

HIV

SURVEILLANCE REPORT

SUPPLEMENTAL REPORT

Volume 24, Number 3

Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data United States and 6 Dependent Areas, 2017

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of HIV/AIDS Prevention



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The Centers for Disease Control and Prevention (CDC) collects data to monitor progress toward achieving national goals [1, 2] and the objectives set forth in other federal directives, including the updated strategic plan [3] of the Division of HIV/AIDS Prevention (DHAP). This surveillance supplemental report complements the 2017 *HIV Surveillance Report* [4] and presents the results of focused analyses of National HIV Surveillance System (NHSS) [5] data to measure progress toward achieving national goals [1]. Data in this report are also used to assess Department of Health and Human Services (HHS) core indicators [6, 7] and monitor progress toward attainment of HIV-related national objectives in Healthy People 2020 [8]. This report addresses the following objectives:

- Reduce the percentage of persons whose HIV infection is classified as stage 3 (AIDS) at diagnosis (DHAP strategic plan, HHS core indicator) (Tables 1a–d)
- Increase to 85% or more the percentage of persons linked to HIV medical care ≤ 1 month after diagnosis of HIV infection (NHAS 2020, DHAP strategic plan, HHS core indicator, Healthy People 2020) (Tables 3a–d)
- Increase to 90% or more the percentage of persons with HIV who are in continuous HIV medical care (i.e., retained in care) (NHAS 2020, DHAP strategic plan, HHS core indicator, Healthy People 2020) (Tables 4a–d)
- Increase to 80% or more the percentage of persons with diagnosed HIV infection who are virally suppressed (NHAS 2020, DHAP strategic plan, Healthy People 2020) (Tables 5a/b)
- Increase to 80% or more the percentage of youth with diagnosed HIV infection who are virally suppressed (NHAS 2020, Healthy People 2020) (Table 5a)
- Among persons with diagnosed HIV infection who inject drugs, increase to 80% or more the percentage who are virally suppressed (NHAS 2020, DHAP strategic plan, Healthy People 2020) (Table 5a)
- Reduce by 33% or more the death rate among persons with diagnosed HIV infection (NHAS 2020, Healthy People 2020) (Table 6c)
- Reduce the number of perinatally acquired HIV cases (Healthy People 2020) (Table 8a)
- Increase to 90% or more the percentage of persons living with HIV who know their HIV status (NHAS 2020, DHAP strategic plan, Healthy People 2020) (Table 11)
- Reduce the disparities in the rate of new diagnoses among gay and bisexual men, young black gay and bisexual men, black females, and persons living in the South (NHAS 2020, DHAP strategic plan) (Table 11)

Monitoring the stage of disease at 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 2018, 42 jurisdictions (41 states and the District of Columbia) required reporting of all levels of CD4 and viral load test results and had reported to CDC $\geq 95\%$ of the test results they had received by December 2018 (for specimens collected from at least January 2016 through September 2018). (For a list of the 42 jurisdictions, see Technical Notes.)

In this report, data from the 42 jurisdictions that reported complete CD4 and viral load laboratory results to CDC were used for the analyses that require laboratory data (Tables 2a–d, 3a–d, 4a–d, and 5a/b). Data from these 42 jurisdictions represent 89% of all persons aged ≥ 13 years living with diagnosed HIV infection at year-end 2016 in the United States and are therefore not representative of data on all persons living with diagnosed HIV infection in the United States. 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 1a–d), deaths and survival of persons with diagnosed HIV infection (Tables 6a–f and 7a–f), and diagnosed perinatally acquired HIV infection (Tables 8a/b).

For tables that include data by transmission category, the data were statistically adjusted to account for missing transmission category (see Technical Notes).

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. Please use caution when interpreting data on diagnosed HIV infection. HIV surveillance data on persons with diagnosed HIV infection may not represent 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.

REPORT CHANGES

Tables 2a–d, 3a–d, 4a–d, and 5a/b include data from 42 jurisdictions that reported complete CD4 and viral load data. 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 2016 report, the 2017 report includes data from 2 additional states that met the criteria.

Tables 2a/b now display data on persons with infection classified as stage 0 at diagnosis. In previous reports, data on persons with infection classified as stage 0 were included in the unknown category (i.e., not displayed).

New to this report are the following:

- Tables 2c/d, 3c/d, and 4c/d display stage at diagnosis, linkage to care, receipt of care, and viral suppression data by race/ethnicity and selected characteristics (c tables) and for males with HIV infection attributed to male-to-male sexual contact by race/ethnicity and age group (d tables).

- Tables 7a/b display survival for >3 years after diagnosis of HIV infection; Tables 7d/e display survival after stage 3 (AIDS) classification by selected demographics for the United States and 6 dependent areas (where indicated).
- Table 9 displays prevalence-based (diagnosed and undiagnosed infection) estimates of HIV care outcomes (diagnosis, receipt of care, and viral suppression) for the United States.

DEFINITIONS AND DATA SPECIFICATIONS

In 2014, the HIV surveillance case definition was revised to adapt to changes in diagnostic criteria used by laboratories and clinicians [9]. 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). In addition, the revised definition consolidates the staging systems for adults/adolescents and children, simplifies surveillance criteria for opportunistic illnesses indicative of stage 3, and incorporates revisions of clinical criteria (i.e., medical record documentation) for reporting diagnoses without laboratory evidence. Because retroactive implementation of some features (e.g., the new staging system) of the 2014 case definition would be impractical, the following criteria were used to classify cases in this report:

- Cases diagnosed before 2014 were classified according to the 2008 HIV case definition [10].
- Cases diagnosed in 2014 and later were classified according to the 2014 HIV case definition.

HIGHLIGHTS OF ANALYSES

Please read all table titles and footnotes carefully to ensure a complete understanding of the displayed data.

Stage 3 (AIDS) classification at HIV diagnosis

Among persons with an HIV diagnosis during 2017, 20.9% of infections were classified as stage 3 (AIDS) at the time of diagnosis (Table 1a). The overall percentages decreased from 2010 through 2017.

The following percentages are for persons with stage 3 (AIDS) classification at the time of HIV diagnosis during 2017.

- **Age group:** The percentage increased as age increased (e.g., 9.1% of persons aged 13–24 years and 35.0% of persons aged ≥ 55 years).
- **Race/ethnicity:** The highest percentages were for Native Hawaiians/other Pacific Islanders (25.9%) and Asians (24.9%), followed by whites (21.5%), Hispanics/Latinos (21.4%), persons of multiple races (20.7%), American Indians/Alaska Natives (20.5%), and blacks/African Americans (20.1%). Please use caution when interpreting data on American Indians/Alaska Natives and Native Hawaiians/other Pacific Islanders: the numbers are small.
- **Transmission category:** The highest percentage was for males with infection attributed to heterosexual contact (34.7%), followed by males with infection attributed to injection drug use (27.0%), females with infection attributed to heterosexual contact (22.6%), females with infection attributed to injection drug use (19.8%), males with infection attributed to male-to-male sexual contact (19.0%), and males with infection attributed to male-to-male sexual contact *and* injection drug use (15.7%).

Stage of disease at diagnosis of HIV infection

Stage of disease at diagnosis (i.e., HIV infection, stage 0, 1, 2, 3 [AIDS], or unknown) was based on data for persons with HIV infection diagnosed during 2017 in the 42 jurisdictions that reported complete CD4 and viral load test results to CDC. Among 33,955 persons, the stage of disease at diagnosis was classified as follows (Table 2a): stage 0 (6.2%), stage 1 (25.6%), stage 2 (30.4%), stage 3 (AIDS) (20.9%), stage unknown (17.0%).

- **Age group:** Among persons whose infection was diagnosed at an earlier stage (stage 0, 1, or 2), the highest percentages were for persons aged 13–24 (9.1% [stage 0]; 28.1% [stage 1]; 35.0% [stage 2]), followed by those for persons aged 25–34 (6.9% [stage 0]; 27.7% [stage 1]; 31.7% [stage 2]). In general, the percentages of early diagnosis decreased as age increased. Among persons with a stage 3 classification, the higher percentages were for persons in older age groups.

- **Race/ethnicity:** For all races/ethnicities, $>60\%$ of infections were diagnosed at an earlier stage (stage 0, 1, or 2), except Native Hawaiian/Other Pacific Islanders. Among persons whose infection was diagnosed at an earlier stage (stage 0, 1, or 2), the highest percentages were for American Indians/Alaska Natives (7.6% [stage 0]; 30.4% [stage 1]; 27.8% [stage 2]), followed by those for persons of multiple races (8.3% [stage 0]; 26.6% [stage 1]; 30.8% [stage 2]), whites (6.9% [stage 0]; 29.8% [stage 1]; 27.7% [stage 2]), Hispanics/Latinos (6.4% [stage 0]; 25.4% [stage 1]; 31.4% [stage 2]), Asians (4.8% [stage 0]; 19.6% [stage 1]; 36.3% [stage 2]), and blacks/African Americans (5.7% [stage 0]; 23.4% [stage 1]; 31.0% [stage 2]). The stage-unknown percentages were slightly higher among blacks/African Americans, Hispanics/Latinos, and American Indians/Alaska Natives (19.7%, 15.3%, and 15.2%, respectively). Please use caution when interpreting data for American Indians/Alaska Natives and for Native Hawaiians/other Pacific Islanders: the numbers are small.
- **Transmission category:** Among persons whose infection was diagnosed at an earlier stage (stage 0, 1, or 2), the highest percentages were for males with infection attributed to male-to-male sexual contact *and* injection drug use (7.4% [stage 0]; 30.2% [stage 1]; 29.7% [stage 2]) and male-to-male sexual contact (7.0% [stage 0]; 25.6% [stage 1]; 31.5% [stage 2]). The lowest percentages were for males with infection attributed to heterosexual contact (3.1% [stage 0]; 17.8% [stage 1]; 27.4% [stage 2]) and for males with infection attributed to injection drug use (4.5% [stage 0]; 23.1% [stage 1]; 28.0% [stage 2]).

Linkage to HIV medical care after diagnosis of HIV infection

Linkage to HIV medical care was based on data for persons with infection diagnosed during 2017 in the 42 jurisdictions that reported complete CD4 and viral load test results to CDC. Linkage to HIV medical care was measured by documentation of at least 1 CD4 or viral load test performed ≤ 1 month or ≤ 3 months after diagnosis. Of the 33,955 persons whose infection was diagnosed during 2017, 78.3% were linked to HIV medical care ≤ 1 month after diagnosis, and 86.8%

were linked to HIV medical care ≤ 3 months after diagnosis (Table 3a).

The following percentages are for persons who were linked to HIV medical care ≤ 1 month after diagnosis (Table 3a).

- **Age group:** Linkage to HIV medical care increased as age at diagnosis increased. The highest percentage was for persons aged ≥ 55 years (81.6%), followed by that for persons aged 45–54 years (81.4%). The lowest percentage was for persons aged 13–24 years (75.0%).
- **Race/ethnicity:** The highest percentage was for American Indians/Alaska Natives (84.8%). The percentages for other races/ethnicities were as follows: Native Hawaiians/other Pacific Islanders (83.7%), whites (81.3%), Asians (80.7%), persons of multiple races (80.3%), Hispanics/Latinos (79.3%), and blacks/African Americans (75.8%).
- **Transmission category:** The percentages were relatively similar for all transmission categories. The highest percentage was for females with infection attributed to heterosexual contact (79.3%), followed by males with infection attributed to male-to-male sexual contact (78.5%) and males with infection attributed to heterosexual contact (77.3%). The lowest percentage was for males with infection attributed to male-to-male sexual contact *and* injection drug use (75.3%).

The following percentages are for persons who were linked to HIV medical care ≤ 3 months after diagnosis (Table 3a).

- **Age group:** Linkage to HIV medical care increased as age at diagnosis increased. The highest percentage was for persons aged ≥ 55 years (89.3%), followed by that for persons aged 45–54 years (88.3%). The lowest percentage was for persons aged 13–24 years (85.1%).
- **Race/ethnicity:** The highest percentages were for Native Hawaiians/other Pacific Islanders (95.3%) and American Indians/Alaska Natives (89.9%). The percentages for other races/ethnicities were 89.6%, whites; 89.1%, persons of multiple races; 87.7%, Asians; 87.2%, Hispanics/Latinos; and 84.7%, blacks/African Americans.

- **Transmission category:** The percentages were relatively similar for all transmission categories. The highest percentage was for females with infection attributed to heterosexual contact (87.8%), followed by males with infection attributed to male-to-male sexual contact (86.8%) and males with infection attributed to heterosexual contact (86.2%). The lowest percentage was for males with infection attributed to injection drug use (84.9%).

Receipt of HIV medical care

Receipt of HIV medical care was based on data for persons with HIV infection diagnosed by year-end 2015 and alive at year-end 2016 in the 42 jurisdictions that reported complete CD4 and viral load test results to CDC. Receipt of any HIV medical care was measured by documentation of ≥ 1 CD4 or viral load tests performed during 2016; retention in HIV medical care (receipt of continuous care) was measured by documentation of ≥ 2 CD4 or viral load tests performed at least 3 months apart during 2016. During 2016, 74.2% of 836,640 persons received HIV medical care, and 57.6% met the criteria for continuous HIV medical care (Table 4a).

The following percentages are for persons who received any HIV medical care.

- **Age group:** The highest percentage was for persons aged 13–24 years (76.3%). The lowest percentages were for persons aged 35–44 (73.2%) and persons aged ≥ 55 years (73.2%).
- **Race/ethnicity:** The highest percentage was for persons of multiple races (85.9%), followed by whites (77.8%), Asians (73.5%), American Indians/Alaska Natives (73.4%), Hispanics/Latinos (71.9%), blacks/African Americans (71.7%), and Native Hawaiians/other Pacific Islanders (71.4%).
- **Transmission category:** The highest percentage was for males with infection attributed to male-to-male sexual contact *and* injection drug use (78.4%), followed by males with infection attributed to male-to-male sexual contact (75.8%). The lowest percentage was for males with infection attributed to injection drug use (63.6%).

The following percentages are for persons who were retained in continuous HIV medical care.

- **Age group:** The highest percentages were for persons aged ≥ 55 years (59.7%) and persons aged 45–54 years (58.9%). In general, the percentage increased as age increased; however, the lowest percentage was for persons aged 25–34 years (54.0%).
- **Race/ethnicity:** The highest percentage was for persons of multiple races (67.5%), followed by whites (59.3%), Hispanics/Latinos (58.6%), Asians (58.2%), American Indians/Alaska Natives (56.2%), blacks/African Americans (54.9%), and Native Hawaiians/other Pacific Islanders (51.0%).
- **Transmission category:** The highest percentages were for males with infection attributed to male-to-male sexual contact *and* injection drug use (61.8%), males with infection attributed to male-to-male sexual contact (58.4%), and females with infection attributed to heterosexual contact (57.7%). The lowest percentage was for males with infection attributed to injection drug use (51.0%).
- **Age group:** The percentage increased as age increased (53.8% [persons aged 13–24 years]; 64.2% [persons aged ≥ 55 years]).
- **Race/ethnicity:** The highest percentage was for persons of multiple races (69.8%), followed by whites (67.8%), Asians (66.6%), Native Hawaiians/other Pacific Islanders (63.4%), Hispanics/Latinos (61.3%), American Indians/Alaska Natives (59.6%), and blacks/African Americans (56.1%).
- **Transmission category:** The highest percentage was for males with infection attributed to male-to-male sexual contact (64.4%), followed by males with infection attributed to male-to-male sexual contact *and* injection drug use (62.3%).

Deaths

Annual rates of death were calculated per 100,000 population and per 1,000 persons living with diagnosed HIV infection or living with infection ever classified as stage 3 (AIDS). Age-adjusted rates per 100,000 population and per 1,000 persons living with diagnosed HIV infection or living 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 2010 through 2016 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 living with diagnosed HIV infection decreased (Table 6b). Trends in rates varied by area of residence at death (Table 6c). In 2016, the age-adjusted rates were 5.7 per 100,000 population and 14.2 per 1,000 persons living with diagnosed HIV infection.

Deaths of persons with stage 3 (AIDS) classification

From 2010 through 2016 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 living with stage 3 (AIDS) decreased (Table 6e). Trends in rates varied by area of residence at death (Table 6f). In 2016, the age-adjusted rates were 4.5 per 100,000 population and 20.6 per 1,000 persons living with stage 3 (AIDS).

Survival for >3 years after diagnosis of HIV infection

In the United States and 6 dependent areas, survival after a diagnosis of HIV infection increased

Viral suppression

Viral suppression was measured for persons with HIV infection diagnosed by year-end 2015 and alive at year-end 2016 in the 42 jurisdictions that reported complete CD4 and viral load test results to CDC. Viral suppression was measured by a viral load result of < 200 copies/mL at the most recent viral load test during 2016.

During 2016, 74.2% of 836,640 persons had at least 1 CD4 or viral load test (i.e., received any care in 2016), and 71.1% had at least 1 viral load test. At the most recent viral load test during 2016, viral load was suppressed in 82.9% of persons who received care (at least 1 CD4 or viral load test) in 2016 and in 86.4% of persons with a viral load test during 2016. The persons with suppressed viral load represented 61.5% of the total number of persons with an HIV diagnosis by year-end 2015 and alive at year-end 2016 in the 42 jurisdictions (Table 5a).

