississippi	303	66	21.8	11	3	27.3	78	20	25.6	10	1	10.0
Missouri	157	23	14.6	29	7	24.1	158	33	20.9	15	2	13.3
Montana	0	0	0.0	1	1	100	13	4	30.8	0	0	0.0
Nebraska	17	4	23.5	20	6	30.0	31	8	25.8	5	0	0.0
Nevada	122	17	13.9	122	22	18.0	121	23	19.0	27	8	29.6
New Hampshire	1	0	0.0	4	1	25.0	25	5	20.0	3	2	66.7
New Jersey	310	59	19.0	331	73	22.1	132	35	26.5	32	10	31.3
New Mexico	4	0	0.0	69	11	15.9	25	6	24.0	33	8	24.2
New York	824	177	21.5	675	147	21.8	319	73	22.9	145	33	22.8
North Carolina	626	113	18.1	142	45	31.7	256	61	23.8	55	6	10.9
North Dakota	12	5	41.7	4	0	0.0	12	6	50.0	8	4	50.0
Ohio	468	81	17.3	33	8	24.2	353	91	25.8	34	10	29.4
Oklahoma	81	19	23.5	51	11	21.6	140	32	22.9	61	10	16.4
Oregon	12	2	16.7	42	6	14.3	108	17	15.7	18	3	16.7
Pennsylvania	376	76	20.2	132	25	18.9	231	74	32.0	36	9	25.0
Rhode Island	9	1	11.1	19	3	15.8	23	4	17.4	2	1	50.0
South Carolina	405	96	23.7	52	21	40.4	158	35	22.2	40	10	25.0
South Dakota	7	1	14.3	4	2	50.0	15	1	6.7	8	0	0.0
Tennessee	378	59	15.6	46	14	30.4	199	36	18.1	24	1	4.2
Texas	1,265	214	16.9	1,448	334	23.1	676	144	21.3	159	48	30.2
Utah	5	2	40.0	49	13	26.5	62	13	21.0	15	2	13.3
Vermont	1	0	0.0	2	1	50.0	9	2	22.2	0	0	0.0
Virginia	413	109	26.4	68	18	26.5	124	36	29.0	23	2	8.7
Washington	82	19	23.2	75	13	17.3	202	42	20.8	62	14	22.6
West Virginia	10	3	30.0	5	2	40.0	116	17	14.7	8	2	25.0
Wisconsin	81	23	28.4	40	9	22.5	82	16	19.5	10	0	0.0
Wyoming	2	0	0.0	2	0	0.0	9	2	22.2	1	0	0.0
Region of residence												
Northeast	1,716	369	21.5	1,337	279	20.9	971	252	26.0	238	61	25.6
Midwest	1,973	368	18.7	514	128	24.9	1,395	333	23.9	236	44	18.6
South	8,064	1,637	20.3	3,435	797	23.2	3,556	796	22.4	606	135	22.3
West	1,071	195	18.2	2,713	617	22.7	1,909	377	19.7	612	157	25.7
Total	**12,824**	**2,569**	**20.0**	**7,999**	**1,821**	**22.8**	**7,831**	**1,758**	**22.4**	**1,692**	**397**	**23.5**

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

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

[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.

[d] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

Table 6a. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and selected characteristics, 2016–2020—United States

	2016			2017			2018			2019			2020 (COVID-19 pandemic)		
	No.	Rate per 100,000 pop.	Rate per 1,000 PWDH[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWDH[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWDH[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWDH[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWDH[a]
Gender															
Male	12,223	—	16.5	12,243	—	16.1	12,103	—	15.5	12,250	—	15.3	13,528	—	16.7
Female	4,025	—	17.2	3,994	—	16.8	3,983	—	16.5	3,830	—	15.6	4,435	—	17.9
Transgender woman[b]	120	—	12.0	106	—	10.1	117	—	10.6	144	—	12.4	188	—	15.5
Transgender man[b]	2	—	5.5	5	—	12.7	5	—	11.3	5	—	10.4	9	—	17.4
Additional gender identity[c]	1	—	6.0	2	—	10.8	1	—	4.9	1	—	4.4	—	—	-
Age at death (yr)															
13–24	166	0.3	3.7	151	0.3	3.5	130	0.3	3.1	133	0.3	3.3	145	0.3	3.9
25–34	1,100	2.5	7.1	1,046	2.3	6.5	1,033	2.3	6.2	1,095	2.4	6.4	1,182	2.6	6.8
35–44	1,968	4.9	10.1	1,834	4.5	9.4	1,771	4.3	9.1	1,787	4.3	9.0	1,967	4.7	9.9
45–54	4,650	10.9	14.8	4,469	10.6	14.5	4,182	10.1	14.1	3,625	8.9	12.7	3,635	9.0	13.4
≥55	8,487	9.4	30.5	8,850	9.6	29.0	9,093	9.6	27.3	9,590	9.9	26.5	11,231	11.5	28.8
Race/ethnicity															
American Indian/Alaska Native	47	2.4	17.2	47	2.4	16.3	48	2.4	15.9	58	2.9	18.3	78	3.9	23.5
Asian[d]	100	0.7	7.7	88	0.6	6.3	84	0.5	5.7	101	0.6	6.5	97	0.6	6.0
Black/African American	7,232	21.9	18.0	7,198	21.6	17.5	6,983	20.7	16.6	6,992	20.6	16.2	7,928	23.1	18.1
Hispanic/Latino[e]	2,632	6.0	12.0	2,694	6.0	11.8	2,840	6.2	12.1	2,740	5.8	11.3	3,245	6.8	13.0
Native Hawaiian/other Pacific Islander	14	3.0	18.7	9	1.9	11.5	13	2.7	15.5	14	2.8	15.7	10	2.0	10.6
White	5,310	3.1	18.0	5,238	3.1	17.5	5,151	3.0	16.9	5,234	3.1	17.0	5,512	3.2	17.7
Multiracial	1,033	23.5	19.4	1,074	23.6	20.0	1,090	23.2	20.3	1,087	22.4	20.2	1,290	25.7	24.1
Transmission category[f]															
Male-to-male sexual contact	6,889	—	12.8	6,992	—	12.6	6,892	—	12.0	7,177	—	12.1	7,801	—	12.8
Injection drug use	3,660	—	30.1	3,551	—	29.4	3,496	—	29.2	3,374	—	28.3	3,751	—	31.8
Male	2,270	—	31.9	2,170	—	30.9	2,173	—	31.2	2,071	—	30.0	2,327	—	34.1
Female	1,390	—	27.5	1,381	—	27.4	1,323	—	26.4	1,304	—	26.1	1,425	—	28.7
Male-to-male sexual contact and injection drug use	1,391	—	23.8	1,372	—	23.5	1,444	—	24.6	1,366	—	23.3	1,595	—	27.3
Heterosexual contact[g]	4,252	—	16.7	4,256	—	16.3	4,205	—	15.8	4,154	—	15.4	4,811	—	17.6
Male	1,690	—	21.7	1,709	—	21.6	1,602	—	19.9	1,685	—	20.7	1,873	—	22.9
Female	2,562	—	14.5	2,547	—	14.1	2,603	—	14.1	2,469	—	13.1	2,939	—	15.4
Other[h]	178	—	12.4	179	—	12.2	171	—	11.4	158	—	10.4	201	—	12.9
Male	103	—	13.8	108	—	14.2	108	—	14.0	96	—	12.3	120	—	15.2
Female	75	—	10.8	71	—	10.0	63	—	8.7	62	—	8.3	81	—	10.5
Region of residence															
Northeast	3,709	7.8	15.9	3,699	7.7	15.7	3,528	7.4	14.9	3,632	7.6	15.2	4,424	9.3	18.5
Midwest	1,857	3.3	15.9	1,915	3.4	15.9	2,004	3.5	16.2	1,938	3.4	15.3	2,230	3.9	17.3
South	8,049	7.9	18.2	7,996	7.8	17.5	7,870	7.6	16.8	7,893	7.5	16.4	8,607	8.1	17.6
West	2,756	4.3	14.2	2,740	4.3	13.8	2,807	4.3	13.7	2,767	4.2	13.2	2,899	4.4	13.6
Population area of residence															
Metropolitan statistical areas (pop. ≥500,000)	10,289	5.6	12.9	10,400	5.6	12.6	10,159	5.4	12.1	10,639	5.6	12.3	12,411	6.5	14.2
Metropolitan areas (pop. 50,000–499,999)	1,350	2.9	14.2	1,521	3.2	15.5	1,494	3.1	14.7	1,601	3.3	15.1	1,671	3.5	15.4
Nonmetropolitan areas (pop. <50,000)	896	2.3	16.7	954	2.5	17.2	869	2.3	15.3	939	2.4	16.0	1,075	2.8	18.0
Total[i]	**16,371**	**6.1**	**16.6**	**16,350**	**6.0**	**16.2**	**16,209**	**5.9**	**15.7**	**16,230**	**5.9**	**15.4**	**18,160**	**6.5**	**16.9**

Abbreviations: pop, population; 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 not available, state at death (where a person's death occurred) was used. 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. Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021.

[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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[g] Sexual 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.

[i] Includes persons of unknown race/ethnicity.

Table 6b. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and selected characteristics, 2016–2020—United States and 6 dependent areas

	2016			2017			2018			2019			2020 (COVID-19 pandemic)		
	No.	Rate per 100,000 pop.	Rate per 1,000 PWDH[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWDH[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWDH[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWDH[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWDH[a]
Gender															
Male	12,548	—	16.6	12,544	—	16.2	12,395	—	15.6	12,524	—	15.5	13,774	—	16.7
Female	4,121	—	17.2	4,102	—	16.9	4,059	—	16.4	3,913	—	15.6	4,517	—	17.9
Transgender woman[b]	120	—	12.0	108	—	10.3	118	—	10.7	146	—	12.5	189	—	15.5
Transgender man[b]	2	—	5.5	5	—	12.7	5	—	11.3	5	—	10.3	9	—	17.3
Additional gender identity[c]	1	—	6.0	2	—	10.8	1	—	4.9	1	—	4.4	0	—	0.0
Age at death (yr)															
13–24	171	0.3	3.7	153	0.3	3.5	134	0.3	3.2	135	0.3	3.4	145	0.3	3.9
25–34	1,115	2.5	7.1	1,067	2.3	6.5	1,053	2.3	6.2	1,113	2.4	6.4	1,188	2.6	6.8
35–44	2,031	5.0	10.2	1,884	4.6	9.6	1,820	4.4	9.2	1,842	4.4	9.2	2,015	4.7	10.0
45–54	4,774	11.0	15.0	4,598	10.8	14.7	4,271	10.2	14.1	3,736	9.0	12.9	3,706	9.1	13.4
≥55	8,701	9.5	30.6	9,059	9.7	29.1	9,300	9.7	27.4	9,763	10.0	26.5	11,435	11.5	28.8
Race/ethnicity															
American Indian/Alaska Native	47	—	17.2	47	—	16.3	48	—	15.9	58	—	18.3	78	—	23.5
Asian[d]	100	—	7.7	88	—	6.3	84	—	5.7	101	—	6.5	97	—	6.0
Black/African American	7,242	—	18.0	7,203	—	17.5	6,983	—	16.6	6,993	—	16.2	7,930	—	18.1
Hispanic/Latino[e]	3,039	—	12.9	3,099	—	12.7	3,203	—	12.7	3,091	—	11.9	3,570	—	13.5
Native Hawaiian/other Pacific Islander	16	—	20.5	9	—	11.1	16	—	18.4	16	—	17.3	10	—	10.3
White	5,311	—	18.0	5,239	—	17.5	5,152	—	16.9	5,236	—	17.0	5,514	—	17.7
Multiracial	1,034	—	19.4	1,074	—	20.0	1,092	—	20.3	1,090	—	20.2	1,290	—	24.1
Transmission category[f]															
Male-to-male sexual contact	6,968	—	12.8	7,063	—	12.6	6,972	—	12.0	7,250	—	12.1	7,874	—	12.9
Injection drug use	3,828	—	30.2	3,718	—	29.7	3,651	—	29.4	3,526	—	28.6	3,874	—	31.7
Male	2,403	—	32.1	2,302	—	31.1	2,295	—	31.4	2,191	—	30.3	2,424	—	33.9
Female	1,425	—	27.6	1,416	—	27.5	1,356	—	26.5	1,335	—	26.2	1,450	—	28.7
Male-to-male sexual contact and injection drug use	1,423	—	24.0	1,396	—	23.5	1,467	—	24.7	1,390	—	23.4	1,621	—	27.4
Heterosexual contact[g]	4,386	—	16.8	4,402	—	16.5	4,308	—	15.9	4,261	—	15.4	4,918	—	17.6
Male	1,766	—	22.0	1,783	—	21.9	1,664	—	20.1	1,742	—	20.8	1,922	—	22.8
Female	2,620	—	14.5	2,619	—	14.1	2,644	—	14.0	2,519	—	13.1	2,995	—	15.4
Other[h]	187	—	12.7	181	—	12.1	180	—	11.8	163	—	10.5	202	—	12.7
Male	109	—	14.2	109	—	14.0	115	—	14.6	98	—	12.4	121	—	15.1
Female	78	—	11.1	72	—	10.0	65	—	8.8	64	—	8.5	81	—	10.4
Region of residence															
Northeast	3,709	7.8	15.9	3,699	7.7	15.7	3,528	7.4	14.9	3,632	7.6	15.2	4,424	9.3	18.5
Midwest	1,857	3.3	15.9	1,915	3.4	15.9	2,004	3.5	16.2	1,938	3.4	15.3	2,230	3.9	17.3
South	8,049	7.9	18.2	7,996	7.8	17.5	7,870	7.6	16.8	7,893	7.5	16.4	8,607	8.1	17.6
West	2,756	4.3	14.2	2,740	4.3	13.8	2,807	4.3	13.7	2,767	4.2	13.2	2,899	4.4	13.6
U.S. dependent areas	421	13.0	24.4	411	12.9	24.3	369	11.9	22.0	359	11.5	21.3	329	10.6	19.6
Total[i]	**16,792**	**6.1**	**16.7**	**16,761**	**6.1**	**16.3**	**16,578**	**6.0**	**15.8**	**16,589**	**5.9**	**15.5**	**18,489**	**6.6**	**17.0**

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 not available, state at death (where a person's death occurred) was used. 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. Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021.

[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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[g] Sexual 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.

[i] Includes persons of unknown race/ethnicity.

