

***Monitoring selected national HIV prevention and care objectives by using
HIV surveillance data—United States and 6 dependent areas, 2019***

Advisory Statement

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

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

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

HIV

SURVEILLANCE REPORT

SUPPLEMENTAL REPORT



Monitoring Selected National HIV Prevention and Care Objectives by Using Surveillance Data United States and 6 Dependent Areas, 2019



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

This issue of the *HIV Surveillance Supplemental Report* is published by the Division of HIV/AIDS Prevention (DHAP), National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, Georgia.

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Commentary	8
National Profile	23
Special Focus Profiles	36
Gay, Bisexual, and Other Men Who Have Sex with Men	39
Persons Who Inject Drugs	36
Transgender Persons and Persons of Additional Gender Identity	41
Women	42
Persons with Perinatally Acquired HIV Infection	44
Young Persons	46
2019 Status and Disparities in Linkage to Care Within 1 Month of HIV Diagnosis and Viral Suppression	49
Technical Notes	54
References	66
Figures in the National Profile	
1 Status of CD4 and viral load reporting, by area of residence as of December 2020—United States and dependent areas	10
2 Stage of disease at HIV diagnosis during 2019 among persons aged ≥ 13 years—44 states and the District of Columbia	11
3 Stage of disease at HIV diagnosis during 2019 among persons aged ≥ 13 years, by selected characteristics—44 states and the District of Columbia	12
4 Linkage to HIV medical care within 1 month of HIV diagnosis during 2019 among persons aged ≥ 13 years, by area of residence—44 states and the District of Columbia	13
5 Linkage to HIV medical care within 1 month of HIV diagnosis during 2019 among persons aged ≥ 13 years, by selected characteristics—44 states and the District of Columbia	14
6 Viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥ 13 years, by area of residence—44 states and the District of Columbia	15
7 Viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥ 13 years, by selected characteristics—44 states and the District of Columbia	16
8a Receipt of HIV medical care among persons aged ≥ 13 years living with diagnosed HIV infection, by area of residence, 2019—44 states and the District of Columbia	17
8b Retention in HIV medical care among persons aged ≥ 13 years living with diagnosed HIV infection, by area of residence, 2019—44 states and the District of Columbia	18
9 Viral suppression among persons aged ≥ 13 years living with diagnosed HIV infection, by area of residence, 2019—44 states and the District of Columbia	19
10 Receipt of HIV medical care, retention in HIV medical care, and viral suppression among persons aged ≥ 13 years living with diagnosed HIV infection, by gender, 2019—44 states and the District of Columbia	20
11 Receipt of HIV medical care, retention in HIV medical care, and viral suppression among persons aged ≥ 13 years living with diagnosed HIV infection, by age, 2019—44 states and the District of Columbia	20
12 Receipt of HIV medical care, retention in HIV medical care, and viral suppression among persons aged ≥ 13 years living with diagnosed HIV infection, by race/ethnicity, 2019—44 states and the District of Columbia	21
13 Receipt of HIV medical care, retention in HIV medical care, and viral suppression among persons aged ≥ 13 years living with diagnosed HIV infection, by transmission category, 2019—44 states and the District of Columbia	22
14 Viral suppression among persons aged ≥ 13 years living with diagnosed HIV infection, by selected characteristics, 2019—44 states and the District of Columbia	23
15 Prevalence-based HIV care continuum for persons aged ≥ 13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2019—United States	24
16 Prevalence-based HIV care continuum for persons aged ≥ 13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2019, by sex at birth—United States	24
17 Prevalence-based HIV care continuum for persons aged ≥ 13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2019, by age—United States	25
18 Prevalence-based HIV care continuum for persons aged ≥ 13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2019, by race/ethnicity—United States	25

19	Prevalence-based HIV care continuum for persons aged ≥ 13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2019, by transmission category—United States	26
20	Stage 3 (AIDS) at time of diagnosis of HIV infection among persons aged ≥ 13 years, by year of diagnosis and population area of residence, 2015–2019—United States	27
21	Stage 3 (AIDS) at time of diagnosis of HIV infection among persons aged ≥ 13 years, by area of residence, 2019—United States	28
22	Stage 3 (AIDS) at time of diagnosis of HIV infection among persons aged ≥ 13 years, by selected characteristics, 2019—United States	29
23	Age-adjusted rates of death among persons aged ≥ 13 years with diagnosed HIV infection, by year of death and area of residence, 2019—United States	30
24	Age-adjusted rates of death among persons aged ≥ 13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2019—United States	31
25	Survival for >3 years after a diagnosis of HIV infection during 2016, by selected characteristics—United States	32
26	PrEP coverage among persons aged ≥ 16 years, by area of residence, 2019—United States and Puerto Rico	34
27	PrEP coverage among persons aged ≥ 16 years, by selected characteristics, 2019—United States	35

Figures in the Special Focus Profiles

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

28	Earlier and late stage of disease at HIV diagnosis during 2019 among men who have sex with men, by race/ethnicity—44 states and the District of Columbia	37
29	Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among men who have sex with men, by race/ethnicity—44 states and the District of Columbia	38
30	Receipt of HIV medical care, retention in HIV medical care, and viral suppression during 2019 among men who have sex with men, by race/ethnicity—44 states and the District of Columbia	39

Section 2 Persons Who Inject Drugs

31	Earlier and late stage of disease at HIV diagnosis during 2019 among persons who inject drugs, by sex at birth and race/ethnicity—44 states and the District of Columbia	40
32	Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among persons who inject drugs, by sex at birth and race/ethnicity—44 states and the District of Columbia	40
33	Receipt of HIV medical care, retention in HIV medical care, and viral suppression during 2019 among persons who inject drugs, by sex at birth and race/ethnicity—44 states and the District of Columbia	40

Section 3 Transgender Persons

34	Receipt of HIV medical care, retention in HIV medical care, and viral suppression during 2019 among transgender persons—44 states and the District of Columbia	40
----	--	----

Section 4 Women

35	Earlier and late stage of disease at HIV diagnosis during 2019 among women, by race/ethnicity—44 states and the District of Columbia	43
36	Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among women, by race/ethnicity—44 states and the District of Columbia	43
37	Receipt of HIV medical care, retention in HIV medical care, and viral suppression during 2019 among women, by race/ethnicity—44 states and the District of Columbia	44

Section 5 Persons with Perinatally Acquired HIV Infection

38	Perinatally acquired HIV infection, by year of birth and mother's race/ethnicity, 2015–2019—United States	45
39	Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother's race/ethnicity, 2015–2019—United States	46

Section 6 Young Persons

40	Earlier and late stage of disease at HIV diagnosis during 2019 among young persons, by race/ethnicity—44 states and the District of Columbia	47
41	Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among young persons, by race/ethnicity—44 states and the District of Columbia	48
42	Receipt of HIV medical care, retention in HIV medical care, and viral suppression during 2019 among young persons, by race/ethnicity—44 states and the District of Columbia	49
43	Status of linkage to HIV medical care within 1 month of HIV diagnosis during 2019 among persons aged ≥ 13 years with diagnosed HIV infection, by selected characteristics—44 states and the District of Columbia	50
44	Status of viral suppression during 2019 among persons aged ≥ 13 years with diagnosed HIV infection, by selected characteristics—44 states and District of Columbia	52

Tables

1a	Stage of disease at time of HIV diagnosis during 2019 among persons aged ≥ 13 years, by selected characteristics—44 states and the District of Columbia	69
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1b	Stage of disease at time of HIV diagnosis during 2019 among persons aged ≥ 13 years, by area of residence—44 states and the District of Columbia	70
1c	Stage of disease at time of HIV diagnosis during 2019 among persons aged ≥ 13 years, by race/ethnicity and selected characteristics—44 states and the District of Columbia	71
1d	Stage of disease at time of HIV diagnosis during 2019 among males aged ≥ 13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—44 states and the District of Columbia	75
2a	Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥ 13 years, by selected characteristics—44 states and the District of Columbia	76
2b	Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥ 13 years, by area of residence—44 states and the District of Columbia	77
2c	Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥ 13 years, by race/ethnicity and selected characteristics—44 states and the District of Columbia	78
2d	Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among males aged ≥ 13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—44 states and the District of Columbia	82
3a	Receipt of HIV medical care among persons aged ≥ 13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by selected characteristics—44 states and the District of Columbia	83
3b	Receipt of HIV medical care among persons aged ≥ 13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by area of residence—44 states and the District of Columbia	84
3c	Receipt of HIV medical care and viral suppression among persons aged ≥ 13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by race/ethnicity and selected characteristics—44 states and the District of Columbia	85
3d	Receipt of HIV medical care and viral suppression during 2019 among males aged ≥ 13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age group—44 states and the District of Columbia	89
4a	HIV viral suppression during 2019 among persons aged ≥ 13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by selected characteristics—44 states and the District of Columbia	90
4b	HIV viral suppression during 2019 among persons aged ≥ 13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by area of residence—44 states and the District of Columbia	91
5	Prevalence-based HIV care continuum for persons aged ≥ 13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2019, by selected characteristics—United States	92
6a	Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥ 13 years, by year of diagnosis and selected characteristics, 2015–2019—United States	93
6b	Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥ 13 years, by year of diagnosis and selected characteristics, 2015–2019—United States and 6 dependent areas	95
6c	Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥ 13 years, by year of diagnosis and area of residence, 2015–2019—United States and 6 dependent areas	96
6d	Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥ 13 years, by race/ethnicity and area of residence, 2019—United States	98
7a	Deaths of persons aged ≥ 13 years with diagnosed HIV infection, by year of death and selected characteristics, 2015–2019—United States	99
7b	Deaths of persons aged ≥ 13 years with diagnosed HIV infection, by year of death and selected characteristics, 2015–2019—United States and 6 dependent areas	100
7c	Deaths of persons aged ≥ 13 years with diagnosed HIV infection, by year of death and area of residence, 2015–2019—United States and 6 dependent areas	101
7d	Deaths of persons aged ≥ 13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and selected characteristics, 2015–2019—United States	106
7e	Deaths of persons aged ≥ 13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and selected characteristics, 2015–2019—United States and 6 dependent areas	107
7f	Deaths of persons aged ≥ 13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2015–2019—United States and 6 dependent areas	108
8a	Persons surviving >3 years after a diagnosis of HIV infection during 2011–2016, by year of diagnosis and selected characteristics—United States	113
8b	Persons surviving >3 years after a diagnosis of HIV infection during 2011–2016, by year of diagnosis and selected characteristics—United States and 6 dependent areas	114
8c	Persons surviving >3 years after a diagnosis of HIV infection during 2011–2016, by year of diagnosis and area of residence—United States and 6 dependent areas	115
8d	Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2011–2016, by year of diagnosis and selected characteristics—United States	116
8e	Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2011–2016, by year of diagnosis and selected characteristics—United States and 6 dependent areas	117

8f	Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2011–2016, by year of diagnosis and area of residence—United States and 6 dependent areas	118
9a	Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2019 among persons aged ≥ 16 years, by selected characteristics—United States	119
9b	Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2019 among persons aged ≥ 16 years, by area of residence—United States and Puerto Rico	120
10a	Perinatally acquired HIV infection, by year of birth and mother’s race/ethnicity, 2015–2019—United States	121
10b	Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother’s race/ethnicity, 2015–2019—United States	121
11	Monitoring Ending the HIV Epidemic (EHE) indicators by using data from the National HIV Surveillance System (NHSS) and other reporting systems	122
12	Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2020—United States and 6 dependent areas	123

Appendix: Tables for Ending the HIV Epidemic Phase I Jurisdictions

A1	Stage of disease at time of HIV diagnosis during 2019 among persons aged ≥13 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions	125
A2	Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥13 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions	126
A3	Receipt of HIV medical care among persons aged ≥13 years with infection diagnosed by year-end 2018 and alive at year-end 2019, by area of residence—Ending the HIV Epidemic Phase I jurisdictions	127
A4	HIV viral suppression during 2019 among persons aged ≥13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by area of residence—Ending the HIV Epidemic Phase I jurisdictions	128
A5	Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2017 (recalculated), 2018 (updated), and 2019 among persons aged ≥ 16 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions	130

Supplementary Tables

S1	Stage of disease at time of HIV diagnosis during 2017 among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia	132
S2	Stage of disease at time of HIV diagnosis during 2017 among males aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—41 states and the District of Columbia	136
S3	Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2017 among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia	137
S4	Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2017 among males aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—41 states and the District of Columbia	141
S5	Receipt of HIV medical care and viral suppression among persons aged ≥13 years with infection diagnosed by year-end 2016 and alive at year-end 2017, by race/ethnicity and selected characteristics—41 states and the District of Columbia	142
S6	Receipt of HIV medical care and viral suppression during 2017 among males aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age group—41 states and the District of Columbia	146
S7a	Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2017 and 2018 among persons aged ≥ 16 years, by selected characteristics—United States	147
S7b	Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2017 and 2018 among persons aged ≥ 16 years, by area of residence—United States and Puerto Rico	148
S8a	Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis and selected characteristics, 2015–2019—United States	149
S8b	Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis and selected characteristics, 2015–2019—United States and 6 dependent areas	150
S9a	Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis, sex at birth, and selected characteristics, 2015–2019—United States	151
S9b	Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis, sex at birth, and selected characteristics, 2015–2019—United States and 6 dependent areas	152
S10a	Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis, age group, sex at birth, and selected characteristics, 2015–2019—United States	153
S10b	Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis, age group, sex at birth, and selected characteristics, 2015–2019—United States and 6 dependent areas	156

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/ μ L) or percentage
CDC	Centers for Disease Control and Prevention
EHE	Ending the HIV Epidemic in the U.S. initiative
FTM	female-to-male
HIV	human immunodeficiency virus
IDU	injection drug use
MMSC	male-to-male sexual contact
MMSC-IDU	male-to-male sexual contact <i>and</i> injection drug use
MSA	metropolitan statistical area
MSM	gay, bisexual, and other men who have sex with men
MTF	male-to-female
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
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 other federal directives, including the updated strategic plans of the Division of HIV/AIDS Prevention (DHAP) and for the United States [1–4]. This surveillance supplemental report complements the 2019 *HIV Surveillance Report* [5] and presents the results of focused analyses of National HIV Surveillance System (NHSS) [6] data to measure progress toward achieving national goals [1–3]. Data in this report are also used to assess Department of Health and Human Services (HHS) core indicators [7, 8] and to monitor progress toward the HIV-related national objectives in Healthy People 2030 and the National HIV Strategic Plan for the United States: A Roadmap to End the Epidemic 2021–2025 (NHSP), and the Ending the HIV Epidemic in the U.S. (EHE) initiative [9, 10].

REPORT CHANGES

Recognizing the changing needs for data, CDC has transitioned this report to a new format that includes figures and tables, and includes data reported to CDC’s NHSS through December 31 of the prior year. The use of data reported to CDC through December 31, 2020 will allow for a 12-month reporting delay and assessment of trends through the most recent diagnosis, death, and prevalence year (2019). Death and prevalence trends through 2019 should be interpreted with caution.

New to this report are the following:

- This report is presented in a new, digital format that includes figures based on charts and maps from the former Selected National HIV Prevention and Care Outcomes slide set.
- Tables now display additional geographic stratifications (i.e., region and population area of residence).
- A Special Focus Profiles section was added to highlight 6 key populations: (1) Gay, Bisexual, and Other Men Who Have Sex With Men (MSM), (2) Persons Who Inject Drugs (PWID), (3) Transgender Persons, (4) Women, (5) Persons with Perinatally Acquired HIV Infection, and (6) Young Persons. This section also includes the following topics: 2019 status and disparities for linkage to care within 1 month of HIV diagnosis and for viral suppression by race/ethnicity, transmission category, and geography.
- Supplementary Tables S1–S7b display 2017 and 2018 data (where indicated) that have been updated. Stage of disease at time of diagnosis, linkage to HIV medical care, viral suppression within 6 months of diagnosis, receipt of HIV medical care, viral suppression, and preexposure prophylaxis (PrEP) coverage are included. Tables S8a–S10b on stage 3 (AIDS) classification at time of diagnosis of HIV infection for older adults were added.

National Profile

The term *diagnosis of HIV infection* refers to a diagnosis of HIV infection regardless of the person's stage of disease (stage 0, 1, 2, 3 [AIDS], or unknown) at the time of diagnosis. The standard used for reporting trends in numbers, percentages, and rates is an increase or a decrease of 5% or more during the specified time frame (e.g., when comparing 2015 and 2019). The exceptions to this standard are where numbers were small (i.e., less than 12) and percentages or rates were based on small numbers. 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 6a–6d), deaths and survival of persons with diagnosed HIV infection (Tables 7a–8f), and persons with diagnosed, perinatally acquired HIV infection (Tables 10a/b). For tables on PrEP (Tables 9a/b), the number of persons who have been prescribed PrEP, the estimated number with PrEP indications, and 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 at birth. For a summary of indicators for EHE, see Table 11. For information and data among selected populations, see the special focus profiles and the 2019 status on linkage to care and viral suppression outcomes section.



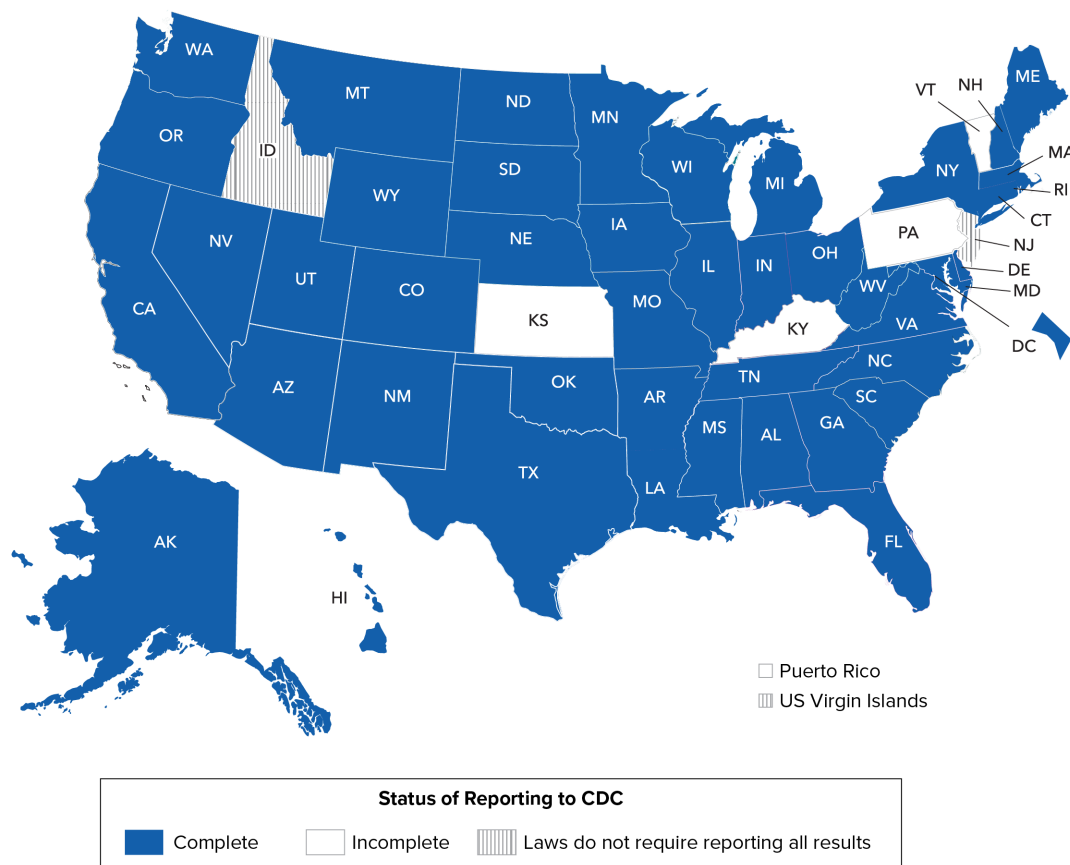
Please read all titles and footnotes carefully to ensure a complete understanding of the displayed data. Please note that we highlight an important point with the magnifying glass icon in the text.

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) 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 2020, 45 jurisdictions (44 states and the District of Columbia) had complete laboratory reporting for specimens collected from at least January 2018 through September 2020 (Figure 1).

Figure 1. Status of CD4 and viral load reporting, by area of residence as of December 2020—United States and dependent areas



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

The jurisdictions included in this report differ from those in previous reports. A jurisdiction’s data are included only if that jurisdiction met CDC’s criteria (see Technical Notes) for the collection and reporting of CD4 and viral load test results for all the data years examined. In comparison with the 2018 report, the 2019 report includes data from 3 additional states (Arizona, Arkansas, and Connecticut) that met the criteria.

DIAGNOSIS-BASED HIV CARE CONTINUUM—OVERVIEW

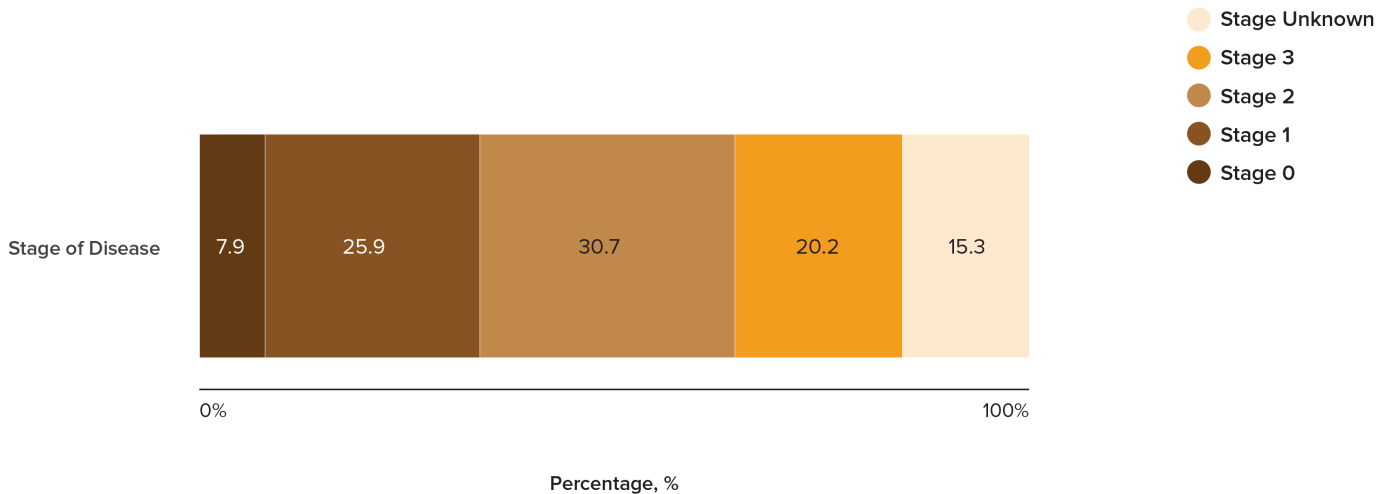
The Diagnosis-based HIV Care Continuum describes each step of the continuum as a percentage of the number of people living with diagnosed HIV. The denominator is the number of persons aged ≥ 13 years living with diagnosed HIV infection at year-end 2019 (note: denominator for linkage to care and viral suppression within 6 months of diagnosis is limited to people with HIV diagnosed in a single year). The numerator is from the 45 jurisdictions with complete CD4 and viral load reporting. For more information on Definitions and Data Specifications, see Technical Notes.

Uses of the diagnosis-based continuum include monitoring the United States progress in comparison to national strategic plan, EHE, and UNAIDS 90-90-90 goals, monitoring disparities among subgroups of the population, and monitoring data at a local level to understand local progress and identify additional action steps to meet national level goals.

Stage of disease at time of diagnosis of HIV infection

Among 33,795 persons with HIV infection diagnosed during 2019 in 45 jurisdictions with complete laboratory reporting, the stage of disease at time of diagnosis was classified as follows: stage 0 (7.9%), stage 1 (25.9%), stage 2 (30.7%), stage 3 (AIDS) (20.2%), and stage unknown (15.3%). A higher percentage of persons had HIV diagnosed at an earlier stage (stage 0, 1, or 2: 64.5%) than at the late stage (stage 3 [AIDS]: 20.2%) (Table 1a, Figure 2).

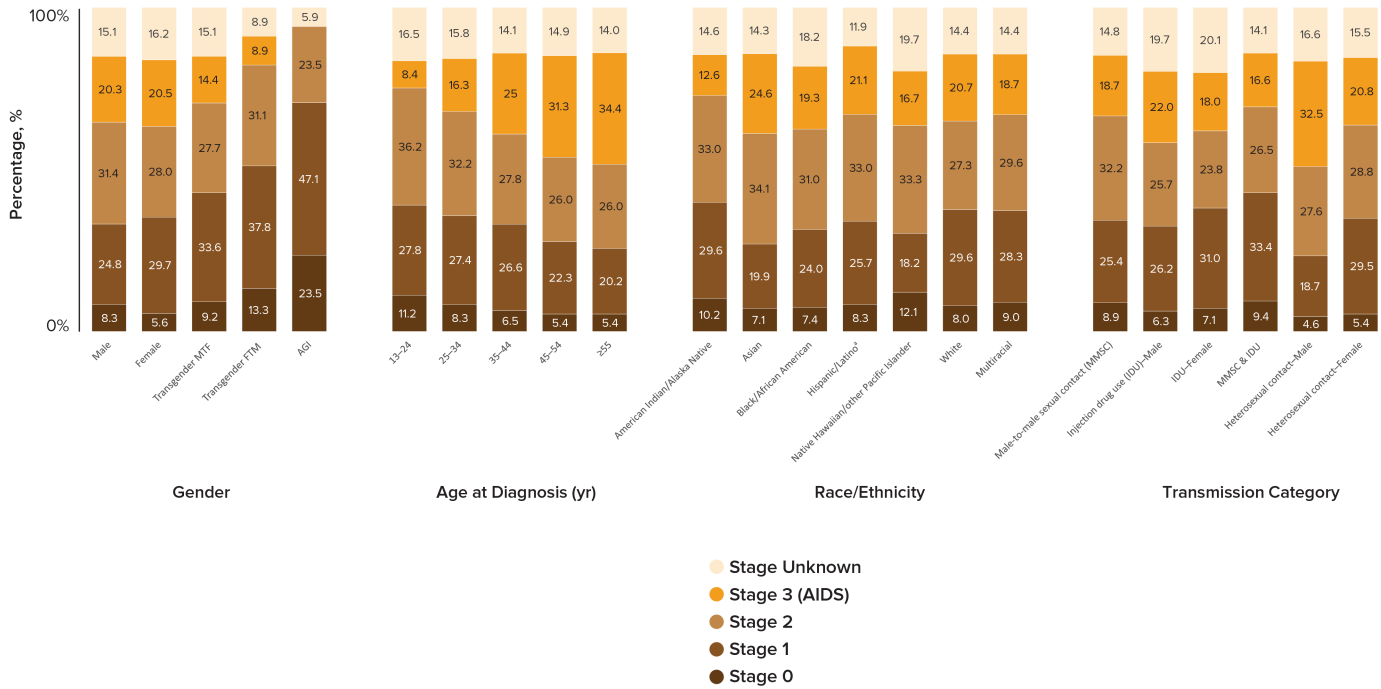
Figure 2. Stage of disease at HIV diagnosis during 2019 among persons aged ≥13 years—44 states and the District of Columbia



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

The highest percentages for persons whose infection was diagnosed at an earlier stage (stage 0, 1, or 2) by selected characteristics (i.e., gender, age group, race/ethnicity, and transmission category) were for persons of additional gender identity (AGI) (23.5% [stage 0], 47.1% [stage 1], 23.5% [stage 2]), transgender female-to-male (FTM) persons (13.3% [stage 0], 37.8% [stage 1], 31.1% [stage 2]), persons aged 13–24 at time of diagnosis (11.2% [stage 0], 27.8% [stage 1], 36.2% [stage 2]), American Indian or Alaska Native persons (10.2% [stage 0], 29.6% [stage 1], 33.0% [stage 2]), males with infection attributed to male-to-male sexual contact *and* injection drug use (MMSC-IDU) (9.4% [stage 0], 33.4% [stage 1], 26.5% [stage 2]), and males with infection attributed to MMSC (8.9% [stage 0], 25.4% [stage 1], 32.2% [stage 2]) (Table 1a, Figure 3). The highest percentages for persons whose infection was diagnosed at a late stage (stage 3 [AIDS]) by selected characteristics were for females (20.5%), males (20.3%), persons aged ≥45 years at time of diagnosis (45–54 years: 31.3%, ≥55 years: 34.4%), Asian persons (24.6%), and males with infection attributed to heterosexual contact (32.5%) (Table 1a, Figure 3). Please use caution when interpreting data for persons of AGI, transgender FTM persons, American Indian or Alaska Native persons, and Native Hawaiian or other Pacific Islander persons: the numbers are small.

Figure 3. Stage of disease at HIV diagnosis during 2019 among persons aged ≥13 years, by selected characteristics—44 states and the District of Columbia



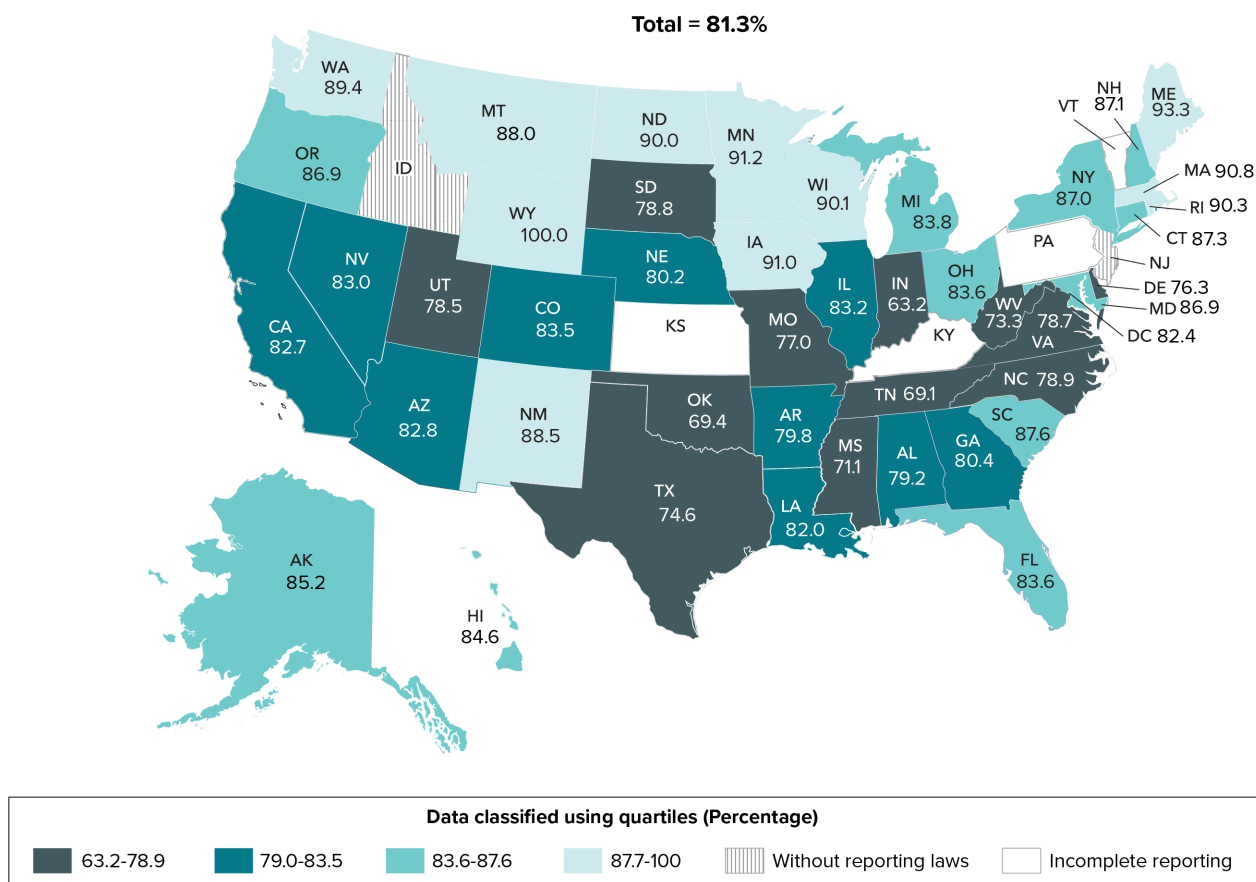
Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

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

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

Among 33,795 persons with HIV infection diagnosed during 2019 in 45 jurisdictions with complete laboratory reporting, 81.3% were linked to HIV medical care ≤1 month after diagnosis (Table 2a). During 2019, 11 states (Iowa, Maine, Massachusetts, Minnesota, Montana, New Mexico, North Dakota, Rhode Island, Washington, Wisconsin, and Wyoming) in the top 25% had the highest percentages (≥87.7) of persons linked to HIV medical care within 1 month of diagnosis. Twelve states (Delaware, Indiana, Mississippi, Missouri, North Carolina, Oklahoma, South Dakota, Tennessee, Texas, Utah, Virginia, and West Virginia) in the lowest 25% had the lowest percentages (≤78.9) of persons linked to HIV medical care within 1 month of diagnosis (Table 2b, Figure 4).

Figure 4. Linkage to HIV medical care within 1 month of HIV diagnosis during 2019 among persons aged ≥13 years, by area of residence—44 states and the District of Columbia



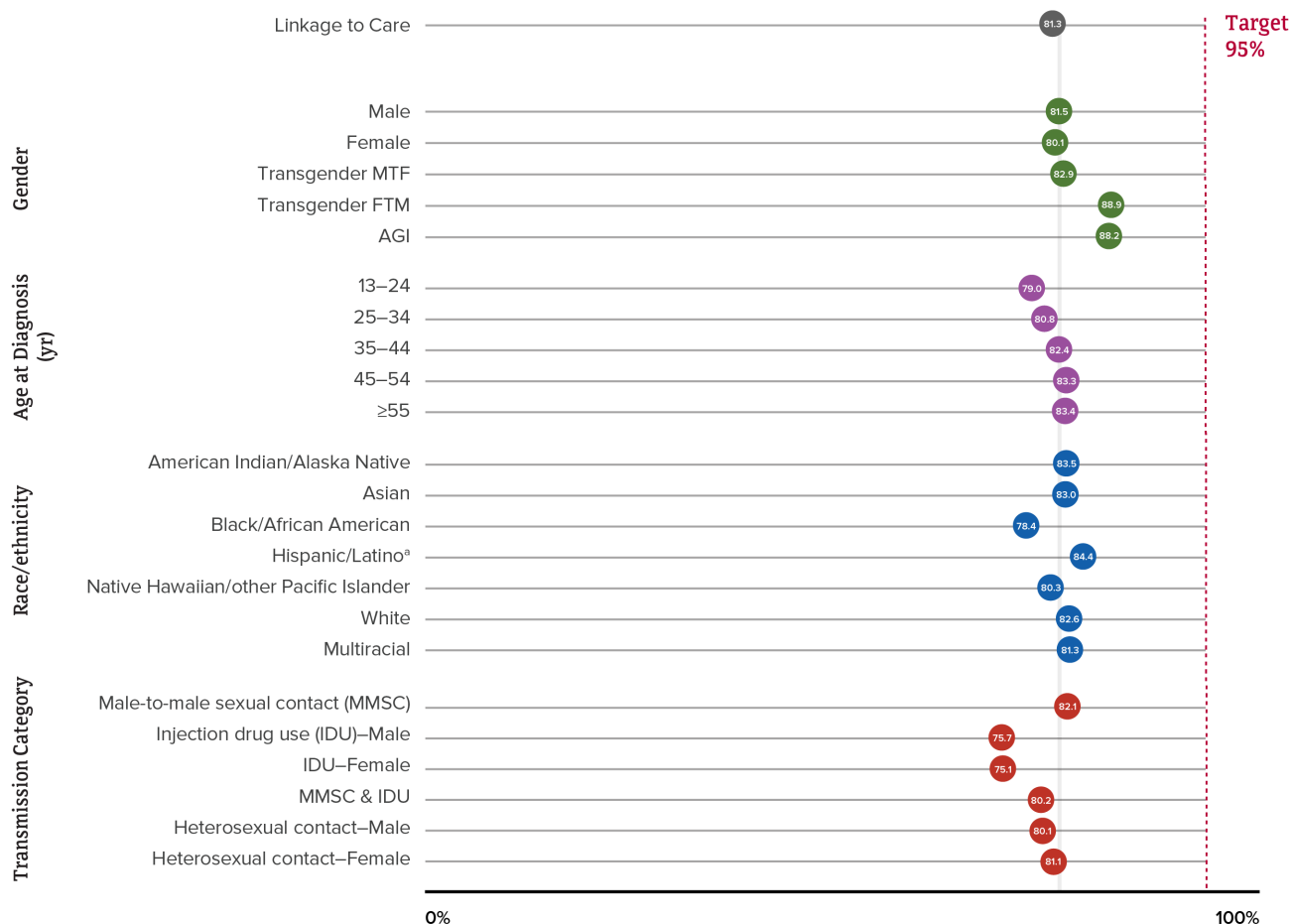
Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

Although linkage to HIV medical care overall is below the EHE target of 95%, the highest percentages for persons linked to HIV medical care ≤1 month of diagnosis by selected characteristics (i.e., gender, age group, race/ethnicity, and transmission category) were for transgender FTM persons (88.9%), persons of AGI (88.2%), persons aged ≥45 years (45–54 years: 83.3%, ≥55 years: 83.4%), Hispanic or Latino persons (84.4%), and males with infection attributed to MMSC (82.1%). The lowest percentages for persons linked to HIV medical care were for females (80.1%), persons aged 13–24 years (79.0%), Black or African American persons (78.4%), and females with infection attributed to IDU (75.1%) (Table 2a, Figure 5). Please use caution when interpreting data for persons of AGI, transgender FTM persons, and Native Hawaiian or other Pacific Islander persons: the numbers are small.



A closer look at linkage to HIV medical care within 1 month of diagnosis reveals that among 33,795 persons with HIV infection diagnosed during 2019 in 45 jurisdictions with complete laboratory reporting, no demographic group or group with infection attributed to any of the transmission categories met the forthcoming EHE target of 95% (Figure 5).

Figure 5. Linkage to HIV medical care within 1 month of HIV diagnosis during 2019 among persons aged ≥13 years, by selected characteristics—44 states and the District of Columbia

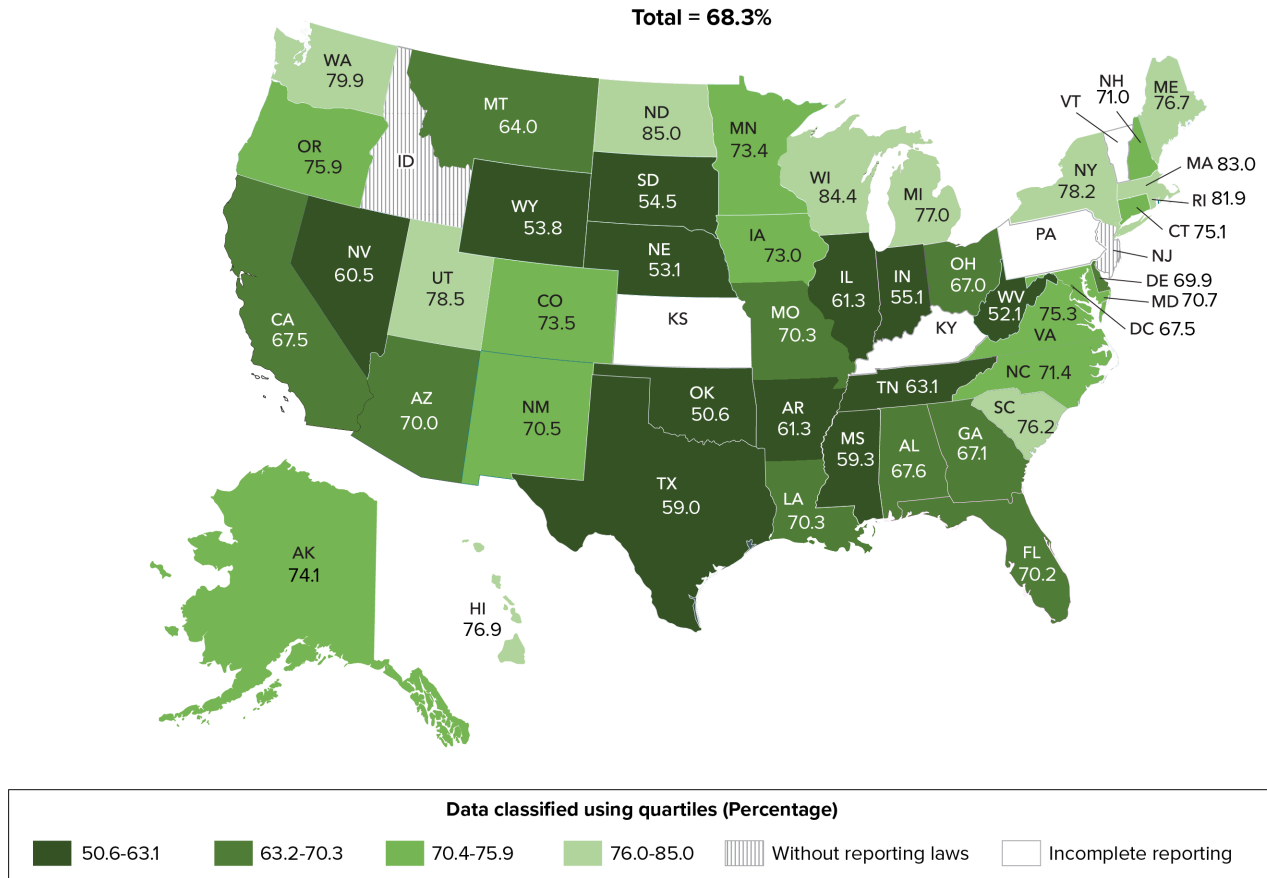


Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

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

For any viral load test result received within 6 months of HIV diagnosis during 2019, viral load was suppressed in 68.3% of persons whose HIV infection was diagnosed during 2019 in the 45 jurisdictions (Table 2a). Eleven states (Hawaii, Maine, Massachusetts, Michigan, New York, North Dakota, Rhode Island, South Carolina, Utah, Washington, and Wisconsin) in the top 25% had the highest percentages (≥ 76.0) of persons with viral suppression within 6 months of diagnosis in 2019. Twelve states (Arkansas, Illinois, Indiana, Mississippi, Nebraska, Nevada, Oklahoma, South Dakota, Tennessee, Texas, West Virginia, and Wyoming) in the lowest 25% had the lowest percentages (≤ 63.1) of persons with viral suppression within 6 months of diagnosis in 2019 (Table 2b, Figure 6).

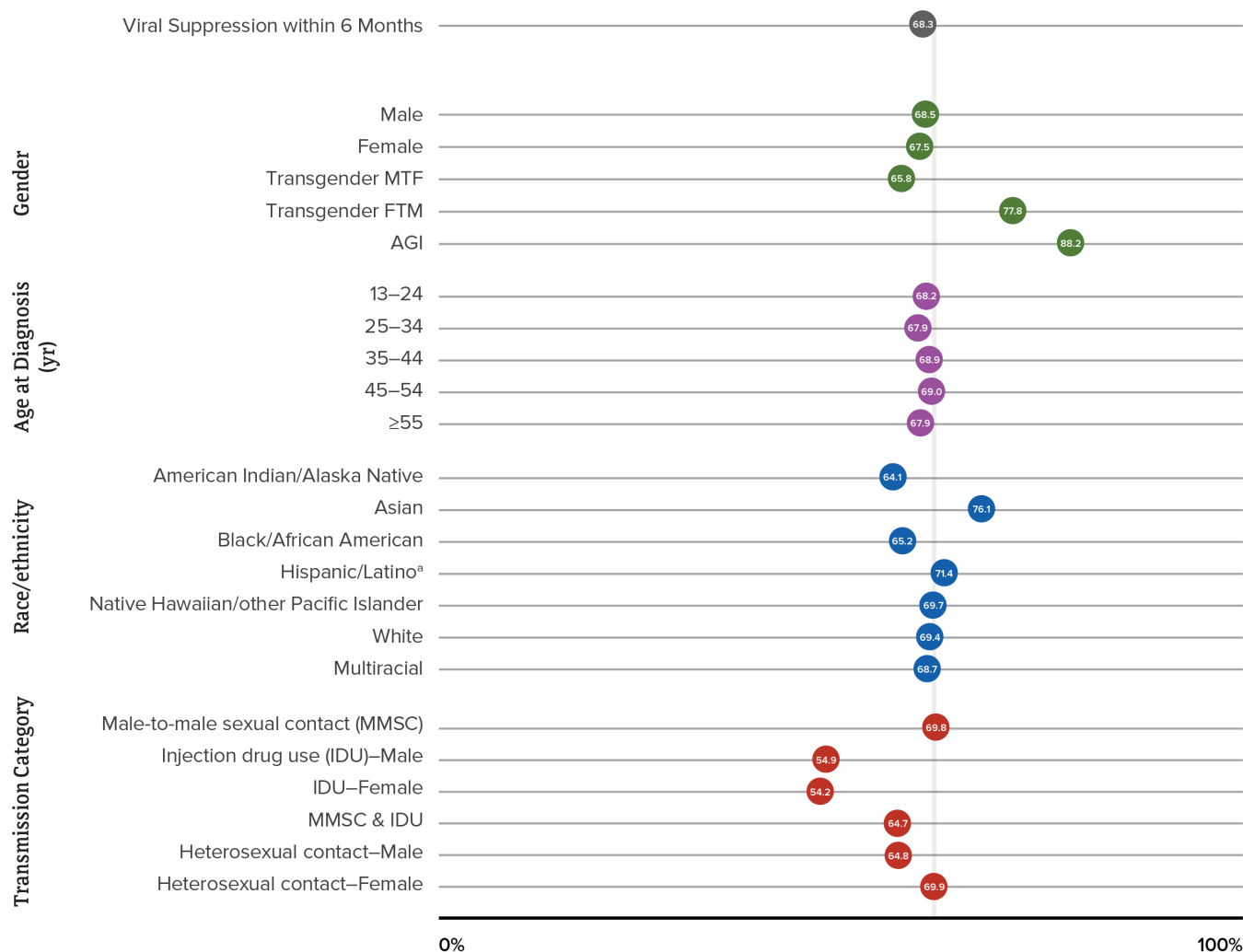
Figure 6. Viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥13 years, by area of residence—44 states and the District of Columbia



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

The highest percentages for persons whose viral load test result indicated viral suppression within 6 months of diagnosis in 2019 by selected characteristics (i.e., gender, age group, race/ethnicity, and transmission category) were for persons of AGI (88.2%), persons aged 45–54 years (69.0%), Asian persons (76.1%), females with infection attributed to heterosexual contact (69.9%), and males with infection attributed to MMSM (69.8%). The lowest percentages for persons that were virally suppressed within 6 months of HIV diagnosis in 2019 were for transgender male-to-female (MTF) persons (65.8%), persons aged 25–34 years and persons ≥55 years (67.9%), American Indian or Alaska Native persons (64.1%), and females with infection attributed to IDU (54.2%) (Table 2a, Figure 7). Please use caution when interpreting data for persons of AGI, transgender FTM persons, and Native Hawaiian or other Pacific Islander persons: the numbers are small.

Figure 7. Viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥13 years, by selected characteristics—44 states and the District of Columbia



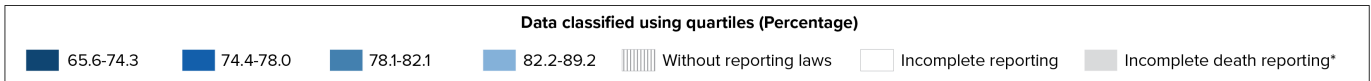
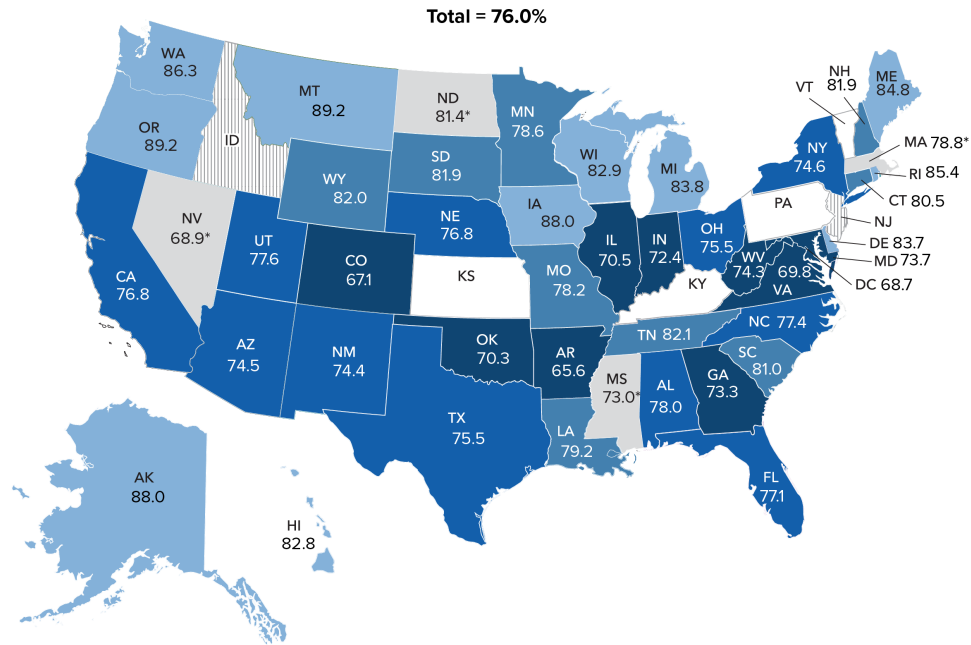
Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

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

Receipt of HIV medical care, retention in HIV medical care, and viral suppression

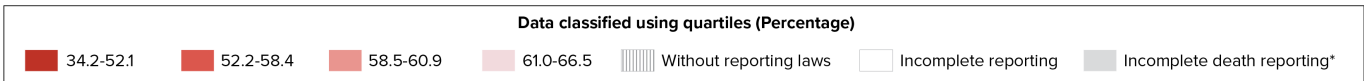
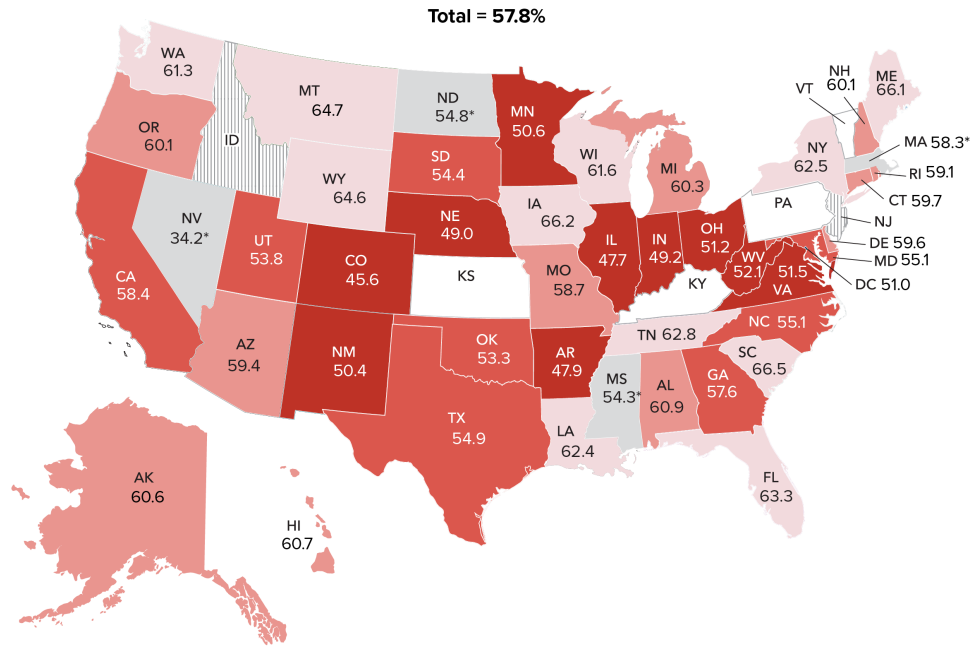
During 2019 in 45 jurisdictions with complete laboratory reporting, 76.0% of 925,077 persons alive at year-end 2019 received any HIV medical care, and 57.8% of persons were retained in HIV medical care (Table 3a). Eleven states (Alaska, Delaware, Hawaii, Iowa, Maine, Michigan, Montana, Oregon, Rhode Island, Washington, and Wisconsin) in the top 25% had the highest percentages (≥ 82.2) of persons who received any HIV medical care. Eleven states (Arkansas, Colorado, Georgia, Illinois, Indiana, Maryland, Mississippi, Nevada, Oklahoma, Virginia, and West Virginia) and the District of Columbia were in the lowest 25% and had the lowest percentages (≤ 74.3) of persons who received any HIV medical care (Table 3b, Figure 8a). Eleven states (Florida, Iowa, Louisiana, Maine, Montana, New York, South Carolina, Tennessee, Washington, Wisconsin, and Wyoming) in the top 25% had the highest percentages (≥ 61.0) of persons retained in HIV medical care. Eleven states (Arkansas, Colorado, Illinois, Indiana, Minnesota, Nebraska, Nevada, New Mexico, Ohio, Virginia, and West Virginia) and the District of Columbia were in the lowest 25% and had the lowest percentages (≤ 52.1) of persons retained in HIV medical care (Table 3b, Figure 8b). Please note that due to incomplete reporting of deaths for the year 2019, data for Massachusetts, Mississippi, Nevada, and North Dakota should be interpreted with caution.

Figures 8a. Receipt of HIV medical care among persons aged ≥13 years living with diagnosed HIV infection, by area of residence, 2019—44 states and the District of Columbia



Note. Data for the year 2019 are preliminary and based on deaths reported to CDC as of December 2020. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

Figures 8b. Retention in HIV medical care among persons aged ≥ 13 years living with diagnosed HIV infection, by area of residence, 2019—44 states and the District of Columbia

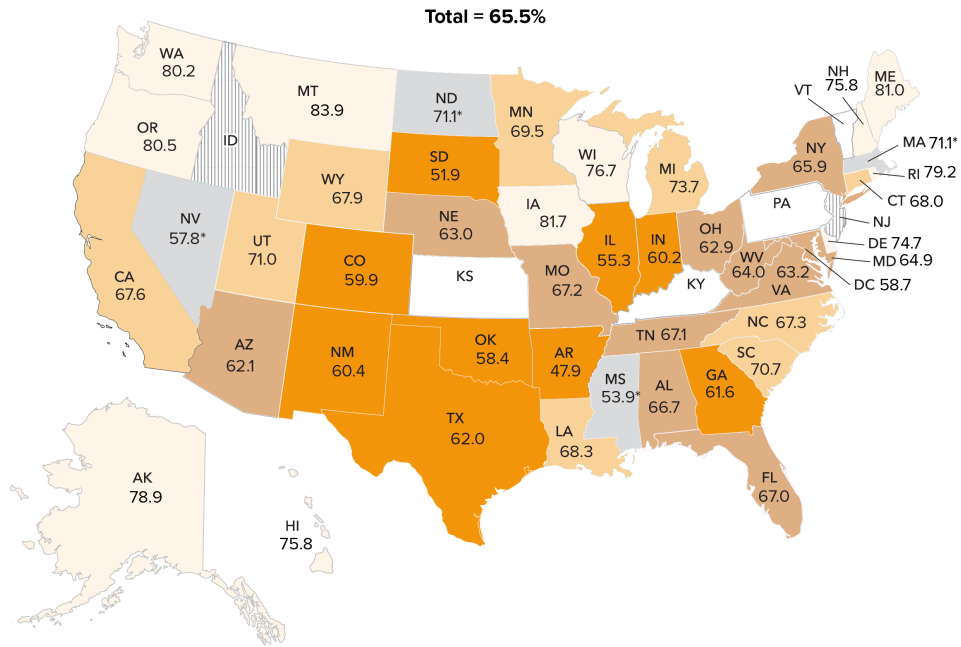


Note. Data for the year 2019 are preliminary and based on deaths reported to CDC as of December 2020. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

During 2019, 76.0% of 925,077 persons had at least 1 CD4 or viral load test (i.e., received any HIV medical care in 2019), and 73.2% had at least 1 viral load test. At the most recent viral load test during 2019, viral load was suppressed in 86.2% of persons who received any HIV medical care (at least 1 CD4 or viral load test) in 2019 and 89.5% of persons with at least 1 viral load test (Table 4a).

Persons with suppressed viral load at the most recent viral load test represented 65.5% of the total number of persons with an HIV diagnosis by year-end 2018 and alive at year-end 2019 in the 45 jurisdictions (Table 4a). Eleven states (Alaska, Delaware, Hawaii, Iowa, Maine, Montana, New Hampshire, Oregon, Rhode Island, Washington, and Wisconsin) in the top 25% had the highest percentages (≥ 73.8) of persons with viral suppression at the most recent viral load test during 2019. Eleven states (Arkansas, Colorado, Georgia, Illinois, Indiana, Mississippi, Nevada, New Mexico, Oklahoma, South Dakota, and Texas) and the District of Columbia were in the lowest 25% and had the lowest percentages (≤ 62.0) of persons with viral suppression at the most recent viral load test during 2019 (Table 4b, Figure 9). Please note that due to incomplete reporting of deaths for the year 2019, data for Massachusetts, Mississippi, North Dakota, and Nevada should be interpreted with caution.

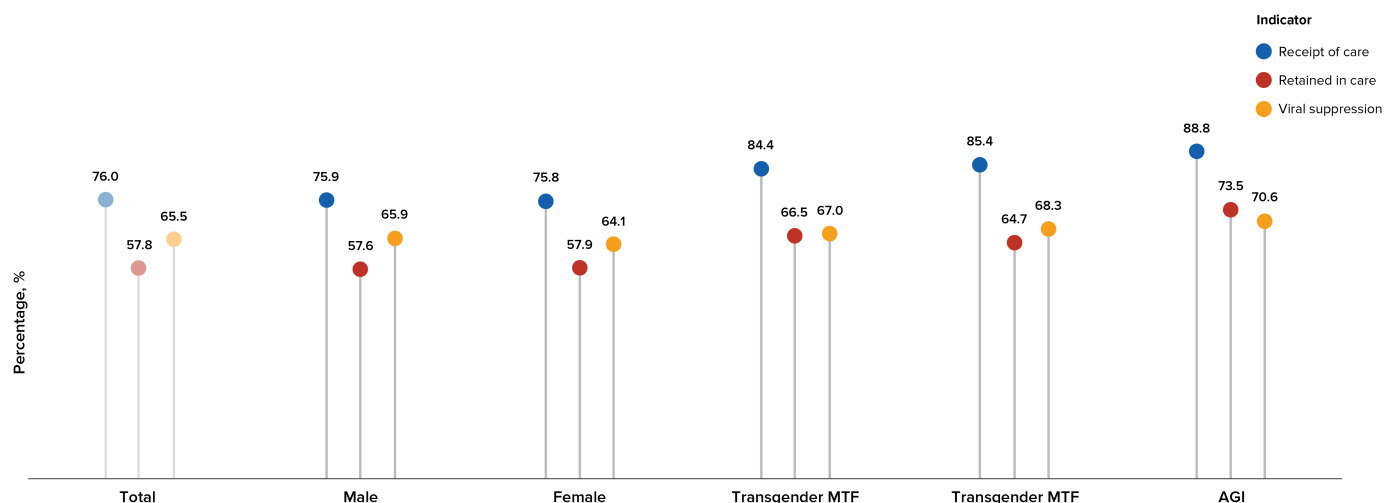
Figure 9. Viral suppression among persons aged ≥13 years living with diagnosed HIV infection, by area of residence, 2019—44 states and the District of Columbia



Note. Data for the year 2019 are preliminary and based on deaths reported to CDC as of December 2020. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

The following percentages are for persons living with diagnosed HIV by year-end 2019 in the 45 jurisdictions with complete laboratory reporting who received any HIV medical care, were retained in HIV medical care, or had a most recent viral load test result in 2019 that indicated viral suppression. By gender, the highest percentage for persons who received any HIV medical care was for persons of AGI (88.8%) and the lowest percentage was for females (75.8%). The highest percentage for persons retained in HIV medical care was for persons of AGI (73.5%) and the lowest percentage was for males (57.6%). The highest percentage for persons who were virally suppressed at the most recent viral load test was for transgender FTM persons (70.6%) and the lowest percentage was for females (64.1%) (Tables 3a and 4a, Figure 10).

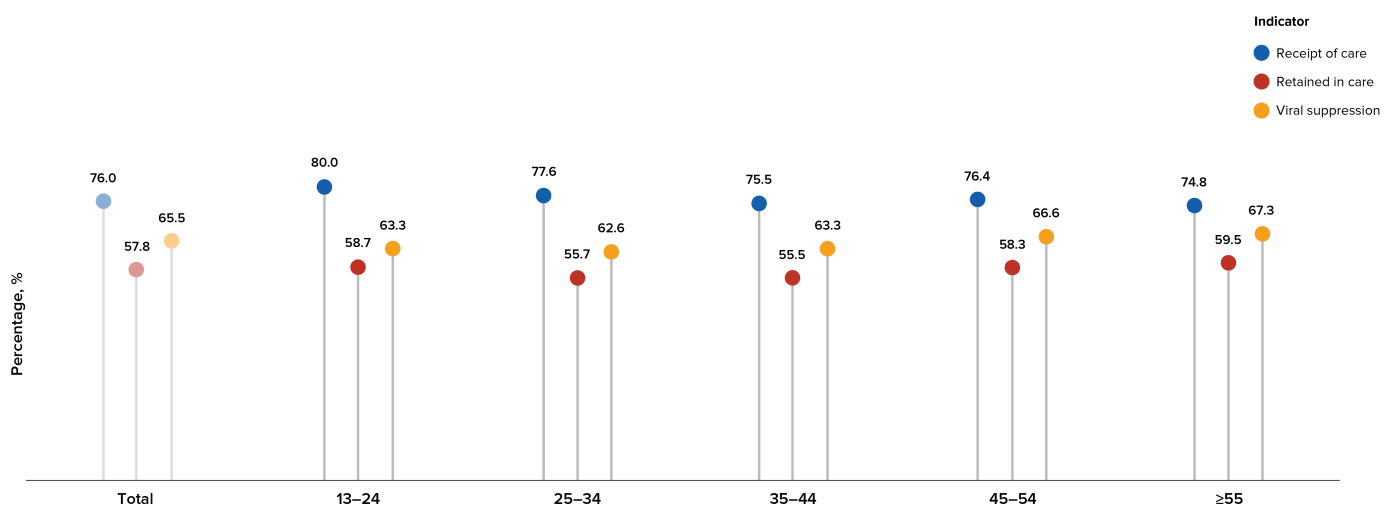
Figure 10. Receipt of HIV medical care, retention in HIV medical care, and viral suppression among persons aged ≥ 13 years living with diagnosed HIV infection, by gender, 2019—44 states and the District of Columbia



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

By age, the highest percentage for persons who received any HIV medical care was for persons aged 13–24 years (80.0%) and the lowest percentage was for persons aged ≥ 55 years (74.8%). The highest percentage for persons retained in HIV medical care was for persons aged ≥ 55 years (59.5%) and the lowest percentage was for persons aged 35–44 years (55.5%). The highest percentage for persons who were virally suppressed at the most recent viral load test was for persons aged ≥ 55 years (67.3%) and the lowest percentage was for persons aged 25–34 years (62.6%) (Tables 3a and 4a, Figure 11).

Figure 11. Receipt of HIV medical care, retention in HIV medical care, and viral suppression among persons aged ≥ 13 years living with diagnosed HIV infection, by age, 2019—44 states and the District of Columbia

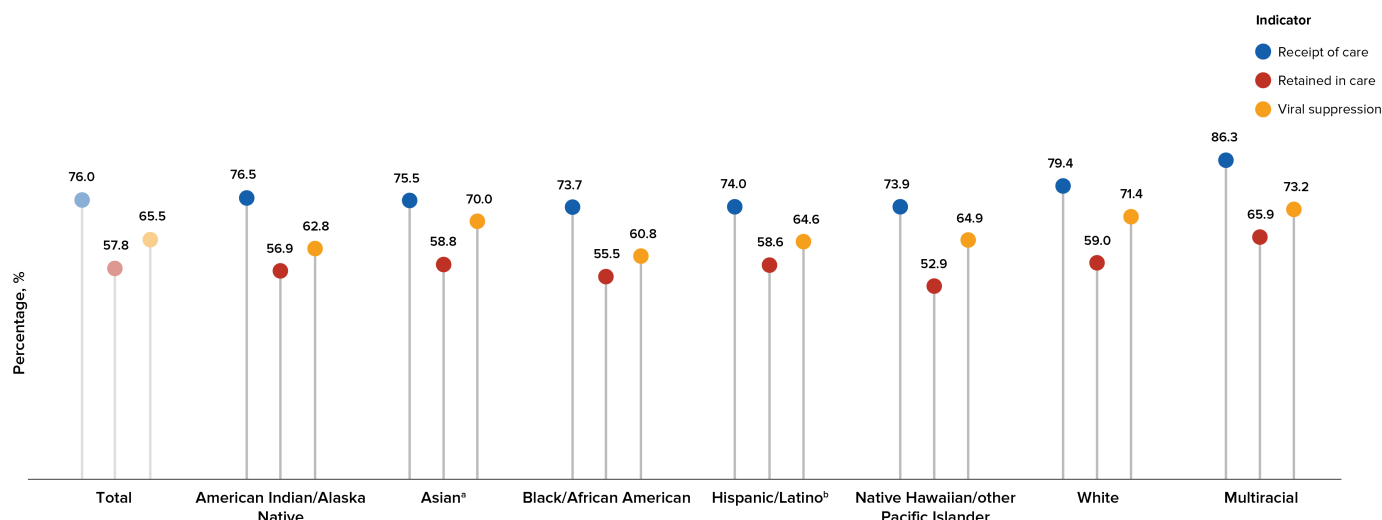


Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

By race/ethnicity, the highest percentage for persons who received any HIV medical care was for multiracial persons (86.3%) and the lowest percentages were for Native Hawaiian or other Pacific Islander (73.9%) and Black or African American persons (73.7%). The highest percentage for persons retained in HIV medical care was for multiracial persons (65.9%) and the lowest percentage was for Native Hawaiian or other Pacific Islander

persons (52.9%). The highest percentage for persons who were virally suppressed at the most recent viral load test was for multiracial persons (73.2%) and the lowest percentage was for Black or African American persons (60.8%) (Tables 3a and 4a, Figure 12).

Figure 12. Receipt of HIV medical care, retention in HIV medical care, and viral suppression among persons aged ≥13 years living with diagnosed HIV infection, by race/ethnicity, 2019—44 states and the District of Columbia



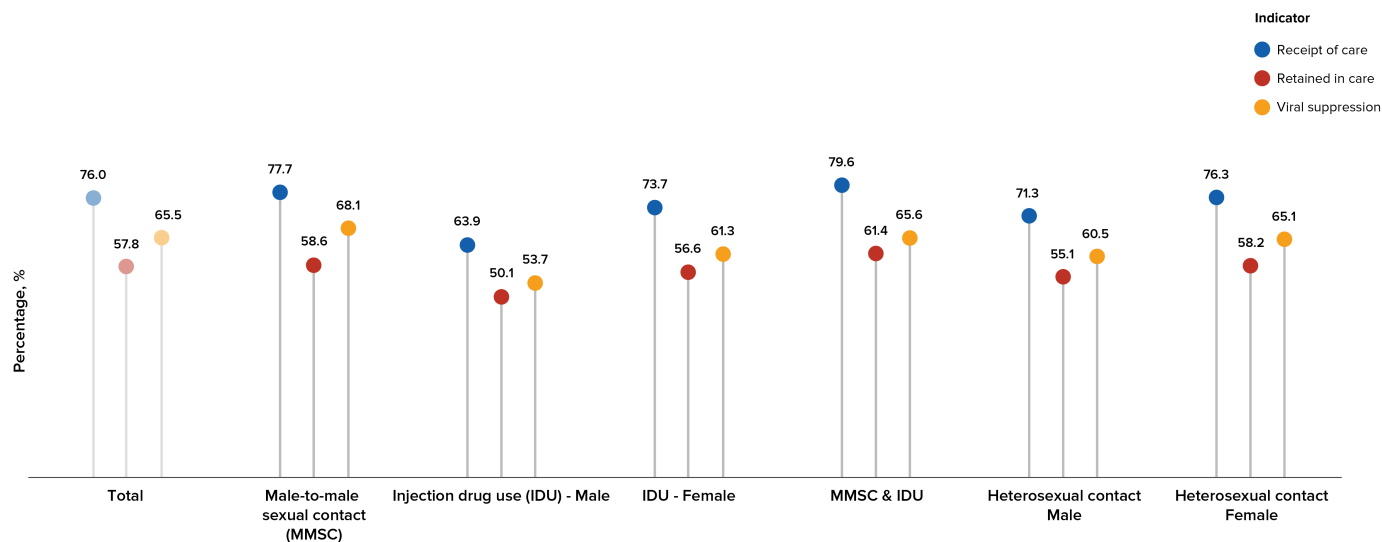
Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

^a Includes Asian/Pacific Islander legacy cases.