The following percentages are for persons whose most recent viral load test result in 2016 indicated viral suppression (denominator: persons who were alive at year-end 2016).

for diagnoses that were made during 2008–2013 (Table 7b). The following percentages are for persons who survived >3 years after receiving a diagnosis in 2013.

- **Age group:** The highest percentage was for persons aged 13–24 years (99%). The lowest percentage was for persons aged ≥55 years (80%).
- **Race/ethnicity:** The highest percentage was for Asians (96%), followed by blacks/African Americans (94%), Hispanics/Latinos (94%), persons of multiple races (94%), whites (93%), and American Indians/Alaska Natives (90%). Percentages for Native Hawaiians/other Pacific Islanders are not displayed because the number of cases was too small for the calculation of meaningful survival estimates.
- **Transmission category:** The highest percentage was for males with infection attributed to male-to-male sexual contact (95%), followed by males with infection attributed to male-to-male sexual contact *and* injection drug use (94%). The lowest percentage was for males with infection attributed to injection drug use (84%).
- By area of residence, at least 90% of persons survived >3 years after diagnosis in all but 1 area (Table 7c).

Survival after stage 3 (AIDS) classification increased over time (Table 7d). The following percentages are for persons who survived >3 years after receiving a stage 3 (AIDS) classification in 2013.

- **Age group:** The highest percentage was for persons aged 13–24 years (96%). The lowest percentage was for persons aged ≥55 years (71%).
- **Race/ethnicity:** The highest percentage was for Asians (91%), followed by persons of multiple races (88%), Hispanics/Latinos (88%), blacks/African Americans (86%), and whites (84%). Data for American Indians/Alaska Natives and Native Hawaiians/other Pacific Islanders are not displayed because the numbers of cases were too small for the calculation of meaningful survival estimates.
- **Transmission category:** The highest percentage was for males with infection attributed to male-to-male sexual contact (88%), followed by females with infection attributed to heterosexual contact (85%) and males with infection attributed to male-to-male sexual contact *and* injection drug use (84%).

The lowest percentage was for males with infection attributed to injection drug use (76%).

- By area of residence, at least 80% of persons survived >3 years after stage 3 (AIDS) classification in all but 2 areas (Table 7f).

Perinatally acquired HIV infection

The overall annual rate of perinatally acquired HIV infections in the United States (regardless of place of birth) decreased from 2.7 per 100,000 live births in 2010 to 1.2 in 2016 (Table 8a). However, annual rates differed by race/ethnicity. Although the annual rate among blacks/African Americans decreased from 10.5 in 2010 to 5.4 in 2016, the 2016 rate among blacks/African Americans (5.4) was substantially higher than the 2016 rates among Hispanics/Latinos (1.3) and whites (0.1).

Among infants born in the United States, the overall annual rate of perinatally acquired HIV infections decreased from 1.8 per 100,000 live births in 2010 to 1.1 in 2016 (Table 8b). However, annual rates differed by race/ethnicity. Although the annual rate among blacks/African Americans decreased from 6.8 in 2010 to 5.0 in 2016, the 2016 rate among blacks/African Americans (5.0) was substantially higher than the 2016 rates among Hispanics/Latinos (1.1) and whites (0.1).

SUGGESTED READINGS

- CDC [Dasgupta S, Oster A, Li J, Hall HI]. Disparities in consistent retention in HIV care—11 states and the District of Columbia, 2011–2013. *MMWR* 2016;65(4):77–82. <http://www.cdc.gov/mmwr/volumes/65/wr/mm6504a2.htm>. Accessed April 30, 2019.
- CDC. Establishing a holistic framework to reduce inequities in HIV, viral hepatitis, STDs, and tuberculosis in the United States: an NCHHSTP white paper on social determinants of health, 2010. <http://go.usa.gov/AH2z>. Accessed April 30, 2019.
- CDC. Estimated HIV incidence and prevalence in the United States, 2010–2016. *HIV Surveillance Supplemental Report* 2019;24(No. 1). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published February 2019. Accessed April 30, 2019.
- CDC [Dailey AF, Satcher Johnson A, Wu B]. HIV care outcomes among blacks with diagnosed HIV—United States, 2014. *MMWR* 2017;66(4):97–103. <http://www.cdc.gov/mmwr/volumes/66/wr/mm6604a2.htm>. Accessed April 30, 2019.

- CDC [Gant Z, Dailey A, Hu X, Satcher Johnson A]. HIV care outcomes among Hispanics or Latinos with diagnosed HIV infection—United States, 2015. *MMWR* 2017;66(40):1065–1072. <http://www.cdc.gov/mmwr/volumes/66/wr/mm6640a2.htm>. Accessed April 30, 2019.
- CDC [Singh S, Mitsch A, Wu B]. HIV care outcomes among men who have sex with men with diagnosed HIV infection—United States, 2015. *MMWR* 2017;66(37):969–974. <http://www.cdc.gov/mmwr/volumes/66/wr/mm6637a2.htm>. Accessed April 30, 2019.
- CDC. *HIV Surveillance Report 2017*; vol. 29. <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published November 2018. Accessed April 30, 2019.
- CDC [Siddiqi A, Hu X, Hall HI]. Mortality among blacks or African Americans with HIV infection—United States, 2008–2012. *MMWR* 2015;64(04):81–86. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6404a2.htm>. Accessed April 30, 2019.
- CDC [Crepaz N, Dong X, Wang X, Hernandez AL, Hall HI]. Racial and ethnic disparities in sustained viral suppression and transmission risk potential among persons receiving HIV care—United States, 2014. *MMWR* 2018;67(04):113–118. <http://www.cdc.gov/mmwr/volumes/67/wr/mm6704a2.htm>. Accessed April 30, 2019.
- CDC [Branson BM, Handsfield HH, Lampe MA, et al]. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. *MMWR* 2006;55(RR-14):1–17. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm>. Accessed April 30, 2019.
- CDC [Selik RM, Mokotoff ED, Branson B, Owen SM, Whitmore S, Hall HI]. Revised surveillance case definition for HIV infection—United States, 2014. *MMWR* 2014;63(RR-03):1–10. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6303a1.htm>. Accessed May 16, 2018.
- CDC [Schneider E, Whitmore S, Glynn MK, Dominguez K, Mitsch A, McKenna MT]. Revised surveillance case definitions for HIV infection among adults, adolescents, and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. *MMWR* 2008;57(RR-10):1–12. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5710a1.htm>. Accessed April 30, 2019.
- Fauci AS, Redfield RR, Sigounas G, Weahkee MD, Giroir BP. Ending the HIV Epidemic: a plan for the United States. *JAMA* 2019;321(9):844–845. doi:10.1001/jama.2019.1343.
- Greenberg AE, Purcell DW, Gordon CM, Barasky RJ, del Rio C. Addressing the challenges of the HIV continuum of care in high-prevalence cities in the United States. *J Acquir Immune Defic Syndr* 2015;69(suppl 1):S1–S7. doi:10.1097/QAI.0000000000000569.
- Hess KL, Hall HI. HIV viral suppression, 37 states and the District of Columbia, 2014. *J Community Health* 2018;43(2):338–347. doi:10.1007/s10900-017-0427-3.
- Institute of Medicine. Monitoring HIV care in the United States: indicators and data systems [consensus report]. <http://www.nap.edu/read/13225/chapter/1>. Published March 15, 2012. Accessed April 30, 2019.
- Laffoon BT, Hall HI, Babu AS, Benbow N, Hsu LC, Hu YW; for Urban Areas HIV Surveillance Workgroup. HIV infection and linkage to HIV-related medical care in large urban areas in the United States, 2009. *J Acquir Immune Defic Syndr* 2015;69(4):487–492. doi:10.1097/QAI.0000000000000619.
- Mahle Gray K, Tang T, Shouse L, Li J, Mermin J, Hall HI. Using the HIV surveillance system to monitor the National HIV/AIDS Strategy. *Am J Public Health* 2013;103(1):141–147. doi:10.2105/AJPH.2012.300859.
- Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in adults and adolescents living with HIV. <http://go.usa.gov/vdGA>. Updated October 25, 2018. Accessed April 30, 2019.
- Satcher Johnson A, Song R, Hall, HI. Estimated HIV incidence, prevalence, and undiagnosed infections in US states and Washington, DC, 2010–2014. *J Acquir Immune Defic Syndr* 2017;76(2):116–122. doi:10.1097/QAI.0000000000001495.
- Singh S, Song R, Johnson AS, McCray E, Hall HI. HIV incidence, prevalence, and undiagnosed infections in U.S. men who have sex with men. *Ann Intern Med* 2018;168(10):685–694. doi:10.7326/M17-2082.

SURVEILLANCE OF HIV INFECTION

This report includes data reported to the Centers for Disease Control and Prevention (CDC) through December 31, 2018, 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 diagnosed HIV infection. HIV surveillance data on persons with diagnosed HIV infection may not represent 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 also use caution when interpreting laboratory data for persons with diagnosed HIV infection. Laboratory data presented in this report are from 42 jurisdictions (41 states and the District of Columbia) that reported complete CD4+ T-lymphocyte (CD4) and viral load test results to CDC as of December 2018. Data from these 42 jurisdictions represent 89% of all persons aged ≥ 13 years living with diagnosed HIV infection at year-end 2016 in the United States and are therefore not representative of data on all persons living with diagnosed HIV infection in the United States.

Areas with Complete Laboratory Reporting

As of December 2018, 42 jurisdictions (41 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 CD4 and viral load results to the state or local health department.
- Laboratories that perform HIV-related testing for the jurisdictions had reported a minimum of 95% of HIV-related test results to the state or local health department.

- By December 31, 2018, the jurisdiction had reported (to CDC) at least 95% of all CD4 and viral load test results received from January 2016 through September 2018.

The 41 states are Alabama, Alaska, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, 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 2a–d, 3a–d, 4a–d, and 5a/b.

TABULATION AND PRESENTATION OF DATA

Stages of HIV Infection

Both the 2008 and 2014 HIV case definitions were used to classify HIV infection among adults and adolescents and among children [9, 10].

The 2008 case definition was used to classify cases diagnosed from the beginning of the epidemic 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 condition and either a CD4 count of ≥ 500 cells/ μL or a CD4 percentage of total lymphocytes of ≥ 29 .
- **HIV infection, stage 2:** No AIDS-defining condition and either a CD4 count of 200–499 cells/ μL or a CD4 percentage of total lymphocytes of 14–28.
- **HIV infection, stage 3 (AIDS):** Documentation of an AIDS-defining condition or either a CD4 count of < 200 cells/ μL or a CD4 percentage of total lymphocytes of < 14 . Documentation of an AIDS-defining condition supersedes a CD4 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 conditions and no information available on CD4 count or percentage.

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) the inclusion of CD4 testing criteria for stage 3 in children, and (3) changes in the cutoffs for CD4 percentage of total lymphocytes used for classification of stages 1 and 2 in persons aged ≥ 6 years. The stages of HIV infection in the 2014 case definition are based on age-specific CD4 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 opportunistic illness. 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 condition (excluding stage 0 as described above) is stage 3. Otherwise, the stage is determined by the lowest CD4 test result.
- **HIV infection, stage unknown:** No reported information on AIDS-defining conditions and no information available on CD4 count or percentage.

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.

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 the time of HIV diagnosis was calculated for persons in all areas (Tables 1a–d). Because a complete assessment of stage of disease at 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 diagnosis was calculated for the 42 jurisdictions that reported complete laboratory data (Tables 2a/b).

Stage 3 (AIDS) at the time of HIV diagnosis (Tables 1a–d) and stage of disease at diagnosis (Tables 2a–d) were determined by using the first CD4 test result or documentation of an AIDS-defining condition ≤ 3 months after the HIV diagnosis date, unless documen-

tation 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 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.

Linkage to, and Receipt of, HIV Medical Care

National guidelines for the clinical care and treatment of adults and adolescents living with HIV [11] recommend CD4 and viral load testing during the first care visit after HIV diagnosis to direct the course of treatment. For patients who are not taking antiretroviral therapy (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 whose CD4 counts have consistently ranged from 300 to 500 cells/ μL for ≥ 2 years, annual monitoring of CD4 count is recommended. For virally suppressed patients whose CD4 counts have consistently been > 500 cells/ μL 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 2017 and who resided in any of the 42 jurisdictions at the time of diagnosis (Tables 3a–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 2015, who resided in any of the 42 jurisdictions as of their most recent known address, and who were alive at year-end 2016 (Tables 4a–d). Receipt of any HIV medical care was measured by documentation of ≥ 1 CD4 or viral load tests performed during 2016. 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 2016.

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 retention in care, data were excluded if the date of death (where applicable) was missing.

Viral Suppression

Viral suppression was measured among persons whose infection was diagnosed by year-end 2015, who resided in any of the 42 jurisdictions as of their most recent known address during 2016, and who were alive at year-end 2016. Viral suppression was defined as a viral load result of <200 copies/mL at the

most recent viral load test during 2016. 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.

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. Because of delays in the reporting of deaths, 7 years (2010–2016) of death data are displayed. The exclusion of data from the most recent year allowed ≥ 18 months for deaths to be reported to CDC. Please use caution when interpreting trend data on the numbers of deaths: the numbers for the most recent year are subject to uncertainty.

Survival Analyses

The Kaplan-Meier method was used to estimate the probability of survival (Tables 7a–f) for > 3 years (36 months) for persons with diagnosed HIV infection and for persons whose infection had ever been classified as stage 3 (AIDS). To allow ≥ 3 years from the time of HIV diagnosis to a death date on or before December 31, 2016, tables were limited to data on persons whose diagnosis or stage 3 (AIDS) classification was made during 2008–2013. 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.

Perinatally Acquired HIV Infection

Table 8a presents data for infants with infection attributed to perinatal transmission and reported to NHSS through December 2018. The data include all persons reported to NHSS with infection attributed to

perinatal exposure, regardless of place of birth. Table 8b presents a subset of data from Table 8a: 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 8b 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.

Age

All tables in this report reflect data on persons aged ≥ 13 years, with the exception of Tables 8a/b (perinatally acquired HIV infection; birth years 2010–2016).

- Tables 4a–d and 5a/b (receipt of care and viral suppression): age was based on the person’s age at year-end 2015.
- Tables 6a–f (deaths): age was based on the person’s age at the time of death.
- Table 9 (prevalence): age was based on the person’s age at year-end 2016.
- All other tables: age was based on the person’s age at the time of HIV diagnosis.

Race and Ethnicity

In the *Federal Register* for October 30, 1997 [12], the Office of Management and Budget (OMB) announced the Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and mandated implementation by January 1, 2003. At a minimum, data should be collected for 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 persons categorized as Asian/Pacific Islander (referred to as legacy cases) that were reported before the new race categories were implemented in 2003 (e.g., diagnoses of HIV infection that were reported to CDC before 2003 but that were classified as stage 3 [AIDS] after 2003) and a small percentage of persons 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 2008–2017, the Asian category does not include persons categorized as Asian/Pacific Islander because their diagnosis was made after 2003 and reported to CDC in accordance with OMB’s Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity [12].

This report also presents data for persons for whom multiple race categories are specified. 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.

Demographic information for the live birth registry is based on that of the mother [13]. Therefore, Tables 8a/b, which present estimated numbers and rates of perinatally acquired HIV infection, categorize race/ethnicity according to the mother’s race/ethnicity.

Geographic Designation

Data by area of residence reflect the address at the time of diagnosis of HIV infection or at the time of stage 3 (AIDS) classification for Tables 1c/d, 2b, 3b, and 7c/f. In Tables 4a–d and 5a/b, area of residence is based on most recent known address as of December 31 of the specified year. For the death tables (6c and 6f), 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.

Transmission Categories

Transmission category is the term used to summarize a person’s possible HIV risk factors; the summary classification results from selecting, from the presumed hierarchical order of probability, the 1 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. Persons with > 1 reported risk

factor for HIV infection are classified in the transmission category listed first in the hierarchy. The exception is the category for male-to-male sexual contact *and* injection drug use; this group makes up a separate transmission category.

Persons whose transmission category is classified as male-to-male sexual contact include men who have ever had sexual contact with other men (i.e., homosexual contact) and men who have ever had sexual contact with both men and women (i.e., bisexual contact). Persons whose transmission category is classified as heterosexual contact are persons who have ever had heterosexual contact with a person known to have, or to be at high risk for, HIV infection (e.g., a person who injects drugs).

Cases of HIV infection reported without a risk factor listed in the hierarchy of transmission categories are classified as “no risk factor reported or identified.” Cases classified as no identified risk factor (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 [14]. 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 [15]. The plausible values are analyzed by using standard procedures, and the results of these analyses are then combined to produce the final results.

Rates

In tables displaying data on deaths of persons with diagnosed HIV infection and deaths of persons with infection ever classified as stage 3 (AIDS) (Tables 6a–f), rates were calculated in 3 ways:

- **Rates of deaths per 100,000 population:** The population denominators used to compute the rates for the 50 states, the District of Columbia, and Puerto Rico were based on the Vintage 2017 file (for years 2010 to 2016) from the U.S. Census Bureau [16]. 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 [17]. Each rate was calculated by dividing the estimated 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.