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2016–2020—United States and 6 dependent areas

	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
			2016		
Alabama	258	6.3	6.0	20.3	19.3
Alaska	12	2.0	1.9	17.1	16.2
Arizona	243	4.2	4.1	15.7	13.6
Arkansas	98	3.9	3.8	18.0	16.3
California	1,771	5.4	5.2	14.0	11.8
Colorado	128	2.8	2.7	10.7	8.5
Connecticut	199	6.5	5.7	19.3	13.8
Delaware	56	7.0	6.1	17.6	16.6
District of Columbia	234	39.5	43.1	16.2	13.5
Florida	2,127	12.0	11.0	19.6	16.8
Georgia	850	10.0	9.7	16.5	15.8
Hawaii	38	3.2	2.9	15.5	11.1
Idaho	12	0.9	0.8	11.1	10.3
Illinois	529	4.9	4.7	15.2	13.9
Indiana	200	3.6	3.5	18.4	17.0
Iowa	33	1.3	1.2	12.9	11.0
Kansas	51	2.1	2.1	17.2	14.9
Kentucky	122	3.3	3.2	17.7	15.7
Louisiana	417	10.8	10.8	20.7	19.4
Maine	23	2.0	1.8	15.0	10.1
Maryland	649	12.9	11.8	19.8	16.9
Massachusetts	293	5.0	4.4	14.5	10.5
Michigan	288	3.4	3.2	18.6	17.3
Minnesota	74	1.6	1.5	9.2	9.1
Mississippi	208	8.4	8.2	22.5	21.6
Missouri	196	3.8	3.6	16.2	14.7
Montana	17	1.9	1.9	28.7	20.5
Nebraska	29	1.9	1.8	14.0	13.9
Nevada	150	6.2	5.9	16.7	15.5
New Hampshire	20	1.7	1.8	17.1	13.8
New Jersey	645	8.6	7.6	18.6	14.5
New Mexico	48	2.8	2.5	14.4	12.4
New York	1,868	11.2	10.1	14.8	11.8
North Carolina	523	6.1	5.8	17.3	15.8
North Dakota	5	0.8	0.9	13.3	9.0
Ohio	354	3.6	3.5	16.6	14.9
Oklahoma	119	3.7	3.6	20.0	18.4
Oregon	104	3.0	2.8	15.4	12.8
Pennsylvania	611	5.6	5.1	17.0	14.4
Rhode Island	39	4.3	3.7	16.0	11.8
South Carolina	342	8.2	7.7	21.0	18.6
South Dakota	11	1.6	1.5	20.1	19.4
Tennessee	330	5.9	5.6	20.1	19.0
Texas	1,359	6.0	6.1	15.8	15.5
Utah	50	2.1	2.3	18.2	17.3
Vermont	11	2.0	1.5	16.7	10.7
Virginia	317	4.5	4.2	14.5	12.7
Washington	178	2.9	2.7	13.9	12.9
West Virginia	40	2.6	2.4	22.5	21.1
Wisconsin	87	1.8	1.6	14.5	11.9
Wyoming	5	1.0	1.1	16.0	12.0
Subtotal	16,371	6.1	5.7	16.6	14.4
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	3	2.4	2.9	32.3	31.9
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	406	13.8	13.1	24.5	19.8
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	12	13.6	11.0	21.9	49.5
Subtotal	421	13.0	12.3	24.4	20.4
Total	**16,792**	**6.1**	**5.8**	**16.7**	**14.5**

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2016–2020—United States and 6 dependent areas *(cont)*

	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
			2017		
Alabama	261	6.4	6.3	19.7	18.1
Alaska	7	1.2	1.2	9.7	8.5
Arizona	248	4.2	4.0	15.5	13.7
Arkansas	105	4.2	4.1	18.6	16.8
California	1,726	5.3	5.0	13.3	11.1
Colorado	132	2.8	2.7	10.7	8.4
Connecticut	199	6.5	5.4	18.9	15.1
Delaware	67	8.3	7.0	20.1	13.8
District of Columbia	233	38.9	41.1	16.2	13.2
Florida	2,045	11.4	10.1	18.4	15.0
Georgia	840	9.7	9.4	15.7	14.8
Hawaii	37	3.1	2.9	15.2	15.6
Idaho	20	1.4	1.4	17.6	13.8
Illinois	507	4.7	4.4	14.4	13.2
Indiana	210	3.8	3.7	18.7	16.8
Iowa	44	1.7	1.7	16.3	13.2
Kansas	47	2.0	1.9	15.5	14.3
Kentucky	139	3.7	3.5	19.4	16.7
Louisiana	411	10.6	10.5	19.9	18.7
Maine	34	2.9	2.3	21.3	14.9
Maryland	601	11.9	10.8	18.1	14.9
Massachusetts	306	5.2	4.6	14.8	11.6
Michigan	277	3.3	3.1	17.4	15.8
Minnesota	91	2.0	1.9	10.9	9.4
Mississippi	219	8.8	8.8	23.2	21.4
Missouri	214	4.2	4.1	17.2	14.7
Montana	15	1.7	1.7	23.8	21.1
Nebraska	33	2.1	2.0	15.4	14.5
Nevada	175	7.1	6.6	18.1	16.3
New Hampshire	21	1.8	1.6	17.6	13.8
New Jersey	645	8.6	7.5	18.4	13.9
New Mexico	62	3.6	3.3	17.8	13.5
New York	1,802	10.8	9.6	14.2	10.8
North Carolina	553	6.4	5.9	17.7	15.4
North Dakota	3	0.5	0.4	7.3	8.7
Ohio	379	3.9	3.7	17.1	15.6
Oklahoma	108	3.3	3.4	17.7	16.8
Oregon	116	3.3	3.0	16.7	12.5
Pennsylvania	646	5.9	5.4	18.0	14.6
Rhode Island	34	3.7	3.3	13.2	9.8
South Carolina	338	8.0	7.2	20.2	17.7
South Dakota	9	1.3	1.3	15.4	12.5
Tennessee	334	5.9	5.6	19.8	18.4
Texas	1,414	6.2	6.2	15.8	15.1
Utah	22	0.9	1.0	7.9	8.4
Vermont	12	2.2	1.9	17.3	11.5
Virginia	297	4.2	3.8	13.2	10.9
Washington	175	2.8	2.6	13.2	10.4
West Virginia	31	2.0	1.8	17.0	13.9
Wisconsin	101	2.1	1.9	16.2	12.8
Wyoming	5	1.0	0.9	15.2	25.3
Subtotal	16,350	6.0	5.6	16.2	13.7
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	0	0.0	0.0	0.0	0.0
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	405	14.0	13.1	24.9	19.4
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	6	6.8	6.5	11.4	8.7
Subtotal	411	12.9	12.0	24.3	18.9
Total	**16,761**	**6.1**	**5.7**	**16.3**	**13.8**

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2016–2020—United States and 6 dependent areas *(cont)*

	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
			2018		
Alabama	234	5.7	5.4	17.1	15.3
Alaska	9	1.5	1.4	12.6	9.3
Arizona	251	4.2	4.0	15.1	12.7
Arkansas	83	3.3	3.4	14.4	12.8
California	1,732	5.3	4.9	13.1	10.6
Colorado	143	3.0	2.9	11.2	8.5
Connecticut	182	5.9	5.0	17.1	11.7
Delaware	68	8.3	7.1	20.3	14.9
District of Columbia	202	33.5	36.6	14.2	11.5
Florida	1,938	10.6	9.4	17.2	13.6
Georgia	862	9.9	9.5	15.5	14.3
Hawaii	36	3.0	2.6	15.1	10.4
Idaho	15	1.0	1.1	12.7	8.8
Illinois	558	5.2	4.8	15.5	13.7
Indiana	195	3.5	3.4	16.9	15.0
Iowa	50	1.9	1.8	17.7	14.1
Kansas	51	2.1	2.0	16.3	14.8
Kentucky	136	3.6	3.5	18.3	15.9
Louisiana	429	11.1	10.8	20.3	18.3
Maine	20	1.7	1.5	12.3	8.4
Maryland	632	12.4	11.1	18.7	15.2
Massachusetts	306	5.2	4.6	14.6	10.9
Michigan	313	3.7	3.3	19.2	17.2
Minnesota	87	1.9	1.8	10.1	8.0
Mississippi	228	9.2	9.1	23.7	21.1
Missouri	234	4.6	4.3	18.3	15.6
Montana	13	1.5	1.4	20.0	16.3
Nebraska	31	2.0	1.8	14.2	12.9
Nevada	160	6.3	5.9	15.6	13.6
New Hampshire	18	1.5	1.4	14.3	15.5
New Jersey	637	8.5	7.3	18.1	13.7
New Mexico	75	4.3	4.2	20.2	16.0
New York	1,738	10.5	9.2	13.6	10.1
North Carolina	533	6.1	5.5	16.6	13.8
North Dakota	8	1.3	1.3	17.5	24.1
Ohio	373	3.8	3.6	16.4	14.1
Oklahoma	117	3.6	3.4	18.7	17.2
Oregon	106	3.0	2.7	14.8	12.6
Pennsylvania	575	5.3	4.7	15.8	12.5
Rhode Island	41	4.5	4.0	15.6	10.9
South Carolina	316	7.4	6.9	18.4	15.6
South Dakota	13	1.8	1.9	20.8	16.3
Tennessee	359	6.3	6.0	20.5	18.3
Texas	1,379	5.9	5.9	14.8	14.0
Utah	46	1.9	2.1	15.4	13.6
Vermont	11	2.0	1.5	15.4	9.4
Virginia	307	4.3	4.0	13.2	11.3
Washington	214	3.4	3.1	15.6	12.1
West Virginia	47	3.0	2.8	24.3	21.1
Wisconsin	91	1.9	1.7	14.3	12.1
Wyoming	7	1.5	1.4	19.7	15.6
Subtotal	16,209	5.9	5.5	15.7	13.0
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	4	3.1	3.7	38.5	39.2
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	361	12.9	11.7	22.4	18.7
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	4	4.5	3.1	7.5	4.8
Subtotal	369	11.9	10.8	22.0	18.4
Total	16,578	6.0	5.5	15.8	13.1

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2016–2020—United States and 6 dependent areas *(cont)*

	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
			2019		
Alabama	272	6.6	6.2	19.3	16.8
Alaska	12	2.0	2.0	16.3	13.3
Arizona	234	3.8	3.7	13.5	11.4
Arkansas	107	4.2	4.1	17.8	16.8
California	1,764	5.3	5.0	13.1	10.8
Colorado	130	2.7	2.6	9.9	8.4
Connecticut	204	6.7	5.5	18.9	12.8
Delaware	77	9.3	8.6	22.4	17.7
District of Columbia	201	33.1	35.3	14.1	10.9
Florida	1,989	10.8	9.3	17.3	13.7
Georgia	837	9.5	9.0	14.6	13.2
Hawaii	44	3.7	3.1	18.3	13.0
Idaho	11	0.7	0.7	8.8	6.2
Illinois	548	5.1	4.7	15.1	13.2
Indiana	164	2.9	2.8	14.0	11.8
Iowa	61	2.3	2.0	20.8	17.0
Kansas	38	1.6	1.5	11.9	10.8
Kentucky	110	2.9	2.7	14.3	12.8
Louisiana	379	9.8	9.7	17.6	15.9
Maine	41	3.5	3.0	24.3	17.8
Maryland	608	11.9	10.6	17.9	14.2
Massachusetts	299	5.0	4.5	14.1	10.8
Michigan	278	3.3	3.0	16.5	14.5
Minnesota	83	1.8	1.7	9.4	8.3
Mississippi	190	7.7	7.6	19.2	17.3
Missouri	230	4.5	4.2	17.7	16.2
Montana	13	1.4	1.4	19.3	15.1
Nebraska	33	2.1	2.1	14.7	11.6
Nevada	155	6.0	5.8	14.3	13.5
New Hampshire	17	1.4	1.3	12.9	8.3
New Jersey	624	8.3	7.0	17.5	12.6
New Mexico	56	3.2	3.0	14.5	11.3
New York	1,795	10.8	9.4	14.0	10.3
North Carolina	509	5.7	5.3	15.2	12.5
North Dakota	5	0.8	0.8	10.0	10.1
Ohio	399	4.0	3.8	16.9	15.0
Oklahoma	142	4.3	4.2	21.8	19.4
Oregon	127	3.5	3.3	17.2	13.3
Pennsylvania	602	5.5	4.9	16.3	12.7
Rhode Island	40	4.4	3.5	14.8	10.9
South Carolina	314	7.2	6.5	17.7	15.2
South Dakota	11	1.5	1.7	16.7	13.7
Tennessee	314	5.5	5.2	17.5	15.0
Texas	1,467	6.2	6.2	15.2	13.9
Utah	37	1.5	1.5	11.9	9.9
Vermont	10	1.8	1.6	13.8	9.0
Virginia	330	4.6	4.1	13.8	11.1
Washington	179	2.8	2.6	12.7	10.3
West Virginia	47	3.1	2.8	23.1	18.0
Wisconsin	88	1.8	1.6	13.4	10.7
Wyoming	5	1.0	0.8	14.3	10.5
Subtotal	16,230	5.9	5.4	15.4	12.6
U.S. dependent areas					
American Samoa	2	5.5	6.6	666.7	365.5
Guam	4	3.1	3.2	35.7	25.7
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	353	12.6	12.0	21.8	17.4
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	0	0.0	0.0	0.0	0.0
Subtotal	359	11.5	11.0	21.3	17.0
Total	**16,589**	**5.9**	**5.4**	**15.5**	**12.7**

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2016–2020—United States and 6 dependent areas *(cont)*

	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
	2020 (COVID-19 pandemic)				
Alabama	268	6.5	6.1	18.6	16.7
Alaska	17	2.8	2.7	22.8	18.1
Arizona	280	4.5	4.2	15.6	13.0
Arkansas	106	4.2	3.9	17.2	15.8
California	1,783	5.4	4.9	13.1	10.3
Colorado	166	3.4	3.2	12.4	9.7
Connecticut	212	6.9	5.8	19.7	13.0
Delaware	62	7.4	6.2	17.7	14.5
District of Columbia	272	44.6	46.2	19.3	13.8
Florida	2,207	11.8	10.2	18.9	14.7
Georgia	895	10.0	9.5	15.3	13.7
Hawaii	35	2.9	2.5	14.5	14.4
Idaho	19	1.3	1.1	14.8	10.0
Illinois	699	6.6	5.9	19.2	16.3
Indiana	206	3.7	3.4	17.1	14.1
Iowa	59	2.2	2.1	19.7	16.1
Kansas[b]	32	1.3	1.2	9.5	7.5
Kentucky	158	4.2	4.1	19.6	17.3
Louisiana	457	11.8	11.5	20.9	19.1
Maine	26	2.2	1.8	15.4	9.5
Maryland[c]	642	12.6	11.2	18.9	15.0
Massachusetts	311	5.2	4.5	14.6	10.2
Michigan	350	4.1	3.7	20.3	17.4
Minnesota	94	2.0	1.7	10.3	8.9
Mississippi	240	9.7	9.0	24.1	21.1
Missouri	243	4.7	4.3	18.6	15.7
Montana	9	1.0	1.1	12.9	9.1
Nebraska	25	1.6	1.6	10.7	8.6
Nevada	172	6.5	6.0	15.3	13.0
New Hampshire	12	1.0	0.9	9.0	7.1
New Jersey	717	9.5	8.1	20.0	14.6
New Mexico	78	4.4	4.0	19.5	14.8
New York	2,397	14.6	12.4	18.8	13.6
North Carolina[b]	563	6.3	5.6	16.5	13.8
North Dakota	5	0.8	0.8	9.5	8.4
Ohio	414	4.2	3.9	17.2	14.7
Oklahoma	155	4.7	4.4	22.9	19.7
Oregon	120	3.3	2.9	16.1	12.2
Pennsylvania	690	6.3	5.5	18.5	14.7
Rhode Island	48	5.2	4.4	17.7	11.6
South Carolina[b]	234	5.3	4.7	12.9	10.5
South Dakota	5	0.7	0.8	7.2	5.4
Tennessee	423	7.3	6.9	22.7	20.4
Texas	1,540	6.4	6.3	15.6	14.0
Utah	29	1.1	1.2	8.8	7.0
Vermont[b]	11	2.0	1.9	15.1	12.8
Virginia	334	4.6	4.2	13.7	10.9
Washington	184	2.8	2.7	12.7	11.3
West Virginia	51	3.3	3.3	23.8	20.2
Wisconsin	98	2.0	1.8	14.5	10.9
Wyoming	7	1.4	1.3	19.3	15.2
Subtotal	18,160	6.5	5.9	16.9	13.7
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam[b]	0	0.0	0.0	0.0	0.0
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico[b]	323	11.5	10.3	20.0	14.2
Republic of Palau	1	5.5	6.0	100.0	87.5
U.S. Virgin Islands	5	5.7	4.5	9.4	6.7
Subtotal	329	10.6	9.4	19.6	13.9
Total	**18,489**	**6.6**	**6.0**	**17.0**	**13.7**

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 not available, state at death (where a person's death occurred) was used. 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. Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021.