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

By transmission category, the highest percentage for persons who received any HIV medical care was for males with infection attributed to MMSC-IDU (79.6%) and the lowest percentage was for males with infection attributed to IDU (63.9%). The highest percentage for persons retained in HIV medical care was for males with infection attributed to MMSC-IDU (61.4%) and the lowest percentage was for males with infection attributed to IDU (50.1%). The highest percentage for persons who were virally suppressed at the most recent viral load test was for males with infection attributed to MMSC (68.1%) and the lowest percentage was for males with infection attributed to IDU (53.7%) (Tables 3a and 4a, Figure 13).

Figure 13. Receipt of HIV medical care, retention in HIV medical care, and viral suppression among persons aged ≥ 13 years living with diagnosed HIV infection, by transmission category, 2019—44 states and the District of Columbia

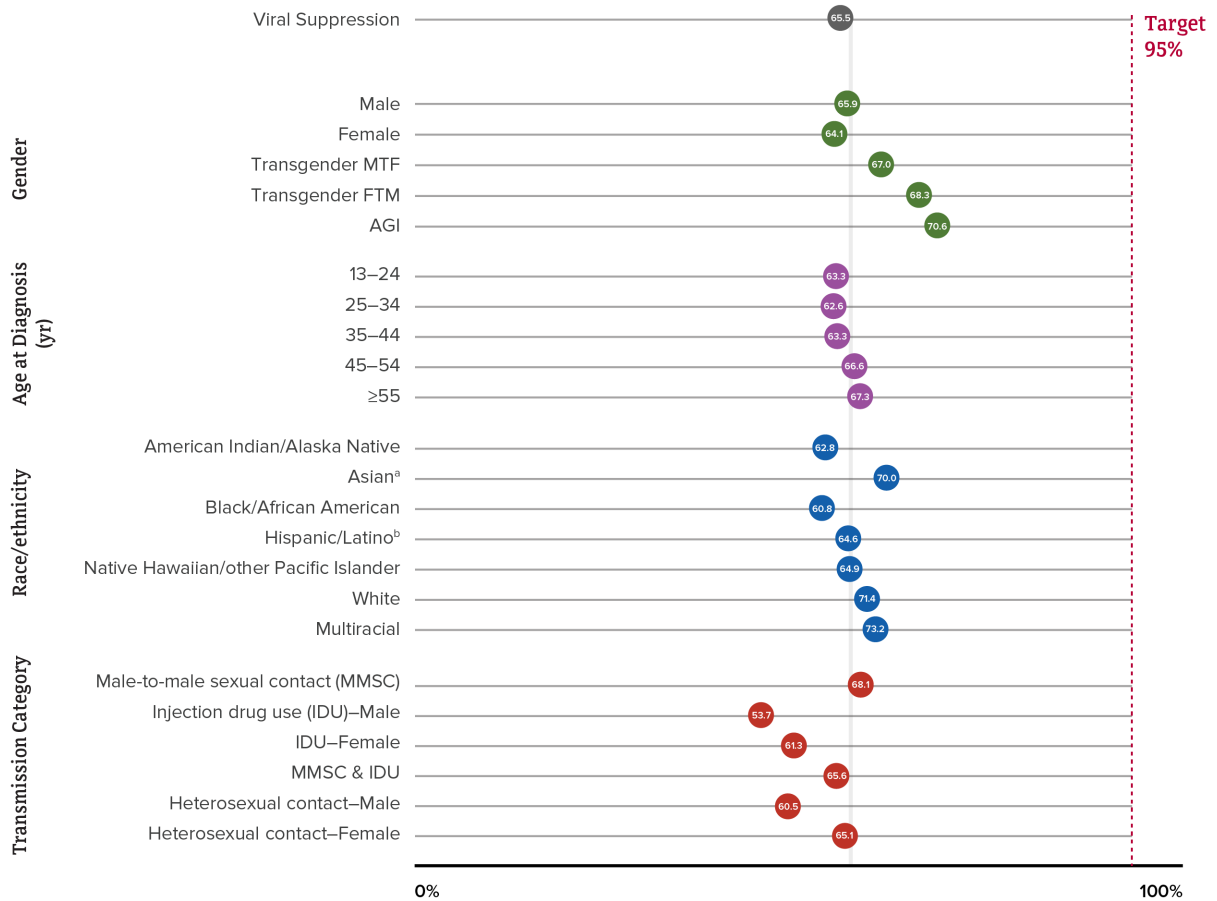


Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



A closer look at viral suppression at the most recent viral load test reveals that among 925,077 persons aged ≥ 13 years living with diagnosed HIV infection at year-end 2019 in the 45 jurisdictions with complete laboratory reporting, no demographic group or group with infection attributed to any of the transmission categories met the forthcoming EHE target of 95% (Figure 14).

Figure 14. Viral suppression among persons aged ≥13 years living with diagnosed HIV infection, by selected characteristics, 2019—44 states and the District of Columbia



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

^a Includes Asian/Pacific Islander legacy cases.

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

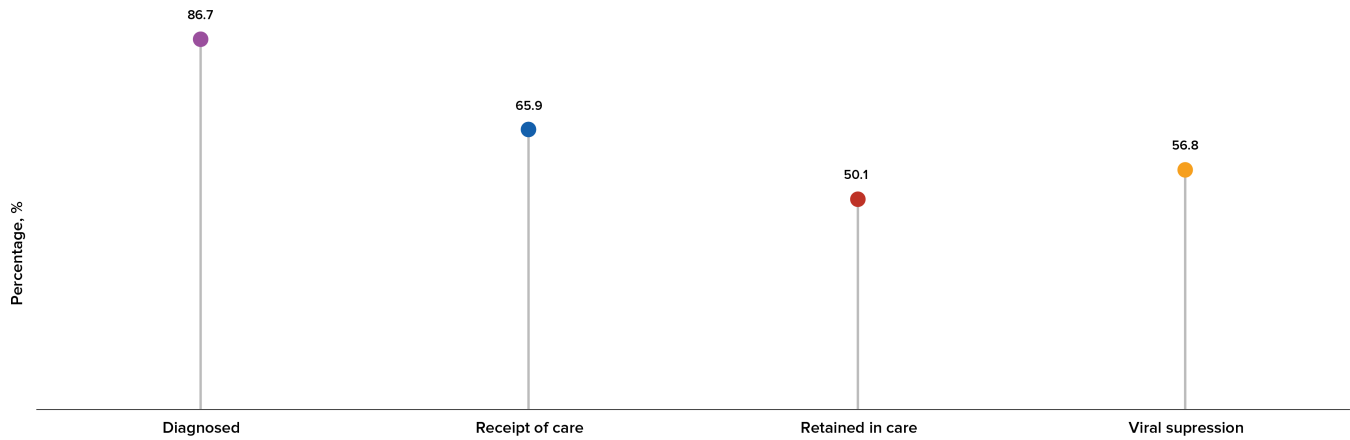
PREVALENCE-BASED HIV CARE CONTINUUM—OVERVIEW

The Prevalence-based HIV Care Continuum describes each step of the continuum as a percentage of the total number of people living with HIV (diagnosed or undiagnosed). The denominator is the estimated number of persons aged ≥13 years living with diagnosed or undiagnosed HIV infection at year-end 2019 (calculated using the first CD4 test after HIV diagnosis and a CD4 depletion model indicating disease progression). The numerator is extrapolated from the 45 jurisdictions with complete CD4 and viral load reporting (apply the percentage from 45 jurisdictions to the total number of people living with diagnosed HIV in the United States). For more information on Definitions and Data Specifications, see Technical Notes.

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

Among the estimated 1.2 million people living with HIV in the United States, 87% received a diagnosis, 66% received HIV medical care in 2019, 50% were retained in HIV medical care, and 57% were virally suppressed (Table 5, Figure 15).

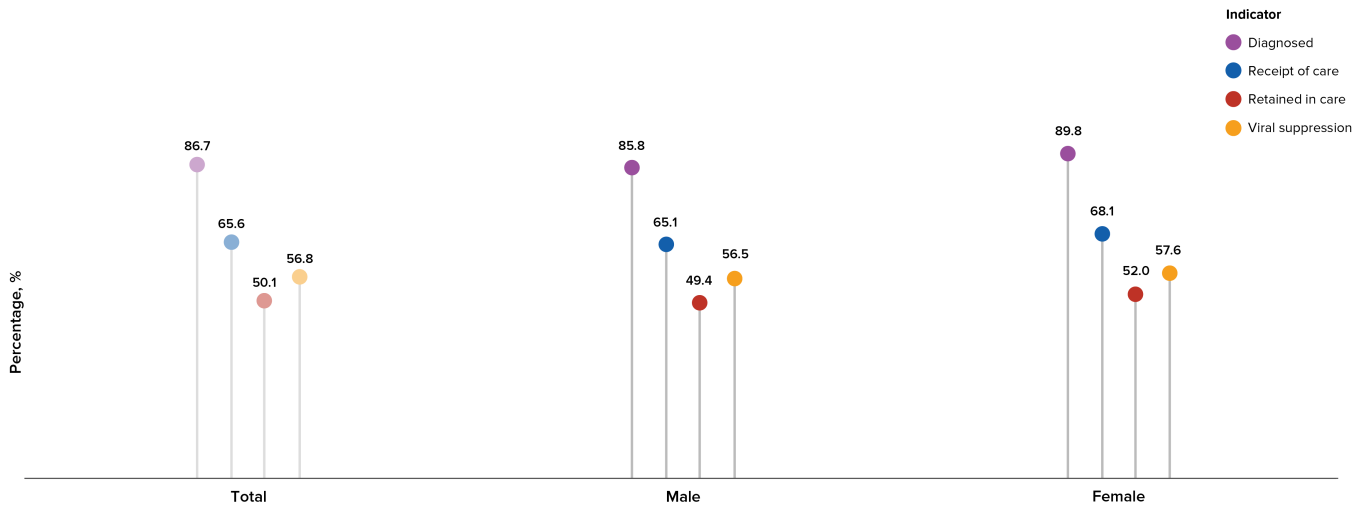
Figure 15. Prevalence-based HIV care continuum for persons aged ≥ 13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2019—United States



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

Among persons living with HIV in the United States, a higher percentage of females received a diagnosis, received HIV medical care in 2019, were retained in HIV medical care, and were virally suppressed than males (Table 5, Figure 16).

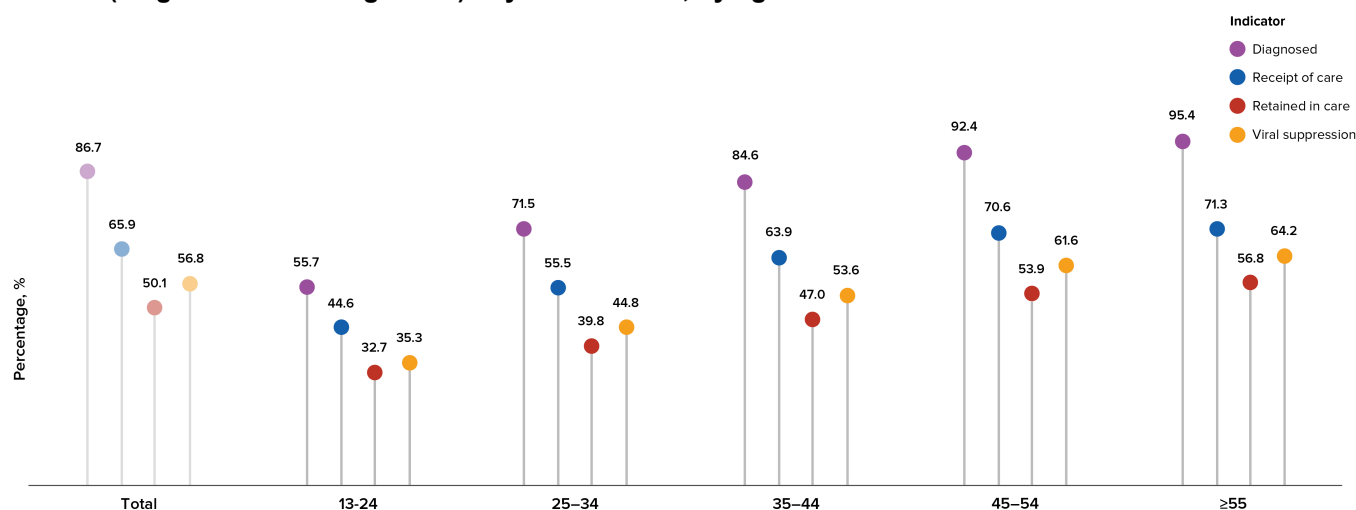
Figure 16. Prevalence-based HIV care continuum for persons aged ≥ 13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2019, by sex at birth—United States



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

Among persons living with HIV in the United States, a higher percentage of persons aged ≥ 55 years received a diagnosis than other age groups, a higher percentage of persons aged ≥ 45 years received HIV medical care in 2019 than other age groups, a higher percentage of persons aged ≥ 55 years were retained in HIV medical care than other age groups, and a higher percentage of persons aged ≥ 55 years were virally suppressed than persons in other age groups. A lower percentage of persons aged 13–24 years received a diagnosis, received HIV medical care in 2019, were retained in HIV medical care, and were virally suppressed than other age groups (Table 5, Figure 17).

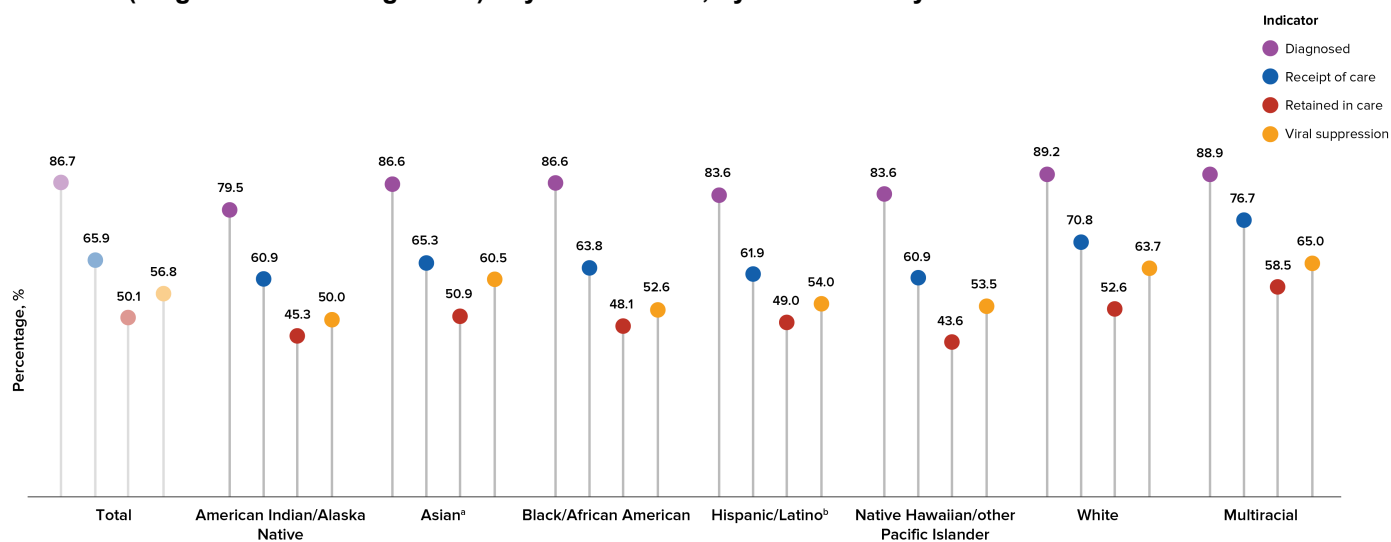
Figure 17. Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2019, by age—United States



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

Among persons living with HIV in the United States, higher percentages of White and multiracial persons received a diagnosis than other racial/ethnic groups, a higher percentage of multiracial persons received HIV medical care in 2019 than other racial/ethnic groups, a higher percentage of multiracial persons were retained in HIV medical care than other racial/ethnic groups, and higher percentages of multiracial and White persons were virally suppressed than other racial/ethnic groups. A lower percentage of American Indian/Alaska Native persons received a diagnosis, lower percentages of American Indian or Alaska Native and Native Hawaiian or other Pacific Islander persons received HIV medical care in 2019 than other racial/ethnic groups, lower percentages of Native Hawaiian or other Pacific Islander and American Indian or Alaska Native persons were retained in HIV medical care than other racial/ethnic groups, and a lower percentage of American Indian or Alaska Native persons were virally suppressed than other racial/ethnic groups (Table 5, Figure 18).

Figure 18. Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2019, by race/ethnicity—United States



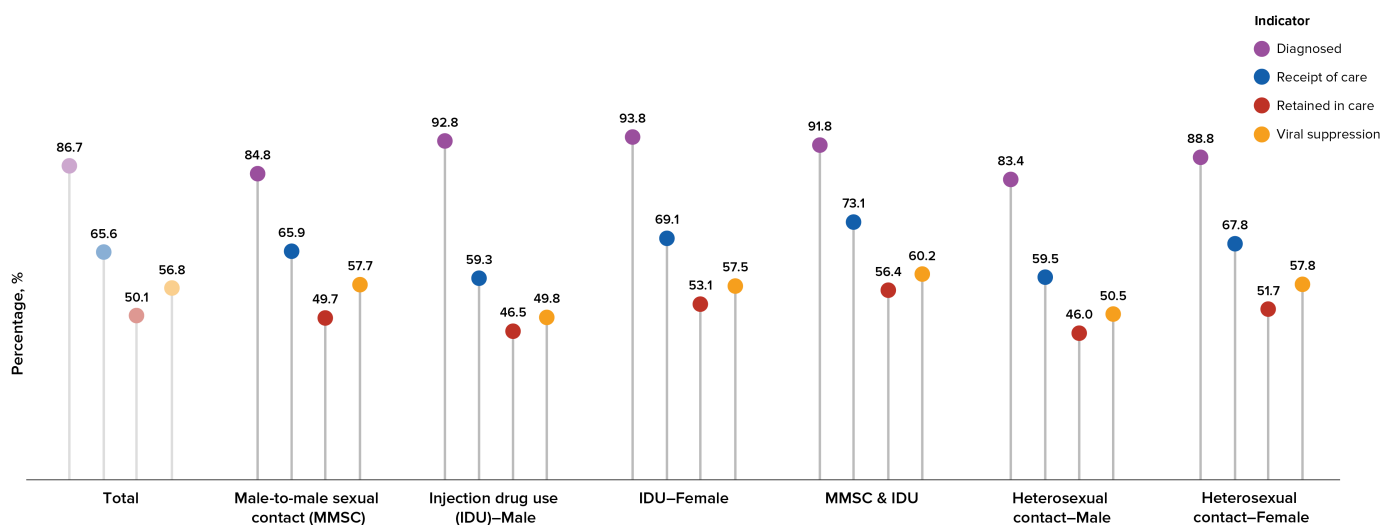
Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

^a Includes Asian/Pacific Islander legacy cases.

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

Among persons living with HIV in the United States, a higher percentage of persons (females and males) with infection attributed to IDU received a diagnosis than persons with infection attributed to other transmission categories, a higher percentage of males with infection attributed to MMSC-IDU received HIV medical care in 2019 than persons with infection attributed to other transmission categories, a higher percentage of males with infection attributed to MMSC-IDU were retained in HIV medical care than persons with infection attributed to other transmission categories, and higher percentages of males with infection attributed to MMSC and females with infection attributed to heterosexual contact were virally suppressed than persons with infection attributed to other transmission categories. A lower percentage of males with infection attributed to heterosexual contact received a diagnosis than persons with infection attributed to other transmission categories, a lower percentage of males with infection attributed to heterosexual contact received HIV medical care in 2019 than persons with infection attributed to other transmission categories, lower percentages of males with infection attributed to heterosexual contact and males with infection attributed to IDU were retained in HIV medical care, and lower percentages of males with infection attributed to heterosexual contact and males with infection attributed to IDU were virally suppressed than persons with infection attributed to other transmission categories (Table 5, Figure 19).

Figure 19. Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2019, by transmission category—United States



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

STAGE 3 (AIDS) AT TIME OF DIAGNOSIS OF HIV INFECTION, AND DEATH AND SURVIVAL AFTER DIAGNOSIS OF HIV INFECTION

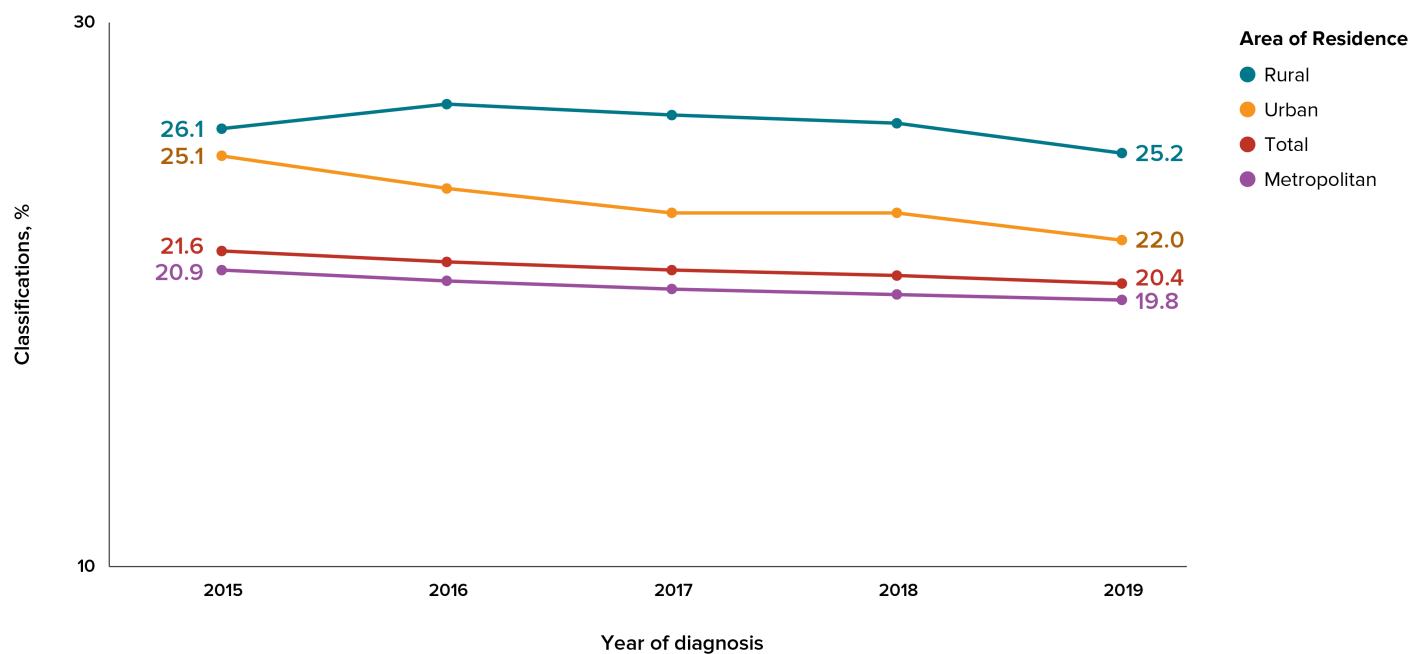
Data from the 50 states, the District of Columbia, and 6 U.S. dependent areas (where indicated) were used for analyses of stage 3 (AIDS) at the time of diagnosis of HIV infection (even when not all CD4 values are reportable), and deaths and survival of persons with diagnosed HIV infection ≥13 years of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

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

From 2015 through 2019, the percentage of stage 3 (AIDS) classifications or late-stage diagnoses varied among persons with an HIV diagnosis in each area of residence or subgroup in the United States (Table 6a). The percentage of stage 3 (AIDS) classifications decreased overall and in metropolitan and urban areas from 2015 through 2019 (Figure 20). The percentage of stage 3 (AIDS) classifications remained stable among persons liv-

ing in rural areas. In 2019, the highest percentage was 25.2% in rural areas, followed by 22.0% in urban and 19.8% in metropolitan areas.

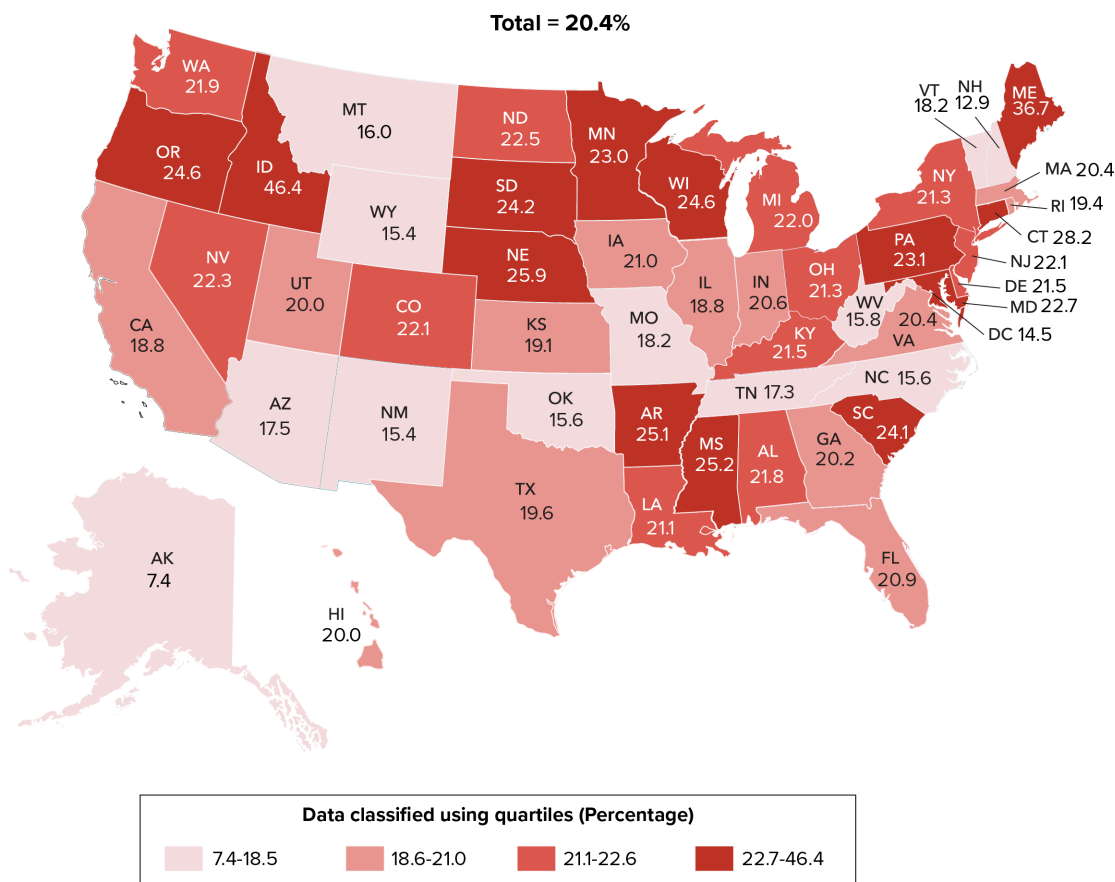
Figure 20. Stage 3 (AIDS) at time of diagnosis of HIV infection among persons aged ≥13 years, by year of diagnosis and population area of residence, 2015–2019—United States



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

In the United States and 6 dependent areas, more than one in five persons (20.4%) received a late-stage diagnosis (stage 3, AIDS) among 36,740 persons with an HIV diagnosis during 2019. The percentages of a late-stage diagnosis were highest in the dependent areas (25.1%) and the Northeast (22.0%) compared to other regions (Table 6b). During 2019, 13 states (Arkansas, Connecticut, Idaho, Maine, Maryland, Minnesota, Mississippi, Nebraska, Oregon, Pennsylvania, South Carolina, South Dakota, and Wisconsin) in the highest 25% had the highest percentages (≥ 22.7) of persons who received a late-stage diagnosis. Twelve states (Alaska, Arizona, Missouri, Montana, New Hampshire, New Mexico, North Carolina, Oklahoma, Tennessee, Vermont, West Virginia, and Wyoming) and the District of Columbia were in the lowest 25% and had the lowest percentages (≤ 18.5) of persons who received a late-stage diagnosis (Table 6c, Figure 21).

Figure 21. Stage 3 (AIDS) at time of diagnosis of HIV infection among persons aged ≥ 13 years, by area of residence, 2019—United States



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

In 2019, the highest percentages of a late-stage diagnosis in the United States and 6 dependent areas by selected characteristics (i.e., gender, age, race/ethnicity, and transmission category) were for females (20.7%), males (20.5%), persons aged ≥ 45 years at time of diagnosis (45–54 years: 31.9%; ≥ 55 years: 34.5%), Asian persons (24.9%), and males with infection attributed to heterosexual contact (33.4%) (Table 6a, Figure 22). Please use caution when interpreting data for persons of AGI, transgender FTM persons, and Native Hawaiian/other Pacific Islander persons: the numbers are small.

Figure 22. Stage 3 (AIDS) at time of diagnosis of HIV infection among persons aged ≥ 13 years, by selected characteristics, 2019—United States



Note. 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.

DEATHS

Annual rates of death among adults and adolescents 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.

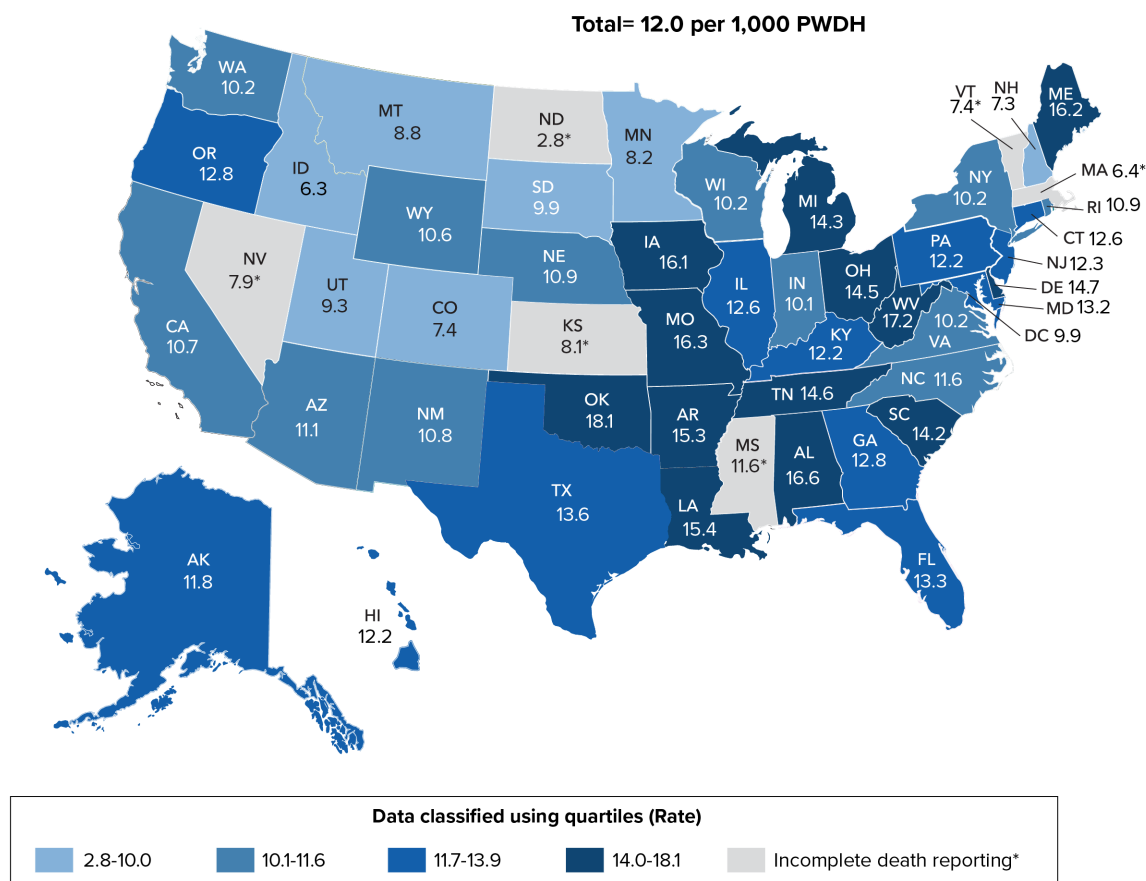
Deaths of persons with diagnosed HIV infection

From 2015 through 2019 in the United States and 6 dependent areas, the annual rate of deaths per 100,000 population and the annual rate per 1,000 persons with diagnosed HIV infection decreased (Table 7b). Trends in rates varied by area of residence at death (Table 7c). In 2019, the age-adjusted rates were 5.2 per 100,000 population and 12.1 per 1,000 persons with diagnosed HIV infection.

During 2019, 12 states (Alabama, Arkansas, Delaware, Iowa, Louisiana, Maine, Missouri, Ohio, Oklahoma, South Carolina, Tennessee, and West Virginia) in the highest 25% had the highest age-adjusted rates of death (≥ 14.0) per 1,000 persons with diagnosed HIV infection. Twelve states (Colorado, Idaho, Kansas, Massachusetts, Minnesota, Montana, Nevada, New Hampshire, North Dakota, South Dakota, Utah, and Vermont) and the District of Columbia were in the lowest 25% and had the lowest age-adjusted rates of death (≤ 9.9).

per 1,000 persons with diagnosed HIV infection (Table 7c, Figure 23). Please note that due to incomplete reporting of deaths for the year 2019, data for Kansas, Massachusetts, Mississippi, Nevada, North Dakota, and Vermont should be interpreted with caution.

Figure 23. Age-adjusted rates of death among persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2019—United States



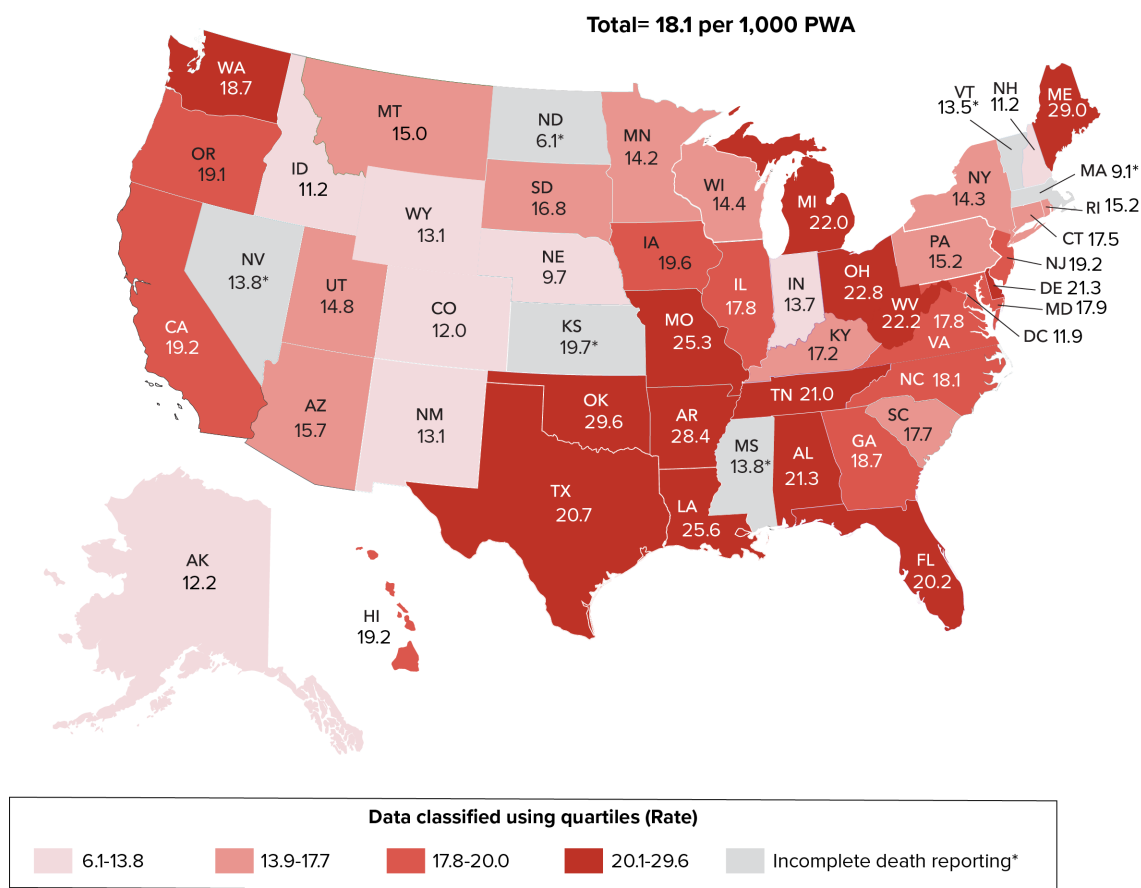
Note. Data for the year 2019 are preliminary and based on deaths reported to CDC as of December 2020. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

Deaths of persons with stage 3 (AIDS) classification

From 2015 through 2019 in the United States and 6 dependent areas, the annual rate of deaths per 100,000 population and the annual rate per 1,000 persons with stage 3 (AIDS) decreased (Table 7e). Trends in rates varied by area of residence at death (Table 7f). In 2019, the age-adjusted rates were 4.0 per 100,000 population and 18.1 per 1,000 persons with stage 3 (AIDS).

During 2019, 13 states (Alabama, Arkansas, Delaware, Florida, Louisiana, Maine, Michigan, Missouri, Ohio, Oklahoma, Tennessee, Texas, and West Virginia) in the highest 25% had the highest age-adjusted rates of deaths (≥ 20.8) per 1,000 persons with diagnosed HIV infection ever classified as Stage 3 (AIDS). Twelve states (Alaska, Colorado, Idaho, Indiana, Massachusetts, Mississippi, Nebraska, New Hampshire, New Mexico, North Dakota, Vermont, and Wyoming) and the District of Columbia were in the lowest 25% and had the lowest age-adjusted rates of deaths (≤ 13.7) per 1,000 persons with diagnosed HIV infection ever classified as Stage 3 (AIDS) (Table 7f, Figure 24). Please note that due to incomplete reporting of deaths for the year 2019, data for Kansas, Massachusetts, Mississippi, Nevada, North Dakota, and Vermont should be interpreted with caution.

Figure 24. Age-adjusted rates of death among persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2019—United States



Note. Data for the year 2019 are preliminary and based on deaths reported to CDC as of December 2020. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

Survival for >3 years after diagnosis of HIV infection

In the United States, survival for >3 years after a diagnosis of HIV infection was above 94% and remained stable for diagnoses that were made during 2011–2016 (Table 8a). The following percentages are for persons in the United States who survived >3 years after receiving a diagnosis in 2016 (Figure 25).

By gender, the highest percentage was for transgender MTF persons (96%), followed by males (95%) and females (94%). Percentages for transgender FTM persons and persons of AGI are not displayed because the number of cases were too small for the calculation of reliable survival estimates.

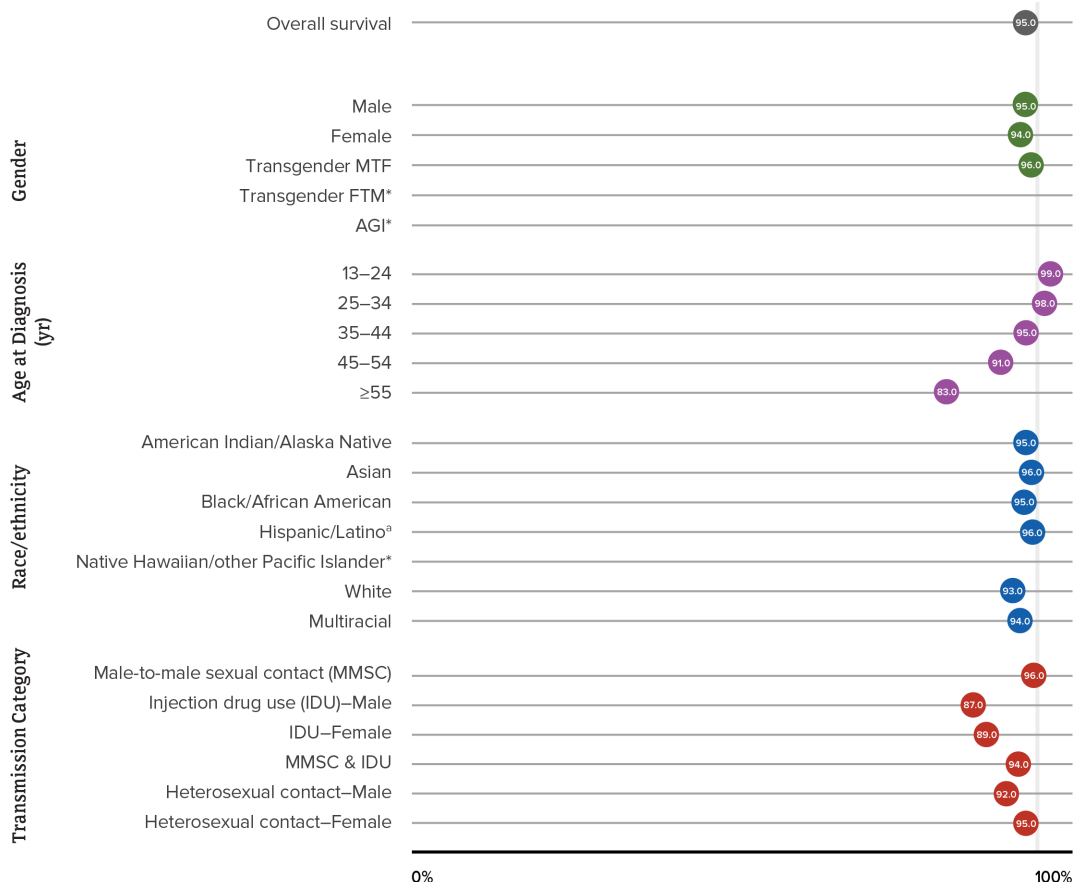
By age, the highest percentage was for persons aged 13–24 years (99%) and the lowest percentage was for persons aged ≥55 years (83%).

By race/ethnicity, the highest percentages were for Asian and Hispanic or Latino persons (96%), followed by American Indian or Alaska Native (95%), Black or African American (95%), multiracial (94%), and White persons (93%). Percentages for Native Hawaiian or other Pacific Islander persons are not displayed because the number of cases was too small for the calculation of reliable survival estimates.

By transmission category, the highest percentage was for males with infection attributed to MMSC (96%), followed by females with infection attributed to heterosexual contact (95%) and males with infection attributed to MMSC-IDU (94%). The lowest percentages were for males and females with infection attributed to IDU (86%, 89% respectively).

By area of residence, at least 93% of persons survived >3 years after diagnosis in all but 1 area (Table 8c).

Figure 25. Survival for >3 years after a diagnosis of HIV infection during 2016, by selected characteristics—United States



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

Survival for >3 years after stage 3 (AIDS) classification was below 90% and remained stable over time (Table 8d). The following percentages are for persons who survived >3 years after receiving a stage 3 (AIDS) classification in 2016.

By gender, the highest percentage was for transgender MTF persons (92%). The lowest percentages were for males and females (86%). Percentages for transgender FTM persons and persons of AGI are not displayed because the number of cases were too small for the calculation of reliable survival estimates.

By age, the highest percentage was for persons aged 13–24 years (96%) and the lowest percentage was for persons aged ≥55 years (71%).

By race/ethnicity, the highest percentage was for Hispanic or Latino persons (90%), followed by Asian (89%), Black or African American (86%), and multiracial persons (84%). The lowest percentage was for White persons (82%). Data for American Indian or Alaska Native and Native Hawaiian or other Pacific Islander persons are not displayed because the numbers of cases were too small for the calculation of reliable survival estimates.

By transmission category, the highest percentage was for males with infection attributed to MMSC (88%), followed by females with infection attributed to heterosexual contact (87%), males with infection attributed to

MMSC-IDU (84%), and males with infection attributed to heterosexual contact (83%). The lowest percentages were for males and females with infection attributed to IDU (74%, 79% respectively).

By area of residence, at least 83% of persons survived >3 years after stage 3 (AIDS) classification in all but 1 area (Table 8f).

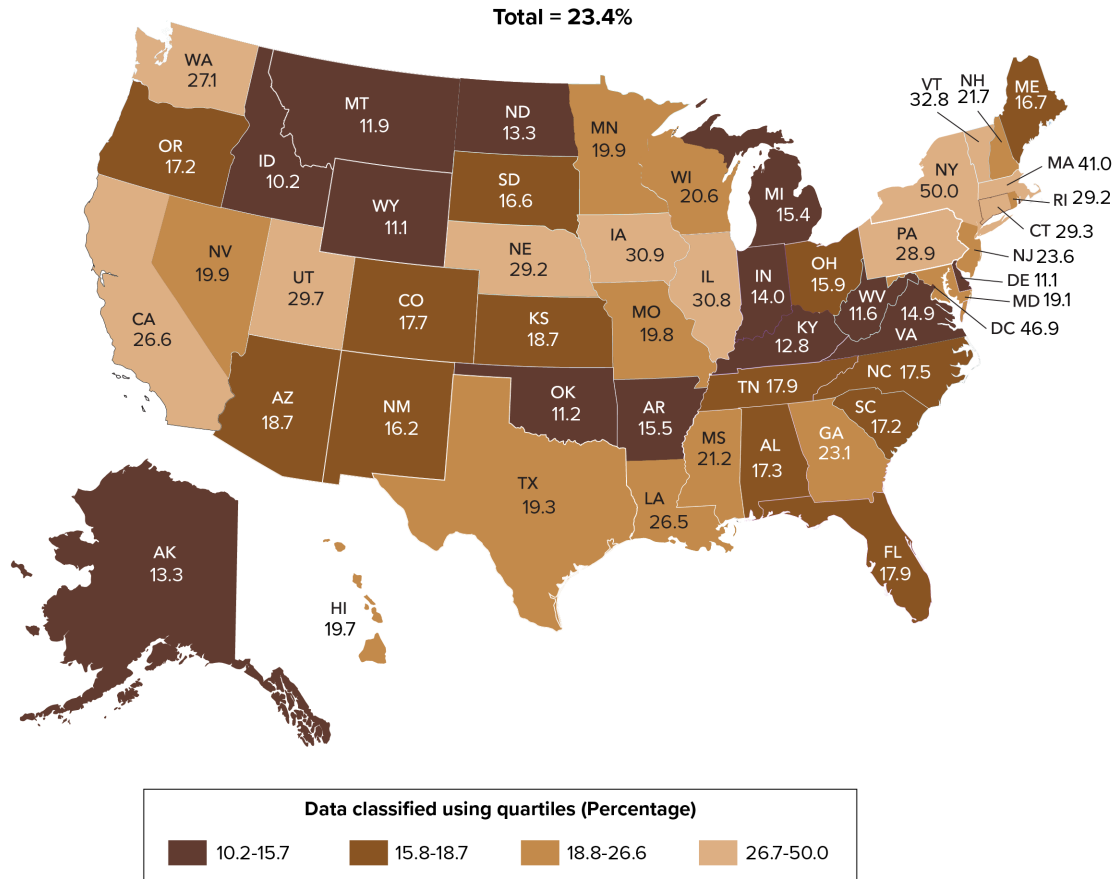
PREEXPOSURE PROPHYLAXIS (PREP) COVERAGE AND PERSONS PRESCRIBED PREP

The number of persons classified as having been prescribed PrEP, the estimated number of persons with PrEP indications, and PrEP coverage in the United States were produced 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 the pharmacy and other national data sources, we estimated 1.2 million persons in the United States had indications for PrEP and 23.4% were prescribed PrEP in 2019 (Table 9a).

PrEP coverage varied by area of residence. Twelve states (California, Connecticut, Illinois, Iowa, Massachusetts, Nebraska, New York, Pennsylvania, Rhode Island, Utah, Vermont, and Washington) and the District of Columbia were in the top 25% and had the highest percentages ($\geq 26.7\%$) of PrEP coverage. Thirteen states (Alaska, Arkansas, Delaware, Idaho, Indiana, Kentucky, Michigan, Montana, North Dakota, Oklahoma, Virginia, West Virginia, and Wyoming) in the lowest 25% had the lowest percentages ($\leq 15.7\%$) of PrEP coverage (Table 9a, Figure 26).

Figure 26. PrEP coverage among persons aged ≥16 years, by area of residence, 2019—United States and Puerto Rico

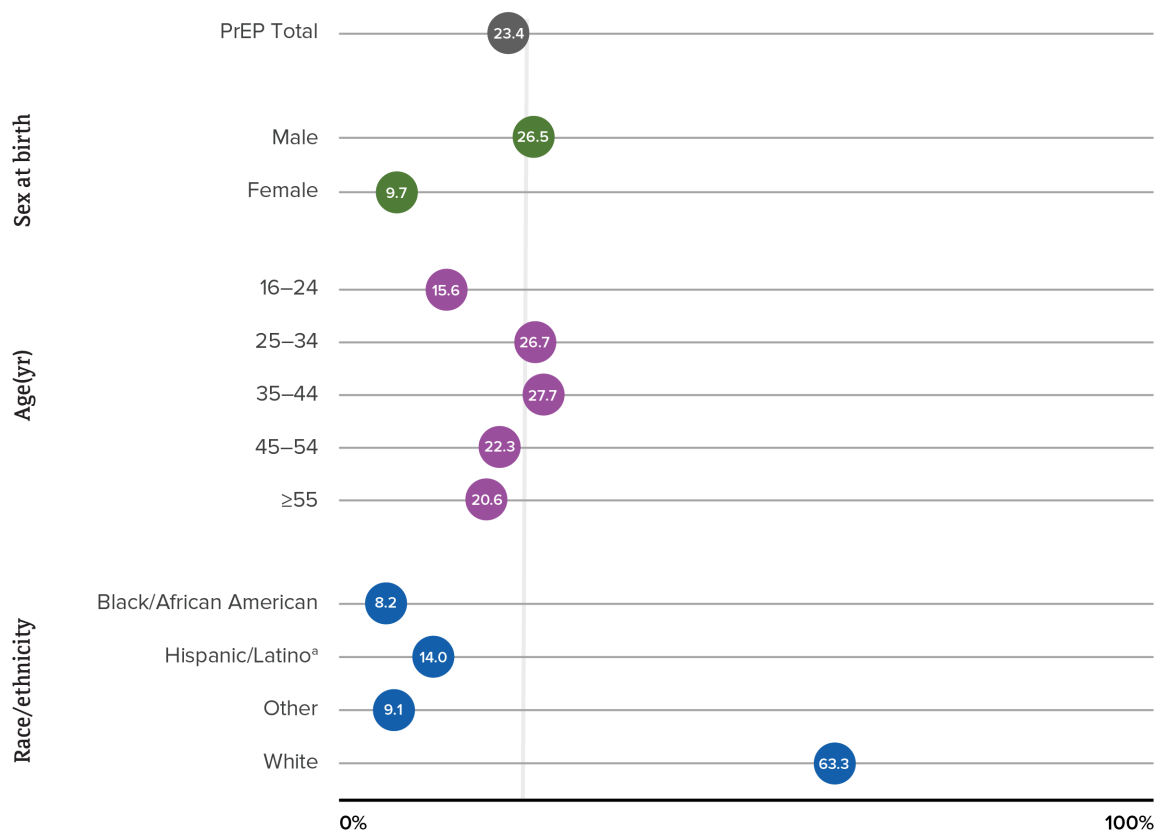


Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

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

PrEP coverage was nearly three times as high among males (26.5%) as among females (9.7%). The highest percentages of PrEP coverage were for persons aged 25–44 years (25–34 years: 26.7%; 35–44 years: 27.7%). The lowest percentage was for persons aged 16–24 years (15.6%). In 2019, after adjusting for missing race/ethnicity, the highest percentage was for White persons (63.3%), followed by Hispanic or Latino (14.0%) and Black or African American persons (8.2%) (Figure 27).

Figure 27. PrEP coverage among persons aged ≥16 years, by selected characteristics, 2019—United States



Note. 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.

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 Persons, (4) Women, (5) Persons with Perinatally Acquired HIV Infection, and (6) Young Persons [aged 13–24 years].

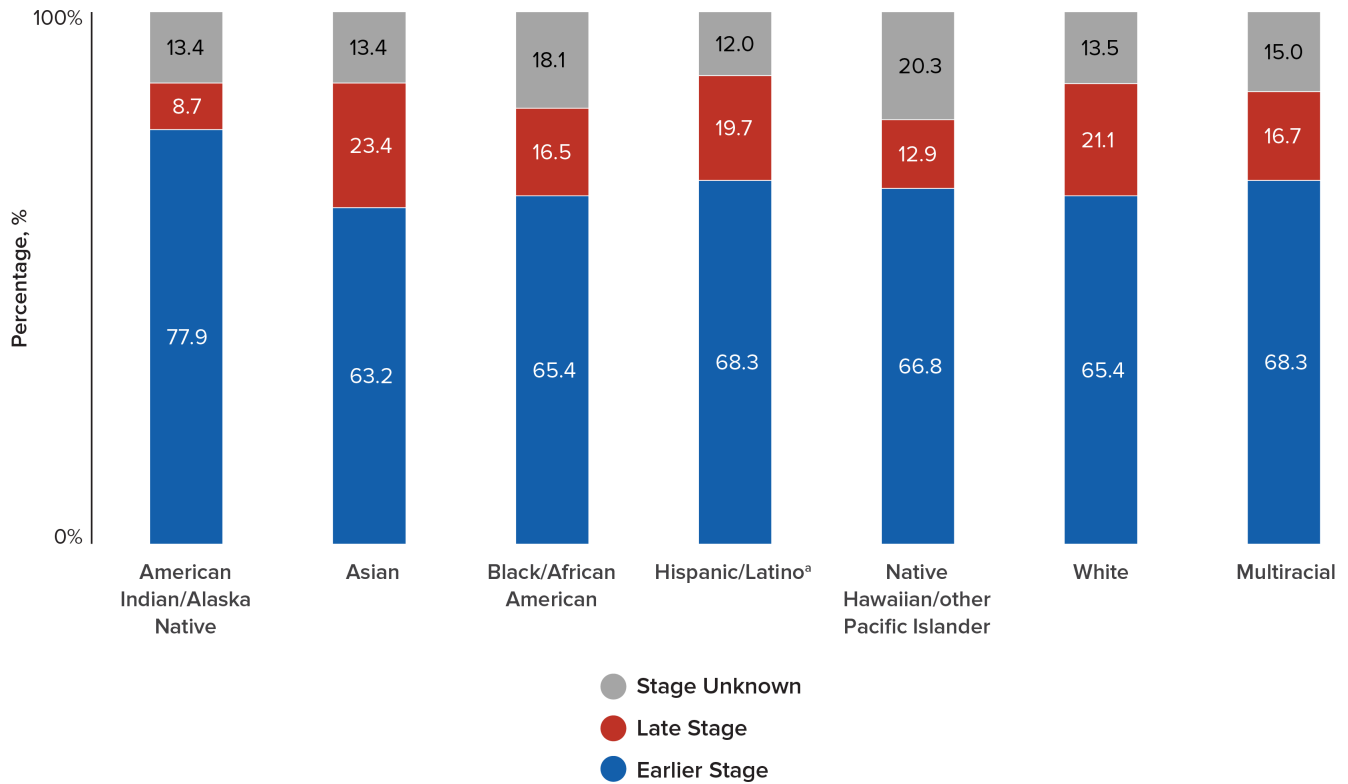
GAY, BISEXUAL, AND OTHER MEN WHO HAVE SEX WITH MEN

Gay, bisexual, and other men who have sexual contact with men (MSM) are most affected by HIV in the United States. Stigma, homophobia, and discrimination make MSM of all races/ethnicities susceptible to multiple physical and mental health problems and can affect whether they seek and receive high-quality health services, including HIV testing, treatment, and other prevention services. In 2019, MSM accounted for 65.4% (24,084 MMSC not including persons with infection attributed to MMSC-IDU) of the 36,801 HIV diagnoses in the United States and 6 dependent areas. Many Black or African American and Hispanic or Latino MSM with HIV, particularly young MSM, are unaware of their HIV infection. Lack of awareness of HIV status among young MSM may be due to recent infection, not getting tested due to underestimation of personal risk or stigma (e.g., homophobia), or fewer opportunities to get tested. Persons who do not know they have HIV do not get medical care or receive treatment and can unknowingly infect others.

Among MSM with HIV infection diagnosed during 2019 in 45 jurisdictions with complete laboratory reporting, stage of disease at diagnosis varied with 66.5% of infections diagnosed at an earlier stage (stage 0, 1, or 2) and 18.7% classified as stage 3 (AIDS) at the time of diagnosis (Table 1a). Moreover, 82.1% of MSM were linked to HIV medical care within 1 month of diagnosis and 69.8% were virally suppressed within 6 months of diagnosis (Table 2a). Of 528,606 persons with infection attributed to MMSC living with diagnosed HIV in the 45 jurisdictions at year-end 2019, 77.7% received HIV medical care, 58.6% were retained in HIV medical care, and 68.1% were virally suppressed at the most recent viral load test (Tables 3a and 4a).

HIV care outcomes varied among MSM by race/ethnicity. For MSM of all racial/ethnic groups, $\geq 63.2\%$ of infections were diagnosed at an earlier stage (Table 1c, Figure 28). Yet, Asian (23.4%), White (21.1%), and Hispanic or Latino MSM (19.7%) had $\geq 20\%$ of infections classified as stage 3 (AIDS) at the time of diagnosis. Among Asian, White, and Hispanic or Latino MSM, infections classified as stage 3 (AIDS) increased with age at the time of diagnosis (Table 1d).

Figure 28. Earlier and late stage of disease at HIV diagnosis during 2019 among men who have sex with men, by race/ethnicity—44 states and the District of Columbia

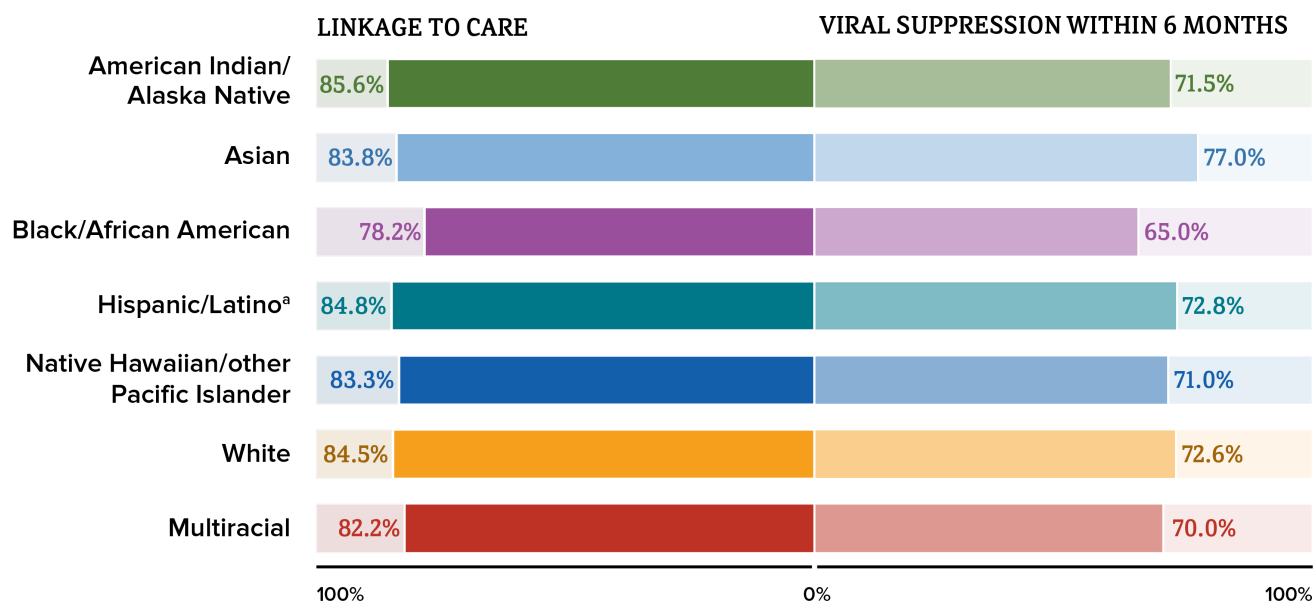


Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

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

The highest percentage for MSM by race/ethnicity who were linked to care within 1 month of diagnosis was for American Indian or Alaska Native persons (85.6%) and the lowest percentage linked to care within 1 month of diagnosis was for Black or African American persons (78.2%) (Table 2c, Figure 29). Among Black or African American MSM, persons aged 13–34 years had the lowest percentages linked to care within 1 month of diagnosis (13–24 years: 77.4%, 25–34 years: 77.5%; Table 2d). The highest percentage for MSM by race/ethnicity who were virally suppressed within 6 months of diagnosis was for Asian persons (77.0%) and the lowest percentage for viral suppression within 6 months of diagnosis was for Black or African American persons (65.0%) (Table 2c, Figure 29). Among Black or African American MSM, persons aged 25–34 years and persons aged ≥55 years had the lowest percentages for viral suppression within 6 months of diagnosis (25–34 years: 63.8%, ≥55 years: 63.7%; Table 2d).

Figure 29. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among men who have sex with men, by race/ethnicity—44 states and the District of Columbia

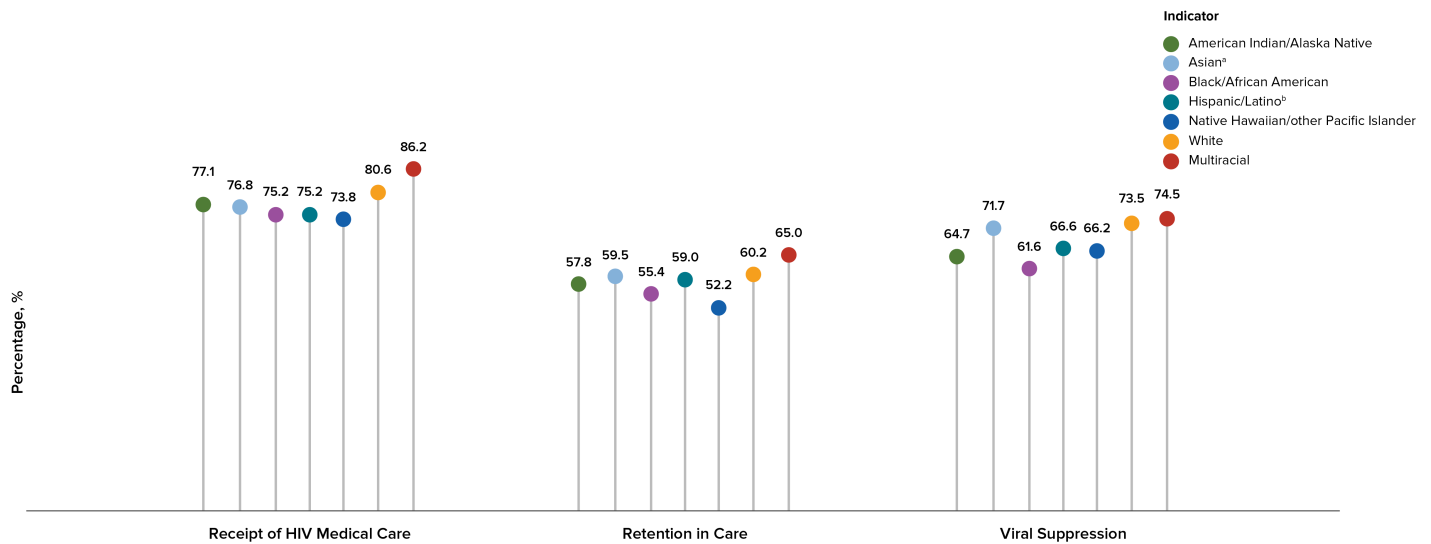


Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

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

The highest percentage for MSM by race/ethnicity who received any HIV medical care was for multiracial persons (86.2%) and the lowest percentage was for Native Hawaiian or other Pacific Islander persons (73.8%) (Table 3c, Figure 30). Among Native Hawaiian or other Pacific Islander MSM, persons aged 13–24 years had the lowest percentage who received any HIV medical care (68.0%) (Table 3d). The highest percentage for MSM by race/ethnicity who were retained in HIV medical care was for multiracial persons (65.0%) and the lowest percentage was for Native Hawaiian or other Pacific Islander persons (52.2%). Among Native Hawaiian or other Pacific Islander MSM, persons aged 35–44 years had the lowest percentage retained in HIV medical care (47.5%) (Table 3d). The highest percentage for MSM by race/ethnicity who were virally suppressed at the most recent viral load test was for multiracial persons (74.5%) and the lowest percentage was for Black or African American persons (61.6%) (Table 3c, Figure 30). Among Black or African American MSM, persons aged 25–34 years had the lowest percentage for viral suppression (59.6%) (Table 3d).

Figure 30. Receipt of HIV medical care, retention in HIV medical care, and viral suppression during 2019 among men who have sex with men, by race/ethnicity—44 states and the District of Columbia



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

^a Includes Asian/Pacific Islander legacy cases.

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

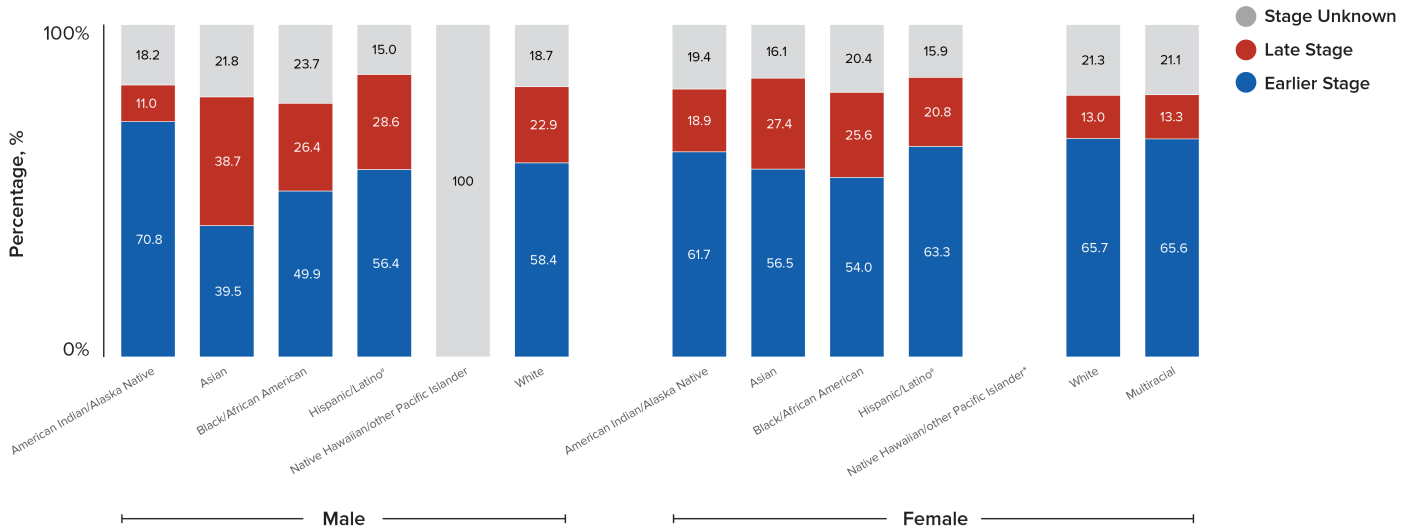
PERSONS WHO INJECT DRUGS

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. HIV diagnoses among PWID have increased in the 50 states and District of Columbia. IDU in rural areas has created prevention challenges and placed new populations at risk for HIV.