- **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 estimated 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 estimated number of persons living with a diagnosis of HIV infection (or with infection classified as stage 3 [AIDS]) at the end of the previous calendar year plus the number of diagnoses of HIV infection (or stage 3 [AIDS] classification) during the current calendar year; the result was then multiplied by 1,000.
- **Age-adjusted rates of deaths per 100,000 population and per 1,000 persons living with diagnosed HIV infection or living with infection ever classified as stage 3 (AIDS):** Tables 6c and 6f include age-adjusted rates by area of residence in addition to crude rates. A standard population distribution was used to adjust death rates per 100,000 population and per 1,000 persons living with diagnosed HIV infection (or with infection ever classified as stage 3 [AIDS]). The age-adjusted rates are rates that would have existed if the age distribution of the designated population and the age distribution of the standard population were the same. The use of the U.S. 2000 standard population in calculating age-adjusted rates was based on recommendations by the National Center for Health Statistics [18, 19].

In the tables displaying data on perinatally acquired HIV infection (Tables 8a/b), rates were calculated per 100,000 live births [13].

References

1. National HIV/AIDS strategy for the United States: updated to 2020. <http://www.hiv.gov/federal-response/national-hiv-aids-strategy/nhas-update>. Published July 2015. Accessed April 30, 2019.
2. Fauci AS, Redfield RR, Sigounas G, Weahkee MD, Giroir BP. Ending the HIV Epidemic: a plan for the United States. *JAMA* 2019;321(9):844–845. doi:10.1001/jama.2019.1343.
3. CDC. Division of HIV/AIDS Prevention strategic plan 2017–2020. <http://www.cdc.gov/hiv/dhap/strategicplan/>. Updated July 2017. Accessed April 30, 2019.
4. CDC. *HIV Surveillance Report 2017*; vol. 29. <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published November 2018. Accessed April 30, 2019.
5. Cohen SM, Gray KM, Bañez Ocfemia MC, Satcher Johnson A, Hall HI. The status of the National HIV Surveillance System, United States, 2013. *Public Health Rep* 2014;129(4):335–341. doi:10.1177/003335491412900408.
6. Valdiserri RO, Forsyth AD, Yakovchenko V, Koh HK. Measuring what matters: development of standard HIV core indicators across the U.S. Department of Health and Human Services. *Public Health Rep* 2013;128(5):354–359. doi:10.1177/003335491312800504.
7. Health Resources and Services Administration, HIV/AIDS Bureau. The United States—performance indicators. <https://hab.hrsa.gov/stateprofiles2014/HHS-Indicators.aspx>. Updated February 2017. Accessed April 29, 2019.
8. Healthy People 2020. <http://www.healthypeople.gov/2020/topics-objectives/topic/hiv/objectives>. Updated 2019. Accessed April 30, 2019.
9. CDC [Selik RM, Mokotoff ED, Branson B, Owen SM, Whitmore S, Hall HI]. Revised surveillance case definition for HIV infection—United States, 2014. *MMWR* 2014;63(RR-03):1–10. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6303a1.htm> Accessed April 30, 2019.
10. CDC [Schneider E, Whitmore S, Glynn MK, Dominguez K, Mitsch A, McKenna MT]. Revised surveillance case definitions for HIV infection among adults, adolescents, and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. *MMWR* 2008;57(RR-10):1–12. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5710a1.htm>. Accessed April 30, 2019.
11. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in adults and adolescents living with HIV. <http://go.usa.gov/vdGA>. Updated October 25, 2018. Accessed April 30, 2019.
12. Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. *Federal Register* 1997;62(210):58782–58790. <http://go.usa.gov/xnV9T>. Accessed April 30, 2019.
13. Martin JA, Hamilton BE, Osterman MJK, Driscoll AK, Drake P. Births: final data for 2016. *Natl Vital Stat Rep* 2018;67(1):1–55.
14. Harrison KM, Kajese T, Hall HI, Song R. Risk factor redistribution of the national HIV/AIDS surveillance data: an alternative approach. *Public Health Rep* 2008;123(5):618–627. doi:10.1177/003335490812300512.
15. Rubin, DB. *Multiple Imputation for Nonresponse in Surveys*. New York: John Wiley & Sons Inc; 1987.
16. U.S. Census Bureau. Population and housing unit estimates datasets. <http://go.usa.gov/xn4cc>. Updated July 1, 2014. Accessed April 30, 2019.
17. U.S. Census Bureau. International Data Base. <http://www.census.gov/data-tools/demo/idb/informationGateway.php>. Updated August 2017. Accessed April 30, 2019.
18. Anderson RN, Rosenberg HM. Age standardization of death rates: implementation of the year 2000 standard. *Natl Vital Stat Rep* 1998;47(3):1–16, 20.
19. Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. *Healthy People 2010 Statistical Notes* 2001;(20):1–9. <http://www.cdc.gov/nchs/data/statnt/statnt20.pdf>. Accessed April 30, 2019.

Table 1a. Stage 3 (AIDS) at HIV diagnosis, among persons aged ≥13 years, by year of diagnosis and selected characteristics, 2010–2017—United States

	2010			2011			2012			2013			2014			2015			2016			2017		
	Total	Stage 3 (AIDS) at diagnosis ^a		Total	Stage 3 (AIDS) at diagnosis ^a		Total	Stage 3 (AIDS) at diagnosis ^a		Total	Stage 3 (AIDS) at diagnosis ^a		Total	Stage 3 (AIDS) at diagnosis ^a		Total	Stage 3 (AIDS) at diagnosis ^a		Total	Stage 3 (AIDS) at diagnosis ^a		Total	Stage 3 (AIDS) at diagnosis ^a	
		No.	No.		%	No.		No.	%		No.	No.		%	No.		No.	%		No.	No.		%	No.
Sex																								
Male	33,773	9,725	28.8	32,766	9,238	28.2	32,530	8,864	27.2	31,689	8,668	27.4	32,424	7,212	22.2	32,439	6,884	21.2	32,032	6,726	21.0	30,939	6,391	20.7
Female	9,492	2,554	26.9	8,750	2,385	27.3	8,189	2,235	27.3	7,622	2,090	27.4	7,589	1,833	24.2	7,388	1,732	23.4	7,537	1,685	22.4	7,285	1,616	22.2
Age at diagnosis (yr)																								
13–24	9,133	1,202	13.2	9,084	1,201	13.2	9,082	1,137	12.5	8,771	1,204	13.7	9,123	805	8.8	9,036	765	8.5	8,641	759	8.8	8,209	749	9.1
25–34	11,758	2,692	22.9	11,544	2,607	22.6	11,852	2,672	22.5	11,842	2,574	21.7	12,640	2,184	17.3	13,056	2,172	16.6	13,615	2,240	16.5	13,319	2,161	16.2
35–44	10,188	3,464	34.0	9,186	3,093	33.7	8,559	2,759	32.2	7,887	2,656	33.7	8,018	2,335	29.1	7,673	2,144	27.9	7,507	2,042	27.2	7,275	1,873	25.7
45–54	8,266	3,247	39.3	7,858	3,043	38.7	7,444	2,901	39.0	6,880	2,640	38.4	6,503	2,251	34.6	6,333	2,144	33.9	5,988	1,976	33.0	5,611	1,889	33.7
≥55	3,920	1,674	42.7	3,844	1,679	43.7	3,782	1,630	43.1	3,931	1,684	42.8	3,729	1,470	39.4	3,729	1,391	37.3	3,818	1,394	36.5	3,810	1,335	35.0
Race/ethnicity																								
American Indian/Alaska Native	159	57	35.8	137	45	32.8	170	50	29.4	144	39	27.1	178	45	25.3	184	45	24.5	227	54	23.8	210	43	20.5
Asian	673	213	31.6	720	204	28.3	768	220	28.6	778	232	29.8	909	221	24.3	921	207	22.5	963	221	22.9	948	236	24.9
Black/African American	19,649	5,259	26.8	18,692	4,928	26.4	17,957	4,736	26.4	17,117	4,424	25.8	17,353	3,777	21.8	17,312	3,520	20.3	17,170	3,487	20.3	16,525	3,320	20.1
Hispanic/Latino ^b	9,253	2,884	31.2	9,065	2,704	29.8	9,102	2,618	28.8	9,016	2,632	29.2	9,565	2,232	23.3	9,684	2,179	22.5	9,921	2,184	22.0	9,602	2,058	21.4
Native Hawaiian/Other Pacific Islander	47	24	51.1	53	22	41.5	48	15	31.3	48	16	33.3	42	10	23.8	73	16	21.9	41	8	19.5	54	14	25.9
White	11,532	3,338	28.9	11,040	3,234	29.3	10,915	3,047	27.9	10,541	3,002	28.5	10,495	2,442	23.3	10,342	2,366	22.9	10,054	2,219	22.1	9,920	2,136	21.5
Multiple races	1,952	504	25.8	1,809	486	26.9	1,759	413	23.5	1,667	413	24.8	1,471	318	21.6	1,311	283	21.6	1,193	238	19.9	965	200	20.7
Transmission category^c																								
Male-to-male sexual contact	26,037	6,900	26.5	25,791	6,751	26.2	26,034	6,543	25.1	25,571	6,504	25.4	26,472	5,346	20.2	26,471	5,111	19.3	26,146	5,014	19.2	25,445	4,830	19.0
Injection drug use																								
Male	1,934	746	38.6	1,592	608	38.2	1,431	523	36.5	1,348	488	36.2	1,286	452	35.2	1,315	387	29.4	1,221	336	27.5	1,314	355	27.0
Female	1,407	374	26.6	1,271	370	29.1	1,155	306	26.5	999	275	27.5	962	222	23.1	1,011	201	19.9	975	201	20.7	1,015	201	19.8
Male-to-male sexual contact and injection drug use	1,697	437	25.8	1,571	373	23.7	1,494	366	24.5	1,379	293	21.2	1,344	231	17.2	1,352	256	18.9	1,338	231	17.3	1,290	203	15.7
Heterosexual contact ^d																								
Male	4,058	1,622	40.0	3,772	1,491	39.5	3,523	1,414	40.1	3,351	1,367	40.8	3,285	1,170	35.6	3,267	1,118	34.2	3,302	1,134	34.4	2,856	991	34.7
Female	8,051	2,167	26.9	7,440	2,000	26.9	7,001	1,921	27.4	6,578	1,804	27.4	6,595	1,601	24.3	6,348	1,525	24.0	6,516	1,475	22.6	6,222	1,408	22.6
Other ^e																								
Male	48	19	40.8	41	15	37.5	47	18	39.1	40	16	40.1	36	13	37.6	33	13	37.8	26	10	38.4	34	11	33.1
Female	34	14	39.9	39	15	39.8	33	8	23.7	45	12	25.6	32	10	31.8	29	6	21.8	47	9	18.9	47	7	14.6
Total	43,265	12,279	28.4	41,516	11,623	28.0	40,719	11,099	27.3	39,311	10,758	27.4	40,013	9,045	22.6	39,827	8,616	21.6	39,569	8,411	21.3	38,224	8,007	20.9

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

Note. Data are based on residence at diagnosis.

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

^b Hispanics/Latinos can be of any race.

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

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

^e Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

Table 1b. Stage 3 (AIDS) at HIV diagnosis, among persons aged ≥13 years, by year of diagnosis and selected characteristics, 2010–2017—United States and 6 dependent areas

	2010			2011			2012			2013			2014			2015			2016			2017		
	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			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.	%	Total No.	No.	%	Total No.	No.	%	Total No.	No.	%
Sex																								
Male	34,383	9,894	28.8	33,325	9,398	28.2	33,083	8,998	27.2	32,201	8,797	27.3	32,933	7,317	22.2	32,908	6,980	21.2	32,481	6,841	21.1	31,305	6,455	20.6
Female	9,703	2,609	26.9	8,960	2,434	27.2	8,384	2,289	27.3	7,786	2,132	27.4	7,734	1,873	24.2	7,498	1,757	23.4	7,640	1,707	22.3	7,376	1,640	22.2
Age at diagnosis (yr)																								
13–24	9,236	1,211	13.1	9,190	1,219	13.3	9,207	1,146	12.4	8,878	1,217	13.7	9,266	814	8.8	9,126	773	8.5	8,728	770	8.8	8,282	754	9.1
25–34	11,966	2,727	22.8	11,731	2,641	22.5	12,051	2,706	22.5	12,016	2,602	21.7	12,797	2,205	17.2	13,211	2,194	16.6	13,749	2,259	16.4	13,446	2,178	16.2
35–44	10,410	3,528	33.9	9,377	3,146	33.6	8,722	2,806	32.2	8,020	2,691	33.6	8,168	2,377	29.1	7,803	2,171	27.8	7,633	2,079	27.2	7,364	1,897	25.8
45–54	8,450	3,317	39.3	8,048	3,114	38.7	7,607	2,963	39.0	7,035	2,685	38.2	6,610	2,288	34.6	6,456	2,183	33.8	6,093	2,012	33.0	5,704	1,911	33.5
≥55	4,024	1,720	42.7	3,939	1,712	43.5	3,880	1,666	42.9	4,038	1,734	42.9	3,826	1,506	39.4	3,810	1,416	37.2	3,918	1,428	36.4	3,885	1,355	34.9
Race/ethnicity																								
American Indian/Alaska Native	159	57	35.8	137	45	32.8	170	50	29.4	144	39	27.1	178	45	25.3	184	45	24.5	227	54	23.8	210	43	20.5
Asian	675	213	31.6	721	205	28.4	769	221	28.7	778	232	29.8	911	223	24.5	925	207	22.4	964	221	22.9	951	238	25.0
Black/African American	19,663	5,265	26.8	18,708	4,932	26.4	17,961	4,738	26.4	17,133	4,427	25.8	17,369	3,784	21.8	17,321	3,525	20.4	17,176	3,489	20.3	16,528	3,320	20.1
Hispanic/Latino ^b	10,051	3,097	30.8	9,813	2,907	29.6	9,839	2,801	28.5	9,670	2,799	28.9	10,191	2,367	23.2	10,244	2,291	22.4	10,458	2,316	22.1	10,046	2,142	21.3
Native Hawaiian/Other Pacific Islander	51	26	51.0	54	22	40.7	51	16	31.4	49	16	32.7	44	10	22.7	76	18	23.7	47	10	21.3	57	16	28.1
White	11,534	3,340	29.0	11,042	3,234	29.3	10,916	3,048	27.9	10,546	3,003	28.5	10,502	2,443	23.3	10,344	2,368	22.9	10,056	2,220	22.1	9,923	2,136	21.5
Multiple races	1,953	505	25.9	1,810	487	26.9	1,761	413	23.5	1,667	413	24.8	1,472	318	21.6	1,312	283	21.6	1,193	238	19.9	966	200	20.7
Transmission category^c																								
Male-to-male sexual contact	26,340	6,973	26.5	26,068	6,816	26.1	26,339	6,607	25.1	25,863	6,567	25.4	26,803	5,392	20.1	26,773	5,167	19.3	26,437	5,070	19.2	25,678	4,868	19.0
Injection drug use																								
Male	2,067	785	38.0	1,702	642	37.7	1,521	548	36.0	1,430	507	35.5	1,347	467	34.7	1,374	395	28.8	1,261	354	28.0	1,348	361	26.8
Female	1,431	380	26.5	1,303	372	28.5	1,177	309	26.3	1,025	281	27.4	976	226	23.2	1,019	202	19.8	985	202	20.6	1,023	201	19.7
Male-to-male sexual contact and injection drug use	1,724	443	25.7	1,595	378	23.7	1,520	370	24.3	1,399	295	21.1	1,353	231	17.1	1,373	260	19.0	1,350	237	17.6	1,301	204	15.7
Heterosexual contact ^d																								
Male	4,205	1,675	39.8	3,917	1,546	39.5	3,657	1,455	39.8	3,469	1,412	40.7	3,394	1,213	35.7	3,354	1,145	34.1	3,408	1,171	34.4	2,944	1,010	34.3
Female	8,238	2,216	26.9	7,618	2,047	26.9	7,174	1,972	27.5	6,715	1,840	27.4	6,726	1,637	24.3	6,450	1,548	24.0	6,609	1,496	22.6	6,306	1,432	22.7
Other ^e																								
Male	48	19	40.8	42	16	39.0	47	18	39.1	40	16	40.1	36	13	37.6	34	13	37.6	26	10	38.5	35	11	33.0
Female	34	14	39.9	39	15	39.8	33	8	23.7	45	12	25.6	32	10	31.8	29	7	22.2	47	9	18.9	47	7	14.6
Total	44,086	12,503	28.4	42,285	11,832	28.0	41,467	11,287	27.2	39,987	10,929	27.3	40,667	9,190	22.6	40,406	8,737	21.6	40,121	8,548	21.3	38,681	8,095	20.9

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

Note. Data are based on residence at diagnosis.

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

^b Hispanics/Latinos can be of any race.