[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 2020.

[c] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

Table 6d. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and selected characteristics, 2016–2020—United States

	2016			2017			2018			2019			2020 (COVID-19 pandemic)		
	No.	Rate per 100,000 pop.	Rate per 1,000 PWA[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWA[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWA[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWA[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWA[a]
Gender															
Male	9,703	—	24.3	9,659	—	24.0	9,445	—	23.3	9,413	—	23.0	10,386	—	25.3
Female	3,167	—	25.2	3,093	—	24.4	3,113	—	24.3	2,919	—	22.7	3,345	—	25.9
Transgender woman[b]	99	—	20.8	75	—	15.3	88	—	17.3	104	—	19.9	139	—	26.1
Transgender man[b]	1	—	6.2	4	—	23.8	2	—	11.6	3	—	16.6	5	—	27.5
Additional gender identity[c]	1	—	15.9	2	—	28.2	1	—	13.7	1	—	13.9	0	—	0.0
Age at death (yr)															
13–24	95	0.2	10.2	89	0.2	10.8	77	0.2	10.5	70	0.1	10.9	70	0.1	12.5
25–34	771	1.7	15.4	709	1.6	14.2	719	1.6	14.5	710	1.5	14.4	721	1.6	15.0
35–44	1,540	3.8	16.1	1,403	3.4	15.3	1,340	3.2	15.0	1,294	3.1	14.8	1,413	3.4	16.6
45–54	3,823	9.0	20.0	3,616	8.6	19.6	3,369	8.1	19.1	2,876	7.0	17.4	2,873	7.1	18.6
≥55	6,742	7.4	36.7	7,016	7.6	35.0	7,144	7.6	32.9	7,490	7.8	31.9	8,798	9.0	35.0
Race/ethnicity															
American Indian/Alaska Native	37	1.9	26.7	36	1.8	25.3	34	1.7	23.5	45	2.3	30.5	54	2.7	35.7
Asian[d]	82	0.5	13.5	67	0.4	10.5	64	0.4	9.7	77	0.5	11.3	74	0.4	10.5
Black/African American	5,722	17.3	26.7	5,648	16.9	26.1	5,450	16.2	24.9	5,350	15.7	24.2	6,018	17.6	27.1
Hispanic/Latino[e]	2,177	5.0	17.8	2,239	5.0	18.0	2,309	5.0	18.3	2,212	4.7	17.3	2,587	5.4	20.0
Native Hawaiian/other Pacific Islander	10	2.2	26.2	8	1.7	20.5	9	1.9	22.3	12	2.4	28.9	9	1.8	21.6
White	4,080	2.4	26.4	3,942	2.3	25.5	3,882	2.3	25.1	3,849	2.2	24.8	4,079	2.4	26.4
Multiracial	863	19.6	27.9	893	19.6	28.9	901	19.2	29.2	894	18.4	29.2	1,054	21.0	34.6
Transmission category[f]															
Male-to-male sexual contact	5,366	—	20.1	5,420	—	19.9	5,245	—	19.0	5,401	—	19.3	5,890	—	20.8
Injection drug use	2,974	—	37.6	2,861	—	36.8	2,764	—	36.1	2,628	—	34.8	2,918	—	39.3
Male	1,850	—	38.6	1,764	—	37.5	1,724	—	37.3	1,622	—	35.8	1,816	—	40.8
Female	1,124	—	36.1	1,097	—	35.6	1,040	—	34.1	1,006	—	33.3	1,102	—	37.0
Male-to-male sexual contact and injection drug use	1,156	—	31.7	1,135	—	31.4	1,221	—	34.1	1,103	—	31.2	1,282	—	36.7
Heterosexual contact[g]	3,323	—	24.0	3,267	—	23.3	3,273	—	23.0	3,169	—	22.0	3,607	—	24.9
Male	1,347	—	28.3	1,331	—	27.6	1,250	—	25.7	1,307	—	26.6	1,433	—	29.1
Female	1,976	—	21.8	1,936	—	21.0	2,024	—	21.6	1,862	—	19.7	2,175	—	22.8
Other[h]	152	—	17.9	151	—	17.6	145	—	16.8	138	—	15.9	178	—	20.4
Male	85	—	18.6	87	—	19.0	93	—	20.3	84	—	18.3	104	—	22.8
Female	68	—	17.2	64	—	16.0	52	—	12.9	54	—	13.2	73	—	17.8
Region of residence															
Northeast	2,924	6.1	21.8	2,882	6.0	21.6	2,753	5.8	20.7	2,843	5.9	21.5	3,419	7.2	26.1
Midwest	1,443	2.5	24.3	1,448	2.5	24.0	1,531	2.7	25.0	1,430	2.5	23.2	1,679	2.9	27.0
South	6,369	6.2	27.5	6,265	6.1	26.6	6,085	5.8	25.5	6,006	5.7	24.9	6,510	6.1	26.7
West	2,235	3.5	21.3	2,238	3.5	21.1	2,280	3.5	21.3	2,161	3.3	20.0	2,267	3.4	21.0
Population area of residence															
Metropolitan statistical areas (pop. ≥500,000)	8,321	4.5	19.4	8,320	4.5	19.1	8,081	4.3	18.5	8,330	4.4	18.8	9,570	5.0	21.5
Metropolitan areas (pop. 50,000–499,999)	1,086	2.3	21.5	1,186	2.5	22.9	1,179	2.5	22.4	1,225	2.5	22.5	1,282	2.7	23.4
Nonmetropolitan areas (pop. <50,000)	693	1.8	23.9	759	2.0	25.4	668	1.7	22.1	732	1.9	23.8	817	2.1	26.3
Total[i]	**12,971**	**4.8**	**24.5**	**12,833**	**4.7**	**24.0**	**12,649**	**4.6**	**23.4**	**12,440**	**4.5**	**22.9**	**13,875**	**5.0**	**25.4**

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 ever classified as stage 3 (AIDS) may be due to any cause. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used. 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. Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021.

[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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[g] Data presented based on sex at birth and include transgender persons.

[h] Sexual 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 persons of unknown race/ethnicity.

Table 6e. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and selected characteristics, 2016–2020—United States and 6 dependent areas

	2016			2017			2018			2019			2020 (COVID-19 pandemic)		
	No.	Rate per 100,000 pop.	Rate per 1,000 PWA[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWA[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWA[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWA[a]	No.	Rate per 100,000 pop.	Rate per 1,000 PWA[a]
Gender															
Male	9,933	—	24.5	9,864	—	24.1	9,642	—	23.4	9,601	—	23.1	10,563	—	25.3
Female	3,231	—	25.1	3,166	—	24.4	3,161	—	24.2	2,977	—	22.7	3,393	—	25.8
Transgender woman[b]	99	—	20.7	77	—	15.7	89	—	17.5	106	—	20.3	140	—	26.2
Transgender man[b]	1	—	6.2	4	—	23.8	2	—	11.6	3	—	16.5	5	—	27.2
Additional gender identity[c]	1	—	15.9	2	—	28.2	1	—	13.7	1	—	13.9	0	—	0.0
Age at death (yr)															
13–24	100	0.2	10.6	91	0.2	10.9	81	0.2	10.9	71	0.1	10.9	70	0.1	12.3
25–34	779	1.7	15.4	723	1.6	14.3	732	1.6	14.6	719	1.5	14.4	725	1.6	14.9
35–44	1,582	3.9	16.3	1,438	3.5	15.5	1,373	3.3	15.2	1,322	3.1	15.0	1,442	3.4	16.7
45–54	3,914	9.1	20.1	3,702	8.7	19.7	3,428	8.2	19.1	2,959	7.2	17.6	2,921	7.2	18.6
≥55	6,890	7.5	36.7	7,159	7.6	35.0	7,281	7.6	32.8	7,617	7.8	31.8	8,943	9.0	34.9
Race/ethnicity															
American Indian/Alaska Native	37	—	26.7	36	—	25.3	34	—	23.5	45	—	30.4	54	—	35.7
Asian[d]	82	—	13.4	67	—	10.5	64	—	9.6	77	—	11.2	74	—	10.5
Black/African American	5,732	—	26.7	5,651	—	26.1	5,450	—	24.9	5,350	—	24.2	6,019	—	27.1
Hispanic/Latino[e]	2,457	—	18.7	2,516	—	18.9	2,551	—	18.9	2,454	—	18.0	2,811	—	20.4
Native Hawaiian/other Pacific Islander	12	—	30.2	8	—	19.6	11	—	26.0	14	—	32.3	9	—	20.8
White	4,081	—	26.4	3,942	—	25.5	3,883	—	25.1	3,850	—	24.8	4,080	—	26.4
Multiracial	864	—	28.0	893	—	28.9	902	—	29.3	897	—	29.2	1,054	—	34.6
Transmission category[f]															
Male-to-male sexual contact	5,420	—	20.1	5,470	—	19.9	5,296	—	19.0	5,457	—	19.3	5,943	—	20.8
Injection drug use	3,093	—	37.7	2,970	—	36.8	2,868	—	36.1	2,729	—	34.9	3,001	—	39.0
Male	1,944	—	38.7	1,852	—	37.6	1,806	—	37.4	1,702	—	35.9	1,884	—	40.5
Female	1,149	—	36.1	1,117	—	35.6	1,062	—	34.2	1,027	—	33.4	1,116	—	36.8
Male-to-male sexual contact and injection drug use	1,185	—	32.0	1,153	—	31.5	1,238	—	34.1	1,120	—	31.2	1,301	—	36.7
Heterosexual contact[g]	3,408	—	24.0	3,367	—	23.4	3,339	—	22.9	3,242	—	22.0	3,677	—	24.9
Male	1,395	—	28.5	1,379	—	27.8	1,291	—	25.8	1,344	—	26.6	1,469	—	29.0
Female	2,013	—	21.7	1,988	—	21.1	2,048	—	21.4	1,898	—	19.6	2,208	—	22.7
Other[h]	158	—	18.2	153	—	17.5	153	—	17.4	141	—	16.0	179	—	20.2
Male	89	—	19.0	88	—	18.9	99	—	21.2	86	—	18.4	106	—	22.6
Female	70	—	17.3	65	—	15.9	54	—	13.2	55	—	13.2	73	—	17.5
Region of residence															
Northeast	2,924	6.1	21.8	2,882	6.0	21.6	2,753	5.8	20.7	2,843	5.9	21.5	3,419	7.2	26.1
Midwest	1,443	2.5	24.3	1,448	2.5	24.0	1,531	2.7	25.0	1,430	2.5	23.2	1,679	2.9	27.0
South	6,369	6.2	27.5	6,265	6.1	26.6	6,085	5.8	25.5	6,006	5.7	24.9	6,510	6.1	26.7
West	2,235	3.5	21.3	2,238	3.5	21.1	2,280	3.5	21.3	2,161	3.3	20.0	2,267	3.4	21.0
U.S. dependent areas	294	9.1	31.5	280	8.8	30.7	246	7.9	27.3	248	7.9	27.6	226	7.3	25.3
Total[i]	**13,265**	**4.8**	**24.6**	**13,113**	**4.8**	**24.1**	**12,895**	**4.6**	**23.5**	**12,688**	**4.5**	**23.0**	**14,101**	**5.0**	**25.4**

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 ever classified as stage 3 (AIDS) may be due to any cause. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used. 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. Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021.

[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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[g] Sexual 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 was not reported or not identified.

[i] Includes persons of unknown race/ethnicity.

Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2016–2020—United States and 6 dependent areas

	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
			2016		
Alabama	192	4.7	4.5	33.5	31.7
Alaska	7	1.2	1.1	18.0	14.2
Arizona	196	3.4	3.3	25.9	20.4
Arkansas	69	2.8	2.7	27.3	21.6
California	1,458	4.5	4.3	20.6	17.7
Colorado	99	2.1	2.1	18.4	14.0
Connecticut	162	5.3	4.6	25.0	17.3
Delaware	47	5.8	5.1	23.9	27.2
District of Columbia	184	31.1	34.1	23.7	19.0
Florida	1,731	9.8	8.9	28.9	24.5
Georgia	670	7.9	7.7	25.2	23.2
Hawaii	30	2.5	2.3	21.1	14.7
Idaho	8	0.6	0.5	14.7	11.1
Illinois	410	3.8	3.6	23.0	19.8
Indiana	162	2.9	2.9	29.4	25.3
Iowa	28	1.1	1.0	19.3	15.5
Kansas	37	1.5	1.5	23.9	18.2
Kentucky	95	2.6	2.4	27.1	22.9
Louisiana	331	8.5	8.6	31.2	29.6
Maine	16	1.4	1.2	20.4	11.8
Maryland	515	10.2	9.3	29.0	23.4
Massachusetts	218	3.7	3.2	19.1	12.5
Michigan	228	2.7	2.5	28.0	24.0
Minnesota	57	1.2	1.1	15.1	14.8
Mississippi	164	6.6	6.5	35.6	31.2
Missouri	162	3.2	2.9	25.3	21.8
Montana	14	1.6	1.6	41.2	25.1
Nebraska	27	1.7	1.7	25.4	22.7
Nevada	117	4.8	4.6	26.3	26.4
New Hampshire	15	1.3	1.3	24.5	19.2
New Jersey	472	6.3	5.6	25.9	21.3
New Mexico	41	2.4	2.1	21.8	17.5
New York	1,535	9.2	8.3	20.6	16.5
North Carolina	383	4.5	4.2	27.7	25.8
North Dakota	4	0.6	0.7	21.3	12.6
Ohio	254	2.6	2.5	24.6	20.0
Oklahoma	91	2.8	2.7	30.9	25.7
Oregon	84	2.4	2.3	21.6	15.4
Pennsylvania	461	4.2	3.8	22.8	19.3
Rhode Island	34	3.7	3.2	24.5	14.6
South Carolina	278	6.7	6.3	31.0	25.7
South Dakota	6	0.9	0.8	23.3	21.7
Tennessee	245	4.4	4.2	29.3	25.4
Texas	1,095	4.8	4.9	24.4	22.1
Utah	39	1.6	1.8	27.0	20.7
Vermont	11	2.0	1.5	30.6	16.6
Virginia	246	3.5	3.2	23.2	21.2
Washington	138	2.3	2.1	19.7	17.6
West Virginia	33	2.1	1.9	32.7	26.1
Wisconsin	68	1.4	1.3	22.7	17.1
Wyoming	4	0.8	0.9	23.0	12.8
Subtotal	12,971	4.8	4.5	24.5	20.8
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	3	2.4	2.9	81.1	69.1
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	279	9.5	9.0	31.1	28.0
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	12	13.6	11.0	39.6	101.8
Subtotal	294	9.1	8.6	31.5	31.1
Total	**13,265**	**4.8**	**4.6**	**24.6**	**21.0**

Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2016–2020—United States and 6 dependent areas *(cont)*

	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
			2017		
Alabama	199	4.9	4.8	33.6	28.4
Alaska	4	0.7	0.7	10.2	7.6
Arizona	195	3.3	3.1	25.3	25.7
Arkansas	79	3.2	3.1	30.2	25.3
California	1,435	4.4	4.2	20.2	17.2
Colorado	106	2.2	2.2	19.6	18.8
Connecticut	160	5.2	4.3	24.6	23.0
Delaware	58	7.1	6.0	28.4	18.0
District of Columbia	161	26.9	28.4	21.0	18.1
Florida	1,644	9.1	8.2	27.2	21.9
Georgia	656	7.6	7.3	23.9	21.6
Hawaii	31	2.6	2.5	21.9	36.3
Idaho	15	1.1	1.1	26.5	20.1
Illinois	381	3.6	3.3	21.4	19.2
Indiana	164	3.0	2.8	29.1	26.1
Iowa	31	1.2	1.2	20.5	14.2
Kansas	37	1.5	1.5	23.4	25.7
Kentucky	108	2.9	2.7	30.2	23.2
Louisiana	313	8.1	8.0	29.2	28.6
Maine	24	2.1	1.7	29.6	22.8
Maryland	474	9.4	8.5	26.5	19.5
Massachusetts	232	3.9	3.4	20.3	13.0
Michigan	226	2.7	2.5	27.5	23.3
Minnesota	70	1.5	1.4	18.0	14.6
Mississippi	174	7.0	7.0	37.0	32.0
Missouri	155	3.0	2.9	24.1	18.6
Montana	13	1.5	1.4	37.6	37.7
Nebraska	23	1.5	1.4	21.6	17.3
Nevada	137	5.5	5.1	29.1	29.4
New Hampshire	15	1.3	1.1	24.6	19.0
New Jersey	474	6.3	5.5	25.9	18.7
New Mexico	49	2.8	2.5	25.7	16.6
New York	1,470	8.8	7.8	19.9	15.0
North Carolina	393	4.6	4.2	27.7	23.7
North Dakota	3	0.5	0.4	15.3	14.6
Ohio	278	2.8	2.7	26.2	22.6
Oklahoma	82	2.5	2.6	27.4	25.2
Oregon	85	2.4	2.2	21.5	14.1
Pennsylvania	474	4.3	3.9	24.0	18.8
Rhode Island	28	3.1	2.6	19.4	14.4
South Carolina	263	6.2	5.6	28.9	23.3
South Dakota	3	0.4	0.5	11.2	8.0
Tennessee	259	4.6	4.4	30.5	27.3
Texas	1,147	5.0	5.0	25.0	23.5
Utah	19	0.8	0.8	13.5	9.4
Vermont	5	0.9	0.8	13.5	11.2
Virginia	230	3.2	2.9	21.1	17.9
Washington	145	2.3	2.2	20.3	14.7
West Virginia	25	1.6	1.5	24.7	19.0
Wisconsin	77	1.6	1.5	25.1	18.0
Wyoming	4	0.8	0.7	22.3	51.9
Subtotal	12,833	4.7	4.4	24.0	20.1
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	0	0.0	0.0	0.0	0.0
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	276	9.6	8.9	31.4	28.8
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	4	4.5	4.0	14.0	10.5
Subtotal	280	8.8	8.2	30.7	28.0
Total	13,113	4.8	4.4	24.1	20.2

Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2016–2020—United States and 6 dependent areas *(cont)*

	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
			2018		
Alabama	166	4.0	3.9	27.4	24.1
Alaska	8	1.3	1.2	20.8	13.4
Arizona	200	3.3	3.2	25.3	22.8
Arkansas	62	2.5	2.5	23.6	20.6
California	1,412	4.3	4.0	19.9	17.3
Colorado	116	2.4	2.4	20.9	15.1
Connecticut	147	4.8	4.0	22.6	13.9
Delaware	54	6.6	5.6	26.6	18.2
District of Columbia	155	25.7	28.0	20.2	19.0
Florida	1,534	8.4	7.4	25.3	20.0
Georgia	661	7.6	7.3	23.5	20.1
Hawaii	31	2.6	2.2	22.6	15.4
Idaho	13	0.9	0.9	22.4	15.0
Illinois	428	4.0	3.7	23.8	20.1
Indiana	144	2.6	2.5	25.0	23.5
Iowa	37	1.4	1.3	24.1	16.2
Kansas	40	1.7	1.5	24.7	26.7
Kentucky	102	2.7	2.6	28.4	25.0
Louisiana	331	8.6	8.3	30.5	26.1
Maine	16	1.4	1.3	19.3	13.9
Maryland	499	9.8	8.7	27.9	21.7
Massachusetts	231	3.9	3.4	20.3	13.4
Michigan	242	2.9	2.5	29.2	24.8
Minnesota	66	1.4	1.3	16.7	12.0
Mississippi	186	7.5	7.5	39.0	34.2
Missouri	179	3.5	3.2	27.4	23.6
Montana	10	1.1	1.0	28.5	21.3
Nebraska	24	1.5	1.4	22.4	17.3
Nevada	135	5.3	4.9	27.6	24.6
New Hampshire	15	1.3	1.2	24.0	14.2
New Jersey	471	6.3	5.4	25.9	22.0
New Mexico	52	3.0	3.0	26.2	23.1
New York	1,410	8.5	7.5	19.2	13.3
North Carolina	363	4.1	3.8	25.0	19.2
North Dakota	6	1.0	0.9	29.0	25.0
Ohio	289	2.9	2.8	26.8	23.1
Oklahoma	86	2.6	2.5	28.2	32.6
Oregon	89	2.5	2.3	22.3	15.7
Pennsylvania	423	3.9	3.4	21.3	14.9
Rhode Island	32	3.5	3.1	22.0	13.7
South Carolina	240	5.6	5.3	26.0	19.7
South Dakota	11	1.5	1.6	37.9	32.9
Tennessee	275	4.8	4.6	31.4	27.1
Texas	1,109	4.8	4.8	23.7	22.7
Utah	36	1.4	1.6	24.5	38.5
Vermont	8	1.5	1.1	20.9	11.1
Virginia	224	3.1	2.9	20.1	17.8
Washington	171	2.7	2.5	23.5	16.8
West Virginia	38	2.5	2.2	36.5	35.9
Wisconsin	65	1.3	1.2	21.2	17.3
Wyoming	7	1.5	1.4	39.1	26.1
Subtotal	12,649	4.6	4.3	23.4	19.4
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	3	2.4	3.0	69.8	85.3
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	241	8.6	7.8	27.9	32.1
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	2	2.3	1.5	6.9	3.8
Subtotal	246	7.9	7.2	27.3	31.3
Total	12,895	4.6	4.3	23.5	19.5

Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2016–2020—United States and 6 dependent areas *(cont)*

	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
	2019				
Alabama	172	4.2	4.1	27.7	22.0
Alaska	9	1.5	1.4	23.7	18.2
Arizona	171	2.8	2.7	21.2	16.0
Arkansas	77	3.1	3.0	28.3	30.4
California	1,381	4.2	3.9	19.4	19.2
Colorado	99	2.0	1.9	17.6	12.7
Connecticut	169	5.5	4.6	26.0	17.8
Delaware	64	7.7	7.4	31.0	27.8
District of Columbia	146	24.1	25.9	19.3	13.7
Florida	1,551	8.4	7.2	25.4	20.7
Georgia	642	7.3	6.9	22.5	19.2
Hawaii	39	3.3	2.7	28.5	22.1
Idaho	11	0.7	0.7	17.6	11.1
Illinois	410	3.8	3.5	22.9	19.0
Indiana	130	2.3	2.2	22.6	16.2
Iowa	45	1.7	1.5	29.2	20.9
Kansas	30	1.2	1.2	18.6	22.2
Kentucky	84	2.2	2.1	23.0	18.1
Louisiana	297	7.7	7.5	27.1	26.2
Maine	32	2.7	2.3	37.8	34.0
Maryland	455	8.9	7.9	25.5	18.8
Massachusetts	224	3.8	3.3	19.6	14.5
Michigan	217	2.6	2.2	25.7	22.3
Minnesota	58	1.2	1.2	14.5	14.2
Mississippi	133	5.4	5.4	27.6	21.3
Missouri	168	3.3	3.0	25.6	26.0
Montana	9	1.0	1.0	26.2	18.5
Nebraska	17	1.1	1.1	15.6	10.5
Nevada	119	4.6	4.4	23.5	21.0
New Hampshire	13	1.1	1.0	20.4	12.8
New Jersey	472	6.3	5.3	26.0	19.7
New Mexico	37	2.1	2.0	18.3	13.7
New York	1,447	8.7	7.5	19.9	14.4
North Carolina	356	4.0	3.7	23.9	19.3
North Dakota	5	0.8	0.8	22.2	18.3
Ohio	276	2.8	2.6	24.8	23.4
Oklahoma	118	3.6	3.4	37.9	30.8
Oregon	104	2.9	2.6	25.6	19.6
Pennsylvania	444	4.1	3.5	22.2	15.6
Rhode Island	34	3.7	2.9	23.3	15.1
South Carolina	232	5.3	4.8	24.7	18.4
South Dakota	8	1.1	1.2	26.2	16.7
Tennessee	246	4.3	4.1	28.0	21.5
Texas	1,142	4.8	4.8	24.0	21.1
Utah	31	1.2	1.3	20.8	15.6
Vermont	8	1.5	1.4	21.2	14.8
Virginia	258	3.6	3.2	22.7	19.0
Washington	147	2.3	2.1	20.0	18.6
West Virginia	33	2.1	1.8	31.4	22.8
Wisconsin	66	1.3	1.2	21.0	15.1
Wyoming	4	0.8	0.6	22.1	13.0
Subtotal	12,440	4.5	4.1	22.9	18.9
U.S. dependent areas					
American Samoa	2	5.5	6.6	1,000.0	365.5
Guam	4	3.1	3.2	93.0	56.7
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	242	8.6	8.0	28.0	24.4
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	0	0.0	0.0	0.0	0.0
Subtotal	248	7.9	7.4	27.6	23.8
Total	12,688	4.5	4.1	23.0	18.9

Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2016–2020—United States and 6 dependent areas *(cont)*

	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
	2020 (COVID-19 pandemic)				
Alabama	171	4.1	3.9	27.0	23.6
Alaska	12	2.0	2.0	31.5	23.5
Arizona	200	3.2	2.9	24.3	20.9
Arkansas	74	2.9	2.7	26.5	24.0
California	1,426	4.3	4.0	20.0	16.7
Colorado	114	2.3	2.2	20.0	18.1
Connecticut	164	5.4	4.5	25.4	16.4
Delaware	46	5.5	4.6	22.1	16.5
District of Columbia	204	33.4	35.1	27.3	18.1
Florida	1,740	9.3	8.0	28.5	22.6
Georgia	705	7.9	7.5	24.3	21.6
Hawaii	28	2.4	2.0	20.7	13.3
Idaho	11	0.7	0.6	17.5	10.8
Illinois	527	5.0	4.5	29.6	23.7
Indiana	140	2.5	2.3	23.9	17.3
Iowa	49	1.9	1.7	31.8	24.9
Kansas[b]	24	1.0	0.9	14.1	9.3
Kentucky	117	3.1	3.1	31.0	29.1
Louisiana	335	8.7	8.4	30.5	26.3
Maine	19	1.6	1.2	22.5	12.3
Maryland[c]	489	9.6	8.5	27.5	21.1
Massachusetts	234	3.9	3.3	20.6	13.4
Michigan	260	3.1	2.7	30.6	27.7
Minnesota	68	1.4	1.2	16.7	12.2
Mississippi	171	6.9	6.6	35.4	31.6
Missouri	186	3.6	3.3	28.4	25.8
Montana	8	0.9	0.9	22.5	14.1
Nebraska	23	1.4	1.4	20.1	16.1
Nevada	141	5.3	4.8	27.1	24.2
New Hampshire	10	0.8	0.6	15.6	11.9
New Jersey	520	6.9	5.8	28.8	20.7
New Mexico	56	3.2	2.8	27.2	17.0
New York	1,924	11.7	9.9	26.7	19.9
North Carolina[b]	377	4.2	3.7	24.8	19.8
North Dakota	4	0.6	0.7	16.8	12.0
Ohio	320	3.2	2.9	28.4	25.2
Oklahoma	122	3.7	3.5	38.4	34.6
Oregon	95	2.6	2.3	23.8	18.9
Pennsylvania	500	4.6	3.9	25.0	17.6
Rhode Island	40	4.4	3.7	27.7	15.2
South Carolina[b]	189	4.3	3.8	20.0	17.4
South Dakota	3	0.4	0.5	9.8	6.7
Tennessee	299	5.1	4.8	33.1	30.2
Texas	1,181	4.9	4.8	24.5	21.2
Utah	22	0.8	0.9	14.4	10.5
Vermont[b]	8	1.5	1.4	20.9	23.2
Virginia	256	3.5	3.1	22.2	17.3
Washington	147	2.3	2.1	19.9	17.2
West Virginia	34	2.2	2.1	32.0	28.4
Wisconsin	75	1.5	1.4	23.4	15.7
Wyoming	7	1.4	1.3	37.6	28.6
Subtotal	13,875	5.0	4.5	25.4	20.6
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam[b]	0	0.0	0.0	0.0	0.0
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico[b]	222	7.9	6.9	25.9	18.9
Republic of Palau	1	5.5	6.0	166.7	87.5
U.S. Virgin Islands	3	3.4	3.1	10.6	9.9
Subtotal	226	7.3	6.4	25.3	18.5
Total	**14,101**	**5.0**	**4.5**	**25.4**	**20.6**

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 ever classified as stage 3 (AIDS) may be due to any cause. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used. 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. Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021.