Among PWID with HIV infection diagnosed during 2019 in 45 jurisdictions with complete laboratory reporting, stage of disease at diagnosis varied by selected characteristics. Overall, 58.2% of infections were diagnosed at an earlier stage (stage 0, 1, or 2) and 22.0% were classified as stage 3 (AIDS) at the time of diagnosis (Table 1a). Moreover, the percentage of PWID linked to care within 1 month of diagnosis was 75.4%, and 54.6% were virally suppressed within 6 months of diagnosis (Table 2a). Of 98,290 persons with infection attributed to injection drug use living with diagnosed HIV in the 45 jurisdictions at year-end 2019, 68.0% received HIV medical care, 52.9% were retained in HIV medical care, and 56.9% were virally suppressed at their most recent viral load test (Tables 3a and 4a).

HIV care outcomes varied among PWID by sex at birth and race/ethnicity. Among persons with infection attributed to IDU, by race/ethnicity, American Indian or Alaska Native males (70.8%) and White females (65.7%) had the highest percentages for persons who were diagnosed at an earlier stage and Asian males (39.5%) and African American females (54.0%) had the lowest percentages for persons who were diagnosed at an earlier stage at time of diagnosis (Figure 31). Among males with infection attributed to IDU, by race/ethnicity, all racial/ethnic groups (except American Indian or Alaska Native and Native Hawaiian or other Pacific Islander persons) had over 20% of infections classified as stage 3 (AIDS) at time of diagnosis. Among females with infection attributed to IDU, by race/ethnicity, Asian, Black or African American, and Hispanic or Latino persons had over 20% of infections classified as stage 3 (AIDS) at time of diagnosis (Table 1c, Figure 31).

Figure 31. Earlier and late stage of disease at HIV diagnosis during 2019 among persons who inject drugs, by sex at birth and race/ethnicity—44 states and the District of Columbia



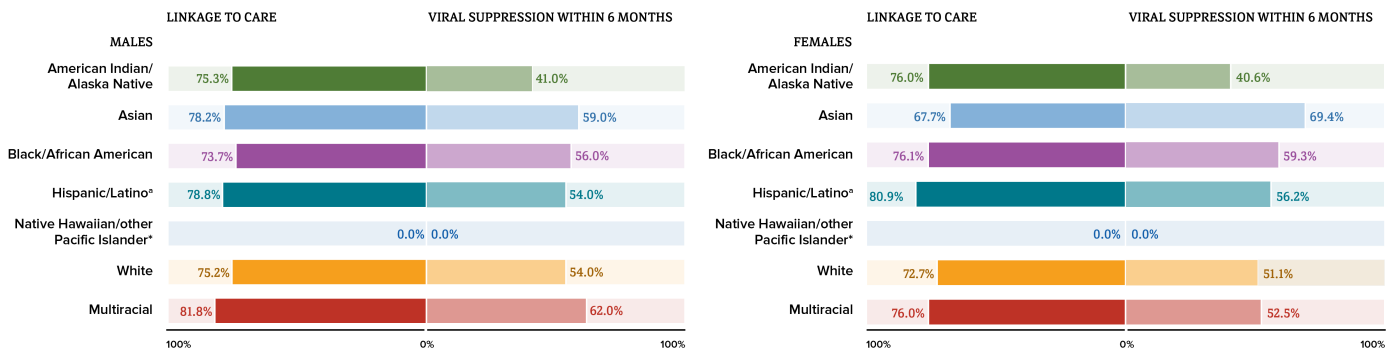
Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

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

* No cases were diagnosed among this group.

Among males with infection attributed to IDU, by sex at birth and race/ethnicity, $\geq 73.7\%$ were linked to care within 1 month of diagnosis and $\geq 41.0\%$ were virally suppressed within 6 months of diagnosis in 2019. Among females with infection attributed to IDU, by sex at birth and race/ethnicity, $\geq 67.7\%$ were linked to care within 1 month of diagnosis and $\geq 40.6\%$ were virally suppressed within 6 months of diagnosis in 2019 (Table 2c, Figure 32).

Figure 32. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among persons who inject drugs, by sex at birth and race/ethnicity—44 states and the District of Columbia



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

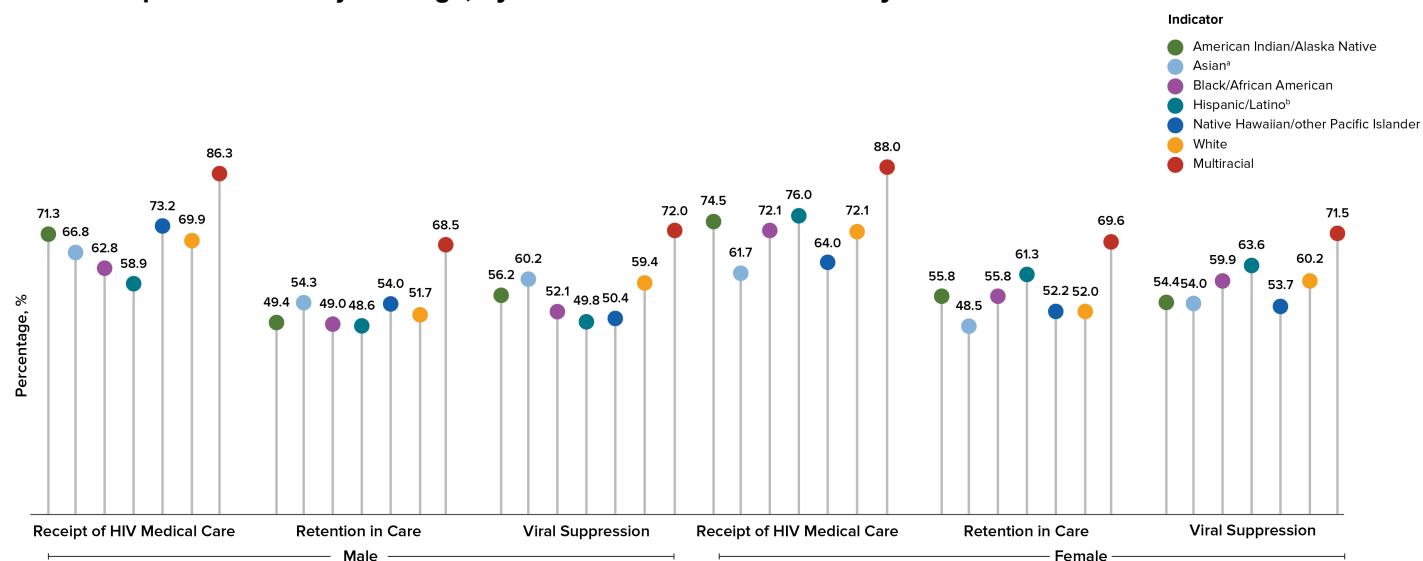
^a Hispanic/Latino persons can be of any race.

* No cases were diagnosed among this group.

The highest percentages by sex at birth and race/ethnicity for PWID who received any HIV medical care were for multiracial persons (males: 86.3%, females: 88.0%) and the lowest percentages were for Hispanic or Latino males (58.9%) and Asian females (61.7%). The highest percentages by sex at birth and race/ethnicity for PWID who were retained in HIV medical care were for multiracial persons (males: 68.5%, females: 69.6%) and the

lowest percentages were for Hispanic or Latino males (48.6%) and Asian females (48.5%). The highest percentages by sex at birth and race/ethnicity for PWID who were virally suppressed at the most recent viral load test were for multiracial persons (males: 72.0%, females: 71.5%) and the lowest percentages were for Hispanic or Latino males (49.8%) and Native Hawaiian or other Pacific Islander females (53.7%) (Table 3c, Figure 33).

Figure 33. Receipt of HIV medical care, retention in HIV medical care, and viral suppression during 2019 among persons who inject drugs, by sex at birth and race/ethnicity—44 states and the District of Columbia



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

^a Includes Asian/Pacific Islander legacy cases.

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

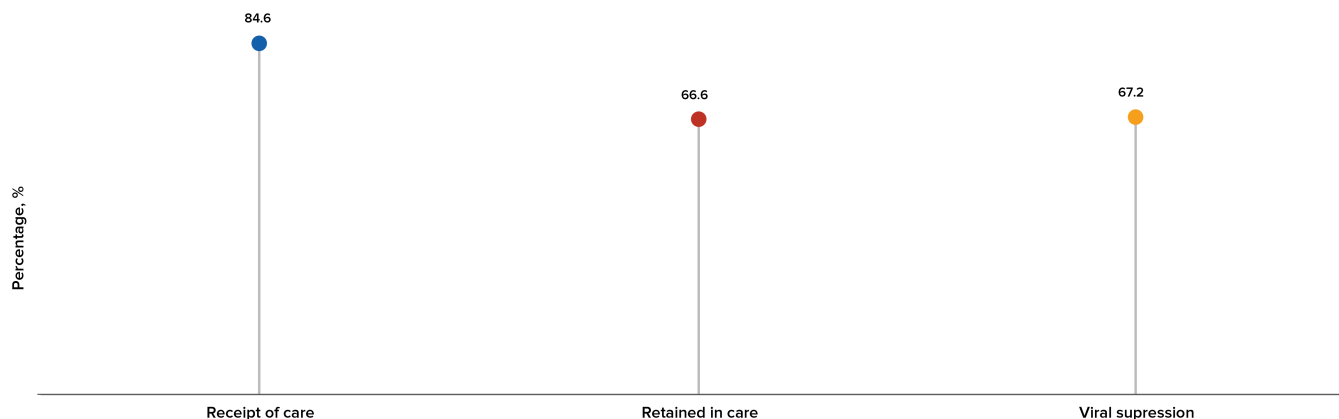
TRANSGENDER PERSONS AND PERSONS OF ADDITIONAL GENDER IDENTITY

Transgender is an umbrella term that is used to identify persons whose sex assigned at birth does not match 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 may identify as heterosexual, homosexual, bisexual, or none of the above. Transgender persons and persons of additional gender identity face numerous prevention challenges, including lack of public/provider knowledge about gender identity and transgender issues and social rejection and exclusion (e.g., transphobia or discrimination), and are underreported (e.g., gaps in reporting or limited data availability) or not well-represented in HIV prevention activities (e.g., PrEP and treatment interventions).

Among transgender persons and persons of additional gender identity with HIV infection diagnosed during 2019 in 45 jurisdictions with complete laboratory reporting, stage of disease at diagnosis varied by selected characteristics. Overall, 72.0% of infections were diagnosed at an earlier stage (stage 0, 1, or 2) and 13.6% were classified as stage 3 (AIDS) at the time of diagnosis (Table 1a). Moreover, 83.4% of transgender persons and persons of additional gender identity were linked to HIV medical care within 1 month of diagnosis and 67.2% were virally suppressed within 6 months of diagnosis in 2019 (Table 2a). Of 925,077 persons living with diagnosed HIV in the 45 jurisdictions with complete reporting of laboratory data at year-end 2019, 10,260 (1.1%) were

transgender persons (Table 3a). Of 10,260 transgender persons and persons of additional gender identity living with diagnosed HIV, 84.6% received HIV medical care, 66.6% were retained in HIV medical care, and 67.2% were virally suppressed at their most recent viral load test (Tables 3a and 4a, Figure 34). Please use caution when interpreting data for transgender persons, persons of additional gender identity, and their subpopulations: the numbers are small.

Figure 34. Receipt of HIV medical care, retention in HIV medical care, and viral suppression during 2019 among transgender persons—44 states and the District of Columbia



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

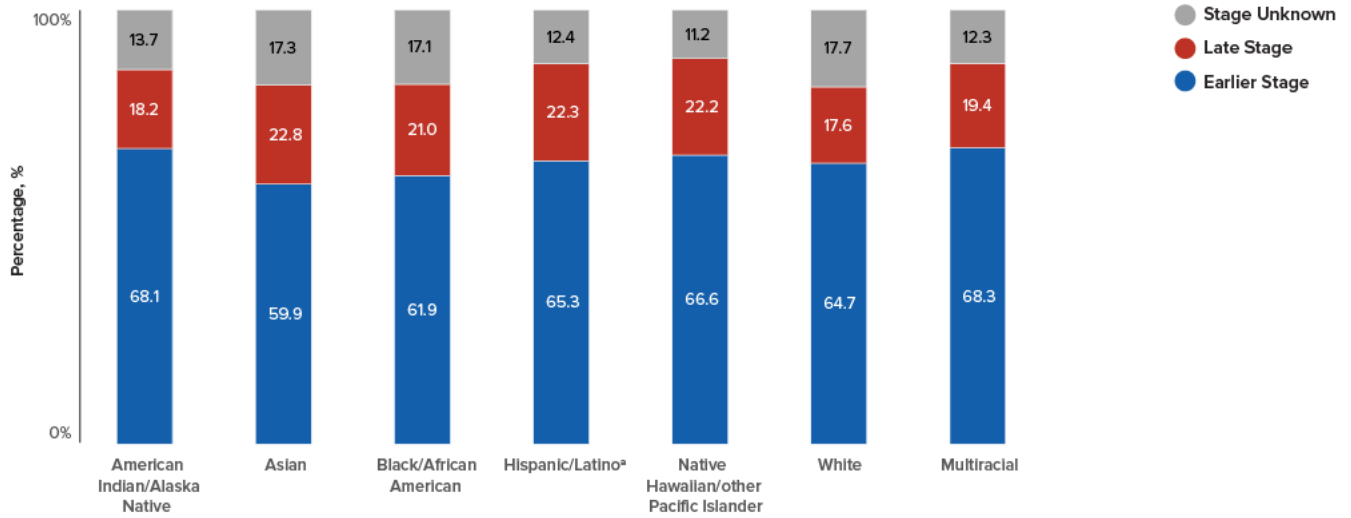
WOMEN

Though HIV diagnoses among women have declined in recent years, approximately 7,000 women received an HIV diagnosis in the United States and 6 dependent areas in 2019. One in nine women with HIV are unaware they have it. 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.

Among women with HIV infection diagnosed during 2019 in 45 jurisdictions with complete laboratory reporting, stage of disease at diagnosis varied by selected characteristics. Overall, 63.3% of infections were diagnosed at an earlier stage (stage 0, 1, or 2) and 20.5% were classified as stage 3 (AIDS) at the time of diagnosis (Table 1a). Moreover, 80.1% of women were linked to care within 1 month of diagnosis and 67.5% were virally suppressed within 6 months of diagnosis (Table 2a). Of 212,405 women living with diagnosed HIV in the 45 jurisdictions with complete reporting of laboratory data at year-end 2019, 75.8% received HIV medical care, 57.9% were retained in care, and 64.1% were virally suppressed at their most recent viral load test (Tables 3a and 4a).

HIV care outcomes varied among women by race/ethnicity. For women of all racial/ethnic groups with diagnosed HIV, $\geq 59.9\%$ of infections were diagnosed at an earlier stage. Yet, Asian (22.8%), Hispanic or Latino (22.3%), Native Hawaiian or other Pacific Islander (22.2%), and Black or African American females (21.0%) had $>20\%$ of infections classified as stage 3 (AIDS) at the time of diagnosis (Table 1c, Figure 35).

Figure 35. Earlier and late stage of disease at HIV diagnosis during 2019 among women, by race/ethnicity—44 states and the District of Columbia

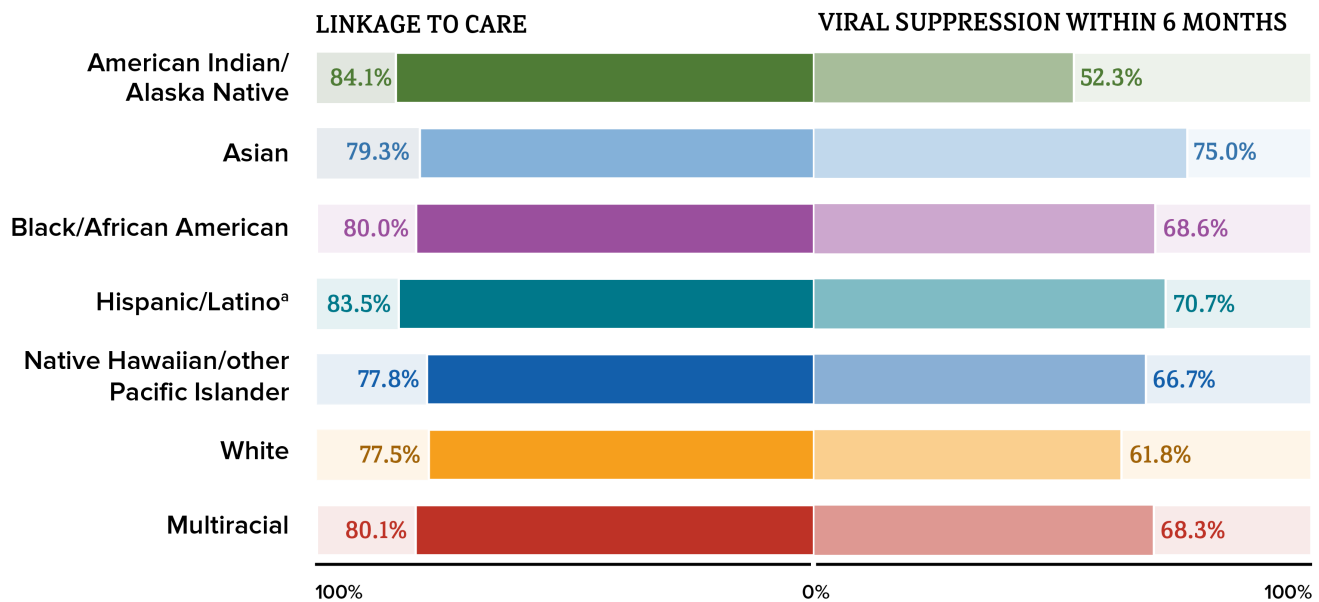


Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

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

The highest percentage for women by race/ethnicity who were linked to HIV medical care within 1 month of diagnosis was for American Indian or Alaska Native persons (84.1%) and the lowest percentage was for White persons (77.5%). The highest percentage for women by race/ethnicity who were virally suppressed within 6 months of diagnosis was for Asian persons (75.0%) and the lowest percentage was for American Indian or Alaska Native persons (52.3%) (Table 2c, Figure 36).

Figure 36. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among women, by race/ethnicity—44 states and the District of Columbia

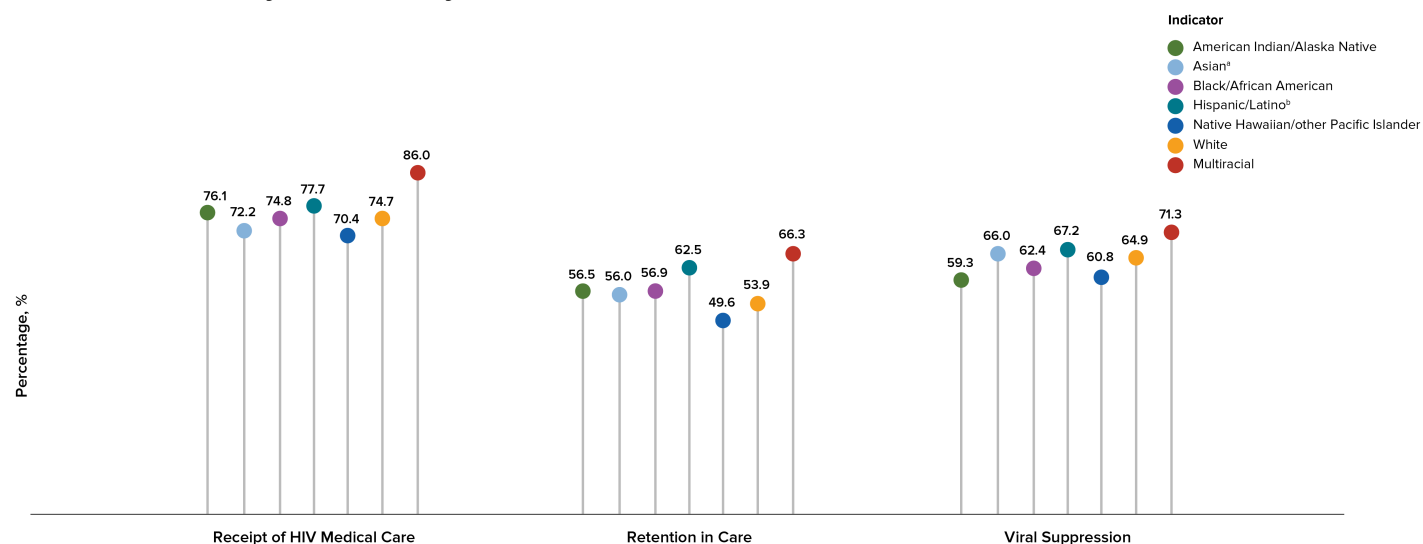


Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

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

The highest percentage for women by race/ethnicity who received any HIV medical care was for multiracial persons (86.0%) and the lowest percentage was for Native Hawaiian or other Pacific Islander persons (70.4%) (Figure 37). The highest percentage for women by race/ethnicity who were retained in HIV medical care was for multiracial persons (66.3%) and the lowest percentage was for Native Hawaiian or other Pacific Islander persons (49.6%). The highest percentage for women by race/ethnicity who were virally suppressed at the most recent viral load test was for multiracial persons (71.3%) and the lowest percentage was for American Indian or Alaska Native persons (59.3%).

Figure 37. Receipt of HIV medical care, retention in HIV medical care, and viral suppression during 2019 among women, by race/ethnicity—44 states and the District of Columbia



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

^a Includes Asian/Pacific Islander legacy cases.

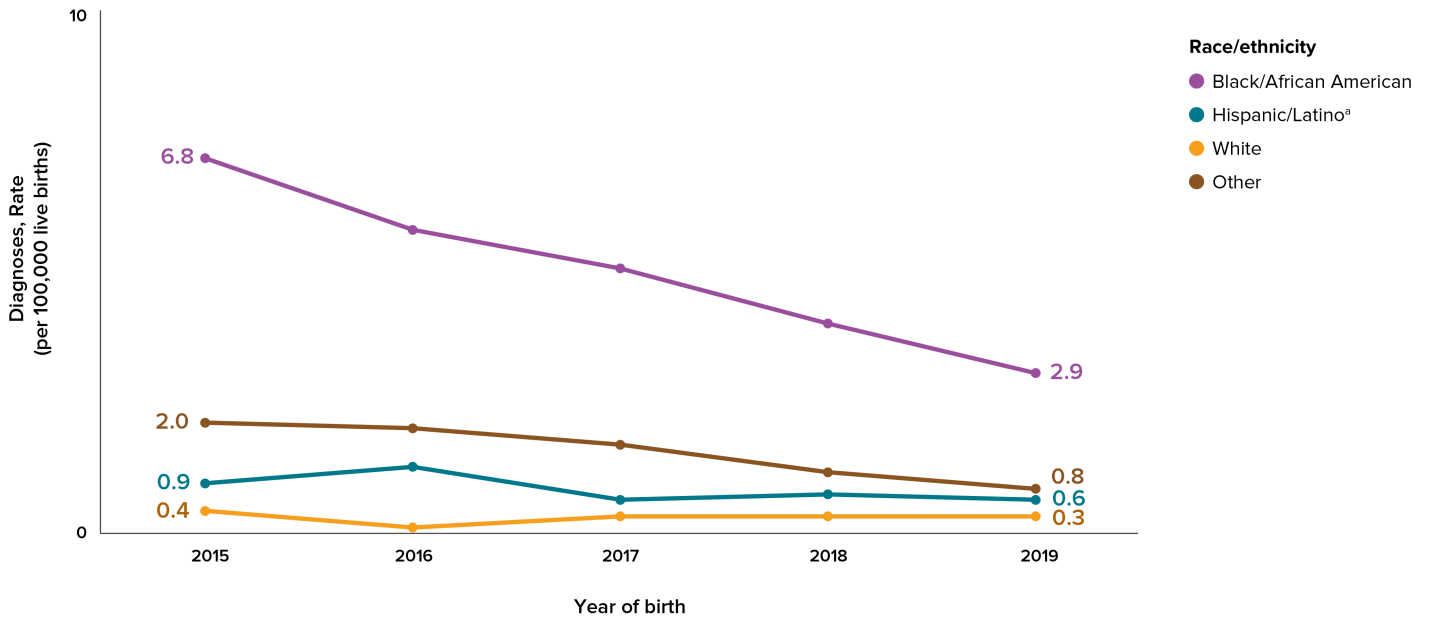
^b Hispanic/Latino persons can be of any race.

PERSONS WITH PERINATALLY ACQUIRED HIV INFECTION

In order 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 of births and diagnoses of HIV infection attributed to perinatal exposure, the data presented provide minimum counts reported to the surveillance system. Please use caution when interpreting perinatally acquired HIV infection cases due to the dynamic nature of reporting. Additionally, numbers less than 12, and rates based on these numbers, should be interpreted with caution.

The overall annual rate of perinatally acquired HIV infections in the United States (regardless of place of birth) decreased from 1.6 per 100,000 live births in 2015 to 0.8 in 2019 (Table 10a). However, annual rates differed by race/ethnicity. Although the annual rate among Black or African American persons decreased from 6.8 in 2015 to 2.9 in 2019, the 2019 rate among Black or African American persons (2.9) was nearly 5 and 10 times the 2019 rates among Hispanic or Latino (0.6) and White persons (0.3) (Figure 38).

Figure 38. Perinatally acquired HIV infection, by year of birth and mother's race/ethnicity, 2015–2019—United States

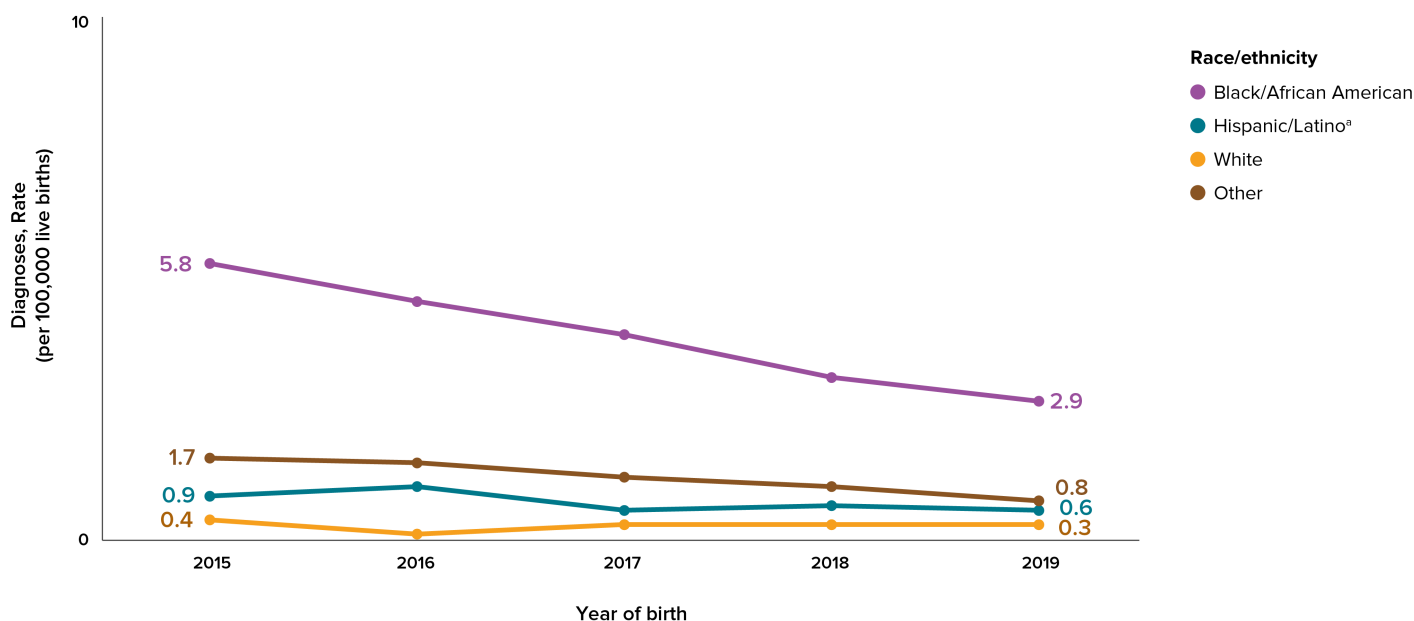


Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications. Live-birth data reflect race/ethnicity of the infant's mother.

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

Among infants born in the United States, the overall annual rate of perinatally acquired HIV infections decreased from 1.4 per 100,000 live births in 2015 to 0.8 in 2019 (Table 10b). However, annual rates differed by race/ethnicity. Although the annual rate among Black or African American persons decreased from 5.8 in 2015 to 2.9 in 2019, the 2019 rate among Black or African American persons (2.9) was nearly 5 and 10 times the 2019 rates among Hispanic or Latino (0.6) and White persons (0.3) (Figure 39).

Figure 39. Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother's race/ethnicity, 2015–2019—United States



Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications. Live-birth data reflect race/ethnicity of the infant's mother.

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

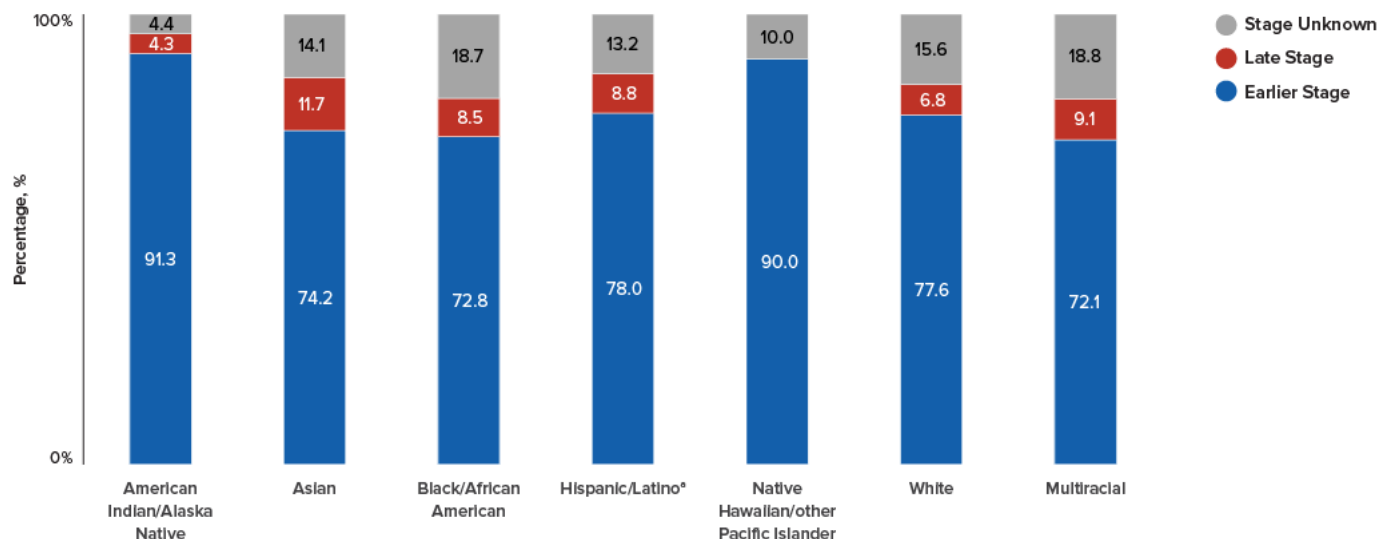
YOUNG PERSONS

Young persons (persons aged 13–24 years) accounted for 20.8% of 36,801 diagnoses of HIV infection in 2019 in the United States and 6 dependent areas [1]. 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.

Among young persons with HIV infection diagnosed during 2019 in 45 jurisdictions with complete laboratory reporting, 75.2% of infections were diagnosed at an earlier stage (stage 0, 1, or 2) and 8.4% were classified as stage 3 (AIDS) at time of diagnosis (Table 1a). Moreover, 79.0% of young persons were linked to HIV medical care within 1 month of diagnosis and 68.2% were virally suppressed within 6 months of diagnosis (Table 2a). Of 29,533 young persons living with diagnosed HIV in the 45 jurisdictions at year-end 2019, 80.0% received HIV medical care, 58.7% were retained in HIV medical care, and 63.3% were virally suppressed at their most recent viral load test (Tables 3a and 4a).

Although HIV care outcomes varied among young persons by race/ethnicity, $\geq 72.1\%$ of infections were diagnosed at an earlier stage for all racial/ethnic groups at time of diagnosis. Young Asian persons had the highest percentage of infections classified as stage 3 (AIDS) at time of diagnosis (11.7%), but no racial/ethnic group had $>20\%$ of infections classified as stage 3 (AIDS) at the time of diagnosis (Table 1c, Figure 40).

Figure 40. Earlier and late stage of disease at HIV diagnosis during 2019 among young persons, by race/ethnicity—44 states and the District of Columbia

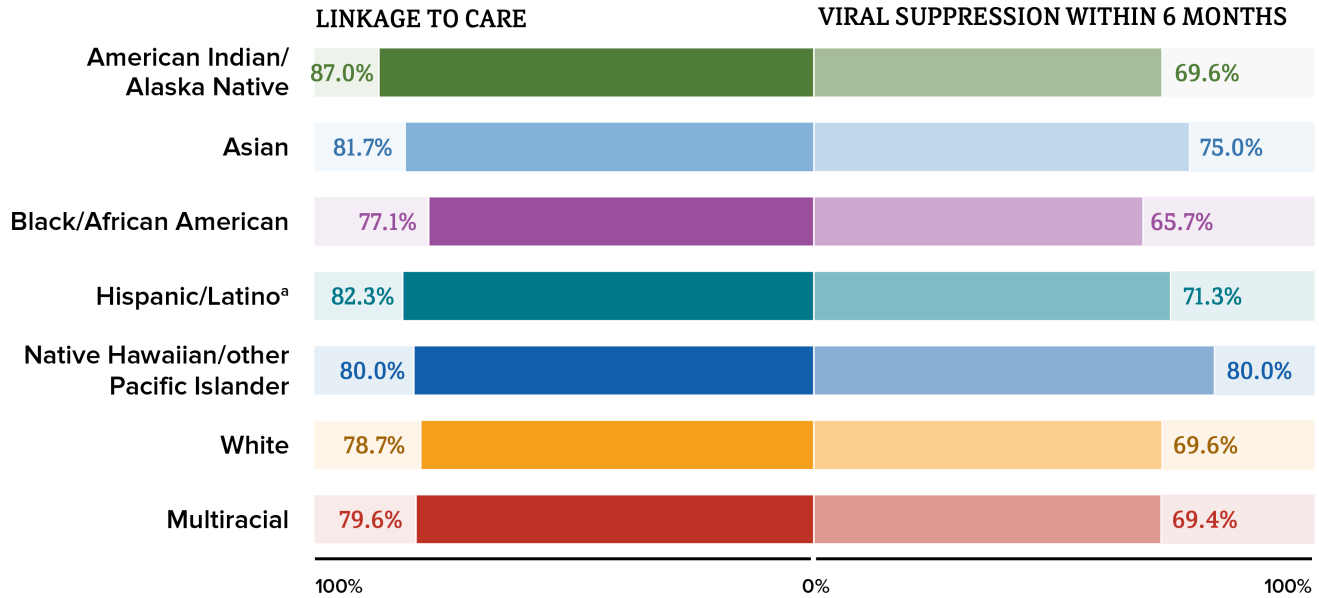


Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

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

The highest percentage for young persons by race/ethnicity who were linked to HIV medical care within 1 month of diagnosis was for American Indian or Alaska Native persons (87.0%) and the lowest percentage was for Black or African American persons (77.1%). The highest percentage for young persons by race/ethnicity who were virally suppressed within 6 months of diagnosis was for Native Hawaiian or other Pacific Islander persons (80.0%) and the lowest percentage was for Black or African American persons (65.7%) (Table 2c, Figure 41).

Figure 41. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among young persons, by race/ethnicity—44 states and the District of Columbia

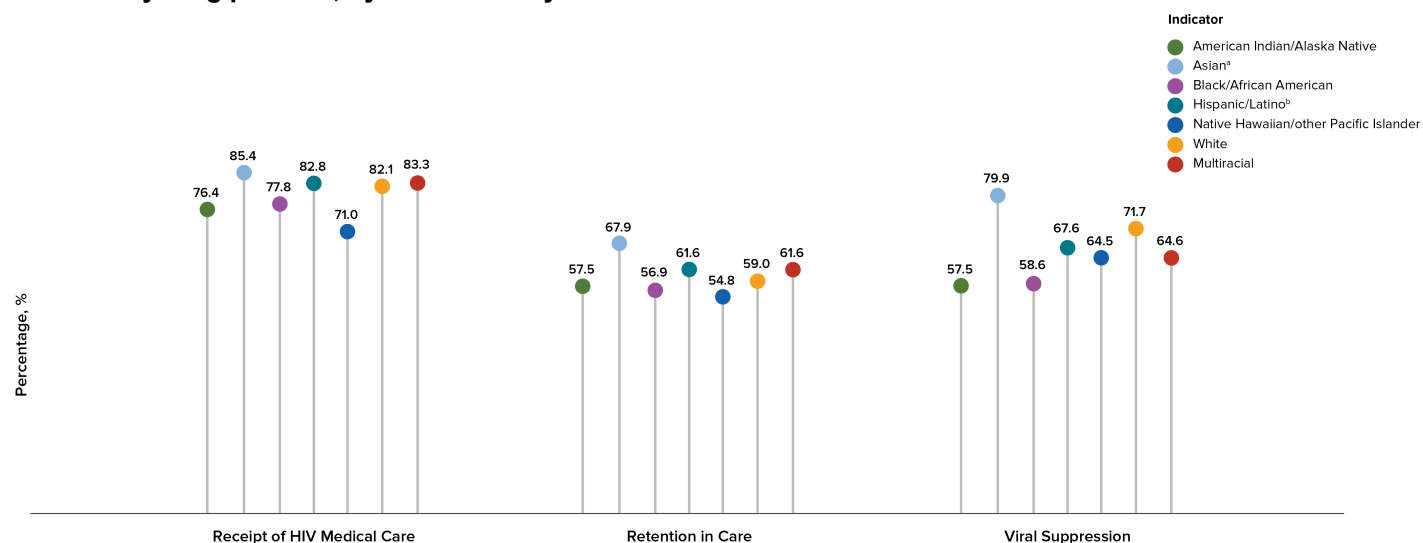


Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

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

The highest percentage for young persons by race/ethnicity who received any HIV medical care was for Asian persons (85.4%) and the lowest percentage was for Native Hawaiian or other Pacific Islander persons (71.0%). The highest percentage for young persons by race/ethnicity who were retained in HIV medical care was for Asian persons (67.9%) and the lowest percentage was for Native Hawaiian or other Pacific Islander persons (54.8%). The highest percentage for young persons by race/ethnicity who were virally suppressed at the most recent viral load test was for Asian persons (79.9%) and the lowest percentage was for Black or African American persons (58.6%) (Table 3c, Figure 42).

Figure 42. Receipt of HIV medical care, retention in HIV medical care, and viral suppression during 2019 among young persons, by race/ethnicity—44 states and the District of Columbia



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

^a Includes Asian/Pacific Islander legacy cases.

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

2019 STATUS AND DISPARITIES IN LINKAGE TO CARE WITHIN 1 MONTH OF HIV DIAGNOSIS AND VIRAL SUPPRESSION

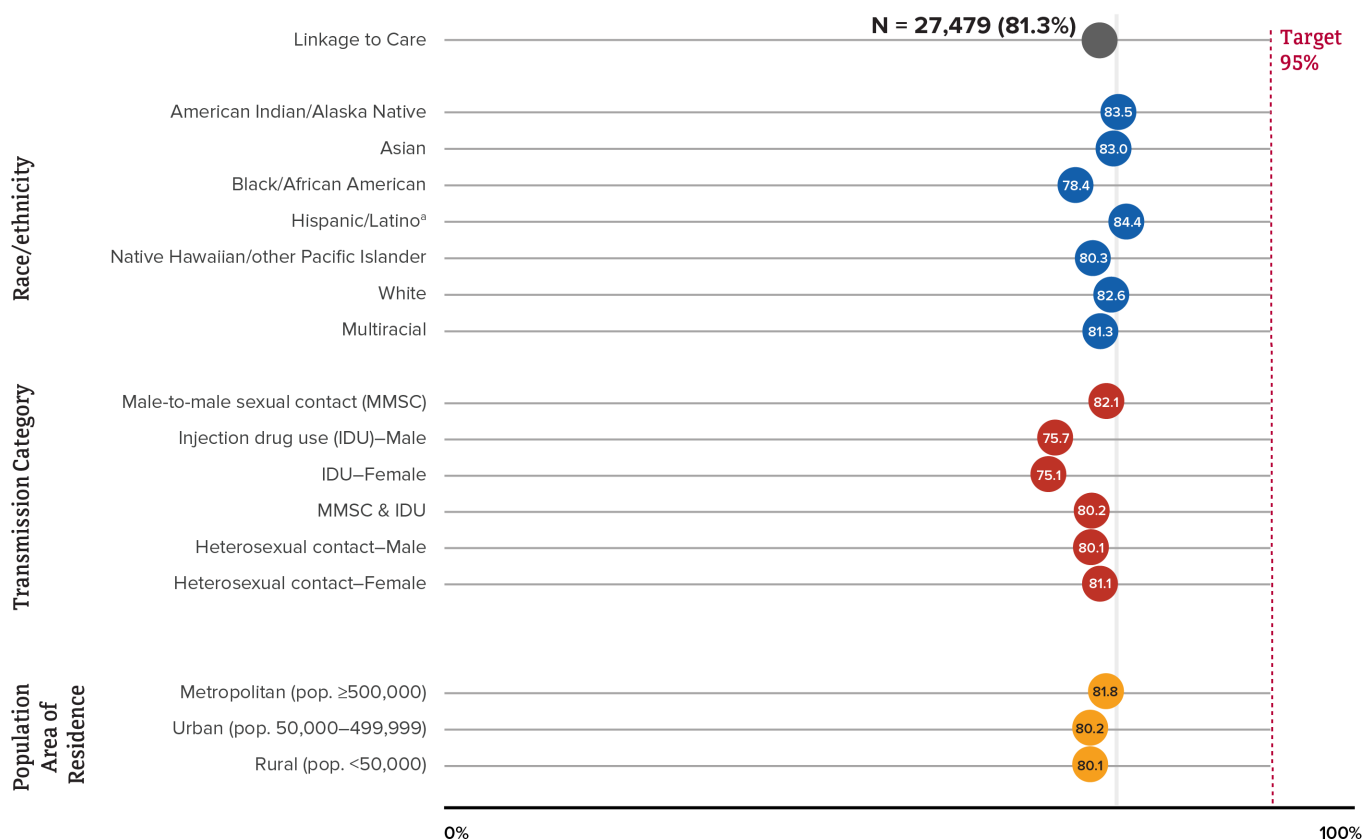
Achieving equitable health in HIV-related outcomes can reduce new HIV infections and eliminate HIV-related disparities in the United States consistent with the goals of Healthy People 2030, NHSP, and the EHE initiative. This section presents the current status and HIV-related disparities for two favorable care outcomes, the percentage of persons with newly diagnosed HIV who were linked to care within 1 month of diagnosis and persons living with diagnosed HIV that were virally suppressed during 2019, prior to the start of national plans and initiatives.

To assess the status and measure HIV-related disparities for both outcomes, we explored the analytic approach used in Healthy People 2030 [9–12]. We assessed the status of the overall outcomes relative to the proposed national targets of 95% for linkage to care and viral suppression. We measured disparities for the two outcomes by selected characteristics (i.e., race/ethnicity, transmission category, and geographic area) and either chose the 95% outcome target or the group with the highest percentage for each outcome as our reference point. We measured the HIV-related disparities comparing the population groups with the highest and lowest percentage for that outcome to their respective targets and to each other using one absolute (i.e., maximal percentage difference) and/or two relative disparity measures (i.e., maximal percentage ratio and summary percentage ratio) to highlight opportunities for improvement. Maximal or absolute percentage difference is the difference between the group with the highest and lowest percentage for an outcome. Maximal percentage ratio is the ratio between the group with the highest and lowest percentage for an outcome. The 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.

2019 Status and Disparities in Linkage to HIV Medical Care Within 1 Month of HIV Diagnosis

Our objective is to increase the percentage of persons linked to HIV medical care within 1 month of HIV diagnosis. In 2019, 81.3% of persons with an HIV diagnosis were linked to HIV medical care within 1 month of diagnosis (Table 2a). Linkage to HIV medical care was 13.7% from the 95% target (absolute percentage difference, 95.0%–81.3%) and 0.856 times the 95% target (81.3/95.0). The 2019 status for linkage to care varied by race/ethnicity, transmission category, and population area of residence (Figure 43).

Figure 43. Status of linkage to HIV medical care within 1 month of HIV diagnosis during 2019 among persons aged ≥13 years with diagnosed HIV infection, by selected characteristics—44 states and the District of Columbia



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

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

By race/ethnicity, the highest linkage to care group percentage was for Hispanic or Latino persons (84.4%) and the lowest linkage to care group percentage was for Black or African American persons (78.4%) (Table 2a, Figure 43). Hispanic or Latino persons (highest linkage to care group) were the closest to the target (absolute percentage difference, 95.0%–84.4%=10.6%) and had a group percentage higher than the overall linkage to care outcome of 81.3%. Black or African American persons were the farthest from the target (absolute percentage difference, 95.0%–78.4%=16.6%) and had a group percentage lower than the overall linkage to care outcome. The percentages for Hispanic or Latino and Black or African American persons were 0.888 and 0.825 times the 95% target respectively ([Hispanic or Latino persons/target]: 84.4/95.0, [Black or African American persons/target]: 78.4/95.0; meeting the target equals 1).

The absolute percentage difference between the percentages for Hispanic or Latino persons (highest linkage to care group, 84.4%) and for Black or African American persons (lowest linkage to care group, 78.4%) was 6.0%. The percentage for Hispanic or Latino persons was 1.077 times the percentage for Black or African American persons (maximal percentage ratio, 84.4/78.4). The average percentage for all other racial/ethnic groups (excluding the percentage for Hispanic or Latino persons) was 81.5%. The absolute percentage difference between the percentage for Hispanic or Latino persons and the average percentage for all other racial/ethnic groups was 2.9% (84.4%–81.5%). The average percentage for all other racial/ethnic groups was 0.966 times the percentage for Hispanic or Latino persons (summary percentage ratio, 81.5/84.4).

By transmission category, the highest linkage to care group percentage was for males with infection attributed to MMSC (82.1%) and the lowest linkage to care group percentage was among females with infection attributed to IDU (75.1%) (Table 2a, Figure 43). Males with infection attributed to MMSC were the closest to the target (absolute percentage difference, 95.0%–82.1%=12.9%) and had a group percentage higher than the overall linkage to care outcome of 81.3%. Females with infection attributed to IDU were the farthest from the target (absolute percentage difference, 95.0%–75.1%=19.9%) and had a group percentage lower than the overall linkage to care outcome. The percentages for males with infection attributed to MMSC and females with infection attributed to IDU were 0.864 and 0.791 times the 95% target respectively ([males with infection attributed to MMSC/target]: 82.1/95.0; [females with infection attributed to IDU/target]: 75.1/95.0).

The absolute percentage difference between the percentages for males with infection attributed to MMSC (highest linkage to care group, 82.1%) and for females with infection attributed to IDU (lowest linkage to care group, 75.1%) was 7.0%. The percentage for males with infection attributed to MMSC was 1.093 times the percentage for females with infection attributed to IDU (maximal percentage ratio, 82.1/75.1). The average percentage for all other transmission categories (excluding the percentage for males with infection attributed to MMSC) was 78.4%. The absolute percentage difference between the percentage for males with infection attributed to MMSC and the average percentage for all other transmission categories was 3.7% (82.1%–78.4%). The average percentage for all other transmission categories was 0.955 times the percentage for males with infection attributed to MMSC (summary percentage ratio, 78.4/82.1).

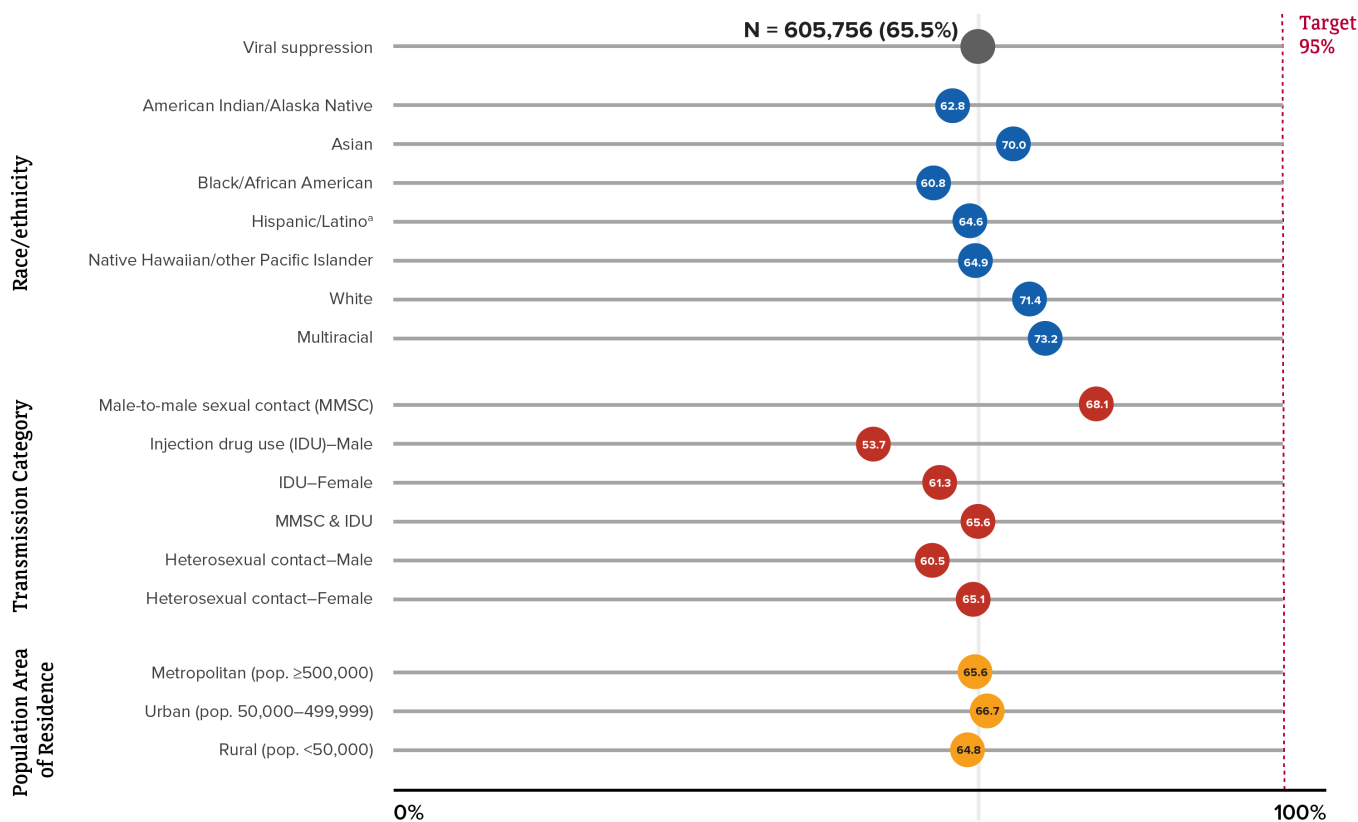
By population area of residence, linkage to care was similar for all geographic areas (metropolitan: 81.8%, urban: 80.2%, rural: 80.1%). The highest linkage to care group percentage was for persons who resided in metropolitan areas (81.8%) and the lowest linkage to care group percentage was for persons who resided in rural areas (80.1%) (Table 2a, Figure 43). Persons who resided in metropolitan areas were the closest to the target (absolute percentage difference, 95.0%–81.8%=13.2%) and had a group percentage higher than the overall linkage to care outcome of 81.3%. Persons who resided in rural areas were the farthest from the target (absolute percentage difference, 95.0%–80.1%=14.9%) and had a group percentage lower than the overall linkage to care outcome. The percentages for persons who resided in metropolitan areas and in rural areas were 0.861 and 0.843 times the 95% target respectively ([metropolitan/target]: 81.8/95.0, [rural/target]: 80.1/95.0).

The absolute percentage difference between the percentages for persons who resided in metropolitan areas (highest linkage to care group, 81.8%) and for persons who resided in rural areas (lowest linkage to care group, 80.1%) was 1.7%. The percentage for persons who resided in metropolitan areas was 1.021 times the percentage for persons who resided in rural areas (maximal percentage ratio, 81.8/80.1). The average percentage for all other geographic areas (excluding the percentage for persons who resided in metropolitan areas) was 80.2%. The absolute percentage difference between the percentage for persons who resided in metropolitan areas and the average percentage for all other geographic areas was 1.6% (81.8%–80.2%). The average percentage for all other geographic areas was 0.980 times the percentage for persons who resided in metropolitan areas (summary percentage ratio, 80.2/81.8).

2019 Status and Disparities in Viral Suppression

Our objective is to increase the percentage of persons living with diagnosed HIV that were virally suppressed. During 2019, 65.5% of persons living with diagnosed HIV infection at year-end were virally suppressed at the most recent viral load test (Table 4a). Viral suppression was 29.5% from the 95% target (absolute percentage difference, 95.0%–65.5%) and was 0.689 times the 95% target (65.5/95.0). The 2019 status for viral suppression varied by race/ethnicity, transmission category, and population area of residence (Figure 44).

Figure 44. Status of viral suppression during 2019 among persons aged ≥13 years with diagnosed HIV infection, by selected characteristics—44 states and District of Columbia



Note. 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.

By race/ethnicity, the highest viral suppression group percentage was for multiracial persons (73.2%) and the lowest viral suppression group percentage was for Black or African American persons (60.8%) (Table 4a, Figure 44). Multiracial persons were the closest to the target (absolute percentage difference, 95.0%–73.2%=21.8%) and had a group percentage higher than the overall viral suppression outcome of 65.5%. Black or African American persons were the farthest from the target (absolute percentage difference, 95.0%–60.8%=34.2%) and had a group percentage lower than the overall viral suppression outcome. The percentages for multiracial and Black or African American persons were 0.770 and 0.640 times the 95% target respectively ([multiracial persons/target]: 73.2/95.0, [Black or African American persons/target]: 60.8/95.0; meeting the target equals 1).

The absolute percentage difference between the percentages for multiracial persons (highest viral suppression [VS] group, 73.2%) and for Black or African American persons (lowest VS group, 60.8%) was 12.4%. The percentage for multiracial persons was 1.204 times the percentage for Black or African American persons (maximal percentage ratio, 73.2/60.8). The average percentage for all other racial/ethnic groups (excluding the

percentage for multiracial persons) was 65.8%. The absolute percentage difference between the percentage for multiracial persons and the average percentage for all other racial/ethnic groups was 7.4% (73.2%–65.8%). The average percentage for all other racial/ethnic groups was 0.899 times the percentage for multiracial persons (summary percentage ratio, 65.8/73.2).

By transmission category, the highest viral suppression group percentage was for males with infection attributed to MMSC (68.1%) and the lowest viral suppression group percentage was for males with infection attributed to IDU (53.7%) (Table 4a, Figure 44). Males with infection attributed to MMSC were the closest to the target (absolute percentage difference, 95.0%–68.1%=26.9%) and had a group percentage higher than the overall viral suppression outcome of 65.5%. Males with infection attributed to IDU were the farthest from the target (absolute percentage difference, 95.0%–53.7%=41.3%) and had a group percentage lower than the overall viral suppression outcome. The percentages for males with infection attributed to MMSC and males with infection attributed to IDU were 0.717 and 0.565 times the 95% target respectively ([males with infection attributed to MMSC/target]: 68.1/95.0, [males with infection attributed to IDU/target]: 53.7/95.0).

The absolute percentage difference between the percentages for males with infection attributed to MMSC (highest VS group, 68.1%) and for males with infection attributed to IDU (lowest VS group, 53.7%) was 14.4%. The percentage for males with infection attributed to MMSC was 1.268 times the percentage for males with infection attributed to IDU (maximal percentage ratio, 68.1/53.7). The average percentage for all other transmission categories (excluding the percentage for males with infection attributed to MMSC) was 61.2%. The absolute percentage difference between the percentage for males with infection attributed to MMSC and the average percentage for all other transmission categories was 6.9% (68.1%–61.2%). The average percentage for all other transmission categories was 0.899 times the percentage for males with infection attributed to MMSC (summary percentage ratio, 61.2/68.1).

By population area of residence, viral suppression was similar for all geographic areas (metropolitan: 65.6%, urban: 66.7%, rural: 64.8%). The highest viral suppression group percentage was for persons who resided in urban areas (66.7%) and the lowest viral suppression group percentage was for persons who resided in rural areas (64.8%) (Table 4a, Figure 44). Persons who resided in urban areas were the closest to the target (absolute percentage difference, 95.0%–66.7%=28.3%) and had a group percentage higher than the overall viral suppression outcome of 65.5%. Persons who resided in rural areas were the farthest from the target (absolute percentage difference, 95.0%–64.8%=30.2%) and had a group percentage lower than the overall viral suppression outcome. The percentages for persons who resided in urban areas and in rural areas were 0.702 and 0.682 times the 95% target respectively ([urban/target]: 66.7/95.0; [rural/target]: 64.8/95.0).

The absolute percentage difference between the percentages for persons who resided in urban and rural areas was 1.9% (66.7%–64.8%). The percentage for persons who resided in urban areas was 1.029 times the percentage for persons who resided in rural areas (maximal percentage ratio, 66.7/64.8). The average percentage for all other geographic areas (including the percentage for persons who resided in metropolitan and rural areas and excluding the percentage who resided in urban areas) was 65.2%. The absolute percentage difference between the percentages for persons who resided in urban and all other geographic areas was 1.5% (66.7%–65.2%). The average percentage for all other geographic areas was 0.978 times the percentage for persons who resided in urban areas (summary percentage ratio, 65.2/66.7).

Technical Notes

A. SURVEILLANCE OF HIV INFECTION OVERVIEW

This report includes data reported to CDC through December 31, 2020, 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.

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; the results of anonymous tests are not reported to the confidential name-based HIV registries of state and local health departments. Therefore, reports of confidential test results may not represent all persons who tested positive for HIV infection.

Please use caution when interpreting laboratory data for persons with diagnosed HIV infection. Laboratory data presented in this report are from 45 jurisdiction (44 states and the District of Columbia) that reported complete CD4+ T-lymphocyte (CD4) and viral load test results to CDC as of December 31, 2020. Data from these jurisdictions represent 89% of all persons aged ≥ 13 years living with diagnosed HIV infection at year-end 2019 in the United States and are therefore not representative of data on all persons living with diagnosed HIV infection in the United States.

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 and among children [13, 14]. In the following lists, some bulleted items are paraphrases, not quotations, from the published surveillance case definitions. The intention is to emphasize the differences between the 2008 and 2014 case definitions.

B1. 2008 Case Definition

The 2008 case definition was used to classify cases diagnosed through 2013. For adults and adolescents, this definition incorporates an HIV infection staging system that includes AIDS (HIV infection, stage 3). The 2008 stages of HIV infection are defined as follows:

- **HIV infection, stage 1:** No AIDS-defining opportunistic illness (OI) and either CD4+ T-lymphocyte (CD4 lymphocyte) count of ≥ 500 cells/ μL or CD4 percentage of total lymphocytes of ≥ 29 .
- **HIV infection, stage 2:** No AIDS-defining OI and either CD4 lymphocyte count of 200–499 cells/ μL or CD4 percentage of total lymphocytes of 14–28.
- **HIV infection, stage 3 (AIDS):** Documentation of an AIDS-defining OI or either a CD4 lymphocyte count of < 200 cells/ μL or CD4 percentage of total lymphocytes of < 14 . Documentation of an AIDS-defining OI supersedes a CD4 lymphocyte count or percentage that would not, by itself, be the basis for a stage 3 (AIDS) classification.
- **HIV infection, stage unknown:** No reported information on AIDS-defining OIs and no information available on CD4 lymphocyte count or percentage.

B2. 2014 Case Definition

In 2014, the HIV surveillance case definition was revised to adapt to changes in diagnostic criteria [13]; the laboratory criteria for defining a confirmed case of HIV infection were changed to accommodate multitest algorithms that did not include previously required tests (e.g., Western blot). New to the case definition is the inclusion of criteria for differentiating HIV-1 and HIV-2 infections and for recognizing early HIV infection (stage 0), during which viral loads may be high enough and CD4 T-lymphocyte counts low enough to be misclassified as stage 3 (AIDS). The 2014 case definition was used to classify cases diagnosed in 2014 and later. It is similar to the 2008 case definition except for the following:

1. inclusion of criteria for stage 0
2. inclusion of CD4 lymphocyte testing criteria for stage 3 in children
3. changes in the cutoffs for CD4 percentage of total lymphocytes used for classification of stages 1 and 2 in persons aged 6 years and older [3]

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.

The transition to CD4 lymphocyte-based criteria for stage 3 (AIDS) among children has resulted in an increase in the number of annual stage 3 (AIDS) classifications among pediatric cases diagnosed after 2013. Before implementation of the 2014 revised case definition, an OI diagnosis was required for a pediatric case to meet the criteria for stage 3 classification.

C. AREAS WITH COMPLETE LABORATORY REPORTING

As of December 31, 2020, 45 jurisdictions (44 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 14).
- 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, 2020, the jurisdiction had reported (to CDC) at least 95% of all CD4 and viral load test results received from January 2018 through September 2020.

The 44 states are Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, 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–d, 2a–d, 3a–d, and 4a–b.

D. TABULATION AND PRESENTATION OF DATA

The data in this report include information received by CDC through December 31, 2020. The data are organized into 2 sections: National Profile and Special Focus Profiles. For both the National Profile and Special Focus Profiles, figures are presented.

1. Tables 1a–d present data for stage of disease at time of diagnosis during 2019.
2. Tables 2a–d present data for on linkage to HIV medical care were based on persons whose infection was diagnosed during 2019 and who resided in any of the 45 jurisdictions at the time of diagnosis; and viral suppression within 6 months of diagnosis was measured for persons whose infection was diagnosed during 2019.
3. Tables 3a–d present data on receipt of and retention in HIV medical care were based on persons whose infection was diagnosed by year-end 2018, who resided in any of the 45 jurisdictions as of their most recent known address, and who were alive at year-end 2019.
4. Tables 3c–4b present data for viral suppression among persons whose infection was diagnosed by year-end 2018, who resided in any of the 45 jurisdictions as of their most recent known address during 2019, and who were alive at year-end 2019.
5. Table 5 presents data for prevalence-based HIV care continuum for persons living with HIV infection (diagnosed or undiagnosed) at year-end 2019.
6. Tables 6a–d present data for stage 3 (AIDS) at time of HIV diagnosis from 2015–2019.
7. Tables 7a–f present data of deaths for persons with diagnosed HIV infection and of persons with infection ever classified as stage 3 (AIDS) from 2015–2019.
8. Tables 8a–f present survival for >3 years for persons with diagnosed HIV infection and for persons whose infection had ever been classified as stage 3 (AIDS) from 2011–2016.
9. Tables 9a/b presents PrEP data.
10. Tables 10a/b presents data for infants with infection attributed to perinatal transmission from 2015–2019.

D1. Definitions and Data Specifications

D1.1 Stage 3 (AIDS) and 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.

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, 1, or 2) can be assessed, stage of disease at time of diagnosis was calculated for the 45 jurisdictions that reported complete laboratory data (Tables 1a/b).

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

Stage of disease at time of diagnosis (i.e., HIV infection, stage 0, 1, 2, 3 [AIDS], or unknown; Tables 1a–d) and stage 3 (AIDS) at time of HIV diagnosis (Tables 6a–d) were determined by using the first CD4 test result or documentation of an AIDS-defining condition ≤ 3 months after the HIV diagnosis date during 2019, 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

National guidelines for the clinical care and treatment of adults and adolescents living with HIV [15] recommend initiation of treatment immediately at time of HIV diagnosis regardless of viral load or CD4 count. Initiation of treatment immediately (or as soon as possible after HIV diagnosis) is to increase treatment uptake and linkage to care, decrease the time to viral suppression for individual patients, and improve the rate of viral suppression among persons with HIV. CD4 and viral load testing is still recommended for use in clinical practice to direct the course of treatment and assess effectiveness of treatment.

For special patient populations with HIV such as transgender and nonbinary persons, knowledge of their unique care and service needs are critical to reduce barriers to engagement in care, improve health, and reduce the risk of HIV transmission to sexual partners. For transgender males and nonbinary persons of childbearing potential, a pregnancy test should be performed prior to antiretroviral therapy (ART) initiation and selection of treatment should be based on their clinical history and pregnancy potential needs. Otherwise, ART-naïve patients who are pregnant should be started on treatment based on perinatal guidelines and counseled during pregnancy for their health and to prevent HIV transmission to the fetus.

For all transgender and nonbinary persons, clinical outcomes, potential adverse effects, treatment goals, and the patient’s current hormone levels should be considered when determining the appropriate doses of hormone and androgen blockers. Clinical treatment effects and hormone levels should be routinely monitored with appropriate titrations of estradiol, testosterone, or androgen blockers, as needed. Interpretation of laboratory results is dependent on patient physiology and the specific test being performed as recommended in the guidelines from the Center of Excellence for Transgender Health.

For patients who are not taking ART, CD4 count should be monitored every 3–6 months. For virally suppressed patients who have taken ART for ≥ 2 years, viral load testing is recommended every 3 to 4 months or as clinically indicated to confirm continuous viral suppression. For virally suppressed patients who have taken ART for > 2 years, viral load testing at 6-month intervals may be considered. For virally suppressed patients with treatment modifications due to drug toxicities or regimen simplification, viral load testing is recommended 4 to 8 weeks after treatment modification to confirm regimen effectiveness. For virally suppressed patients whose CD4 counts have consistently ranged from 300 to 500 cells/ μ L for ≥ 2 years, annual monitoring of CD4 count

is recommended. For virally suppressed patients whose CD4 counts have consistently been > 500 cells/ μ L for ≥ 2 years, continued CD4 monitoring is optional.

Frequent monitoring of CD4 count, especially among persons with higher counts (>300 cells/ μ L) and consistently suppressed viral loads, is generally not required for patient management. However, if clinically indicated, the CD4 count should be monitored more frequently (e.g., when changes in a patient's clinical status decrease CD4 count and thus prompt the need for prophylaxis for opportunistic infection).

The data on linkage to HIV medical care were based on persons whose infection was diagnosed during 2019 and who resided in any of the 45 jurisdictions at the time of diagnosis (Tables 2a–d). 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. Linkage to HIV medical care within 3 months after HIV diagnosis was measured by documentation of ≥ 1 CD4 (count or percentage) or viral load tests performed ≤ 3 months 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 2018, who resided in any of the 45 jurisdictions as of their most recent known address, and who were alive at year-end 2019 (Tables 3a–d). Receipt of any HIV medical care was measured by documentation of ≥ 1 CD4 or viral load tests performed during 2019. 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 2019.

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 2018, who resided in any of the 45 jurisdictions as of their most recent known address during 2019, and who were alive at year-end 2019 (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 2019 and who resided in any of the 45 jurisdictions at the time of diagnosis (Tables 2a–d). 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 2019.

D1.4 Deaths

Persons whose HIV infections are reported to the National HIV Surveillance System (NHSS) are assumed to be alive unless their deaths have been reported to CDC. Death data were based on deaths of persons with diagnosed HIV infection and of persons with infection ever classified as stage 3 (AIDS), regardless of the cause of death. Jurisdiction-level data were based on area of residence at death. If information on residence at death was not available, the state where a person's death occurred was used. Data for the year 2019 are preliminary and based on death data received by CDC through December 2020.

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, and the prevalence-based HIV care continuum is dependent upon complete death ascertainment conducted by HIV surveillance programs for reporting to CDC. Due to incomplete reporting of deaths for the year 2019, death data for Kansas, Massachusetts, Mississippi, North Dakota, Nevada, Vermont, and the U.S. Virgin Islands should be interpreted with caution. Please use caution when interpreting trend data: the numbers for the most recent year are subject to uncertainty.

D1.5 Survival analyses

The Kaplan-Meier method was used to estimate the probability of survival (Tables 8a–f) for >3 years (36 months) for persons with diagnosed HIV infection and for persons whose infection had ever been classified as stage 3 (AIDS). To allow ≥ 3 years from the time of HIV diagnosis to a death date on or before December 31, 2019, tables were limited to data on persons whose diagnosis or stage 3 (AIDS) classification was made during 2011–2016. The results of survival analyses for areas with <100 diagnoses per year (i.e., 600 during the 6-year period) were unstable and therefore are not presented in this report.