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

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

^e Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

Table 1c. Stage 3 (AIDS) at HIV diagnosis, among persons aged ≥13 years, by year of diagnosis and area of residence, 2010–2017—United States and 6 dependent areas

	2010			2011			2012			2013			2014			2015			2016			2017		
	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		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.	%
Alabama	681	144	21.1	682	160	23.5	666	164	24.6	633	165	26.1	673	147	21.8	664	160	24.1	664	144	21.7	653	142	21.7
Alaska	35	12	34.3	24	8	33.3	28	10	35.7	23	7	30.4	38	4	10.5	25	5	20.0	37	6	16.2	29	7	24.1
Arizona	619	218	35.2	565	169	29.9	623	155	24.9	691	193	27.9	744	153	20.6	693	149	21.5	717	144	20.1	727	137	18.8
Arkansas	235	61	26.0	240	53	22.1	248	61	24.6	263	70	26.6	312	66	21.2	272	62	22.8	311	69	22.2	286	51	17.8
California	5,281	1,485	28.1	5,061	1,352	26.7	5,064	1,364	26.9	4,714	1,223	25.9	5,167	1,016	19.7	5,116	948	18.5	5,148	961	18.7	4,767	908	19.0
Colorado	421	142	33.7	363	108	29.8	371	101	27.2	312	92	29.5	379	102	26.9	378	99	26.2	424	84	19.8	441	80	18.1
Connecticut	390	140	35.9	352	124	35.2	288	112	38.9	328	103	31.4	293	90	30.7	275	71	25.8	261	68	26.1	275	65	23.6
Delaware	126	45	35.7	113	35	31.0	136	47	34.6	110	48	43.6	115	34	29.6	103	29	28.2	111	34	30.6	125	32	25.6
District of Columbia	802	176	21.9	642	150	23.4	573	116	20.2	492	102	20.7	418	72	17.2	370	55	14.9	344	59	17.2	305	40	13.1
Florida	4,648	1,279	27.5	4,589	1,229	26.8	4,391	1,164	26.5	4,302	1,227	28.5	4,485	1,030	23.0	4,587	986	21.5	4,684	998	21.3	4,590	976	21.3
Georgia	2,697	731	27.1	2,720	760	27.9	2,677	720	26.9	2,340	617	26.4	2,385	564	23.6	2,621	536	20.5	2,493	474	19.0	2,584	567	21.9
Hawaii	105	33	31.4	82	28	34.1	81	28	34.6	97	35	36.1	99	31	31.3	120	23	19.2	78	11	14.1	78	13	16.7
Idaho	44	20	45.5	35	10	28.6	36	11	30.6	26	8	30.8	22	7	31.8	40	14	35.0	45	7	15.6	45	11	24.4
Illinois	1,676	495	29.5	1,632	455	27.9	1,675	443	26.4	1,603	410	25.6	1,538	326	21.2	1,556	331	21.3	1,489	309	20.8	1,354	274	20.2
Indiana	486	131	27.0	467	140	30.0	491	132	26.9	474	118	24.9	465	116	24.9	632	121	19.1	483	109	22.6	516	124	24.0
Iowa	114	51	44.7	114	35	30.7	116	46	39.7	120	54	45.0	94	33	35.1	124	46	37.1	133	31	23.3	126	27	21.4
Kansas	136	50	36.8	135	42	31.1	152	52	34.2	147	50	34.0	130	37	28.5	153	35	22.9	146	35	24.0	117	26	22.2
Kentucky	332	99	29.8	309	103	33.3	360	96	26.7	354	99	28.0	344	90	26.2	339	79	23.3	336	109	32.4	365	86	23.6
Louisiana	1,114	331	29.7	1,194	366	30.7	1,024	347	33.9	1,135	338	29.8	1,206	275	22.8	1,098	242	22.0	1,118	261	23.3	1,008	229	22.7
Maine	55	16	29.1	49	15	30.6	48	11	22.9	35	14	40.0	55	7	12.7	46	13	28.3	53	12	22.6	31	12	38.7
Maryland	1,761	422	24.0	1,436	367	25.6	1,336	321	24.0	1,311	350	26.7	1,238	283	22.9	1,185	260	21.9	1,105	229	20.7	1,020	249	24.4
Massachusetts	705	220	31.2	690	225	32.6	700	205	29.3	670	191	28.5	641	146	22.8	597	136	22.8	634	138	21.8	597	121	20.3
Michigan	762	225	29.5	769	199	25.9	787	196	24.9	747	224	30.0	777	176	22.7	723	161	22.3	744	178	23.9	761	149	19.6
Minnesota	336	93	27.7	296	85	28.7	314	85	27.1	307	94	30.6	310	79	25.5	296	73	24.7	295	67	22.7	276	76	27.5
Mississippi	457	150	32.8	524	161	30.7	445	116	26.1	471	141	29.9	477	130	27.3	508	119	23.4	422	118	28.0	426	115	27.0
Missouri	571	124	21.7	524	152	29.0	529	139	26.3	464	120	25.9	467	110	23.6	461	95	20.6	510	120	23.5	504	84	16.7
Montana	20	5	25.0	22	5	22.7	20	8	40.0	22	7	31.8	14	5	35.7	19	6	31.6	21	4	19.0	31	6	19.4
Nebraska	115	40	34.8	79	27	34.2	82	25	30.5	79	29	36.7	88	28	31.8	79	22	27.8	76	18	23.7	88	13	14.8
Nevada	376	124	33.0	382	124	32.5	363	117	32.2	433	134	30.9	429	113	26.3	477	108	22.6	514	113	22.0	491	107	21.8
New Hampshire	50	11	22.0	39	13	33.3	47	20	42.6	35	10	28.6	41	9	22.0	25	3	12.0	41	11	26.8	35	5	14.3
New Jersey	1,369	415	30.3	1,192	345	28.9	1,296	374	28.9	1,207	359	29.7	1,243	331	26.6	1,201	314	26.1	1,214	281	23.1	1,133	238	21.0
New Mexico	148	53	35.8	137	41	29.9	118	38	32.2	142	38	26.8	134	39	29.1	135	32	23.7	144	30	20.8	135	29	21.5

Table 1c. Stage 3 (AIDS) at HIV diagnosis, among persons aged ≥13 years, by year of diagnosis and area of residence, 2010–2017—United States and 6 dependent areas (cont)

	2010			2011			2012			2013			2014			2015			2016			2017		
	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		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.	%
New York	3,942	1,073	27.2	3,787	991	26.2	3,547	891	25.1	3,253	818	25.1	3,329	720	21.6	3,063	657	21.4	2,829	578	20.4	2,744	580	21.1
North Carolina	1,444	358	24.8	1,439	358	24.9	1,231	280	22.7	1,282	335	26.1	1,310	282	21.5	1,324	291	22.0	1,391	273	19.6	1,301	265	20.4
North Dakota	13	3	23.1	12	1	8.3	11	4	36.4	19	7	36.8	21	5	23.8	21	9	42.9	46	11	23.9	37	10	27.0
Ohio	982	273	27.8	1,048	282	26.9	1,019	284	27.9	1,042	273	26.2	952	213	22.4	933	197	21.1	982	228	23.2	1,006	212	21.1
Oklahoma	285	71	24.9	314	82	26.1	285	78	27.4	332	66	19.9	304	71	23.4	314	68	21.7	293	74	25.3	299	63	21.1
Oregon	240	87	36.2	240	87	36.2	271	86	31.7	228	87	38.2	239	79	33.1	221	67	30.3	226	57	25.2	202	49	24.3
Pennsylvania	1,486	474	31.9	1,385	412	29.7	1,420	449	31.6	1,296	362	27.9	1,200	313	26.1	1,177	304	25.8	1,130	274	24.2	1,083	261	24.1
Rhode Island	115	36	31.3	100	40	40.0	78	27	34.6	78	32	41.0	89	24	27.0	64	19	29.7	70	19	27.1	83	24	28.9
South Carolina	768	280	36.5	742	295	39.8	701	254	36.2	707	251	35.5	761	169	22.2	667	171	25.6	744	179	24.1	707	182	25.7
South Dakota	32	6	18.8	21	10	47.6	25	8	32.0	31	11	35.5	29	7	24.1	23	11	47.8	43	12	27.9	38	6	15.8
Tennessee	856	234	27.3	847	201	23.7	853	194	22.7	770	226	29.4	757	158	20.9	742	129	17.4	709	114	16.1	713	121	17.0
Texas	4,453	1,259	28.3	4,274	1,218	28.5	4,317	1,167	27.0	4,336	1,123	25.9	4,416	948	21.5	4,505	967	21.5	4,519	961	21.3	4,309	860	20.0
Utah	85	26	30.6	106	29	27.4	122	46	37.7	110	27	24.5	114	23	20.2	120	25	20.8	139	25	18.0	115	22	19.1
Vermont	20	5	25.0	13	6	46.2	14	3	21.4	13	5	38.5	17	4	23.5	14	4	28.6	5	3	60.0	22	9	40.9
Virginia	994	291	29.3	903	245	27.1	937	255	27.2	952	238	25.0	902	197	21.8	955	184	19.3	903	192	21.3	864	171	19.8
Washington	539	165	30.6	481	160	33.3	497	139	28.0	445	118	26.5	439	103	23.5	452	105	23.2	428	104	24.3	438	97	22.1
West Virginia	73	26	35.6	87	33	37.9	82	29	35.4	73	27	37.0	86	23	26.7	72	26	36.1	67	20	29.9	76	22	28.9
Wisconsin	252	63	25.0	244	77	31.6	217	78	35.9	242	75	31.0	217	56	25.8	225	46	20.4	229	47	20.5	258	50	19.4
Wyoming	19	8	42.1	15	10	66.7	7	3	42.9	15	7	46.7	10	1	10.0	17	3	17.6	21	8	38.1	10	4	40.0
Subtotal	43,265	12,279	28.4	41,516	11,623	28.0	40,719	11,099	27.3	39,311	10,758	27.4	40,013	9,045	22.6	39,827	8,616	21.6	39,569	8,411	21.3	38,224	8,007	20.9
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	0	0	0.0	0	0	0.0	0	0	0.0
Guam	6	2	33.3	1	0	0.0	7	2	28.6	1	0	0.0	3	0	0.0	6	2	33.3	4	2	50.0	6	4	66.7
Northern Mariana Islands	0	0	0.0	2	1	50.0	0	0	0.0	0	0	0.0	1	1	100	2	1	50.0	0	0	0.0	1	0	0.0
Puerto Rico	785	208	26.5	737	199	27.0	728	181	24.9	649	165	25.4	624	133	21.3	558	112	20.1	533	130	24.4	443	84	19.0
Republic of Palau	0	0	0.0	1	1	100	0	0	0.0	1	0	0.0	0	0	0.0	1	0	0.0	2	0	0.0	0	0	0.0
U.S. Virgin Islands	30	14	46.7	28	8	28.6	13	5	38.5	25	6	24.0	26	11	42.3	12	6	50.0	13	5	38.5	7	0	0.0
Subtotal	821	224	27.3	769	209	27.2	748	188	25.1	676	171	25.3	654	145	22.2	579	121	20.9	552	137	24.8	457	88	19.3
Total	44,086	12,503	28.4	42,285	11,832	28.0	41,467	11,287	27.2	39,987	10,929	27.3	40,667	9,190	22.6	40,406	8,737	21.6	40,121	8,548	21.3	38,681	8,095	20.9

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

Note. Data are based on residence at diagnosis.

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

Table 1d. Stage 3 (AIDS) at HIV diagnosis, among persons aged ≥13 years, by race/ethnicity and area of residence, 2017—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	430	91	21.2	22	7	31.8	180	39	21.7	21	5	23.8
Alaska	4	1	25.0	3	1	33.3	9	2	22.2	13	3	23.1
Arizona	116	9	7.8	296	60	20.3	246	49	19.9	69	19	27.5
Arkansas	145	24	16.6	19	6	31.6	113	20	17.7	9	1	11.1
California	794	123	15.5	2,227	451	20.3	1,234	228	18.5	512	106	20.7
Colorado	56	8	14.3	156	32	20.5	209	36	17.2	20	4	20.0
Connecticut	109	24	22.0	83	15	18.1	77	22	28.6	6	4	66.7
Delaware	76	20	26.3	20	5	25.0	28	7	25.0	1	0	0.0
District of Columbia	221	30	13.6	43	4	9.3	31	5	16.1	10	1	10.0
Florida	1,930	425	22.0	1,452	280	19.3	1,104	238	21.6	104	33	31.7
Georgia	1,864	392	21.0	193	56	29.0	437	99	22.7	90	20	22.2
Hawaii	4	1	25.0	13	1	7.7	22	2	9.1	39	9	23.1
Idaho	4	1	25.0	5	1	20.0	33	8	24.2	3	1	33.3
Illinois	687	130	18.9	275	60	21.8	321	70	21.8	71	14	19.7
Indiana	235	47	20.0	60	22	36.7	191	50	26.2	30	5	16.7
Iowa	37	8	21.6	18	3	16.7	63	15	23.8	8	1	12.5
Kansas	36	6	16.7	23	4	17.4	50	15	30.0	8	1	12.5
Kentucky	112	22	19.6	23	6	26.1	220	57	25.9	10	1	10.0
Louisiana	696	150	21.6	71	18	25.4	228	58	25.4	13	3	23.1
Maine	4	2	50.0	1	0	0.0	25	9	36.0	1	1	100
Maryland	715	158	22.1	100	32	32.0	150	42	28.0	55	17	30.9
Massachusetts	163	53	32.5	180	28	15.6	221	31	14.0	33	9	27.3
Michigan	438	79	18.0	62	10	16.1	241	60	24.9	20	0	0.0
Minnesota	129	33	25.6	32	10	31.3	95	25	26.3	20	8	40.0
Mississippi	340	92	27.1	11	3	27.3	68	20	29.4	7	0	0.0
Missouri	258	37	14.3	39	9	23.1	190	35	18.4	17	3	17.6
Montana	0	0	0.0	4	1	25.0	22	5	22.7	5	0	0.0
Nebraska	26	4	15.4	15	2	13.3	37	6	16.2	10	1	10.0
Nevada	146	25	17.1	139	38	27.3	172	36	20.9	34	8	23.5
New Hampshire	6	0	0.0	5	1	20.0	22	4	18.2	2	0	0.0
New Jersey	508	105	20.7	397	80	20.2	176	37	21.0	52	16	30.8
New Mexico	9	3	33.3	62	12	19.4	37	10	27.0	27	4	14.8
New York	1,081	241	22.3	950	188	19.8	456	94	20.6	257	57	22.2
North Carolina	843	162	19.2	121	29	24.0	288	63	21.9	49	11	22.4
North Dakota	13	4	30.8	3	0	0.0	15	5	33.3	6	1	16.7
Ohio	447	94	21.0	69	21	30.4	429	85	19.8	61	12	19.7
Oklahoma	80	9	11.3	56	16	28.6	121	27	22.3	42	11	26.2
Oregon	17	3	17.6	44	10	22.7	123	31	25.2	18	5	27.8
Pennsylvania	547	124	22.7	181	38	21.0	316	89	28.2	39	10	25.6
Rhode Island	16	5	31.3	24	4	16.7	39	14	35.9	4	1	25.0
South Carolina	442	107	24.2	69	25	36.2	165	43	26.1	31	7	22.6
South Dakota	7	2	28.6	5	1	20.0	16	1	6.3	10	2	20.0
Tennessee	404	61	15.1	37	12	32.4	256	45	17.6	16	3	18.8
Texas	1,585	263	16.6	1,735	398	22.9	816	164	20.1	173	35	20.2
Utah	12	1	8.3	39	11	28.2	54	7	13.0	10	3	30.0
Vermont	2	2	100	2	0	0.0	16	7	43.8	2	0	0.0
Virginia	492	91	18.5	92	23	25.0	211	42	19.9	69	15	21.7
Washington	112	27	24.1	90	16	17.8	188	40	21.3	48	14	29.2
West Virginia	20	5	25.0	1	0	0.0	49	14	28.6	6	3	50.0
Wisconsin	107	16	15.0	34	8	23.5	101	21	20.8	16	5	31.3
Wyoming	0	0	0.0	1	0	0.0	9	4	44.4	0	0	0.0
Total	16,525	3,320	20.1	9,602	2,058	21.4	9,920	2,136	21.5	2,177	493	22.6

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

Note. Data are based on residence at diagnosis.

^a Hispanics/Latinos can be of any race.

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

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

Table 2a. Stage of disease at HIV diagnosis during 2017, among persons aged ≥13 years, by 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.	%
Sex											
Male	27,505	1,812	6.6	6,873	25.0	8,503	30.9	5,652	20.5	4,665	17.0
Female	6,450	310	4.8	1,805	28.0	1,806	28.0	1,429	22.2	1,100	17.1
Age at diagnosis (yr)											
13–24	7,342	665	9.1	2,062	28.1	2,570	35.0	671	9.1	1,374	18.7
25–34	11,852	819	6.9	3,287	27.7	3,761	31.7	1,924	16.2	2,061	17.4
35–44	6,463	294	4.5	1,601	24.8	1,869	28.9	1,662	25.7	1,037	16.0
45–54	4,936	195	4.0	1,054	21.4	1,263	25.6	1,665	33.7	759	15.4
≥55	3,362	149	4.4	674	20.0	846	25.2	1,159	34.5	534	15.9
Race/ethnicity											
American Indian/Alaska Native	158	12	7.6	48	30.4	44	27.8	30	19.0	24	15.2
Asian	855	41	4.8	168	19.6	310	36.3	212	24.8	124	14.5
Black/African American	14,909	855	5.7	3,493	23.4	4,616	31.0	3,002	20.1	2,943	19.7
Hispanic/Latino ^c	8,517	543	6.4	2,166	25.4	2,676	31.4	1,825	21.4	1,307	15.3
Native Hawaiian/ Other Pacific Islander	43	5	11.6	7	16.3	12	27.9	13	30.2	6	14.0
White	8,578	592	6.9	2,558	29.8	2,375	27.7	1,818	21.2	1,235	14.4
Multiple races	895	74	8.3	238	26.6	276	30.8	181	20.2	126	14.1
Transmission category^d											
Male-to-male sexual contact	22,752	1,600	7.0	5,833	25.6	7,170	31.5	4,309	18.9	3,840	16.9
Injection drug use											
Male	1,078	49	4.5	249	23.1	302	28.0	287	26.7	190	17.7
Female	858	55	6.4	250	29.1	212	24.7	175	20.4	166	19.4
Male-to-male sexual contact and injection drug use	1,110	82	7.4	336	30.2	330	29.7	171	15.4	191	17.2
Heterosexual contact ^e											
Male	2,533	79	3.1	452	17.8	695	27.4	873	34.5	435	17.2
Female	5,552	254	4.6	1,540	27.7	1,581	28.5	1,248	22.5	929	16.7
Total^f	33,955	2,122	6.2	8,678	25.6	10,309	30.4	7,081	20.9	5,765	17.0

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic illness (i.e., AIDS-defining condition).