[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 2020.

[c] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

Table 7a. Persons aged ≥13 years surviving >3 years after a diagnosis of HIV infection during 2012–2017, by year of diagnosis and selected characteristics—United States

		Proportion survived >3 years					
	No.	2012	2013	2014	2015	2016	2017
Gender							
Male	186,603	0.94	0.94	0.95	0.95	0.95	0.95
Female	44,915	0.93	0.92	0.94	0.94	0.94	0.94
Transgender woman[a]	3,557	0.99	0.98	0.98	0.97	0.97	0.97
Transgender man[a]	144	*	*	*	*	*	*
Additional gender identity[b]	64	*	*	*	*	*	*
Age at diagnosis (yr)							
13–24	52,537	0.99	0.99	0.99	0.99	0.99	0.99
25–34	75,522	0.97	0.97	0.97	0.98	0.98	0.98
35–44	46,306	0.95	0.94	0.95	0.95	0.95	0.95
45–54	38,254	0.90	0.90	0.91	0.92	0.91	0.92
≥55	22,664	0.81	0.80	0.82	0.82	0.83	0.84
Race/ethnicity							
American Indian/Alaska Native	1,044	0.91	0.90	0.94	0.95	0.95	0.92
Asian	5,043	0.97	0.96	0.97	0.97	0.96	0.97
Black/African American	100,270	0.94	0.94	0.95	0.95	0.96	0.95
Hispanic/Latino[c]	57,473	0.95	0.95	0.96	0.96	0.96	0.96
Native Hawaiian/other Pacific Islander	270	*	*	*	*	*	*
White	60,546	0.94	0.93	0.94	0.94	0.93	0.94
Multiracial	10,637	0.95	0.95	0.95	0.95	0.95	0.95
Transmission category[d]							
Male-to-male sexual contact	153,811	0.96	0.95	0.96	0.96	0.96	0.96
Injection drug use	13,975	0.87	0.86	0.87	0.89	0.88	0.88
Male	7,649	0.86	0.85	0.86	0.88	0.87	0.87
Female	6,327	0.89	0.88	0.89	0.91	0.89	0.90
Male-to-male sexual contact and injection drug use	9,208	0.94	0.94	0.96	0.95	0.94	0.95
Heterosexual contact[e]	57,809	0.93	0.92	0.93	0.93	0.94	0.93
Male	19,342	0.89	0.89	0.91	0.91	0.91	0.91
Female	38,467	0.94	0.93	0.94	0.95	0.95	0.95
Other[f]	479	*	*	*	*	*	*
Male	209	*	*	*	*	*	*
Female	270	*	*	*	*	*	*
Region of residence							
Northeast	39,360	0.94	0.94	0.95	0.95	0.95	0.95
Midwest	31,036	0.95	0.94	0.95	0.95	0.95	0.95
South	119,643	0.94	0.94	0.94	0.95	0.95	0.95
West	45,244	0.95	0.94	0.95	0.95	0.95	0.95
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	193,248	0.95	0.94	0.95	0.95	0.95	0.95
Metropolitan areas (pop. 50,000–499,999)	26,677	0.93	0.92	0.94	0.94	0.94	0.94
Nonmetropolitan areas (pop. <50,000)	13,825	0.91	0.9	0.92	0.92	0.93	0.93
Total	**235,283**	**0.94**	**0.94**	**0.95**	**0.95**	**0.95**	**0.95**

Abbreviations: asterisk (*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates; pop., population.

Note. 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. Data are based on residence at time of diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

[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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[e] Sexual contact with a person known to have, or with a risk factor for, HIV infection.

[f] 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 7b. Persons aged ≥13 years surviving >3 years after a diagnosis of HIV infection during 2012–2017, by year of diagnosis and selected characteristics—United States and 6 dependent areas

		Proportion survived >3 years					
	No.	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Gender							
Male	189,417	0.94	0.94	0.95	0.95	0.95	0.95
Female	45,720	0.93	0.92	0.94	0.94	0.94	0.94
Transgender woman[a]	3,573	0.99	0.98	0.98	0.97	0.97	0.97
Transgender man[a]	145	*	*	*	*	*	*
Additional gender identity[b]	65	*	*	*	*	*	*
Age at diagnosis (yr)							
13–24	53,151	0.99	0.99	0.99	0.99	0.99	0.99
25–34	76,463	0.97	0.97	0.97	0.98	0.98	0.97
35–44	47,092	0.95	0.94	0.95	0.95	0.95	0.95
45–54	38,993	0.90	0.90	0.91	0.92	0.91	0.91
≥55	23,221	0.81	0.80	0.81	0.82	0.83	0.84
Race/ethnicity							
American Indian/Alaska Native	1,044	0.91	0.90	0.94	0.95	0.95	0.92
Asian	5,054	0.97	0.96	0.97	0.97	0.97	0.97
Black/African American	100,325	0.94	0.94	0.95	0.95	0.96	0.95
Hispanic/Latino[c]	61,002	0.95	0.94	0.95	0.96	0.96	0.96
Native Hawaiian/other Pacific Islander	284	*	*	*	*	*	*
White	60,567	0.94	0.93	0.94	0.94	0.93	0.94
Multiracial	10,644	0.95	0.95	0.95	0.95	0.95	0.95
Transmission category[d]							
Male-to-male sexual contact	155,586	0.96	0.95	0.96	0.96	0.96	0.96
Injection drug use	14,405	0.87	0.86	0.87	0.89	0.88	0.88
Male	7,986	0.85	0.84	0.85	0.88	0.86	0.86
Female	6,419	0.89	0.88	0.89	0.91	0.89	0.90
Male-to-male sexual contact and injection drug use	9,320	0.94	0.94	0.96	0.95	0.94	0.95
Heterosexual contact[e]	59,129	0.92	0.92	0.93	0.93	0.94	0.93
Male	19,949	0.89	0.89	0.91	0.91	0.91	0.91
Female	39,180	0.94	0.93	0.94	0.94	0.95	0.95
Other[f]	480	*	*	*	*	*	*
Male	209	*	*	*	*	*	*
Female	271	*	*	*	*	*	*
Region of residence							
Northeast	39,360	0.94	0.94	0.95	0.95	0.95	0.95
Midwest	31,036	0.95	0.94	0.95	0.95	0.95	0.95
South	119,643	0.94	0.94	0.94	0.95	0.95	0.95
West	45,244	0.95	0.94	0.95	0.95	0.95	0.95
U.S. dependent areas	3,637	0.88	0.86	0.89	0.90	0.88	0.89
Total	**238,920**	**0.94**	**0.94**	**0.95**	**0.95**	**0.95**	**0.95**

Abbreviation: asterisk (*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

Note. 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. Data are based on residence at time of diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

[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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[e] Sexual contact with a person known to have, or with a risk factor for, HIV infection.

[f] 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 7c. Persons aged ≥13 years surviving >3 years after a diagnosis of HIV infection during 2012–2017, by year of diagnosis and area of residence—United States and 6 dependent areas

		Proportion survived >3 years					
	No.	2012	2013	2014	2015	2016	2017
Alabama	3,908	0.93	0.93	0.92	0.94	0.95	0.95
Alaska	178	*	*	*	*	*	*
Arizona	4,147	0.92	0.94	0.96	0.94	0.94	0.94
Arkansas	1,685	0.96	0.92	0.92	0.93	0.96	0.97
California	29,416	0.95	0.94	0.95	0.96	0.96	0.96
Colorado	2,280	0.97	0.97	0.95	0.95	0.95	0.97
Connecticut	1,697	0.95	0.94	0.96	0.99	0.98	0.92
Delaware	699	0.93	0.96	0.96	0.97	0.94	0.94
District of Columbia	2,475	0.96	0.96	0.96	0.96	0.96	0.95
Florida	26,853	0.93	0.93	0.94	0.94	0.95	0.95
Georgia	14,939	0.93	0.94	0.95	0.94	0.95	0.95
Hawaii	542	*	*	*	*	*	*
Idaho	213	*	*	*	*	*	*
Illinois	9,100	0.96	0.95	0.95	0.96	0.96	0.96
Indiana	3,051	0.94	0.93	0.94	0.94	0.95	0.94
Iowa	707	0.94	0.92	0.93	0.97	0.95	0.92
Kansas[a]	848	0.95	0.90	0.96	0.94	0.95	0.98
Kentucky	2,101	0.93	0.92	0.92	0.95	0.93	0.93
Louisiana	6,492	0.92	0.94	0.94	0.94	0.95	0.95
Maine	273	*	*	*	*	*	*
Maryland[b]	7,060	0.95	0.94	0.96	0.96	0.96	0.94
Massachusetts	3,833	0.98	0.97	0.97	0.97	0.95	0.96
Michigan	4,542	0.95	0.93	0.95	0.95	0.95	0.95
Minnesota	1,799	0.97	0.93	0.95	0.97	0.98	0.97
Mississippi	2,733	0.94	0.92	0.93	0.93	0.93	0.94
Missouri	2,931	0.95	0.94	0.96	0.96	0.95	0.93
Montana	126	*	*	*	*	*	*
Nebraska	490	*	*	*	*	*	*
Nevada	2,698	0.92	0.94	0.95	0.95	0.94	0.94
New Hampshire	219	*	*	*	*	*	*
New Jersey	7,128	0.93	0.91	0.94	0.95	0.95	0.94
New Mexico	802	0.97	0.94	0.93	0.92	0.99	0.94
New York	18,406	0.95	0.95	0.95	0.96	0.95	0.96
North Carolina[a]	7,800	0.94	0.95	0.95	0.94	0.95	0.96
North Dakota	152	*	*	*	*	*	*
Ohio	5,835	0.95	0.95	0.94	0.94	0.93	0.95
Oklahoma	1,822	0.94	0.92	0.94	0.94	0.95	0.92
Oregon	1,372	0.93	0.96	0.93	0.96	0.95	0.94
Pennsylvania	7,263	0.93	0.93	0.93	0.94	0.96	0.96
Rhode Island	461	*	*	*	*	*	*
South Carolina[a]	4,261	0.95	0.93	0.93	0.94	0.94	0.94
South Dakota	193	*	*	*	*	*	*
Tennessee	4,536	0.92	0.92	0.93	0.93	0.95	0.94
Texas	26,355	0.94	0.94	0.95	0.95	0.95	0.95
Utah	717	0.95	0.94	0.98	0.97	0.94	0.96
Vermont[a]	80	*	*	*	*	*	*
Virginia	5,473	0.94	0.95	0.96	0.97	0.95	0.96
Washington	2,672	0.97	0.95	0.95	0.98	0.95	0.97
West Virginia	451	*	*	*	*	*	*
Wisconsin	1,388	0.96	0.95	0.94	0.98	0.97	0.93
Wyoming	81	*	*	*	*	*	*
Subtotal	235,283	0.94	0.94	0.95	0.95	0.95	0.95
U.S. dependent areas							
American Samoa	0	*	*	*	*	*	*
Guam[a]	25	*	*	*	*	*	*
Northern Mariana Islands	5	*	*	*	*	*	*
Puerto Rico[a]	3,509	0.88	0.86	0.89	0.90	0.88	0.89
Republic of Palau	3	*	*	*	*	*	*
U.S. Virgin Islands	95	*	*	*	*	*	*
Subtotal	3,637	0.88	0.86	0.89	0.90	0.88	0.89
Total	**238,920**	**0.94**	**0.94**	**0.95**	**0.95**	**0.95**	**0.95**

Abbreviation: asterisk (*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

Note. 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. Data are based on residence at time of diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

[a] Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2020.

[b] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

Table 7d. Persons aged ≥13 years with HIV surviving >3 years after stage 3 (AIDS) classification during 2012–2017, by year of diagnosis and selected characteristics—United States

		Proportion survived >3 years					
	No.	2012	2013	2014	2015	2016	2017
Gender							
Male	91,020	0.87	0.86	0.85	0.86	0.86	0.86
Female	29,455	0.85	0.84	0.84	0.84	0.86	0.84
Transgender woman[a]	1,490	0.94	0.92	0.92	0.91	0.92	0.93
Transgender man[a]	45	*	*	*	*	*	*
Additional gender identity[b]	21	*	*	*	*	*	*
Age at diagnosis (yr)							
13–24	10,644	0.95	0.96	0.94	0.95	0.96	0.94
25–34	30,886	0.93	0.92	0.92	0.92	0.93	0.93
35–44	30,121	0.89	0.89	0.88	0.88	0.88	0.88
45–54	30,656	0.83	0.83	0.83	0.83	0.83	0.83
≥55	19,724	0.72	0.71	0.68	0.70	0.71	0.72
Race/ethnicity							
American Indian/Alaska Native	480	*	*	*	*	*	*
Asian	1,935	0.93	0.91	0.91	0.91	0.89	0.92
Black/African American	56,171	0.86	0.85	0.84	0.86	0.86	0.86
Hispanic/Latino[c]	26,912	0.89	0.88	0.87	0.87	0.89	0.88
Native Hawaiian/other Pacific Islander	114	*	*	*	*	*	*
White	29,570	0.84	0.84	0.83	0.82	0.82	0.82
Multiracial	6,849	0.89	0.89	0.87	0.86	0.86	0.84
Transmission category[d]							
Male-to-male sexual contact	66,028	0.89	0.88	0.87	0.87	0.88	0.88
Injection drug use	11,991	0.78	0.77	0.76	0.76	0.76	0.76
Male	6,618	0.77	0.75	0.74	0.74	0.74	0.75
Female	5,373	0.79	0.79	0.78	0.78	0.79	0.77
Male-to-male sexual contact and injection drug use	5,856	0.86	0.84	0.85	0.84	0.85	0.85
Heterosexual contact[e]	36,987	0.85	0.84	0.84	0.85	0.86	0.85
Male	13,469	0.83	0.83	0.82	0.84	0.83	0.83
Female	23,518	0.86	0.85	0.85	0.86	0.87	0.86
Other[f]	1,169	0.91	0.93	0.91	0.92	0.91	0.91
Male	556	*	*	*	*	*	*
Female	613	0.94	0.93	0.92	0.90	0.93	0.93
Region of residence							
Northeast	21,816	0.88	0.87	0.86	0.87	0.87	0.87
Midwest	15,644	0.88	0.88	0.87	0.87	0.87	0.86
South	63,855	0.85	0.85	0.84	0.84	0.85	0.85
West	20,716	0.87	0.87	0.86	0.85	0.86	0.85
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	98,816	0.87	0.87	0.85	0.86	0.86	0.86
Metropolitan areas (pop. 50,000–499,999)	14,329	0.84	0.83	0.82	0.84	0.83	0.84
Nonmetropolitan areas (pop. <50,000)	8,247	0.83	0.83	0.81	0.81	0.84	0.82
Total	**122,031**	**0.86**	**0.86**	**0.85**	**0.85**	**0.86**	**0.86**

Abbreviations: asterisk (*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates; pop., population.