D1.6 Perinatally acquired HIV infection

Table 10a presents data for infants with infection attributed to perinatal transmission and reported to NHSS through December 2020. The data include all persons reported to NHSS with infection attributed to perinatal exposure, regardless of place of birth. Table 10b presents a subset of data from Table 10a: the data include only the persons whose case record denoted the United States as place of birth or residence at birth. The data on persons with perinatally acquired infection that are presented in Table 10b do not include persons who were born in a U.S. dependent area or a foreign country or whose residence at birth was unknown or missing from the case record.

D1.7 Preexposure prophylaxis (PrEP) coverage

PrEP coverage, reported as a percentage, is defined as the number of persons aged ≥ 16 years classified as having been prescribed PrEP during the specified year divided by the estimated number of persons aged ≥ 16 years who had indications for PrEP during the specified year (Tables 9a/b, A5, S7a/b).

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 [16, 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. Beginning in 2017, methods were adjusted to provide the estimated number of persons of other races/ethnicities (including Asian persons and persons in other race/ethnic groups), in addition to Black or African American, Hispanic or Latino, and White persons. Also beginning in 2017, an adjustment was applied to calculate an estimated number of persons with PrEP indications in counties with suppressed data for the number of HIV diagnoses in some transmission risk groups, age groups, or race/ethnicity groups.

The tables included in this report provide updated data on PrEP coverage for the years 2017 and 2018 and preliminary data for the year 2019 and for the year 2020 (from January through September) using the IQVIA data reported through September 2020. 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 HIV Surveillance Data Tables, 2017 denominators were used for 2017 PrEP coverage data; 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.

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.

The population denominators used to compute the rates for the 50 states, the District of Columbia, and Puerto Rico were based on the Vintage 2019 postcensal estimates file (for years 2015–2019) from the U.S. Census Bureau [24]. The population denominators for American Samoa, Guam, the Northern Mariana Islands, the Republic of Palau, and the U.S. Virgin Islands were based on estimates and projections from the U.S. Census Bureau's International Data Base [25]. Each rate was calculated by dividing the total number of diagnoses (or deaths or prevalence) for the calendar year by the population for that calendar year and then multiplying the result by 100,000. The denominators used for calculating the rates specific to age, sex at birth, and race/ethnicity were computed by applying the appropriate vintage estimates for age, sex at birth, and race/ethnicity for the 50 states and the District of Columbia [24]. The same method was used to calculate the denominators for Puerto Rico, with the exception of race/ethnicity estimates; these data are not available for Puerto Rico (see next paragraph). For the other 5 U.S. dependent areas, estimates from the U.S. Census Bureau's International Data Base were used for age- and sex-specific population denominators [25].

CDC currently does not provide subpopulation rates by race/ethnicity for the 6 U.S. dependent areas because the U.S. Census Bureau does not collect information from all dependent areas. Rates for gender and transmission categories are not provided in this report because of the absence of denominator data from the U.S. Census Bureau, the source of data used for calculating all rates in this report.

In the tables displaying data on perinatally acquired HIV infection (Tables 10a/b), rates were calculated per 100,000 live births [26].

The standard used for reporting trends in numbers and percentages is an increase or a decrease of 5% or more during the specified time frame (e.g., when comparing 2015 and 2019). The exceptions to this standard are where population sizes or numbers were small (i.e., less than 12) or percentages were based on small numbers or population sizes.

Prevalence trends and data reflect persons living with diagnosed HIV infection, regardless of stage of disease, (Figures 9, 10, 36, and 37; Tables 15a/b–22 and A2) at the end of a given year during 2015–2019. Because of delays in the reporting of deaths, prevalence data are based on a 12-month reporting delay to allow data to be reported to CDC. For tables presenting prevalence data, region or area of residence is based on most recent known address as of the end of the specified year. Data for the year 2019 are preliminary and based on death data received by CDC as of December 31, 2020. Trends through 2019 should be interpreted with caution. Due to incomplete reporting of deaths for the year 2019, prevalence data for Kansas, Massachusetts, Mississippi, Nevada, North Dakota, Vermont, and the U.S. Virgin Islands should be interpreted with caution.

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 7a–f), rates were calculated in 3 ways:

- **Rates of deaths per 100,000 population:** Each rate was calculated by dividing the total number of deaths for the calendar year by the population for that calendar year and then multiplying the result by 100,000.
- **Rates of deaths per 1,000 persons living with diagnosed HIV infection or living with infection ever classified as stage 3 (AIDS):** Rates were calculated by dividing the reported total number of deaths of persons with diagnosed HIV infection (or with infection classified as stage 3 [AIDS]) during the calendar year by the sum of the number of persons living with a diagnosis of HIV infection (or with infection classified

as stage 3 [AIDS]) at the end of the previous calendar year plus the number of diagnoses of HIV infection (or stage 3 [AIDS] classification) during the current calendar year; the result was then multiplied by 1,000.

- **Age-adjusted rates of deaths per 100,000 population and per 1,000 persons living with diagnosed HIV infection or living with infection ever classified as stage 3 (AIDS):** Tables 7c and 7f include age-adjusted rates by area of residence in addition to crude rates. A standard population distribution was used to adjust death rates per 100,000 population and per 1,000 persons living with diagnosed HIV infection (or with infection ever classified as stage 3 [AIDS]). The age-adjusted rates are rates that would have existed if the age distribution of the designated population and the age distribution of the standard population were the same. The use of the U.S. 2000 standard population in calculating age-adjusted rates was based on recommendations by the National Center for Health Statistics [27, 28].

E. DEMOGRAPHIC INFORMATION

E1. Age

The designation “adults and adolescents” refers to persons aged 13 years and older, “young adults” refers to persons aged 20–24 years (unless noted otherwise), and “adolescents” refers to persons aged 13–19 years; the designation “children” refers to persons aged less than 13 years.

All tables in this report reflect data on persons aged 13 years and older, with the exception of Tables 9a/b (PrEP coverage) and Tables 10a/b (perinatally acquired HIV infection, birth years 2015–2019).

- Tables 3a–d and 4a/b (receipt of care and viral suppression): age was based on the person’s age at year-end 2018.
- Table 5 (prevalence): age was based on the person’s age at the end of the specified year.
- Tables 7a–f (deaths): age was based on the person’s age at the time of death.
- All other tables: age was based on the person’s age at the time of HIV diagnosis.

E2. Sex and Gender

E2.1 Sex at birth

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

E2.2 Gender

Gender identity refers to a person’s internal understanding of their own gender, or gender with which a person identifies. HIV surveillance personnel collect data on gender identity, when available, from sources such as case report forms submitted by health care or HIV testing providers and medical records, or by matching with other health department databases (e.g., Ryan White program data). In May 2013, CDC issued guidance to state and local programs on methods for collecting data on transgender persons and working with transgender-specific data. However, characterization of HIV infection among transgender persons may require supplemental data from special studies. A person’s transgender status in NHSS is determined based on two variables: sex assigned at birth and current gender identity. Both variables are examined, using a two-step approach, to assess transgender status. Although not used in this report, *cisgender* is a term used to indicate that a person’s sex assigned at birth and current gender identity are the same (i.e., a person assigned male at birth and who currently identifies as a man is a cisgender male).

Categories

- **Male:** persons assigned “male” sex at birth and current gender identity is not “transgender male-to-female” or “additional gender identity” (current gender identity can be listed as “male,” “female,” “transgender female-to-male,” “unspecified,” or left blank).
- **Female:** persons assigned “female” sex at birth and current gender identity is not “transgender female-to-male” or “additional gender identity” (current gender identity can be listed as “male,” “female,” “transgender male-to-female,” “unspecified,” or left blank).
- **Transgender male-to-female** (transgender MTF): persons assigned “male” sex at birth and current gender identity is “transgender male-to-female.”
- **Transgender female-to-male** (transgender FTM): persons assigned “female” sex at birth and current gender identity is “transgender female-to-male.”
- **Additional gender identity** (AGI): persons assigned “male” or “female” sex at birth and current gender identity is “additional gender identity.” AGI includes “bigender,” “gender queer,” and “two-spirit.”

E3. Race and Ethnicity

In the *Federal Register* [29] 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. Implementation by January 1, 2003, was mandated. At a minimum, data should be collected for persons in the following race categories:

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or other Pacific Islander
- White

Additionally, systems must be able to retain information when multiple race categories are reported. In addition to data on race, data on 2 categories of ethnicity should be collected:

- Hispanic or Latino
- not Hispanic or Latino

The Asian or Pacific Islander category displayed in annual surveillance reports published prior to the 2007 surveillance report was split into 2 categories: (1) Asian and (2) Native Hawaiian or other Pacific Islander. The Asian category (in tables where footnoted) includes the cases in Asian/Pacific Islander persons (referred to as legacy cases) that were reported before the implementation of the new race categories in 2003 (e.g., cases of HIV infection that were diagnosed and reported to CDC before 2003 but that were classified as stage 3 [AIDS] after 2003) and a small percentage of cases that were reported after 2003 but that were reported according to the old race category (Asian/Pacific Islander). In tables of diagnoses of HIV infection during 2015–2019, the Asian category does not include Asian/Pacific Islander cases because these cases were diagnosed after 2003 and were reported to CDC in accordance with OMB’s Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity [29].

This report also presents data for persons for whom multiple race categories are reported (i.e., multiracial). In this report, persons categorized by race were not Hispanic or Latino. The number of persons reported in each race category may, however, include persons whose ethnicity was not reported.

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 [30, 31]. Racial and ethnic differences in health are more likely to reflect profound differences in people's experience based on the relatively advantaged or disadvantaged position in society into which they are born [31, 32]. Social determinant of health factors, shaped by income, education, wealth, and socioeconomic conditions, vary systematically by race and ethnicity and are important in explaining differences in health outcomes [32].

Demographic information for the live birth registry is based on that of the mother [26]. Therefore, Tables 10a/b, which present estimated numbers and rates of perinatally acquired HIV infection, categorize race/ethnicity according to the mother's race/ethnicity.

E4. Transmission Categories

Transmission category is the term for the classification of cases that summarizes an adult's or adolescent's 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. For surveillance purposes, a diagnosis of HIV infection is counted only once in the hierarchy of transmission categories [33]. Adults or adolescents with more than 1 reported risk factor for HIV infection are classified in the transmission category listed first in the hierarchy. The exception is men who had sexual contact with other men *and* injected drugs; this group makes up a separate transmission category.

Hierarchical Categories

- **Male-to-male sexual contact:** men who have had sexual contact with men (i.e., homosexual contact) and men who have had sexual contact with both men and women (i.e., bisexual contact)
- **Injection drug use (IDU):** persons who have injected nonprescription drugs
- **Male-to-male sexual contact *and* injection drug use** (male-to-male sexual contact and IDU): men who have had sexual contact with other men and injected nonprescription drugs
- **Heterosexual contact:** persons who have ever had heterosexual contact with a person known to have, or with a risk factor for, HIV infection
- **Perinatal:** persons infected through perinatal transmission but aged 13 years and older at time of diagnosis of HIV infection. Prevalence data and tables of death data includes persons infected through perinatal transmission but aged 13 years and older during the specified year or at death.
- **Other:** all other transmission categories (e.g., blood transfusion, hemophilia, risk factor not reported or not identified).

Cases of HIV infection reported without a risk factor listed in the hierarchy of transmission categories are classified as "no identified risk (NIR)." Cases classified as NIR include cases that are being followed up by local health department staff; cases in persons whose risk-factor information is missing because they died, declined to be interviewed, or were lost to follow-up; and cases in persons who were interviewed or for whom other follow-up information was available but for whom no risk factor was identified.

Because a substantial proportion of cases of HIV infection are reported to CDC without an identified risk factor, multiple imputation is used to assign a transmission category to these cases [33]. Multiple imputation is a statistical approach in which each missing transmission category is replaced with a set of plausible values that represent the uncertainty about the true, but missing, value [34]. Each resulting data set containing the plausible values is analyzed by using standard procedures, and the results from these analyses are then combined to produce the final results. In tables displaying transmission categories, multiple imputation was used for adults and adoles-

cents, but not for children (because the number of cases in children is small, missing transmission categories were not imputed).

F. GEOGRAPHIC DESIGNATION

F1. Area of Residence

Data by area of residence reflect the address at the time of stage 3 (AIDS) classification or at the time of diagnosis of HIV infection for Tables 1b, 2b, 6c/d, 7c/f, 8c/f, and A1–A2. In Tables 3b, 4b, and A3–A4, area of residence is based on most recent known address as of December 31 of the specified year. For the death tables (7c/f), area of residence is based on residence at death. When information on residence at death is not available, the state where a person's death occurred is used. For PrEP data, please see the Preexposure Prophylaxis (PrEP) Coverage—Geographic Designations section.

F2. U.S. Census Regions

Data by region reflect the address at the time of diagnosis of HIV infection for tables that present number of diagnoses (Tables 2a, 6a/b, 8a/b–d/e, S8a–S10a). For the death tables (7a/b–7d/e), region is based on residence at death.

F3. Population Area of Residence

In the Federal Register for June 28, 2010, OMB published revised standards for defining metropolitan statistical areas (MSAs) in federal statistical activities [35]. These standards, which provided for the identification of MSAs in the United States and Puerto Rico, replaced the 2000 standards. The adoption of the new standards was effective as of June 28, 2010. On February 28, 2013, OMB announced new MSA delineations based on the new standards and Census 2010 data [36]. 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 1c, 2a/c, 6a, and 8a/d. Tables 3a/c, 4a, and 7a, population area of residence is based on most recent known address as of December 31 of the specified year. For the death tables (7a/d), population area of residence is based in residence at death.

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Table 1a. Stage of disease at time of HIV diagnosis during 2019 among persons aged ≥13 years, by selected characteristics—44 states and the District of Columbia

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥500 cells/μL or ≥26%)		Stage 2 (CD4=200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 <200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
Gender											
Male	26,827	2,237	8.3	6,659	24.8	8,426	31.4	5,449	20.3	4,056	15.1
Female	6,322	355	5.6	1,877	29.7	1,770	28.0	1,293	20.5	1,027	16.2
Transgender male-to-female ^c	584	54	9.2	196	33.6	162	27.7	84	14.4	88	15.1
Transgender female-to-male ^c	45	6	13.3	17	37.8	14	31.1	4	8.9	4	8.9
Additional gender identity ^d	17	4	23.5	8	47.1	4	23.5	0	0.0	1	5.9
Age at diagnosis (yr)											
13–24	7,093	791	11.2	1,971	27.8	2,567	36.2	593	8.4	1,171	16.5
25–34	12,105	1,004	8.3	3,318	27.4	3,897	32.2	1,972	16.3	1,914	15.8
35–44	6,560	425	6.5	1,747	26.6	1,821	27.8	1,640	25.0	927	14.1
45–54	4,523	246	5.4	1,010	22.3	1,178	26.0	1,417	31.3	672	14.9
≥55	3,514	190	5.4	711	20.2	913	26.0	1,208	34.4	492	14.0
Race/ethnicity											
American Indian/Alaska Native	206	21	10.2	61	29.6	68	33.0	26	12.6	30	14.6
Asian	687	49	7.1	137	19.9	234	34.1	169	24.6	98	14.3
Black/African American	14,268	1,062	7.4	3,430	24.0	4,421	31.0	2,759	19.3	2,596	18.2
Hispanic/Latino ^e	9,478	782	8.3	2,436	25.7	3,126	33.0	2,002	21.1	1,132	11.9
Native Hawaiian/ other Pacific Islander	66	8	12.1	12	18.2	22	33.3	11	16.7	13	19.7
White	8,249	658	8.0	2,443	29.6	2,256	27.3	1,706	20.7	1,186	14.4
Multiracial	841	76	9.0	238	28.3	249	29.6	157	18.7	121	14.4
Transmission category^f											
Male-to-male sexual contact	22,392	1,985	8.9	5,681	25.4	7,219	32.2	4,196	18.7	3,310	14.8
Injection drug use	2,175	137	6.3	570	26.2	559	25.7	479	22.0	429	19.7
Male	1,190	68	5.7	265	22.3	325	27.3	302	25.4	231	19.4
Female	985	70	7.1	305	31.0	234	23.8	177	18.0	198	20.1
Male-to-male sexual contact and injection drug use	1,347	126	9.4	450	33.4	357	26.5	224	16.6	190	14.1
Heterosexual contact ^g	7,821	405	5.2	2,042	26.1	2,223	28.4	1,912	24.4	1,239	15.8
Male	2,459	114	4.6	460	18.7	679	27.6	798	32.5	408	16.6
Female	5,362	291	5.4	1,582	29.5	1,544	28.8	1,114	20.8	831	15.5
Total^h	33,795	2,656	7.9	8,757	25.9	10,376	30.7	6,830	20.2	5,176	15.3

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

Note. 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: Kansas, 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 male-to-female" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender. "Transgender female-to-male" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.

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

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

^f 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.

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

^h Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was 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 2019 among persons aged ≥13 years, by area of residence—44 states and the District of Columbia

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥500 cells/μL or ≥26%)		Stage 2 (CD4 = 200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 <200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
		Alabama	638	40	6.3	146	22.9	206	32.3	139	21.8
Alaska	27	2	7.4	12	44.4	7	25.9	2	7.4	4	14.8
Arizona	761	45	5.9	222	29.2	266	35.0	133	17.5	95	12.5
Arkansas	287	11	3.8	76	26.5	73	25.4	72	25.1	55	19.2
California	4,354	411	9.4	1,177	27.0	1,373	31.5	818	18.8	575	13.2
Colorado	461	22	4.8	133	28.9	150	32.5	102	22.1	54	11.7
Connecticut	213	21	9.9	51	23.9	64	30.0	60	28.2	17	8.0
Delaware	93	4	4.3	23	24.7	30	32.3	20	21.5	16	17.2
District of Columbia	255	20	7.8	70	27.5	86	33.7	37	14.5	42	16.5
Florida	4,378	268	6.1	1,278	29.2	1,328	30.3	917	20.9	587	13.4
Georgia	2,439	97	4.0	656	26.9	805	33.0	493	20.2	388	15.9
Hawaii	65	5	7.7	18	27.7	23	35.4	13	20.0	6	9.2
Illinois	1,252	74	5.9	288	23.0	388	31.0	236	18.8	266	21.2
Indiana	486	13	2.7	110	22.6	120	24.7	100	20.6	143	29.4
Iowa	100	50	50.0	15	15.0	9	9.0	21	21.0	5	5.0
Louisiana	881	95	10.8	206	23.4	284	32.2	186	21.1	110	12.5
Maine	30	0	0.0	3	10.0	13	43.3	11	36.7	3	10.0
Maryland	918	97	10.6	208	22.7	293	31.9	208	22.7	112	12.2
Massachusetts	535	28	5.2	176	32.9	172	32.1	109	20.4	50	9.3
Michigan	674	53	7.9	186	27.6	227	33.7	148	22.0	60	8.9
Minnesota	274	18	6.6	67	24.5	96	35.0	63	23.0	30	10.9
Mississippi	477	11	2.3	86	18.0	96	20.1	120	25.2	164	34.4
Missouri	488	20	4.1	118	24.2	148	30.3	89	18.2	113	23.2
Montana	25	2	8.0	6	24.0	9	36.0	4	16.0	4	16.0
Nebraska	81	1	1.2	22	27.2	24	29.6	21	25.9	13	16.0
Nevada	512	28	5.5	132	25.8	125	24.4	114	22.3	113	22.1
New Hampshire	31	2	6.5	5	16.1	13	41.9	4	12.9	7	22.6
New Mexico	156	8	5.1	40	25.6	51	32.7	24	15.4	33	21.2
New York	2,330	284	12.2	558	23.9	780	33.5	496	21.3	212	9.1
North Carolina	1,365	162	11.9	312	22.9	370	27.1	213	15.6	308	22.6
North Dakota	40	1	2.5	13	32.5	15	37.5	9	22.5	2	5.0
Ohio	980	21	2.1	245	25.0	348	35.5	209	21.3	157	16.0
Oklahoma	320	19	5.9	73	22.8	74	23.1	50	15.6	104	32.5
Oregon	199	36	18.1	48	24.1	50	25.1	49	24.6	16	8.0
Rhode Island	72	10	13.9	19	26.4	18	25.0	14	19.4	11	15.3
South Carolina	680	53	7.8	182	26.8	235	34.6	164	24.1	46	6.8
South Dakota	33	2	6.1	6	18.2	12	36.4	8	24.2	5	15.2
Tennessee	773	34	4.4	222	28.7	219	28.3	134	17.3	164	21.2
Texas	4,302	428	9.9	1,061	24.7	1,244	28.9	842	19.6	727	16.9
Utah	135	11	8.1	42	31.1	39	28.9	27	20.0	16	11.9
Virginia	822	73	8.9	186	22.6	248	30.2	168	20.4	147	17.9
Washington	483	50	10.4	150	31.1	137	28.4	106	21.9	40	8.3
West Virginia	146	5	3.4	53	36.3	31	21.2	23	15.8	34	23.3
Wisconsin	211	21	10.0	53	25.1	70	33.2	52	24.6	15	7.1
Wyoming	13	0	0.0	4	30.8	7	53.8	2	15.4	0	0.0
Total	33,795	2,656	7.9	8,757	25.9	10,376	30.7	6,830	20.2	5,176	15.3

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

Note. 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: Kansas, 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.

Table 1c. Stage of disease at time of HIV diagnosis during 2019 among persons aged ≥13 years, by race/ethnicity and selected characteristics—44 states and the District of Columbia

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥500 cells/μL or ≥26%)		Stage 2 (CD4=200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 < 200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
American Indian/Alaska Native											
Gender											
Male	157	18	11.5	48	30.6	50	31.8	17	10.8	24	15.3
Female	44	2	4.5	11	25.0	17	38.6	8	18.2	6	13.6
Transgender male-to-female ^c	5	1	20.0	2	40.0	1	20.0	1	20.0	0	0.0
Transgender female-to-male ^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
Age at diagnosis (yr)											
13–24	46	3	6.5	15	32.6	24	52.2	2	4.3	2	4.3
25–34	63	6	9.5	20	31.7	23	36.5	5	7.9	9	14.3
35–44	57	6	10.5	17	29.8	15	26.3	9	15.8	10	17.5
45–54	27	4	14.8	7	25.9	3	11.1	7	25.9	6	22.2
≥55	13	2	15.4	2	15.4	3	23.1	3	23.1	3	23.1
Transmission category^e											
Male-to-male sexual contact	123	17	13.5	41	33.4	38	31.0	11	8.7	17	13.4
Injection drug use											
Male	15	2	14.3	2	15.6	6	40.9	2	11.0	3	18.2
Female	18	1	5.7	3	14.3	7	41.7	3	18.9	3	19.4
Male-to-male sexual contact and injection drug use	15	0	0.7	4	29.1	4	27.7	4	27.7	2	14.9
Heterosexual contact ^f											
Male	8	0	0.0	2	24.1	2	28.9	1	16.9	3	30.1
Female	27	1	3.8	9	32.1	10	36.6	5	17.7	3	9.8
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	107	12	11.2	33	30.8	32	29.9	14	13.1	16	15.0
Metropolitan areas (pop. 50,000–499,999)	32	3	9.4	11	34.4	13	40.6	2	6.3	3	9.4
Nonmetropolitan areas (pop. < 50,000)	63	6	9.5	16	25.4	23	36.5	8	12.7	10	15.9
Total	206	21	10.2	61	29.6	68	33.0	26	12.6	30	14.6
Asian											
Gender											
Male	583	46	7.9	118	20.2	194	33.3	144	24.7	81	13.9
Female	92	3	3.3	18	19.6	34	37.0	21	22.8	16	17.4
Transgender male-to-female ^c	11	0	0.0	1	9.1	5	45.5	4	36.4	1	9.1
Transgender female-to-male ^c	1	0	0.0	0	0.0	1	100	0	0.0	0	0.0
Additional gender identity ^d	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Age at diagnosis (yr)											
13–24	120	14	11.7	27	22.5	48	40.0	14	11.7	17	14.2
25–34	251	25	10.0	56	22.3	79	31.5	59	23.5	32	12.7
35–44	143	6	4.2	31	21.7	47	32.9	38	26.6	21	14.7
45–54	112	2	1.8	15	13.4	41	36.6	37	33.0	17	15.2
≥55	61	2	3.3	8	13.1	19	31.1	21	34.4	11	18.0
Transmission category^e											
Male-to-male sexual contact	539	44	8.2	112	20.8	184	34.2	126	23.4	73	13.5
Injection drug use											
Male	12	0	0.0	1	10.5	4	29.0	5	38.7	3	21.8
Female	6	0	4.8	1	19.4	2	32.3	2	27.4	1	16.1
Male-to-male sexual contact and injection drug use	13	1	7.9	0	3.2	2	17.5	6	50.0	3	21.4
Heterosexual contact ^f											
Male	27	1	3.8	4	13.9	9	33.1	10	39.1	3	10.2
Female	86	3	3.0	17	19.4	33	38.2	19	22.1	15	17.2
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	615	45	7.3	121	19.7	214	34.8	151	24.6	84	13.7
Metropolitan areas (pop. 50,000–499,999)	51	2	3.9	13	25.5	16	31.4	12	23.5	8	15.7
Nonmetropolitan areas (pop. < 50,000)	15	2	13.3	1	6.7	3	20.0	5	33.3	4	26.7
Total	687	49	7.1	137	19.9	234	34.1	169	24.6	98	14.3

Table 1c. Stage of disease at time of HIV diagnosis during 2019 among persons aged ≥13 years, by race/ethnicity and selected characteristics—44 states and the District of Columbia (cont)

	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.	%
Black/African American											
Gender											
Male	10,478	859	8.2	2,324	22.2	3,357	32.0	1,995	19.0	1,943	18.5
Female	3,498	177	5.1	1,004	28.7	983	28.1	734	21.0	600	17.2
Transgender male-to-female ^c	269	21	7.8	92	34.2	78	29.0	28	10.4	50	18.6
Transgender female-to-male ^c	19	4	21.1	8	42.1	3	15.8	2	10.5	2	10.5
Additional gender identity ^d	4	1	25.0	2	50.0	0	0.0	0	0.0	1	25.0
Age at diagnosis (yr)											
13–24	3,650	411	11.3	928	25.4	1,317	36.1	311	8.5	683	18.7
25–34	5,025	401	8.0	1,258	25.0	1,602	31.9	796	15.8	968	19.3
35–44	2,393	120	5.0	566	23.7	662	27.7	635	26.5	410	17.1
45–54	1,676	70	4.2	354	21.1	442	26.4	524	31.3	286	17.1
≥55	1,524	60	3.9	324	21.3	398	26.1	493	32.3	249	16.3
Transmission category^e											
Male-to-male sexual contact	8,571	764	8.9	2,008	23.4	2,834	33.1	1,414	16.5	1,551	18.1
Injection drug use											
Male	360	22	6.0	67	18.6	91	25.3	95	26.4	85	23.6
Female	277	18	6.5	69	24.8	63	22.7	71	25.6	57	20.4
Male-to-male sexual contact and injection drug use	274	24	8.7	75	27.4	81	29.7	41	15.0	53	19.2
Heterosexual contact ^f											
Male	1,528	71	4.7	265	17.4	425	27.8	465	30.4	302	19.8
Female	3,226	163	5.0	939	29.1	919	28.5	661	20.5	544	16.9
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	11,265	853	7.6	2,766	24.6	3,488	31.0	2,107	18.7	2,051	18.2
Metropolitan areas (pop. 50,000–499,999)	1,777	135	7.6	402	22.6	570	32.1	375	21.1	295	16.6
Nonmetropolitan areas (pop. < 50,000)	867	44	5.1	187	21.6	260	30.0	208	24.0	168	19.4
Total	14,268	1,062	7.4	3,430	24.0	4,421	31.0	2,759	19.3	2,596	18.2
Hispanic/Latino^g											
Gender											
Male	8,116	681	8.4	2,031	25.0	2,724	33.6	1,712	21.1	968	11.9
Female	1,136	69	6.1	333	29.3	340	29.9	253	22.3	141	12.4
Transgender male-to-female ^c	211	29	13.7	66	31.3	58	27.5	36	17.1	22	10.4
Transgender female-to-male ^c	11	1	9.1	4	36.4	4	36.4	1	9.1	1	9.1
Additional gender identity ^d	4	2	50.0	2	50.0	0	0.0	0	0.0	0	0.0
Age at diagnosis (yr)											
13–24	1,974	225	11.4	559	28.3	756	38.3	174	8.8	260	13.2
25–34	3,632	297	8.2	987	27.2	1,273	35.0	655	18.0	420	11.6
35–44	2,051	148	7.2	521	25.4	596	29.1	563	27.5	223	10.9
45–54	1,179	79	6.7	260	22.1	318	27.0	366	31.0	156	13.2
≥55	642	33	5.1	109	17.0	183	28.5	244	38.0	73	11.4
Transmission category^e											
Male-to-male sexual contact	7,196	636	8.8	1,816	25.2	2,472	34.3	1,415	19.7	857	11.9
Injection drug use											
Male	263	19	7.3	60	22.9	69	26.2	75	28.6	40	15.0
Female	156	14	9.0	44	27.9	41	26.4	32	20.8	25	15.9
Male-to-male sexual contact and injection drug use	373	35	9.4	124	33.2	100	26.7	72	19.2	43	11.4
Heterosexual contact ^f											
Male	489	20	4.1	98	19.9	138	28.1	184	37.6	50	10.2
Female	988	57	5.7	292	29.6	301	30.5	221	22.4	117	11.8
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	8,263	689	8.3	2,135	25.8	2,743	33.2	1,735	21.0	961	11.6
Metropolitan areas (pop. 50,000–499,999)	800	78	9.8	188	23.5	257	32.1	172	21.5	105	13.1
Nonmetropolitan areas (pop. < 50,000)	327	9	2.8	93	28.4	101	30.9	78	23.9	46	14.1
Total	9,478	782	8.3	2,436	25.7	3,126	33.0	2,002	21.1	1,132	11.9

Table 1c. Stage of disease at time of HIV diagnosis during 2019 among persons aged ≥13 years, by race/ethnicity and selected characteristics—44 states and the District of Columbia (cont)

	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.	%
Native Hawaiian/other Pacific Islander											
Gender											
Male	52	7	13.5	8	15.4	19	36.5	7	13.5	11	21.2
Female	9	1	11.1	3	33.3	2	22.2	2	22.2	1	11.1
Transgender male-to-female ^c	5	0	0.0	1	20.0	1	20.0	2	40.0	1	20.0
Transgender female-to-male ^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
Age at diagnosis (yr)											
13–24	10	3	30.0	4	40.0	2	20.0	0	0.0	1	10.0
25–34	35	2	5.7	4	11.4	16	45.7	5	14.3	8	22.9
35–44	14	2	14.3	4	28.6	3	21.4	3	21.4	2	14.3
45–54	5	1	20.0	0	0.0	1	20.0	3	60.0	0	0.0
≥55	2	0	0.0	0	0.0	0	0.0	0	0.0	2	100
Transmission category^e											
Male-to-male sexual contact	52	7	13.4	9	17.1	19	36.3	7	12.9	11	20.3
Injection drug use											
Male	1	0	0.0	0	0.0	0	0.0	0	8.3	1	91.7
Female	0	0	0.0	0	33.3	0	0.0	0	66.7	0	0.0
Male-to-male sexual contact and injection drug use	2	0	0.0	0	4.8	0	0.0	2	95.2	0	0.0
Heterosexual contact ^f											
Male	2	0	0.0	0	0.0	1	73.3	0	13.3	0	13.3
Female	9	1	11.5	3	33.3	2	23.0	2	20.7	1	11.5
Population area of residence											
Metropolitan statistical areas (pop. ≥ 500,000)	51	6	11.8	8	15.7	19	37.3	8	15.7	10	19.6
Metropolitan areas (pop. 50,000–499,999)	11	0	0.0	4	36.4	3	27.3	2	18.2	2	18.2
Nonmetropolitan areas (pop. < 50,000)	4	2	50.0	0	0.0	0	0.0	1	25.0	1	25.0
Total	66	8	12.1	12	18.2	22	33.3	11	16.7	13	19.7
White											
Gender											
Male	6,805	565	8.3	1,960	28.8	1,890	27.8	1,456	21.4	934	13.7
Female	1,357	88	6.5	449	33.1	341	25.1	239	17.6	240	17.7
Transgender male-to-female ^c	71	3	4.2	29	40.8	18	25.4	10	14.1	11	15.5
Transgender female-to-male ^c	11	1	9.1	3	27.3	5	45.5	1	9.1	1	9.1
Additional gender identity ^d	5	1	20.0	2	40.0	2	40.0	0	0.0	0	0.0
Age at diagnosis (yr)											
13–24	1,107	115	10.4	379	34.2	365	33.0	75	6.8	173	15.6
25–34	2,759	236	8.6	895	32.4	792	28.7	409	14.8	427	15.5
35–44	1,749	135	7.7	555	31.7	458	26.2	359	20.5	242	13.8
45–54	1,431	85	5.9	356	24.9	349	24.4	444	31.0	197	13.8
≥55	1,203	87	7.2	258	21.4	292	24.3	419	34.8	147	12.2
Transmission category^e											
Male-to-male sexual contact	5,376	462	8.6	1,550	28.8	1,507	28.0	1,134	21.1	722	13.4
Injection drug use											
Male	513	24	4.7	127	24.7	148	29.0	117	22.9	96	18.7
Female	490	32	6.6	177	36.0	113	23.1	64	13.0	104	21.3
Male-to-male sexual contact and injection drug use	622	62	10.0	231	37.1	159	25.5	90	14.5	80	12.9
Heterosexual contact ^f											
Male	363	20	5.6	82	22.5	93	25.7	122	33.5	46	12.6
Female	875	56	6.4	275	31.5	232	26.5	175	20.0	136	15.5
Population area of residence											
Metropolitan statistical areas (pop. ≥ 500,000)	5,959	517	8.7	1,806	30.3	1,661	27.9	1,147	19.2	828	13.9
Metropolitan areas (pop. 50,000–499,999)	1,365	86	6.3	394	28.9	364	26.7	323	23.7	198	14.5
Nonmetropolitan areas (pop. < 50,000)	805	44	5.5	209	26.0	199	24.7	222	27.6	131	16.3
Total	8,249	658	8.0	2,443	29.6	2,256	27.3	1,706	20.7	1,186	14.4

Table 1c. Stage of disease at time of HIV diagnosis during 2019 among persons aged ≥13 years, by race/ethnicity and selected characteristics—44 states and the District of Columbia (cont)

	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.	%
Multiracial											
Gender											
Male	636	61	9.6	170	26.7	192	30.2	118	18.6	95	14.9
Female	186	15	8.1	59	31.7	53	28.5	36	19.4	23	12.4
Transgender male-to-female ^c	12	0	0.0	5	41.7	1	8.3	3	25.0	3	25.0
Transgender female-to-male ^c	3	0	0.0	2	66.7	1	33.3	0	0.0	0	0.0
Additional gender identity ^d	4	0	0.0	2	50.0	2	50.0	0	0.0	0	0.0
Age at diagnosis (yr)											
13–24	186	20	10.8	59	31.7	55	29.6	17	9.1	35	18.8
25–34	340	37	10.9	98	28.8	112	32.9	43	12.6	50	14.7
35–44	153	8	5.2	53	34.6	40	26.1	33	21.6	19	12.4
45–54	93	5	5.4	18	19.4	24	25.8	36	38.7	10	10.8
≥ 55	69	6	8.7	10	14.5	18	26.1	28	40.6	7	10.1
Transmission category^e											
Male-to-male sexual contact	534	55	10.3	145	27.1	165	30.9	89	16.7	80	15.0
Injection drug use											
Male	25	0	0.4	7	29.6	6	25.5	8	30.4	4	14.2
Female	38	4	11.7	13	33.6	8	20.3	5	13.3	8	21.1
Male-to-male sexual contact and injection drug use	49	4	8.8	15	31.2	11	22.8	8	16.9	10	20.4
Heterosexual contact ^f											
Male	42	2	3.5	10	22.6	11	26.2	16	37.3	4	10.4
Female	152	11	7.0	48	31.7	47	31.1	31	20.3	15	9.9
Population area of residence											
Metropolitan statistical areas (pop. ≥ 500,000)	669	59	8.8	188	28.1	193	28.8	130	19.4	99	14.8
Metropolitan areas (pop. 50,000–499,999)	110	13	11.8	34	30.9	35	31.8	15	13.6	13	11.8
Nonmetropolitan areas (pop. < 50,000)	52	3	5.8	13	25.0	16	30.8	12	23.1	8	15.4
Total	841	76	9.0	238	28.3	249	29.6	157	18.7	121	14.4

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

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

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

^e 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.

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

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

Table 1d. Stage of disease at time of HIV diagnosis during 2019 among males aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—44 states and the District of Columbia

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥500 cells/μL or ≥26%)		Stage 2 (CD4=200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 <200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
American Indian/Alaska Native											
13–24	33	2	6.1	12	35.6	18	53.2	0	0.0	2	5.2
25–34	45	6	13.0	15	32.9	14	31.8	4	8.1	6	14.3
35–44	25	4	15.7	11	43.3	3	11.8	4	15.0	4	14.2
45–54	14	3	21.0	3	21.7	2	14.5	3	21.7	3	21.0
≥55	7	2	30.8	1	12.3	2	23.1	0	4.6	2	29.2
Asian											
13–24	107	12	11.2	23	21.4	44	41.1	12	11.6	16	14.7
25–34	210	24	11.4	49	23.2	64	30.3	46	22.0	28	13.1
35–44	111	6	5.4	24	21.9	38	33.8	28	25.5	15	13.3
45–54	80	1	1.2	12	14.7	32	39.4	26	32.5	10	12.2
≥55	30	1	3.3	4	13.8	7	24.0	13	42.1	5	16.8
Black/African American											
13–24	2,948	352	11.9	712	24.2	1,103	37.4	243	8.3	538	18.2
25–34	3,523	301	8.5	862	24.5	1,159	32.9	542	15.4	659	18.7
35–44	1,141	70	6.1	257	22.5	308	27.0	312	27.3	195	17.1
45–54	585	27	4.6	106	18.2	159	27.1	191	32.7	102	17.5
≥55	373	15	3.9	71	18.9	106	28.4	126	33.8	56	15.0
Hispanic/Latino^c											
13–24	1,678	199	11.9	459	27.3	653	38.9	147	8.8	220	13.1
25–34	2,939	251	8.5	771	26.2	1,063	36.2	521	17.7	334	11.3
35–44	1,461	114	7.8	362	24.8	432	29.5	385	26.4	168	11.5
45–54	784	55	7.0	170	21.6	226	28.8	237	30.2	97	12.4
≥55	333	17	5.2	54	16.2	98	29.3	125	37.6	39	11.7
Native Hawaiian/other Pacific Islander											
13–24	8	3	37.5	3	37.5	1	12.5	0	0.0	1	12.5
25–34	29	2	7.0	3	10.1	14	48.4	3	10.5	7	24.0
35–44	10	1	10.1	3	30.3	3	30.3	2	20.2	1	9.1
45–54	4	1	27.0	0	0.0	1	27.0	2	45.9	0	0.0
≥55	2	0	0.0	0	0.0	0	0.0	0	0.0	2	100
White											
13–24	812	95	11.7	264	32.5	278	34.2	56	6.9	119	14.7
25–34	1,828	163	8.9	560	30.6	537	29.4	296	16.2	272	14.9
35–44	1,027	86	8.3	322	31.4	273	26.6	220	21.4	127	12.3
45–54	898	58	6.5	220	24.5	221	24.6	289	32.2	109	12.2
≥55	811	61	7.5	183	22.6	198	24.4	274	33.8	95	11.7
Multiracial											
13–24	148	18	12.1	47	32.0	43	28.7	14	9.2	27	18.0
25–34	229	28	12.2	61	26.6	78	34.3	30	12.9	32	14.0
35–44	84	4	4.7	27	31.6	25	29.4	17	20.4	12	13.9
45–54	40	2	4.5	8	19.8	10	24.0	16	40.1	5	11.6
≥55	33	3	10.2	2	5.8	10	29.8	13	39.1	5	15.1
All											
13–24	5,735	681	11.9	1,521	26.5	2,139	37.3	473	8.2	922	16.1
25–34	8,802	774	8.8	2,320	26.4	2,929	33.3	1,442	16.4	1,338	15.2
35–44	3,861	285	7.4	1,007	26.1	1,081	28.0	968	25.1	521	13.5
45–54	2,406	147	6.1	519	21.6	650	27.0	764	31.7	326	13.6
≥55	1,588	99	6.2	314	19.8	420	26.4	551	34.7	204	12.8
Total	22,392	1,985	8.9	5,681	25.4	7,219	32.2	4,196	18.7	3,310	14.8

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

Note. 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: Kansas, Kentucky, Pennsylvania, Vermont, and Puerto Rico. 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 2a. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥13 years, by selected characteristics—44 states and the District of Columbia

	Total diagnoses No.	Linkage to care								Viral suppression	
		≤1 month				≤3 months				VL <200 copies/mL ≤ 6 months	
		≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test		No.	%
	No.	%	No.	%	No.	%	No.	%	No.	%	
Gender											
Male	26,827	21,873	81.5	4,954	18.5	23,767	88.6	3,060	11.4	18,382	68.5
Female	6,322	5,067	80.1	1,255	19.9	5,541	87.6	781	12.4	4,266	67.5
Transgender male-to-female ^a	584	484	82.9	100	17.1	516	88.4	68	11.6	384	65.8
Transgender female-to-male ^a	45	40	88.9	5	11.1	43	95.6	2	4.4	35	77.8
Additional gender identity ^b	17	15	88.2	2	11.8	16	94.1	1	5.9	15	88.2
Age at diagnosis (yr)											
13–24	7,093	5,602	79.0	1,491	21.0	6,191	87.3	902	12.7	4,835	68.2
25–34	12,105	9,775	80.8	2,330	19.2	10,640	87.9	1,465	12.1	8,223	67.9
35–44	6,560	5,405	82.4	1,155	17.6	5,851	89.2	709	10.8	4,517	68.9
45–54	4,523	3,767	83.3	756	16.7	4,050	89.5	473	10.5	3,121	69.0
≥55	3,514	2,930	83.4	584	16.6	3,151	89.7	363	10.3	2,386	67.9
Race/ethnicity											
American Indian/Alaska Native	206	172	83.5	34	16.5	183	88.8	23	11.2	132	64.1
Asian	687	570	83.0	117	17.0	611	88.9	76	11.1	523	76.1
Black/African American	14,268	11,179	78.4	3,089	21.6	12,304	86.2	1,964	13.8	9,309	65.2
Hispanic/Latino ^c	9,478	8,004	84.4	1,474	15.6	8,584	90.6	894	9.4	6,768	71.4
Native Hawaiian/other Pacific Islander	66	53	80.3	13	19.7	58	87.9	8	12.1	46	69.7
White	8,249	6,817	82.6	1,432	17.4	7,390	89.6	859	10.4	5,726	69.4
Multiracial	841	684	81.3	157	18.7	753	89.5	88	10.5	578	68.7
Transmission category^d											
Male-to-male sexual contact	22,392	18,389	82.1	4,003	17.9	19,921	89.0	2,470	11.0	15,634	69.8
Injection drug use	2,175	1,640	75.4	535	24.6	1,826	84.0	348	16.0	1,187	54.6
Male	1,190	900	75.7	290	24.3	1,006	84.5	184	15.5	653	54.9
Female	985	740	75.1	245	24.9	821	83.3	164	16.7	534	54.2
Male-to-male sexual contact and injection drug use	1,347	1,080	80.2	267	19.8	1,202	89.2	145	10.8	872	64.7
Heterosexual contact ^e	7,821	6,320	80.8	1,502	19.2	6,880	88.0	942	12.0	5,344	68.3
Male	2,459	1,969	80.1	490	19.9	2,134	86.8	325	13.2	1,594	64.8
Female	5,362	4,351	81.1	1,011	18.9	4,745	88.5	617	11.5	3,750	69.9
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	26,929	22,020	81.8	4,909	18.2	23,859	88.6	3,070	11.4	18,579	69.0
Metropolitan areas (pop. 50,000–499,999)	4,146	3,327	80.2	819	19.8	3,670	88.5	476	11.5	2,664	64.3
Nonmetropolitan areas (pop. < 50,000)	2,133	1,709	80.1	424	19.9	1,881	88.2	252	11.8	1,439	67.5
Total^f	33,795	27,479	81.3	6,316	18.7	29,883	88.4	3,912	11.6	23,082	68.3

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

Note. Data are based on residence at time of diagnosis. Linkage to HIV medical care was measured by documentation of ≥1CD4 or VL tests ≤1 month or ≤3 months 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 2019. 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: Kansas, Kentucky, Pennsylvania, Vermont, and Puerto Rico.

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

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

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

^d 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.

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

^f Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure, or whose risk factor was not reported or identified. Data not displayed because the numbers were too small to be meaningful.

Table 2b. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥13 years, by area of residence—44 states and the District of Columbia

	Total diagnoses No.	Linkage to care								Viral suppression	
		≤1 month				≤3 months				VL <200 copies/mL ≤6 months	
		≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test		No.	%
		No.	%	No.	%	No.	%	No.	%		
Alabama	638	505	79.2	133	20.8	556	87.1	82	12.9	431	67.6
Alaska	27	23	85.2	4	14.8	25	92.6	2	7.4	20	74.1
Arizona	761	630	82.8	131	17.2	685	90.0	76	10.0	533	70.0
Arkansas	287	229	79.8	58	20.2	258	89.9	29	10.1	176	61.3
California	4,354	3,601	82.7	753	17.3	3,865	88.8	489	11.2	2,940	67.5
Colorado	461	385	83.5	76	16.5	422	91.5	39	8.5	339	73.5
Connecticut	213	186	87.3	27	12.7	203	95.3	10	4.7	160	75.1
Delaware	93	71	76.3	22	23.7	78	83.9	15	16.1	65	69.9
District of Columbia	255	210	82.4	45	17.6	223	87.5	32	12.5	172	67.5
Florida	4,378	3,662	83.6	716	16.4	3,904	89.2	474	10.8	3,074	70.2
Georgia	2,439	1,961	80.4	478	19.6	2,115	86.7	324	13.3	1,636	67.1
Hawaii	65	55	84.6	10	15.4	59	90.8	6	9.2	50	76.9
Illinois	1,252	1,042	83.2	210	16.8	1,104	88.2	148	11.8	767	61.3
Indiana	486	307	63.2	179	36.8	370	76.1	116	23.9	268	55.1
Iowa	100	91	91.0	9	9.0	95	95.0	5	5.0	73	73.0
Louisiana	881	722	82.0	159	18.0	792	89.9	89	10.1	619	70.3
Maine	30	28	93.3	2	6.7	28	93.3	2	6.7	23	76.7
Maryland	918	798	86.9	120	13.1	833	90.7	85	9.3	649	70.7
Massachusetts	535	486	90.8	49	9.2	499	93.3	36	6.7	444	83.0
Michigan	674	565	83.8	109	16.2	617	91.5	57	8.5	519	77.0
Minnesota	274	250	91.2	24	8.8	258	94.2	16	5.8	201	73.4
Mississippi	477	339	71.1	138	28.9	403	84.5	74	15.5	283	59.3
Missouri	488	376	77.0	112	23.0	430	88.1	58	11.9	343	70.3
Montana	25	22	88.0	3	12.0	24	96.0	1	4.0	16	64.0
Nebraska	81	65	80.2	16	19.8	72	88.9	9	11.1	43	53.1
Nevada	512	425	83.0	87	17.0	455	88.9	57	11.1	310	60.5
New Hampshire	31	27	87.1	4	12.9	28	90.3	3	9.7	22	71.0
New Mexico	156	138	88.5	18	11.5	142	91.0	14	9.0	110	70.5
New York	2,330	2,027	87.0	303	13.0	2,149	92.2	181	7.8	1,823	78.2
North Carolina	1,365	1,077	78.9	288	21.1	1,229	90.0	136	10.0	975	71.4
North Dakota	40	36	90.0	4	10.0	39	97.5	1	2.5	34	85.0
Ohio	980	819	83.6	161	16.4	883	90.1	97	9.9	657	67.0
Oklahoma	320	222	69.4	98	30.6	253	79.1	67	20.9	162	50.6
Oregon	199	173	86.9	26	13.1	183	92.0	16	8.0	151	75.9
Rhode Island	72	65	90.3	7	9.7	69	95.8	3	4.2	59	81.9
South Carolina	680	596	87.6	84	12.4	643	94.6	37	5.4	518	76.2
South Dakota	33	26	78.8	7	21.2	31	93.9	2	6.1	18	54.5
Tennessee	773	534	69.1	239	30.9	640	82.8	133	17.2	488	63.1
Texas	4,302	3,210	74.6	1,092	25.4	3,596	83.6	706	16.4	2,539	59.0
Utah	135	106	78.5	29	21.5	124	91.9	11	8.1	106	78.5
Virginia	822	647	78.7	175	21.3	723	88.0	99	12.0	619	75.3
Washington	483	432	89.4	51	10.6	447	92.5	36	7.5	386	79.9
West Virginia	146	107	73.3	39	26.7	119	81.5	27	18.5	76	52.1
Wisconsin	211	190	90.0	21	10.0	199	94.3	12	5.7	178	84.4
Wyoming	13	13	100	0	0.0	13	100	0	0.0	7	53.8
Total	33,795	27,479	81.3	6,316	18.7	29,883	88.4	3,912	11.6	23,082	68.3

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

Note. 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 or ≤3 months 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 2019. 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: Kansas, Kentucky, Pennsylvania, Vermont, and Puerto Rico.

Table 2c. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥13 years, by race/ethnicity and selected characteristics—44 states and the District of Columbia

	Total diagnoses No.	Linkage to care								Viral suppression	
		≤1 month				≤3 months				VL <200 copies/mL ≤6 months	
		≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test		No.	%
	No.	%	No.	%	No.	%	No.	%	No.	%	
American Indian/Alaska Native											
Gender											
Male	157	130	82.8	27	17.2	138	87.9	19	12.1	107	68.2
Female	44	37	84.1	7	15.9	40	90.9	4	9.1	23	52.3
Transgender male-to-female ^a	5	5	100	0	0.0	5	100	0	0.0	2	40.0
Transgender female-to-male ^a	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Additional gender identity ^b	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Age at diagnosis (yr)											
13–24	46	40	87.0	6	13.0	45	97.8	1	2.2	32	69.6
25–34	63	54	85.7	9	14.3	56	88.9	7	11.1	46	73.0
35–44	57	48	84.2	9	15.8	50	87.7	7	12.3	31	54.4
45–54	27	21	77.8	6	22.2	22	81.5	5	18.5	17	63.0
≥55	13	9	69.2	4	30.8	10	76.9	3	23.1	6	46.2
Transmission category^c											
Male-to-male sexual contact	123	106	85.6	18	14.4	112	90.4	12	9.6	88	71.5
Injection drug use											
Male	15	12	75.3	4	24.7	13	82.5	3	17.5	6	40.9
Female	18	13	76.0	4	24.0	14	81.7	3	18.3	7	40.6
Male-to-male sexual contact and injection drug use	15	13	86.5	2	13.5	13	86.5	2	13.5	12	78.4
Heterosexual contact ^d											
Male	8	5	57.8	4	42.2	6	69.9	3	30.1	3	33.7
Female	27	24	89.4	3	10.6	26	97.0	1	3.0	16	60.0
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	107	88	82.2	19	17.8	95	88.8	12	11.2	69	64.5
Metropolitan areas (pop. 50,000–499,999)	32	28	87.5	4	12.5	29	90.6	3	9.4	23	71.9
Nonmetropolitan areas (pop. < 50,000)	63	53	84.1	10	15.9	56	88.9	7	11.1	38	60.3
Total^e	206	172	83.5	34	16.5	183	88.8	23	11.2	132	64.1
Asian											
Gender											
Male	583	486	83.4	97	16.6	520	89.2	63	10.8	445	76.3
Female	92	73	79.3	19	20.7	80	87.0	12	13.0	69	75.0
Transgender male-to-female ^a	11	10	90.9	1	9.1	10	90.9	1	9.1	8	72.7
Transgender female-to-male ^a	1	1	100	0	0.0	1	100	0	0.0	1	100
Additional gender identity ^b	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Age at diagnosis (yr)											
13–24	120	98	81.7	22	18.3	105	87.5	15	12.5	90	75.0
25–34	251	219	87.3	32	12.7	232	92.4	19	7.6	201	80.1
35–44	143	112	78.3	31	21.7	125	87.4	18	12.6	108	75.5
45–54	112	95	84.8	17	15.2	98	87.5	14	12.5	82	73.2
≥55	61	46	75.4	15	24.6	51	83.6	10	16.4	42	68.9
Transmission category^c											
Male-to-male sexual contact	539	452	83.8	87	16.2	482	89.4	57	10.6	415	77.0
Injection drug use											
Male	12	10	78.2	3	21.8	11	86.3	2	13.7	7	58.9
Female	6	4	67.7	2	32.3	4	69.4	2	30.6	4	69.4
Male-to-male sexual contact and injection drug use	13	10	77.0	3	23.0	11	86.5	2	13.5	10	81.0
Heterosexual contact ^d											
Male	27	22	83.8	4	16.2	24	90.6	3	9.4	19	72.6
Female	86	69	80.4	17	19.6	76	88.4	10	11.6	65	75.7
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	615	509	82.8	106	17.2	546	88.8	69	11.2	471	76.6
Metropolitan areas (pop. 50,000–499,999)	51	43	84.3	8	15.7	46	90.2	5	9.8	37	72.5
Nonmetropolitan areas (pop. < 50,000)	15	14	93.3	1	6.7	15	100	0	0.0	14	93.3
Total^e	687	570	83.0	117	17.0	611	88.9	76	11.1	523	76.1

Table 2c. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥13 years, by race/ethnicity and selected characteristics—44 states and the District of Columbia (cont)

	Total diagnoses No.	Linkage to care								Viral suppression	
		≤1 month				≤3 months				VL <200 copies/mL ≤6 months	
		≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test		No.	%
	No.	%	No.	%	No.	%	No.	%	No.	%	
Black/African American											
Gender											
Male	10,478	8,145	77.7	2,333	22.3	8,991	85.8	1,487	14.2	6,724	64.2
Female	3,498	2,800	80.0	698	20.0	3,063	87.6	435	12.4	2,399	68.6
Transgender male-to-female ^a	269	213	79.2	56	20.8	228	84.8	41	15.2	168	62.5
Transgender female-to-male ^a	19	18	94.7	1	5.3	19	100	0	0.0	15	78.9
Additional gender identity ^b	4	3	75.0	1	25.0	3	75.0	1	25.0	3	75.0
Age at diagnosis (yr)											
13–24	3,650	2,813	77.1	837	22.9	3,136	85.9	514	14.1	2,399	65.7
25–34	5,025	3,869	77.0	1,156	23.0	4,276	85.1	749	14.9	3,218	64.0
35–44	2,393	1,918	80.2	475	19.8	2,087	87.2	306	12.8	1,585	66.2
45–54	1,676	1,350	80.5	326	19.5	1,472	87.8	204	12.2	1,107	66.1
≥55	1,524	1,229	80.6	295	19.4	1,333	87.5	191	12.5	1,000	65.6
Transmission category^c											
Male-to-male sexual contact	8,571	6,701	78.2	1,870	21.8	7,398	86.3	1,173	13.7	5,574	65.0
Injection drug use											
Male	360	265	73.7	95	26.3	292	81.2	68	18.8	201	55.9
Female	277	211	76.1	66	23.9	232	83.7	45	16.3	164	59.3
Male-to-male sexual contact and injection drug use	274	208	76.0	66	24.0	232	85.0	41	15.0	155	56.7
Heterosexual contact ^d											
Male	1,528	1,172	76.7	357	23.3	1,284	84.0	244	16.0	953	62.4
Female	3,226	2,595	80.4	631	19.6	2,838	88.0	388	12.0	2,237	69.4
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	11,265	8,875	78.8	2,390	21.2	9,720	86.3	1,545	13.7	7,367	65.4
Metropolitan areas (pop. 50,000–499,999)	1,777	1,398	78.7	379	21.3	1,546	87.0	231	13.0	1,117	62.9
Nonmetropolitan areas (pop. < 50,000)	867	654	75.4	213	24.6	751	86.6	116	13.4	584	67.4
Total^e	14,268	11,179	78.4	3,089	21.6	12,304	86.2	1,964	13.8	9,309	65.2
Hispanic/Latino^f											
Gender											
Male	8,116	6,861	84.5	1,255	15.5	7,357	90.6	759	9.4	5,805	71.5
Female	1,136	949	83.5	187	16.5	1,018	89.6	118	10.4	803	70.7
Transgender male-to-female ^a	211	180	85.3	31	14.7	195	92.4	16	7.6	149	70.6
Transgender female-to-male ^a	11	10	90.9	1	9.1	10	90.9	1	9.1	8	72.7
Additional gender identity ^b	4	4	100	0	0.0	4	100	0	0.0	3	75.0
Age at diagnosis (yr)											
13–24	1,974	1,624	82.3	350	17.7	1,768	89.6	206	10.4	1,407	71.3
25–34	3,632	3,087	85.0	545	15.0	3,299	90.8	333	9.2	2,613	71.9
35–44	2,051	1,743	85.0	308	15.0	1,864	90.9	187	9.1	1,476	72.0
45–54	1,179	1,001	84.9	178	15.1	1,065	90.3	114	9.7	830	70.4
≥55	642	549	85.5	93	14.5	588	91.6	54	8.4	442	68.8
Transmission category^c											
Male-to-male sexual contact	7,196	6,104	84.8	1,092	15.2	6,532	90.8	663	9.2	5,241	72.8
Injection drug use											
Male	263	207	78.8	56	21.2	230	87.4	33	12.6	143	54.4
Female	156	126	80.9	30	19.1	134	86.1	22	13.9	88	56.2
Male-to-male sexual contact and injection drug use	373	301	80.8	72	19.2	335	89.9	38	10.1	234	62.8
Heterosexual contact ^d											
Male	489	424	86.6	66	13.4	449	91.7	41	8.3	330	67.4
Female	988	831	84.1	157	15.9	891	90.2	97	9.8	721	72.9
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	8,263	7,004	84.8	1,259	15.2	7,494	90.7	769	9.3	5,981	72.4
Metropolitan areas (pop. 50,000–499,999)	800	652	81.5	148	18.5	725	90.6	75	9.4	516	64.5
Nonmetropolitan areas (pop. < 50,000)	327	284	86.9	43	13.1	297	90.8	30	9.2	211	64.5
Total^e	9,478	8,004	84.4	1,474	15.6	8,584	90.6	894	9.4	6,768	71.4

Table 2c. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥13 years, by race/ethnicity and selected characteristics—44 states and the District of Columbia (cont)

	Total diagnoses No.	Linkage to care								Viral suppression	
		≤1 month				≤3 months				VL <200 copies/mL ≤6 months	
		≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test		No.	%
	No.	%	No.	%	No.	%	No.	%	No.	%	
Native Hawaiian/other Pacific Islander											
Gender											
Male	52	43	82.7	9	17.3	46	88.5	6	11.5	37	71.2
Female	9	7	77.8	2	22.2	8	88.9	1	11.1	6	66.7
Transgender male-to-female ^a	5	3	60.0	2	40.0	4	80.0	1	20.0	3	60.0
Transgender female-to-male ^a	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Additional gender identity ^b	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Age at diagnosis (yr)											
13–24	10	8	80.0	2	20.0	10	100	0	0.0	8	80.0
25–34	35	29	82.9	6	17.1	31	88.6	4	11.4	25	71.4
35–44	14	11	78.6	3	21.4	12	85.7	2	14.3	10	71.4
45–54	5	5	100	0	0.0	5	100	0	0.0	3	60.0
≥55	2	0	0.0	2	100	0	0.0	2	100	0	0.0
Transmission category^c											
Male-to-male sexual contact	52	43	83.3	9	16.7	46	89.1	6	10.9	37	71.8
Injection drug use											
Male	1	0	8.3	1	91.7	0	8.3	1	91.7	0	8.3
Female	0	0	100	0	0.0	0	100	0	0.0	0	100
Male-to-male sexual contact and injection drug use	2	1	52.4	1	47.6	2	100	0	0.0	1	52.4
Heterosexual contact ^d											
Male	2	1	93.3	0	6.7	1	93.3	0	6.7	1	93.3
Female	9	7	77.0	2	23.0	8	88.5	1	11.5	6	65.5
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	51	40	78.4	11	21.6	45	88.2	6	11.8	35	68.6
Metropolitan areas (pop. 50,000–499,999)	11	9	81.8	2	18.2	9	81.8	2	18.2	7	63.6
Nonmetropolitan areas (pop. < 50,000)	4	4	100	0	0.0	4	100	0	0.0	4	100
Total^e	66	53	80.3	13	19.7	58	87.9	8	12.1	46	69.7
White											
Gender											
Male	6,805	5,689	83.6	1,116	16.4	6,145	90.3	660	9.7	4,826	70.9
Female	1,357	1,052	77.5	305	22.5	1,165	85.9	192	14.1	839	61.8
Transgender male-to-female ^a	71	64	90.1	7	9.9	65	91.5	6	8.5	47	66.2
Transgender female-to-male ^a	11	8	72.7	3	27.3	10	90.9	1	9.1	9	81.8
Additional gender identity ^b	5	4	80.0	1	20.0	5	100	0	0.0	5	100
Age at diagnosis (yr)											
13–24	1,107	871	78.7	236	21.3	968	87.4	139	12.6	770	69.6
25–34	2,759	2,246	81.4	513	18.6	2,444	88.6	315	11.4	1,896	68.7
35–44	1,749	1,448	82.8	301	17.2	1,572	89.9	177	10.1	1,193	68.2
45–54	1,431	1,217	85.0	214	15.0	1,301	90.9	130	9.1	1,013	70.8
≥55	1,203	1,035	86.0	168	14.0	1,105	91.9	98	8.1	854	71.0
Transmission category^c											
Male-to-male sexual contact	5,376	4,544	84.5	832	15.5	4,874	90.7	501	9.3	3,905	72.6
Injection drug use											
Male	513	386	75.2	127	24.8	436	85.0	77	15.0	279	54.4
Female	490	356	72.7	134	27.3	405	82.6	85	17.4	250	51.1
Male-to-male sexual contact and injection drug use	622	513	82.4	109	17.6	568	91.2	55	8.8	432	69.4
Heterosexual contact ^d											
Male	363	309	85.1	54	14.9	330	91.1	32	8.9	257	70.9
Female	875	701	80.1	174	19.9	767	87.7	107	12.3	596	68.1
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	5,959	4,961	83.3	998	16.7	5,364	90.0	595	10.0	4,190	70.3
Metropolitan areas (pop. 50,000–499,999)	1,365	1,108	81.2	257	18.8	1,216	89.1	149	10.9	895	65.6
Nonmetropolitan areas (pop. < 50,000)	805	656	81.5	149	18.5	709	88.1	96	11.9	554	68.8
Total^e	8,249	6,817	82.6	1,432	17.4	7,390	89.6	859	10.4	5,726	69.4

Table 2c. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥13 years, by race/ethnicity and selected characteristics—44 states and the District of Columbia (cont)

	Total diagnoses No.	Linkage to care								Viral suppression	
		≤1 month				≤3 months				VL <200 copies/mL ≤6 months	
		≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test		No.	%
	No.	%	No.	%	No.	%	No.	%	No.	%	
Multiracial											
Gender											
Male	636	519	81.6	117	18.4	570	89.6	66	10.4	438	68.9
Female	186	149	80.1	37	19.9	167	89.8	19	10.2	127	68.3
Transgender male-to-female ^a	12	9	75.0	3	25.0	9	75.0	3	25.0	7	58.3
Transgender female-to-male ^a	3	3	100	0	0.0	3	100	0	0.0	2	66.7
Additional gender identity ^b	4	4	100	0	0.0	4	100	0	0.0	4	100
Age at diagnosis (yr)											
13–24	186	148	79.6	38	20.4	159	85.5	27	14.5	129	69.4
25–34	340	271	79.7	69	20.3	302	88.8	38	11.2	224	65.9
35–44	153	125	81.7	28	18.3	141	92.2	12	7.8	114	74.5
45–54	93	78	83.9	15	16.1	87	93.5	6	6.5	69	74.2
≥55	69	62	89.9	7	10.1	64	92.8	5	7.2	42	60.9
Transmission category^c											
Male-to-male sexual contact	534	439	82.2	95	17.8	477	89.3	57	10.7	374	70.0
Injection drug use											
Male	25	20	81.8	5	18.2	23	94.7	1	5.3	15	61.9
Female	38	29	76.0	9	24.0	31	82.1	7	17.9	20	52.5
Male-to-male sexual contact and injection drug use	49	35	70.9	14	29.1	41	83.7	8	16.3	28	56.6
Heterosexual contact ^d											
Male	42	36	85.6	6	14.4	40	94.1	3	5.9	30	71.5
Female	152	124	81.6	28	18.4	140	91.9	12	8.1	110	72.3
Population area of residence											
Metropolitan statistical areas (pop. ≥500,000)	669	543	81.2	126	18.8	595	88.9	74	11.1	466	69.7
Metropolitan areas (pop. 50,000–499,999)	110	89	80.9	21	19.1	99	90.0	11	10.0	69	62.7
Nonmetropolitan areas (pop. < 50,000)	52	44	84.6	8	15.4	49	94.2	3	5.8	34	65.4
Total^e	841	684	81.3	157	18.7	753	89.5	88	10.5	578	68.7

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

Note. 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 or ≤3 months 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 2019. 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: Kansas, Kentucky, Pennsylvania, Vermont, and Puerto Rico.

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

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

^c 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.

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

^e Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure, or whose risk factor was not reported or 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 and viral suppression within 6 months of HIV diagnosis during 2019 among males aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—44 states and the District of Columbia

	Total diagnoses No.	Linkage to care								Viral suppression	
		≤1 month				≤3 months				VL <200 copies/mL ≤6 months	
		≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test		No.	%
		No.	%	No.	%	No.	%	No.	%		
American Indian/Alaska Native											
13–24	33	28	85.7	5	14.3	32	97.9	1	2.1	21	64.4
25–34	45	39	87.2	6	12.8	40	89.5	5	10.5	33	74.5
35–44	25	23	89.8	3	10.2	23	89.8	3	10.2	20	78.0
45–54	14	11	79.7	3	20.3	12	86.2	2	13.8	10	72.5
≥55	7	5	70.8	2	29.2	5	70.8	2	29.2	4	58.5
Asian											
13–24	107	87	81.6	20	18.4	93	87.2	14	12.8	81	75.5
25–34	210	184	87.5	26	12.5	194	92.1	17	7.9	168	79.9
35–44	111	87	77.9	25	22.1	97	87.6	14	12.4	85	76.1
45–54	80	71	88.8	9	11.2	72	90.0	8	10.0	61	75.8
≥55	30	23	75.3	8	24.7	25	83.2	5	16.8	21	68.4
Black/African American											
13–24	2,948	2,283	77.4	665	22.6	2,551	86.5	398	13.5	1,957	66.4
25–34	3,523	2,731	77.5	792	22.5	3,017	85.7	505	14.3	2,249	63.8
35–44	1,141	915	80.2	226	19.8	994	87.0	148	13.0	749	65.6
45–54	585	468	79.9	118	20.1	511	87.3	75	12.7	382	65.2
≥55	373	304	81.4	69	18.6	325	87.2	48	12.8	238	63.7
Hispanic/Latino^a											
13–24	1,678	1,381	82.3	297	17.7	1,509	89.9	169	10.1	1,203	71.7
25–34	2,939	2,518	85.7	422	14.3	2,680	91.2	260	8.8	2,149	73.1
35–44	1,461	1,242	85.0	220	15.0	1,322	90.5	139	9.5	1,085	74.3
45–54	784	679	86.6	105	13.4	716	91.3	68	8.7	576	73.4
≥55	333	284	85.4	49	14.6	306	92.0	27	8.0	228	68.6
Native Hawaiian/other Pacific Islander											
13–24	8	7	87.5	1	12.5	8	100	0	0.0	7	87.5
25–34	29	24	82.6	5	17.4	26	89.5	3	10.5	20	68.6
35–44	10	9	90.9	1	9.1	9	90.9	1	9.1	9	90.9
45–54	4	4	100	0	0.0	4	100	0	0.0	2	45.9
≥55	2	0	0.0	2	100	0	0.0	2	100	0	0.0
White											
13–24	812	648	79.7	165	20.3	718	88.4	94	11.6	587	72.3
25–34	1,828	1,535	84.0	292	16.0	1,636	89.5	192	10.5	1,322	72.4
35–44	1,027	866	84.3	161	15.7	938	91.3	89	8.7	748	72.8
45–54	898	783	87.2	115	12.8	833	92.8	65	7.2	663	73.9
≥55	811	712	87.8	99	12.2	749	92.4	61	7.6	584	72.1
Multiracial											
13–24	148	118	79.5	30	20.5	129	86.7	20	13.3	103	69.4
25–34	229	190	82.9	39	17.1	205	89.7	24	10.3	154	67.3
35–44	84	69	81.5	16	18.5	77	90.9	8	9.1	63	75.0
45–54	40	34	84.7	6	15.3	37	91.6	3	8.4	33	80.4
≥55	33	29	88.6	4	11.4	30	91.1	3	8.9	21	65.8
All											
13–24	5,735	4,552	79.4	1,183	20.6	5,040	87.9	695	12.1	3,958	69.0
25–34	8,802	7,220	82.0	1,582	18.0	7,797	88.6	1,005	11.4	6,096	69.3
35–44	3,861	3,210	83.1	651	16.9	3,460	89.6	401	10.4	2,759	71.5
45–54	2,406	2,050	85.2	356	14.8	2,185	90.8	221	9.2	1,726	71.7
≥55	1,588	1,356	85.4	232	14.6	1,440	90.7	148	9.3	1,096	69.0
Total	22,392	18,389	82.1	4,003	17.9	19,921	89.0	2,470	11.0	15,634	69.8

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

Note. 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 or ≤3 months 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 2019. 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: Kansas, Kentucky, Pennsylvania, Vermont, and Puerto Rico.