Note. Stage of disease at 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 diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

^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 Hispanics/Latinos 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.

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

^f Includes persons whose infection was attributed to hemophilia, blood transfusion, or 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 2b. Stage of disease at HIV diagnosis during 2017, among persons aged ≥13 years, by area of residence—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.	%
		Alabama	653	32	4.9	164	25.1	175	26.8	142	21.7
Alaska	29	3	10.3	10	34.5	7	24.1	7	24.1	2	6.9
California	4,767	392	8.2	1,179	24.7	1,392	29.2	908	19.0	896	18.8
Colorado	441	24	5.4	125	28.3	159	36.1	80	18.1	53	12.0
Connecticut	275	15	5.5	72	26.2	83	30.2	65	23.6	40	14.5
Delaware	125	6	4.8	33	26.4	35	28.0	32	25.6	19	15.2
District of Columbia	305	14	4.6	83	27.2	108	35.4	40	13.1	60	19.7
Florida	4,590	121	2.6	1,359	29.6	1,432	31.2	976	21.3	702	15.3
Georgia	2,584	83	3.2	637	24.7	795	30.8	567	21.9	502	19.4
Hawaii	78	11	14.1	25	32.1	21	26.9	13	16.7	8	10.3
Illinois	1,354	55	4.1	333	24.6	413	30.5	274	20.2	279	20.6
Indiana	516	10	1.9	122	23.6	143	27.7	124	24.0	117	22.7
Iowa	126	29	23.0	20	15.9	45	35.7	27	21.4	5	4.0
Louisiana	1,008	76	7.5	269	26.7	302	30.0	229	22.7	132	13.1
Maine	31	2	6.5	11	35.5	4	12.9	12	38.7	2	6.5
Maryland	1,020	79	7.7	230	22.5	341	33.4	249	24.4	121	11.9
Massachusetts	597	31	5.2	191	32.0	189	31.7	121	20.3	65	10.9
Michigan	761	62	8.1	205	26.9	267	35.1	149	19.6	78	10.2
Minnesota	276	22	8.0	65	23.6	85	30.8	76	27.5	28	10.1
Mississippi	426	20	4.7	66	15.5	90	21.1	115	27.0	135	31.7
Missouri	504	15	3.0	130	25.8	127	25.2	84	16.7	148	29.4
Montana	31	1	3.2	12	38.7	9	29.0	6	19.4	3	9.7
Nebraska	88	6	6.8	24	27.3	32	36.4	13	14.8	13	14.8
New Hampshire	35	3	8.6	10	28.6	12	34.3	5	14.3	5	14.3
New Mexico	135	6	4.4	39	28.9	46	34.1	29	21.5	15	11.1
New York	2,744	285	10.4	692	25.2	912	33.2	580	21.1	275	10.0
North Carolina	1,301	131	10.1	286	22.0	311	23.9	265	20.4	308	23.7
North Dakota	37	0	0.0	11	29.7	14	37.8	10	27.0	2	5.4
Ohio	1,006	19	1.9	288	28.6	316	31.4	212	21.1	171	17.0
Oklahoma	299	26	8.7	79	26.4	86	28.8	63	21.1	45	15.1
Oregon	202	17	8.4	53	26.2	59	29.2	49	24.3	24	11.9
Rhode Island	83	8	9.6	23	27.7	25	30.1	24	28.9	3	3.6
South Carolina	707	39	5.5	158	22.3	247	34.9	182	25.7	81	11.5
South Dakota	38	0	0.0	6	15.8	16	42.1	6	15.8	10	26.3
Tennessee	713	9	1.3	188	26.4	189	26.5	121	17.0	206	28.9
Texas	4,309	324	7.5	1,038	24.1	1,295	30.1	860	20.0	792	18.4
Utah	115	5	4.3	30	26.1	40	34.8	22	19.1	18	15.7
Virginia	864	58	6.7	207	24.0	236	27.3	171	19.8	192	22.2
Washington	438	44	10.0	134	30.6	133	30.4	97	22.1	30	6.8
West Virginia	76	2	2.6	17	22.4	24	31.6	22	28.9	11	14.5
Wisconsin	258	37	14.3	52	20.2	91	35.3	50	19.4	28	10.9
Wyoming	10	0	0.0	2	20.0	3	30.0	4	40.0	1	10.0
Total	33,955	2,122	6.2	8,678	25.6	10,309	30.4	7,081	20.9	5,765	17.0

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic illness (i.e., AIDS-defining condition).

Note. Stage of disease at 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 diagnosis.

^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 2c. Stage of disease at 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											
Sex											
Male	121	11	9.1	37	30.6	34	28.1	22	18.2	17	14.0
Female	37	1	2.7	11	29.7	10	27.0	8	21.6	7	18.9
Age at diagnosis (yr)											
13–24	20	2	10.0	10	50.0	5	25.0	1	5.0	2	10.0
25–34	65	6	9.2	24	36.9	21	32.3	7	10.8	7	10.8
35–44	35	2	5.7	7	20.0	11	31.4	7	20.0	8	22.9
45–54	27	2	7.4	6	22.2	5	18.5	12	44.4	2	7.4
≥55	11	0	0.0	1	9.1	2	18.2	3	27.3	5	45.5
Transmission category^c											
Male-to-male sexual contact	87	7	8.0	32	36.4	26	29.7	15	17.4	7	8.5
Injection drug use											
Male	8	2	26.0	1	13.0	1	15.6	2	27.3	1	18.2
Female	13	0	0.0	5	34.3	3	20.9	2	17.2	4	27.6
Male-to-male sexual contact and injection drug use	19	1	5.4	4	22.6	4	23.1	4	22.6	5	26.3
Heterosexual contact ^d											
Male	7	1	13.9	0	0.0	2	33.3	1	6.9	3	45.8
Female	24	1	4.2	6	27.1	7	30.5	6	24.2	3	14.0
Total^e	158	12	7.6	48	30.4	44	27.8	30	19.0	24	15.2
Asian											
Sex											
Male	756	38	5.0	149	19.7	280	37.0	185	24.5	104	13.8
Female	99	3	3.0	19	19.2	30	30.3	27	27.3	20	20.2
Age at diagnosis (yr)											
13–24	179	11	6.1	37	20.7	83	46.4	18	10.1	30	16.8
25–34	275	15	5.5	54	19.6	108	39.3	61	22.2	37	13.5
35–44	202	8	4.0	46	22.8	67	33.2	48	23.8	33	16.3
45–54	134	7	5.2	24	17.9	30	22.4	58	43.3	15	11.2
≥55	65	0	0.0	7	10.8	22	33.8	27	41.5	9	13.8
Transmission category^c											
Male-to-male sexual contact	689	37	5.3	136	19.8	256	37.1	164	23.8	96	14.0
Injection drug use											
Male	12	0	1.6	3	20.2	5	41.1	3	22.6	2	14.5
Female	4	0	5.7	1	17.1	1	34.3	1	20.0	1	22.9
Male-to-male sexual contact and injection drug use	16	1	6.2	4	27.3	7	44.1	3	16.1	1	6.2
Heterosexual contact ^d											
Male	38	0	0.3	6	15.8	11	30.3	16	41.6	5	12.1
Female	95	3	3.0	18	19.5	28	30.0	26	27.6	19	20.0
Total^e	855	41	4.8	168	19.6	310	36.3	212	24.8	124	14.5

Table 2c. Stage of disease at 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											
Sex											
Male	10,998	694	6.3	2,465	22.4	3,471	31.6	2,124	19.3	2,244	20.4
Female	3,911	161	4.1	1,028	26.3	1,145	29.3	878	22.4	699	17.9
Age at diagnosis (yr)											
13–24	3,906	343	8.8	983	25.2	1,398	35.8	388	9.9	794	20.3
25–34	5,179	320	6.2	1,306	25.2	1,639	31.6	850	16.4	1,064	20.5
35–44	2,473	93	3.8	529	21.4	726	29.4	657	26.6	468	18.9
45–54	1,835	52	2.8	368	20.1	463	25.2	611	33.3	341	18.6
≥55	1,516	47	3.1	307	20.3	390	25.7	496	32.7	276	18.2
Transmission category^c											
Male-to-male sexual contact	8,810	623	7.1	2,067	23.5	2,856	32.4	1,466	16.6	1,797	20.4
Injection drug use											
Male	338	15	4.5	56	16.5	96	28.6	92	27.3	78	23.1
Female	293	19	6.5	65	22.2	82	28.1	69	23.4	58	19.8
Male-to-male sexual contact and injection drug use	230	11	4.9	52	22.5	64	28.0	43	18.7	60	26.0
Heterosexual contact ^d											
Male	1,604	43	2.7	288	18.0	451	28.1	518	32.3	304	18.9
Female	3,590	142	3.9	951	26.5	1,054	29.4	805	22.4	638	17.8
Total^e	14,909	855	5.7	3,493	23.4	4,616	31.0	3,002	20.1	2,943	19.7
Hispanic/Latino^f											
Sex											
Male	7,537	487	6.5	1,884	25.0	2,389	31.7	1,612	21.4	1,165	15.5
Female	980	56	5.7	282	28.8	287	29.3	213	21.7	142	14.5
Age at diagnosis (yr)											
13–24	1,710	158	9.2	511	29.9	589	34.4	147	8.6	305	17.8
25–34	3,254	217	6.7	884	27.2	1,077	33.1	599	18.4	477	14.7
35–44	1,847	89	4.8	445	24.1	552	29.9	476	25.8	285	15.4
45–54	1,149	52	4.5	228	19.8	308	26.8	398	34.6	163	14.2
≥55	557	27	4.8	98	17.6	150	26.9	205	36.8	77	13.8
Transmission category^c											
Male-to-male sexual contact	6,542	439	6.7	1,691	25.8	2,100	32.1	1,311	20.0	1,001	15.3
Injection drug use											
Male	267	11	4.0	54	20.1	79	29.4	80	29.8	45	16.6
Female	113	7	5.8	38	33.9	26	22.7	21	18.4	22	19.2
Male-to-male sexual contact and injection drug use	269	16	5.8	72	26.7	86	31.9	44	16.3	52	19.2
Heterosexual contact ^d											
Male	452	21	4.6	67	14.9	122	27.0	175	38.6	67	14.9
Female	863	49	5.7	241	27.9	260	30.2	192	22.3	120	13.9
Total^e	8,517	543	6.4	2,166	25.4	2,676	31.4	1,825	21.4	1,307	15.3

Table 2c. Stage of disease at 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											
Sex											
Male	33	4	12.1	7	21.2	11	33.3	8	24.2	3	9.1
Female	10	1	10.0	0	0.0	1	10.0	5	50.0	3	30.0
Age at diagnosis (yr)											
13–24	8	1	12.5	4	50.0	3	37.5	0	0.0	0	0.0
25–34	19	3	15.8	2	10.5	6	31.6	5	26.3	3	15.8
35–44	10	1	10.0	1	10.0	2	20.0	4	40.0	2	20.0
45–54	5	0	0.0	0	0.0	1	20.0	3	60.0	1	20.0
≥55	1	0	0.0	0	0.0	0	0.0	1	100	0	0.0
Transmission category^c											
Male-to-male sexual contact	28	3	10.5	7	25.4	10	35.5	6	21.7	2	6.9
Injection drug use											
Male	1	0	0.0	0	0.0	0	9.1	0	0.0	1	90.9
Female											
Male-to-male sexual contact and injection drug use	2	1	52.4	0	0.0	0	0.0	1	47.6	0	0.0
Heterosexual contact ^d											
Male	2	0	0.0	0	0.0	1	50.0	1	45.5	0	4.5
Female	10	1	10.0	0	0.0	1	10.0	5	50.0	3	30.0
Total^e	43	5	11.6	7	16.3	12	27.9	13	30.2	6	14.0
White											
Sex											
Male	7,322	513	7.0	2,143	29.3	2,081	28.4	1,560	21.3	1,025	14.0
Female	1,256	79	6.3	415	33.0	294	23.4	258	20.5	210	16.7
Age at diagnosis (yr)											
13–24	1,286	127	9.9	441	34.3	414	32.2	101	7.9	203	15.8
25–34	2,743	230	8.4	921	33.6	810	29.5	356	13.0	426	15.5
35–44	1,735	93	5.4	537	31.0	461	26.6	419	24.1	225	13.0
45–54	1,659	72	4.3	407	24.5	419	25.3	537	32.4	224	13.5
≥55	1,155	70	6.1	252	21.8	271	23.5	405	35.1	157	13.6
Transmission category^c											
Male-to-male sexual contact	5,971	436	7.3	1,744	29.2	1,716	28.7	1,237	20.7	839	14.1
Injection drug use											
Male	426	19	4.5	130	30.5	114	26.7	101	23.8	62	14.6
Female	407	27	6.6	134	32.8	94	23.0	75	18.4	78	19.1
Male-to-male sexual contact and injection drug use	534	48	9.0	189	35.4	156	29.2	71	13.2	70	13.1
Heterosexual contact ^d											
Male	383	10	2.6	79	20.7	94	24.5	147	38.4	53	13.7
Female	846	52	6.1	281	33.2	200	23.6	182	21.6	131	15.5
Total^e	8,578	592	6.9	2,558	29.8	2,375	27.7	1,818	21.2	1,235	14.4

Table 2c. Stage of disease at 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.	%
Multiple races											
Sex											
Male	738	65	8.8	188	25.5	237	32.1	141	19.1	107	14.5
Female	157	9	5.7	50	31.8	39	24.8	40	25.5	19	12.1
Age at diagnosis (yr)											
13–24	233	23	9.9	76	32.6	78	33.5	16	6.9	40	17.2
25–34	317	28	8.8	96	30.3	100	31.5	46	14.5	47	14.8
35–44	161	8	5.0	36	22.4	50	31.1	51	31.7	16	9.9
45–54	127	10	7.9	21	16.5	37	29.1	46	36.2	13	10.2
≥55	57	5	8.8	9	15.8	11	19.3	22	38.6	10	17.5
Transmission category^c											
Male-to-male sexual contact	624	56	8.9	156	25.0	205	32.9	110	17.6	97	15.6
Injection drug use											
Male	25	2	5.9	6	24.1	7	26.1	9	36.4	2	7.5
Female	29	2	7.7	8	26.5	7	22.6	8	28.6	4	14.6
Male-to-male sexual contact and injection drug use	41	4	10.3	14	35.2	13	30.8	6	14.2	4	9.5
Heterosexual contact ^d											
Male	47	4	7.4	12	24.5	13	26.6	16	34.0	4	7.4
Female	126	7	5.3	42	33.5	30	24.2	32	25.3	15	11.6
Total^e	895	74	8.3	238	26.6	276	30.8	181	20.2	126	14.1

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic illness (i.e., AIDS-defining condition).

Note. Stage of disease at 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 diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

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

^b Includes persons with no CD4 information.

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

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

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

^f Hispanics/Latinos can be of any race.