Note. 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. 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.

[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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[e] Sexual contact with a person known to have, or with a risk factor for, HIV infection.

[f] 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 7e. Persons aged ≥13 years with HIV surviving >3 years after stage 3 (AIDS) classification during 2012–2017, by year of diagnosis and selected characteristics—United States and 6 dependent areas

		Proportion survived >3 years					
	No.	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Gender							
Male	92,472	0.86	0.86	0.85	0.85	0.86	0.86
Female	30,029	0.85	0.84	0.84	0.84	0.86	0.84
Transgender woman[a]	1,494	0.94	0.92	0.92	0.91	0.92	0.93
Transgender man[a]	45	*	*	*	*	*	*
Additional gender identity[b]	21	*	*	*	*	*	*
Age at diagnosis (yr)							
13–24	10,759	0.95	0.96	0.94	0.95	0.95	0.94
25–34	31,227	0.92	0.92	0.92	0.92	0.93	0.93
35–44	30,655	0.89	0.89	0.87	0.88	0.88	0.88
45–54	31,266	0.83	0.83	0.83	0.82	0.83	0.83
≥55	20,154	0.71	0.71	0.68	0.70	0.71	0.72
Race/ethnicity							
American Indian/Alaska Native	480	*	*	*	*	*	*
Asian	1,942	0.93	0.91	0.91	0.91	0.90	0.92
Black/African American	56,212	0.86	0.85	0.84	0.86	0.86	0.86
Hispanic/Latino[c]	28,872	0.88	0.88	0.86	0.86	0.88	0.87
Native Hawaiian/other Pacific Islander	123	*	*	*	*	*	*
White	29,581	0.84	0.84	0.83	0.82	0.82	0.82
Multiracial	6,851	0.89	0.89	0.87	0.86	0.86	0.84
Transmission category[d]							
Male-to-male sexual contact	66,648	0.89	0.88	0.87	0.87	0.88	0.88
Injection drug use	12,458	0.77	0.77	0.75	0.75	0.76	0.75
Male	6,974	0.76	0.75	0.74	0.73	0.74	0.75
Female	5,484	0.79	0.79	0.77	0.77	0.79	0.76
Male-to-male sexual contact and injection drug use	5,945	0.86	0.84	0.85	0.84	0.84	0.85
Heterosexual contact[e]	37,816	0.85	0.84	0.84	0.85	0.85	0.85
Male	13,850	0.83	0.82	0.81	0.83	0.83	0.83
Female	23,966	0.86	0.85	0.85	0.86	0.87	0.86
Other[f]	1,195	0.92	0.93	0.91	0.92	0.91	0.92
Male	567	*	*	*	*	*	*
Female	628	0.94	0.93	0.92	0.89	0.93	0.93
Region of residence							
Northeast	21,816	0.88	0.87	0.86	0.87	0.87	0.87
Midwest	15,644	0.88	0.88	0.87	0.87	0.87	0.86
South	63,855	0.85	0.85	0.84	0.84	0.85	0.85
West	20,716	0.87	0.87	0.86	0.85	0.86	0.85
U.S. dependent areas	2,030	0.74	0.77	0.74	0.72	0.73	0.79
Total	**124,061**	**0.86**	**0.86**	**0.85**	**0.85**	**0.86**	**0.85**

Abbreviation: asterisk (*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

Note. 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. 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.

[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 sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

[e] Sexual contact with a person known to have, or with a risk factor for, HIV infection.

[f] 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 7f. Persons aged ≥13 years with HIV surviving >3 years after stage 3 (AIDS) classification during 2012–2017, by year of diagnosis and area of residence—United States and 6 dependent areas

		Proportion survived >3 years					
	No.	2012	2013	2014	2015	2016	2017
Alabama	2,062	0.80	0.82	0.81	0.83	0.84	0.86
Alaska	98	*	*	*	*	*	*
Arizona	1,832	0.82	0.84	0.85	0.80	0.83	0.83
Arkansas	795	0.86	0.87	0.77	0.84	0.89	0.89
California	13,151	0.87	0.87	0.85	0.86	0.86	0.85
Colorado	1,117	0.91	0.89	0.88	0.84	0.87	0.88
Connecticut	1,038	0.89	0.88	0.88	0.93	0.91	0.84
Delaware	453	*	*	*	*	*	*
District of Columbia	1,313	0.88	0.88	0.83	0.84	0.90	0.83
Florida	14,697	0.85	0.82	0.81	0.83	0.85	0.84
Georgia	7,955	0.85	0.86	0.86	0.87	0.87	0.87
Hawaii	264	*	*	*	*	*	*
Idaho	114	*	*	*	*	*	*
Illinois	4,472	0.89	0.89	0.86	0.87	0.88	0.87
Indiana	1,509	0.87	0.85	0.86	0.83	0.84	0.82
Iowa	405	*	*	*	*	*	*
Kansas[a]	414	*	*	*	*	*	*
Kentucky	1,015	0.83	0.81	0.84	0.82	0.86	0.85
Louisiana	3,591	0.83	0.84	0.81	0.84	0.86	0.86
Maine	138	*	*	*	*	*	*
Maryland[b]	4,151	0.87	0.87	0.88	0.87	0.85	0.86
Massachusetts	1,926	0.93	0.91	0.90	0.92	0.88	0.87
Michigan	2,319	0.86	0.85	0.88	0.83	0.87	0.83
Minnesota	971	0.91	0.90	0.90	0.91	0.96	0.94
Mississippi	1,769	0.82	0.84	0.82	0.83	0.83	0.83
Missouri	1,438	0.91	0.87	0.90	0.88	0.86	0.88
Montana	71	*	*	*	*	*	*
Nebraska	266	*	*	*	*	*	*
Nevada	1,314	0.80	0.87	0.83	0.83	0.82	0.84
New Hampshire	106	*	*	*	*	*	*
New Jersey	3,881	0.85	0.84	0.86	0.85	0.85	0.86
New Mexico	384	*	*	*	*	*	*
New York	10,442	0.88	0.88	0.86	0.86	0.88	0.87
North Carolina[a]	4,214	0.86	0.87	0.83	0.83	0.83	0.86
North Dakota	74	*	*	*	*	*	*
Ohio	2,968	0.86	0.89	0.85	0.89	0.85	0.87
Oklahoma	955	0.81	0.76	0.84	0.86	0.87	0.83
Oregon	741	0.88	0.88	0.86	0.89	0.86	0.82
Pennsylvania	3,983	0.88	0.85	0.86	0.86	0.88	0.87
Rhode Island	251	*	*	*	*	*	*
South Carolina[a]	2,472	0.88	0.84	0.82	0.85	0.84	0.84
South Dakota	105	*	*	*	*	*	*
Tennessee	2,434	0.85	0.85	0.83	0.83	0.85	0.86
Texas	13,153	0.86	0.86	0.85	0.85	0.86	0.86
Utah	321	*	*	*	*	*	*
Vermont[a]	51	*	*	*	*	*	*
Virginia	2,562	0.84	0.90	0.84	0.85	0.87	0.85
Washington	1,256	0.92	0.91	0.89	0.86	0.88	0.88
West Virginia	264	*	*	*	*	*	*
Wisconsin	703	0.91	0.85	0.82	0.91	0.86	0.83
Wyoming	53	*	*	*	*	*	*
Subtotal	122,031	0.86	0.86	0.85	0.85	0.86	0.86
U.S. dependent areas							
American Samoa	0	*	*	*	*	*	*
Guam[a]	14	*	*	*	*	*	*
Northern Mariana Islands	5	*	*	*	*	*	*
Puerto Rico[a]	1,942	0.74	0.76	0.73	0.72	0.73	0.78
Republic of Palau	1	*	*	*	*	*	*
U.S. Virgin Islands	68	*	*	*	*	*	*
Subtotal	2,030	0.74	0.77	0.74	0.72	0.73	0.79
Total	**124,061**	**0.86**	**0.86**	**0.85**	**0.85**	**0.86**	**0.85**

Abbreviation: asterisk (*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

Note. 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. Data are based on residence at time of stage 3 (AIDS) classification. Data exclude persons whose month of diagnosis or month of death is unknown.

[a] Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2020.

[b] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

Table 8a. Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2020 (COVID-19 pandemic) among persons aged ≥16 years, by selected characteristics—United States and Puerto Rico

	Persons prescribed PrEP[a]	Persons with PrEP indications[b]	PrEP coverage[c]
	No.	No.	%
Sex assigned at birth			
Male	276,810	989,200	28.0
Female	23,667	227,010	10.4
Age (yr)			
16–24	38,420	246,290	15.6
25–34	119,125	434,680	27.4
35–44	72,044	238,470	30.2
45–54	40,603	173,420	23.4
≥55	30,313	123,350	24.6
Race/ethnicity[d]			
Black/African American	42,568	468,540	9.1
Hispanic/Latino[e]	49,306	312,820	15.7
Other	12,254	131,180	9.3
White	196,478	300,650	65.4
Total	**300,606**	**1,216,210**	**24.7**

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

Note. PrEP coverage data are considered preliminary. Data for 2020 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 2021 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, National Health and Nutrition Examination Survey, and U.S. Census Bureau's American Community Survey. Data are rounded to the nearest 10. Data for which values are unknown were not reported; therefore, 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. The 2018 denominators were used for 2020 PrEP coverage data.

[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 2020. 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 8b. Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2020 (COVID-19 pandemic) among persons aged ≥16 years, by area of residence—United States and Puerto Rico

Area of residence	Persons prescribed PrEP[a] No.	Persons with PrEP indications[b] No.	PrEP coverage[c] %
Alabama	1,918	11,020	17.4
Alaska	244	1,780	13.7
Arizona	5,051	25,780	19.6
Arkansas	870	5,130	17.0
California	42,304	165,030	25.6
Colorado	4,765	25,120	19.0
Connecticut	2,477	9,560	25.9
Delaware	467	4,400	10.6
District of Columbia	5,953	12,950	46.0
Florida	34,581	125,330	27.6
Georgia	9,745	39,030	25.0
Hawaii	903	4,360	20.7
Idaho	660	4,790	13.8
Illinois	15,938	55,860	28.5
Indiana	3,198	22,170	14.4
Iowa	1,516	4,760	31.8
Kansas	944	5,060	18.7
Kentucky	1,668	12,990	12.8
Louisiana	3,603	15,920	22.6
Maine	663	3,950	16.8
Maryland	4,798	27,300	17.6
Massachusetts	9,372	24,900	37.6
Michigan	4,687	29,570	15.9
Minnesota	4,190	21,720	19.3
Mississippi	1,098	4,530	24.2
Missouri	3,570	18,370	19.4
Montana	299	2,290	13.1
Nebraska	725	2,180	33.3
Nevada	2,496	11,390	21.9
New Hampshire	649	3,020	21.5
New Jersey	5,921	25,280	23.4
New Mexico	1,237	6,800	18.2
New York	34,090	72,640	46.9
North Carolina	6,160	32,490	19.0
North Dakota	216	1,520	14.2
Ohio	6,833	40,320	16.9
Oklahoma	1,524	11,030	13.8
Oregon	3,819	19,750	19.3
Pennsylvania	10,608	36,490	29.1
Puerto Rico	368	9,700	3.8
Rhode Island	1,153	3,880	29.7
South Carolina	2,120	10,390	20.4
South Dakota	144	910	15.8
Tennessee	5,168	22,460	23.0
Texas	27,520	123,790	22.2
Utah	2,370	6,840	34.6
Vermont	321	1,060	30.3
Virginia	5,131	31,430	16.3
Washington	10,025	40,050	25.0
West Virginia	522	5,250	9.9
Wisconsin	2,521	12,980	19.4
Wyoming	99	890	11.1

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

Note. PrEP coverage data are considered preliminary. Data for 2020 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 2021 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, National Health and Nutrition Examination Survey, and U.S. Census Bureau's American Community Survey. Data are rounded to the nearest 10. Data for which values are unknown were not reported; therefore, 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. The 2018 denominators were used for 2020 PrEP coverage data.

[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 9a. Perinatally acquired HIV infection, by year of birth and mother's race/ethnicity, 2016–2020—United States

	2016		2017		2018		2019		2020 (COVID-19 pandemic)	
Race/ethnicity[a]	**No.**	**Rate**	**No.**	**Rate**	**No.**	**Rate**	**No.**	**Rate**	**No.**	**Rate**
Black/African American	33	5.9	27	4.8	19	3.4	17	3.1	21	4.0
Hispanic/Latino[b]	11	1.2	7	0.8	7	0.8	7	0.8	8	0.9
White	3	0.1	6	0.3	6	0.3	5	0.3	6	0.3
Other[c]	7	1.9	6	1.6	6	1.7	3	0.8	1	0.3
Total	**54**	**1.4**	**46**	**1.2**	**38**	**1.0**	**32**	**0.9**	**36**	**1.0**

Note. 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. 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. 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 9b. Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother's race/ethnicity, 2016–2020—United States

	2016		2017		2018		2019		2020 (COVID-19 pandemic)	
Race/ethnicity[a]	**No.**	**Rate**	**No.**	**Rate**	**No.**	**Rate**	**No.**	**Rate**	**No.**	**Rate**
Black/African American	30	5.4	26	4.6	18	3.3	17	3.1	20	3.8
Hispanic/Latino[b]	10	1.1	7	0.8	7	0.8	7	0.8	8	0.9
White	3	0.1	6	0.3	6	0.3	5	0.3	6	0.3
Other[c]	6	1.6	6	1.6	5	1.4	3	0.8	1	0.3
Total	**49**	**1.2**	**45**	**1.2**	**36**	**0.9**	**32**	**0.9**	**35**	**1.0**

Note. 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. 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. 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 10. Monitoring national HIV prevention goals by using data from the National HIV Surveillance System (NHSS) and other reporting systems