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

Table 3a. Receipt of HIV medical care among persons aged ≥13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by selected characteristics—44 states and the District of Columbia

	Persons alive at year-end 2019		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.	No.	%	No.	%	
Gender						
Male	702,412	533,401	75.9	404,656	57.6	
Female	212,405	160,947	75.8	122,955	57.9	
Transgender male-to-female ^b	9,699	8,190	84.4	6,452	66.5	
Transgender female-to-male ^b	391	334	85.4	253	64.7	
Additional gender identity ^c	170	151	88.8	125	73.5	
Age at year-end 2018 (yr)						
13–24	29,533	23,615	80.0	17,346	58.7	
25–34	147,061	114,125	77.6	81,883	55.7	
35–44	175,204	132,214	75.5	97,169	55.5	
45–54	254,886	194,838	76.4	148,607	58.3	
≥55	318,393	238,231	74.8	189,436	59.5	
Race/ethnicity						
American Indian/Alaska Native	2,924	2,236	76.5	1,664	56.9	
Asian ^d	13,903	10,495	75.5	8,178	58.8	
Black/African American	371,711	273,801	73.7	206,196	55.5	
Hispanic/Latino ^e	220,914	163,537	74.0	129,539	58.6	
Native Hawaiian/other Pacific Islander	815	602	73.9	431	52.9	
White	270,980	215,050	79.4	159,945	59.0	
Multiracial	43,145	37,243	86.3	28,440	65.9	
Transmission category^f						
Male-to-male sexual contact	528,606	410,672	77.7	309,723	58.6	
Injection drug use	98,290	66,875	68.0	51,968	52.9	
Male	56,813	36,326	63.9	28,477	50.1	
Female	41,478	30,549	73.7	23,491	56.6	
Male-to-male sexual contact and injection drug use	51,307	40,865	79.6	31,520	61.4	
Heterosexual contact ^g	233,549	174,765	74.8	133,758	57.3	
Male	68,761	48,995	71.3	37,906	55.1	
Female	164,787	125,770	76.3	95,852	58.2	
Other ^h						
Male	6,771	4,864	71.8	3,590	53.0	
Female	6,554	4,981	76.0	3,882	59.2	
Population area of residence						
Metropolitan statistical areas (pop. ≥500,000)	754,205	573,250	76.0	436,448	57.9	
Metropolitan areas (pop. 50,000–499,999)	93,099	72,080	77.4	54,368	58.4	
Nonmetropolitan areas (pop. < 50,000)	52,469	39,948	76.1	30,331	57.8	
Totalⁱ	925,077	703,023	76.0	534,441	57.8	

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

Note. Data are based on address of residence as of December 31, 2019 (i.e., most recent known address). Data for the year 2019 are preliminary and based on death data received by CDC as of December 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: Kansas, Kentucky, Pennsylvania, Vermont, and Puerto Rico.

^a Performed ≥3 months apart during 2019.

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

^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 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.

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

^h Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure, or whose risk factor was not reported or not identified.

ⁱ Includes 685 persons of unknown race/ethnicity.

Table 3b. Receipt of HIV medical care among persons aged ≥13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by area of residence—44 states and the District of Columbia

	Persons alive at year-end 2019	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.	No.	%	No.	%
Alabama	13,245	10,325	78.0	8,067	60.9
Alaska	700	616	88.0	424	60.6
Arizona	16,537	12,323	74.5	9,818	59.4
Arkansas	5,668	3,721	65.6	2,713	47.9
California	128,592	98,773	76.8	75,158	58.4
Colorado	12,556	8,427	67.1	5,724	45.6
Connecticut	10,380	8,361	80.5	6,194	59.7
Delaware	3,286	2,749	83.7	1,959	59.6
District of Columbia	13,777	9,463	68.7	7,026	51.0
Florida	109,195	84,213	77.1	69,134	63.3
Georgia	54,031	39,619	73.3	31,125	57.6
Hawaii	2,324	1,925	82.8	1,411	60.7
Illinois	34,564	24,366	70.5	16,504	47.7
Indiana	11,145	8,070	72.4	5,480	49.2
Iowa	2,785	2,452	88.0	1,845	66.2
Louisiana	20,425	16,185	79.2	12,736	62.4
Maine	1,613	1,368	84.8	1,066	66.1
Maryland	32,466	23,932	73.7	17,880	55.1
Massachusetts ^b	20,514	16,162	78.8	11,956	58.3
Michigan	15,903	13,332	83.8	9,591	60.3
Minnesota	8,532	6,708	78.6	4,316	50.6
Mississippi ^b	9,356	6,830	73.0	5,076	54.3
Missouri	12,320	9,630	78.2	7,230	58.7
Montana	638	569	89.2	413	64.7
Nebraska	2,151	1,652	76.8	1,054	49.0
Nevada ^b	10,228	7,047	68.9	3,499	34.2
New Hampshire	1,273	1,042	81.9	765	60.1
New Mexico	3,582	2,664	74.4	1,806	50.4
New York	124,135	92,597	74.6	77,565	62.5
North Carolina	31,640	24,495	77.4	17,447	55.1
North Dakota ^b	456	371	81.4	250	54.8
Ohio	22,204	16,766	75.5	11,371	51.2
Oklahoma	6,033	4,244	70.3	3,215	53.3
Oregon	7,080	6,313	89.2	4,255	60.1
Rhode Island	2,584	2,206	85.4	1,528	59.1
South Carolina	16,917	13,701	81.0	11,256	66.5
South Dakota	618	506	81.9	336	54.4
Tennessee	16,957	13,929	82.1	10,647	62.8
Texas	90,852	68,574	75.5	49,885	54.9
Utah	2,947	2,287	77.6	1,586	53.8
Virginia	22,870	15,972	69.8	11,788	51.5
Washington	13,539	11,688	86.3	8,293	61.3
West Virginia	1,847	1,373	74.3	963	52.1
Wisconsin	6,279	5,204	82.9	3,871	61.6
Wyoming	333	273	82.0	215	64.6
Total	925,077	703,023	76.0	534,441	57.8

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

Note. Data are based on address of residence as of December 31, 2019 (i.e., most recent known address). Data for the year 2019 are preliminary and based on death data received by CDC as of December 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: Kansas, Kentucky, Pennsylvania, Vermont, and Puerto Rico.

^a Performed ≥3 months apart during 2019.

^b Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2019.

Table 3c. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by race/ethnicity and selected characteristics—44 states and the District of Columbia

	Persons alive at						
	year-end 2019	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL of <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%
American Indian/Alaska Native							
Gender							
Male	2,141	1,638	76.5	1,217	56.8	1,374	64.2
Female	735	559	76.1	415	56.5	436	59.3
Transgender male-to-female ^c	43	35	81.4	30	69.8	23	53.5
Transgender female-to-male ^c	4	3	75.0	2	50.0	2	50.0
Additional gender identity ^d	1	1	100	0	0.0	1	100
Age at year-end 2018 (yr)							
13–24	106	81	76.4	61	57.5	61	57.5
25–34	576	453	78.6	313	54.3	350	60.8
35–44	644	501	77.8	365	56.7	403	62.6
45–54	821	612	74.5	464	56.5	512	62.4
≥55	777	589	75.8	461	59.3	510	65.6
Transmission category^e							
Male-to-male sexual contact	1,538	1,186	77.1	888	57.8	996	64.7
Injection drug use							
Male	216	154	71.3	107	49.4	121	56.2
Female	247	184	74.5	138	55.8	135	54.4
Male-to-male sexual contact and injection drug use	271	208	76.7	168	62.0	173	63.7
Heterosexual contact ^f							
Male	143	112	78.2	74	52.0	98	68.4
Female	473	368	77.9	272	57.5	295	62.4
Other ^g							
Male	17	14	81.8	10	55.9	11	62.9
Female	19	9	48.9	7	37.9	8	43.7
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	1,546	1,121	72.5	830	53.7	917	59.3
Metropolitan areas (pop. 50,000–499,999)	518	434	83.8	336	64.9	376	72.6
Nonmetropolitan areas (pop. <50,000)	800	638	79.8	472	59.0	515	64.4
Total	2,924	2,236	76.5	1,664	56.9	1,836	62.8
Asian^h							
Gender							
Male	11,379	8,652	76.0	6,750	59.3	8,046	70.7
Female	2,357	1,701	72.2	1,320	56.0	1,555	66.0
Transgender male-to-female ^c	156	131	84.0	99	63.5	119	76.3
Transgender female-to-male ^c	6	6	100	4	66.7	6	100
Additional gender identity ^d	5	5	100	5	100	5	100
Age at year-end 2018 (yr)							
13–24	508	434	85.4	345	67.9	406	79.9
25–34	2,649	2,036	76.9	1,574	59.4	1,901	71.8
35–44	3,544	2,658	75.0	2,042	57.6	2,464	69.5
45–54	4,043	3,102	76.7	2,376	58.8	2,864	70.8
≥55	3,159	2,265	71.7	1,841	58.3	2,096	66.4
Transmission category^e							
Male-to-male sexual contact	9,779	7,510	76.8	5,822	59.5	7,015	71.7
Injection drug use							
Male	386	258	66.8	210	54.3	232	60.2
Female	165	102	61.7	80	48.5	89	54.0
Male-to-male sexual contact and injection drug use	365	287	78.6	219	60.1	246	67.5
Heterosexual contact ^f							
Male	894	650	72.7	536	60.0	603	67.5
Female	2,099	1,531	72.9	1,177	56.1	1,401	66.8
Other ^g							
Male	115	82	71.5	66	56.9	72	62.8
Female	100	75	75.1	68	67.9	72	71.4
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	12,551	9,530	75.9	7,451	59.4	8,849	70.5
Metropolitan areas (pop. 50,000–499,999)	852	622	73.0	478	56.1	573	67.3
Nonmetropolitan areas (pop. <50,000)	228	163	71.5	122	53.5	148	64.9
Total	13,903	10,495	75.5	8,178	58.8	9,731	70.0

Table 3c. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by race/ethnicity and selected characteristics—44 states and the District of Columbia (cont)

	Persons alive at year-end 2019		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL of <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
Black/African American								
Gender								
Male	242,900	177,024	72.9	132,522	54.6	145,500	59.9	
Female	124,207	92,918	74.8	70,683	56.9	77,448	62.4	
Transgender male-to-female ^c	4,364	3,662	83.9	2,836	65.0	2,801	64.2	
Transgender female-to-male ^c	175	143	81.7	109	62.3	107	61.1	
Additional gender identity ^d	65	54	83.1	46	70.8	43	66.2	
Age at year-end 2018 (yr)								
13–24	16,242	12,629	77.8	9,238	56.9	9,525	58.6	
25–34	69,916	52,575	75.2	37,125	53.1	40,175	57.5	
35–44	71,140	52,613	74.0	38,263	53.8	42,367	59.6	
45–54	94,893	70,660	74.5	53,901	56.8	59,492	62.7	
≥55	119,520	85,324	71.4	67,669	56.6	74,340	62.2	
Transmission category^e								
Male-to-male sexual contact	161,072	121,057	75.2	89,196	55.4	99,297	61.6	
Injection drug use								
Male	26,496	16,635	62.8	12,982	49.0	13,812	52.1	
Female	19,674	14,176	72.1	10,976	55.8	11,793	59.9	
Male-to-male sexual contact and injection drug use	13,725	10,439	76.1	8,169	59.5	8,321	60.6	
Heterosexual contact ^f								
Male	42,937	30,484	71.0	23,466	54.7	25,394	59.1	
Female	101,072	76,157	75.3	57,688	57.1	63,813	63.1	
Other ^g								
Male	3,092	2,119	68.5	1,587	51.3	1,515	49.0	
Female	3,642	2,734	75.1	2,133	58.6	1,954	53.6	
Population area of residence								
Metropolitan statistical areas (pop. ≥500,000)	303,373	223,260	73.6	167,415	55.2	184,200	60.7	
Metropolitan areas (pop. 50,000–499,999)	36,537	27,443	75.1	20,973	57.4	22,570	61.8	
Nonmetropolitan areas (pop. <50,000)	20,546	15,369	74.8	12,038	58.6	12,610	61.4	
Total	371,711	273,801	73.7	206,196	55.5	225,899	60.8	
Hispanic/Latinoⁱ								
Gender								
Male	176,370	128,701	73.0	101,493	57.5	112,731	63.9	
Female	40,990	31,857	77.7	25,629	62.5	27,541	67.2	
Transgender male-to-female ^c	3,419	2,859	83.6	2,322	67.9	2,339	68.4	
Transgender female-to-male ^c	85	74	87.1	58	68.2	62	72.9	
Additional gender identity ^d	50	46	92.0	37	74.0	36	72.0	
Age at year-end 2018 (yr)								
13–24	7,406	6,135	82.8	4,563	61.6	5,010	67.6	
25–34	39,518	31,361	79.4	23,429	59.3	26,145	66.2	
35–44	50,675	37,041	73.1	28,608	56.5	31,733	62.6	
45–54	62,961	45,919	72.9	36,980	58.7	40,606	64.5	
≥55	60,354	43,081	71.4	35,959	59.6	39,215	65.0	
Transmission category^e								
Male-to-male sexual contact	135,301	101,756	75.2	79,807	59.0	90,078	66.6	
Injection drug use								
Male	16,340	9,628	58.9	7,937	48.6	8,143	49.8	
Female	8,427	6,401	76.0	5,167	61.3	5,356	63.6	
Male-to-male sexual contact and injection drug use	12,501	9,663	77.3	7,646	61.2	7,807	62.5	
Heterosexual contact ^f								
Male	14,214	9,475	66.7	7,627	53.7	8,251	58.0	
Female	31,211	24,388	78.1	19,601	62.8	21,386	68.5	
Other ^g								
Male	1,477	1,079	73.0	829	56.1	823	55.7	
Female	1,443	1,148	79.5	925	64.1	865	59.9	
Population area of residence								
Metropolitan statistical areas (pop. ≥500,000)	193,348	144,350	74.7	114,748	59.3	126,230	65.3	
Metropolitan areas (pop. 50,000–499,999)	14,778	10,570	71.5	8,013	54.2	9,169	62.0	
Nonmetropolitan areas (pop. <50,000)	7,358	4,511	61.3	3,472	47.2	3,749	51.0	
Total	220,914	163,537	74.0	129,539	58.6	142,709	64.6	

Table 3c. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by race/ethnicity and selected characteristics—44 states and the District of Columbia (cont)

	Persons alive at year-end 2019		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL of <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
Native Hawaiian/other Pacific Islander								
Gender								
Male	661	490	74.1	352	53.3	432	65.4	
Female	125	88	70.4	62	49.6	76	60.8	
Transgender male-to-female ^c	29	24	82.8	17	58.6	21	72.4	
Transgender female-to-male ^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	
Age at year-end 2018 (yr)								
13–24	31	22	71.0	17	54.8	20	64.5	
25–34	172	129	75.0	85	49.4	106	61.6	
35–44	205	143	69.8	98	47.8	121	59.0	
45–54	208	156	75.0	112	53.8	138	66.3	
≥55	199	152	76.4	119	59.8	144	72.4	
Transmission category^e								
Male-to-male sexual contact	590	435	73.8	308	52.2	391	66.2	
Injection drug use								
Male	22	16	73.2	12	54.0	11	50.4	
Female	20	13	64.0	11	52.2	11	53.7	
Male-to-male sexual contact and injection drug use	41	34	82.6	28	67.4	26	63.0	
Heterosexual contact ^f								
Male	32	24	75.3	17	53.1	21	66.0	
Female	104	75	72.2	51	49.5	65	62.6	
Other ^g								
Male	4	4	95.3	4	95.3	4	95.3	
Female	1	0	25.0	0	16.7	0	25.0	
Population area of residence								
Metropolitan statistical areas (pop. ≥500,000)	658	489	74.3	353	53.6	424	64.4	
Metropolitan areas (pop. 50,000–499,999)	87	63	72.4	46	52.9	63	72.4	
Nonmetropolitan areas (pop. <50,000)	46	35	76.1	22	47.8	28	60.9	
Total	815	602	73.9	431	52.9	529	64.9	
White								
Gender								
Male	235,825	188,666	80.0	140,849	59.7	170,502	72.3	
Female	34,076	25,442	74.7	18,383	53.9	22,112	64.9	
Transgender male-to-female ^c	959	836	87.2	631	65.8	702	73.2	
Transgender female-to-male ^c	91	80	87.9	60	65.9	66	72.5	
Additional gender identity ^d	29	26	89.7	22	75.9	20	69.0	
Age at year-end 2018 (yr)								
13–24	3,902	3,203	82.1	2,301	59.0	2,798	71.7	
25–34	26,778	21,421	80.0	14,949	55.8	18,447	68.9	
35–44	40,306	31,957	79.3	22,444	55.7	27,780	68.9	
45–54	79,701	63,812	80.1	46,660	58.5	57,174	71.7	
≥55	120,293	94,657	78.7	73,591	61.2	87,203	72.5	
Transmission category^e								
Male-to-male sexual contact	195,335	157,446	80.6	117,648	60.2	143,640	73.5	
Injection drug use								
Male	11,180	7,810	69.9	5,780	51.7	6,646	59.4	
Female	10,488	7,561	72.1	5,450	52.0	6,318	60.2	
Male-to-male sexual contact and injection drug use	20,566	16,834	81.9	12,595	61.2	14,335	69.7	
Heterosexual contact ^f								
Male	8,076	6,199	76.8	4,623	57.2	5,494	68.0	
Female	22,720	17,274	76.0	12,494	55.0	15,252	67.1	
Other ^g								
Male	1,649	1,236	74.9	853	51.7	1,107	67.1	
Female	966	691	71.6	502	52.0	610	63.2	
Population area of residence								
Metropolitan statistical areas (pop. ≥500,000)	206,824	163,820	79.2	122,152	59.1	147,781	71.5	
Metropolitan areas (pop. 50,000–499,999)	36,148	29,376	81.3	21,859	60.5	26,284	72.7	
Nonmetropolitan areas (pop. <50,000)	20,998	17,080	81.3	12,532	59.7	15,149	72.1	
Total	270,980	215,050	79.4	159,945	59.0	193,402	71.4	

Table 3c. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by race/ethnicity and selected characteristics—44 states and the District of Columbia (cont)

	Persons alive at year-end 2019		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL of <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
Multiracial								
Gender								
Male	32,635	28,180	86.3	21,432	65.7	24,119	73.9	
Female	9,731	8,373	86.0	6,456	66.3	6,936	71.3	
Transgender male-to-female ^c	729	643	88.2	517	70.9	498	68.3	
Transgender female-to-male ^c	30	28	93.3	20	66.7	24	80.0	
Additional gender identity ^d	20	19	95.0	15	75.0	15	75.0	
Age at year-end 2018 (yr)								
13–24	1,332	1,110	83.3	821	61.6	860	64.6	
25–34	7,438	6,147	82.6	4,406	59.2	4,861	65.4	
35–44	8,663	7,298	84.2	5,346	61.7	6,020	69.5	
45–54	12,068	10,564	87.5	8,102	67.1	9,027	74.8	
≥55	13,644	12,124	88.9	9,765	71.6	10,824	79.3	
Transmission category^e								
Male-to-male sexual contact	24,643	21,244	86.2	16,023	65.0	18,369	74.5	
Injection drug use								
Male	2,108	1,820	86.3	1,445	68.5	1,518	72.0	
Female	2,398	2,110	88.0	1,668	69.6	1,714	71.5	
Male-to-male sexual contact and injection drug use	3,791	3,399	89.7	2,694	71.1	2,749	72.5	
Heterosexual contact ^f								
Male	2,437	2,049	84.1	1,560	64.0	1,744	71.5	
Female	6,997	5,971	85.3	4,563	65.2	5,016	71.7	
Other ^g								
Male	403	328	81.4	240	59.6	252	62.5	
Female	368	322	87.4	247	67.0	231	62.8	
Population area of residence								
Metropolitan statistical areas (pop. ≥500,000)	35,386	30,621	86.5	23,451	66.3	25,998	73.5	
Metropolitan areas (pop. 50,000–499,999)	4,143	3,572	86.2	2,663	64.3	3,016	72.8	
Nonmetropolitan areas (pop. <50,000)	2,453	2,152	87.7	1,673	68.2	1,824	74.4	
Total	43,145	37,243	86.3	28,440	65.9	31,592	73.2	

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

Note. Data are based on address of residence as of December 31, 2019 (i.e., most recent known address). Data for the year 2019 are preliminary and based on death data received by CDC as of December 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: Kansas, Kentucky, Pennsylvania, Vermont, and Puerto Rico.

^a Performed ≥3 months apart during 2019.

^b VL test results are from the most recent test during 2019.

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

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

^e Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total. Data are based on sex at birth and include transgender persons.

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

^g Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure, or whose risk factor was not reported or not identified.

^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 2019 among males aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age group—44 states and the District of Columbia

	Males alive at year-end 2019		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL of <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
American Indian/Alaska Native								
13–24	76	61	80.5	45	59.8	48	63.5	
25–34	390	318	81.6	221	56.7	259	66.4	
35–44	344	268	77.7	195	56.6	223	64.8	
45–54	402	300	74.6	239	59.4	258	64.2	
≥55	326	240	73.6	188	57.7	208	63.7	
	1,538	1,187	77.2	888	57.7	996	64.8	
Asian^c								
13–24	369	315	85.4	243	65.9	301	81.4	
25–34	2,173	1,676	77.1	1,296	59.6	1,579	72.7	
35–44	2,424	1,840	75.9	1,389	57.3	1,711	70.6	
45–54	2,793	2,180	78.0	1,678	60.1	2,025	72.5	
≥55	2,020	1,499	74.2	1,217	60.2	1,400	69.3	
	9,779	7,510	76.8	5,823	59.5	7,016	71.7	
Black/African American								
13–24	10,371	8,190	79.0	5,880	56.7	6,359	61.3	
25–34	48,433	37,165	76.7	26,165	54.0	28,867	59.6	
35–44	32,830	24,960	76.0	18,092	55.1	20,279	61.8	
45–54	35,334	26,368	74.6	20,016	56.6	22,482	63.6	
≥55	34,104	24,374	71.5	19,042	55.8	21,309	62.5	
	161,072	121,057	75.2	89,195	55.4	99,296	61.6	
Hispanic/Latino^d								
13–24	5,344	4,482	83.9	3,296	61.7	3,753	70.2	
25–34	30,327	24,314	80.2	18,102	59.7	20,655	68.1	
35–44	33,359	24,599	73.7	18,991	56.9	21,548	64.6	
45–54	37,689	27,592	73.2	22,165	58.8	24,960	66.2	
≥55	28,582	20,769	72.7	17,253	60.4	19,161	67.0	
	135,301	101,756	75.2	79,807	59.0	90,077	66.6	
Native Hawaiian/other Pacific Islander								
13–24	22	15	68.0	11	50.2	13	58.9	
25–34	137	102	74.7	69	50.7	87	63.7	
35–44	154	108	70.1	73	47.5	96	62.4	
45–54	150	110	73.6	77	51.6	99	66.2	
≥55	127	100	78.5	77	60.6	95	74.6	
	590	435	73.7	307	52.0	390	66.1	
White								
13–24	2,555	2,120	83.0	1,525	59.7	1,906	74.6	
25–34	19,096	15,507	81.2	10,841	56.8	13,755	72.0	
35–44	27,273	21,882	80.2	15,387	56.4	19,534	71.6	
45–54	57,059	46,318	81.2	33,929	59.5	42,109	73.8	
≥55	89,352	71,618	80.2	55,966	62.6	66,336	74.2	
	195,335	157,445	80.6	117,648	60.2	143,640	73.5	
Multiracial								
13–24	783	656	83.8	485	62.0	533	68.1	
25–34	5,401	4,502	83.4	3,191	59.1	3,637	67.3	
35–44	5,224	4,403	84.3	3,217	61.6	3,731	71.4	
45–54	6,635	5,813	87.6	4,407	66.4	5,118	77.1	
≥55	6,600	5,870	88.9	4,723	71.6	5,351	81.1	
	24,643	21,244	86.2	16,023	65.0	18,370	74.5	
All								
13–24	19,520	15,839	81.1	11,485	58.8	12,914	66.2	
25–34	105,957	83,584	78.9	59,885	56.5	68,839	65.0	
35–44	101,620	78,061	76.8	57,345	56.4	67,123	66.1	
45–54	140,157	108,691	77.5	82,520	58.9	97,061	69.3	
≥55	161,352	124,497	77.2	98,487	61.0	113,885	70.6	
Total	528,606	410,672	77.7	309,723	58.6	359,821	68.1	

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

Note. Data are based on address of residence as of December 31, 2019 (i.e., most recent known address). Data for the year 2019 are preliminary and based on death data received by CDC as of December 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: Kansas, Kentucky, Pennsylvania, Vermont, and Puerto Rico.

^a Performed ≥3 months apart during 2019.

^b VL test results are from the most recent test during 2019.

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

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

Table 4a. HIV viral suppression during 2019 among persons aged ≥13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by selected characteristics—44 states and the District of Columbia

	Persons alive at year-end 2019		Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		VL of <200 copies/mL			
							Among persons alive at year-end 2019		Among persons with ≥1 CD4 or VL tests	
	No.	% ^a	No.	%	No.	%	No.	%	%	%
Gender										
Male	702,412	75.9	533,401	75.9	513,077	73.0	462,753	65.9	86.8	90.2
Female	212,405	23.0	160,947	75.8	155,442	73.2	136,113	64.1	84.6	87.6
Transgender male-to-female ^b	9,699	1.0	8,190	84.4	7,983	82.3	6,503	67.0	79.4	81.5
Transgender female-to-male ^b	391	0.0	334	85.4	314	80.3	267	68.3	79.9	85.0
Additional gender identity ^c	170	0.0	151	88.8	149	87.6	120	70.6	79.5	80.5
Age at year-end 2018 (yr)										
13–24	29,533	3.2	23,615	80.0	22,963	77.8	18,681	63.3	79.1	81.4
25–34	147,061	15.9	114,125	77.6	110,495	75.1	91,988	62.6	80.6	83.3
35–44	175,204	18.9	132,214	75.5	127,584	72.8	110,891	63.3	83.9	86.9
45–54	254,886	27.6	194,838	76.4	187,749	73.7	169,826	66.6	87.2	90.5
≥55	318,393	34.4	238,231	74.8	228,174	71.7	214,370	67.3	90.0	94.0
Race/ethnicity										
American Indian/Alaska Native	2,924	0.3	2,236	76.5	2,097	71.7	1,836	62.8	82.1	87.6
Asian ^d	13,903	1.5	10,495	75.5	10,160	73.1	9,731	70.0	92.7	95.8
Black/African American	371,711	40.2	273,801	73.7	263,551	70.9	225,899	60.8	82.5	85.7
Hispanic/Latino ^e	220,914	23.9	163,537	74.0	158,720	71.8	142,709	64.6	87.3	89.9
Native Hawaiian/other Pacific Islander	815	0.1	602	73.9	579	71.0	529	64.9	87.9	91.4
White	270,980	29.3	215,050	79.4	205,753	75.9	193,402	71.4	89.9	94.0
Multiracial	43,145	4.7	37,243	86.3	36,046	83.5	31,592	73.2	84.8	87.6
Transmission category^f										
Male-to-male sexual contact	528,606	57.1	410,672	77.7	395,518	74.8	359,821	68.1	87.6	91.0
Injection drug use	98,290	10.6	66,875	68.0	64,248	65.4	55,906	56.9	83.6	87.0
Male	56,813	6.1	36,326	63.9	34,723	61.1	30,489	53.7	83.9	87.8
Female	41,478	4.5	30,549	73.7	29,525	71.2	25,418	61.3	83.2	86.1
Male-to-male sexual contact and injection drug use	51,307	5.5	40,865	79.6	39,244	76.5	33,657	65.6	82.4	85.8
Heterosexual contact ^g	233,549	25.2	174,765	74.8	168,399	72.1	148,842	63.7	85.2	88.4
Male	68,761	7.4	48,995	71.3	47,008	68.4	41,608	60.5	84.9	88.5
Female	164,787	17.8	125,770	76.3	121,391	73.7	107,234	65.1	85.3	88.3
Other ^h										
Male	6,771	0.7	4,864	71.8	4,697	69.4	3,787	55.9	77.9	80.6
Female	6,554	0.7	4,981	76.0	4,859	74.1	3,742	57.1	75.1	77.0
Population area of residence										
Metropolitan statistical areas (pop. ≥500,000)	754,205	81.5	573,250	76.0	552,557	73.3	494,457	65.6	86.3	89.5
Metropolitan areas (pop. 50,000–499,999)	93,099	10.1	72,080	77.4	69,346	74.5	62,051	66.7	86.1	89.5
Nonmetropolitan areas (pop. <50,000)	52,469	5.7	39,948	76.1	37,937	72.3	34,023	64.8	85.2	89.7
Totalⁱ	925,077	100	703,023	76.0	676,965	73.2	605,756	65.5	86.2	89.5

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

Note. Data are based on address of residence as of December 31, 2019 (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 2019. Data for the year 2019 are preliminary and based on death data received by CDC as of December 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: Kansas, Kentucky, Pennsylvania, Vermont, and Puerto Rico.

^a Represents percentage of the total number for the column.

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

^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 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.

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

^h Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was not reported or not identified.

ⁱ Includes 685 persons of unknown race/ethnicity.

Table 4b. HIV viral suppression during 2019 among persons aged ≥13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by area of residence—44 states and the District of Columbia

	Persons alive at year-end 2019		Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		VL of <200 copies/mL			
							Among persons alive at year-end 2019		Among persons with ≥1 CD4 or VL tests	
	No.	% ^a	No.	%	No.	%	No.	%	%	%
Alabama	13,245	1.4	10,325	78.0	10,034	75.8	8,837	66.7	85.6	88.1
Alaska	700	0.1	616	88.0	606	86.6	552	78.9	89.6	91.1
Arizona	16,537	1.8	12,323	74.5	11,264	68.1	10,276	62.1	83.4	91.2
Arkansas	5,668	0.6	3,721	65.6	3,237	57.1	2,715	47.9	73.0	83.9
California	128,592	13.9	98,773	76.8	94,714	73.7	86,913	67.6	88.0	91.8
Colorado	12,556	1.4	8,427	67.1	8,154	64.9	7,526	59.9	89.3	92.3
Connecticut	10,380	1.1	8,361	80.5	7,681	74.0	7,059	68.0	84.4	91.9
Delaware	3,286	0.4	2,749	83.7	2,721	82.8	2,456	74.7	89.3	90.3
District of Columbia	13,777	1.5	9,463	68.7	9,201	66.8	8,082	58.7	85.4	87.8
Florida	109,195	11.8	84,213	77.1	81,606	74.7	73,187	67.0	86.9	89.7
Georgia	54,031	5.8	39,619	73.3	38,188	70.7	33,270	61.6	84.0	87.1
Hawaii	2,324	0.3	1,925	82.8	1,897	81.6	1,762	75.8	91.5	92.9
Illinois	34,564	3.7	24,366	70.5	22,121	64.0	19,097	55.3	78.4	86.3
Indiana	11,145	1.2	8,070	72.4	7,434	66.7	6,705	60.2	83.1	90.2
Iowa	2,785	0.3	2,452	88.0	2,434	87.4	2,275	81.7	92.8	93.5
Louisiana	20,425	2.2	16,185	79.2	16,002	78.3	13,952	68.3	86.2	87.2
Maine	1,613	0.2	1,368	84.8	1,362	84.4	1,307	81.0	95.5	96.0
Maryland	32,466	3.5	23,932	73.7	23,580	72.6	21,083	64.9	88.1	89.4
Massachusetts ^b	20,514	2.2	16,162	78.8	15,573	75.9	14,581	71.1	90.2	93.6
Michigan	15,903	1.7	13,332	83.8	12,994	81.7	11,713	73.7	87.9	90.1
Minnesota	8,532	0.9	6,708	78.6	6,399	75.0	5,934	69.5	88.5	92.7
Mississippi ^b	9,356	1.0	6,830	73.0	6,066	64.8	5,043	53.9	73.8	83.1
Missouri	12,320	1.3	9,630	78.2	9,190	74.6	8,277	67.2	86.0	90.1
Montana	638	0.1	569	89.2	561	87.9	535	83.9	94.0	95.4
Nebraska	2,151	0.2	1,652	76.8	1,494	69.5	1,355	63.0	82.0	90.7
Nevada ^b	10,228	1.1	7,047	68.9	6,585	64.4	5,911	57.8	83.9	89.8
New Hampshire	1,273	0.1	1,042	81.9	1,028	80.8	965	75.8	92.6	93.9
New Mexico	3,582	0.4	2,664	74.4	2,393	66.8	2,162	60.4	81.2	90.3
New York	124,135	13.4	92,597	74.6	91,860	74.0	81,751	65.9	88.3	89.0
North Carolina	31,640	3.4	24,495	77.4	23,907	75.6	21,291	67.3	86.9	89.1
North Dakota ^b	456	0.0	371	81.4	363	79.6	324	71.1	87.3	89.3
Ohio	22,204	2.4	16,766	75.5	15,723	70.8	13,969	62.9	83.3	88.8
Oklahoma	6,033	0.7	4,244	70.3	4,043	67.0	3,521	58.4	83.0	87.1
Oregon	7,080	0.8	6,313	89.2	6,067	85.7	5,701	80.5	90.3	94.0
Rhode Island	2,584	0.3	2,206	85.4	2,185	84.6	2,047	79.2	92.8	93.7
South Carolina	16,917	1.8	13,701	81.0	13,352	78.9	11,967	70.7	87.3	89.6
South Dakota	618	0.1	506	81.9	361	58.4	321	51.9	63.4	88.9
Tennessee	16,957	1.8	13,929	82.1	13,227	78.0	11,383	67.1	81.7	86.1
Texas	90,852	9.8	68,574	75.5	65,056	71.6	56,315	62.0	82.1	86.6
Utah	2,947	0.3	2,287	77.6	2,255	76.5	2,092	71.0	91.5	92.8
Virginia	22,870	2.5	15,972	69.8	15,773	69.0	14,462	63.2	90.5	91.7
Washington	13,539	1.5	11,688	86.3	11,556	85.4	10,861	80.2	92.9	94.0
West Virginia	1,847	0.2	1,373	74.3	1,318	71.4	1,182	64.0	86.1	89.7
Wisconsin	6,279	0.7	5,204	82.9	5,160	82.2	4,813	76.7	92.5	93.3
Wyoming	333	0.0	273	82.0	240	72.1	226	67.9	82.8	94.2
Total	925,077	100	703,023	76.0	676,965	73.2	605,756	65.5	86.2	89.5

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

Note. Data are based on address of residence as of December 31, 2019 (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 2019. Data for the year 2019 are preliminary and based on death data received by CDC as of December 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: Kansas, Kentucky, Pennsylvania, Vermont, and Puerto Rico.

^a Represents percentage of the total number for the column.

^b Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2019.

Table 5. Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2019, by selected characteristics—United States

	Persons with HIV infection alive at year-end 2019 ^a		Persons with diagnosed HIV infection alive at year-end 2019 ^b		Receipt of care ^c		Retention in care ^c		Viral suppression ^c	
	Total No.	No.	No.	%	No.	%	No.	%	No.	%
Sex at birth										
Male	925,800	794,128	86		604,000	65	458,500	49	523,300	57
Female	263,900	237,063	90		179,700	68	137,300	52	151,900	58
Age at year-end 2019 (yr)										
13–24	45,900	25,581	56		20,500	45	15,000	33	16,200	35
25–34	218,700	156,378	72		121,300	55	87,100	40	97,800	45
35–44	228,000	192,894	85		145,600	64	107,000	47	122,100	54
45–54	290,000	268,039	92		204,900	71	156,300	54	178,600	62
≥55	407,100	388,299	95		290,500	71	231,000	57	261,400	64
Race/ethnicity										
American Indian/Alaska Native	4,000	3,185	80		2,400	61	1,800	45	2,000	50
Asian ^d	17,700	15,309	87		11,600	65	9,000	51	10,700	61
Black/African American	479,300	415,003	87		305,700	64	230,200	48	252,200	53
Hispanic/Latino ^e	294,200	246,078	84		182,200	62	144,300	49	159,000	54
Native Hawaiian/other Pacific Islander	1,100	906	84		670	61	480	44	590	53
White	338,600	301,927	89		239,600	71	178,200	53	215,500	64
Multiracial	54,100	48,063	89		41,500	77	31,700	59	35,200	65
Transmission category^f										
Male-to-male sexual contact	692,900	587,555	85		456,500	66	344,300	50	399,900	58
Injection drug use										
Male	72,900	67,603	93		43,200	59	33,900	46	36,300	50
Female	51,900	48,660	94		35,800	69	27,500	53	29,800	57
Male-to-male sexual contact and injection drug use	61,800	56,720	92		45,200	73	34,800	56	37,200	60
Heterosexual contact ^g										
Male	96,300	80,351	83		57,300	59	44,300	46	48,600	50
Female	210,700	187,127	89		142,800	68	108,900	52	121,800	58
Total^h	1,189,700	1,031,191	87		783,700	66	596,700	50	675,200	57

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

^a Estimates derived by using HIV surveillance and CD4 data for persons aged ≥13 years at diagnosis (i.e., persons living with diagnosed or undiagnosed HIV infection). Estimates rounded to the nearest 100 for estimates of > 1,000 and to the nearest 10 for estimates of ≤ 1,000 to reflect model uncertainty. Estimates with an RSE of 30%–50% are preceded by an asterisk (*) and should be interpreted with caution because they do not meet the standard of reliability. Estimates with an RSE of >50% are not shown and are replaced by an ellipsis (...). Data previously published in *HIV Surveillance Supplemental Report 2021*;26(No. 1). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

^b Reported to National HIV Surveillance System. Data previously published in *HIV Surveillance Supplemental Report 2021*;26(No. 1). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

^c Estimates are the result of extrapolating data from the 45 jurisdictions with complete CD4 and viral load reporting by applying the percentage in the 45 jurisdictions (found in Table 4b) to the total number of people living with diagnosed HIV in the United States. Estimates rounded to the nearest 100 for estimates of > 1,000 and to the nearest 10 for estimates of ≤ 1,000 to reflect model uncertainty.

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

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

^f Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total. Data presented based on sex at birth and include transgender persons.

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

^h Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was not reported or not identified.

Table 6a. Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥ 13 years, by year of diagnosis and selected characteristics, 2015–2019—United States

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
Gender															
Male	31,748	6,786	21.4	31,298	6,614	21.1	30,411	6,321	20.8	29,699	6,148	20.7	28,781	5,899	20.5
Female	7,324	1,723	23.5	7,457	1,665	22.3	7,248	1,604	22.1	7,025	1,523	21.7	6,868	1,412	20.6
Transgender male-to-female ^b	589	71	12.1	639	89	13.9	581	79	13.6	596	80	13.4	623	86	13.8
Transgender female-to-male ^b	32	1	3.1	21	3	14.3	36	5	13.9	48	2	4.2	46	5	10.9
Additional gender identity ^c	10	0	0.0	12	3	25.0	13	2	15.4	14	1	7.1	19	0	0.0
Age at diagnosis (yr)															
13–24	9,070	751	8.3	8,652	756	8.7	8,281	742	9.0	7,835	715	9.1	7,588	633	8.3
25–34	13,010	2,159	16.6	13,602	2,228	16.4	13,361	2,151	16.1	13,382	2,126	15.9	13,014	2,131	16.4
35–44	7,607	2,134	28.1	7,457	2,022	27.1	7,241	1,875	25.9	7,181	1,841	25.6	7,068	1,778	25.2
45–54	6,288	2,145	34.1	5,896	1,966	33.3	5,569	1,886	33.9	5,233	1,749	33.4	4,866	1,545	31.8
≥55	3,728	1,392	37.3	3,820	1,402	36.7	3,837	1,357	35.4	3,751	1,323	35.3	3,801	1,315	34.6
Race/ethnicity															
American Indian/Alaska Native	170	39	22.9	217	51	23.5	206	45	21.8	182	29	15.9	209	27	12.9
Asian	907	202	22.3	919	218	23.7	915	229	25.0	849	226	26.6	732	181	24.7
Black/African American	16,670	3,407	20.4	16,493	3,356	20.3	15,931	3,195	20.1	15,441	3,035	19.7	15,299	2,949	19.3
Hispanic/Latino ^d	10,316	2,266	22.0	10,601	2,302	21.7	10,460	2,212	21.1	10,530	2,279	21.6	10,112	2,155	21.3
Native Hawaiian/other Pacific Islander	66	16	24.2	40	8	20.0	51	13	25.5	64	13	20.3	66	11	16.7
White	10,051	2,329	23.2	9,753	2,170	22.2	9,546	2,080	21.8	9,293	1,976	21.3	9,006	1,895	21.0
Multiracial	1,523	322	21.1	1,404	269	19.2	1,180	237	20.1	1,023	196	19.2	913	184	20.2
Transmission category^e															
Male-to-male sexual contact	26,273	5,063	19.3	25,947	4,974	19.2	25,337	4,820	19.0	24,556	4,723	19.2	23,866	4,489	18.8
Injection drug use															
Male	1,295	382	29.5	1,203	336	27.9	1,301	343	26.4	1,407	326	23.2	1,375	339	24.7
Female	1,033	213	20.6	1,000	201	20.1	1,053	205	19.5	1,084	220	20.3	1,106	193	17.5
Male-to-male sexual contact and injection drug use	1,499	282	18.8	1,498	257	17.1	1,421	215	15.1	1,408	200	14.2	1,457	245	16.8
Heterosexual contact ^f															
Male	3,249	1,117	34.4	3,275	1,129	34.5	2,913	1,015	34.8	2,903	972	33.5	2,685	899	33.5
Female	6,298	1,504	23.9	6,437	1,456	22.6	6,198	1,398	22.5	5,958	1,295	21.7	5,787	1,218	21.0
Other ^g															
Male	31	12	39.5	24	10	43.4	34	9	27.1	35	8	23.1	37	13	36.2
Female	25	7	26.2	43	11	25.9	33	6	19.6	32	9	29.2	25	6	24.4

Table 6a. Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥13 years, by year of diagnosis and selected characteristics, 2015–2019—United States (cont)

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
Region of residence															
Northeast	6,440	1,519	23.6	6,203	1,364	22.0	6,000	1,292	21.5	5,562	1,260	22.7	5,268	1,158	22.0
Midwest	5,212	1,144	21.9	5,154	1,165	22.6	5,086	1,074	21.1	4,932	1,114	22.6	4,750	981	20.7
South	20,331	4,336	21.3	20,220	4,284	21.2	19,658	4,170	21.2	19,364	3,902	20.2	19,100	3,856	20.2
West	7,720	1,582	20.5	7,850	1,561	19.9	7,545	1,475	19.5	7,524	1,478	19.6	7,219	1,407	19.5
Population area of residence															
Metropolitan statistical areas (pop. ≥500,000)	32,295	6,734	20.9	32,075	6,576	20.5	31,127	6,287	20.2	30,352	6,070	20.0	29,056	5,752	19.8
Metropolitan areas (pop. 50,000–499,999)	4,560	1,143	25.1	4,701	1,124	23.9	4,683	1,079	23.0	4,616	1,063	23.0	4,418	974	22.0
Nonmetropolitan areas (pop. < 50,000)	2,507	655	26.1	2,323	628	27.0	2,239	596	26.6	2,312	607	26.3	2,262	571	25.2
Total	39,703	8,581	21.6	39,427	8,374	21.2	38,289	8,011	20.9	37,382	7,754	20.7	36,337	7,402	20.4

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

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

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

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

^e 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.

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

^g Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was not reported or not identified.

Table 6b. Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥13 years, by year of diagnosis and selected characteristics, 2015–2019—United States and 6 dependent areas

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
Gender															
Male	32,218	6,882	21.4	31,744	6,728	21.2	30,780	6,386	20.7	30,066	6,230	20.7	29,101	5,973	20.5
Female	7,436	1,749	23.5	7,562	1,687	22.3	7,342	1,628	22.2	7,106	1,540	21.7	6,949	1,439	20.7
Transgender male-to-female ^b	593	72	12.1	641	89	13.9	583	79	13.6	597	81	13.6	625	86	13.8
Transgender female-to-male ^b	32	1	3.1	21	3	14.3	36	5	13.9	48	2	4.2	46	5	10.9
Additional gender identity ^c	10	0	0.0	12	3	25.0	13	2	15.4	14	1	7.1	19	0	0.0
Age at diagnosis (yr)															
13–24	9,158	760	8.3	8,737	766	8.8	8,359	747	8.9	7,909	720	9.1	7,648	639	8.4
25–34	13,168	2,182	16.6	13,737	2,246	16.4	13,490	2,169	16.1	13,517	2,144	15.9	13,127	2,154	16.4
35–44	7,742	2,162	27.9	7,586	2,058	27.1	7,331	1,900	25.9	7,259	1,861	25.6	7,147	1,794	25.1
45–54	6,413	2,185	34.1	6,001	2,003	33.4	5,662	1,908	33.7	5,327	1,778	33.4	4,931	1,574	31.9
≥55	3,808	1,415	37.2	3,919	1,437	36.7	3,912	1,376	35.2	3,819	1,351	35.4	3,887	1,342	34.5
Race/ethnicity															
American Indian/Alaska Native	170	39	22.9	217	51	23.5	206	45	21.8	182	29	15.9	209	27	12.9
Asian	911	202	22.2	920	218	23.7	918	231	25.2	853	226	26.5	738	184	24.9
Black/African American	16,679	3,412	20.5	16,499	3,358	20.4	15,935	3,196	20.1	15,448	3,036	19.7	15,305	2,951	19.3
Hispanic/Latino ^d	10,883	2,380	21.9	11,139	2,433	21.8	10,910	2,296	21.0	10,960	2,375	21.7	10,494	2,249	21.4
Native Hawaiian/other Pacific Islander	69	18	26.1	46	10	21.7	54	15	27.8	66	15	22.7	70	12	17.1
White	10,053	2,331	23.2	9,755	2,171	22.3	9,550	2,080	21.8	9,297	1,977	21.3	9,011	1,896	21.0
Multiracial	1,524	322	21.1	1,404	269	19.2	1,181	237	20.1	1,025	196	19.1	913	184	20.2
Transmission category^e															
Male-to-male sexual contact	26,585	5,121	19.3	26,244	5,027	19.2	25,580	4,858	19.0	24,819	4,770	19.2	24,084	4,531	18.8
Injection drug use															
Male	1,348	391	29.0	1,241	353	28.4	1,333	350	26.2	1,432	335	23.4	1,397	346	24.8
Female	1,040	214	20.6	1,011	203	20.1	1,062	205	19.3	1,086	220	20.3	1,111	196	17.7
Male-to-male sexual contact and injection drug use	1,522	286	18.8	1,510	262	17.3	1,432	216	15.1	1,420	206	14.5	1,468	248	16.9
Heterosexual contact ^f															
Male	3,335	1,144	34.3	3,377	1,168	34.6	2,997	1,034	34.5	2,970	993	33.4	2,754	921	33.4
Female	6,402	1,529	23.9	6,530	1,476	22.6	6,283	1,422	22.6	6,037	1,312	21.7	5,863	1,242	21.2
Other ^g															
Male	31	12	39.7	24	10	43.4	34	9	27.1	35	8	23.3	37	13	36.2
Female	25	7	26.8	43	11	25.8	33	6	19.5	32	9	29.2	25	6	24.4
Region of residence															
Northeast	6,440	1,519	23.6	6,203	1,364	22.0	6,000	1,292	21.5	5,562	1,260	22.7	5,268	1,158	22.0
Midwest	5,212	1,144	21.9	5,154	1,165	22.6	5,086	1,074	21.1	4,932	1,114	22.6	4,750	981	20.7
South	20,331	4,336	21.3	20,220	4,284	21.2	19,658	4,170	21.2	19,364	3,902	20.2	19,100	3,856	20.2
West	7,720	1,582	20.5	7,850	1,561	19.9	7,545	1,475	19.5	7,524	1,478	19.6	7,219	1,407	19.5
U.S. dependent areas	586	123	21.0	553	136	24.6	465	89	19.1	449	100	22.3	403	101	25.1
Total	40,289	8,704	21.6	39,980	8,510	21.3	38,754	8,100	20.9	37,831	7,854	20.8	36,740	7,503	20.4

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

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

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

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

^e 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.

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

^g Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was not reported or not identified.

Table 6c. Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥ 13 years, by year of diagnosis and area of residence, 2015–2019—United States and 6 dependent areas

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
Alabama	663	161	24.3	653	143	21.9	650	142	21.8	607	126	20.8	638	139	21.8
Alaska	25	5	20.0	37	6	16.2	29	7	24.1	23	4	17.4	27	2	7.4
Arizona	689	147	21.3	714	144	20.2	727	135	18.6	753	159	21.1	761	133	17.5
Arkansas	271	60	22.1	315	69	21.9	287	50	17.4	278	60	21.6	287	72	25.1
California	5,029	950	18.9	5,067	970	19.1	4,806	917	19.1	4,715	876	18.6	4,354	818	18.8
Colorado	377	97	25.7	421	84	20.0	435	79	18.2	402	96	23.9	461	102	22.1
Connecticut	276	71	25.7	256	67	26.2	274	65	23.7	259	64	24.7	213	60	28.2
Delaware	104	29	27.9	111	35	31.5	126	32	25.4	91	22	24.2	93	20	21.5
District of Columbia	365	54	14.8	351	58	16.5	316	40	12.7	281	43	15.3	255	37	14.5
Florida	4,595	980	21.3	4,651	985	21.2	4,557	973	21.4	4,530	927	20.5	4,378	917	20.9
Georgia	2,627	527	20.1	2,526	469	18.6	2,596	568	21.9	2,482	494	19.9	2,439	493	20.2
Hawaii	117	23	19.7	77	11	14.3	77	13	16.9	72	15	20.8	65	13	20.0
Idaho	40	14	35.0	46	7	15.2	46	11	23.9	37	15	40.5	28	13	46.4
Illinois	1,547	329	21.3	1,483	312	21.0	1,367	290	21.2	1,374	279	20.3	1,252	236	18.8
Indiana	632	121	19.1	489	108	22.1	515	125	24.3	509	129	25.3	486	100	20.6
Iowa	124	46	37.1	132	31	23.5	125	27	21.6	116	25	21.6	100	21	21.0
Kansas	155	35	22.6	147	34	23.1	119	25	21.0	157	42	26.8	131	25	19.1
Kentucky	340	79	23.2	338	109	32.2	365	88	24.1	378	76	20.1	326	70	21.5
Louisiana	1,095	241	22.0	1,108	259	23.4	996	229	23.0	961	182	18.9	881	186	21.1
Maine	47	13	27.7	53	12	22.6	29	11	37.9	30	10	33.3	30	11	36.7
Maryland	1,168	252	21.6	1,097	228	20.8	1,020	249	24.4	991	203	20.5	918	208	22.7
Massachusetts	598	138	23.1	640	139	21.7	608	124	20.4	649	150	23.1	535	109	20.4
Michigan	723	162	22.4	746	178	23.9	773	154	19.9	715	168	23.5	674	148	22.0
Minnesota	296	73	24.7	297	67	22.6	277	75	27.1	288	67	23.3	274	63	23.0
Mississippi	502	118	23.5	427	118	27.6	428	115	26.9	476	130	27.3	477	120	25.2
Missouri	463	94	20.3	512	120	23.4	502	84	16.7	449	96	21.4	488	89	18.2
Montana	19	5	26.3	20	3	15.0	32	6	18.8	23	5	21.7	25	4	16.0
Nebraska	78	22	28.2	75	18	24.0	88	13	14.8	79	26	32.9	81	21	25.9
Nevada	477	109	22.9	509	114	22.4	494	106	21.5	501	97	19.4	512	114	22.3
New Hampshire	25	2	8.0	39	11	28.2	32	5	15.6	38	10	26.3	31	4	12.9
New Jersey	1,192	312	26.2	1,188	277	23.3	1,123	241	21.5	1,021	235	23.0	1,057	234	22.1
New Mexico	137	32	23.4	146	32	21.9	141	30	21.3	135	32	23.7	156	24	15.4
New York	3,051	657	21.5	2,820	571	20.2	2,729	569	20.9	2,449	542	22.1	2,330	496	21.3
North Carolina	1,328	292	22.0	1,388	274	19.7	1,295	264	20.4	1,186	206	17.4	1,365	213	15.6

Table 6c. Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥13 years, by year of diagnosis and area of residence, 2015–2019—United States and 6 dependent areas (cont)

	2015			2016			2017			2018			2019		
	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	20	9	45.0	46	12	26.1	38	10	26.3	36	5	13.9	40	9	22.5
Ohio	925	196	21.2	955	227	23.8	983	212	21.6	973	224	23.0	980	209	21.3
Oklahoma	314	69	22.0	294	74	25.2	299	63	21.1	278	61	21.9	320	50	15.6
Oregon	223	67	30.0	228	54	23.7	203	49	24.1	230	52	22.6	199	49	24.6
Pennsylvania	1,173	303	25.8	1,131	265	23.4	1,100	244	22.2	1,023	219	21.4	989	228	23.1
Rhode Island	64	19	29.7	71	19	26.8	85	24	28.2	75	22	29.3	72	14	19.4
South Carolina	670	174	26.0	747	179	24.0	706	180	25.5	712	175	24.6	680	164	24.1
South Dakota	24	11	45.8	43	12	27.9	39	8	20.5	29	7	24.1	33	8	24.2
Tennessee	736	129	17.5	716	115	16.1	721	124	17.2	746	146	19.6	773	134	17.3
Texas	4,529	964	21.3	4,527	958	21.2	4,356	861	19.8	4,422	859	19.4	4,302	842	19.6
Utah	123	25	20.3	139	24	17.3	113	22	19.5	121	17	14.0	135	27	20.0
Vermont	14	4	28.6	5	3	60.0	20	9	45.0	18	8	44.4	11	2	18.2
Virginia	953	181	19.0	903	191	21.2	863	170	19.7	861	171	19.9	822	168	20.4
Washington	447	105	23.5	425	104	24.5	432	96	22.2	500	109	21.8	483	106	21.9
West Virginia	71	26	36.6	68	20	29.4	77	22	28.6	84	21	25.0	146	23	15.8
Wisconsin	225	46	20.4	229	46	20.1	260	51	19.6	207	46	22.2	211	52	24.6
Wyoming	17	3	17.6	21	8	38.1	10	4	40.0	12	1	8.3	13	2	15.4
Subtotal	39,703	8,581	21.6	39,427	8,374	21.2	38,289	8,011	20.9	37,382	7,754	20.7	36,337	7,402	20.4
U.S. dependent areas															
American Samoa	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Guam	6	2	33.3	4	2	50.0	6	4	66.7	7	3	42.9	10	3	30.0
Northern Mariana Islands	2	1	50.0	0	0	0.0	1	0	0.0	1	0	0.0	2	1	50.0
Puerto Rico	565	114	20.2	535	129	24.1	450	84	18.7	431	96	22.3	383	94	24.5
Republic of Palau	1	0	0.0	2	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
U.S. Virgin Islands	12	6	50.0	12	5	41.7	8	1	12.5	10	1	10.0	8	3	37.5
Subtotal	586	123	21.0	553	136	24.6	465	89	19.1	449	100	22.3	403	101	25.1
Total	40,289	8,704	21.6	39,980	8,510	21.3	38,754	8,100	20.9	37,831	7,854	20.8	36,740	7,503	20.4

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

Note. 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.

Table 6d. Stage 3 (AIDS) at time of HIV diagnosis among persons aged ≥13 years, by race/ethnicity and area of residence, 2019—United States

	Black/African American			Hispanic/Latino ^a			White			Other ^b		
	Total No.	Stage 3 (AIDS) at diagnosis ^c		Total No.	Stage 3 (AIDS) at diagnosis ^c		Total No.	Stage 3 (AIDS) at diagnosis ^c		Total No.	Stage 3 (AIDS) at diagnosis ^c	
		No.	%		No.	%		No.	%		No.	%
Alabama	457	104	22.8	13	2	15.4	152	31	20.4	16	2	12.5
Alaska	5	1	20.0	4	0	0.0	12	1	8.3	6	0	0.0
Arizona	128	22	17.2	321	59	18.4	248	43	17.3	64	9	14.1
Arkansas	139	32	23.0	17	6	35.3	121	29	24.0	10	5	50.0
California	742	95	12.8	2,180	446	20.5	1,072	195	18.2	360	82	22.8
Colorado	73	17	23.3	170	40	23.5	202	42	20.8	16	3	18.8
Connecticut	96	27	28.1	51	11	21.6	57	16	28.1	9	6	66.7
Delaware	61	13	21.3	8	2	25.0	22	5	22.7	2	0	0.0
District of Columbia	195	25	12.8	30	8	26.7	19	2	10.5	11	2	18.2
Florida	1,692	389	23.0	1,570	301	19.2	1,013	203	20.0	103	24	23.3
Georgia	1,753	362	20.7	237	45	19.0	366	69	18.9	83	17	20.5
Hawaii	1	0	0.0	12	1	8.3	13	2	15.4	39	10	25.6
Idaho	2	1	50.0	10	6	60.0	15	5	33.3	1	1	100
Illinois	651	114	17.5	300	63	21.0	233	48	20.6	68	11	16.2
Indiana	215	41	19.1	68	8	11.8	186	48	25.8	17	3	17.6
Iowa	32	11	34.4	12	1	8.3	47	9	19.1	9	0	0.0
Kansas	38	5	13.2	26	7	26.9	60	12	20.0	7	1	14.3
Kentucky	91	13	14.3	28	7	25.0	195	42	21.5	12	8	66.7
Louisiana	578	118	20.4	81	22	27.2	206	42	20.4	16	4	25.0
Maine	11	4	36.4	2	1	50.0	15	5	33.3	2	1	50.0
Maryland	672	144	21.4	102	32	31.4	99	24	24.2	45	8	17.8
Massachusetts	171	47	27.5	145	24	16.6	173	28	16.2	46	10	21.7
Michigan	387	67	17.3	54	15	27.8	215	63	29.3	18	3	16.7
Minnesota	98	27	27.6	38	9	23.7	106	23	21.7	32	4	12.5
Mississippi	364	86	23.6	19	7	36.8	87	25	28.7	7	2	28.6
Missouri	235	36	15.3	46	4	8.7	185	43	23.2	22	6	27.3
Montana	0	0	0.0	3	0	0.0	20	4	20.0	2	0	0.0
Nebraska	21	7	33.3	16	6	37.5	36	6	16.7	8	2	25.0
Nevada	172	30	17.4	152	35	23.0	157	43	27.4	31	6	19.4
New Hampshire	4	0	0.0	5	2	40.0	17	2	11.8	5	0	0.0
New Jersey	426	86	20.2	389	90	23.1	185	41	22.2	57	17	29.8
New Mexico	9	0	0.0	84	15	17.9	34	6	17.6	29	3	10.3
New York	951	182	19.1	864	190	22.0	341	72	21.1	174	52	29.9
North Carolina	843	132	15.7	160	27	16.9	299	52	17.4	63	2	3.2
North Dakota	19	4	21.1	4	0	0.0	17	5	29.4	0	0	0.0
Ohio	468	95	20.3	60	17	28.3	405	91	22.5	47	6	12.8
Oklahoma	91	15	16.5	46	9	19.6	125	21	16.8	58	5	8.6
Oregon	22	5	22.7	36	7	19.4	128	33	25.8	13	4	30.8
Pennsylvania	472	85	18.0	180	43	23.9	295	88	29.8	42	12	28.6
Rhode Island	16	3	18.8	16	1	6.3	35	9	25.7	5	1	20.0
South Carolina	455	97	21.3	47	17	36.2	161	48	29.8	17	2	11.8
South Dakota	4	1	25.0	4	1	25.0	12	4	33.3	13	2	15.4
Tennessee	407	60	14.7	75	18	24.0	265	50	18.9	26	6	23.1
Texas	1,280	189	14.8	2,129	491	23.1	698	131	18.8	195	31	15.9
Utah	9	0	0.0	47	10	21.3	67	15	22.4	12	2	16.7
Vermont	2	0	0.0	1	0	0.0	7	1	14.3	1	1	100
Virginia	525	110	21.0	88	15	17.0	177	36	20.3	32	7	21.9
Washington	103	23	22.3	119	26	21.8	213	43	20.2	48	14	29.2
West Virginia	15	3	20.0	3	0	0.0	120	18	15.0	8	2	25.0
Wisconsin	98	21	21.4	35	8	22.9	66	20	30.3	12	3	25.0
Wyoming	0	0	0.0	5	0	0.0	7	1	14.3	1	1	100
Total	15,299	2,949	19.3	10,112	2,155	21.3	9,006	1,895	21.0	1,920	403	21.0

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

Note. 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.

Table 7a. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and selected characteristics, 2015–2019—United States

	2015			2016			2017			2018			2019		
	No.	Rate per		No.	Rate per		No.	Rate per		No.	Rate per		No.	Rate per	
		100,000 pop.	PWDH ^a		100,000 pop.	PWDH ^a		100,000 pop.	PWDH ^a		100,000 pop.	PWDH ^a		100,000 pop.	PWDH ^a
Gender															
Male	11,847	—	16.4	12,240	—	16.4	12,256	—	16.0	12,068	—	15.4	11,699	—	14.6
Female	3,890	—	16.9	4,024	—	17.1	3,991	—	16.7	3,985	—	16.4	3,624	—	14.7
Transgender male-to-female ^b	108	—	11.9	121	—	12.6	104	—	10.3	119	—	11.2	134	—	12.0
Transgender female-to-male ^b	5	—	15.5	2	—	5.9	4	—	10.8	3	—	7.1	5	—	10.8
Additional gender identity ^c	1	—	7.4	0	—	0.0	1	—	6.1	1	—	5.5	1	—	5.0
Age at death (yr)															
13–24	161	0.3	3.4	167	0.3	3.7	150	0.3	3.4	130	0.3	3.1	128	0.3	3.2
25–34	990	2.2	6.7	1,106	2.5	7.1	1,047	2.3	6.5	1,027	2.3	6.2	1,039	2.3	6.0
35–44	2,041	5.0	10.2	1,966	4.9	10.0	1,835	4.5	9.4	1,764	4.3	9.0	1,681	4.0	8.5
45–54	4,937	11.5	15.6	4,649	10.9	14.8	4,469	10.6	14.5	4,180	10.1	14.0	3,462	8.5	12.1
≥55	7,722	8.7	30.5	8,499	9.4	30.4	8,855	9.6	29.0	9,075	9.6	27.2	9,153	9.5	25.2
Race/ethnicity															
American Indian/Alaska Native	61	3.2	23.2	47	2.4	16.8	46	2.4	15.5	48	2.4	15.5	51	2.6	15.6
Asian ^d	81	0.6	6.7	101	0.7	7.8	88	0.6	6.3	85	0.5	5.8	95	0.6	6.1
Black/African American	7,126	21.8	18.2	7,244	22.0	18.1	7,196	21.6	17.5	6,977	20.7	16.6	6,633	19.5	15.5
Hispanic/Latino ^e	2,518	5.9	11.6	2,628	6.0	11.6	2,688	6.0	11.4	2,821	6.1	11.6	2,702	5.7	10.7
Native Hawaiian/other Pacific Islander	7	1.6	9.4	14	3.0	18.1	9	1.9	11.1	13	2.7	15.0	14	2.9	15.2
White	5,021	2.9	17.3	5,320	3.1	18.0	5,253	3.1	17.5	5,147	3.0	16.9	4,922	2.9	16.0
Multiracial	1,031	24.3	20.9	1,030	23.4	20.7	1,074	23.6	21.5	1,085	23.1	21.7	1,042	21.5	20.9
Transmission category^f															
Male adult or adolescent^g															
Male-to-male sexual contact	6,566	—	12.6	6,897	—	12.8	7,005	—	12.5	6,876	—	11.9	6,855	—	11.5
Injection drug use	2,288	—	31.5	2,272	—	31.7	2,168	—	30.6	2,187	—	31.1	1,965	—	28.2
Male-to-male sexual contact and injection drug use	1,400	—	24.3	1,397	—	24.2	1,370	—	23.7	1,427	—	24.6	1,304	—	22.5
Heterosexual contact ^h	1,597	—	20.9	1,692	—	21.7	1,711	—	21.5	1,589	—	19.7	1,614	—	19.7
Other ⁱ	104	—	14.1	102	—	13.7	107	—	14.1	108	—	14.1	97	—	12.5
Subtotal	11,956	9.1	16.3	12,361	9.4	16.4	12,361	9.3	16.0	12,187	9.1	15.4	11,834	8.8	14.6
Female adult or adolescent^g															
Injection drug use	1,353	—	26.6	1,384	—	27.4	1,373	—	27.3	1,319	—	26.4	1,221	—	24.5
Heterosexual contact ^h	2,468	—	14.2	2,567	—	14.4	2,551	—	14.0	2,607	—	14.0	2,352	—	12.4
Other ⁱ	74	—	11.1	74	—	10.8	71	—	10.1	63	—	8.8	56	—	7.6
Subtotal	3,895	2.8	16.9	4,026	2.9	17.1	3,995	2.9	16.7	3,989	2.8	16.4	3,629	2.6	14.7
Region of residence															
Northeast	3,612	7.6	15.7	3,711	7.8	15.9	3,699	7.7	15.7	3,534	7.4	14.9	3,450	7.2	14.4
Midwest	1,821	3.2	16.0	1,857	3.3	15.8	1,910	3.3	15.8	2,000	3.5	16.1	1,849	3.2	14.6
South	7,810	7.8	18.0	8,055	7.9	18.1	8,008	7.8	17.5	7,848	7.5	16.7	7,517	7.1	15.6
West	2,608	4.1	13.9	2,764	4.3	14.3	2,739	4.3	13.7	2,794	4.3	13.6	2,647	4.0	12.6
Population area of residence															
Metropolitan statistical areas (pop. ≥500,000)	9,823	5.4	12.6	10,274	5.6	12.9	10,385	5.6	12.6	10,114	5.4	12.1	10,776	5.7	12.5
Metropolitan areas (pop. 50,000–499,999)	1,498	3.2	16.0	1,362	2.9	14.1	1,530	3.2	15.3	1,491	3.1	14.5	1,596	3.3	14.9
Nonmetropolitan areas (pop. <50,000)	887	2.3	16.9	895	2.3	16.6	952	2.5	17.1	860	2.2	15.1	927	2.4	15.8
Total^j	15,851	5.9	16.4	16,387	6.1	16.6	16,356	6.0	16.1	16,176	5.9	15.6	15,463	5.6	14.6

Abbreviations: pop, population; PWDH, persons with diagnosed HIV infection; CDC, 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 the year 2019 are preliminary and based on death data received by CDC as of December 2020. Trends through 2019 should be interpreted with caution.

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

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

^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 Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

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

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

ⁱ Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was not reported or not identified.

^j Includes persons of unknown race/ethnicity.