Table 2d. Stage of disease at 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	13.8	7	48.3	5	33.1	0	0.0	1	4.8
25–34	39	3	7.6	18	45.3	11	27.0	5	12.7	3	7.4
35–44	19	1	5.3	4	21.4	7	36.4	6	30.5	1	6.4
45–54	12	1	8.1	3	24.4	4	30.9	4	28.5	1	8.1
≥55	3	0	0.0	0	0.0	0	0.0	1	38.5	2	61.5
Asian											
13–24	168	10	5.9	36	21.4	77	46.0	17	10.1	28	16.6
25–34	240	13	5.4	45	18.6	98	40.7	52	21.7	33	13.6
35–44	149	7	4.7	34	22.9	51	34.3	36	24.0	21	14.1
45–54	98	7	6.9	19	18.9	21	21.0	42	42.5	11	10.7
≥55	33	0	0.0	3	7.6	9	27.4	17	52.3	4	12.8
Black/African American											
13–24	3,117	300	9.6	743	23.8	1,148	36.8	300	9.6	625	20.1
25–34	3,575	244	6.8	896	25.1	1,127	31.5	559	15.6	749	20.9
35–44	1,119	41	3.7	244	21.8	331	29.6	283	25.3	220	19.7
45–54	636	23	3.6	124	19.5	151	23.7	208	32.6	131	20.6
≥55	363	15	4.1	60	16.6	100	27.4	116	32.1	72	19.8
Hispanic/Latino^c											
13–24	1,454	135	9.3	433	29.8	509	35.0	117	8.0	260	17.9
25–34	2,683	187	7.0	719	26.8	901	33.6	481	17.9	395	14.7
35–44	1,348	68	5.0	338	25.0	410	30.4	337	25.0	197	14.6
45–54	775	38	5.0	151	19.4	208	26.9	263	33.9	115	14.8
≥55	283	11	3.7	51	17.9	73	25.7	114	40.2	35	12.4
Native Hawaiian/Other Pacific Islander											
13–24	8	1	11.4	4	50.6	3	38.0	0	0.0	0	0.0
25–34	13	2	15.5	2	15.5	5	38.8	2	15.5	2	14.7
35–44	5	0	0.0	1	20.8	2	37.5	2	41.7	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	995	97	9.7	312	31.4	345	34.7	85	8.5	156	15.7
25–34	1,921	161	8.4	637	33.1	579	30.1	255	13.3	289	15.0
35–44	1,132	68	6.0	351	31.0	302	26.6	272	24.0	141	12.4
45–54	1,165	55	4.7	281	24.1	308	26.4	370	31.7	151	12.9
≥55	758	55	7.3	164	21.6	183	24.1	255	33.6	102	13.4
Multiple races											
13–24	187	20	10.6	50	26.6	69	37.0	14	7.4	34	18.3
25–34	246	23	9.1	70	28.3	76	31.0	39	15.8	39	15.8
35–44	98	6	6.2	22	23.0	32	33.2	25	25.6	12	12.0
45–54	70	6	7.9	13	18.0	23	32.1	22	31.3	8	10.7
≥55	24	2	8.3	2	6.3	5	20.8	10	42.9	5	21.7
Total	22,752	1,600	7.0	5,833	25.6	7,170	31.5	4,309	18.9	3,840	16.9

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic illness (i.e., AIDS-defining condition).

Note. Stage of disease at 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 diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

^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 Hispanics/Latinos can be of any race.

Table 3a. Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged ≥ 13 years, by selected characteristics—41 states and the District of Columbia

	Total		≤ 1 month				≤ 3 months			
			≥ 1 CD4 or VL tests		No CD4 or VL test		≥ 1 CD4 or VL tests		No CD4 or VL test	
	No.	% ^a	No.	%	No.	%	No.	%	No.	%
Sex										
Male	27,505	81.0	21,505	78.2	6,000	21.8	23,823	86.6	3,682	13.4
Female	6,450	19.0	5,097	79.0	1,353	21.0	5,641	87.5	809	12.5
Age at diagnosis (yr)										
13–24	7,342	21.6	5,510	75.0	1,832	25.0	6,248	85.1	1,094	14.9
25–34	11,852	34.9	9,182	77.5	2,670	22.5	10,224	86.3	1,628	13.7
35–44	6,463	19.0	5,149	79.7	1,314	20.3	5,632	87.1	831	12.9
45–54	4,936	14.5	4,017	81.4	919	18.6	4,359	88.3	577	11.7
≥ 55	3,362	9.9	2,744	81.6	618	18.4	3,001	89.3	361	10.7
Race/ethnicity										
American Indian/Alaska Native	158	0.5	134	84.8	24	15.2	142	89.9	16	10.1
Asian	855	2.5	690	80.7	165	19.3	750	87.7	105	12.3
Black/African American	14,909	43.9	11,295	75.8	3,614	24.2	12,622	84.7	2,287	15.3
Hispanic/Latino ^b	8,517	25.1	6,750	79.3	1,767	20.7	7,429	87.2	1,088	12.8
Native Hawaiian/Other Pacific Islander	43	0.1	36	83.7	7	16.3	41	95.3	2	4.7
White	8,578	25.3	6,978	81.3	1,600	18.7	7,683	89.6	895	10.4
Multiple races	895	2.6	719	80.3	176	19.7	797	89.1	98	10.9
Transmission category^c										
Male-to-male sexual contact	22,752	67.0	17,862	78.5	4,890	21.5	19,753	86.8	2,999	13.2
Injection drug use										
Male	1,078	3.2	823	76.4	255	23.6	915	84.9	163	15.1
Female	858	2.5	661	77.1	197	22.9	731	85.1	128	14.9
Male-to-male sexual contact and injection drug use	1,110	3.3	836	75.3	274	24.7	945	85.1	165	14.9
Heterosexual contact ^d										
Male	2,533	7.5	1,959	77.3	575	22.7	2,183	86.2	350	13.8
Female	5,552	16.4	4,402	79.3	1,150	20.7	4,875	87.8	677	12.2
Total^e	33,955	100	26,602	78.3	7,353	21.7	29,464	86.8	4,491	13.2

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

Note. Data are based on residence at diagnosis. Linkage to HIV medical care was measured by documentation of ≥ 1 CD4 or VL tests ≤ 1 month or ≤ 3 months after HIV diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

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

^b Hispanics/Latinos can be of any race.

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

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

^e Includes persons whose infection was attributed to hemophilia, blood transfusion, or 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 3b. Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged ≥13 years, by area of residence—41 states and the District of Columbia

	Total		≤1 month				≤3 months			
			≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test	
	No.	% ^a	No.	%	No.	%	No.	%	No.	%
Alabama	653	1.9	502	76.9	151	23.1	555	85.0	98	15.0
Alaska	29	0.1	28	96.6	1	3.4	28	96.6	1	3.4
California	4,767	14.0	3,588	75.3	1,179	24.7	3,975	83.4	792	16.6
Colorado	441	1.3	370	83.9	71	16.1	408	92.5	33	7.5
Connecticut	275	0.8	232	84.4	43	15.6	249	90.5	26	9.5
Delaware	125	0.4	107	85.6	18	14.4	111	88.8	14	11.2
District of Columbia	305	0.9	245	80.3	60	19.7	257	84.3	48	15.7
Florida	4,590	13.5	3,580	78.0	1,010	22.0	3,995	87.0	595	13.0
Georgia	2,584	7.6	2,007	77.7	577	22.3	2,186	84.6	398	15.4
Hawaii	78	0.2	67	85.9	11	14.1	71	91.0	7	9.0
Illinois	1,354	4.0	1,108	81.8	246	18.2	1,184	87.4	170	12.6
Indiana	516	1.5	352	68.2	164	31.8	423	82.0	93	18.0
Iowa	126	0.4	116	92.1	10	7.9	122	96.8	4	3.2
Louisiana	1,008	3.0	801	79.5	207	20.5	891	88.4	117	11.6
Maine	31	0.1	29	93.5	2	6.5	31	100	0	0.0
Maryland	1,020	3.0	879	86.2	141	13.8	938	92.0	82	8.0
Massachusetts	597	1.8	526	88.1	71	11.9	551	92.3	46	7.7
Michigan	761	2.2	634	83.3	127	16.7	698	91.7	63	8.3
Minnesota	276	0.8	243	88.0	33	12.0	259	93.8	17	6.2
Mississippi	426	1.3	297	69.7	129	30.3	362	85.0	64	15.0
Missouri	504	1.5	365	72.4	139	27.6	441	87.5	63	12.5
Montana	31	0.1	27	87.1	4	12.9	28	90.3	3	9.7
Nebraska	88	0.3	69	78.4	19	21.6	78	88.6	10	11.4
New Hampshire	35	0.1	28	80.0	7	20.0	32	91.4	3	8.6
New Mexico	135	0.4	116	85.9	19	14.1	125	92.6	10	7.4
New York	2,744	8.1	2,330	84.9	414	15.1	2,495	90.9	249	9.1
North Carolina	1,301	3.8	982	75.5	319	24.5	1,115	85.7	186	14.3
North Dakota	37	0.1	33	89.2	4	10.8	35	94.6	2	5.4
Ohio	1,006	3.0	836	83.1	170	16.9	895	89.0	111	11.0
Oklahoma	299	0.9	203	67.9	96	32.1	259	86.6	40	13.4
Oregon	202	0.6	161	79.7	41	20.3	178	88.1	24	11.9
Rhode Island	83	0.2	77	92.8	6	7.2	82	98.8	1	1.2
South Carolina	707	2.1	608	86.0	99	14.0	650	91.9	57	8.1
South Dakota	38	0.1	32	84.2	6	15.8	36	94.7	2	5.3
Tennessee	713	2.1	429	60.2	284	39.8	551	77.3	162	22.7
Texas	4,309	12.7	3,144	73.0	1,165	27.0	3,583	83.2	726	16.8
Utah	115	0.3	105	91.3	10	8.7	109	94.8	6	5.2
Virginia	864	2.5	661	76.5	203	23.5	750	86.8	114	13.2
Washington	438	1.3	400	91.3	38	8.7	418	95.4	20	4.6
West Virginia	76	0.2	59	77.6	17	22.4	67	88.2	9	11.8
Wisconsin	258	0.8	217	84.1	41	15.9	234	90.7	24	9.3
Wyoming	10	0.0	9	90.0	1	10.0	9	90.0	1	10.0
Total	33,955	100	26,602	78.3	7,353	21.7	29,464	86.8	4,491	13.2

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

Note. Data are based on residence at 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 Represents percentage of the total number for the column.

Table 3c. Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged ≥ 13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia

	Total		≤ 1 month				≤ 3 months			
			≥ 1 CD4 or VL tests		No CD4 or VL test		≥ 1 CD4 or VL tests		No CD4 or VL test	
	No.	% ^a	No.	%	No.	%	No.	%	No.	%
American Indian/Alaska Native										
Sex										
Male	121	76.6	101	83.5	20	16.5	109	90.1	12	9.9
Female	37	23.4	33	89.2	4	10.8	33	89.2	4	10.8
Age at diagnosis (yr)										
13–24	20	12.7	18	90.0	2	10.0	18	90.0	2	10.0
25–34	65	41.1	56	86.2	9	13.8	61	93.8	4	6.2
35–44	35	22.2	28	80.0	7	20.0	29	82.9	6	17.1
45–54	27	17.1	25	92.6	2	7.4	27	100	0	0.0
≥ 55	11	7.0	7	63.6	4	36.4	7	63.6	4	36.4
Transmission category^b										
Male-to-male sexual contact	87	55.3	77	88.3	10	11.7	82	93.8	5	6.2
Injection drug use										
Male	8	4.9	6	81.8	1	18.2	6	81.8	1	18.2
Female	13	8.5	12	90.3	1	9.7	12	90.3	1	9.7
Male-to-male sexual contact and injection drug use	19	11.8	14	72.6	5	27.4	17	89.8	2	10.2
Heterosexual contact ^c										
Male	7	4.6	4	54.2	3	45.8	4	54.2	3	45.8
Female	24	14.9	21	88.6	3	11.4	21	88.6	3	11.4
Total^d	158	100	134	84.8	24	15.2	142	89.9	16	10.1
Asian										
Sex										
Male	756	88.4	615	81.3	141	18.7	670	88.6	86	11.4
Female	99	11.6	75	75.8	24	24.2	80	80.8	19	19.2
Age at diagnosis (yr)										
13–24	179	20.9	141	78.8	38	21.2	156	87.2	23	12.8
25–34	275	32.2	232	84.4	43	15.6	243	88.4	32	11.6
35–44	202	23.6	155	76.7	47	23.3	176	87.1	26	12.9
45–54	134	15.7	110	82.1	24	17.9	119	88.8	15	11.2
≥ 55	65	7.6	52	80.0	13	20.0	56	86.2	9	13.8
Transmission category^b										
Male-to-male sexual contact	689	80.5	561	81.5	127	18.5	608	88.4	80	11.6
Injection drug use										
Male	12	1.5	9	69.4	4	30.6	11	87.1	2	12.9
Female	4	0.4	3	74.3	1	25.7	3	77.1	1	22.9
Male-to-male sexual contact and injection drug use	16	1.9	14	88.2	2	11.8	15	95.7	1	4.3
Heterosexual contact ^c										
Male	38	4.4	30	79.2	8	20.8	35	91.3	3	8.7
Female	95	11.1	72	75.9	23	24.1	77	81.1	18	18.9
Total^d	855	100	690	80.7	165	19.3	750	87.7	105	12.3

Table 3c. Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)

	Total		≤1 month				≤3 months			
			≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test	
	No.	% ^a	No.	%	No.	%	No.	%	No.	%
Black/African American										
Sex										
Male	10,998	73.8	8,213	74.7	2,785	25.3	9,212	83.8	1,786	16.2
Female	3,911	26.2	3,082	78.8	829	21.2	3,410	87.2	501	12.8
Age at diagnosis (yr)										
13–24	3,906	26.2	2,880	73.7	1,026	26.3	3,270	83.7	636	16.3
25–34	5,179	34.7	3,880	74.9	1,299	25.1	4,348	84.0	831	16.0
35–44	2,473	16.6	1,902	76.9	571	23.1	2,100	84.9	373	15.1
45–54	1,835	12.3	1,429	77.9	406	22.1	1,572	85.7	263	14.3
≥55	1,516	10.2	1,204	79.4	312	20.6	1,332	87.9	184	12.1
Transmission category^b										
Male-to-male sexual contact	8,810	59.1	6,574	74.6	2,236	25.4	7,386	83.8	1,424	16.2
Injection drug use										
Male	338	2.3	247	73.3	90	26.7	272	80.4	66	19.6
Female	293	2.0	230	78.5	63	21.5	250	85.5	42	14.5
Male-to-male sexual contact and injection drug use	230	1.5	161	70.1	69	29.9	179	77.9	51	22.1
Heterosexual contact ^c										
Male	1,604	10.8	1,218	75.9	387	24.1	1,362	84.9	242	15.1
Female	3,590	24.1	2,828	78.8	762	21.2	3,134	87.3	456	12.7
Total^d	14,909	100	11,295	75.8	3,614	24.2	12,622	84.7	2,287	15.3
Hispanic/Latino^e										
Sex										
Male	7,537	88.5	5,965	79.1	1,572	20.9	6,561	87.1	976	12.9
Female	980	11.5	785	80.1	195	19.9	868	88.6	112	11.4
Age at diagnosis (yr)										
13–24	1,710	20.1	1,271	74.3	439	25.7	1,449	84.7	261	15.3
25–34	3,254	38.2	2,582	79.3	672	20.7	2,854	87.7	400	12.3
35–44	1,847	21.7	1,496	81.0	351	19.0	1,607	87.0	240	13.0
45–54	1,149	13.5	943	82.1	206	17.9	1,022	88.9	127	11.1
≥55	557	6.5	458	82.2	99	17.8	497	89.2	60	10.8
Transmission category^b										
Male-to-male sexual contact	6,542	76.8	5,189	79.3	1,353	20.7	5,708	87.2	834	12.8
Injection drug use										
Male	267	3.1	214	79.9	54	20.1	229	85.8	38	14.2
Female	113	1.3	84	74.8	29	25.2	96	84.7	17	15.3
Male-to-male sexual contact and injection drug use	269	3.2	200	74.3	69	25.7	224	83.5	44	16.5
Heterosexual contact ^c										
Male	452	5.3	357	78.9	95	21.1	393	86.9	59	13.1
Female	863	10.1	696	80.7	167	19.3	768	89.0	95	11.0
Total^d	8,517	100	6,750	79.3	1,767	20.7	7,429	87.2	1,088	12.8

Table 3c. Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)

	Total		≤1 month				≤3 months			
			≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test	
	No.	% ^a	No.	%	No.	%	No.	%	No.	%
Native Hawaiian/Other Pacific Islander										
Sex										
Male	33	76.7	28	84.8	5	15.2	31	93.9	2	6.1
Female	10	23.3	8	80.0	2	20.0	10	100	0	0.0
Age at diagnosis (yr)										
13–24	8	18.6	7	87.5	1	12.5	8	100	0	0.0
25–34	19	44.2	16	84.2	3	15.8	18	94.7	1	5.3
35–44	10	23.3	9	90.0	1	10.0	10	100	0	0.0
45–54	5	11.6	3	60.0	2	40.0	4	80.0	1	20.0
≥55	1	2.3	1	100	0	0.0	1	100	0	0.0
Transmission category^b										
Male-to-male sexual contact	28	64.2	24	85.9	4	14.1	27	96.4	1	3.6
Injection drug use										
Male	1	2.6	0	9.1	1	90.9	0	9.1	1	90.9
Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Male-to-male sexual contact and injection drug use	2	4.9	2	95.2	0	4.8	2	100	0	0.0
Heterosexual contact ^c										
Male	2	5.1	2	100	0	0.0	2	100	0	0.0
Female	10	23.3	8	80.0	2	20.0	10	100	0	0.0
Total^d	43	100	36	83.7	7	16.3	41	95.3	2	4.7
White										
Sex										
Male	7,322	85.4	5,992	81.8	1,330	18.2	6,588	90.0	734	10.0
Female	1,256	14.6	986	78.5	270	21.5	1,095	87.2	161	12.8
Age at diagnosis (yr)										
13–24	1,286	15.0	1,007	78.3	279	21.7	1,144	89.0	142	11.0
25–34	2,743	32.0	2,166	79.0	577	21.0	2,420	88.2	323	11.8
35–44	1,735	20.2	1,427	82.2	308	17.8	1,564	90.1	171	9.9
45–54	1,659	19.3	1,400	84.4	259	15.6	1,497	90.2	162	9.8
≥55	1,155	13.5	978	84.7	177	15.3	1,058	91.6	97	8.4
Transmission category^b										
Male-to-male sexual contact	5,971	69.6	4,936	82.7	1,035	17.3	5,394	90.3	578	9.7
Injection drug use										
Male	426	5.0	327	76.7	99	23.3	375	87.9	52	12.1
Female	407	4.7	312	76.7	95	23.3	344	84.5	63	15.5
Male-to-male sexual contact and injection drug use	534	6.2	412	77.1	122	22.9	471	88.1	64	11.9
Heterosexual contact ^c										
Male	383	4.5	311	81.2	72	18.8	343	89.5	40	10.5
Female	846	9.9	672	79.4	174	20.6	749	88.5	97	11.5
Total^d	8,578	100	6,978	81.3	1,600	18.7	7,683	89.6	895	10.4