Indicator	2017[a]	2018	2019	2020 (COVID-19 pandemic)
Ending the HIV Epidemic in the U.S. indicators—Targets through 2025				
Reduce new infections by 75%[b]	37,000	36,200	34,800	—
Increase knowledge of status to 95%[b]	85.8	86.3	86.7	—
Reduce new HIV diagnoses by 75%[c]	38,351	37,417	36,528	30,346
Increase linkage to HIV medical care within 1 month of diagnosis to at least 95%	77.8	80.2	81.3	82.4
Increase viral suppression among persons with diagnosed HIV infection to at least 95%	63.1	64.7	65.5	64.6
Increase PrEP coverage to at least 50%[d]	13.2	18.1	22.5	24.7
National HIV/AIDS Strategy indicators—Targets through 2025				
Indicator 1: Increase knowledge of status to 95%[b]	85.8	86.3	86.7	—
Indicator 2: Reduce new HIV infections by 75%[b]	37,000	36,200	34,800	—
Indicator 3: Reduce new HIV diagnoses by 75%[c]	38,351	37,417	36,528	30,346
Indicator 4: Increase PrEP coverage to 50%[d]	13.2	18.1	22.5	24.7
Indicator 5: Increase linkage to care within 1 month of diagnosis to 95%	77.8	80.2	81.3	82.4
Indicator 6: Increase viral suppression among persons with diagnosed HIV to 95%	63.1	64.7	65.5	64.6
Indicator 6a: Increase viral suppression among MSM with diagnosed HIV to 95%	66.1	67.3	68.1	64.2
Indicator 6b: Increase viral suppression among Black MSM with diagnosed HIV to 95%	58.4	60.6	61.6	61.4
Indicator 6c: Increase viral suppression among Latino MSM with diagnosed HIV to 95%	64.9	65.9	66.6	65.5
Indicator 6d: Increase viral suppression among American Indian/Alaska Native MSM with diagnosed HIV to 95%	67.3	66.9	64.7	64.7
Indicator 6e: Increase viral suppression among Black women with diagnosed HIV to 95%	59.3	61.4	62.4	61.9
Indicator 6f: Increase viral suppression among transgender women in HIV medical care to 95%[e]	80.5	81.1	82.9	84.2
Indicator 6g: Increase viral suppression among persons who inject drugs and have received an HIV diagnosis to 95%	54.9	56.3	56.9	55.3
Indicator 6h: Increase viral suppression among youth aged 13–24 years with diagnosed HIV to 95%	57.1	60.3	63.3	63.5
Indicator 7: Decrease stigma among persons with diagnosed HIV by 50%[f]	—	31.2	30.7	—
Indicator 8: Reduce homelessness among persons with diagnosed HIV by 50%[g]	9.1	8.9	8.9	—
Indicator 9: Increase the median percentage of secondary schools that implement at least 4 out of 7 LGBTQ-supportive policies and practices to 65%[h]	—	59.8	—	—

Abbreviations: PrEP, preexposure prophylaxis; MSM, gay, bisexual, and other men who have sex with men; CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. 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. Em dash (—) denotes data not available. Information on Ending the HIV Epidemic in the U.S. can be found at https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview. For data on EHE Phase I jurisdictions, see https://www.cdc.gov/hiv/pdf/library/reports/ehe-core-indicators/cdc-hiv-ehe-core-indicators-2019.pdf. Information on National HIV/AIDS Strategy (2022–2025) can be found at https://www.hiv.gov/federal-response/national-hiv-aids-strategy/national-hiv-aids-strategy-2022-2025.

[a] Baseline data for EHE indicators, published at https://www.cdc.gov/hiv/pdf/library/reports/surveillance-data-tables/vol-1-no-1/cdc-hiv-surveillance-tables-vol-1-no-1.pdf. Baseline data for PrEP coverage, published at: https://www.cdc.gov/hiv/pdf/library/reports/surveillance-data-tables/vol-2-no-2/cdc-hiv-surveillance-tables-vol-2-no-2.pdf. Baseline data for NHAS indicators, published at https://hivgov-prod-v3.s3.amazonaws.com/s3fs-public/NHAS-2022-At-A-Glance.pdf.

[b] CDC. Estimated HIV incidence and prevalence in the United States, 2015–2019. *HIV Surveillance Supplemental Report* 2021;26(No. 1). http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 2021. Baseline data for NHAS indicators, published at https://hivgov-prod-v3.s3.amazonaws.com/s3fs-public/NHAS-2022-2025.pdf.

[c] Persons ≥13 years only. CDC. *HIV Surveillance Report, 2020*; vol. 33. http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 2022.

[d] PrEP coverage, reported as a percentage, was calculated as the number of persons classified as having been been prescribed PrEP divided by the estimated number of persons who had indications for PrEP. PrEP coverage for 2017 used a 2017 denominator. PrEP coverage for 2018, 2019, 2020 used a 2018 denominator.

[e] Health Resources and Services Administration. Ryan White HIV/AIDS Program annual client-level data report 2020. http://hab.hrsa.gov/data/data-reports. Published December 2021. Baseline data (2017) can be found at: https://ryanwhite.hrsa.gov/sites/default/files/ryanwhite/data/rwhap-annual-client-level-data-report-2017.pdf.

[f] The revised stigma scale used for this indicator is a 10-item scale, ranging from 0 (no stigma) to 100 (high stigma), measured among persons aged >18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale utilized for this indicator is discussed in Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1). The 2015 median score is weighted. The previously published median score was unweighted. The revised stigma scale used for this indicator is defined as a median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about people living with HIV. Data are collected through CDC's MMP. Data collected on HIV stigma using the revised scale started with 2018 MMP data collection cycle; consequently 2018 is the baseline year for HIV stigma. For more information about MMP, see http://www.cdc.gov/hiv/statistics/systems/mmp/.

[g] MMP samples HIV diagnoses from the National HIV Surveillance System (NHSS). The homelessness estimate provided is subset to persons receiving HIV medical care in the past 12 months. For more information about MMP, see http://www.cdc.gov/hiv/statistics/systems/mmp/.

[h] School policies and practices known to improve health outcomes for both LGBTQ youth and all students: (1) having a Gay/Straight Alliance (GSA) or similar club; (2) identifying safe spaces; (3) prohibiting harassment based on sexual orientation or gender identity; (4) encouraging staff to attend professional development; (5) facilitating access to out-of-school health service providers; (6) facilitating access to out-of-school social and psychological service providers; and (7) providing LGBTQ-relevant curricula or supplementary materials.

Table 11. Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2021—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
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

Table 11. Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2021—United States and 6 dependent areas *(cont)*

	CD4 count (cells/μL) or CD4 percentage		Viral load	
	Lab reporting required[a]	Reportable level[b]	Lab reporting required[a]	Reportable level[b]
New Jersey	Yes	<200 or <14%	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

Abbreviation: CD4, CD4+ T-lymphocyte count (cells/μL) 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 HIV diagnosis during 2020 (COVID-19 pandemic) 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 ≥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.	%
Arizona											
Maricopa County	477	47	9.9	129	27.0	126	26.4	109	22.9	66	13.8
California											
Alameda County	157	15	9.6	37	23.6	54	34.4	31	19.7	20	12.7
Los Angeles County	1,382	123	8.9	368	26.6	406	29.4	291	21.1	194	14.0
Orange County	264	25	9.5	78	29.5	84	31.8	58	22.0	19	7.2
Riverside County	239	15	6.3	75	31.4	73	30.5	47	19.7	29	12.1
Sacramento County	153	13	8.5	50	32.7	43	28.1	28	18.3	19	12.4
San Bernardino County	263	10	3.8	68	25.9	76	28.9	52	19.8	57	21.7
San Diego County	296	14	4.7	95	32.1	94	31.8	62	20.9	31	10.5
San Francisco County	153	33	21.6	46	30.1	44	28.8	26	17.0	4	2.6
District of Columbia	197	9	4.6	50	25.4	73	37.1	41	20.8	24	12.2
Florida											
Broward County	460	12	2.6	150	32.6	138	30.0	99	21.5	61	13.3
Duval County	229	18	7.9	67	29.3	48	21.0	38	16.6	58	25.3
Hillsborough County	247	20	8.1	70	28.3	69	27.9	54	21.9	34	13.8
Miami-Dade County	781	29	3.7	264	33.8	238	30.5	145	18.6	105	13.4
Orange County	369	17	4.6	109	29.5	123	33.3	67	18.2	53	14.4
Palm Beach County	213	5	2.3	74	34.7	55	25.8	42	19.7	37	17.4
Pinellas County	152	16	10.5	40	26.3	44	28.9	34	22.4	18	11.8
Georgia											
Cobb County	135	4	3.0	32	23.7	46	34.1	37	27.4	16	11.9
DeKalb County	269	8	3.0	69	25.7	99	36.8	53	19.7	40	14.9
Fulton County	477	15	3.1	143	30.0	168	35.2	86	18.0	65	13.6
Gwinnett County	149	11	7.4	38	25.5	50	33.6	30	20.1	20	13.4
Illinois											
Cook County	774	81	10.5	168	21.7	228	29.5	145	18.7	152	19.6
Indiana											
Marion County	167	0	0.0	52	31.1	49	29.3	38	22.8	28	16.8
Louisiana											
East Baton Rouge Parish	124	21	16.9	24	19.4	34	27.4	29	23.4	16	12.9
Orleans Parish	105	17	16.2	22	21.0	34	32.4	18	17.1	14	13.3
Maryland[c]											
Baltimore City	175	22	12.6	53	30.3	58	33.1	23	13.1	19	10.9
Montgomery County	80	8	10.0	21	26.3	25	31.3	20	25.0	6	7.5
Prince George's County	214	19	8.9	45	21.0	75	35.0	57	26.6	18	8.4
Massachusetts											
Suffolk County	135	10	7.4	48	35.6	40	29.6	22	16.3	15	11.1
Michigan											
Wayne County	227	33	14.5	59	26.0	68	30.0	32	14.1	35	15.4
Nevada											
Clark County	343	13	3.8	111	32.4	128	37.3	59	17.2	32	9.3
New York											
Bronx County	338	41	12.1	99	29.3	102	30.2	58	17.2	38	11.2
Kings County	444	43	9.7	96	21.6	147	33.1	111	25.0	47	10.6
New York County	296	17	5.7	93	31.4	89	30.1	56	18.9	41	13.9
Queens County	316	30	9.5	74	23.4	115	36.4	70	22.2	27	8.5
North Carolina											
Mecklenburg County	209	18	8.6	32	15.3	57	27.3	40	19.1	62	29.7
Ohio											
Cuyahoga County	185	6	3.2	68	36.8	61	33.0	33	17.8	17	9.2
Franklin County	204	2	1.0	69	33.8	78	38.2	43	21.1	12	5.9
Hamilton County	132	1	0.8	32	24.2	47	35.6	29	22.0	23	17.4
Pennsylvania											
Philadelphia County	331	28	8.5	92	27.8	107	32.3	60	18.1	44	13.3
Tennessee											
Shelby County	235	22	9.4	43	18.3	77	32.8	31	13.2	62	26.4
Texas											
Bexar County	282	29	10.3	70	24.8	62	22.0	58	20.6	63	22.3
Dallas County	658	58	8.8	145	22.0	213	32.4	125	19.0	117	17.8
Harris County	921	64	6.9	225	24.4	274	29.8	189	20.5	169	18.3
Tarrant County	292	30	10.3	63	21.6	82	28.1	47	16.1	70	24.0
Travis County	162	14	8.6	40	24.7	55	34.0	26	16.0	27	16.7
Washington											
King County	198	22	11.1	59	29.8	57	28.8	43	21.7	17	8.6

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

Note. 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. Stage of disease at time of HIV diagnosis is based on the 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. 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: New Jersey. Areas with incomplete lab reporting: 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] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

Table A2. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) 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 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
		No.	%	No.	%	No.	%
Arizona							
Maricopa County	477	408	85.5	69	14.5	337	70.6
California							
Alameda County	157	132	84.1	25	15.9	106	67.5
Los Angeles County	1,382	1,128	81.6	254	18.4	893	64.6
Orange County	264	237	89.8	27	10.2	200	75.8
Riverside County	239	196	82.0	43	18.0	170	71.1
Sacramento County	153	135	88.2	18	11.8	111	72.5
San Bernardino County	263	186	70.7	77	29.3	149	56.7
San Diego County	296	256	86.5	40	13.5	180	60.8
San Francisco County	153	144	94.1	9	5.9	119	77.8
District of Columbia	197	172	87.3	25	12.7	142	72.1
Florida							
Broward County	460	402	87.4	58	12.6	294	63.9
Duval County	229	184	80.3	45	19.7	143	62.4
Hillsborough County	247	209	84.6	38	15.4	176	71.3
Miami-Dade County	781	660	84.5	121	15.5	545	69.8
Orange County	369	318	86.2	51	13.8	255	69.1
Palm Beach County	213	170	79.8	43	20.2	150	70.4
Pinellas County	152	128	84.2	24	15.8	116	76.3
Georgia							
Cobb County	135	110	81.5	25	18.5	95	70.4
DeKalb County	269	224	83.3	45	16.7	182	67.7
Fulton County	477	401	84.1	76	15.9	307	64.4
Gwinnett County	149	111	74.5	38	25.5	104	69.8
Illinois							
Cook County	774	662	85.5	112	14.5	502	64.9
Indiana							
Marion County	167	128	76.6	39	23.4	123	73.7
Louisiana							
East Baton Rouge Parish	124	99	79.8	25	20.2	79	63.7
Orleans Parish	105	84	80.0	21	20.0	78	74.3
Maryland[a]							
Baltimore City	175	150	85.7	25	14.3	130	74.3
Montgomery County	80	70	87.5	10	12.5	54	67.5
Prince George's County	214	193	90.2	21	9.8	159	74.3
Massachusetts							
Suffolk County	135	121	89.6	14	10.4	104	77.0
Michigan							
Wayne County	227	186	81.9	41	18.1	156	68.7
Nevada							
Clark County	343	295	86.0	48	14.0	240	70.0
New York							
Bronx County	338	289	85.5	49	14.5	250	74.0
Kings County	444	376	84.7	68	15.3	325	73.2
New York County	296	250	84.5	46	15.5	207	69.9
Queens County	316	279	88.3	37	11.7	237	75.0

Table A2. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2020 (COVID-19 pandemic) among persons aged ≥13 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions *(cont)*

Area of residence	Total No.	Linkage to care				Viral suppression	
		≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
		No.	%	No.	%	No.	%
North Carolina							
Mecklenburg County	209	173	82.8	36	17.2	153	73.2
Ohio							
Cuyahoga County	185	164	88.6	21	11.4	142	76.8
Franklin County	204	180	88.2	24	11.8	154	75.5
Hamilton County	132	115	87.1	17	12.9	81	61.4
Pennsylvania							
Philadelphia County	331	286	86.4	45	13.6	221	66.8
Tennessee							
Shelby County	235	158	67.2	77	32.8	116	49.4
Texas							
Bexar County	282	202	71.6	80	28.4	179	63.5
Dallas County	658	502	76.3	156	23.7	398	60.5
Harris County	921	698	75.8	223	24.2	567	61.6
Tarrant County	292	211	72.3	81	27.7	149	51.0
Travis County	162	130	80.2	32	19.8	102	63.0
Washington							
King County	198	177	89.4	21	10.6	158	79.8

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 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 residence at time of diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after HIV diagnosis. 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 2020. 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 the CDC. Area without laws: New Jersey. Area with incomplete lab reporting: Pennsylvania (excluding Philadelphia) and Puerto Rico.