Table 7b. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and selected characteristics, 2015–2019—United States and 6 dependent areas

	2015			2016			2017			2018			2019		
	No.	Rate per		No.	Rate per		No.	Rate per		No.	Rate per		No.	Rate per	
		100,000 pop.	PWDH ^a		100,000 pop.	PWDH ^a		100,000 pop.	PWDH ^a		100,000 pop.	PWDH ^a		100,000 pop.	PWDH ^a
Gender															
Male	12,149	—	16.5	12,564	—	16.6	12,556	—	16.2	12,361	—	15.6	11,968	—	14.7
Female	3,997	—	16.9	4,119	—	17.2	4,099	—	16.8	4,061	—	16.4	3,705	—	14.7
Transgender male-to-female ^b	108	—	11.9	121	—	12.6	106	—	10.5	120	—	11.3	136	—	12.2
Transgender female-to-male ^b	5	—	15.5	2	—	5.9	4	—	10.7	3	—	7.1	5	—	10.7
Additional gender identity ^c	1	—	7.4	0	—	0.0	1	—	6.1	1	—	5.5	1	—	5.0
Age at death (yr)															
13–24	163	0.3	3.4	172	0.3	3.8	152	0.3	3.5	134	0.3	3.2	130	0.3	3.2
25–34	1,016	2.3	6.8	1,121	2.5	7.2	1,068	2.3	6.6	1,047	2.3	6.2	1,058	2.3	6.1
35–44	2,097	5.1	10.3	2,029	5.0	10.2	1,885	4.6	9.5	1,814	4.4	9.2	1,735	4.1	8.7
45–54	5,086	11.7	15.8	4,772	11.0	14.9	4,599	10.8	14.7	4,269	10.2	14.1	3,571	8.6	12.3
≥55	7,898	8.8	30.5	8,712	9.5	30.6	9,062	9.7	29.0	9,282	9.7	27.2	9,321	9.5	25.2
Race/ethnicity															
American Indian/Alaska Native	61	—	23.1	47	—	16.8	46	—	15.5	48	—	15.5	51	—	15.6
Asian ^d	82	—	6.8	101	—	7.8	88	—	6.3	85	—	5.7	95	—	6.1
Black/African American	7,132	—	18.2	7,253	—	18.1	7,201	—	17.5	6,977	—	16.6	6,634	—	15.5
Hispanic/Latino ^e	2,918	—	12.5	3,034	—	12.5	3,092	—	12.3	3,185	—	12.3	3,047	—	11.4
Native Hawaiian/other Pacific Islander	8	—	10.4	16	—	19.8	9	—	10.6	16	—	17.7	17	—	17.7
White	5,021	—	17.3	5,321	—	18.0	5,254	—	17.5	5,148	—	16.9	4,923	—	16.0
Multiracial	1,032	—	20.9	1,031	—	20.7	1,074	—	21.5	1,087	—	21.8	1,044	—	20.9
Transmission category^f															
Male adult or adolescent^g															
Male-to-male sexual contact	6,645	—	12.7	6,976	—	12.8	7,077	—	12.6	6,957	—	12.0	6,926	—	11.6
Injection drug use	2,421	—	31.6	2,403	—	31.8	2,299	—	30.9	2,309	—	31.3	2,085	—	28.6
Male-to-male sexual contact and injection drug use	1,429	—	24.4	1,428	—	24.3	1,395	—	23.8	1,448	—	24.7	1,327	—	22.6
Heterosexual contact ^h	1,656	—	21.0	1,769	—	21.9	1,784	—	21.8	1,651	—	19.8	1,668	—	19.8
Other ⁱ	107	—	14.1	108	—	14.2	108	—	13.9	115	—	14.7	99	—	12.5
Subtotal	12,258	9.3	16.4	12,685	9.5	16.6	12,663	9.4	16.1	12,481	9.2	15.5	12,105	8.9	14.7
Female adult or adolescent^g															
Injection drug use	1,377	—	26.5	1,419	—	27.5	1,408	—	27.4	1,352	—	26.5	1,251	—	24.6
Heterosexual contact ^h	2,549	—	14.4	2,624	—	14.4	2,623	—	14.1	2,648	—	14.0	2,401	—	12.4
Other ⁱ	76	—	11.0	77	—	11.0	72	—	10.0	65	—	8.9	58	—	7.8
Subtotal	4,002	2.9	16.9	4,121	2.9	17.1	4,103	2.9	16.8	4,065	2.9	16.4	3,710	2.6	14.7
Region of residence															
Northeast	3,612	7.6	15.7	3,711	7.8	15.9	3,699	7.7	15.7	3,534	7.4	14.9	3,450	7.2	14.4
Midwest	1,821	3.2	16.0	1,857	3.3	15.8	1,910	3.3	15.8	2,000	3.5	16.1	1,849	3.2	14.6
South	7,810	7.8	18.0	8,055	7.9	18.1	8,008	7.8	17.5	7,848	7.5	16.7	7,517	7.1	15.6
West	2,608	4.1	13.9	2,764	4.3	14.3	2,739	4.3	13.7	2,794	4.3	13.6	2,647	4.0	12.6
U.S. dependent areas	409	12.4	23.7	419	12.9	24.3	410	12.8	24.1	370	11.9	22.0	352	11.3	20.9
Total^j	16,260	6.0	16.6	16,806	6.1	16.7	16,766	6.1	16.3	16,546	6.0	15.7	15,815	5.7	14.7

Abbreviations: pop, population; PWDH, persons with diagnosed HIV infection; CDC, 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 the year 2019 are preliminary and based on death data received by CDC as of December 2020. Trends through 2019 should be interpreted with caution.

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

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

^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 Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

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

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

ⁱ Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was not reported or not identified.

^j Includes persons of unknown race/ethnicity.

Table 7c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2015–2019—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
				2015	
Alabama	278	6.8	6.7	22.5	21.3
Alaska	12	2.0	2.1	18.2	17.5
Arizona	214	3.8	3.7	14.3	12.6
Arkansas	111	4.5	4.6	21.2	19.4
California	1,703	5.3	5.1	13.9	11.9
Colorado	123	2.7	2.7	11.0	8.2
Connecticut	183	6.0	5.2	17.7	13.9
Delaware	70	8.8	7.8	22.2	16.8
District of Columbia	255	43.8	47.5	17.7	15.4
Florida	1,977	11.4	10.6	18.6	16.2
Georgia	853	10.2	10.0	17.1	16.7
Hawaii	32	2.7	2.4	12.9	9.5
Idaho	14	1.0	1.1	13.7	10.3
Illinois	548	5.1	4.8	15.9	14.4
Indiana	179	3.3	3.2	16.9	17.3
Iowa	36	1.4	1.2	14.8	13.8
Kansas	51	2.1	2.0	17.9	16.9
Kentucky	127	3.4	3.4	19.0	17.5
Louisiana	419	10.9	10.9	21.5	20.9
Maine	19	1.7	1.4	13.2	8.2
Maryland	546	10.9	10.0	16.6	13.8
Massachusetts	300	5.2	4.7	15.1	11.8
Michigan	301	3.6	3.3	20.5	19.7
Minnesota	99	2.2	2.0	12.8	13.2
Mississippi	212	8.6	8.6	23.0	22.9
Missouri	172	3.4	3.3	14.5	13.8
Montana	13	1.5	1.4	22.5	19.7
Nebraska	28	1.8	1.9	13.9	13.4
Nevada	128	5.4	5.2	15.0	14.3
New Hampshire	29	2.5	2.2	24.9	19.3
New Jersey	638	8.5	7.7	18.3	14.9
New Mexico	75	4.3	4.3	23.0	20.3
New York	1,814	10.9	9.9	14.5	11.6
North Carolina	561	6.7	6.3	19.0	16.7
North Dakota	8	1.3	1.6	23.9	25.4
Ohio	308	3.2	3.0	15.0	13.6
Oklahoma	140	4.4	4.4	24.2	22.1
Oregon	111	3.3	3.1	16.7	13.3
Pennsylvania	597	5.5	5.0	17.6	14.5
Rhode Island	27	3.0	2.6	11.5	10.0
South Carolina	296	7.2	6.9	18.4	17.0
South Dakota	7	1.0	0.9	13.2	13.4
Tennessee	341	6.2	6.2	20.5	19.1
Texas	1,313	5.9	6.0	15.8	15.3
Utah	31	1.3	1.5	11.7	9.8
Vermont	5	0.9	0.7	7.8	5.3
Virginia	280	4.0	3.8	13.1	11.1
Washington	148	2.5	2.3	11.9	10.9
West Virginia	31	2.0	1.7	18.0	16.0
Wisconsin	84	1.7	1.6	14.3	12.6
Wyoming	4	0.8	0.8	13.9	11.0
Subtotal	15,851	5.9	5.6	16.4	14.4
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	2	1.6	1.8	23.0	14.0
Northern Mariana Islands	1	2.5	3.7	90.9	33.3
Puerto Rico	397	13.3	13.0	23.9	19.2
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	9	10.2	9.8	16.1	11.3
Subtotal	409	12.4	12.1	23.7	19.0
Total	16,260	6.0	5.7	16.6	14.5

Table 7c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2015–2019—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
2016					
Alabama	258	6.3	6.0	20.2	19.3
Alaska	12	2.0	1.9	17.2	16.3
Arizona	244	4.2	4.1	15.7	13.5
Arkansas	98	3.9	3.9	17.9	16.1
California	1,776	5.4	5.2	14.0	11.8
Colorado	127	2.7	2.7	10.6	8.4
Connecticut	199	6.5	5.7	19.3	13.8
Delaware	56	7.0	6.1	17.6	16.6
District of Columbia	243	41.2	44.7	16.7	14.0
Florida	2,120	12.0	10.9	19.5	16.8
Georgia	848	10.0	9.7	16.4	15.7
Hawaii	39	3.2	3.0	15.8	11.3
Idaho	12	0.9	0.8	11.1	10.2
Illinois	530	4.9	4.7	15.1	13.8
Indiana	200	3.6	3.6	18.3	16.9
Iowa	33	1.3	1.2	12.8	11.0
Kansas	50	2.1	2.1	16.9	14.5
Kentucky	122	3.3	3.2	17.6	15.7
Louisiana	417	10.8	10.8	20.6	19.3
Maine	23	2.0	1.8	14.9	10.1
Maryland	651	12.9	11.8	19.9	17.0
Massachusetts	292	5.0	4.4	14.4	10.5
Michigan	287	3.4	3.2	18.5	17.3
Minnesota	74	1.6	1.5	9.2	9.1
Mississippi	209	8.5	8.2	22.3	21.5
Missouri	196	3.8	3.6	16.2	14.7
Montana	17	1.9	2.0	28.6	20.4
Nebraska	29	1.9	1.8	14.0	13.8
Nevada	150	6.2	5.9	16.6	15.4
New Hampshire	20	1.7	1.8	17.1	13.8
New Jersey	650	8.7	7.7	18.7	14.6
New Mexico	48	2.8	2.5	14.4	12.4
New York	1,866	11.2	10.1	14.7	11.8
North Carolina	523	6.1	5.8	17.2	15.7
North Dakota	5	0.8	0.9	13.4	9.0
Ohio	354	3.6	3.5	16.5	14.8
Oklahoma	118	3.7	3.5	19.9	18.2
Oregon	106	3.1	2.9	15.6	13.0
Pennsylvania	611	5.6	5.1	17.0	14.3
Rhode Island	39	4.3	3.7	16.0	11.8
South Carolina	342	8.2	7.6	20.7	18.3
South Dakota	11	1.6	1.5	20.1	19.4
Tennessee	330	5.9	5.6	20.0	19.0
Texas	1,360	6.0	6.1	15.8	15.5
Utah	49	2.1	2.3	17.9	17.1
Vermont	11	2.0	1.5	16.6	10.6
Virginia	319	4.5	4.2	14.6	12.7
Washington	179	2.9	2.7	13.9	12.9
West Virginia	41	2.6	2.4	23.0	21.5
Wisconsin	88	1.8	1.7	14.7	12.0
Wyoming	5	1.0	1.1	16.0	12.1
Subtotal	16,387	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	32.6	32.2
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	405	13.8	13.0	24.4	19.7
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	11	12.5	10.2	19.7	48.2
Subtotal	419	12.9	12.2	24.3	20.2
Total	16,806	6.1	5.8	16.7	14.5

Table 7c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2015–2019—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	262	6.4	6.3	19.7	18.1
Alaska	7	1.2	1.2	9.7	8.5
Arizona	248	4.2	4.0	15.4	13.6
Arkansas	106	4.2	4.1	18.7	16.9
California	1,725	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	237	39.7	41.9	16.4	13.4
Florida	2,043	11.4	10.1	18.4	14.9
Georgia	842	9.8	9.4	15.7	14.8
Hawaii	37	3.1	2.9	15.0	15.4
Idaho	20	1.4	1.4	17.5	13.7
Illinois	498	4.6	4.3	14.0	12.8
Indiana	214	3.9	3.7	19.0	17.3
Iowa	44	1.7	1.7	16.3	13.2
Kansas	47	2.0	1.9	15.5	14.4
Kentucky	139	3.7	3.5	19.3	16.5
Louisiana	411	10.6	10.5	19.9	18.6
Maine	35	3.0	2.5	21.9	15.6
Maryland	600	11.9	10.8	18.1	14.8
Massachusetts	308	5.2	4.6	14.9	11.7
Michigan	276	3.3	3.1	17.3	15.8
Minnesota	91	2.0	1.9	10.9	9.3
Mississippi	220	8.9	8.8	23.1	21.3
Missouri	214	4.2	4.1	17.2	14.7
Montana	15	1.7	1.7	23.7	21.0
Nebraska	33	2.1	2.0	15.4	14.5
Nevada	175	7.1	6.6	18.0	16.3
New Hampshire	21	1.8	1.6	17.5	13.8
New Jersey	644	8.6	7.5	18.3	13.8
New Mexico	62	3.6	3.3	17.9	13.4
New York	1,796	10.8	9.6	14.1	10.7
North Carolina	554	6.4	5.9	17.7	15.4
North Dakota	3	0.5	0.4	7.3	8.9
Ohio	380	3.9	3.7	17.1	15.6
Oklahoma	108	3.3	3.4	17.7	16.8
Oregon	116	3.3	3.0	16.6	12.5
Pennsylvania	650	6.0	5.4	18.1	14.6
Rhode Island	34	3.7	3.3	13.2	9.8
South Carolina	339	8.0	7.3	20.0	17.5
South Dakota	9	1.3	1.3	15.4	12.4
Tennessee	335	5.9	5.7	19.8	18.5
Texas	1,418	6.2	6.2	15.8	15.1
Utah	22	0.9	1.0	8.0	8.4
Vermont	12	2.2	1.9	17.1	11.4
Virginia	296	4.2	3.8	13.1	10.7
Washington	175	2.8	2.6	13.1	10.4
West Virginia	31	2.0	1.8	17.0	13.8
Wisconsin	101	2.1	1.9	16.2	12.8
Wyoming	5	1.0	0.9	15.2	25.3
Subtotal	16,356	6.0	5.6	16.1	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	404	14.0	13.1	24.7	19.3
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	6	6.8	6.5	11.1	8.4
Subtotal	410	12.8	12.0	24.1	18.8
Total	16,766	6.1	5.7	16.3	13.8

Table 7c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2015–2019—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	15.2
Alaska	9	1.5	1.4	12.6	9.3
Arizona	249	4.2	3.9	14.9	12.5
Arkansas	84	3.4	3.4	14.5	12.9
California	1,734	5.3	4.9	13.1	10.6
Colorado	142	3.0	2.9	11.1	8.4
Connecticut	183	6.0	5.0	17.2	11.7
Delaware	68	8.3	7.2	20.2	14.9
District of Columbia	200	33.3	36.4	14.0	11.4
Florida	1,934	10.6	9.4	17.1	13.6
Georgia	849	9.7	9.4	15.3	14.0
Hawaii	36	3.0	2.6	15.0	10.2
Idaho	15	1.0	1.1	12.6	8.7
Illinois	551	5.2	4.8	15.2	13.4
Indiana	197	3.5	3.4	17.0	15.0
Iowa	51	1.9	1.8	18.1	14.4
Kansas	48	2.0	1.9	15.4	14.0
Kentucky	136	3.6	3.5	18.2	15.8
Louisiana	427	11.1	10.8	20.1	18.1
Maine	20	1.7	1.5	12.3	8.3
Maryland	631	12.4	11.0	18.7	15.1
Massachusetts	304	5.1	4.5	14.5	10.8
Michigan	313	3.7	3.3	19.2	17.2
Minnesota	85	1.8	1.7	9.9	7.7
Mississippi	229	9.2	9.2	23.5	21.0
Missouri	238	4.6	4.3	18.6	15.8
Montana	13	1.5	1.4	19.9	16.2
Nebraska	31	2.0	1.8	14.2	12.8
Nevada	146	5.8	5.4	14.2	12.3
New Hampshire	18	1.5	1.4	14.2	15.3
New Jersey	640	8.5	7.4	18.1	13.7
New Mexico	74	4.2	4.1	20.2	15.9
New York	1,743	10.5	9.3	13.6	10.1
North Carolina	532	6.1	5.5	16.5	13.8
North Dakota	8	1.3	1.3	17.5	24.2
Ohio	373	3.8	3.6	16.4	14.1
Oklahoma	116	3.6	3.4	18.5	17.0
Oregon	105	3.0	2.7	14.7	12.5
Pennsylvania	574	5.3	4.7	15.7	12.5
Rhode Island	41	4.5	4.0	15.6	10.9
South Carolina	319	7.4	7.0	18.3	15.5
South Dakota	13	1.8	1.9	20.8	16.2
Tennessee	360	6.3	6.0	20.5	18.3
Texas	1,374	5.9	5.9	14.8	13.9
Utah	46	1.9	2.1	15.4	13.6
Vermont	11	2.0	1.5	15.3	9.3
Virginia	308	4.3	4.0	13.3	11.3
Washington	218	3.5	3.2	15.8	12.2
West Virginia	47	3.0	2.8	24.3	21.0
Wisconsin	92	1.9	1.7	14.4	12.2
Wyoming	7	1.5	1.4	19.8	15.6
Subtotal	16,176	5.9	5.5	15.6	12.9
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	4	3.1	3.7	38.1	37.7
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	362	12.9	11.8	22.4	18.8
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	4	4.5	3.1	7.3	4.8
Subtotal	370	11.9	10.9	22.0	18.5
Total	16,546	6.0	5.5	15.7	13.0

Table 7c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2015–2019—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	268	6.5	6.1	19.0	16.6
Alaska	11	1.8	1.9	15.0	11.8
Arizona	228	3.7	3.6	13.0	11.1
Arkansas	97	3.9	3.7	16.1	15.3
California	1,747	5.3	4.9	13.0	10.7
Colorado	121	2.5	2.4	9.2	7.4
Connecticut	202	6.6	5.4	18.7	12.6
Delaware	67	8.1	7.2	19.4	14.7
District of Columbia	184	30.5	32.8	12.9	9.9
Florida	1,933	10.5	9.0	16.8	13.3
Georgia	806	9.1	8.7	14.1	12.8
Hawaii	43	3.6	3.0	17.7	12.2
Idaho	11	0.7	0.7	8.8	6.3
Illinois	530	5.0	4.5	14.6	12.6
Indiana	141	2.5	2.4	12.0	10.1
Iowa	58	2.2	1.9	19.7	16.1
Kansas ^b	28	1.2	1.1	8.7	8.1
Kentucky	106	2.8	2.6	13.7	12.2
Louisiana	367	9.5	9.4	16.9	15.4
Maine	39	3.3	2.9	23.1	16.2
Maryland	567	11.1	9.9	16.7	13.2
Massachusetts ^b	167	2.8	2.5	7.9	6.4
Michigan	273	3.2	2.9	16.2	14.3
Minnesota	82	1.7	1.6	9.2	8.2
Mississippi ^b	129	5.2	5.0	13.0	11.6
Missouri	227	4.4	4.1	17.4	16.3
Montana	8	0.9	1.0	11.8	8.8
Nebraska	31	1.9	1.9	13.7	10.9
Nevada ^b	87	3.4	3.3	8.0	7.9
New Hampshire	15	1.3	1.2	11.4	7.3
New Jersey	615	8.2	6.9	17.2	12.3
New Mexico	52	3.0	2.7	13.7	10.8
New York	1,787	10.8	9.3	13.9	10.2
North Carolina	474	5.4	4.9	14.2	11.6
North Dakota ^b	2	0.3	0.4	4.0	2.8
Ohio	384	3.9	3.7	16.3	14.5
Oklahoma	131	4.0	3.8	20.2	18.1
Oregon	122	3.4	3.1	16.5	12.8
Pennsylvania	577	5.3	4.6	15.6	12.2
Rhode Island	40	4.4	3.5	14.9	10.9
South Carolina	299	6.9	6.1	16.7	14.2
South Dakota	9	1.2	1.4	13.7	9.9
Tennessee	307	5.3	5.1	17.1	14.6
Texas	1,434	6.1	6.0	14.8	13.6
Utah	35	1.4	1.4	11.2	9.3
Vermont ^b	8	1.5	1.4	11.0	7.4
Virginia	303	4.2	3.8	12.6	10.2
Washington	177	2.8	2.5	12.5	10.2
West Virginia	45	2.9	2.7	22.2	17.2
Wisconsin	84	1.7	1.5	12.8	10.2
Wyoming	5	1.0	0.8	14.3	10.6
Subtotal	15,463	5.6	5.1	14.6	12.0
U.S. dependent areas					
American Samoa	2	5.3	6.4	666.7	365.5
Guam	4	3.1	3.1	36.0	26.3
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	346	12.3	11.7	21.4	17.1
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands ^b	0	0.0	0.0	0.0	0.0
Subtotal	352	11.3	10.8	20.9	16.8
Total	15,815	5.7	5.2	14.7	12.1

Abbreviations: pop, population; PWDH, persons with diagnosed HIV infection; CDC, 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 the year 2019 are preliminary and based on death data received by CDC as of December 2020. Trends through 2019 should be interpreted with caution.

^a Denominator was calculated as (No. PLWDH 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 2019.

Table 7d. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and selected characteristics, 2015–2019—United States

	2015			2016			2017			2018			2019		
	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	9,607	—	24.3	9,717	—	24.3	9,663	—	23.9	9,418	—	23.1	9,023	—	22.0
Female	3,112	—	25.0	3,165	—	25.1	3,089	—	24.3	3,112	—	24.3	2,775	—	21.5
Transgender male-to-female ^b	88	—	19.8	100	—	21.8	74	—	15.7	90	—	18.4	97	—	19.3
Transgender female-to-male ^b	2	—	13.6	1	—	6.6	3	—	19.0	1	—	6.1	3	—	17.5
Additional gender identity ^c	1	—	18.2	0	—	0.0	1	—	15.4	1	—	14.7	1	—	14.9
Age at death (yr)															
13–24	115	0.2	11.0	95	0.2	10.2	88	0.2	10.6	77	0.2	10.5	69	0.1	10.8
25–34	755	1.7	15.1	774	1.7	15.5	709	1.6	14.2	718	1.6	14.5	686	1.5	13.9
35–44	1,637	4.0	16.2	1,539	3.8	16.1	1,402	3.4	15.3	1,334	3.2	15.0	1,223	2.9	14.0
45–54	4,128	9.6	21.1	3,825	9.0	19.9	3,615	8.6	19.5	3,368	8.1	19.1	2,750	6.7	16.6
≥55	6,175	7.0	36.8	6,750	7.5	36.6	7,016	7.6	34.9	7,125	7.5	32.7	7,171	7.4	30.5
Race/ethnicity															
American Indian/Alaska Native	50	2.6	36.3	37	1.9	26.1	36	1.8	24.7	34	1.7	22.9	41	2.1	27.1
Asian ^d	64	0.4	10.9	82	0.5	13.4	67	0.4	10.5	64	0.4	9.6	72	0.4	10.5
Black/African American	5,694	17.4	27.0	5,737	17.4	26.8	5,642	16.9	26.1	5,445	16.2	24.9	5,099	15.0	23.2
Hispanic/Latino ^e	2,135	5.0	17.4	2,171	4.9	17.3	2,232	5.0	17.5	2,295	5.0	17.7	2,182	4.6	16.6
Native Hawaiian/other Pacific Islander	5	1.1	13.2	10	2.2	25.7	8	1.7	20.0	9	1.9	21.8	12	2.4	28.2
White	3,972	2.3	25.7	4,086	2.4	26.4	3,950	2.3	25.5	3,876	2.3	25.0	3,637	2.1	23.5
Multiracial	890	21.0	30.5	860	19.6	29.5	895	19.7	30.7	899	19.1	31.1	855	17.6	29.8
Transmission category^f															
Male adult or adolescent^g															
Male-to-male sexual contact	5,249	—	19.9	5,373	—	20.0	5,433	—	19.9	5,245	—	19.0	5,180	—	18.5
Injection drug use	1,895	—	38.5	1,844	—	38.3	1,759	—	37.2	1,731	—	37.2	1,551	—	34.0
Male-to-male sexual contact and injection drug use	1,190	—	32.6	1,161	—	32.1	1,132	—	31.5	1,203	—	33.9	1,052	—	30.0
Heterosexual contact ^h	1,273	—	27.1	1,355	—	28.3	1,331	—	27.5	1,236	—	25.3	1,254	—	25.4
Other ⁱ	89	—	19.6	84	—	18.6	84	—	18.6	92	—	20.2	83	—	18.3
Subtotal	9,696	7.4	24.2	9,817	7.4	24.2	9,738	7.3	23.8	9,508	7.1	23.1	9,121	6.8	22.0
Female adult or adolescent^g															
Injection drug use	1,104	—	35.1	1,116	—	35.9	1,094	—	35.5	1,043	—	34.3	944	—	31.3
Heterosexual contact ^h	1,942	—	21.7	1,982	—	21.8	1,935	—	20.9	2,019	—	21.5	1,784	—	18.8
Other ⁱ	68	—	17.7	67	—	17.1	63	—	15.9	52	—	12.8	50	—	12.3
Subtotal	3,114	2.3	24.9	3,166	2.3	25.1	3,092	2.2	24.3	3,114	2.2	24.3	2,778	2.0	21.5
Region of residence															
Northeast	2,921	6.1	21.9	2,924	6.1	21.8	2,880	6.0	21.6	2,757	5.8	20.7	2,718	5.7	20.5
Midwest	1,438	2.5	24.6	1,446	2.5	24.2	1,444	2.5	23.9	1,526	2.7	24.9	1,367	2.4	22.1
South	6,296	6.3	27.4	6,373	6.3	27.5	6,268	6.1	26.6	6,070	5.8	25.4	5,740	5.5	23.7
West	2,155	3.4	20.8	2,240	3.5	21.3	2,238	3.5	21.0	2,269	3.5	21.2	2,074	3.2	19.2
Population area of residence															
Metropolitan statistical areas (pop. ≥500,000)	8,122	4.5	19.2	8,311	4.5	19.4	8,304	4.5	19.1	8,047	4.3	18.4	8,404	4.5	19.1
Metropolitan areas (pop. 50,000–499,999)	1,218	2.6	24.1	1,096	2.3	21.4	1,192	2.5	22.7	1,177	2.5	22.1	1,212	2.5	22.0
Nonmetropolitan areas (pop. <50,000)	710	1.8	24.6	692	1.8	23.7	756	1.9	25.2	662	1.7	21.9	722	1.9	23.4
Total^j	12,810	4.8	24.4	12,983	4.8	24.4	12,830	4.7	23.9	12,622	4.6	23.4	11,899	4.3	21.9

Abbreviations: pop, population; PWA, persons with diagnosed HIV infection ever classified as stage 3 (AIDS); CDC, 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 the year 2019 are preliminary and based on death data received by CDC as of December 2020. Trends through 2019 should be interpreted with caution.

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

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

^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 Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

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

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

ⁱ Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was not reported or not identified.

^j Includes persons of unknown race/ethnicity.

Table 7e. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and selected characteristics, 2015–2019—United States and 6 dependent areas

	2015			2016			2017			2018			2019		
	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	9,835	—	24.4	9,947	—	24.4	9,868	—	24.0	9,616	—	23.3	9,208	—	22.1
Female	3,189	—	25.0	3,228	—	25.1	3,162	—	24.4	3,159	—	24.1	2,831	—	21.5
Transgender male-to-female ^b	88	—	19.7	100	—	21.7	76	—	16.1	91	—	18.6	99	—	19.7
Transgender female-to-male ^b	2	—	13.6	1	—	6.6	3	—	19.0	1	—	6.1	3	—	17.5
Additional gender identity ^c	1	—	18.2	0	—	0.0	1	—	15.4	1	—	14.7	1	—	14.9
Age at death (yr)															
13–24	117	0.2	11.1	100	0.2	10.6	90	0.2	10.7	81	0.2	10.9	70	0.1	10.8
25–34	775	1.7	15.3	782	1.7	15.5	723	1.6	14.3	731	1.6	14.6	696	1.5	14.0
35–44	1,675	4.1	16.3	1,581	3.9	16.3	1,437	3.5	15.4	1,368	3.3	15.1	1,250	3.0	14.1
45–54	4,242	9.7	21.3	3,915	9.1	20.0	3,702	8.7	19.6	3,427	8.1	19.1	2,832	6.8	16.8
≥55	6,306	7.0	36.8	6,898	7.5	36.7	7,158	7.6	34.9	7,261	7.6	32.7	7,294	7.5	30.4
Race/ethnicity															
American Indian/Alaska Native	50	—	36.3	37	—	26.1	36	—	24.7	34	—	22.9	41	—	27.1
Asian ^d	64	—	10.9	82	—	13.4	67	—	10.5	64	—	9.6	72	—	10.5
Black/African American	5,698	—	27.0	5,746	—	26.8	5,645	—	26.1	5,445	—	24.9	5,099	—	23.1
Hispanic/Latino ^e	2,434	—	18.4	2,451	—	18.2	2,509	—	18.4	2,537	—	18.3	2,419	—	17.2
Native Hawaiian/other Pacific Islander	6	—	15.3	12	—	29.6	8	—	19.0	11	—	25.3	15	—	33.6
White	3,972	—	25.7	4,087	—	26.4	3,950	—	25.5	3,877	—	25.0	3,638	—	23.5
Multiracial	891	—	30.5	861	—	29.5	895	—	30.7	900	—	31.1	857	—	29.9
Transmission category^f															
Male adult or adolescent^g															
Male-to-male sexual contact	5,310	—	20.0	5,428	—	20.1	5,483	—	20.0	5,297	—	19.0	5,236	—	18.5
Injection drug use	1,993	—	38.7	1,937	—	38.3	1,848	—	37.3	1,814	—	37.3	1,631	—	34.2
Male-to-male sexual contact and injection drug use	1,216	—	32.8	1,190	—	32.4	1,151	—	31.6	1,220	—	33.9	1,068	—	30.0
Heterosexual contact ^h	1,315	—	27.2	1,404	—	28.5	1,378	—	27.7	1,277	—	25.4	1,288	—	25.4
Other ⁱ	90	—	19.4	88	—	19.1	85	—	18.4	98	—	21.1	85	—	18.4
Subtotal	9,924	7.5	24.4	10,047	7.5	24.4	9,945	7.4	24.0	9,707	7.2	23.2	9,308	6.8	22.1
Female adult or adolescent^g															
Injection drug use	1,119	—	34.8	1,141	—	35.9	1,114	—	35.5	1,065	—	34.3	964	—	31.4
Heterosexual contact ^h	2,003	—	21.9	2,019	—	21.7	1,987	—	21.0	2,043	—	21.3	1,819	—	18.8
Other ⁱ	69	—	17.6	69	—	17.2	64	—	15.8	54	—	13.0	51	—	12.4
Subtotal	3,191	2.3	25.0	3,229	2.3	25.1	3,165	2.2	24.3	3,161	2.2	24.1	2,834	2.0	21.5
Region of residence^j															
Northeast	2,921	6.1	21.9	2,924	6.1	21.8	2,880	6.0	21.6	2,757	5.8	20.7	2,718	5.7	20.5
Midwest	1,438	2.5	24.6	1,446	2.5	24.2	1,444	2.5	23.9	1,526	2.7	24.9	1,367	2.4	22.1
South	6,296	6.3	27.4	6,373	6.3	27.5	6,268	6.1	26.6	6,070	5.8	25.4	5,740	5.5	23.7
West	2,155	3.4	20.8	2,240	3.5	21.3	2,238	3.5	21.0	2,269	3.5	21.2	2,074	3.2	19.2
U.S. dependent areas	305	9.3	32.3	293	9.0	31.3	280	8.8	30.5	246	7.9	27.2	243	7.8	27.0
Total^k	13,115	4.8	24.5	13,276	4.9	24.6	13,110	4.8	24.0	12,868	4.6	23.4	12,142	4.3	21.9

Abbreviations: pop, population; PWA, persons with diagnosed HIV infection ever classified as stage 3 (AIDS); CDC, 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 the year 2019 are preliminary and based on death data received by CDC as of December 2020. Trends through 2019 should be interpreted with caution.

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

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

^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 Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

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

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

ⁱ Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was not reported or not identified.

^j 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.

^k Includes persons of unknown race/ethnicity.

Table 7f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2015–2019—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
	2015				
Alabama	210	5.2	5.2	37.3	33.5
Alaska	9	1.5	1.6	24.3	20.9
Arizona	174	3.1	3.0	23.2	20.7
Arkansas	85	3.4	3.5	34.3	31.9
California	1,417	4.4	4.3	20.3	16.8
Colorado	102	2.2	2.2	20.1	14.6
Connecticut	158	5.2	4.5	24.1	21.8
Delaware	57	7.2	6.4	28.9	20.0
District of Columbia	192	33.0	36.0	24.5	22.5
Florida	1,652	9.6	8.9	27.8	24.7
Georgia	671	8.0	7.9	25.6	23.2
Hawaii	27	2.3	2.1	18.4	13.1
Idaho	7	0.5	0.5	13.5	10.2
Illinois	454	4.2	4.0	25.3	21.1
Indiana	138	2.5	2.5	25.3	28.9
Iowa	29	1.1	1.0	21.1	17.5
Kansas	43	1.8	1.7	28.3	23.3
Kentucky	96	2.6	2.6	27.9	24.4
Louisiana	346	9.0	9.0	33.3	32.7
Maine	15	1.3	1.2	19.9	11.0
Maryland	457	9.1	8.4	25.1	19.6
Massachusetts	227	3.9	3.5	19.8	15.1
Michigan	243	2.9	2.6	31.0	28.3
Minnesota	71	1.6	1.5	19.1	24.6
Mississippi	175	7.1	7.1	38.3	35.5
Missouri	128	2.5	2.4	20.1	18.4
Montana	11	1.3	1.2	32.1	27.4
Nebraska	22	1.4	1.4	20.7	26.5
Nevada	104	4.4	4.2	24.3	25.0
New Hampshire	24	2.1	1.8	38.8	29.0
New Jersey	517	6.9	6.2	27.7	22.8
New Mexico	68	3.9	3.9	36.1	37.3
New York	1,487	8.9	8.1	19.9	15.9
North Carolina	409	4.9	4.6	30.0	24.3
North Dakota	7	1.1	1.3	40.7	38.9
Ohio	231	2.4	2.3	23.3	20.8
Oklahoma	121	3.8	3.9	41.7	39.2
Oregon	88	2.6	2.4	22.8	16.6
Pennsylvania	471	4.3	4.0	24.8	18.5
Rhode Island	19	2.1	1.7	14.0	10.6
South Carolina	237	5.8	5.6	26.7	25.3
South Dakota	6	0.9	0.7	24.3	24.4
Tennessee	252	4.6	4.6	29.8	28.3
Texas	1,085	4.9	5.0	24.5	21.8
Utah	27	1.2	1.3	18.9	13.6
Vermont	3	0.6	0.4	8.6	5.1
Virginia	222	3.2	3.0	21.3	17.6
Washington	120	2.0	1.9	17.2	16.7
West Virginia	29	1.8	1.6	29.4	23.1
Wisconsin	66	1.4	1.3	22.3	19.2
Wyoming	1	0.2	0.2	6.5	2.9
Subtotal	12,810	4.8	4.6	24.4	21.2
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	2	1.6	1.8	62.5	35.3
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	297	10.0	9.7	32.7	29.3
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	6	6.8	6.2	19.4	13.3
Subtotal	305	9.3	9.0	32.3	28.8
Total	13,115	4.8	4.6	24.5	21.3

Table 7f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2015–2019—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
2016					
Alabama	192	4.7	4.5	33.5	31.7
Alaska	7	1.2	1.1	18.1	14.3
Arizona	196	3.4	3.3	25.8	20.3
Arkansas	69	2.8	2.7	27.2	21.5
California	1,463	4.5	4.3	20.7	17.7
Colorado	98	2.1	2.1	18.2	13.8
Connecticut	162	5.3	4.6	25.0	17.3
Delaware	47	5.9	5.1	23.9	27.2
District of Columbia	191	32.4	35.4	24.5	19.7
Florida	1,726	9.8	8.9	28.9	24.6
Georgia	668	7.8	7.7	25.1	22.8
Hawaii	30	2.5	2.3	20.8	14.5
Idaho	8	0.6	0.5	14.5	11.0
Illinois	412	3.8	3.7	23.0	19.7
Indiana	163	3.0	2.9	29.4	25.3
Iowa	28	1.1	1.0	19.4	15.5
Kansas	37	1.5	1.5	23.9	18.1
Kentucky	95	2.6	2.4	27.0	22.7
Louisiana	331	8.6	8.6	31.2	29.5
Maine	16	1.4	1.2	20.3	11.8
Maryland	517	10.3	9.4	29.1	23.6
Massachusetts	218	3.7	3.2	19.1	12.4
Michigan	227	2.7	2.5	27.8	23.9
Minnesota	57	1.2	1.1	15.0	14.8
Mississippi	164	6.6	6.5	35.3	31.0
Missouri	162	3.2	2.9	25.3	21.8
Montana	14	1.6	1.6	40.8	24.9
Nebraska	27	1.7	1.7	25.4	22.6
Nevada	117	4.8	4.6	26.2	26.3
New Hampshire	15	1.3	1.3	24.6	19.2
New Jersey	476	6.4	5.6	26.0	21.3
New Mexico	41	2.4	2.1	21.9	17.6
New York	1,532	9.2	8.3	20.5	16.4
North Carolina	383	4.5	4.2	27.7	25.8
North Dakota	4	0.6	0.7	21.4	12.6
Ohio	254	2.6	2.5	24.5	19.9
Oklahoma	91	2.8	2.7	30.9	25.7
Oregon	85	2.5	2.3	21.8	15.5
Pennsylvania	460	4.2	3.8	22.7	19.2
Rhode Island	34	3.7	3.2	24.5	14.6
South Carolina	278	6.7	6.2	30.8	25.5
South Dakota	6	0.9	0.8	23.6	22.1
Tennessee	246	4.4	4.2	29.4	25.5
Texas	1,094	4.8	4.9	24.4	22.0
Utah	38	1.6	1.8	26.3	20.4
Vermont	11	2.0	1.5	30.4	16.3
Virginia	248	3.5	3.3	23.4	21.4
Washington	139	2.3	2.1	19.8	17.7
West Virginia	33	2.1	1.9	32.5	26.0
Wisconsin	69	1.4	1.3	23.0	17.3
Wyoming	4	0.8	0.9	22.9	12.8
Subtotal	12,983	4.8	4.5	24.4	20.8
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	3	2.4	2.9	83.3	72.8
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	279	9.5	9.0	31.0	27.9
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	11	12.5	10.2	35.6	99.5
Subtotal	293	9.0	8.5	31.3	30.8
Total	13,276	4.9	4.6	24.6	21.0

Table 7f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2015–2019—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	198	4.8	4.8	33.4	28.3
Alaska	4	0.7	0.7	10.2	7.6
Arizona	195	3.3	3.1	25.1	25.6
Arkansas	80	3.2	3.1	30.5	25.7
California	1,434	4.4	4.2	20.2	17.2
Colorado	106	2.3	2.2	19.6	18.7
Connecticut	160	5.2	4.3	24.6	23.0
Delaware	58	7.2	6.0	28.3	18.0
District of Columbia	164	27.5	29.0	21.4	18.4
Florida	1,641	9.1	8.2	27.2	21.9
Georgia	658	7.6	7.4	23.9	21.6
Hawaii	31	2.6	2.5	21.6	36.0
Idaho	15	1.1	1.1	26.3	20.0
Illinois	374	3.5	3.3	20.8	18.8
Indiana	167	3.0	2.9	29.5	26.5
Iowa	31	1.2	1.2	20.5	14.2
Kansas	37	1.5	1.5	23.5	25.8
Kentucky	108	2.9	2.7	30.0	23.0
Louisiana	313	8.1	8.0	29.1	28.6
Maine	24	2.1	1.7	29.6	22.8
Maryland	473	9.3	8.5	26.5	19.5
Massachusetts	233	4.0	3.4	20.3	13.0
Michigan	226	2.7	2.5	27.5	23.3
Minnesota	69	1.5	1.4	17.8	14.4
Mississippi	174	7.0	7.0	36.8	31.8
Missouri	155	3.0	2.9	24.1	18.6
Montana	13	1.5	1.4	37.4	37.6
Nebraska	23	1.5	1.4	21.6	17.3
Nevada	137	5.5	5.1	29.0	29.1
New Hampshire	15	1.3	1.1	24.6	19.2
New Jersey	474	6.3	5.5	25.8	18.6
New Mexico	49	2.8	2.5	25.7	16.6
New York	1,467	8.8	7.8	19.8	14.9
North Carolina	393	4.6	4.2	27.7	23.7
North Dakota	3	0.5	0.4	15.4	14.6
Ohio	279	2.8	2.7	26.3	22.6
Oklahoma	82	2.5	2.6	27.4	25.1
Oregon	86	2.4	2.3	21.7	14.2
Pennsylvania	474	4.3	3.9	24.0	18.8
Rhode Island	28	3.1	2.6	19.4	14.4
South Carolina	264	6.2	5.7	28.7	23.2
South Dakota	3	0.4	0.5	11.5	8.2
Tennessee	259	4.6	4.4	30.5	27.4
Texas	1,150	5.0	5.0	25.1	23.5
Utah	19	0.8	0.8	13.5	9.4
Vermont	5	0.9	0.8	13.4	11.1
Virginia	228	3.2	2.9	20.9	16.7
Washington	145	2.3	2.2	20.2	14.6
West Virginia	25	1.6	1.5	24.7	18.9
Wisconsin	77	1.6	1.5	25.0	18.0
Wyoming	4	0.8	0.7	22.5	51.9
Subtotal	12,830	4.7	4.4	23.9	20.0
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	31.3	28.7
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	4	4.5	4.0	13.6	10.0
Subtotal	280	8.8	8.2	30.5	27.9
Total	13,110	4.8	4.4	24.0	20.1

Table 7f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2015–2019—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	164	4.0	3.8	27.1	23.9
Alaska	8	1.3	1.2	20.8	13.4
Arizona	197	3.3	3.1	24.9	22.4
Arkansas	62	2.5	2.5	23.5	20.6
California	1,413	4.3	4.0	19.8	17.2
Colorado	116	2.4	2.4	20.9	15.1
Connecticut	147	4.8	4.0	22.6	14.0
Delaware	54	6.6	5.6	26.5	18.1
District of Columbia	154	25.6	27.9	20.1	18.9
Florida	1,531	8.4	7.4	25.3	20.0
Georgia	653	7.5	7.2	23.2	19.9
Hawaii	31	2.6	2.2	22.3	15.2
Idaho	13	0.9	0.9	22.3	14.8
Illinois	424	4.0	3.6	23.3	19.8
Indiana	147	2.6	2.6	25.4	23.8
Iowa	35	1.3	1.2	22.8	15.1
Kansas	38	1.6	1.5	23.6	25.8
Kentucky	102	2.7	2.6	28.2	24.9
Louisiana	330	8.5	8.3	30.4	26.0
Maine	16	1.4	1.3	19.3	13.9
Maryland	499	9.8	8.7	27.8	21.6
Massachusetts	231	3.9	3.4	20.2	13.3
Michigan	242	2.9	2.5	29.2	24.8
Minnesota	65	1.4	1.3	16.5	11.8
Mississippi	188	7.6	7.6	39.1	34.3
Missouri	179	3.5	3.2	27.4	23.5
Montana	10	1.1	1.0	28.2	21.1
Nebraska	24	1.5	1.4	22.4	17.3
Nevada	125	4.9	4.6	25.4	22.8
New Hampshire	15	1.3	1.2	24.0	14.2
New Jersey	473	6.3	5.4	25.9	22.0
New Mexico	52	3.0	3.0	26.3	23.4
New York	1,412	8.5	7.5	19.2	13.3
North Carolina	361	4.1	3.8	24.9	19.1
North Dakota	6	1.0	0.9	29.0	25.0
Ohio	289	2.9	2.8	26.7	23.1
Oklahoma	85	2.6	2.5	27.8	32.2
Oregon	88	2.5	2.2	22.0	15.5
Pennsylvania	423	3.9	3.4	21.3	14.8
Rhode Island	32	3.5	3.1	22.0	13.7
South Carolina	242	5.6	5.3	26.0	19.7
South Dakota	11	1.5	1.6	38.3	33.1
Tennessee	276	4.9	4.6	31.6	27.2
Texas	1,106	4.7	4.8	23.7	22.7
Utah	36	1.5	1.6	24.5	38.5
Vermont	8	1.5	1.1	20.7	10.9
Virginia	225	3.1	2.9	20.2	17.9
Washington	173	2.7	2.5	23.7	16.8
West Virginia	38	2.5	2.2	36.4	35.8
Wisconsin	66	1.3	1.2	21.5	17.5
Wyoming	7	1.5	1.4	39.3	26.3
Subtotal	12,622	4.6	4.3	23.4	19.3
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	3	2.4	3.0	68.2	85.3
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	241	8.6	7.9	27.8	32.2
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	2	2.3	1.5	6.7	3.7
Subtotal	246	7.9	7.3	27.2	31.4
Total	12,868	4.6	4.3	23.4	19.4

Table 7f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2015–2019—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	166	4.0	3.9	26.7	21.3
Alaska	8	1.3	1.3	21.2	12.2
Arizona	168	2.7	2.7	20.7	15.7
Arkansas	70	2.8	2.7	25.6	28.4
California	1,371	4.1	3.9	19.2	19.2
Colorado	93	1.9	1.8	16.5	12.0
Connecticut	167	5.5	4.5	25.6	17.5
Delaware	53	6.4	5.8	25.7	21.3
District of Columbia	132	21.9	23.8	17.4	11.9
Florida	1,510	8.2	7.0	24.7	20.2
Georgia	626	7.1	6.7	21.9	18.7
Hawaii	38	3.2	2.6	27.4	19.2
Idaho	11	0.7	0.7	17.8	11.2
Illinois	399	3.7	3.4	22.2	17.8
Indiana	110	2.0	1.9	19.0	13.7
Iowa	42	1.6	1.4	27.2	19.6
Kansas ^b	24	1.0	1.0	14.9	19.7
Kentucky	80	2.1	2.0	21.7	17.2
Louisiana	290	7.5	7.4	26.4	25.6
Maine	32	2.7	2.3	37.8	29.0
Maryland	429	8.4	7.5	24.0	17.9
Massachusetts ^b	129	2.2	1.9	11.3	9.1
Michigan	214	2.5	2.2	25.4	22.0
Minnesota	57	1.2	1.1	14.2	14.2
Mississippi ^b	85	3.4	3.3	17.6	13.8
Missouri	164	3.2	2.9	24.9	25.3
Montana	7	0.8	0.9	20.1	15.0
Nebraska	16	1.0	1.0	14.7	9.7
Nevada ^b	67	2.6	2.5	13.3	13.8
New Hampshire	11	0.9	0.9	17.4	11.2
New Jersey	465	6.2	5.2	25.5	19.2
New Mexico	34	1.9	1.8	17.0	13.1
New York	1,443	8.7	7.5	19.8	14.3
North Carolina	333	3.8	3.5	22.3	18.1
North Dakota ^b	2	0.3	0.4	9.0	6.1
Ohio	268	2.7	2.5	24.2	22.8
Oklahoma	112	3.4	3.3	36.1	29.6
Oregon	99	2.8	2.5	24.4	19.0
Pennsylvania	430	3.9	3.4	21.4	15.2
Rhode Island	34	3.7	2.9	23.3	15.2
South Carolina	224	5.1	4.6	23.7	17.7
South Dakota	8	1.1	1.2	26.4	16.8
Tennessee	242	4.2	4.0	27.4	21.0
Texas	1,122	4.7	4.7	23.5	20.7
Utah	29	1.1	1.2	19.5	14.8
Vermont ^b	7	1.3	1.3	18.4	13.5
Virginia	234	3.2	2.9	20.5	17.8
Washington	145	2.3	2.0	19.7	18.7
West Virginia	32	2.1	1.8	30.5	22.2
Wisconsin	63	1.3	1.1	19.9	14.4
Wyoming	4	0.8	0.6	22.3	13.1
Subtotal	11,899	4.3	3.9	21.9	18.1
U.S. dependent areas					
American Samoa	2	5.3	6.4	1,000.0	365.5
Guam	4	3.1	3.1	90.9	74.5
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	237	8.4	7.8	27.4	23.9
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands ^b	0	0.0	0.0	0.0	0.0
Subtotal	243	7.8	7.2	27.0	23.7
Total	12,142	4.3	4.0	21.9	18.1

Abbreviations: pop, population; PWA, persons with diagnosed HIV infection ever classified as stage 3 (AIDS); CDC, 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 the year 2019 are preliminary and based on death data received by CDC as of December 2020. Trends through 2019 should be interpreted with caution.

^a Denominator was calculated as (No. PLWA 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 2019.

Table 8a. Persons surviving >3 years after a diagnosis of HIV infection during 2011–2016, by year of diagnosis and selected characteristics—United States

	No.	Proportion survived >3 years					
		2011	2012	2013	2014	2015	2016
Gender							
Male	188,262	0.94	0.94	0.94	0.95	0.95	0.95
Female	46,332	0.93	0.93	0.92	0.94	0.94	0.94
Transgender male-to-female ^a	3,358	0.98	0.99	0.98	0.98	0.97	0.96
Transgender female-to-male ^a	121	*	*	*	*	*	*
Additional gender identity ^b	47	*	*	*	*	*	*
Age at diagnosis (yr)							
13–24	53,267	0.99	0.99	0.99	0.99	0.99	0.99
25–34	73,620	0.97	0.97	0.97	0.97	0.98	0.98
35–44	48,144	0.94	0.95	0.94	0.95	0.95	0.95
45–54	40,458	0.89	0.90	0.90	0.91	0.92	0.91
≥55	22,631	0.80	0.81	0.80	0.82	0.82	0.83
Race/ethnicity							
American Indian/Alaska Native	985	0.91	0.91	0.90	0.94	0.95	0.95
Asian	4,795	0.96	0.97	0.96	0.97	0.97	0.96
Black/African American	100,904	0.93	0.94	0.94	0.94	0.95	0.95
Hispanic/Latino ^c	59,436	0.95	0.95	0.95	0.96	0.96	0.96
Native Hawaiian/other Pacific Islander	282	*	*	*	*	*	*
White	61,308	0.92	0.94	0.93	0.94	0.94	0.93
Multiracial	10,410	0.96	0.95	0.95	0.95	0.94	0.94
Transmission category^d							
Male-to-male sexual contact	154,052	0.95	0.96	0.95	0.96	0.96	0.96
Injection drug use							
Male	7,919	0.85	0.86	0.85	0.86	0.88	0.87
Female	6,412	0.89	0.89	0.88	0.89	0.91	0.89
Male-to-male sexual contact and injection drug use	9,206	0.95	0.94	0.94	0.95	0.95	0.94
Heterosexual contact ^e							
Male	20,278	0.89	0.90	0.89	0.91	0.91	0.92
Female	39,843	0.93	0.94	0.93	0.94	0.95	0.95
Region of residence							
Northeast	40,880	0.94	0.94	0.94	0.95	0.95	0.95
Midwest	31,265	0.95	0.95	0.94	0.95	0.95	0.95
South	120,894	0.93	0.94	0.94	0.94	0.95	0.95
West	45,081	0.94	0.95	0.94	0.95	0.95	0.95
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	195,824	0.94	0.95	0.94	0.95	0.95	0.95
Metropolitan areas (pop. 50,000–499,999)	26,797	0.92	0.93	0.92	0.93	0.94	0.94
Nonmetropolitan areas (pop. <50,000)	14,006	0.91	0.91	0.91	0.92	0.92	0.93
Total^f	238,120	0.94	0.94	0.94	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 are based on residence at time of diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

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

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

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

^d 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.

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

^f Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was not reported or not identified. Data not displayed because the numbers were too small to be meaningful.

Table 8b. Persons surviving >3 years after a diagnosis of HIV infection during 2011–2016, by year of diagnosis and selected characteristics—United States and 6 dependent areas

	No.	Proportion survived >3 years					
		2011	2012	2013	2014	2015	2016
Gender							
Male	191,275	0.94	0.94	0.94	0.95	0.95	0.95
Female	47,258	0.92	0.93	0.92	0.94	0.94	0.94
Transgender male-to-female ^a	3,374	0.98	0.99	0.98	0.98	0.97	0.96
Transgender female-to-male ^a	121	*	*	*	*	*	*
Additional gender identity ^b	47	*	*	*	*	*	*
Age at diagnosis (yr)							
13–24	53,914	0.99	0.99	0.99	0.99	0.99	0.99
25–34	74,622	0.97	0.97	0.97	0.97	0.98	0.98
35–44	49,035	0.94	0.95	0.94	0.95	0.95	0.95
45–54	41,296	0.89	0.90	0.90	0.91	0.92	0.91
≥55	23,208	0.79	0.81	0.80	0.81	0.82	0.83
Race/ethnicity							
American Indian/Alaska Native	985	0.91	0.91	0.90	0.94	0.95	0.95
Asian	4,804	0.96	0.97	0.96	0.97	0.97	0.96
Black/African American	100,972	0.93	0.94	0.94	0.94	0.95	0.95
Hispanic/Latino ^c	63,274	0.94	0.95	0.95	0.96	0.96	0.96
Native Hawaiian/other Pacific Islander	298	*	*	*	*	*	*
White	61,326	0.92	0.94	0.93	0.94	0.94	0.93
Multiracial	10,416	0.96	0.95	0.95	0.95	0.94	0.94
Transmission category^d							
Male-to-male sexual contact	155,878	0.95	0.96	0.95	0.96	0.96	0.96
Injection drug use							
Male	8,336	0.84	0.85	0.84	0.85	0.87	0.86
Female	6,529	0.88	0.89	0.88	0.89	0.91	0.89
Male-to-male sexual contact and injection drug use	9,329	0.95	0.94	0.94	0.95	0.95	0.94
Heterosexual contact ^e							
Male	20,939	0.89	0.89	0.89	0.91	0.90	0.91
Female	40,652	0.93	0.94	0.93	0.94	0.95	0.95
Region of residence							
Northeast	40,880	0.94	0.94	0.94	0.95	0.95	0.95
Midwest	31,265	0.95	0.95	0.94	0.95	0.95	0.95
South	120,894	0.93	0.94	0.94	0.94	0.95	0.95
West	45,081	0.94	0.95	0.94	0.95	0.95	0.95
U.S. dependent areas	3,955	0.86	0.88	0.86	0.89	0.90	0.88
Total^f	242,075	0.93	0.94	0.94	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 are based on residence at time of diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

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

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

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

^d 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.

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

^f Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was not reported or not identified. Data not displayed because the numbers were too small to be meaningful.

Table 8c. Persons surviving >3 years after a diagnosis of HIV infection during 2011–2016, by year of diagnosis and area of residence—United States and 6 dependent areas

	No.	Proportion survived >3 years					
		2011	2012	2013	2014	2015	2016
Alabama	3,942	0.93	0.93	0.93	0.92	0.94	0.95
Alaska	173	*	*	*	*	*	*
Arizona	4,003	0.93	0.92	0.94	0.96	0.94	0.94
Arkansas	1,638	0.91	0.96	0.92	0.92	0.93	0.96
California	29,538	0.94	0.95	0.94	0.95	0.96	0.96
Colorado	2,208	0.95	0.97	0.97	0.95	0.95	0.95
Connecticut	1,772	0.93	0.95	0.94	0.96	0.99	0.98
Delaware	689	0.94	0.93	0.96	0.96	0.97	0.94
District of Columbia	2,789	0.95	0.96	0.97	0.96	0.96	0.96
Florida	26,873	0.92	0.93	0.93	0.94	0.94	0.95
Georgia	14,995	0.93	0.93	0.94	0.95	0.94	0.95
Hawaii	546	*	*	*	*	*	*
Idaho	203	*	*	*	*	*	*
Illinois	9,339	0.94	0.96	0.95	0.95	0.96	0.96
Indiana	3,003	0.94	0.94	0.93	0.94	0.94	0.95
Iowa	697	0.95	0.93	0.92	0.93	0.97	0.95
Kansas ^a	864	0.96	0.95	0.90	0.96	0.94	0.95
Kentucky	2,038	0.92	0.93	0.92	0.92	0.95	0.93
Louisiana	6,707	0.93	0.92	0.94	0.94	0.94	0.95
Maine	293	*	*	*	*	*	*
Maryland	7,456	0.94	0.95	0.94	0.96	0.96	0.96
Massachusetts ^a	3,904	0.96	0.98	0.97	0.97	0.97	0.95
Michigan	4,549	0.93	0.95	0.93	0.95	0.95	0.95
Minnesota	1,812	0.96	0.97	0.93	0.95	0.97	0.98
Mississippi ^a	2,829	0.91	0.94	0.92	0.93	0.93	0.93
Missouri	2,950	0.95	0.95	0.94	0.96	0.96	0.95
Montana	115	*	*	*	*	*	*
Nebraska	479	*	*	*	*	*	*
Nevada ^a	2,585	0.92	0.92	0.94	0.95	0.95	0.95
New Hampshire	227	*	*	*	*	*	*
New Jersey	7,207	0.91	0.93	0.91	0.94	0.95	0.95
New Mexico	789	0.95	0.97	0.94	0.93	0.91	0.99
New York	19,385	0.94	0.95	0.95	0.95	0.96	0.95
North Carolina	7,940	0.94	0.94	0.95	0.95	0.94	0.95
North Dakota ^a	127	*	*	*	*	*	*
Ohio	5,905	0.95	0.95	0.95	0.94	0.94	0.93
Oklahoma	1,834	0.91	0.94	0.92	0.94	0.94	0.95
Oregon	1,404	0.94	0.93	0.96	0.93	0.96	0.95
Pennsylvania	7,545	0.93	0.93	0.93	0.93	0.94	0.96
Rhode Island	473	*	*	*	*	*	*
South Carolina	4,305	0.93	0.95	0.93	0.93	0.94	0.94
South Dakota	173	*	*	*	*	*	*
Tennessee	4,661	0.94	0.92	0.92	0.93	0.93	0.95
Texas	26,242	0.94	0.94	0.94	0.95	0.95	0.95
Utah	711	0.96	0.95	0.94	0.98	0.97	0.94
Vermont ^a	74	*	*	*	*	*	*
Virginia	5,496	0.93	0.94	0.95	0.96	0.97	0.95
Washington	2,720	0.94	0.97	0.95	0.95	0.98	0.94
West Virginia	460	*	*	*	*	*	*
Wisconsin	1,367	0.95	0.96	0.95	0.94	0.98	0.97
Wyoming	86	*	*	*	*	*	*
Subtotal	238,120	0.94	0.94	0.94	0.95	0.95	0.95
U.S. dependent areas							
American Samoa	0	*	*	*	*	*	*
Guam	22	*	*	*	*	*	*
Northern Mariana Islands	6	*	*	*	*	*	*
Puerto Rico	3,807	0.86	0.88	0.86	0.89	0.90	0.88
Republic of Palau	4	*	*	*	*	*	*
U.S. Virgin Islands ^a	116	*	*	*	*	*	*
Subtotal	3,955	0.86	0.88	0.86	0.89	0.90	0.88
Total	242,075	0.93	0.94	0.94	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 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 2019.

Table 8d. Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2011–2016, by year of diagnosis and selected characteristics—United States

	No.	Proportion survived >3 years					
		2011	2012	2013	2014	2015	2016
Gender							
Male	96,765	0.86	0.87	0.86	0.85	0.86	0.86
Female	31,622	0.85	0.85	0.84	0.84	0.84	0.86
Transgender male-to-female ^a	1,494	0.94	0.94	0.92	0.92	0.90	0.92
Transgender female-to-male ^a	40	*	*	*	*	*	*
Additional gender identity ^b	16	*	*	*	*	*	*
Age at diagnosis (yr)							
13–24	11,735	0.96	0.95	0.96	0.94	0.95	0.96
25–34	32,052	0.92	0.93	0.92	0.92	0.92	0.93
35–44	32,924	0.89	0.89	0.89	0.88	0.88	0.88
45–54	33,380	0.83	0.83	0.83	0.83	0.83	0.83
≥55	19,846	0.70	0.72	0.71	0.68	0.70	0.71
Race/ethnicity							
American Indian/Alaska Native	508	*	*	*	*	*	*
Asian	1,910	0.92	0.93	0.91	0.91	0.91	0.89
Black/African American	59,282	0.85	0.86	0.85	0.84	0.86	0.86
Hispanic/Latino ^c	29,616	0.89	0.90	0.89	0.88	0.88	0.90
Native Hawaiian/other Pacific Islander	123	*	*	*	*	*	*
White	31,428	0.85	0.84	0.84	0.83	0.82	0.82
Multiracial	7,070	0.89	0.88	0.88	0.86	0.85	0.84
Transmission category^d							
Male-to-male sexual contact	69,623	0.88	0.89	0.88	0.87	0.87	0.88
Injection drug use							
Male	7,270	0.77	0.77	0.75	0.75	0.74	0.74
Female	5,854	0.80	0.79	0.79	0.77	0.78	0.79
Male-to-male sexual contact and injection drug use	6,335	0.87	0.86	0.84	0.85	0.84	0.84
Heterosexual contact ^e							
Male	14,452	0.83	0.83	0.82	0.82	0.83	0.83
Female	25,172	0.86	0.86	0.85	0.85	0.86	0.87
Region of residence							
Northeast	23,871	0.87	0.88	0.87	0.86	0.87	0.87
Midwest	16,626	0.88	0.88	0.88	0.87	0.87	0.87
South	67,513	0.85	0.85	0.85	0.84	0.84	0.85
West	21,927	0.87	0.87	0.87	0.86	0.85	0.86
Population area of residence							
Metropolitan statistical areas (pop. ≥500,000)	105,340	0.87	0.87	0.87	0.85	0.86	0.86
Metropolitan areas (pop. 50,000–499,999)	15,221	0.84	0.84	0.84	0.82	0.84	0.83
Nonmetropolitan areas (pop. <50,000)	8,707	0.83	0.83	0.83	0.81	0.81	0.85
Total^f	129,937	0.86	0.86	0.86	0.85	0.85	0.86

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

Note. Data are based on residence when infection was classified as stage 3 (AIDS) classification. Data exclude persons whose month of diagnosis or month of death is unknown.

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

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

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

^d 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.

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

^f Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was not reported or not identified. Data not displayed because the numbers were too small to be meaningful.

Table 8e. Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2011–2016, by year of diagnosis and selected characteristics—United States and 6 dependent areas

	No.	Proportion survived >3 years					
		2011	2012	2013	2014	2015	2016
Gender							
Male	98,423	0.86	0.86	0.86	0.85	0.85	0.86
Female	32,275	0.85	0.85	0.84	0.84	0.84	0.86
Transgender male-to-female ^a	1,499	0.95	0.94	0.92	0.92	0.91	0.92
Transgender female-to-male ^a	40	*	*	*	*	*	*
Additional gender identity ^b	16	*	*	*	*	*	*
Age at diagnosis (yr)							
13–24	11,865	0.96	0.95	0.96	0.94	0.95	0.96
25–34	32,431	0.92	0.92	0.92	0.92	0.92	0.93
35–44	33,548	0.89	0.89	0.89	0.87	0.88	0.88
45–54	34,098	0.82	0.83	0.83	0.83	0.82	0.83
≥55	20,311	0.70	0.71	0.71	0.68	0.70	0.71
Race/ethnicity							
American Indian/Alaska Native	508	*	*	*	*	*	*
Asian	1,917	0.91	0.93	0.91	0.91	0.91	0.89
Black/African American	59,325	0.85	0.86	0.85	0.84	0.86	0.86
Hispanic/Latino ^c	31,861	0.88	0.89	0.88	0.87	0.87	0.89
Native Hawaiian/other Pacific Islander	132	*	*	*	*	*	*
White	31,437	0.85	0.84	0.84	0.83	0.82	0.82
Multiracial	7,073	0.89	0.88	0.88	0.86	0.85	0.84
Transmission category^d							
Male-to-male sexual contact	70,287	0.88	0.89	0.88	0.87	0.87	0.88
Injection drug use							
Male	7,705	0.76	0.76	0.75	0.74	0.73	0.74
Female	5,987	0.80	0.79	0.79	0.77	0.77	0.79
Male-to-male sexual contact and injection drug use	6,446	0.86	0.86	0.84	0.85	0.84	0.84
Heterosexual contact ^e							
Male	14,891	0.82	0.83	0.82	0.81	0.83	0.83
Female	25,675	0.86	0.86	0.85	0.85	0.86	0.87
Region of residence							
Northeast	23,871	0.87	0.88	0.87	0.86	0.87	0.87
Midwest	16,626	0.88	0.88	0.88	0.87	0.87	0.87
South	67,513	0.85	0.85	0.85	0.84	0.84	0.85
West	21,927	0.87	0.87	0.87	0.86	0.85	0.86
U.S. dependent areas	2,316	0.74	0.74	0.77	0.74	0.72	0.74
Total^f	132,253	0.86	0.86	0.86	0.85	0.85	0.86

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

Note. Data are based on residence when infection was classified as stage 3 (AIDS) classification. Data exclude persons whose month of diagnosis or month of death is unknown.

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

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

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

^d 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.

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

^f Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was not reported or not identified. Data not displayed because the numbers were too small to be meaningful.

Table 8f. Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2011–2016, by year of diagnosis and area of residence—United States and 6 dependent areas

	No.	Proportion survived >3 years					
		2011	2012	2013	2014	2015	2016
Alabama	2,253	0.84	0.80	0.82	0.81	0.84	0.85
Alaska	107	*	*	*	*	*	*
Arizona	1,889	0.86	0.82	0.84	0.85	0.81	0.83
Arkansas	784	0.79	0.86	0.87	0.77	0.84	0.89
California	13,939	0.88	0.87	0.87	0.85	0.86	0.86
Colorado	1,177	0.87	0.91	0.89	0.88	0.84	0.87
Connecticut	1,174	0.90	0.89	0.88	0.88	0.93	0.91
Delaware	472	*	*	*	*	*	*
District of Columbia	1,526	0.88	0.88	0.88	0.82	0.85	0.90
Florida	15,538	0.82	0.85	0.82	0.82	0.83	0.85
Georgia	8,258	0.85	0.85	0.86	0.86	0.87	0.87
Hawaii	286	*	*	*	*	*	*
Idaho	118	*	*	*	*	*	*
Illinois	4,793	0.88	0.89	0.89	0.86	0.87	0.88
Indiana	1,575	0.86	0.87	0.85	0.86	0.84	0.84
Iowa	415	*	*	*	*	*	*
Kansas ^a	446	*	*	*	*	*	*
Kentucky	1,018	0.86	0.83	0.81	0.84	0.82	0.86
Louisiana	3,884	0.83	0.83	0.84	0.82	0.84	0.86
Maine	138	*	*	*	*	*	*
Maryland	4,387	0.88	0.87	0.87	0.88	0.87	0.85
Massachusetts ^a	2,070	0.90	0.93	0.91	0.90	0.92	0.89
Michigan	2,460	0.87	0.86	0.85	0.88	0.83	0.87
Minnesota	1,016	0.90	0.91	0.91	0.90	0.91	0.96
Mississippi ^a	1,870	0.86	0.82	0.84	0.82	0.83	0.83
Missouri	1,578	0.89	0.91	0.87	0.90	0.88	0.86
Montana	71	*	*	*	*	*	*
Nebraska	284	*	*	*	*	*	*
Nevada ^a	1,332	0.80	0.80	0.87	0.83	0.83	0.83
New Hampshire	118	*	*	*	*	*	*
New Jersey	4,200	0.81	0.85	0.84	0.86	0.85	0.85
New Mexico	422	*	*	*	*	*	*
New York	11,543	0.88	0.88	0.88	0.86	0.86	0.88
North Carolina	4,422	0.85	0.86	0.87	0.83	0.83	0.83
North Dakota ^a	63	*	*	*	*	*	*
Ohio	3,115	0.91	0.86	0.89	0.85	0.89	0.85
Oklahoma	983	0.81	0.81	0.76	0.84	0.87	0.87
Oregon	810	0.86	0.88	0.88	0.86	0.89	0.86
Pennsylvania	4,305	0.86	0.88	0.85	0.86	0.86	0.88
Rhode Island	279	*	*	*	*	*	*
South Carolina	2,655	0.85	0.88	0.84	0.82	0.85	0.84
South Dakota	109	*	*	*	*	*	*
Tennessee	2,632	0.83	0.85	0.85	0.83	0.83	0.85
Texas	13,825	0.87	0.86	0.86	0.85	0.85	0.86
Utah	347	*	*	*	*	*	*
Vermont ^a	44	*	*	*	*	*	*
Virginia	2,723	0.85	0.84	0.90	0.84	0.85	0.87
Washington	1,363	0.86	0.92	0.91	0.89	0.86	0.88
West Virginia	283	*	*	*	*	*	*
Wisconsin	772	0.89	0.91	0.85	0.82	0.91	0.86
Wyoming	66	*	*	*	*	*	*
Subtotal	129,937	0.86	0.86	0.86	0.85	0.85	0.86
U.S. dependent areas							
American Samoa	0	*	*	*	*	*	*
Guam	14	*	*	*	*	*	*
Northern Mariana Islands	5	*	*	*	*	*	*
Puerto Rico	2,221	0.75	0.74	0.76	0.73	0.72	0.74
Republic of Palau	2	*	*	*	*	*	*
U.S. Virgin Islands ^a	74	*	*	*	*	*	*
Subtotal	2,316	0.74	0.74	0.77	0.74	0.72	0.74
Total	132,253	0.86	0.86	0.86	0.85	0.85	0.86

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

Note. 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 2019.