Table 3c. Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)

	Total		≤1 month				≤3 months			
			≥1 CD4 or VL tests		No CD4 or VL test		≥1 CD4 or VL tests		No CD4 or VL test	
	No.	% ^a	No.	%	No.	%	No.	%	No.	%
Multiple races										
Sex										
Male	738	82.5	591	80.1	147	19.9	652	88.3	86	11.7
Female	157	17.5	128	81.5	29	18.5	145	92.4	12	7.6
Age at diagnosis (yr)										
13–24	233	26.0	186	79.8	47	20.2	203	87.1	30	12.9
25–34	317	35.4	250	78.9	67	21.1	280	88.3	37	11.7
35–44	161	18.0	132	82.0	29	18.0	146	90.7	15	9.3
45–54	127	14.2	107	84.3	20	15.7	118	92.9	9	7.1
≥55	57	6.4	44	77.2	13	22.8	50	87.7	7	12.3
Transmission category^b										
Male-to-male sexual contact	624	69.8	500	80.0	125	20.0	548	87.8	76	12.2
Injection drug use										
Male	25	2.8	20	79.1	5	20.9	22	87.7	3	12.3
Female	29	3.2	20	71.1	8	28.9	26	89.5	3	10.5
Male-to-male sexual contact and injection drug use	41	4.6	34	82.6	7	17.4	37	91.2	4	8.8
Heterosexual contact ^c										
Male	47	5.3	38	79.8	10	20.2	44	93.4	3	6.6
Female	126	14.0	105	83.7	21	16.3	117	93.0	9	7.0
Total^d	895	100	719	80.3	176	19.7	797	89.1	98	10.9

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

Note. Data are based on residence at diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month or ≤3 months after HIV diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

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

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

^c Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

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

^e Hispanics/Latinos can be of any race.

Table 3d. Linkage to HIV medical care after 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		≤ 1 month				≤ 3 months			
			≥ 1 CD4 or VL tests		No CD4 or VL test		≥ 1 CD4 or VL tests		No CD4 or VL test	
	No.	% ^a	No.	%	No.	%	No.	%	No.	%
American Indian/Alaska Native										
13–24	15	16.6	14	95.2	1	4.8	14	95.2	1	4.8
25–34	39	45.0	35	88.0	5	12.0	37	95.2	2	4.8
35–44	19	21.4	18	93.6	1	6.4	18	93.6	1	6.4
45–54	12	14.1	10	83.7	2	16.3	12	100	0	0.0
≥ 55	3	3.0	1	38.5	2	61.5	1	38.5	2	61.5
Asian										
13–24	168	24.4	132	78.6	36	21.4	147	87.5	21	12.5
25–34	240	34.8	202	84.3	38	15.7	211	87.9	29	12.1
35–44	149	21.7	119	79.5	31	20.5	134	89.7	15	10.3
45–54	98	14.3	81	82.5	17	17.5	88	89.3	11	10.7
≥ 55	33	4.8	27	82.7	6	17.3	29	87.2	4	12.8
Black/African American										
13–24	3,117	35.4	2,288	73.4	829	26.6	2,606	83.6	510	16.4
25–34	3,575	40.6	2,651	74.1	924	25.9	2,986	83.5	589	16.5
35–44	1,119	12.7	858	76.7	261	23.3	937	83.7	182	16.3
45–54	636	7.2	494	77.6	143	22.4	541	85.0	95	15.0
≥ 55	363	4.1	284	78.3	79	21.7	316	87.0	47	13.0
Hispanic/Latino^b										
13–24	1,454	22.2	1,075	73.9	379	26.1	1,233	84.8	221	15.2
25–34	2,683	41.0	2,140	79.8	542	20.2	2,354	87.7	329	12.3
35–44	1,348	20.6	1,105	82.0	243	18.0	1,186	88.0	162	12.0
45–54	775	11.8	632	81.5	144	18.5	679	87.7	96	12.3
≥ 55	283	4.3	237	83.8	46	16.2	255	90.4	27	9.6
Native Hawaiian/Other Pacific Islander										
13–24	8	28.6	7	88.6	1	11.4	8	100	0	0.0
25–34	13	46.7	10	76.7	3	23.3	12	92.2	1	7.8
35–44	5	17.4	5	100	0	0.0	5	100	0	0.0
45–54	2	7.2	2	100	0	0.0	2	100	0	0.0
≥ 55	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
White										
13–24	995	16.7	784	78.8	211	21.2	888	89.2	107	10.8
25–34	1,921	32.2	1,548	80.6	372	19.4	1,713	89.2	207	10.8
35–44	1,132	19.0	957	84.5	176	15.5	1,037	91.5	96	8.5
45–54	1,165	19.5	1,001	85.9	164	14.1	1,058	90.8	107	9.2
≥ 55	758	12.7	646	85.1	113	14.9	698	92.0	61	8.0
Multiple races										
13–24	187	29.9	149	79.7	38	20.3	162	86.5	25	13.5
25–34	246	39.4	191	77.5	55	22.5	215	87.2	32	12.8
35–44	98	15.6	83	84.9	15	15.1	86	88.0	12	12.0
45–54	70	11.2	59	84.4	11	15.6	66	94.9	4	5.1
≥ 55	24	3.8	18	75.0	6	25.0	20	83.3	4	16.7
Total	22,752	100	17,862	78.5	4,890	21.5	19,753	86.8	2,999	13.2

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

Note. Data are based on residence at diagnosis. Linkage to HIV medical care was measured by documentation of ≥ 1 CD4 or VL tests ≤ 1 month or ≤ 3 months after HIV diagnosis. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

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

^b Hispanics/Latinos can be of any race.

Table 4a. Receipt of HIV medical care among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia

	Persons alive at year-end 2016	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.	No.	%	No.	%
Sex					
Male	638,354	473,746	74.2	367,431	57.6
Female	198,286	146,682	74.0	114,275	57.6
Age at year-end 2015 (yr)					
13–24	32,447	24,762	76.3	18,213	56.1
25–34	126,264	93,547	74.1	68,201	54.0
35–44	168,024	122,997	73.2	92,834	55.3
45–54	271,830	204,762	75.3	160,229	58.9
≥55	238,075	174,360	73.2	142,229	59.7
Race/ethnicity					
American Indian/Alaska Native	2,021	1,483	73.4	1,136	56.2
Asian ^b	11,289	8,297	73.5	6,567	58.2
Black/African American	350,852	251,423	71.7	192,519	54.9
Hispanic/Latino ^c	181,145	130,195	71.9	106,101	58.6
Native Hawaiian/Other Pacific Islander	702	501	71.4	358	51.0
White	252,832	196,616	77.8	149,933	59.3
Multiple races	37,079	31,844	85.9	25,034	67.5
Transmission category^d					
Male-to-male sexual contact	461,965	350,253	75.8	269,746	58.4
Injection drug use					
Male	58,814	37,394	63.6	30,005	51.0
Female	41,293	29,927	72.5	23,585	57.1
Male-to-male sexual contact and injection drug use	46,714	36,645	78.4	28,863	61.8
Heterosexual contact ^e					
Male	64,430	44,861	69.6	35,328	54.8
Female	151,019	112,269	74.3	87,149	57.7
Other ^f					
Male	6,431	4,593	71.4	3,489	54.3
Female	5,974	4,486	75.1	3,541	59.3
Total^g	836,640	620,428	74.2	481,706	57.6

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

Note. Data are based on address of residence as of December 31, 2016 (i.e., most recent known address). See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

^a Performed ≥3 months apart during 2016.

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

^c Hispanics/Latinos 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.

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

^f Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

^g Includes 720 persons of unknown race/ethnicity.

Table 4b. Receipt of HIV medical care among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by area of residence—41 states and the District of Columbia

	Persons alive at year-end 2016 Total No.	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
		No.	%	No.	%
Alabama	11,946	8,891	74.4	6,881	57.6
Alaska	654	587	89.8	396	60.6
California	120,666	91,791	76.1	70,474	58.4
Colorado	11,765	7,596	64.6	5,389	45.8
Connecticut	9,912	7,883	79.5	6,097	61.5
Delaware	3,049	2,453	80.5	1,811	59.4
District of Columbia	14,115	9,671	68.5	7,350	52.1
Florida	103,068	76,291	74.0	62,240	60.4
Georgia	48,718	34,854	71.5	27,614	56.7
Hawaii	2,530	1,874	74.1	1,353	53.5
Illinois	33,938	23,558	69.4	16,971	50.0
Indiana	10,420	7,871	75.5	5,810	55.8
Iowa	2,427	2,107	86.8	1,562	64.4
Louisiana	18,938	14,586	77.0	11,544	61.0
Maine	1,454	1,227	84.4	944	64.9
Maryland	31,324	21,201	67.7	15,129	48.3
Massachusetts	19,364	15,344	79.2	12,074	62.4
Michigan	14,501	12,066	83.2	8,877	61.2
Minnesota	7,732	5,875	76.0	4,061	52.5
Mississippi	8,905	6,189	69.5	4,740	53.2
Missouri	11,551	9,091	78.7	6,853	59.3
Montana	566	512	90.5	391	69.1
Nebraska	2,008	1,523	75.8	1,014	50.5
New Hampshire	1,131	863	76.3	674	59.6
New Mexico	3,126	2,472	79.1	1,951	62.4
New York	123,789	90,326	73.0	76,315	61.6
North Carolina	28,743	21,417	74.5	15,401	53.6
North Dakota	328	273	83.2	201	61.3
Ohio	20,282	12,912	63.7	8,753	43.2
Oklahoma	5,627	4,204	74.7	3,389	60.2
Oregon	6,501	5,736	88.2	4,069	62.6
Rhode Island	2,310	1,903	82.4	1,363	59.0
South Carolina	15,700	12,171	77.5	9,993	63.6
South Dakota	483	280	58.0	160	33.1
Tennessee	15,553	12,161	78.2	8,962	57.6
Texas	80,232	61,069	76.1	48,076	59.9
Utah	2,591	1,786	68.9	1,152	44.5
Virginia	20,611	13,109	63.6	9,316	45.2
Washington	12,309	10,568	85.9	7,744	62.9
West Virginia	1,702	1,246	73.2	800	47.0
Wisconsin	5,783	4,657	80.5	3,630	62.8
Wyoming	288	234	81.3	182	63.2
Total	836,640	620,428	74.2	481,706	57.6

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

Note. Data are based on address of residence as of December 31, 2016 (i.e., most recent known address).

^a Performed \geq 3 months apart during 2016.

Table 4c. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia

	Persons alive at year-end 2016 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							
Sex							
Male	1,440	1,038	72.1	806	56.0	864	60.0
Female	581	445	76.6	330	56.8	341	58.7
Age at year-end 2015 (yr)							
13–24	79	64	81.0	49	62.0	45	57.0
25–34	321	240	74.8	179	55.8	186	57.9
35–44	444	314	70.7	225	50.7	245	55.2
45–54	700	519	74.1	408	58.3	426	60.9
≥55	477	346	72.5	275	57.7	303	63.5
Transmission category^c							
Male-to-male sexual contact	977	714	73.1	557	57.0	608	62.2
Injection drug use							
Male	156	101	64.9	77	49.0	82	52.1
Female	190	140	73.4	95	49.7	100	52.5
Male-to-male sexual contact and injection drug use	176	130	74.3	103	58.5	104	59.4
Heterosexual contact ^d							
Male	118	82	68.9	63	53.5	61	51.9
Female	374	293	78.3	226	60.5	232	62.0
Other ^e							
Male	13	10	79.7	6	48.4	9	71.9
Female	17	12	73.3	9	54.5	9	55.2
Total	2,021	1,483	73.4	1,136	56.2	1,205	59.6
Asian^f							
Sex							
Male	9,297	6,895	74.2	5,448	58.6	6,265	67.4
Female	1,992	1,402	70.4	1,119	56.2	1,256	63.1
Age at year-end 2015 (yr)							
13–24	422	341	80.8	276	65.4	300	71.1
25–34	2,014	1,505	74.7	1,142	56.7	1,344	66.7
35–44	3,372	2,475	73.4	1,921	57.0	2,231	66.2
45–54	3,290	2,457	74.7	1,982	60.2	2,242	68.1
≥55	2,191	1,519	69.3	1,246	56.9	1,404	64.1
Transmission category^c							
Male-to-male sexual contact	7,745	5,794	74.8	4,562	58.9	5,280	68.2
Injection drug use							
Male	356	225	63.1	179	50.4	201	56.4
Female	154	100	64.9	77	50.1	86	55.4
Male-to-male sexual contact and injection drug use	329	260	79.1	200	60.9	224	68.3
Heterosexual contact ^d							
Male	779	557	71.5	458	58.8	507	65.1
Female	1,769	1,260	71.2	1,007	56.9	1,131	63.9
Other ^e							
Male	88	59	67.2	48	54.7	53	59.8
Female	69	42	61.6	35	50.3	40	57.7
Total	11,289	8,297	73.5	6,567	58.2	7,521	66.6

Table 4c. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia (cont)

	Persons alive at year-end 2016 Total No.	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL of <200 copies/mL ^b	
		No.	%	No.	%	No.	%
Black/African American							
Sex							
Male	231,029	163,880	70.9	125,049	54.1	127,875	55.4
Female	119,823	87,543	73.1	67,470	56.3	68,943	57.5
Age at year-end 2015 (yr)							
13–24	19,179	14,250	74.3	10,247	53.4	9,481	49.4
25–34	62,611	44,959	71.8	32,116	51.3	32,029	51.2
35–44	71,037	50,741	71.4	37,691	53.1	38,726	54.5
45–54	103,790	75,719	73.0	59,216	57.1	61,142	58.9
≥55	94,235	65,754	69.8	53,249	56.5	55,440	58.8
Transmission category^c							
Male-to-male sexual contact	143,512	104,434	72.8	78,329	54.6	81,377	56.7
Injection drug use							
Male	29,111	18,262	62.7	14,491	49.8	14,408	49.5
Female	20,849	14,839	71.2	11,651	55.9	11,587	55.6
Male-to-male sexual contact and injection drug use	13,816	10,354	74.9	8,179	59.2	7,852	56.8
Heterosexual contact ^d							
Male	41,629	28,807	69.2	22,513	54.1	22,936	55.1
Female	95,606	70,166	73.4	53,819	56.3	55,743	58.3
Other ^e							
Male	2,961	2,022	68.3	1,538	52.0	1,302	44.0
Female	3,367	2,537	75.4	2,000	59.4	1,613	47.9
Total	350,852	251,423	71.7	192,519	54.9	196,818	56.1
Hispanic/Latino^g							
Sex							
Male	145,972	103,604	71.0	84,025	57.6	89,007	61.0
Female	35,173	26,591	75.6	22,076	62.8	22,100	62.8
Age at year-end 2015 (yr)							
13–24	6,893	5,396	78.3	4,167	60.5	4,036	58.6
25–34	30,091	22,362	74.3	17,098	56.8	18,105	60.2
35–44	43,668	30,819	70.6	24,648	56.4	25,923	59.4
45–54	58,255	42,114	72.3	34,777	59.7	36,598	62.8
≥55	42,238	29,504	69.9	25,411	60.2	26,445	62.6
Transmission category^c							
Male-to-male sexual contact	105,947	77,407	73.1	62,279	58.8	67,421	63.6
Injection drug use							
Male	16,276	9,532	58.6	8,064	49.5	7,839	48.2
Female	7,899	5,874	74.4	4,930	62.4	4,691	59.4
Male-to-male sexual contact and injection drug use	10,099	7,650	75.8	6,294	62.3	6,139	60.8
Heterosexual contact ^d							
Male	12,281	8,034	65.4	6,608	53.8	6,892	56.1
Female	25,983	19,720	75.9	16,321	62.8	16,703	64.3
Other ^e							
Male	1,368	981	71.7	781	57.1	716	52.3
Female	1,292	996	77.1	825	63.9	707	54.7
Total	181,145	130,195	71.9	106,101	58.6	111,107	61.3

Table 4c. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia (cont)