[a] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

Table A3. Receipt of HIV medical care among persons aged ≥13 years with infection diagnosed by year-end 2019 and alive at year-end 2020, by area of residence—Ending the HIV Epidemic Phase I jurisdictions

	Persons alive at year-end 2020	≥1 CD4 or VL tests		≥2 CD4 or VL tests[a]		VL <200 copies/mL[b]	
Area of residence	**Total No.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Arizona							
Maricopa County	11,643	8,886	76.3	6,672	57.3	7,851	67.4
California							
Alameda County	5,883	4,586	78.0	2,808	47.7	4,117	70.0
Los Angeles County	48,881	34,709	71.0	25,135	51.4	30,955	63.3
Orange County	6,835	4,758	69.6	3,610	52.8	4,269	62.5
Riverside County	9,530	7,848	82.4	5,687	59.7	7,298	76.6
Sacramento County	4,364	3,387	77.6	2,068	47.4	2,993	68.6
San Bernardino County	4,596	3,146	68.5	2,092	45.5	2,773	60.3
San Diego County	13,026	9,341	71.7	5,981	45.9	7,687	59.0
San Francisco County	11,650	9,139	78.4	5,651	48.5	8,424	72.3
District of Columbia	13,596	8,787	64.6	5,473	40.3	7,444	54.8
Florida							
Broward County	19,525	15,152	77.6	11,905	61.0	13,410	68.7
Duval County	6,111	4,923	80.6	3,700	60.5	3,953	64.7
Hillsborough County	6,988	5,714	81.8	4,651	66.6	5,106	73.1
Miami-Dade County	25,779	17,734	68.8	13,503	52.4	15,256	59.2
Orange County	8,617	6,852	79.5	5,122	59.4	6,118	71.0
Palm Beach County	7,830	5,642	72.1	4,310	55.0	5,034	64.3
Pinellas County	4,678	4,119	88.1	3,471	74.2	3,582	76.6
Georgia							
Cobb County	3,347	2,437	72.8	1,652	49.4	2,153	64.3
DeKalb County	8,728	6,307	72.3	4,249	48.7	5,417	62.1
Fulton County	15,528	11,159	71.9	7,751	49.9	9,375	60.4
Gwinnett County	3,039	2,231	73.4	1,584	52.1	1,989	65.4
Illinois							
Cook County	25,183	18,563	73.7	10,874	43.2	16,001	63.5
Indiana							
Marion County	4,625	3,588	77.6	2,102	45.4	3,128	67.6
Louisiana							
East Baton Rouge Parish	3,977	3,416	85.9	2,846	71.6	2,967	74.6
Orleans Parish	4,845	3,670	75.7	2,492	51.4	3,233	66.7
Maryland[c]							
Baltimore City	9,762	6,699	68.6	4,119	42.2	5,786	59.3
Montgomery County	3,776	2,287	60.6	1,531	40.5	2,089	55.3
Prince George's County	7,867	5,576	70.9	3,741	47.6	4,993	63.5
Massachusetts							
Suffolk County	5,571	4,022	72.2	2,255	40.5	3,673	65.9
Michigan							
Wayne County	6,779	5,107	75.3	2,945	43.4	4,371	64.5
Nevada							
Clark County	9,049	6,677	73.8	4,693	51.9	5,797	64.1
New York							
Bronx County	27,306	20,837	76.3	15,632	57.2	17,310	63.4
Kings County	25,770	18,067	70.1	13,200	51.2	15,749	61.1
New York County	26,113	17,213	65.9	12,382	47.4	15,448	59.2
Queens County	15,731	10,547	67.0	7,623	48.5	9,653	61.4
North Carolina[d]							
Mecklenburg County	5,993	4,594	76.7	3,024	50.5	3,891	64.9
Ohio							
Cuyahoga County	4,737	3,496	73.8	2,158	45.6	3,118	65.8
Franklin County	5,003	3,791	75.8	2,276	45.5	3,309	66.1
Hamilton County	2,987	2,189	73.3	1,196	40.0	1,862	62.3

Table A3. Receipt of HIV medical care among persons aged ≥13 years with infection diagnosed by year-end 2019 and alive at year-end 2020, by area of residence—Ending the HIV Epidemic Phase I jurisdictions *(cont)*

	Persons alive at year-end 2020	≥1 CD4 or VL tests		≥2 CD4 or VL tests[a]		VL <200 copies/mL[b]	
Area of residence	**Total No.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Pennsylvania							
Philadelphia County	16,678	11,334	68.0	6,977	41.8	9,762	58.5
Tennessee							
Shelby County	6,072	4,832	79.6	3,724	61.3	3,939	64.9
Texas							
Bexar County	6,480	4,710	72.7	2,851	44.0	4,097	63.2
Dallas County	18,383	14,015	76.2	9,490	51.6	10,482	57.0
Harris County	26,174	19,002	72.6	12,759	48.7	16,371	62.5
Tarrant County	5,942	4,540	76.4	3,310	55.7	3,582	60.3
Travis County	5,006	4,063	81.2	2,632	52.6	3,403	68.0
Washington							
King County	6,919	5,890	85.1	3,322	48.0	5,516	79.7

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 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. Data are based on address of residence as of December 31, 2020 (i.e., most recent known address). Data for the year 2020 are preliminary and based on death data received by CDC as of December 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: New Jersey. Areas with incomplete lab reporting: Pennsylvania (excluding Philadelphia) and Puerto Rico.

[a] Performed ≥3 months apart during 2020.

[b] A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2020.

[c] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

[d] Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2020.

Table A4. HIV viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by area of residence—Ending the HIV Epidemic Phase I jurisdictions

						VL of <200 copies/mL			
	Persons alive at year-end 2020	Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		Total	Among persons alive at year-end 2020	Among persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests
Area of residence	No.	No.	%	No.	%	No.	%	%	%
Arizona									
Maricopa County	11,643	8,886	76.3	8,441	72.5	7,851	67.4	88.4	93.0
California									
Alameda County	5,883	4,586	78.0	4,426	75.2	4,117	70.0	89.8	93.0
Los Angeles County	48,881	34,709	71.0	33,617	68.8	30,955	63.3	89.2	92.1
Orange County	6,835	4,758	69.6	4,542	66.5	4,269	62.5	89.7	94.0
Riverside County	9,530	7,848	82.4	7,695	80.7	7,298	76.6	93.0	94.8
Sacramento County	4,364	3,387	77.6	3,262	74.7	2,993	68.6	88.4	91.8
San Bernardino County	4,596	3,146	68.5	3,023	65.8	2,773	60.3	88.1	91.7
San Diego County	13,026	9,341	71.7	8,200	63.0	7,687	59.0	82.3	93.7
San Francisco County	11,650	9,139	78.4	8,964	76.9	8,424	72.3	92.2	94.0
District of Columbia	13,596	8,787	64.6	8,386	61.7	7,444	54.8	84.7	88.8
Florida									
Broward County	19,525	15,152	77.6	14,655	75.1	13,410	68.7	88.5	91.5
Duval County	6,111	4,923	80.6	4,543	74.3	3,953	64.7	80.3	87.0
Hillsborough County	6,988	5,714	81.8	5,654	80.9	5,106	73.1	89.4	90.3
Miami-Dade County	25,779	17,734	68.8	17,088	66.3	15,256	59.2	86.0	89.3
Orange County	8,617	6,852	79.5	6,712	77.9	6,118	71.0	89.3	91.2
Palm Beach County	7,830	5,642	72.1	5,539	70.7	5,034	64.3	89.2	90.9
Pinellas County	4,678	4,119	88.1	3,904	83.5	3,582	76.6	87.0	91.8
Georgia									
Cobb County	3,347	2,437	72.8	2,380	71.1	2,153	64.3	88.3	90.5
DeKalb County	8,728	6,307	72.3	6,106	70.0	5,417	62.1	85.9	88.7
Fulton County	15,528	11,159	71.9	10,766	69.3	9,375	60.4	84.0	87.1
Gwinnett County	3,039	2,231	73.4	2,189	72.0	1,989	65.4	89.2	90.9
Illinois									
Cook County	25,183	18,563	73.7	17,826	70.8	16,001	63.5	86.2	89.8
Indiana									
Marion County	4,625	3,588	77.6	3,415	73.8	3,128	67.6	87.2	91.6
Louisiana									
East Baton Rouge Parish	3,977	3,416	85.9	3,345	84.1	2,967	74.6	86.9	88.7
Orleans Parish	4,845	3,670	75.7	3,615	74.6	3,233	66.7	88.1	89.4
Maryland[a]									
Baltimore City	9,762	6,699	68.6	6,564	67.2	5,786	59.3	86.4	88.1
Montgomery County	3,776	2,287	60.6	2,233	59.1	2,089	55.3	91.3	93.6
Prince George's County	7,867	5,576	70.9	5,461	69.4	4,993	63.5	89.5	91.4
Massachusetts									
Suffolk County	5,571	4,022	72.2	3,916	70.3	3,673	65.9	91.3	93.8
Michigan									
Wayne County	6,779	5,107	75.3	4,945	72.9	4,371	64.5	85.6	88.4

Table A4. HIV viral suppression during 2020 (COVID-19 pandemic) among persons aged ≥13 years with HIV infection diagnosed by year-end 2019 and alive at year-end 2020, by area of residence—Ending the HIV Epidemic Phase I jurisdictions *(cont)*

Area of residence	Persons alive at year-end 2020	Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		VL of <200 copies/mL			
						Total	Among persons alive at year-end 2020	Among persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests
	No.	No.	%	No.	%	No.	%	%	%
Nevada									
Clark County	9,049	6,677	73.8	6,312	69.8	5,797	64.1	86.8	91.8
New York									
Bronx County	27,306	20,837	76.3	20,597	75.4	17,310	63.4	83.1	84.0
Kings County	25,770	18,067	70.1	17,783	69.0	15,749	61.1	87.2	88.6
New York County	26,113	17,213	65.9	16,994	65.1	15,448	59.2	89.7	90.9
Queens County	15,731	10,547	67.0	10,418	66.2	9,653	61.4	91.5	92.7
North Carolina[b]									
Mecklenburg County	5,993	4,594	76.7	4,350	72.6	3,891	64.9	84.7	89.4
Ohio									
Cuyahoga County	4,737	3,496	73.8	3,460	73.0	3,118	65.8	89.2	90.1
Franklin County	5,003	3,791	75.8	3,625	72.5	3,309	66.1	87.3	91.3
Hamilton County	2,987	2,189	73.3	2,119	70.9	1,862	62.3	85.1	87.9
Pennsylvania									
Philadelphia County	16,678	11,334	68.0	10,974	65.8	9,762	58.5	86.1	89.0
Tennessee									
Shelby County	6,072	4,832	79.6	4,738	78.0	3,939	64.9	81.5	83.1
Texas									
Bexar County	6,480	4,710	72.7	4,600	71.0	4,097	63.2	87.0	89.1
Dallas County	18,383	14,015	76.2	12,798	69.6	10,482	57.0	74.8	81.9
Harris County	26,174	19,002	72.6	18,608	71.1	16,371	62.5	86.2	88.0
Tarrant County	5,942	4,540	76.4	4,433	74.6	3,582	60.3	78.9	80.8
Travis County	5,006	4,063	81.2	3,689	73.7	3,403	68.0	83.8	92.2
Washington									
King County	6,919	5,890	85.1	5,843	84.4	5,516	79.7	93.7	94.4

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. 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. Data are based on address of residence as of December 31, 2020 (i.e., most recent known address). Data for the year 2020 are preliminary and based on death data received by CDC as of December 2021. A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results during 2020. 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: New Jersey. Areas with incomplete lab reporting: Pennsylvania (excluding Philadelphia) and Puerto Rico.

[a] Data should be interpreted with caution due to incomplete reporting of case information to CDC during December 2021.

[b] Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2020.

Table A5. Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2020 (COVID-19 pandemic) among persons aged ≥ 16 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions

Area of residence	Persons prescribed PrEP[a] No.	Persons with PrEP indications[b] No.	PrEP coverage[c] %
Arizona			
Maricopa County	3,888	22,720	17.1
California			
Alameda County	2,029	8,930	22.7
Los Angeles County	14,796	67,450	21.9
Orange County	2,218	10,510	21.1
Riverside County	1,913	11,080	17.3
Sacramento County	967	5,920	16.3
San Bernardino County	816	11,890	6.9
San Diego County	3,767	14,500	26.0
San Francisco County	8,085	10,840	74.6
District of Columbia	5,953	12,950	46.0
Florida			
Broward County	6,711	20,470	32.8
Duval County	742	8,970	8.3
Hillsborough County	1,516	12,910	11.7
Miami-Dade County	10,284	21,760	47.3
Orange County	3,870	15,310	25.3
Palm Beach County	3,015	9,170	32.9
Pinellas County	1,214	9,530	12.7
Georgia			
Cobb County	643	3,070	20.9
DeKalb County	1,712	6,290	27.2
Fulton County	3,573	13,120	27.2
Gwinnett County	787	3,240	24.3
Illinois			
Cook County	12,861	39,060	32.9
Indiana			
Marion County	1,199	9,150	13.1
Louisiana			
East Baton Rouge Parish	528	1,810	29.2
Orleans Parish	1,341	4,590	29.2
Maryland			
Baltimore City	854	6,330	13.5
Montgomery County	902	5,770	15.6
Prince George's County	823	4,040	20.4
Massachusetts			
Suffolk County	2,804	6,520	43.0
Michigan			
Wayne County	1,225	9,270	13.2
Nevada			
Clark County	2,095	11,670	18.0
New Jersey			
Essex County	706	4,090	17.3
Hudson County	1,050	4,650	22.6
New York			
Bronx County	2,043	5,570	36.7
Kings County	7,411	15,650	47.4
New York County	13,669	15,540	88.0
Queens County	3,787	9,230	41.0

Table A5. Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2020 (COVID-19 pandemic) among persons aged ≥ 16 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions *(cont)*

Area of residence	Persons prescribed PrEP[a] No.	Persons with PrEP indications[b] No.	PrEP coverage[c] %
North Carolina			
Mecklenburg County	1,571	8,450	18.6
Ohio			
Cuyahoga County	961	7,520	12.8
Franklin County	2,317	11,620	19.9
Hamilton County	630	7,720	8.2
Pennsylvania			
Philadelphia County	3,489	9,840	35.5
Tennessee			
Shelby County	810	6,450	12.6
Texas			
Bexar County	1,767	11,920	14.8
Dallas County	5,172	28,670	18.0
Harris County	5,966	40,670	14.7
Tarrant County	1,650	11,340	14.6
Travis County	5,076	11,590	43.8
Washington			
King County	6,971	17,890	39.0
Puerto Rico			
San Juan Municipio	—[d]	2,190	n/a

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

Note. 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] Estimated by using data from IQVIA pharmacy database reported through September 2021 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 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; therefore, 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. In this table, 2018 denominators were used for 2020 PrEP coverage data.

[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] Data value <40 was not reported due to unreliability.