Table 9a. Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2019 among persons aged ≥ 16 years, by selected characteristics—United States

	Persons prescribed PrEP ^a	Persons with PrEP indications ^b	PrEP coverage ^c
	No.	No.	%
Sex at birth			
Male	262,360	989,200	26.5
Female	21,955	227,010	9.7
Age (yr)			
16–24	38,316	246,290	15.6
25–34	116,012	434,680	26.7
35–44	66,005	238,470	27.7
45–54	38,718	173,420	22.3
≥55	25,413	123,350	20.6
Race/ethnicity^d			
Black/African American	38,284	468,540	8.2
Hispanic/Latino ^e	43,812	312,820	14.0
Other	11,953	131,180	9.1
White	190,415	300,650	63.3
Total	284,464	1,216,210	23.4

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

^a Estimated by using data from IQVIA pharmacy database reported through September 2020 based on an algorithm that included FDA-approved drugs for PrEP. Data for which values are unknown were not reported thus 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 thus values may not sum to column total. The data sources used to estimate the number of persons with indications for PrEP have different schedules of data availability. Consequently, the availability of a denominator may lag the availability of a numerator. The 2018 denominators were used for 2019 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 2019. Number prescribed PrEP and PrEP coverage for race/ethnicity reported in the table were adjusted by applying the distribution of records with known race/ethnicity to records with missing race/ethnicity.

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

Table 9b. Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2019 among persons aged ≥ 16 years, by area of residence—United States and Puerto Rico

Area of residence	Persons prescribed PrEP ^a	Persons with PrEP indications ^b	PrEP coverage ^c
	No.	No.	%
Alabama	1,907	11,020	17.3
Alaska	236	1,780	13.3
Arizona	4,825	25,780	18.7
Arkansas	794	5,130	15.5
California	43,952	165,030	26.6
Colorado	4,434	25,120	17.7
Connecticut	2,805	9,560	29.3
Delaware	488	4,400	11.1
District of Columbia	6,077	12,950	46.9
Florida	22,439	125,330	17.9
Georgia	8,999	39,030	23.1
Hawaii	857	4,360	19.7
Idaho	487	4,790	10.2
Illinois	17,190	55,860	30.8
Indiana	3,097	22,170	14.0
Iowa	1,473	4,760	30.9
Kansas	944	5,060	18.7
Kentucky	1,669	12,990	12.8
Louisiana	4,221	15,920	26.5
Maine	658	3,950	16.7
Maryland	5,218	27,300	19.1
Massachusetts	10,212	24,900	41.0
Michigan	4,552	29,570	15.4
Minnesota	4,317	21,720	19.9
Mississippi	959	4,530	21.2
Missouri	3,634	18,370	19.8
Montana	272	2,290	11.9
Nebraska	637	2,180	29.2
Nevada	2,266	11,390	19.9
New Hampshire	656	3,020	21.7
New Jersey	5,955	25,280	23.6
New Mexico	1,100	6,800	16.2
New York	36,285	72,640	50.0
North Carolina	5,671	32,490	17.5
North Dakota	202	1,520	13.3
Ohio	6,393	40,320	15.9
Oklahoma	1,230	11,030	11.2
Oregon	3,396	19,750	17.2
Pennsylvania	10,546	36,490	28.9
Puerto Rico	348	9,700	3.6
Rhode Island	1,133	3,880	29.2
South Carolina	1,788	10,390	17.2
South Dakota	151	910	16.6
Tennessee	4,020	22,460	17.9
Texas	23,898	123,790	19.3
Utah	2,029	6,840	29.7
Vermont	348	1,060	32.8
Virginia	4,686	31,430	14.9
Washington	10,864	40,050	27.1
West Virginia	610	5,250	11.6
Wisconsin	2,678	12,980	20.6
Wyoming	99	890	11.1

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

^a Estimated by using data from IQVIA pharmacy database reported through September 2020 based on an algorithm that included FDA-approved drugs for PrEP. Data for which values are unknown were not reported thus 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 thus values may not sum to column total. The data sources used to estimate the number of persons with indications for PrEP have different schedules of data availability. Consequently, the availability of a denominator may lag the availability of a numerator. The 2018 denominators were used for 2019 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 10a. Perinatally acquired HIV infection, by year of birth and mother's race/ethnicity, 2015–2019—United States

Race/ethnicity ^a	2015		2016		2017		2018		2019	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Black/African American	40	6.8	31	5.5	27	4.8	21	3.8	16	2.9
Hispanic/Latino ^b	8	0.9	11	1.2	5	0.6	6	0.7	5	0.6
White	9	0.4	2	0.1	5	0.3	6	0.3	5	0.3
Other	6	2.0	7	1.9	6	1.6	4	1.1	3	0.8
Total	63	1.6	51	1.3	43	1.1	37	1.0	29	0.8

Note. Rates are per 100,000 live births. Because of delays in the reporting of births and diagnoses of HIV infection attributed to perinatal exposure, these numbers may be subject to change. 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.

Table 10b. Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother's race/ethnicity, 2015–2019—United States

Race/ethnicity ^a	2015		2016		2017		2018		2019	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Black/African American	34	5.8	28	5.0	24	4.3	19	3.4	16	2.9
Hispanic/Latino ^b	8	0.9	10	1.1	5	0.6	6	0.7	5	0.6
White	8	0.4	2	0.1	5	0.3	6	0.3	5	0.3
Other	5	1.7	6	1.6	5	1.3	4	1.1	3	0.8
Total	55	1.4	46	1.2	39	1.0	35	0.9	29	0.8

Note. Rates are per 100,000 live births. Because of delays in the reporting of births and diagnoses of HIV infection attributed to perinatal exposure, these numbers may be subject to change. 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.

Table 11. Monitoring Ending the HIV Epidemic (EHE) indicators by using data from the National HIV Surveillance System (NHSS) and other reporting systems

Indicator	2017 ^a	2018	2019
Reduce the estimated number of new infections by 90 percent ^b	37,000	36,200	34,800
Increase the percentage of people living with HIV who know their serostatus to at least 95 percent (Knowledge of HIV status) ^b	85.8	86.3	86.7
Reduce the number of new HIV diagnoses by 90 percent ^c	38,351	37,382	36,337
Increase the percentage of persons with newly diagnosed HIV infection linked to HIV medical care within one month of diagnosis to at least 95 percent	77.8	80.2	81.3
Increase the percentage of persons with diagnosed HIV infection who are virally suppressed to at least 95 percent	63.1	64.7	65.5
Increase the percentage of the estimated number of persons with indications for PrEP who have been classified as having been prescribed PrEP to at least 50% (PrEP coverage) ^d	13.2	18.6	23.4

Abbreviations: PrEP, preexposure prophylaxis; CDC, Centers for Disease Control and Prevention [footnotes only].

Note. 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>.

^a Baseline data for EHE indicators, published at: <https://www.cdc.gov/hiv/pdf/library/reports/ehe-core-indicators/cdc-hiv-ehe-core-indicators-2019.pdf>. Baseline PrEP data updated and published at <https://www.cdc.gov/hiv/library/reports/surveillance-data-tables/vol-2-no-2/index.html>.

^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.

^c Adults and adolescents only. CDC. *HIV Surveillance Report*, 2019;vol. 32. <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published May 2021.

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

Table 12. Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2020—United States and 6 dependent areas

	CD4 count (cells/ μ L) 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

Table 12. Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2020—United States and 6 dependent areas (cont)

	CD4 count (cells/ μ L) or CD4 percentage		Viral load	
	Lab reporting required ^a	Reportable level ^b	Lab reporting required ^a	Reportable level ^b
Nevada	Yes	All values	Yes	Any result
New Hampshire	Yes	All values	Yes	Any result
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/ μ L) or percentage.

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

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

Table A1. Stage of disease at time of HIV diagnosis during 2019 among persons aged ≥13 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions

Area of residence	Total No.	Stage 1				Stage 2 (CD4=200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 <200 cells/μL or <14%)		Stage unknown ^b	
		Stage 0 ^a		(CD4 ≥500 cells/μL or ≥26%)		No.	%	No.	%	No.	%
Arizona											
Maricopa County	513	35	6.8	147	28.7	173	33.7	95	18.5	63	12.3
California											
Alameda County	219	27	12.3	58	26.5	64	29.2	47	21.5	23	10.5
Los Angeles County	1,482	157	10.6	399	26.9	449	30.3	244	16.5	233	15.7
Orange County	246	20	8.1	57	23.2	88	35.8	53	21.5	28	11.4
Riverside County	268	18	6.7	74	27.6	82	30.6	64	23.9	30	11.2
Sacramento County	136	7	5.1	43	31.6	46	33.8	27	19.9	13	9.6
San Bernardino County	287	16	5.6	74	25.8	76	26.5	54	18.8	67	23.3
San Diego County	366	31	8.5	99	27.0	121	33.1	77	21.0	38	10.4
San Francisco County	207	39	18.8	68	32.9	62	30.0	30	14.5	8	3.9
District of Columbia	255	20	7.8	70	27.5	86	33.7	37	14.5	42	16.5
Florida											
Broward County	594	26	4.4	207	34.8	172	29.0	126	21.2	63	10.6
Duval County	273	20	7.3	60	22.0	75	27.5	57	20.9	61	22.3
Hillsborough County	266	35	13.2	68	25.6	79	29.7	56	21.1	28	10.5
Miami-Dade County	1,151	71	6.2	363	31.5	362	31.5	200	17.4	155	13.5
Orange County	466	24	5.2	135	29.0	151	32.4	80	17.2	76	16.3
Palm Beach County	237	10	4.2	74	31.2	63	26.6	56	23.6	34	14.3
Pinellas County	184	15	8.2	44	23.9	49	26.6	53	28.8	23	12.5
Georgia											
Cobb County	179	3	1.7	69	38.5	54	30.2	33	18.4	20	11.2
DeKalb County	351	20	5.7	97	27.6	114	32.5	66	18.8	54	15.4
Fulton County	537	20	3.7	144	26.8	206	38.4	92	17.1	75	14.0
Gwinnett County	208	8	3.8	54	26.0	65	31.3	40	19.2	41	19.7
Illinois											
Cook County	881	58	6.6	199	22.6	274	31.1	155	17.6	195	22.1
Indiana											
Marion County	206	5	2.4	40	19.4	46	22.3	33	16.0	82	39.8
Louisiana											
East Baton Rouge Parish	153	22	14.4	43	28.1	53	34.6	24	15.7	11	7.2
Orleans Parish	158	25	15.8	43	27.2	42	26.6	33	20.9	15	9.5
Maryland											
Baltimore City	199	19	9.5	41	20.6	56	28.1	44	22.1	39	19.6
Montgomery County	132	10	7.6	28	21.2	35	26.5	46	34.8	13	9.8
Prince George's County	279	23	8.2	70	25.1	98	35.1	57	20.4	31	11.1
Massachusetts											
Suffolk County	133	10	7.5	54	40.6	37	27.8	23	17.3	9	6.8
Michigan											
Wayne County	285	28	9.8	82	28.8	98	34.4	54	18.9	23	8.1
Nevada											
Clark County	449	26	5.8	109	24.3	109	24.3	100	22.3	105	23.4
New York											
Bronx County	499	70	14.0	119	23.8	167	33.5	98	19.6	45	9.0
Kings County	466	68	14.6	119	25.5	157	33.7	80	17.2	42	9.0
New York County	338	47	13.9	87	25.7	119	35.2	52	15.4	33	9.8
Queens County	354	37	10.5	65	18.4	124	35.0	88	24.9	40	11.3
North Carolina											
Mecklenburg County	267	16	6.0	55	20.6	66	24.7	35	13.1	95	35.6
Ohio											
Cuyahoga County	162	0	0.0	42	25.9	73	45.1	32	19.8	15	9.3
Franklin County	214	10	4.7	65	30.4	68	31.8	49	22.9	22	10.3
Hamilton County	173	3	1.7	37	21.4	65	37.6	38	22.0	30	17.3
Pennsylvania											
Philadelphia County	446	79	17.7	124	27.8	124	27.8	55	12.3	64	14.3
Tennessee											
Shelby County	263	11	4.2	76	28.9	72	27.4	39	14.8	65	24.7
Texas											
Bexar County	336	41	12.2	84	25.0	82	24.4	55	16.4	74	22.0
Dallas County	733	77	10.5	144	19.6	229	31.2	157	21.4	126	17.2
Harris County	1,195	109	9.1	287	24.0	375	31.4	232	19.4	192	16.1
Tarrant County	307	44	14.3	80	26.1	74	24.1	54	17.6	55	17.9
Travis County	174	28	16.1	52	29.9	47	27.0	35	20.1	12	6.9
Washington											
King County	245	32	13.1	72	29.4	74	30.2	48	19.6	19	7.8

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

Note. 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.

Table A2. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2019 among persons aged ≥13 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions

Area of residence	Linkage to care					Viral suppression	
	Total No.	≥1 CD4 or VL tests		No CD4 or VL test		VL <200 copies/mL ≤6 months	
		No.	%	No.	%	No.	%
Arizona							
Maricopa County	513	417	81.3	96	18.7	371	72.3
California							
Alameda County	219	195	89.0	24	11.0	167	76.3
Los Angeles County	1,482	1,198	80.8	284	19.2	1,005	67.8
Orange County	246	199	80.9	47	19.1	176	71.5
Riverside County	268	216	80.6	52	19.4	185	69.0
Sacramento County	136	118	86.8	18	13.2	93	68.4
San Bernardino County	287	208	72.5	79	27.5	154	53.7
San Diego County	366	317	86.6	49	13.4	237	64.8
San Francisco County	207	199	96.1	8	3.9	173	83.6
District of Columbia	255	210	82.4	45	17.6	172	67.5
Florida							
Broward County	594	517	87.0	77	13.0	423	71.2
Duval County	273	210	76.9	63	23.1	169	61.9
Hillsborough County	266	228	85.7	38	14.3	191	71.8
Miami-Dade County	1,151	971	84.4	180	15.6	795	69.1
Orange County	466	365	78.3	101	21.7	326	70.0
Palm Beach County	237	187	78.9	50	21.1	165	69.6
Pinellas County	184	157	85.3	27	14.7	136	73.9
Georgia							
Cobb County	179	151	84.4	28	15.6	134	74.9
DeKalb County	351	284	80.9	67	19.1	237	67.5
Fulton County	537	450	83.8	87	16.2	349	65.0
Gwinnett County	208	170	81.7	38	18.3	152	73.1
Illinois							
Cook County	881	732	83.1	149	16.9	504	57.2
Indiana							
Marion County	206	108	52.4	98	47.6	97	47.1
Louisiana							
East Baton Rouge Parish	153	135	88.2	18	11.8	123	80.4
Orleans Parish	158	130	82.3	28	17.7	121	76.6
Maryland							
Baltimore City	199	169	84.9	30	15.1	121	60.8
Montgomery County	132	117	88.6	15	11.4	96	72.7
Prince George's County	279	245	87.8	34	12.2	201	72.0
Massachusetts							
Suffolk County	133	124	93.2	9	6.8	112	84.2
Michigan							
Wayne County	285	243	85.3	42	14.7	216	75.8
Nevada							
Clark County	449	371	82.6	78	17.4	272	60.6
New York							
Bronx County	499	435	87.2	64	12.8	371	74.3
Kings County	466	397	85.2	69	14.8	373	80.0
New York County	338	297	87.9	41	12.1	261	77.2
Queens County	354	302	85.3	52	14.7	277	78.2
North Carolina							
Mecklenburg County	267	209	78.3	58	21.7	201	75.3
Ohio							
Cuyahoga County	162	143	88.3	19	11.7	114	70.4
Franklin County	214	196	91.6	18	8.4	158	73.8
Hamilton County	173	147	85.0	26	15.0	97	56.1
Pennsylvania							
Philadelphia County	446	377	84.5	69	15.5	308	69.1
Tennessee							
Shelby County	263	160	60.8	103	39.2	156	59.3
Texas							
Bexar County	336	237	70.5	99	29.5	188	56.0
Dallas County	733	557	76.0	176	24.0	425	58.0
Harris County	1,195	889	74.4	306	25.6	702	58.7
Tarrant County	307	218	71.0	89	29.0	165	53.7
Travis County	174	152	87.4	22	12.6	140	80.5
Washington							
King County	245	222	90.6	23	9.4	202	82.4

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

Note. 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 or ≤3 months 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 2019. 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. Area without laws: New Jersey. Areas with incomplete lab reporting: Pennsylvania (excluding Philadelphia) and Puerto Rico.

Table A3. Receipt of HIV medical care among persons aged ≥13 years with infection diagnosed by year-end 2018 and alive at year-end 2019, by area of residence—Ending the HIV Epidemic Phase I jurisdictions

Area of residence	Persons alive at year-end 2019 Total No.	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
		No.	%	No.	%
Arizona					
Maricopa County	11,288	8,667	76.8	6,987	61.9
California					
Alameda County	5,886	4,841	82.2	3,580	60.8
Los Angeles County	48,185	35,407	73.5	28,086	58.3
Orange County	6,744	4,849	71.9	4,042	59.9
Riverside County	9,196	7,823	85.1	6,273	68.2
Sacramento County	4,230	3,439	81.3	2,358	55.7
San Bernardino County	4,445	3,284	73.9	2,514	56.6
San Diego County	12,882	9,705	75.3	7,085	55.0
San Francisco County	11,804	9,820	83.2	7,109	60.2
District of Columbia	13,777	9,463	68.7	7,026	51.0
Florida					
Broward County	19,237	15,286	79.5	12,871	66.9
Duval County	5,973	4,835	80.9	3,756	62.9
Hillsborough County	6,784	5,555	81.9	4,625	68.2
Miami-Dade County	25,480	17,753	69.7	14,540	57.1
Orange County	8,432	6,641	78.8	5,277	62.6
Palm Beach County	7,785	5,530	71.0	4,572	58.7
Pinellas County	4,521	3,897	86.2	3,220	71.2
Georgia					
Cobb County	3,168	2,338	73.8	1,734	54.7
DeKalb County	8,528	6,378	74.8	4,900	57.5
Fulton County	15,116	11,121	73.6	8,672	57.4
Gwinnett County	2,885	2,158	74.8	1,707	59.2
Illinois					
Cook County	24,960	17,293	69.3	11,355	45.5
Indiana					
Marion County	4,450	2,986	67.1	1,983	44.6
Louisiana					
East Baton Rouge Parish	3,795	3,237	85.3	2,712	71.5
Orleans Parish	4,833	3,810	78.8	2,951	61.1
Maryland					
Baltimore City	10,091	7,480	74.1	5,651	56.0
Montgomery County	3,787	2,362	62.4	1,817	48.0
Prince George's County	7,786	5,701	73.2	4,217	54.2
Massachusetts					
Suffolk County ^b	5,621	4,361	77.6	3,239	57.6
Michigan					
Wayne County	6,666	5,510	82.7	3,801	57.0
Nevada					
Clark County ^b	8,601	5,959	69.3	2,994	34.8
New York					
Bronx County	27,548	21,886	79.4	18,904	68.6
Kings County	26,035	19,256	74.0	16,282	62.5
New York County	26,599	18,497	69.5	15,446	58.1
Queens County	15,730	11,163	71.0	9,380	59.6
North Carolina					
Mecklenburg County	5,822	4,646	79.8	3,629	62.3
Ohio					
Cuyahoga County	4,642	3,539	76.2	2,452	52.8
Franklin County	4,846	3,849	79.4	2,664	55.0
Hamilton County	2,884	2,153	74.7	1,298	45.0
Pennsylvania					
Philadelphia County	16,731	12,204	72.9	9,502	56.8
Tennessee					
Shelby County	6,079	4,963	81.6	3,971	65.3
Texas					
Bexar County	6,246	4,742	75.9	3,240	51.9
Dallas County	17,992	14,133	78.6	10,609	59.0
Harris County	21,455	14,851	69.2	10,049	46.8
Tarrant County	5,678	4,379	77.1	3,276	57.7
Travis County	4,873	4,102	84.2	2,961	60.8
Washington					
King County	6,844	6,054	88.5	4,217	61.6

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL).

Note. 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 the Centers for Disease Control and Prevention. Areas without laws: New Jersey. Areas with incomplete lab reporting: Pennsylvania (excluding Philadelphia) and Puerto Rico.

^a Performed ≥3 months apart during 2019.

^b Data should be interpreted with caution due to incomplete ascertainment of deaths that occurred during the year 2019.

Table A4. HIV viral suppression during 2019 among persons aged ≥13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by area of residence—Ending the HIV Epidemic Phase I jurisdictions

Area of residence	Persons alive at year-end 2019 No.	Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		Total No.	VL of <200 copies/mL		
		No.	%	No.	%		Among persons alive at year-end 2019	Among persons with ≥1 CD4 or VL tests	Among persons with ≥1 VL tests
							%	%	%
Arizona									
Maricopa County	11,288	8,667	76.8	7,949	70.4	7,262	64.3	83.8	91.4
California									
Alameda County	5,886	4,841	82.2	4,732	80.4	4,311	73.2	89.1	91.1
Los Angeles County	48,185	35,407	73.5	34,393	71.4	31,185	64.7	88.1	90.7
Orange County	6,744	4,849	71.9	4,753	70.5	4,438	65.8	91.5	93.4
Riverside County	9,196	7,823	85.1	7,656	83.3	7,198	78.3	92.0	94.0
Sacramento County	4,230	3,439	81.3	3,315	78.4	2,984	70.5	86.8	90.0
San Bernardino County	4,445	3,284	73.9	3,078	69.2	2,759	62.1	84.0	89.6
San Diego County	12,882	9,705	75.3	8,455	65.6	7,866	61.1	81.1	93.0
San Francisco County	11,804	9,820	83.2	9,736	82.5	9,086	77.0	92.5	93.3
District of Columbia	13,777	9,463	68.7	9,201	66.8	8,082	58.7	85.4	87.8
Florida									
Broward County	19,237	15,286	79.5	14,809	77.0	13,416	69.7	87.8	90.6
Duval County	5,973	4,835	80.9	4,531	75.9	3,816	63.9	78.9	84.2
Hillsborough County	6,784	5,555	81.9	5,481	80.8	4,891	72.1	88.0	89.2
Miami-Dade County	25,480	17,753	69.7	17,029	66.8	15,194	59.6	85.6	89.2
Orange County	8,432	6,641	78.8	6,472	76.8	5,815	69.0	87.6	89.8
Palm Beach County	7,785	5,530	71.0	5,419	69.6	4,854	62.4	87.8	89.6
Pinellas County	4,521	3,897	86.2	3,735	82.6	3,437	76.0	88.2	92.0
Georgia									
Cobb County	3,168	2,338	73.8	2,293	72.4	2,049	64.7	87.6	89.4
DeKalb County	8,528	6,378	74.8	6,271	73.5	5,504	64.5	86.3	87.8
Fulton County	15,116	11,121	73.6	10,917	72.2	9,378	62.0	84.3	85.9
Gwinnett County	2,885	2,158	74.8	2,131	73.9	1,921	66.6	89.0	90.1
Illinois									
Cook County	24,960	17,293	69.3	15,374	61.6	13,074	52.4	75.6	85.0
Indiana									
Marion County	4,450	2,986	67.1	2,867	64.4	2,611	58.7	87.4	91.1
Louisiana									
East Baton Rouge Parish	3,795	3,237	85.3	3,201	84.3	2,775	73.1	85.7	86.7
Orleans Parish	4,833	3,810	78.8	3,765	77.9	3,294	68.2	86.5	87.5
Maryland									
Baltimore City	10,091	7,480	74.1	7,375	73.1	6,409	63.5	85.7	86.9
Montgomery County	3,787	2,362	62.4	2,339	61.8	2,148	56.7	90.9	91.8
Prince George's County	7,786	5,701	73.2	5,637	72.4	5,063	65.0	88.8	89.8
Massachusetts									
Suffolk County ^a	5,621	4,361	77.6	4,291	76.3	3,986	70.9	91.4	92.9

Table A4. HIV viral suppression during 2019 among persons aged ≥ 13 years with HIV infection diagnosed by year-end 2018 and alive at year-end 2019, by area of residence—Ending the HIV Epidemic Phase I jurisdictions (*cont*)

Area of residence	Persons alive at year-end 2019 No.	Persons with ≥ 1 CD4 or VL tests		Persons with ≥ 1 VL tests		Total No.	VL of <200 copies/mL		
		No.	%	No.	%		Among persons alive at year-end 2019	Among persons with ≥ 1 CD4 or VL tests	Among persons with ≥ 1 VL tests
							%	%	%
Michigan									
Wayne County	6,666	5,510	82.7	5,390	80.9	4,652	69.8	84.4	86.3
Nevada									
Clark County ^a	8,601	5,959	69.3	5,630	65.5	5,068	58.9	85.0	90.0
New York									
Bronx County	27,548	21,886	79.4	21,739	78.9	18,158	65.9	83.0	83.5
Kings County	26,035	19,256	74.0	19,114	73.4	16,886	64.9	87.7	88.3
New York County	26,599	18,497	69.5	18,384	69.1	16,660	62.6	90.1	90.6
Queens County	15,730	11,163	71.0	11,031	70.1	10,124	64.4	90.7	91.8
North Carolina									
Mecklenburg County	5,822	4,646	79.8	4,613	79.2	4,068	69.9	87.6	88.2
Ohio									
Cuyahoga County	4,642	3,539	76.2	3,486	75.1	3,082	66.4	87.1	88.4
Franklin County	4,846	3,849	79.4	3,657	75.5	3,275	67.6	85.1	89.6
Hamilton County	2,884	2,153	74.7	1,663	57.7	1,406	48.8	65.3	84.5
Pennsylvania									
Philadelphia County	16,731	12,204	72.9	12,074	72.2	10,656	63.7	87.3	88.3
Tennessee									
Shelby County	6,079	4,963	81.6	4,853	79.8	3,957	65.1	79.7	81.5
Texas									
Bexar County	6,246	4,742	75.9	4,660	74.6	4,088	65.4	86.2	87.7
Dallas County	17,992	14,133	78.6	13,013	72.3	10,980	61.0	77.7	84.4
Harris County	21,455	14,851	69.2	14,376	67.0	12,282	57.2	82.7	85.4
Tarrant County	5,678	4,379	77.1	4,274	75.3	3,695	65.1	84.4	86.5
Travis County	4,873	4,102	84.2	4,004	82.2	3,662	75.1	89.3	91.5
Washington									
King County	6,844	6,054	88.5	6,019	87.9	5,673	82.9	93.7	94.3

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

Note. Data are based on address of residence as of December 31, 2019 (i.e., most recent known address). A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results during 2019. 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 ascertainment of deaths that occurred during the year 2019.

Table A5. Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2017 (recalculated), 2018 (updated), and 2019 among persons aged ≥ 16 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions

Area of residence	2017			2018			2019		
	Persons prescribed PrEP ^a No.	Persons with PrEP indications ^b No.	PrEP coverage ^c %	Persons prescribed PrEP ^a No.	Persons with PrEP indications ^b No.	PrEP coverage ^c %	Persons prescribed PrEP ^a No.	Persons with PrEP indications ^b No.	PrEP coverage ^c %
Arizona									
Maricopa County	1,943	23,540	8.3	2,968	22,720	13.1	3,725	22,720	16.4
California									
Alameda County	1,464	7,260	20.2	1,929	8,930	21.6	2,254	8,930	25.2
Los Angeles County	9,834	64,180	15.3	12,891	67,450	19.1	14,679	67,450	21.8
Orange County	1,084	9,990	10.9	1,640	10,510	15.6	2,123	10,510	20.2
Riverside County	1,022	11,040	9.3	1,454	11,080	13.1	1,861	11,080	16.8
Sacramento County	587	5,460	10.8	797	5,920	13.5	987	5,920	16.7
San Bernardino County	438	12,450	3.5	631	11,890	5.3	805	11,890	6.8
San Diego County	2,477	19,420	12.8	3,495	14,500	24.1	3,962	14,500	27.3
San Francisco County	6,597	11,330	58.2	8,176	10,840	75.4	9,170	10,840	84.6
District of Columbia	4,018	13,710	29.3	5,212	12,950	40.2	6,077	12,950	46.9
Florida									
Broward County	2,011	20,030	10.0	2,913	20,470	14.2	3,881	20,470	19.0
Duval County	256	9,250	2.8	382	8,970	4.3	524	8,970	5.8
Hillsborough County	648	12,670	5.1	1,152	12,910	8.9	1,495	12,910	11.6
Miami-Dade County	2,018	22,190	9.1	3,891	21,760	17.9	6,668	21,760	30.6
Orange County	1,043	16,500	6.3	1,895	15,310	12.4	2,845	15,310	18.6
Palm Beach County	388	7,620	5.1	594	9,170	6.5	915	9,170	10.0
Pinellas County	470	10,470	4.5	800	9,530	8.4	1,133	9,530	11.9
Georgia									
Cobb County	277	3,570	7.8	395	3,070	12.9	584	3,070	19.0
DeKalb County	916	6,370	14.4	1,229	6,290	19.5	1,616	6,290	25.7
Fulton County	2,018	12,060	16.7	2,667	13,120	20.3	3,403	13,120	25.9
Gwinnett County	320	3,390	9.4	468	3,240	14.4	714	3,240	22.0
Illinois									
Cook County	8,905	38,270	23.3	11,812	39,060	30.2	14,027	39,060	35.9
Indiana									
Marion County	692	8,490	8.2	880	9,150	9.6	1,171	9,150	12.8
Louisiana									
East Baton Rouge Parish	225	1,290	17.4	452	1,810	25.0	514	1,810	28.4
Orleans Parish	1,061	5,230	20.3	1,387	4,590	30.2	1,669	4,590	36.4
Maryland									
Baltimore City	475	6,000	7.9	666	6,330	10.5	930	6,330	14.7
Montgomery County	567	5,790	9.8	819	5,770	14.2	982	5,770	17.0
Prince George's County	460	3,830	12.0	662	4,040	16.4	853	4,040	21.1
Massachusetts									
Suffolk County	1,944	7,050	27.6	2,532	6,520	38.8	3,181	6,520	48.8
Michigan									
Wayne County	695	9,470	7.3	1,045	9,270	11.3	1,293	9,270	13.9

Table A5. Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2017 (recalculated), 2018 (updated), and 2019 among persons aged ≥ 16 years, by area of residence—Ending the HIV Epidemic Phase I jurisdictions

Area of residence	2017			2018			2019		
	Persons prescribed PrEP ^a No.	Persons with PrEP indications ^b No.	PrEP coverage ^c %	Persons prescribed PrEP ^a No.	Persons with PrEP indications ^b No.	PrEP coverage ^c %	Persons prescribed PrEP ^a No.	Persons with PrEP indications ^b No.	PrEP coverage ^c %
Nevada									
Clark County	958	8,790	10.9	1,320	11,670	11.3	1,944	11,670	16.7
New Jersey									
Essex County	406	5,190	7.8	600	4,090	14.7	715	4,090	17.5
Hudson County	675	4,720	14.3	896	4,650	19.3	1,105	4,650	23.8
New York									
Bronx County	1,335	6,690	20.0	2,045	5,570	36.7	2,305	5,570	41.4
Kings County	4,867	15,300	31.8	6,408	15,650	40.9	7,645	15,650	48.8
New York County	9,911	14,790	67.0	12,603	15,540	81.1	14,508	15,540	93.4
Queens County	2,634	8,740	30.1	3,412	9,230	37.0	4,020	9,230	43.6
North Carolina									
Mecklenburg County	692	9,430	7.3	1,001	8,450	11.8	1,420	8,450	16.8
Ohio									
Cuyahoga County	612	8,200	7.5	832	7,520	11.1	996	7,520	13.2
Franklin County	1,360	13,660	10.0	1,679	11,620	14.4	2,126	11,620	18.3
Hamilton County	280	6,430	4.4	449	7,720	5.8	570	7,720	7.4
Pennsylvania									
Philadelphia County	2,475	8,550	28.9	3,306	9,840	33.6	3,781	9,840	38.4
Tennessee									
Shelby County	319	7,590	4.2	480	6,450	7.4	656	6,450	10.2
Texas									
Bexar County	676	13,010	5.2	1,140	11,920	9.6	1,529	11,920	12.8
Dallas County	2,366	22,000	10.8	3,354	28,670	11.7	4,325	28,670	15.1
Harris County	2,602	39,780	6.5	3,971	40,670	9.8	5,055	40,670	12.4
Tarrant County	698	11,550	6.0	1,197	11,340	10.6	1,513	11,340	13.3
Travis County	2,244	10,810	20.8	3,450	11,590	29.8	4,654	11,590	40.2
Washington									
King County	5,072	13,690	37.0	6,360	17,890	35.6	7,669	17,890	42.9
Puerto Rico									
San Juan Municipio	—	2,190 ^d	n/a	—	2,190	n/a	—	2,190	n/a

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

^a Estimated by using data from IQVIA pharmacy database reported through September 2020 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, 2017 denominators were used for 2017 PrEP coverage data and 2018 denominators were used for 2018 and 2019 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 Number of persons with PrEP indications in San Juan Municipio was unavailable in 2017 and 2018 data are used for 2017.

Table S1. Stage of disease at time of HIV diagnosis during 2017 among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥500 cells/μL or ≥26%)		Stage 2 (CD4=200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 <200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
American Indian/Alaska Native											
Gender											
Male	121	11	9.1	35	28.9	33	27.3	23	19.0	19	15.7
Female	35	1	2.9	9	25.7	10	28.6	8	22.9	7	20.0
Transgender male-to-female ^c	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Transgender female-to-male ^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
Age at diagnosis (yr)											
13–24	20	2	10.0	9	45.0	5	25.0	1	5.0	3	15.0
25–34	64	6	9.4	24	37.5	19	29.7	7	10.9	8	12.5
35–44	33	2	6.1	5	15.2	12	36.4	7	21.2	7	21.2
45–54	28	2	7.1	6	21.4	5	17.9	13	46.4	2	7.1
≥55	11	0	0.0	0	0.0	2	18.2	3	27.3	6	54.5
Transmission category^e											
Male-to-male sexual contact	88	7	8.0	29	33.6	25	28.9	15	17.6	10	11.9
Injection drug use											
Male	9	2	21.3	1	10.6	1	13.8	3	35.1	2	19.1
Female	12	0	0.0	3	28.0	3	24.6	2	17.8	4	29.7
Male-to-male sexual contact and injection drug use	18	1	5.6	4	24.9	4	23.7	4	23.7	4	22.0
Heterosexual contact ^f											
Male	6	1	15.9	0	3.2	2	33.3	0	1.6	3	46.0
Female	23	1	4.3	6	24.6	7	30.6	6	25.4	4	15.1
Total^g	156	12	7.7	44	28.2	43	27.6	31	19.9	26	16.7
Asian											
Gender											
Male	724	35	4.8	137	18.9	272	37.6	179	24.7	101	14.0
Female	100	1	1.0	20	20.0	29	29.0	29	29.0	21	21.0
Transgender male-to-female ^c	16	0	0.0	3	18.8	9	56.3	3	18.8	1	6.3
Transgender female-to-male ^c	2	1	50.0	0	0.0	1	50.0	0	0.0	0	0.0
Additional gender identity ^d	1	1	100	0	0.0	0	0.0	0	0.0	0	0.0
Age at diagnosis (yr)											
13–24	175	12	6.9	34	19.4	83	47.4	17	9.7	29	16.6
25–34	274	15	5.5	50	18.2	110	40.1	62	22.6	37	13.5
35–44	200	5	2.5	45	22.5	67	33.5	49	24.5	34	17.0
45–54	134	6	4.5	24	17.9	32	23.9	57	42.5	15	11.2
≥55	60	0	0.0	7	11.7	19	31.7	26	43.3	8	13.3
Transmission category^e											
Male-to-male sexual contact	681	35	5.1	127	18.7	259	38.1	165	24.2	95	14.0
Injection drug use											
Male	11	0	0.9	2	20.4	5	46.3	3	26.9	1	5.6
Female	4	0	0.0	1	16.2	1	18.9	1	32.4	1	32.4
Male-to-male sexual contact and injection drug use	14	1	8.8	3	24.3	7	52.2	1	4.4	1	10.3
Heterosexual contact ^f											
Male	33	0	0.0	6	19.0	9	26.8	14	41.3	4	13.0
Female	97	2	2.1	19	19.7	29	29.9	28	28.3	20	20.0
Total^g	843	38	4.5	160	19.0	311	36.9	211	25.0	123	14.6

Table S1. Stage of disease at time of HIV diagnosis during 2017 among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)

	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.	%
Black/African American											
Gender											
Male	10,703	683	6.4	2,353	22.0	3,364	31.4	2,088	19.5	2,215	20.7
Female	3,883	161	4.1	1,021	26.3	1,136	29.3	868	22.4	697	18.0
Transgender male-to-female ^c	253	25	9.9	69	27.3	82	32.4	33	13.0	44	17.4
Transgender female-to-male ^c	9	1	11.1	4	44.4	4	44.4	0	0.0	0	0.0
Additional gender identity ^d	6	0	0.0	3	50.0	0	0.0	2	33.3	1	16.7
Age at diagnosis (yr)											
13–24	3,904	349	8.9	977	25.0	1,398	35.8	382	9.8	798	20.4
25–34	5,144	323	6.3	1,279	24.9	1,630	31.7	845	16.4	1,067	20.7
35–44	2,453	97	4.0	522	21.3	707	28.8	662	27.0	465	19.0
45–54	1,827	54	3.0	371	20.3	461	25.2	603	33.0	338	18.5
≥55	1,526	47	3.1	301	19.7	390	25.6	499	32.7	289	18.9
Transmission category^e											
Male-to-male sexual contact	8,745	629	7.2	2,020	23.1	2,833	32.4	1,458	16.7	1,805	20.6
Injection drug use											
Male	333	18	5.3	60	18.0	90	27.2	88	26.3	77	23.2
Female	299	18	6.0	64	21.5	82	27.2	73	24.3	63	20.9
Male-to-male sexual contact and injection drug use	243	13	5.3	52	21.3	70	28.7	43	17.7	66	27.1
Heterosexual contact ^f											
Male	1,627	47	2.9	290	17.9	452	27.8	531	32.6	307	18.9
Female	3,564	144	4.0	949	26.6	1,050	29.5	790	22.2	631	17.7
Total^g	14,854	870	5.9	3,450	23.2	4,586	30.9	2,991	20.1	2,957	19.9
Hispanic/Latino^h											
Gender											
Male	7,526	499	6.6	1,834	24.4	2,380	31.6	1,604	21.3	1,209	16.1
Female	996	56	5.6	283	28.4	288	28.9	218	21.9	151	15.2
Transgender male-to-female ^c	145	9	6.2	46	31.7	45	31.0	22	15.2	23	15.9
Transgender female-to-male ^c	6	1	16.7	1	16.7	1	16.7	3	50.0	0	0.0
Additional gender identity ^d	4	1	25.0	1	25.0	2	50.0	0	0.0	0	0.0
Age at diagnosis (yr)											
13–24	1,749	160	9.1	508	29.0	603	34.5	147	8.4	331	18.9
25–34	3,330	227	6.8	890	26.7	1,095	32.9	602	18.1	516	15.5
35–44	1,876	97	5.2	441	23.5	556	29.6	484	25.8	298	15.9
45–54	1,157	53	4.6	226	19.5	313	27.1	402	34.7	163	14.1
≥55	565	29	5.1	100	17.7	149	26.4	212	37.5	75	13.3
Transmission category^e											
Male-to-male sexual contact	6,641	455	6.9	1,684	25.4	2,127	32.0	1,318	19.8	1,057	15.9
Injection drug use											
Male	276	12	4.5	54	19.7	82	29.8	81	29.5	46	16.5
Female	131	6	4.5	46	35.1	31	23.7	24	18.1	24	18.6
Male-to-male sexual contact and injection drug use	302	20	6.7	76	25.1	97	32.2	49	16.3	60	19.7
Heterosexual contact ^f											
Male	451	20	4.4	66	14.7	119	26.3	176	39.1	70	15.4
Female	869	51	5.9	237	27.3	258	29.6	197	22.6	127	14.6
Total^g	8,677	566	6.5	2,165	25.0	2,716	31.3	1,847	21.3	1,383	15.9

Table S1. Stage of disease at time of HIV diagnosis during 2017 among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)

	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.	%
Native Hawaiian/other Pacific Islander											
Gender											
Male	31	3	9.7	7	22.6	11	35.5	6	19.4	4	12.9
Female	8	1	12.5	0	0.0	0	0.0	5	62.5	2	25.0
Transgender male-to-female ^c	2	1	50.0	0	0.0	0	0.0	1	50.0	0	0.0
Transgender female-to-male ^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
Age at diagnosis (yr)											
13–24	9	1	11.1	4	44.4	3	33.3	0	0.0	1	11.1
25–34	18	3	16.7	1	5.6	6	33.3	5	27.8	3	16.7
35–44	9	1	11.1	2	22.2	2	22.2	3	33.3	1	11.1
45–54	4	0	0.0	0	0.0	0	0.0	3	75.0	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	28	3	10.1	6	21.7	10	35.7	6	21.7	3	10.8
Injection drug use											
Male	2	0	8.7	1	43.5	0	4.3	0	0.0	1	43.5
Female	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Male-to-male sexual contact and injection drug use	1	1	100	0	0.0	0	0.0	0	0.0	0	0.0
Heterosexual contact ^f											
Male	2	0	0.0	0	0.0	1	50.0	1	50.0	0	0.0
Female	8	1	12.5	0	0.0	0	0.0	5	62.5	2	25.0
Total^g	41	5	12.2	7	17.1	11	26.8	12	29.3	6	14.6
White											
Gender											
Male	7,167	499	7.0	2,068	28.9	2,043	28.5	1,552	21.7	1,005	14.0
Female	1,241	78	6.3	403	32.5	287	23.1	255	20.5	218	17.6
Transgender male-to-female ^c	59	11	18.6	18	30.5	16	27.1	8	13.6	6	10.2
Transgender female-to-male ^c	9	1	11.1	3	33.3	5	55.6	0	0.0	0	0.0
Additional gender identity ^d	2	0	0.0	2	100	0	0.0	0	0.0	0	0.0
Age at diagnosis (yr)											
13–24	1,270	124	9.8	434	34.2	410	32.3	101	8.0	201	15.8
25–34	2,708	225	8.3	900	33.2	796	29.4	357	13.2	430	15.9
35–44	1,702	97	5.7	516	30.3	457	26.9	413	24.3	219	12.9
45–54	1,651	72	4.4	396	24.0	419	25.4	540	32.7	224	13.6
≥55	1,147	71	6.2	248	21.6	269	23.5	404	35.2	155	13.5
Transmission category^e	5,856	430	7.3	1,684	28.8	1,685	28.8	1,237	21.1	820	14.0
Male-to-male sexual contact											
Injection drug use	422	22	5.2	130	30.9	108	25.6	100	23.7	62	14.7
Male	424	28	6.5	137	32.2	98	23.0	75	17.8	87	20.4
Female	565	48	8.5	195	34.6	170	30.2	71	12.6	80	14.2
Male-to-male sexual contact and injection drug use											
Heterosexual contact ^f	378	9	2.5	76	20.2	95	25.1	149	39.4	49	12.8
Male	823	51	6.2	269	32.7	193	23.5	179	21.7	131	15.9
Female											
Total^g	8,478	589	6.9	2,494	29.4	2,351	27.7	1,815	21.4	1,229	14.5

Table S1. Stage of disease at time of HIV diagnosis during 2017 among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)

	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.	%
Multiracial											
Gender											
Male	839	78	9.3	224	26.7	259	30.9	159	19.0	119	14.2
Female	174	8	4.6	57	32.8	44	25.3	40	23.0	25	14.4
Transgender male-to-female ^c	13	1	7.7	5	38.5	5	38.5	0	0.0	2	15.4
Transgender female-to-male ^c	3	1	33.3	0	0.0	0	0.0	1	33.3	1	33.3
Additional gender identity ^d	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Age at diagnosis (yr)											
13–24	261	25	9.6	89	34.1	83	31.8	19	7.3	45	17.2
25–34	378	38	10.1	115	30.4	114	30.2	54	14.3	57	15.1
35–44	182	9	4.9	47	25.8	56	30.8	50	27.5	20	11.0
45–54	138	10	7.2	23	16.7	41	29.7	50	36.2	14	10.1
≥55	70	6	8.6	12	17.1	14	20.0	27	38.6	11	15.7
Transmission category^e											
Male-to-male sexual contact	724	70	9.7	196	27.0	228	31.5	122	16.8	108	15.0
Injection drug use											
Male	23	0	0.9	5	21.1	8	36.4	7	28.9	3	12.7
Female	32	2	6.5	9	26.8	8	25.2	8	24.6	5	16.8
Male-to-male sexual contact and injection drug use	48	5	9.4	16	33.7	14	28.9	9	18.9	4	9.1
Heterosexual contact ^f											
Male	57	4	6.9	12	21.6	14	24.2	22	38.1	5	9.2
Female	142	7	4.9	48	34.0	34	23.7	33	23.2	20	14.2
Total^g	1,029	88	8.6	286	27.8	308	29.9	200	19.4	147	14.3

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

Note. 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 and are for cases reported to CDC as of December 2019. 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, New Jersey, and Pennsylvania. Areas with incomplete lab reporting: Arizona, Arkansas, Connecticut, Kansas, Kentucky, 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 male-to-female" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender. "Transgender female-to-male" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.

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

^e 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.

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

^g Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure or whose risk factor was 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 S2. Stage of disease at time of HIV diagnosis during 2017 among males aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—41 states and the District of Columbia

	Total No.	Stage 0 ^a		Stage 1 (CD4 ≥500 cells/μL or ≥26%)		Stage 2 (CD4=200–499 cells/μL or 14%–25%)		Stage 3 (AIDS) (OI or CD4 <200 cells/μL or <14%)		Stage unknown ^b	
		No.	%	No.	%	No.	%	No.	%	No.	%
American Indian/Alaska Native											
13–24	15	2	13.2	7	45.0	5	32.5	0	0.0	1	9.3
25–34	39	3	7.7	18	45.9	9	22.4	5	12.9	4	11.1
35–44	17	1	5.8	2	10.5	8	45.6	6	33.9	1	4.1
45–54	13	1	8.0	3	24.0	4	31.2	4	28.8	1	8.0
≥55	4	0	0.0	0	0.0	0	0.0	1	25.0	3	75.0
Asian											
13–24	163	11	6.8	32	19.7	77	47.4	16	9.8	27	16.3
25–34	241	13	5.4	42	17.3	100	41.4	54	22.2	33	13.6
35–44	148	5	3.3	33	22.0	52	35.2	37	25.0	21	14.4
45–54	97	6	6.0	19	19.2	22	22.7	41	42.3	10	9.8
≥55	33	0	0.0	2	6.9	9	25.5	17	52.0	5	15.6
Black/African American											
13–24	3,121	306	9.8	739	23.7	1,152	36.9	296	9.5	628	20.1
25–34	3,539	247	7.0	872	24.6	1,116	31.5	551	15.6	753	21.3
35–44	1,094	41	3.7	231	21.1	314	28.7	290	26.5	217	19.8
45–54	626	22	3.5	124	19.8	150	23.9	204	32.6	127	20.2
≥55	365	14	3.9	54	14.7	100	27.4	117	32.0	80	22.0
Hispanic/Latino^c											
13–24	1,482	140	9.4	429	28.9	518	35.0	113	7.6	282	19.0
25–34	2,719	191	7.0	714	26.3	910	33.5	482	17.7	422	15.5
35–44	1,375	74	5.4	337	24.5	416	30.2	343	25.0	205	14.9
45–54	779	39	5.0	152	19.5	212	27.2	264	33.8	113	14.5
≥55	287	12	4.0	53	18.4	72	25.1	116	40.5	35	12.0
Native Hawaiian/other Pacific Islander											
13–24	9	1	9.1	4	45.5	3	34.1	0	0.0	1	11.4
25–34	12	2	16.7	1	8.3	5	41.7	2	16.7	2	16.7
35–44	5	0	0.0	1	20.4	2	38.8	2	40.8	0	0.0
45–54	2	0	0.0	0	0.0	0	0.0	2	100	0	0.0
≥55	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
White											
13–24	977	97	9.9	306	31.4	339	34.7	86	8.8	150	15.3
25–34	1,874	155	8.3	618	33.0	560	29.9	255	13.6	286	15.3
35–44	1,094	70	6.4	330	30.2	296	27.0	273	25.0	125	11.4
45–54	1,157	53	4.6	270	23.3	308	26.7	369	31.9	156	13.5
≥55	754	55	7.3	160	21.2	182	24.1	254	33.7	103	13.7
Multiracial											
13–24	207	22	10.5	60	29.0	72	34.9	17	8.1	37	17.6
25–34	296	32	10.9	87	29.5	89	30.1	42	14.2	45	15.2
35–44	113	7	6.2	31	27.2	36	32.1	25	22.0	14	12.5
45–54	77	6	8.3	14	17.7	25	32.2	25	31.9	8	9.9
≥55	31	3	9.7	4	12.9	5	17.5	13	43.4	5	16.5
All											
13–24	5,974	577	9.7	1,578	26.4	2,167	36.3	527	8.8	1,125	18.8
25–34	8,720	643	7.4	2,352	27.0	2,789	32.0	1,391	15.9	1,546	17.7
35–44	3,845	198	5.1	965	25.1	1,123	29.2	976	25.4	583	15.2
45–54	2,751	127	4.6	580	21.1	721	26.2	908	33.0	414	15.0
≥55	1,474	84	5.7	272	18.5	368	24.9	519	35.2	231	15.7
Total	22,763	1,630	7.2	5,746	25.2	7,167	31.5	4,321	19.0	3,899	17.1

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

Note. 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 and are for cases reported to CDC as of December 2019. 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 Centers for Disease Control and Prevention. Areas without laws: Idaho, New Jersey, and Pennsylvania. Areas with incomplete reporting: Arizona, Arkansas, Connecticut, Kansas, Kentucky, Vermont, and Puerto Rico. 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 S3. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2017 among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia

	Linkage to care										Viral suppression	
	Total diagnoses No.	≤1 month				≤3 months				VL <200 copies/mL ≤6 months		
		≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test				
		No.	%	No.	%	No.	%	No.	%	No.	%	
American Indian/Alaska Native												
Gender												
Male	121	99	81.8	22	18.2	106	87.6	15	12.4	81	66.9	
Female	35	31	88.6	4	11.4	31	88.6	4	11.4	22	62.9	
Transgender male-to-female ^a	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Transgender female-to-male ^a	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Additional gender identity ^b	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Age at diagnosis (yr)												
13–24	20	17	85.0	3	15.0	17	85.0	3	15.0	13	65.0	
25–34	64	54	84.4	10	15.6	58	90.6	6	9.4	41	64.1	
35–44	33	27	81.8	6	18.2	28	84.8	5	15.2	25	75.8	
45–54	28	26	92.9	2	7.1	28	100	0	0.0	21	75.0	
≥55	11	6	54.5	5	45.5	6	54.5	5	45.5	3	27.3	
Transmission category^c												
Male-to-male sexual contact	88	74	84.7	13	15.3	79	90.4	8	9.6	61	69.1	
Injection drug use												
Male	9	8	80.9	2	19.1	8	80.9	2	19.1	4	46.8	
Female	12	11	89.0	1	11.0	11	89.0	1	11.0	6	49.2	
Male-to-male sexual contact and injection drug use	18	14	78.0	4	22.0	16	89.3	2	10.7	13	71.2	
Heterosexual contact ^d												
Male	6	3	54.0	3	46.0	3	54.0	3	46.0	3	54.0	
Female	23	21	88.4	3	11.6	21	88.4	3	11.6	16	69.8	
Total^e	156	130	83.3	26	16.7	137	87.8	19	12.2	103	66.0	
Asian												
Gender												
Male	724	591	81.6	133	18.4	642	88.7	82	11.3	523	72.2	
Female	100	76	76.0	24	24.0	82	82.0	18	18.0	73	73.0	
Transgender male-to-female ^a	16	14	87.5	2	12.5	15	93.8	1	6.3	9	56.3	
Transgender female-to-male ^a	2	2	100	0	0.0	2	100	0	0.0	2	100	
Additional gender identity ^b	1	1	100	0	0.0	1	100	0	0.0	1	100	
Age at diagnosis (yr)												
13–24	175	138	78.9	37	21.1	152	86.9	23	13.1	125	71.4	
25–34	274	232	84.7	42	15.3	243	88.7	31	11.3	202	73.7	
35–44	200	155	77.5	45	22.5	175	87.5	25	12.5	145	72.5	
45–54	134	109	81.3	25	18.7	119	88.8	15	11.2	93	69.4	
≥55	60	50	83.3	10	16.7	53	88.3	7	11.7	43	71.7	
Transmission category^c												
Male-to-male sexual contact	681	555	81.5	126	18.5	602	88.4	79	11.6	492	72.2	
Injection drug use												
Male	11	8	74.1	3	25.9	10	94.4	1	5.6	8	72.2	
Female	4	2	64.9	1	35.1	3	67.6	1	32.4	2	59.5	
Male-to-male sexual contact and injection drug use	14	13	93.4	1	6.6	13	94.9	1	5.1	10	70.6	
Heterosexual contact ^d												
Male	33	28	84.0	5	16.0	31	91.9	3	8.1	22	66.9	
Female	97	75	77.0	22	23.0	81	83.1	17	16.9	72	74.1	
Total^e	843	684	81.1	159	18.9	742	88.0	101	12.0	608	72.1	

Table S3. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2017 among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)

	Total diagnoses No.	Linkage to care								Viral suppression	
		≤1 month				≤3 months				VL <200 copies/mL ≤6 months	
		≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test			
		No.	%	No.	%	No.	%	No.	%	No.	%
Black/African American											
Gender											
Male	10,703	7,933	74.1	2,770	25.9	8,919	83.3	1,784	16.7	6,040	56.4
Female	3,883	3,037	78.2	846	21.8	3,372	86.8	511	13.2	2,542	65.5
Transgender male-to-female ^a	253	195	77.1	58	22.9	215	85.0	38	15.0	152	60.1
Transgender female-to-male ^a	9	9	100	0	0.0	9	100	0	0.0	7	77.8
Additional gender identity ^b	6	6	100	0	0.0	6	100	0	0.0	4	66.7
Age at diagnosis (yr)											
13–24	3,904	2,867	73.4	1,037	26.6	3,257	83.4	647	16.6	2,210	56.6
25–34	5,144	3,821	74.3	1,323	25.7	4,299	83.6	845	16.4	3,036	59.0
35–44	2,453	1,880	76.6	573	23.4	2,080	84.8	373	15.2	1,506	61.4
45–54	1,827	1,418	77.6	409	22.4	1,561	85.4	266	14.6	1,122	61.4
≥55	1,526	1,194	78.2	332	21.8	1,324	86.8	202	13.2	871	57.1
Transmission category^c											
Male-to-male sexual contact	8,745	6,485	74.2	2,260	25.8	7,301	83.5	1,444	16.5	4,984	57.0
Injection drug use											
Male	333	243	73.1	89	26.9	268	80.4	65	19.6	162	48.7
Female	299	231	77.2	68	22.8	251	83.7	49	16.3	164	54.7
Male-to-male sexual contact and injection drug use	243	168	69.2	75	30.8	187	76.8	56	23.2	123	50.6
Heterosexual contact ^d											
Male	1,627	1,227	75.4	400	24.6	1,373	84.4	254	15.6	920	56.5
Female	3,564	2,790	78.3	774	21.7	3,104	87.1	461	12.9	2,367	66.4
Total^e	14,854	11,180	75.3	3,674	24.7	12,521	84.3	2,333	15.7	8,745	58.9
Hispanic/Latino^f											
Gender											
Male	7,526	5,907	78.5	1,619	21.5	6,502	86.4	1,024	13.6	4,901	65.1
Female	996	781	78.4	215	21.6	873	87.7	123	12.3	637	64.0
Transgender male-to-female ^a	145	106	73.1	39	26.9	125	86.2	20	13.8	95	65.5
Transgender female-to-male ^a	6	6	100	0	0.0	6	100	0	0.0	4	66.7
Additional gender identity ^b	4	3	75.0	1	25.0	4	100	0	0.0	3	75.0
Age at diagnosis (yr)											
13–24	1,749	1,286	73.5	463	26.5	1,469	84.0	280	16.0	1,074	61.4
25–34	3,330	2,608	78.3	722	21.7	2,894	86.9	436	13.1	2,182	65.5
35–44	1,876	1,502	80.1	374	19.9	1,616	86.1	260	13.9	1,256	67.0
45–54	1,157	941	81.3	216	18.7	1,026	88.7	131	11.3	761	65.8
≥55	565	466	82.5	99	17.5	505	89.4	60	10.6	367	65.0
Transmission category^c											
Male-to-male sexual contact	6,641	5,220	78.6	1,421	21.4	5,750	86.6	891	13.4	4,385	66.0
Injection drug use											
Male	276	221	80.3	54	19.7	236	85.8	39	14.2	151	54.9
Female	131	97	74.5	33	25.5	111	85.2	19	14.8	65	50.0
Male-to-male sexual contact and injection drug use	302	219	72.5	83	27.5	251	83.0	51	17.0	162	53.7
Heterosexual contact ^d											
Male	451	351	77.8	100	22.2	389	86.3	62	13.7	297	65.9
Female	869	687	79.1	182	20.9	765	88.1	104	11.9	575	66.2
Total^e	8,677	6,803	78.4	1,874	21.6	7,510	86.6	1,167	13.4	5,640	65.0

Table S3. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2017 among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)

	Total diagnoses No.	Linkage to care								Viral suppression	
		≤1 month				≤3 months				VL <200 copies/mL ≤6 months	
		≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test			
		No.	%	No.	%	No.	%	No.	%	No.	%
Native Hawaiian/other Pacific Islander											
Gender											
Male	31	24	77.4	7	22.6	28	90.3	3	9.7	17	54.8
Female	8	7	87.5	1	12.5	8	100	0	0.0	7	87.5
Transgender male-to-female ^a	2	2	100	0	0.0	2	100	0	0.0	0	0.0
Transgender female-to-male ^a	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Additional gender identity ^b	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Age at diagnosis (yr)											
13–24	9	7	77.8	2	22.2	8	88.9	1	11.1	3	33.3
25–34	18	15	83.3	3	16.7	17	94.4	1	5.6	12	66.7
35–44	9	7	77.8	2	22.2	9	100	0	0.0	6	66.7
45–54	4	3	75.0	1	25.0	3	75.0	1	25.0	2	50.0
≥55	1	1	100	0	0.0	1	100	0	0.0	1	100
Transmission category^c											
Male-to-male sexual contact	28	23	82.7	5	17.3	26	92.8	2	7.2	16	57.4
Injection drug use											
Male	2	0	4.3	2	95.7	1	56.5	1	43.5	0	4.3
Female	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Male-to-male sexual contact and injection drug use	1	1	100	0	0.0	1	100	0	0.0	0	0.0
Heterosexual contact ^d											
Male	2	2	100	0	0.0	2	100	0	0.0	1	50.0
Female	8	7	87.5	1	12.5	8	100	0	0.0	7	87.5
Total^e	41	33	80.5	8	19.5	38	92.7	3	7.3	24	58.5
White											
Gender											
Male	7,167	5,843	81.5	1,324	18.5	6,426	89.7	741	10.3	4,857	67.8
Female	1,241	964	77.7	277	22.3	1,071	86.3	170	13.7	735	59.2
Transgender male-to-female ^a	59	47	79.7	12	20.3	55	93.2	4	6.8	43	72.9
Transgender female-to-male ^a	9	8	88.9	1	11.1	9	100	0	0.0	8	88.9
Additional gender identity ^b	2	2	100	0	0.0	2	100	0	0.0	2	100
Age at diagnosis (yr)											
13–24	1,270	994	78.3	276	21.7	1,126	88.7	144	11.3	828	65.2
25–34	2,708	2,115	78.1	593	21.9	2,370	87.5	338	12.5	1,758	64.9
35–44	1,702	1,397	82.1	305	17.9	1,533	90.1	169	9.9	1,116	65.6
45–54	1,651	1,388	84.1	263	15.9	1,485	89.9	166	10.1	1,146	69.4
≥55	1,147	970	84.6	177	15.4	1,049	91.5	98	8.5	797	69.5
Transmission category^c											
Male-to-male sexual contact	5,856	4,828	82.4	1,028	17.6	5,277	90.1	579	9.9	4,075	69.6
Injection drug use											
Male	422	321	76.1	101	23.9	369	87.6	52	12.4	236	56.0
Female	424	321	75.9	102	24.1	354	83.7	69	16.3	199	47.0
Male-to-male sexual contact and injection drug use	565	433	76.6	132	23.4	493	87.3	72	12.7	337	59.6
Heterosexual contact ^d											
Male	378	304	80.4	74	19.6	337	89.1	41	10.9	250	66.2
Female	823	648	78.7	175	21.3	722	87.8	101	12.2	542	65.8
Total^e	8,478	6,864	81.0	1,614	19.0	7,563	89.2	915	10.8	5,645	66.6

Table S3. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2017 among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)

	Total diagnoses No.	Linkage to care								Viral suppression	
		≤1 month				≤3 months				VL <200 copies/mL ≤6 months	
		≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test			
		No.	%	No.	%	No.	%	No.	%	No.	%
Multiracial											
Gender											
Male	839	674	80.3	165	19.7	739	88.1	100	11.9	552	65.8
Female	174	136	78.2	38	21.8	157	90.2	17	9.8	118	67.8
Transgender male-to-female ^a	13	11	84.6	2	15.4	13	100	0	0.0	6	46.2
Transgender female-to-male ^a	3	2	66.7	1	33.3	2	66.7	1	33.3	3	100
Additional gender identity ^b	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Age at diagnosis (yr)											
13–24	261	205	78.5	56	21.5	226	86.6	35	13.4	162	62.1
25–34	378	298	78.8	80	21.2	332	87.8	46	12.2	257	68.0
35–44	182	148	81.3	34	18.7	162	89.0	20	11.0	127	69.8
45–54	138	117	84.8	21	15.2	129	93.5	9	6.5	94	68.1
≥55	70	55	78.6	15	21.4	62	88.6	8	11.4	39	55.7
Transmission category^c											
Male-to-male sexual contact	724	581	80.2	143	19.8	637	87.9	88	12.1	488	67.4
Injection drug use											
Male	23	19	82.0	4	18.0	20	87.3	3	12.7	13	55.3
Female	32	21	66.7	11	33.3	27	85.0	5	15.0	18	56.4
Male-to-male sexual contact and injection drug use	48	41	85.0	7	15.0	44	91.3	4	8.7	26	54.5
Heterosexual contact ^d											
Male	57	44	78.2	12	21.8	51	90.8	5	9.2	31	54.5
Female	142	114	80.2	28	19.8	129	90.8	13	9.2	101	71.4
Total^e	1,029	823	80.0	206	20.0	911	88.5	118	11.5	679	66.0

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

Note. Data are based on residence at time of diagnosis and are for cases reported to CDC as of December 2019. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month or ≤3 months 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 2017. 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, New Jersey, and Pennsylvania. Areas with incomplete reporting: Arizona, Arkansas, Connecticut, Kansas, Kentucky, Vermont, and Puerto Rico.

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

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

^c 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.

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

^e Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure, or whose risk factor was not reported or identified. Data not displayed because the numbers were too small to be meaningful.

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

Table S4. Linkage to HIV medical care and viral suppression within 6 months of HIV diagnosis during 2017 among males aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—41 states and the District of Columbia

	Total diagnoses No.	Linkage to care								Viral suppression	
		≤1 month				≤3 months				VL <200 copies/mL ≤6 months	
		≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test			
		No.	%	No.	%	No.	%	No.	%	No.	%
American Indian/Alaska Native											
13–24	15	14	90.7	1	9.3	14	90.7	1	9.3	11	72.2
25–34	39	33	83.8	6	16.2	36	91.5	3	8.5	26	65.7
35–44	17	16	95.9	1	4.1	16	95.9	1	4.1	15	90.1
45–54	13	11	84.0	2	16.0	13	100	0	0.0	8	61.6
≥55	4	1	25.0	3	75.0	1	25.0	3	75.0	1	25.0
Asian											
13–24	163	128	78.7	35	21.3	142	87.3	21	12.7	117	72.0
25–34	241	204	84.6	37	15.4	213	88.3	28	11.7	177	73.5
35–44	148	116	78.4	32	21.6	132	89.2	16	10.8	109	73.6
45–54	97	80	83.3	16	16.7	87	90.2	10	9.8	66	68.1
≥55	33	27	82.0	6	18.0	29	87.1	4	12.9	23	69.7
Black/African American											
13–24	3,121	2,284	73.2	837	26.8	2,604	83.4	517	16.6	1,735	55.6
25–34	3,539	2,599	73.4	940	26.6	2,939	83.0	600	17.0	2,038	57.6
35–44	1,094	840	76.8	254	23.2	915	83.7	178	16.3	646	59.0
45–54	626	484	77.3	142	22.7	533	85.1	93	14.9	381	60.9
≥55	365	278	76.3	86	23.7	310	85.0	55	15.0	184	50.4
Hispanic/Latino^a											
13–24	1,482	1,086	73.3	396	26.7	1,245	84.0	237	16.0	920	62.1
25–34	2,719	2,147	79.0	572	21.0	2,365	87.0	354	13.0	1,802	66.3
35–44	1,375	1,114	81.1	260	18.9	1,197	87.1	178	12.9	947	68.9
45–54	779	632	81.2	147	18.8	683	87.6	96	12.4	525	67.3
≥55	287	240	83.7	47	16.3	260	90.6	27	9.4	191	66.4
Native Hawaiian/other Pacific Islander											
13–24	9	7	79.5	2	20.5	8	88.6	1	11.4	3	34.1
25–34	12	9	75.0	3	25.0	11	91.7	1	8.3	7	58.3
35–44	5	5	100	0	0.0	5	100	0	0.0	5	100
45–54	2	2	100	0	0.0	2	100	0	0.0	1	50.0
≥55	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
White											
13–24	977	771	78.9	206	21.1	871	89.1	106	10.9	650	66.6
25–34	1,874	1,502	80.1	373	19.9	1,663	88.7	212	11.3	1,290	68.8
35–44	1,094	928	84.9	166	15.1	1,008	92.1	87	7.9	776	71.0
45–54	1,157	988	85.4	169	14.6	1,045	90.3	112	9.7	820	70.9
≥55	754	639	84.7	115	15.3	691	91.6	63	8.4	538	71.3
Multiracial											
13–24	207	163	78.4	45	21.6	178	85.6	30	14.4	134	64.8
25–34	296	233	78.9	63	21.1	259	87.6	37	12.4	202	68.2
35–44	113	94	83.9	18	16.1	98	87.5	14	12.5	85	75.6
45–54	77	65	83.5	13	16.5	74	95.0	4	5.0	49	63.4
≥55	31	26	83.5	5	16.5	28	90.0	3	10.0	18	57.6
All											
13–24	5,974	4,452	74.5	1,521	25.5	5,061	84.7	913	15.3	3,572	59.8
25–34	8,720	6,726	77.1	1,994	22.9	7,485	85.8	1,235	14.2	5,541	63.5
35–44	3,845	3,114	81.0	731	19.0	3,371	87.7	473	12.3	2,583	67.2
45–54	2,751	2,262	82.2	489	17.8	2,436	88.6	315	11.4	1,850	67.3
≥55	1,474	1,212	82.2	263	17.8	1,319	89.5	155	10.5	954	64.7
Total	22,763	17,766	78.0	4,997	22.0	19,672	86.4	3,091	13.6	14,500	63.7

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

Note. Data are based on residence at time of diagnosis and are for cases reported to CDC as of December 2019. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month or ≤3 months 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 2017. 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, New Jersey, and Pennsylvania. Areas with incomplete reporting: Arizona, Arkansas, Connecticut, Kansas, Kentucky, Vermont, and Puerto Rico.

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

Table S5. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with infection diagnosed by year-end 2016 and alive at year-end 2017, by race/ethnicity and selected characteristics—41 states and the District of Columbia

	Persons alive at year-end 2017		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL of <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
American Indian/Alaska Native								
Gender								
Male	1,449	1,091	75.3	817	56.4	941	64.9	
Female	586	443	75.6	335	57.2	341	58.2	
Transgender male-to-female ^c	24	19	79.2	15	62.5	14	58.3	
Transgender female-to-male ^c	4	4	100	3	75.0	3	75.0	
Additional gender identity ^d	0	0	0.0	0	0.0	0	0.0	
Age at year-end 2016 (yr)								
13–24	78	62	79.5	49	62.8	53	67.9	
25–34	354	277	78.2	200	56.5	218	61.6	
35–44	465	336	72.3	247	53.1	279	60.0	
45–54	649	503	77.5	370	57.0	412	63.5	
≥55	517	379	73.3	304	58.8	337	65.2	
Transmission category^e								
Male-to-male sexual contact	1,007	774	76.9	586	58.2	678	67.3	
Injection drug use								
Male	153	102	66.6	72	47.2	79	51.9	
Female	189	137	72.5	102	54.2	101	53.3	
Male-to-male sexual contact and injection drug use	182	135	74.2	106	58.1	112	61.7	
Heterosexual contact ^f								
Male	117	88	75.3	60	50.8	76	64.4	
Female	385	302	78.3	227	59.0	236	61.3	
Other ^g								
Male	14	11	78.8	9	62.0	10	70.8	
Female	16	8	53.2	8	52.5	7	46.2	
Total	2,063	1,557	75.5	1,170	56.7	1,299	63.0	
Asian^h								
Gender								
Male	9,784	7,387	75.5	5,774	59.0	6,781	69.3	
Female	2,087	1,514	72.5	1,179	56.5	1,373	65.8	
Transgender male-to-female ^c	132	105	79.5	80	60.6	92	69.7	
Transgender female-to-male ^c	2	2	100	2	100	2	100	
Additional gender identity ^d	0	0	0.0	0	0.0	0	0.0	
Age at year-end 2016 (yr)								
13–24	440	356	80.9	290	65.9	325	73.9	
25–34	2,208	1,683	76.2	1,259	57.0	1,526	69.1	
35–44	3,415	2,564	75.1	1,976	57.9	2,359	69.1	
45–54	3,506	2,674	76.3	2,102	60.0	2,447	69.8	
≥55	2,436	1,731	71.1	1,408	57.8	1,591	65.3	
Transmission category^e								
Male-to-male sexual contact	8,302	6,328	76.2	4,909	59.1	5,820	70.1	
Injection drug use								
Male	365	233	63.9	192	52.7	210	57.4	
Female	151	99	65.9	82	54.7	88	58.6	
Male-to-male sexual contact and injection drug use	345	270	78.2	209	60.7	241	69.8	
Heterosexual contact ^f								
Male	813	597	73.4	498	61.3	549	67.6	
Female	1,863	1,366	73.3	1,057	56.8	1,241	66.6	
Other ^g								
Male	91	65	70.9	45	49.6	54	58.8	
Female	76	51	67.2	41	54.4	45	60.0	
Total	12,005	9,008	75.0	7,035	58.6	8,248	68.7	

Table S5. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with infection diagnosed by year-end 2016 and alive at year-end 2017, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)

	Persons alive at year-end 2017		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL of <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
Black/African American								
Gender								
Male	230,105	165,855	72.1	125,740	54.6	130,781	56.8	
Female	120,358	89,371	74.3	68,226	56.7	71,365	59.3	
Transgender male-to-female ^c	3,812	3,111	81.6	2,399	62.9	2,246	58.9	
Transgender female-to-male ^c	148	121	81.8	95	64.2	86	58.1	
Additional gender identity ^d	57	45	78.9	37	64.9	31	54.4	
Age at year-end 2016 (yr)								
13–24	18,070	13,632	75.4	9,883	54.7	9,550	52.9	
25–34	64,920	47,601	73.3	33,841	52.1	34,416	53.0	
35–44	69,899	50,930	72.9	37,357	53.4	39,302	56.2	
45–54	100,609	74,431	74.0	57,812	57.5	60,418	60.1	
≥55	100,982	71,909	71.2	57,604	57.0	60,823	60.2	
Transmission category^e								
Male-to-male sexual contact	147,709	109,559	74.2	81,631	55.3	86,203	58.4	
Injection drug use								
Male	27,628	17,502	63.3	13,870	50.2	13,930	50.4	
Female	20,163	14,637	72.6	11,295	56.0	11,576	57.4	
Male-to-male sexual contact and injection drug use	13,836	10,529	76.1	8,307	60.0	8,044	58.1	
Heterosexual contact ^f								
Male	41,838	29,382	70.2	22,813	54.5	23,506	56.2	
Female	96,935	72,311	74.6	55,034	56.8	58,193	60.0	
Other ^g								
Male	2,953	2,031	68.8	1,548	52.4	1,368	46.3	
Female	3,418	2,552	74.7	1,999	58.5	1,689	49.4	
Total	354,480	258,503	72.9	196,497	55.4	204,509	57.7	
Hispanic/Latinoⁱ								
Gender								
Male	150,473	107,881	71.7	86,733	57.6	93,408	62.1	
Female	36,112	27,607	76.4	22,509	62.3	23,145	64.1	
Transgender male-to-female ^c	2,706	2,242	82.9	1,857	68.6	1,791	66.2	
Transgender female-to-male ^c	60	48	80.0	40	66.7	39	65.0	
Additional gender identity ^d	37	33	89.2	30	81.1	24	64.9	
Age at year-end 2016 (yr)								
13–24	6,963	5,471	78.6	4,163	59.8	4,265	61.3	
25–34	32,014	24,417	76.3	18,462	57.7	19,852	62.0	
35–44	44,488	31,704	71.3	24,981	56.2	26,932	60.5	
45–54	58,882	42,931	72.9	35,125	59.7	37,483	63.7	
≥55	47,041	33,288	70.8	28,438	60.5	29,875	63.5	
Transmission category^e								
Male-to-male sexual contact	112,530	83,152	73.9	66,481	59.1	73,029	64.9	
Injection drug use								
Male	15,809	9,325	59.0	7,797	49.3	7,683	48.6	
Female	7,904	5,907	74.7	4,895	61.9	4,753	60.1	
Male-to-male sexual contact and injection drug use	10,857	8,326	76.7	6,728	62.0	6,607	60.9	
Heterosexual contact ^f								
Male	12,629	8,348	66.1	6,847	54.2	7,203	57.0	
Female	26,946	20,705	76.8	16,813	62.4	17,710	65.7	
Other ^g								
Male	1,385	999	72.1	761	54.9	699	50.4	
Female	1,329	1,048	78.9	847	63.7	724	54.4	
Total	189,388	137,811	72.8	111,169	58.7	118,407	62.5	

Table S5. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with infection diagnosed by year-end 2016 and alive at year-end 2017, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)

	Persons alive at year-end 2017		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL of <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
Native Hawaiian/other Pacific Islander								
Gender								
Male	556	420	75.5	308	55.4	365	65.6	
Female	116	82	70.7	58	50.0	73	62.9	
Transgender male-to-female ^c	20	18	90.0	13	65.0	16	80.0	
Transgender female-to-male ^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	
Age at year-end 2016 (yr)								
13–24	20	12	60.0	8	40.0	11	55.0	
25–34	129	101	78.3	68	52.7	80	62.0	
35–44	182	133	73.1	91	50.0	119	65.4	
45–54	209	157	75.1	114	54.5	134	64.1	
≥55	152	117	77.0	98	64.5	110	72.4	
Transmission category^e								
Male-to-male sexual contact	490	367	74.8	267	54.4	325	66.2	
Injection drug use								
Male	19	15	80.0	12	63.2	11	56.8	
Female	20	13	64.0	11	56.3	12	62.4	
Male-to-male sexual contact and injection drug use	37	34	92.1	23	63.6	26	70.4	
Heterosexual contact ^f								
Male	28	20	72.5	17	61.1	18	64.3	
Female	96	69	72.2	47	48.8	60	63.1	
Other ^g								
Male	3	2	92.0	2	92.0	2	84.0	
Female	1	0	50.0	0	33.3	0	50.0	
Total	692	520	75.1	379	54.8	454	65.6	
White								
Gender								
Male	220,381	175,754	79.8	132,737	60.2	156,585	71.1	
Female	31,758	23,634	74.4	17,499	55.1	19,865	62.6	
Transgender male-to-female ^c	826	709	85.8	546	66.1	579	70.1	
Transgender female-to-male ^c	63	53	84.1	41	65.1	41	65.1	
Additional gender identity ^d	20	17	85.0	12	60.0	15	75.0	
Age at year-end 2016 (yr)								
13–24	3,991	3,187	79.9	2,310	57.9	2,638	66.1	
25–34	24,998	19,775	79.1	13,837	55.4	16,503	66.0	
35–44	39,282	30,844	78.5	22,109	56.3	26,196	66.7	
45–54	87,995	70,270	79.9	52,480	59.6	62,277	70.8	
≥55	96,782	76,091	78.6	60,099	62.1	69,471	71.8	
Transmission category^e								
Male-to-male sexual contact	182,457	146,485	80.3	110,589	60.6	132,047	72.4	
Injection drug use								
Male	10,437	7,339	70.3	5,607	53.7	6,111	58.6	
Female	9,808	7,090	72.3	5,282	53.9	5,709	58.2	
Male-to-male sexual contact and injection drug use	19,242	15,765	81.9	11,996	62.3	13,065	67.9	
Heterosexual contact ^f								
Male	7,499	5,687	75.8	4,246	56.6	4,906	65.4	
Female	21,118	15,960	75.6	11,786	55.8	13,662	64.7	
Other ^g								
Male	1,587	1,200	75.6	854	53.8	1,046	65.9	
Female	900	641	71.2	475	52.8	538	59.7	
Total	253,048	200,167	79.1	150,835	59.6	177,085	70.0	

Table S5. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with infection diagnosed by year-end 2016 and alive at year-end 2017, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)

	Persons alive at year-end 2017		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL of <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
Multiracial								
Gender								
Male	30,503	26,136	85.7	19,986	65.5	21,548	70.6	
Female	9,318	8,008	85.9	6,220	66.8	6,349	68.1	
Transgender male-to-female ^c	644	580	90.1	462	71.7	425	66.0	
Transgender female-to-male ^c	24	24	100	17	70.8	17	70.8	
Additional gender identity ^d	13	13	100	9	69.2	10	76.9	
Age at year-end 2016 (yr)								
13–24	1,671	1,384	82.8	1,016	60.8	986	59.0	
25–34	7,048	5,738	81.4	4,120	58.5	4,380	62.1	
35–44	8,301	6,979	84.1	5,191	62.5	5,517	66.5	
45–54	12,582	10,966	87.2	8,523	67.7	9,044	71.9	
≥55	10,900	9,694	88.9	7,844	72.0	8,422	77.3	
Transmission category^e								
Male-to-male sexual contact	22,608	19,277	85.3	14,577	64.5	16,130	71.3	
Injection drug use								
Male	2,175	1,878	86.3	1,542	70.9	1,508	69.3	
Female	2,383	2,077	87.1	1,651	69.3	1,609	67.5	
Male-to-male sexual contact and injection drug use	3,628	3,250	89.6	2,556	70.5	2,503	69.0	
Heterosexual contact ^f								
Male	2,357	1,995	84.7	1,540	65.3	1,605	68.1	
Female	6,620	5,660	85.5	4,353	65.7	4,554	68.8	
Other ^g								
Male	391	328	83.7	241	61.7	235	60.1	
Female	339	296	87.3	234	69.1	205	60.4	
Total	40,502	34,761	85.8	26,694	65.9	28,349	70.0	

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

Note. Data are based on address of residence as of December 31, 2017 (i.e., most recent known address). Data are for cases reported to CDC as of December 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, New Jersey, and Pennsylvania. Areas with incomplete reporting: Arizona, Arkansas, Connecticut, Kansas, Kentucky, Vermont, and Puerto Rico.

^a Performed ≥3 months apart during 2017.

^b VL test results are from the most recent test during 2017.

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

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

^e 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.

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

^g Includes persons whose infection was attributed to hemophilia, blood transfusion, perinatal exposure, or whose risk factor was not reported or not identified.

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

ⁱ Hispanic/Latino persons can be of any race.

Table S6. Receipt of HIV medical care and viral suppression during 2017 among males aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age group—41 states and the District of Columbia

	Males alive at year-end 2017 Total No.	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL of <200 copies/mL ^b	
		No.	%	No.	%	No.	%
American Indian/Alaska Native							
13–24	53	46	87.0	36	67.1	40	75.6
25–34	227	185	81.5	133	58.7	156	68.5
35–44	215	156	72.7	111	51.7	142	66.2
45–54	304	230	75.8	178	58.6	199	65.7
≥55	209	157	75.0	128	61.6	141	67.6
Asian^c							
13–24	330	265	80.4	212	64.4	246	74.6
25–34	1,727	1,317	76.2	973	56.3	1,203	69.7
35–44	2,269	1,728	76.1	1,323	58.3	1,592	70.1
45–54	2,460	1,904	77.4	1,497	60.8	1,745	70.9
≥55	1,516	1,115	73.5	903	59.6	1,034	68.2
Black/African American							
13–24	11,397	8,696	76.3	6,164	54.1	6,291	55.2
25–34	42,930	32,202	75.0	22,796	53.1	23,648	55.1
35–44	29,302	21,850	74.6	16,111	55.0	17,134	58.5
45–54	36,912	27,382	74.2	21,182	57.4	22,561	61.1
≥55	27,168	19,429	71.5	15,378	56.6	16,568	61.0
Hispanic/Latino^d							
13–24	4,750	3,769	79.3	2,843	59.8	3,059	64.4
25–34	23,909	18,507	77.4	14,010	58.6	15,461	64.7
35–44	28,517	20,474	71.8	16,211	56.8	17,883	62.7
45–54	34,242	25,200	73.6	20,516	59.9	22,610	66.0
≥55	21,111	15,202	72.0	12,901	61.1	14,016	66.4
Native Hawaiian/other Pacific Islander							
13–24	13	7	54.3	5	38.8	6	46.5
25–34	100	78	77.6	51	50.8	65	64.7
35–44	138	101	73.2	70	50.7	92	66.6
45–54	140	104	74.2	79	56.0	91	65.0
≥55	99	77	77.7	62	62.9	71	71.3
White							
13–24	2,517	2,042	81.1	1,470	58.4	1,754	69.7
25–34	17,822	14,269	80.1	9,977	56.0	12,358	69.3
35–44	26,509	21,143	79.8	15,116	57.0	18,505	69.8
45–54	63,812	51,595	80.9	38,558	60.4	46,559	73.0
≥55	71,797	57,436	80.0	45,468	63.3	52,871	73.6
Multiracial							
13–24	1,025	845	82.5	604	58.9	624	60.8
25–34	5,000	4,085	81.7	2,914	58.3	3,227	64.5
35–44	4,746	3,988	84.0	2,934	61.8	3,256	68.6
45–54	6,842	5,914	86.4	4,561	66.7	5,088	74.4
≥55	4,995	4,444	89.0	3,564	71.3	3,936	78.8
All							
13–24	20,085	15,669	78.0	11,333	56.4	12,020	59.8
25–34	91,715	70,643	77.0	50,854	55.4	56,117	61.2
35–44	91,714	69,441	75.7	51,879	56.6	58,605	63.9
45–54	144,836	112,344	77.6	86,582	59.8	98,868	68.3
≥55	127,086	97,882	77.0	78,423	61.7	88,658	69.8
Total	475,435	365,980	77.0	279,071	58.7	314,269	66.1

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, Centers for Disease Control and Prevention [footnotes only].
Note. Data are based on address of residence as of December 31, 2017 (i.e., most recent known address). Data are for cases reported to CDC as of December 2019. 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, New Jersey, and Pennsylvania. Areas with incomplete reporting: Arizona, Arkansas, Connecticut, Kansas, Kentucky, Vermont, and Puerto Rico.

^a Performed ≥3 months apart during 2017.

^b VL test results are from the most recent test during 2017.

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

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

Table S7a. Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2017 and 2018 among persons aged ≥ 16 years, by selected characteristics—United States

	2017			2018		
	Persons prescribed PrEP ^a No.	Persons with PrEP indications ^b No.	PrEP coverage ^c %	Persons prescribed PrEP ^a No.	Persons with PrEP indications ^b No.	PrEP coverage ^c %
Sex at birth						
Male	149,620	993,840	15.1	204,863	989,200	20.7
Female	11,458	227,240	5.0	15,688	227,010	6.9
Age (yr)						
16–24	20,071	259,130	7.7	29,413	246,290	11.9
25–34	64,906	425,690	15.2	90,975	434,680	20.9
35–44	38,088	233,560	16.3	50,892	238,470	21.3
45–54	25,252	180,870	14.0	31,602	173,420	18.2
≥55	12,868	121,830	10.6	17,780	123,350	14.4
Race/ethnicity^d						
Asian/other	7,149	132,040	5.4	9,836	131,180	7.5
Black/African American	20,255	475,100	4.3	29,262	468,540	6.2
Hispanic/Latino ^e	23,142	299,580	7.7	34,228	312,820	10.9
White	110,638	311,250	35.5	153,215	300,650	51.0
Total	161,185	1,221,080	13.2	226,541	1,216,210	18.6

Abbreviations: PrEP, preexposure prophylaxis; n/a, not available; NHSS, National HIV Surveillance System [footnotes only].

^a Estimated by using data from IQVIA pharmacy database and 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 2017 and 2018 data from 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, 2017 denominators were used for 2017 PrEP coverage data and 2018 denominators were used for 2018 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 each year. 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 S7b. Number of persons prescribed PrEP, number of persons with PrEP indications, and PrEP coverage in 2017 and 2018 among persons aged ≥ 16 years, by area of residence—United States and Puerto Rico

	2017			2018		
	Persons prescribed PrEP ^a	Persons with PrEP indications ^b	PrEP coverage ^c	Persons prescribed PrEP ^a	Persons with PrEP indications ^b	PrEP coverage ^c
	No.	No.	%	No.	No.	%
Alabama	1,014	11,390	8.9	1,557	11,020	14.1
Alaska	120	2,370	5.1	196	1,780	11.0
Arizona	2,430	26,820	9.1	3,694	25,780	14.3
Arkansas	445	4,840	9.2	632	5,130	12.3
California	28,138	166,150	16.9	37,659	165,030	22.8
Colorado	2,484	25,510	9.7	3,517	25,120	14.0
Connecticut	1,636	10,970	14.9	2,349	9,560	24.6
Delaware	287	4,860	5.9	423	4,400	9.6
District of Columbia	4,018	13,710	29.3	5,212	12,950	40.2
Florida	8,731	125,160	7.0	14,999	125,330	12.0
Georgia	4,685	40,680	11.5	6,548	39,030	16.8
Hawaii	460	5,440	8.5	698	4,360	16.0
Idaho	272	3,860	7.0	380	4,790	7.9
Illinois	10,605	54,620	19.4	14,334	55,860	25.7
Indiana	1,577	21,640	7.3	2,251	22,170	10.2
Iowa	803	4,280	18.8	1,186	4,760	24.9
Kansas	556	5,570	10.0	751	5,060	14.8
Kentucky	781	13,170	5.9	1,244	12,990	9.6
Louisiana	2,458	15,490	15.9	3,574	15,920	22.4
Maine	318	3,270	9.7	494	3,950	12.5
Maryland	2,815	28,150	10.0	4,089	27,300	15.0
Massachusetts	5,996	25,110	23.9	8,191	24,900	32.9
Michigan	2,307	28,520	8.1	3,544	29,570	12.0
Minnesota	2,581	23,770	10.9	3,552	21,720	16.4
Mississippi	465	5,030	9.2	655	4,530	14.5
Missouri	1,983	19,420	10.2	2,850	18,370	15.5
Montana	123	2,750	4.5	185	2,290	8.1
Nebraska	361	2,590	13.9	481	2,180	22.1
Nevada	1,127	10,870	10.4	1,564	11,390	13.7
New Hampshire	338	3,110	10.9	533	3,020	17.6
New Jersey	3,457	28,590	12.1	4,768	25,280	18.9
New Mexico	618	6,720	9.2	820	6,800	12.1
New York	23,455	74,450	31.5	30,945	72,640	42.6
North Carolina	2,736	33,110	8.3	4,158	32,490	12.8
North Dakota	111	1,230	9.0	164	1,520	10.8
Ohio	3,645	40,940	8.9	4,931	40,320	12.2
Oklahoma	555	11,030	5.0	860	11,030	7.8
Oregon	2,073	20,720	10.0	2,757	19,750	14.0
Pennsylvania	6,326	36,160	17.5	8,800	36,490	24.1
Rhode Island	657	4,360	15.1	897	3,880	23.1
South Carolina	720	10,390	6.9	1,249	10,390	12.0
South Dakota	60	1,000	6.0	104	910	11.4
Tennessee	1,802	22,890	7.9	2,691	22,460	12.0
Texas	11,750	123,400	9.5	18,050	123,790	14.6
Utah	1,045	6,900	15.1	1,500	6,840	21.9
Vermont	216	1,490	14.5	288	1,060	27.2
Virginia	2,167	33,670	6.4	3,267	31,430	10.4
Washington	6,952	35,600	19.5	8,986	40,050	22.4
West Virginia	242	3,660	6.6	380	5,250	7.2
Wisconsin	1,428	14,230	10.0	2,021	12,980	15.6
Wyoming	50	1,410	3.5	80	890	9.0
Puerto Rico ^d	120	9,700	1.2	245	9,700	2.5
Total	161,185	1,221,080	13.2	226,541	1,216,210	18.6

Abbreviations: PrEP, preexposure prophylaxis; n/a, not available; NHSS, National HIV Surveillance System [footnotes only].

^a Estimated by using data from IQVIA pharmacy database and 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 2017 and 2018 data from NHSS, 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. In this table, 2017 denominators were used for 2017 PrEP coverage data and 2018 denominators were used for 2018 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 Number of persons with PrEP indications was unavailable in 2017 and 2018 data are used for 2017.

Table S8a. Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis and selected characteristics, 2015–2019—United States

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
Gender															
Male	4,901	1,837	37.5	4,765	1,815	38.1	4,637	1,699	36.6	4,433	1,615	36.4	4,320	1,549	35.9
Female	1,792	596	33.3	1,877	572	30.5	1,820	580	31.9	1,769	572	32.3	1,754	498	28.4
Transgender male-to-female ^b	25	5	20.0	23	7	30.4	19	4	21.1	15	3	20.0	28	6	21.4
Transgender female-to-male ^b	1	0	0	1	0	0.0	1	0	0.0	1	0	0.0	0	0	0.0
Additional gender identity ^c	0	0	0	1	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Age at diagnosis (yr)															
50–54	2,991	1,046	35.0	2,847	992	34.8	2,640	926	35.1	2,467	867	35.1	2,301	738	32.1
55–59	1,882	678	36.0	1,881	699	37.2	1,873	657	35.1	1,841	647	35.1	1,827	594	32.5
60–64	995	388	39.0	1,080	369	34.2	1,087	387	35.6	1,040	356	34.2	1,100	383	34.8
65–69	538	211	39.2	563	203	36.1	519	182	35.1	484	177	36.6	501	199	39.7
70–74	197	76	38.6	188	84	44.7	224	73	32.6	248	92	37.1	233	88	37.8
75–79	82	27	32.9	71	31	43.7	90	45	50.0	91	39	42.9	91	34	37.4
80–84	28	11	39.3	27	15	55.6	35	11	31.4	34	10	29.4	32	11	34.4
≥85	6	1	16.7	10	1	10.0	9	2	22.2	13	2	15.4	17	6	35.3
Race/ethnicity															
American Indian/Alaska Native	22	9	40.9	30	7	23.3	33	12	36.4	27	11	40.7	29	8	27.6
Asian	104	52	50.0	120	44	36.7	115	53	46.1	113	44	38.9	115	43	37.4
Black/African American	2,733	922	33.7	2,677	885	33.1	2,651	857	32.3	2,494	830	33.3	2,518	792	31.5
Hispanic/Latino ^d	1,234	449	36.4	1,260	481	38.2	1,254	467	37.2	1,338	517	38.6	1,254	439	35.0
Native Hawaiian/other Pacific Islander	10	4	40.0	7	1	14.3	4	3	75.0	9	3	33.3	6	3	50.0
White	2,397	915	38.2	2,381	897	37.7	2,267	829	36.6	2,106	735	34.9	2,051	713	34.8
Multiracial	219	87	39.7	192	79	41.1	153	62	40.5	131	50	38.2	129	55	42.6
Transmission category^e															
Male adult^f															
Male-to-male sexual contact	3,213	1,148	35.7	3,154	1,165	36.9	3,094	1,089	35.2	2,954	1,037	35.1	2,888	987	34.2
Injection drug use	416	165	39.6	392	146	37.1	380	138	36.4	383	141	36.8	355	130	36.6
Male-to-male sexual contact and injection drug use	180	73	40.3	177	64	35.9	171	47	27.7	147	48	32.6	160	48	30.1
Heterosexual contact ^g	1,107	454	41.0	1,053	443	42.0	999	424	42.5	951	387	40.7	929	384	41.4
Other ^h	10	3	34.3	11	5	48.2	12	4	33.6	13	5	33.8	15	6	39.2
Subtotal	4,926	1,842	37.4	4,788	1,822	38.1	4,656	1,703	36.6	4,448	1,618	36.4	4,348	1,555	35.8
Female adult^f															
Injection drug use	256	89	34.9	276	88	31.8	238	81	34.1	254	89	35.0	241	72	30.0
Heterosexual contact ^g	1,532	504	32.9	1,600	483	30.2	1,578	497	31.5	1,511	480	31.8	1,510	425	28.1
Other ^h	6	2	38.6	4	2	48.6	4	2	39.5	5	3	52.0	3	1	26.7
Subtotal	1,793	596	33.2	1,879	572	30.4	1,821	580	31.9	1,770	572	32.3	1,754	498	28.4
Region of residenceⁱ															
Northeast	1,343	506	37.7	1,239	419	33.8	1,170	426	36.4	1,145	412	36.0	1,037	368	35.5
Midwest	775	297	38.3	811	344	42.4	774	290	37.5	737	285	38.7	703	245	34.9
South	3,373	1,203	35.7	3,352	1,182	35.3	3,297	1,158	35.1	3,167	1,067	33.7	3,225	1,071	33.2
West	1,228	432	35.2	1,265	449	35.5	1,236	409	33.1	1,169	426	36.4	1,137	369	32.5
Total	6,719	2,438	36.3	6,667	2,394	35.9	6,477	2,283	35.2	6,218	2,190	35.2	6,102	2,053	33.6

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

Note. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

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

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

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

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

^e Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

^f Data presented based on sex at birth and include transgender persons.

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

^h Includes persons whose infection was attributed to hemophilia, blood transfusion, or whose risk factor was not reported or not identified.

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

Table S8b. Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis and selected characteristics, 2015–2019—United States and 6 dependent areas

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
Gender															
Male	5,000	1,871	37.4	4,877	1,856	38.1	4,732	1,725	36.5	4,520	1,653	36.6	4,402	1,578	35.8
Female	1,831	608	33.2	1,910	583	30.5	1,852	589	31.8	1,800	583	32.4	1,786	507	28.4
Transgender male-to-female ^b	25	5	20.0	23	7	30.4	19	4	21.1	15	3	20.0	28	6	21.4
Transgender female-to-male ^b	1	0	0.0	1	0	0.0	1	0	0.0	1	0	0.0	0	0	0.0
Additional gender identity ^c	0	0	0.0	1	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Age at diagnosis (yr)															
50–54	3,049	1,069	35.1	2,893	1,009	34.9	2,692	942	35.0	2,517	888	35.3	2,329	749	32.2
55–59	1,915	686	35.8	1,930	712	36.9	1,907	668	35.0	1,868	659	35.3	1,863	602	32.3
60–64	1,010	390	38.6	1,105	378	34.2	1,108	391	35.3	1,060	364	34.3	1,123	389	34.6
65–69	560	220	39.3	580	213	36.7	526	184	35.0	496	181	36.5	516	206	39.9
70–74	205	78	38.0	192	85	44.3	230	74	32.2	254	94	37.0	243	94	38.7
75–79	84	29	34.5	73	33	45.2	94	45	47.9	93	40	43.0	93	34	36.6
80–84	28	11	39.3	28	15	53.6	37	12	32.4	34	10	29.4	32	11	34.4
≥85	6	1	16.7	11	1	9.1	10	2	20.0	14	3	21.4	17	6	35.3
Race/ethnicity															
American Indian/Alaska Native	22	9	40.9	30	7	23.3	33	12	36.4	27	11	40.7	29	8	27.6
Asian	104	52	50.0	120	44	36.7	115	53	46.1	113	44	38.9	115	43	37.4
Black/African American	2,735	923	33.7	2,679	886	33.1	2,651	857	32.3	2,495	830	33.3	2,521	793	31.5
Hispanic/Latino ^d	1,367	491	35.9	1,402	531	37.9	1,377	500	36.3	1,451	564	38.9	1,363	476	34.9
Native Hawaiian/other Pacific Islander	11	5	45.5	8	2	25.0	6	5	83.3	10	4	40.0	7	3	42.9
White	2,399	917	38.2	2,381	897	37.7	2,269	829	36.5	2,108	736	34.9	2,052	713	34.7
Multiracial	219	87	39.7	192	79	41.1	153	62	40.5	132	50	37.9	129	55	42.6
Transmission category^e															
Male adult^f															
Male-to-male sexual contact	3,254	1,163	35.7	3,200	1,174	36.7	3,134	1,104	35.2	2,994	1,052	35.1	2,925	998	34.1
Injection drug use	437	168	38.5	410	154	37.6	401	144	36.0	394	146	37.0	366	134	36.8
Male-to-male sexual contact and injection drug use	185	75	40.6	177	64	35.9	171	47	27.7	150	50	33.4	162	49	30.4
Heterosexual contact ^g	1,140	467	41.0	1,102	466	42.3	1,033	429	41.6	984	404	41.0	962	396	41.2
Other ^h	10	4	35.0	11	5	48.2	12	4	33.1	13	5	33.8	15	6	39.2
Subtotal	5,025	1,876	37.3	4,900	1,863	38.0	4,751	1,729	36.4	4,535	1,656	36.5	4,430	1,584	35.8
Female adult^f															
Injection drug use	257	89	34.8	279	89	31.8	242	81	33.7	254	89	35.0	243	73	30.1
Heterosexual contact ^g	1,569	516	32.9	1,629	492	30.2	1,607	506	31.5	1,542	491	31.9	1,540	433	28.1
Other ^h	6	2	38.6	4	2	47.2	4	2	39.5	5	3	52.0	3	1	26.7
Subtotal	1,832	608	33.2	1,912	583	30.5	1,853	589	31.8	1,801	583	32.4	1,786	507	28.4
Region of residenceⁱ															
Northeast	1,343	506	37.7	1,239	419	33.8	1,170	426	36.4	1,145	412	36.0	1,037	368	35.5
Midwest	775	297	38.3	811	344	42.4	774	290	37.5	737	285	38.7	703	245	34.9
South	3,373	1,203	35.7	3,352	1,182	35.3	3,297	1,158	35.1	3,167	1,067	33.7	3,225	1,071	33.2
West	1,228	432	35.2	1,265	449	35.5	1,236	409	33.1	1,169	426	36.4	1,137	369	32.5
U.S. dependent areas	138	46	33.3	145	52	35.9	127	35	27.6	118	49	41.5	114	38	33.3
Total	6,857	2,484	36.2	6,812	2,446	35.9	6,604	2,318	35.1	6,336	2,239	35.3	6,216	2,091	33.6

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

Note. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

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

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

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

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

^e Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

^f Data presented based on sex at birth and include transgender persons.

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

^h Includes persons whose infection was attributed to hemophilia, blood transfusion, or whose risk factor was not reported or not identified.

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

Table S9a. Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis, sex at birth, and selected characteristics, 2015–2019—United States

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
Male adult															
Age at diagnosis (yr)															
50–54	2,252	819	36.4	2,123	781	36.8	1,980	702	35.5	1,808	656	36.3	1,677	584	34.8
55–59	1,348	499	37.0	1,308	519	39.7	1,313	490	37.3	1,297	477	36.8	1,317	448	34.0
60–64	700	285	40.7	734	272	37.1	755	282	37.4	720	256	35.6	748	286	38.2
65–69	386	154	39.9	407	152	37.3	368	140	38.0	350	137	39.1	344	140	40.7
70–74	154	58	37.7	141	66	46.8	152	50	32.9	177	62	35.0	160	59	36.9
75–79	64	22	34.4	54	21	38.9	55	28	50.9	62	25	40.3	67	25	37.3
80–84	16	4	25.0	17	10	58.8	27	10	37.0	25	5	20.0	24	10	41.7
≥85	6	1	16.7	4	1	25.0	6	1	16.7	9	0	0.0	11	3	27.3
Race/ethnicity															
American Indian/Alaska Native	14	4	28.6	20	6	30.0	21	7	33.3	20	9	45.0	21	6	28.6
Asian	81	45	55.6	93	34	36.6	84	43	51.2	85	33	38.8	91	37	40.7
Black/African American	1,652	585	35.4	1,556	572	36.8	1,546	536	34.7	1,467	526	35.9	1,460	512	35.1
Hispanic/Latino ^b	946	354	37.4	946	373	39.4	967	373	38.6	995	390	39.2	963	344	35.7
Native Hawaiian/other Pacific Islander	8	4	50.0	4	0	0.0	3	2	66.7	7	3	42.9	5	2	40.0
White	2,069	785	37.9	2,032	779	38.3	1,919	698	36.4	1,788	624	34.9	1,720	612	35.6
Multiracial	156	65	41.7	137	58	42.3	116	44	37.9	86	33	38.4	88	42	47.7
Region of residence^c															
Northeast	926	367	39.6	826	308	37.3	767	293	38.2	771	289	37.5	689	261	37.9
Midwest	595	245	41.2	623	276	44.3	585	226	38.6	576	229	39.8	526	192	36.5
South	2,392	877	36.7	2,316	855	36.9	2,294	840	36.6	2,189	772	35.3	2,222	793	35.7
West	1,013	353	34.8	1,023	383	37.4	1,010	344	34.1	912	328	36.0	911	309	33.9
Subtotal, male adult	4,926	1,842	37.4	4,788	1,822	38.1	4,656	1,703	36.6	4,448	1,618	36.4	4,348	1,555	35.8
Female adult															
Age at diagnosis (yr)															
50–54	739	227	30.7	724	211	29.1	660	224	33.9	659	211	32.0	624	154	24.7
55–59	534	179	33.5	573	180	31.4	560	167	29.8	544	170	31.3	510	146	28.6
60–64	295	103	34.9	346	97	28.0	332	105	31.6	320	100	31.3	352	97	27.6
65–69	152	57	37.5	156	51	32.7	151	42	27.8	134	40	29.9	157	59	37.6
70–74	43	18	41.9	47	18	38.3	72	23	31.9	71	30	42.3	73	29	39.7
75–79	18	5	27.8	17	10	58.8	35	17	48.6	29	14	48.3	24	9	37.5
80–84	12	7	58.3	10	5	50.0	8	1	12.5	9	5	55.6	8	1	12.5
≥85	0	0	0.0	6	0	0.0	3	1	33.3	4	2	50.0	6	3	50.0
Race/ethnicity															
American Indian/Alaska Native	8	5	62.5	10	1	10.0	12	5	41.7	7	2	28.6	8	2	25.0
Asian	23	7	30.4	27	10	37.0	31	10	32.3	28	11	39.3	24	6	25.0
Black/African American	1,081	337	31.2	1,121	313	27.9	1,105	321	29.0	1,027	304	29.6	1,058	280	26.5
Hispanic/Latino ^b	288	95	33.0	314	108	34.4	287	94	32.8	343	127	37.0	291	95	32.6
Native Hawaiian/other Pacific Islander	2	0	0.0	3	1	33.3	1	1	100	2	0	0.0	1	1	100
White	328	130	39.6	349	118	33.8	348	131	37.6	318	111	34.9	331	101	30.5
Multiracial	63	22	34.9	55	21	38.2	37	18	48.6	45	17	37.8	41	13	31.7
Region of residence^c															
Northeast	417	139	33.3	413	111	26.9	403	133	33.0	374	123	32.9	348	107	30.7
Midwest	180	52	28.9	188	68	36.2	189	64	33.9	161	56	34.8	177	53	29.9
South	981	326	33.2	1,036	327	31.6	1,003	318	31.7	978	295	30.2	1,003	278	27.7
West	215	79	36.7	242	66	27.3	226	65	28.8	257	98	38.1	226	60	26.5
Subtotal, female adult	1,793	596	33.2	1,879	572	30.4	1,821	580	31.9	1,770	572	32.3	1,754	498	28.4
Total	6,719	2,438	36.3	6,667	2,394	35.9	6,477	2,283	35.2	6,218	2,190	35.2	6,102	2,053	33.6

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

Note. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

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

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

^c Data are based on residence at time of diagnosis.

Table S9b. Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis, sex at birth, and selected characteristics, 2015–2019—United States and 6 dependent areas

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
Male adult															
Age at diagnosis (yr)															
50–54	2,296	838	36.5	2,160	794	36.8	2,020	715	35.4	1,846	672	36.4	1,699	594	35.0
55–59	1,369	504	36.8	1,343	528	39.3	1,336	497	37.2	1,316	485	36.9	1,340	454	33.9
60–64	714	287	40.2	752	279	37.1	771	286	37.1	735	263	35.8	766	291	38.0
65–69	398	158	39.7	422	161	38.2	374	141	37.7	359	141	39.3	355	145	40.8
70–74	160	60	37.5	145	67	46.2	155	50	32.3	181	63	34.8	166	62	37.3
75–79	66	24	36.4	56	23	41.1	59	28	47.5	63	26	41.3	69	25	36.2
80–84	16	4	25.0	18	10	55.6	29	11	37.9	25	5	20.0	24	10	41.7
≥85	6	1	16.7	4	1	25.0	7	1	14.3	10	1	10.0	11	3	27.3
Race/ethnicity															
American Indian/Alaska Native	14	4	28.6	20	6	30.0	21	7	33.3	20	9	45.0	21	6	28.6
Asian	81	45	55.6	93	34	36.6	84	43	51.2	85	33	38.8	91	37	40.7
Black/African American	1,652	585	35.4	1,558	573	36.8	1,546	536	34.7	1,468	526	35.8	1,462	513	35.1
Hispanic/Latino ^b	1,042	385	36.9	1,055	412	39.1	1,059	397	37.5	1,077	426	39.6	1,041	372	35.7
Native Hawaiian/other Pacific Islander	9	5	55.6	5	1	20.0	5	4	80.0	8	4	50.0	6	2	33.3
White	2,071	787	38.0	2,032	779	38.3	1,920	698	36.4	1,790	625	34.9	1,721	612	35.6
Multiracial	156	65	41.7	137	58	42.3	116	44	37.9	87	33	37.9	88	42	47.7
Region of residence^c															
Northeast	926	367	39.6	826	308	37.3	767	293	38.2	771	289	37.5	689	261	37.9
Midwest	595	245	41.2	623	276	44.3	585	226	38.6	576	229	39.8	526	192	36.5
South	2,392	877	36.7	2,316	855	36.9	2,294	840	36.6	2,189	772	35.3	2,222	793	35.7
West	1,013	353	34.8	1,023	383	37.4	1,010	344	34.1	912	328	36.0	911	309	33.9
U.S. dependent areas	99	34	34.3	112	41	36.6	95	26	27.4	87	38	43.7	82	29	35.4
Subtotal, male adult	5,025	1,876	37.3	4,900	1,863	38.0	4,751	1,729	36.4	4,535	1,656	36.5	4,430	1,584	35.8
Female adult															
Age at diagnosis (yr)															
50–54	753	231	30.7	733	215	29.3	672	227	33.8	671	216	32.2	630	155	24.6
55–59	546	182	33.3	587	184	31.3	571	171	29.9	552	174	31.5	523	148	28.3
60–64	296	103	34.8	353	99	28.0	337	105	31.2	325	101	31.1	357	98	27.5
65–69	162	62	38.3	158	52	32.9	152	43	28.3	137	40	29.2	161	61	37.9
70–74	45	18	40.0	47	18	38.3	75	24	32.0	73	31	42.5	77	32	41.6
75–79	18	5	27.8	17	10	58.8	35	17	48.6	30	14	46.7	24	9	37.5
80–84	12	7	58.3	10	5	50.0	8	1	12.5	9	5	55.6	8	1	12.5
≥85	0	0	0.0	7	0	0.0	3	1	33.3	4	2	50.0	6	3	50.0
Race/ethnicity															
American Indian/Alaska Native	8	5	62.5	10	1	10.0	12	5	41.7	7	2	28.6	8	2	25.0
Asian	23	7	30.4	27	10	37.0	31	10	32.3	28	11	39.3	24	6	25.0
Black/African American	1,083	338	31.2	1,121	313	27.9	1,105	321	29.0	1,027	304	29.6	1,059	280	26.4
Hispanic/Latino ^b	325	106	32.6	347	119	34.3	318	103	32.4	374	138	36.9	322	104	32.3
Native Hawaiian/other Pacific Islander	2	0	0.0	3	1	33.3	1	1	100	2	0	0.0	1	1	100
White	328	130	39.6	349	118	33.8	349	131	37.5	318	111	34.9	331	101	30.5
Multiracial	63	22	34.9	55	21	38.2	37	18	48.6	45	17	37.8	41	13	31.7
Region of residence^c															
Northeast	417	139	33.3	413	111	26.9	403	133	33.0	374	123	32.9	348	107	30.7
Midwest	180	52	28.9	188	68	36.2	189	64	33.9	161	56	34.8	177	53	29.9
South	981	326	33.2	1,036	327	31.6	1,003	318	31.7	978	295	30.2	1,003	278	27.7
West	215	79	36.7	242	66	27.3	226	65	28.8	257	98	38.1	226	60	26.5
U.S. dependent areas	39	12	30.8	33	11	33.3	32	9	28.1	31	11	35.5	32	9	28.1
Subtotal, female adult	1,832	608	33.2	1,912	583	30.5	1,853	589	31.8	1,801	583	32.4	1,786	507	28.4
Total	6,857	2,484	36.2	6,812	2,446	35.9	6,604	2,318	35.1	6,336	2,239	35.3	6,216	2,091	33.6

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

Note. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

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

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

^c Data are based on residence at time of diagnosis.

Table S10a. Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis, age group, sex at birth, and selected characteristics, 2015–2019—United States

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
Aged 50–64 years at diagnosis															
Male adult															
Race/ethnicity															
American Indian/Alaska Native	14	4	28.6	17	4	23.5	18	6	33.3	17	8	47.1	20	5	25.0
Asian	71	40	56.3	74	26	35.1	73	39	53.4	69	27	39.1	78	32	41.0
Black/African American	1,432	501	35.0	1,335	483	36.2	1,330	462	34.7	1,243	446	35.9	1,220	418	34.3
Hispanic/Latino ^b	833	313	37.6	851	324	38.1	848	333	39.3	885	347	39.2	853	295	34.6
Native Hawaiian/other Pacific Islander	8	4	50.0	2	0	0.0	2	1	50.0	6	2	33.3	5	2	40.0
White	1,812	687	37.9	1,762	680	38.6	1,673	596	35.6	1,533	531	34.6	1,492	530	35.5
Multiracial	130	54	41.5	124	55	44.4	104	37	35.6	72	28	38.9	74	36	48.6
Transmission category^c															
Male-to-male sexual contact	2,864	1,021	35.6	2,814	1,034	36.8	2,758	966	35.0	2,576	903	35.1	2,545	858	33.7
Injection drug use	357	141	39.6	330	122	37.0	316	115	36.5	333	122	36.4	302	107	35.5
Male-to-male sexual contact and injection drug use	170	67	39.2	159	56	35.1	155	41	26.4	136	45	33.1	143	42	29.2
Heterosexual contact ^d	905	373	41.2	857	357	41.7	813	350	43.1	773	317	41.0	745	308	41.4
Other ^e	4	2	37.5	5	3	48.1	6	2	36.1	8	3	33.3	8	3	39.3
Region of residence^f															
Northeast	792	314	39.6	701	255	36.4	655	243	37.1	658	242	36.8	579	220	38.0
Midwest	532	215	40.4	567	252	44.4	512	192	37.5	499	194	38.9	450	159	35.3
South	2,077	763	36.7	2,000	734	36.7	1,986	731	36.8	1,886	672	35.6	1,906	677	35.5
West	899	311	34.6	897	331	36.9	895	308	34.4	782	281	35.9	807	262	32.5
Subtotal, male adult, aged 50–64 years	4,300	1,603	37.3	4,165	1,572	37.7	4,048	1,474	36.4	3,825	1,389	36.3	3,742	1,318	35.2
Female adult															
Race/ethnicity															
American Indian/Alaska Native	7	5	71.4	9	1	11.1	11	5	45.5	7	2	28.6	6	0	0.0
Asian	18	5	27.8	22	10	45.5	26	10	38.5	22	9	40.9	19	4	21.1
Black/African American	933	282	30.2	981	271	27.6	918	262	28.5	881	256	29.1	877	220	25.1
Hispanic/Latino ^b	252	82	32.5	266	84	31.6	246	82	33.3	292	106	36.3	243	73	30.0
Native Hawaiian/other Pacific Islander	2	0	0.0	3	1	33.3	1	1	100	2	0	0.0	1	1	100
White	297	116	39.1	317	106	33.4	318	120	37.7	284	94	33.1	306	90	29.4
Multiracial	59	19	32.2	45	15	33.3	32	16	50.0	35	14	40.0	34	9	26.5
Transmission category^c															
Injection drug use	229	80	34.8	244	75	30.8	211	74	35.2	225	74	32.7	209	56	26.9
Heterosexual contact ^d	1,336	428	32.1	1,397	412	29.5	1,339	421	31.5	1,296	406	31.4	1,275	340	26.7
Other ^e	3	1	37.0	2	1	50.0	2	1	33.3	2	1	47.8	2	1	36.8
Region of residence^f															
Northeast	362	114	31.5	354	87	24.6	342	115	33.6	318	104	32.7	286	82	28.7
Midwest	159	46	28.9	173	65	37.6	169	58	34.3	140	49	35.0	157	42	26.8
South	862	281	32.6	901	276	30.6	837	264	31.5	850	248	29.2	854	227	26.6
West	185	68	36.8	215	60	27.9	204	59	28.9	215	80	37.2	189	46	24.3
Subtotal, female adult, aged 50–64 years	1,568	509	32.5	1,643	488	29.7	1,552	496	32.0	1,523	481	31.6	1,486	397	26.7

Table S10a. Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis, age group, sex at birth, and selected characteristics, 2015–2019—United States (cont)

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Aged 50–64 years at diagnosis (cont)															
Both sexes															
Race/ethnicity															
American Indian/Alaska Native	21	9	42.9	26	5	19.2	29	11	37.9	24	10	41.7	26	5	19.2
Asian	89	45	50.6	96	36	37.5	99	49	49.5	91	36	39.6	97	36	37.1
Black/African American	2,365	783	33.1	2,316	754	32.6	2,248	724	32.2	2,124	702	33.1	2,097	638	30.4
Hispanic/Latino ^b	1,085	395	36.4	1,117	408	36.5	1,094	415	37.9	1,177	453	38.5	1,096	368	33.6
Native Hawaiian/other Pacific Islander	10	4	40.0	5	1	20.0	3	2	66.7	8	2	25.0	6	3	50.0
White	2,109	803	38.1	2,079	786	37.8	1,991	716	36.0	1,817	625	34.4	1,798	620	34.5
Multiracial	189	73	38.6	169	70	41.4	136	53	39.0	107	42	39.3	108	45	41.7
Region of residence^f															
Northeast	1,154	428	37.1	1,055	342	32.4	997	358	35.9	976	346	35.5	865	302	34.9
Midwest	691	261	37.8	740	317	42.8	681	250	36.7	639	243	38.0	607	201	33.1
South	2,939	1,044	35.5	2,901	1,010	34.8	2,823	995	35.2	2,736	920	33.6	2,760	904	32.8
West	1,084	379	35.0	1,112	391	35.2	1,099	367	33.4	997	361	36.2	996	308	30.9
Subtotal, aged 50–64 years	5,868	2,112	36.0	5,808	2,060	35.5	5,600	1,970	35.2	5,348	1,870	35.0	5,228	1,715	32.8
Aged ≥65 years at diagnosis															
Male adult															
Race/ethnicity															
American Indian/Alaska Native	0	0	0.0	3	2	66.7	3	1	33.3	3	1	33.3	1	1	100
Asian	10	5	50.0	19	8	42.1	11	4	36.4	16	6	37.5	13	5	38.5
Black/African American	220	84	38.2	221	89	40.3	216	74	34.3	224	80	35.7	240	94	39.2
Hispanic/Latino ^b	113	41	36.3	95	49	51.6	119	40	33.6	110	43	39.1	110	49	44.5
Native Hawaiian/other Pacific Islander	0	0	0.0	2	0	0.0	1	1	100	1	1	100	0	0	0.0
White	257	98	38.1	270	99	36.7	246	102	41.5	255	93	36.5	228	82	36.0
Multiracial	26	11	42.3	13	3	23.1	12	7	58.3	14	5	35.7	14	6	42.9
Transmission category^c															
Male-to-male sexual contact	349	127	36.4	340	130	38.2	336	123	36.7	378	134	35.5	344	129	37.5
Injection drug use	59	23	39.8	63	24	37.6	64	23	36.3	50	19	39.0	54	23	42.4
Male-to-male sexual contact and injection drug use	10	6	57.8	18	8	43.5	16	7	39.9	12	3	27.0	17	7	38.2
Heterosexual contact ^d	202	81	40.0	196	86	43.6	186	74	39.9	179	70	39.4	185	76	41.2
Other ^e	6	2	32.2	6	3	48.3	6	2	30.9	6	2	34.5	7	3	39.1
Region of residence^f															
Northeast	134	53	39.6	125	53	42.4	112	50	44.6	113	47	41.6	110	41	37.3
Midwest	63	30	47.6	56	24	42.9	73	34	46.6	77	35	45.5	76	33	43.4
South	315	114	36.2	316	121	38.3	308	109	35.4	303	100	33.0	316	116	36.7
West	114	42	36.8	126	52	41.3	115	36	31.3	130	47	36.2	104	47	45.2
Subtotal, male adult, aged ≥65 years	626	239	38.2	623	250	40.1	608	229	37.7	623	229	36.8	606	237	39.1

Table S10a. Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis, age group, sex at birth, and selected characteristics, 2015–2019—United States (cont)

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
	No.	%		No.	%		No.	%		No.	%		No.	%	
Aged ≥65 years at diagnosis (cont)															
Female adult															
Race/ethnicity															
American Indian/Alaska Native	1	0	0.0	1	0	0.0	1	0	0.0	0	0	0.0	2	2	100
Asian	5	2	40.0	5	0	0.0	5	0	0.0	6	2	33.3	5	2	40.0
Black/African American	148	55	37.2	140	42	30.0	187	59	31.6	146	48	32.9	181	60	33.1
Hispanic/Latino ^b	36	13	36.1	48	24	50.0	41	12	29.3	51	21	41.2	48	22	45.8
Native Hawaiian/other Pacific Islander	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
White	31	14	45.2	32	12	37.5	30	11	36.7	34	17	50.0	25	11	44.0
Multiracial	4	3	75.0	10	6	60.0	5	2	40.0	10	3	30.0	7	4	57.1
Transmission category^c															
Injection drug use	26	10	36.0	32	13	39.7	28	7	26.3	29	16	53.2	32	16	50
Heterosexual contact ^d	196	76	39.0	203	71	34.9	239	76	31.7	215	74	34.4	235	85	36.2
Other ^e	3	1	40.0	2	1	46.7	2	1	47.4	3	2	55.6	1	0	9.1
Region of residence^f															
Northeast	55	25	45.5	59	24	40.7	61	18	29.5	56	19	33.9	62	25	40.3
Midwest	21	6	28.6	15	3	20.0	20	6	30.0	21	7	33.3	20	11	55.0
South	119	45	37.8	135	51	37.8	166	54	32.5	128	47	36.7	149	51	34.2
West	30	11	36.7	27	6	22.2	22	6	27.3	42	18	42.9	37	14	37.8
Subtotal, female adult, aged ≥65 years	225	87	38.7	236	84	35.6	269	84	31.2	247	91	36.8	268	101	37.7
Both sexes															
Race/ethnicity															
American Indian/Alaska Native	1	0	0.0	4	2	50.0	4	1	25.0	3	1	33.3	3	3	100
Asian	15	7	46.7	24	8	33.3	16	4	25.0	22	8	36.4	18	7	38.9
Black/African American	368	139	37.8	361	131	36.3	403	133	33.0	370	128	34.6	421	154	36.6
Hispanic/Latino ^b	149	54	36.2	143	73	51.0	160	52	32.5	161	64	39.8	158	71	44.9
Native Hawaiian/other Pacific Islander	0	0	0.0	2	0	0.0	1	1	100	1	1	100	0	0	0.0
White	288	112	38.9	302	111	36.8	276	113	40.9	289	110	38.1	253	93	36.8
Multiracial	30	14	46.7	23	9	39.1	17	9	52.9	24	8	33.3	21	10	47.6
Region of residence^f															
Northeast	189	78	41.3	184	77	41.8	173	68	39.3	169	66	39.1	172	66	38.4
Midwest	84	36	42.9	71	27	38.0	93	40	43.0	98	42	42.9	96	44	45.8
South	434	159	36.6	451	172	38.1	474	163	34.4	431	147	34.1	465	167	35.9
West	144	53	36.8	153	58	37.9	137	42	30.7	172	65	37.8	141	61	43.3
Subtotal, aged ≥65 years	851	326	38.3	859	334	38.9	877	313	35.7	870	320	36.8	874	338	38.7
Total	6,719	2,438	36.3	6,667	2,394	35.9	6,477	2,283	35.2	6,218	2,190	35.2	6,102	2,053	33.6

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

Note. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

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

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

^c Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to the column subtotals and total.

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

^e Includes persons whose infection was attributed to hemophilia, blood transfusion, or whose risk factor was not reported or not identified.

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

Table S10b. Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis, age group, sex at birth, and selected characteristics, 2015–2019—United States and 6 dependent areas

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
		No.	%		No.	%		No.	%		No.	%		No.	%
Aged 50–64 years at diagnosis															
Male adult															
Race/ethnicity															
American Indian/Alaska Native	14	4	28.6	17	4	23.5	18	6	33.3	17	8	47.1	20	5	25.0
Asian	71	40	56.3	74	26	35.1	73	39	53.4	69	27	39.1	78	32	41.0
Black/African American	1,432	501	35.0	1,337	484	36.2	1,330	462	34.7	1,244	446	35.9	1,221	418	34.2
Hispanic/Latino ^b	909	336	37.0	938	351	37.4	924	355	38.4	952	376	39.5	914	316	34.6
Native Hawaiian/other Pacific Islander	9	5	55.6	3	1	33.3	4	3	75.0	7	3	42.9	6	2	33.3
White	1,814	689	38.0	1,762	680	38.6	1,674	596	35.6	1,535	532	34.7	1,492	530	35.5
Multiracial	130	54	41.5	124	55	44.4	104	37	35.6	73	28	38.4	74	36	48.6
Transmission category^c															
Male-to-male sexual contact	2,898	1,033	35.7	2,857	1,043	36.5	2,796	981	35.1	2,614	917	35.1	2,578	869	33.7
Injection drug use	376	145	38.5	344	128	37.2	333	121	36.4	342	126	36.8	309	110	35.8
Male-to-male sexual contact and injection drug use	173	68	39.5	159	56	35.1	155	41	26.4	138	46	33.4	144	42	29.0
Heterosexual contact ^d	928	381	41.0	889	371	41.8	836	353	42.2	796	329	41.3	766	315	41.1
Other ^e	4	2	39.0	5	3	48.1	6	2	35.5	8	3	33.3	8	3	39.3
Region of residence^f															
Northeast	792	314	39.6	701	255	36.4	655	243	37.1	658	242	36.8	579	220	38.0
Midwest	532	215	40.4	567	252	44.4	512	192	37.5	499	194	38.9	450	159	35.3
South	2,077	763	36.7	2,000	734	36.7	1,986	731	36.8	1,886	672	35.6	1,906	677	35.5
West	899	311	34.6	897	331	36.9	895	308	34.4	782	281	35.9	807	262	32.5
U.S. dependent areas	79	26	32.9	90	29	32.2	79	24	30.4	72	31	43.1	63	21	33.3
Subtotal, male adult, aged 50–64 years	4,379	1,629	37.2	4,255	1,601	37.6	4,127	1,498	36.3	3,897	1,420	36.4	3,805	1,339	35.2
Female adult															
Race/ethnicity															
American Indian/Alaska Native	7	5	71.4	9	1	11.1	11	5	45.5	7	2	28.6	6	0	0.0
Asian	18	5	27.8	22	10	45.5	26	10	38.5	22	9	40.9	19	4	21.1
Black/African American	933	282	30.2	981	271	27.6	918	262	28.5	881	256	29.1	878	220	25.1
Hispanic/Latino ^b	279	89	31.9	296	94	31.8	273	89	32.6	317	116	36.6	266	77	28.9
Native Hawaiian/other Pacific Islander	2	0	0.0	3	1	33.3	1	1	100	2	0	0.0	1	1	100
White	297	116	39.1	317	106	33.4	319	120	37.6	284	94	33.1	306	90	29.4
Multiracial	59	19	32.2	45	15	33.3	32	16	50.0	35	14	40.0	34	9	26.5
Transmission category^c															
Injection drug use	230	80	34.6	247	76	30.8	214	74	34.7	225	74	32.6	211	57	27.2
Heterosexual contact ^d	1,362	435	32.0	1,424	421	29.6	1,364	428	31.4	1,321	416	31.5	1,297	343	26.4
Other ^e	3	1	37.0	2	1	50.0	2	1	33.3	2	1	47.8	2	1	36.8
Region of residence^f															
Northeast	362	114	31.5	354	87	24.6	342	115	33.6	318	104	32.7	286	82	28.7
Midwest	159	46	28.9	173	65	37.6	169	58	34.3	140	49	35.0	157	42	26.8
South	862	281	32.6	901	276	30.6	837	264	31.5	850	248	29.2	854	227	26.6
West	185	68	36.8	215	60	27.9	204	59	28.9	215	80	37.2	189	46	24.3
U.S. dependent areas	27	7	25.9	30	10	33.3	28	7	25.0	25	10	40.0	24	4	16.7
Subtotal, female adult, aged 50–64 years	1,595	516	32.4	1,673	498	29.8	1,580	503	31.8	1,548	491	31.7	1,510	401	26.6

Table S10b. Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis, age group, sex at birth, and selected characteristics, 2015–2019—United States and 6 dependent areas (cont)

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%
Aged 50–64 years at diagnosis (cont)															
Both sexes															
Race/ethnicity															
American Indian/Alaska Native	21	9	42.9	26	5	19.2	29	11	37.9	24	10	41.7	26	5	19.2
Asian	89	45	50.6	96	36	37.5	99	49	49.5	91	36	39.6	97	36	37.1
Black/African American	2,365	783	33.1	2,318	755	32.6	2,248	724	32.2	2,125	702	33.0	2,099	638	30.4
Hispanic/Latino ^b	1,188	425	35.8	1,234	445	36.1	1,197	444	37.1	1,269	492	38.8	1,180	393	33.3
Native Hawaiian/other Pacific Islander	11	5	45.5	6	2	33.3	5	4	80.0	9	3	33.3	7	3	42.9
White	2,111	805	38.1	2,079	786	37.8	1,993	716	35.9	1,819	626	34.4	1,798	620	34.5
Multiracial	189	73	38.6	169	70	41.4	136	53	39.0	108	42	38.9	108	45	41.7
Region of residence^f															
Northeast	1,154	428	37.1	1,055	342	32.4	997	358	35.9	976	346	35.5	865	302	34.9
Midwest	691	261	37.8	740	317	42.8	681	250	36.7	639	243	38.0	607	201	33.1
South	2,939	1,044	35.5	2,901	1,010	34.8	2,823	995	35.2	2,736	920	33.6	2,760	904	32.8
West	1,084	379	35.0	1,112	391	35.2	1,099	367	33.4	997	361	36.2	996	308	30.9
U.S. dependent areas	106	33	31.1	120	39	32.5	107	31	29.0	97	41	42.3	87	25	28.7
Subtotal, aged 50–64 years	5,974	2,145	35.9	5,928	2,099	35.4	5,707	2,001	35.1	5,445	1,911	35.1	5,315	1,740	32.7
Aged ≥65 years at diagnosis															
Male adult															
Race/ethnicity															
American Indian/Alaska Native	0	0	0.0	3	2	66.7	3	1	33.3	3	1	33.3	1	1	100
Asian	10	5	50.0	19	8	42.1	11	4	36.4	16	6	37.5	13	5	38.5
Black/African American	220	84	38.2	221	89	40.3	216	74	34.3	224	80	35.7	241	95	39.4
Hispanic/Latino ^b	133	49	36.8	117	61	52.1	135	42	31.1	125	50	40.0	127	56	44.1
Native Hawaiian/other Pacific Islander	0	0	0.0	2	0	0.0	1	1	100	1	1	100	0	0	0.0
White	257	98	38.1	270	99	36.7	246	102	41.5	255	93	36.5	229	82	35.8
Multiracial	26	11	42.3	13	3	23.1	12	7	58.3	14	5	35.7	14	6	42.9
Transmission category^c															
Male-to-male sexual contact	356	129	36.3	343	130	38.1	338	123	36.5	380	135	35.6	347	129	37.2
Injection drug use	61	23	38.4	65	26	39.4	68	23	34.2	52	20	38.2	57	24	42.0
Male-to-male sexual contact and injection drug use	12	7	56.6	18	8	43.5	16	7	39.9	13	4	33.3	18	8	41.7
Heterosexual contact ^d	212	86	40.6	213	95	44.7	197	76	38.9	188	75	39.8	195	82	41.8
Other ^e	6	2	32.2	6	3	48.3	6	2	30.4	6	2	34.5	7	3	39.1
Region of residence^f															
Northeast	134	53	39.6	125	53	42.4	112	50	44.6	113	47	41.6	110	41	37.3
Midwest	63	30	47.6	56	24	42.9	73	34	46.6	77	35	45.5	76	33	43.4
South	315	114	36.2	316	121	38.3	308	109	35.4	303	100	33.0	316	116	36.7
West	114	42	36.8	126	52	41.3	115	36	31.3	130	47	36.2	104	47	45.2
U.S. dependent areas	20	8	40.0	22	12	54.5	16	2	12.5	15	7	46.7	19	8	42.1
Subtotal, male adult, aged ≥65 years	646	247	38.2	645	262	40.6	624	231	37.0	638	236	37.0	625	245	39.2

Table S10b. Stage 3 (AIDS) at the time of diagnosis of HIV infection among adults aged ≥50 years, by year of diagnosis, age group, sex at birth, and selected characteristics, 2015–2019—United States and 6 dependent areas (cont)

	2015			2016			2017			2018			2019		
	Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a		Total No.	Stage 3 (AIDS) at diagnosis ^a	
	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%
Aged ≥65 years at diagnosis (cont)															
Female adult															
Race/ethnicity															
American Indian/Alaska Native	1	0	0.0	1	0	0.0	1	0	0.0	0	0	0.0	2	2	100
Asian	5	2	40.0	5	0	0.0	5	0	0.0	6	2	33.3	5	2	40.0
Black/African American	150	56	37.3	140	42	30.0	187	59	31.6	146	48	32.9	181	60	33.1
Hispanic/Latino ^b	46	17	37.0	51	25	49.0	45	14	31.1	57	22	38.6	56	27	48.2
Native Hawaiian/other Pacific Islander	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
White	31	14	45.2	32	12	37.5	30	11	36.7	34	17	50.0	25	11	44.0
Multiracial	4	3	75.0	10	6	60.0	5	2	40.0	10	3	30.0	7	4	57.1
Transmission category^c															
Injection drug use	27	10	36.2	32	13	39.8	28	7	26.0	29	16	53.2	32	16	49.8
Heterosexual contact ^d	208	81	39.1	205	72	34.8	243	78	32.0	221	75	33.9	243	90	37.0
Other ^e	3	1	40.0	2	1	43.7	2	1	47.4	3	2	55.6	1	0	9.1
Region of residence^f															
Northeast	55	25	45.5	59	24	40.7	61	18	29.5	56	19	33.9	62	25	40.3
Midwest	21	6	28.6	15	3	20.0	20	6	30.0	21	7	33.3	20	11	55.0
South	119	45	37.8	135	51	37.8	166	54	32.5	128	47	36.7	149	51	34.2
West	30	11	36.7	27	6	22.2	22	6	27.3	42	18	42.9	37	14	37.8
U.S. dependent areas	12	5	41.7	3	1	33.3	4	2	50.0	6	1	16.7	8	5	62.5
Subtotal, female adult, aged ≥65 years	237	92	38.8	239	85	35.6	273	86	31.5	253	92	36.4	276	106	38.4
Both sexes															
Race/ethnicity															
American Indian/Alaska Native	1	0	0.0	4	2	50.0	4	1	25.0	3	1	33.3	3	3	100
Asian	15	7	46.7	24	8	33.3	16	4	25.0	22	8	36.4	18	7	38.9
Black/African American	370	140	37.8	361	131	36.3	403	133	33.0	370	128	34.6	422	155	36.7
Hispanic/Latino ^b	179	66	36.9	168	86	51.2	180	56	31.1	182	72	39.6	183	83	45.4
Native Hawaiian/other Pacific Islander	0	0	0.0	2	0	0.0	1	1	100	1	1	100	0	0	0.0
White	288	112	38.9	302	111	36.8	276	113	40.9	289	110	38.1	254	93	36.6
Multiracial	30	14	46.7	23	9	39.1	17	9	52.9	24	8	33.3	21	10	47.6
Region of residence^f															
Northeast	189	78	41.3	184	77	41.8	173	68	39.3	169	66	39.1	172	66	38.4
Midwest	84	36	42.9	71	27	38.0	93	40	43.0	98	42	42.9	96	44	45.8
South	434	159	36.6	451	172	38.1	474	163	34.4	431	147	34.1	465	167	35.9
West	144	53	36.8	153	58	37.9	137	42	30.7	172	65	37.8	141	61	43.3
U.S. dependent areas	32	13	40.6	25	13	52.0	20	4	20.0	21	8	38.1	27	13	48.1
Subtotal, aged ≥65 years	883	339	38.4	884	347	39.3	897	317	35.3	891	328	36.8	901	351	39.0
Total	6,857	2,484	36.2	6,812	2,446	35.9	6,604	2,318	35.1	6,336	2,239	35.3	6,216	2,091	33.6

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

Note. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

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

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

^c Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to the column subtotals and total.

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

^e Includes persons whose infection was attributed to hemophilia, blood transfusion, or whose risk factor was not reported or not identified.

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