	Persons alive at year-end 2016 Total No.	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL of <200 copies/mL ^b	
		No.	%	No.	%	No.	%
Native Hawaiian/Other Pacific Islander							
Sex							
Male	582	419	72.0	296	50.9	370	63.6
Female	120	82	68.3	62	51.7	75	62.5
Age at year-end 2015 (yr)							
13–24	28	18	64.3	11	39.3	16	57.1
25–34	132	87	65.9	63	47.7	77	58.3
35–44	188	136	72.3	95	50.5	118	62.8
45–54	208	153	73.6	104	50.0	134	64.4
≥55	146	107	73.3	85	58.2	100	68.5
Transmission category^c							
Male-to-male sexual contact	500	353	70.5	250	50.1	312	62.4
Injection drug use							
Male	20	15	74.8	13	62.4	15	74.8
Female	19	11	60.2	8	43.5	11	60.2
Male-to-male sexual contact and injection drug use	34	29	85.5	19	55.2	23	67.6
Heterosexual contact ^d							
Male	26	20	78.1	13	50.8	18	70.4
Female	100	70	69.8	53	52.9	63	62.9
Other ^e							
Male	2	2	95.5	1	50.0	2	95.5
Female	2	1	70.6	1	70.6	1	64.7
Total	702	501	71.4	358	51.0	445	63.4
Whites							
Sex							
Male	221,047	173,403	78.4	132,594	60.0	152,223	68.9
Female	31,785	23,213	73.0	17,339	54.6	19,234	60.5
Age at year-end 2015 (yr)							
13–24	4,177	3,321	79.5	2,404	57.6	2,644	63.3
25–34	24,758	19,191	77.5	13,787	55.7	15,767	63.7
35–44	41,600	32,106	77.2	23,380	56.2	26,937	64.8
45–54	93,244	73,187	78.5	55,322	59.3	64,101	68.7
≥55	89,053	68,811	77.3	55,040	61.8	62,008	69.6
Transmission category^c							
Male-to-male sexual contact	182,404	143,950	78.9	110,087	60.4	127,836	70.1
Injection drug use							
Male	10,656	7,381	69.3	5,657	53.1	6,072	57.0
Female	9,832	6,969	70.9	5,214	53.0	5,549	56.4
Male-to-male sexual contact and injection drug use	18,936	15,289	80.7	11,721	61.9	12,506	66.0
Heterosexual contact ^d							
Male	7,417	5,568	75.1	4,247	57.3	4,782	64.5
Female	21,055	15,619	74.2	11,671	55.4	13,172	62.6
Other ^e							
Male	1,633	1,214	74.4	881	54.0	1,026	62.8
Female	897	625	69.7	454	50.6	513	57.2
Total	252,832	196,616	77.8	149,933	59.3	171,457	67.8

Table 4c. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia (cont)

	Persons alive at year-end 2016		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a		VL of <200 copies/mL ^b	
	Total No.	No.	%	No.	%	No.	%	
Multiple races								
Sex								
Male	28,476	24,451	85.9	19,165	67.3	20,104	70.6	
Female	8,603	7,393	85.9	5,869	68.2	5,795	67.4	
Age at year-end 2015 (yr)								
13–24	1,658	1,370	82.6	1,057	63.8	938	56.6	
25–34	6,327	5,203	82.2	3,816	60.3	3,951	62.4	
35–44	7,653	6,400	83.6	4,868	63.6	5,052	66.0	
45–54	12,086	10,590	87.6	8,400	69.5	8,748	72.4	
≥55	9,355	8,281	88.5	6,893	73.7	7,210	77.1	
Transmission category^c								
Male-to-male sexual contact	20,515	17,558	85.6	13,645	66.5	14,671	71.5	
Injection drug use								
Male	2,174	1,870	86.0	1,519	69.9	1,501	69.1	
Female	2,285	1,990	87.1	1,609	70.4	1,530	66.9	
Male-to-male sexual contact and injection drug use	3,285	2,930	89.2	2,345	71.4	2,251	68.5	
Heterosexual contact ^d								
Male	2,147	1,791	83.4	1,423	66.3	1,462	68.1	
Female	6,002	5,132	85.5	4,044	67.4	4,083	68.0	
Other ^e								
Male	355	303	85.3	233	65.6	219	61.6	
Female	315	271	85.9	216	68.4	183	57.9	
Total	37,079	31,844	85.9	25,034	67.5	25,899	69.8	

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

Note. Data are based on address of residence as of December 31, 2016 (i.e., most recent known address). See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

^a Performed ≥3 months apart during 2016.

^b VL test results are from the most recent test during 2016.

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

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

^e Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

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

^g Hispanics/Latinos can be of any race.

Table 4d. Receipt of HIV medical care and viral suppression among males aged ≥13 years with infection attributed to male-to-male sexual contact, by selected characteristics—41 states and the District of Columbia^b

	Males alive at year-end 2016		≥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	51	42	83.0	33	65.3	31	61.6	
25–34	190	146	76.8	104	54.8	118	61.8	
35–44	211	144	68.2	108	51.1	125	59.0	
45–54	336	245	73.0	202	60.3	212	63.2	
≥55	189	138	72.6	110	57.9	122	64.6	
Asian^c								
13–24	317	261	82.4	207	65.1	229	72.1	
25–34	1,540	1,157	75.1	866	56.3	1,039	67.5	
35–44	2,246	1,662	74.0	1,279	57.0	1,506	67.1	
45–54	2,298	1,736	75.5	1,409	61.3	1,592	69.3	
≥55	1,344	978	72.7	801	59.6	914	68.0	
Black/African American								
13–24	11,882	8,952	75.3	6,297	53.0	6,192	52.1	
25–34	40,133	29,527	73.6	21,002	52.3	21,461	53.5	
35–44	29,054	21,174	72.9	15,809	54.4	16,421	56.5	
45–54	37,686	27,501	73.0	21,364	56.7	22,570	59.9	
≥55	24,758	17,281	69.8	13,857	56.0	14,733	59.5	
Hispanic/Latino^d								
13–24	4,568	3,631	79.5	2,780	60.9	2,801	61.3	
25–34	22,109	16,724	75.6	12,694	57.4	13,855	62.7	
35–44	27,550	19,586	71.1	15,694	57.0	16,982	61.6	
45–54	33,210	24,272	73.1	19,869	59.8	21,690	65.3	
≥55	18,511	13,194	71.3	11,241	60.7	12,094	65.3	
Native Hawaiian/Other Pacific Islander								
13–24	18	11	61.5	7	39.1	9	50.3	
25–34	105	68	64.4	49	46.6	61	57.8	
35–44	132	97	73.6	68	51.2	85	63.9	
45–54	151	109	72.4	73	48.6	95	63.1	
≥55	94	67	71.8	54	57.1	62	66.5	
Whites								
13–24	2,633	2,132	81.0	1,538	58.4	1,796	68.2	
25–34	17,647	13,885	78.7	9,951	56.4	11,783	66.8	
35–44	28,162	22,053	78.3	16,068	57.1	19,066	67.7	
45–54	67,846	53,922	79.5	40,823	60.2	48,008	70.8	
≥55	66,117	51,959	78.6	41,707	63.1	47,183	71.4	
Multiple races								
13–24	1,011	826	81.7	635	62.8	604	59.7	
25–34	4,402	3,635	82.6	2,646	60.1	2,851	64.8	
35–44	4,340	3,648	84.1	2,776	64.0	2,985	68.8	
45–54	6,537	5,711	87.4	4,482	68.6	4,902	75.0	
≥55	4,224	3,738	88.5	3,106	73.5	3,330	78.8	
Total	461,965	350,253	75.8	269,746	58.4	297,546	64.4	

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

Note. Data are based on address of residence as of December 31, 2016 (i.e., most recent known address). Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting. Ages are as of year-end 2015.

^a Performed ≥3 months apart during 2016.

^b VL test results are from the most recent test during 2016.

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

^d Hispanics/Latinos can be of any race.

Table 5a. HIV viral suppression during 2016 among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia

	Persons alive at year-end 2016		Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		VL of <200 copies/mL			
							Among persons alive at year-end 2016		Among persons with ≥1 CD4 or VL tests	
	No.	% ^a	No.	%	No.	%	No.	%	%	%
Sex										
Male	638,354	76.3	473,746	74.2	453,953	71.1	396,762	62.2	83.7	87.4
Female	198,286	23.7	146,682	74.0	141,246	71.2	117,757	59.4	80.3	83.4
Age at year-end 2015 (yr)										
13–24	32,447	3.9	24,762	76.3	23,807	73.4	17,462	53.8	70.5	73.3
25–34	126,264	15.1	93,547	74.1	90,244	71.5	71,459	56.6	76.4	79.2
35–44	168,024	20.1	122,997	73.2	118,330	70.4	99,238	59.1	80.7	83.9
45–54	271,830	32.5	204,762	75.3	196,472	72.3	173,413	63.8	84.7	88.3
≥55	238,075	28.5	174,360	73.2	166,346	69.9	152,947	64.2	87.7	91.9
Race/ethnicity										
American Indian/Alaska Native	2,021	0.2	1,483	73.4	1,425	70.5	1,205	59.6	81.3	84.6
Asian ^b	11,289	1.3	8,297	73.5	8,009	70.9	7,521	66.6	90.6	93.9
Black/African American	350,852	41.9	251,423	71.7	241,270	68.8	196,818	56.1	78.3	81.6
Hispanic/Latino ^c	181,145	21.7	130,195	71.9	126,720	70.0	111,107	61.3	85.3	87.7
Native Hawaiian/Other Pacific Islander	702	0.1	501	71.4	485	69.1	445	63.4	88.8	91.8
White	252,832	30.2	196,616	77.8	186,540	73.8	171,457	67.8	87.2	91.9
Multiple races	37,079	4.4	31,844	85.9	30,681	82.7	25,899	69.8	81.3	84.4
Transmission category^d										
Male-to-male sexual contact	461,965	55.2	350,253	75.8	335,994	72.7	297,546	64.4	85.0	88.6
Injection drug use										
Male	58,814	7.0	37,394	63.6	35,486	60.3	30,124	51.2	80.6	84.9
Female	41,293	4.9	29,927	72.5	28,773	69.7	23,556	57.0	78.7	81.9
Male-to-male sexual contact and injection drug use	46,714	5.6	36,645	78.4	35,053	75.0	29,103	62.3	79.4	83.0
Heterosexual contact ^e										
Male	64,430	7.7	44,861	69.6	43,020	66.8	36,662	56.9	81.7	85.2
Female	151,019	18.1	112,269	74.3	108,135	71.6	91,135	60.3	81.2	84.3
Other ^f										
Male	6,431	0.8	4,593	71.4	4,400	68.4	3,327	51.7	72.4	75.6
Female	5,974	0.7	4,486	75.1	4,338	72.6	3,066	51.3	68.4	70.7
Total^g	836,640	100	620,428	74.2	595,199	71.1	514,519	61.5	82.9	86.4

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

Note. Data are based on address of residence as of December 31, 2016 (i.e., most recent known address). See Technical Notes for the list of areas that met the criteria for complete laboratory reporting. A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2016.

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

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

^c Hispanics/Latinos 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.

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

^f Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

^g Includes 720 persons of unknown race/ethnicity.

Table 5b. HIV viral suppression during 2016 among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by area of residence—41 states and the District of Columbia

	Persons alive at year-end 2016		Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		VL of <200 copies/mL			
							Among persons alive at year-end 2016		Among persons with ≥1 CD4 or VL tests	
	No.	% ^a	No.	%	No.	%	No.	%	%	%
Alabama	11,946	1.4	8,891	74.4	8,654	72.4	7,297	61.1	82.1	84.3
Alaska	654	0.1	587	89.8	572	87.5	501	76.6	85.3	87.6
California	120,666	14.4	91,791	76.1	88,934	73.7	79,917	66.2	87.1	89.9
Colorado	11,765	1.4	7,596	64.6	7,402	62.9	6,640	56.4	87.4	89.7
Connecticut	9,912	1.2	7,883	79.5	7,312	73.8	6,435	64.9	81.6	88.0
Delaware	3,049	0.4	2,453	80.5	2,393	78.5	2,052	67.3	83.7	85.8
District of Columbia	14,115	1.7	9,671	68.5	9,328	66.1	7,787	55.2	80.5	83.5
Florida	103,068	12.3	76,291	74.0	74,059	71.9	63,746	61.8	83.6	86.1
Georgia	48,718	5.8	34,854	71.5	33,633	69.0	27,827	57.1	79.8	82.7
Hawaii	2,530	0.3	1,874	74.1	1,843	72.8	1,707	67.5	91.1	92.6
Illinois	33,938	4.1	23,558	69.4	21,104	62.2	18,141	53.5	77.0	86.0
Indiana	10,420	1.2	7,871	75.5	7,387	70.9	6,440	61.8	81.8	87.2
Iowa	2,427	0.3	2,107	86.8	2,085	85.9	1,914	78.9	90.8	91.8
Louisiana	18,938	2.3	14,586	77.0	14,378	75.9	11,862	62.6	81.3	82.5
Maine	1,454	0.2	1,227	84.4	1,206	82.9	1,109	76.3	90.4	92.0
Maryland	31,324	3.7	21,201	67.7	20,533	65.6	17,081	54.5	80.6	83.2
Massachusetts	19,364	2.3	15,344	79.2	14,627	75.5	13,234	68.3	86.2	90.5
Michigan	14,501	1.7	12,066	83.2	11,725	80.9	10,256	70.7	85.0	87.5
Minnesota	7,732	0.9	5,875	76.0	5,770	74.6	5,265	68.1	89.6	91.2
Mississippi	8,905	1.1	6,189	69.5	5,797	65.1	4,747	53.3	76.7	81.9
Missouri	11,551	1.4	9,091	78.7	8,238	71.3	7,198	62.3	79.2	87.4
Montana	566	0.1	512	90.5	495	87.5	451	79.7	88.1	91.1
Nebraska	2,008	0.2	1,523	75.8	1,418	70.6	1,268	63.1	83.3	89.4
New Hampshire	1,131	0.1	863	76.3	853	75.4	773	68.3	89.6	90.6
New Mexico	3,126	0.4	2,472	79.1	2,440	78.1	2,200	70.4	89.0	90.2
New York	123,789	14.8	90,326	73.0	89,513	72.3	77,823	62.9	86.2	86.9
North Carolina	28,743	3.4	21,417	74.5	20,777	72.3	17,861	62.1	83.4	86.0
North Dakota	328	0.0	273	83.2	264	80.5	238	72.6	87.2	90.2
Ohio	20,282	2.4	12,912	63.7	12,265	60.5	10,481	51.7	81.2	85.5
Oklahoma	5,627	0.7	4,204	74.7	3,902	69.3	3,305	58.7	78.6	84.7
Oregon	6,501	0.8	5,736	88.2	4,106	63.2	3,640	56.0	63.5	88.7
Rhode Island	2,310	0.3	1,903	82.4	1,886	81.6	1,731	74.9	91.0	91.8
South Carolina	15,700	1.9	12,171	77.5	11,498	73.2	9,696	61.8	79.7	84.3
South Dakota	483	0.1	280	58.0	259	53.6	218	45.1	77.9	84.2
Tennessee	15,553	1.9	12,161	78.2	10,378	66.7	8,552	55.0	70.3	82.4
Texas	80,232	9.6	61,069	76.1	58,321	72.7	48,519	60.5	79.4	83.2
Utah	2,591	0.3	1,786	68.9	1,750	67.5	1,340	51.7	75.0	76.6
Virginia	20,611	2.5	13,109	63.6	12,155	59.0	10,675	51.8	81.4	87.8
Washington	12,309	1.5	10,568	85.9	10,161	82.5	9,418	76.5	89.1	92.7
West Virginia	1,702	0.2	1,246	73.2	1,107	65.0	978	57.5	78.5	88.3
Wisconsin	5,783	0.7	4,657	80.5	4,442	76.8	3,999	69.2	85.9	90.0
Wyoming	288	0.0	234	81.3	229	79.5	197	68.4	84.2	86.0
Total	836,640	100	620,428	74.2	595,199	71.1	514,519	61.5	82.9	86.4

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

Note. Data are based on address of residence as of December 31, 2016 (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 2016.

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

Table 6a. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death, 2010–2016—United States

	2010			2011			2012			2013			2014			2015			2016		
	Rate per	Rate per		Rate per	Rate per		Rate per	Rate per		Rate per	Rate per		Rate per	Rate per		Rate per	Rate per		Rate per	Rate per	
	100,000	1,000	No.	100,000	1,000	No.	100,000	1,000	No.	100,000	1,000	No.	100,000	1,000	No.	100,000	1,000	No.	100,000	1,000	
Sex																					
Male	12,480	10.0	19.6	12,173	9.6	18.5	11,897	9.3	17.5	11,940	9.3	17.1	12,025	9.3	16.7	12,026	9.2	16.2	12,241	9.3	16.1
Female	4,409	3.4	20.7	4,264	3.2	19.6	4,242	3.2	19.1	4,086	3.0	18.1	4,202	3.1	18.3	3,913	2.9	16.8	3,970	2.9	16.7
Age at death (yr)																					
13–24	242	0.5	5.4	228	0.4	4.9	195	0.4	4.1	180	0.3	3.8	188	0.4	3.9	160	0.3	3.4	164	0.3	3.6
25–34	1,173	2.8	9.4	1,101	2.6	8.6	1,112	2.6	8.4	1,058	2.5	7.7	1,006	2.3	7.1	992	2.3	6.7	1,097	2.5	7.1
35–44	3,260	8.0	13.5	2,894	7.1	12.6	2,569	6.3	11.6	2,322	5.7	10.9	2,251	5.6	10.9	2,055	5.1	10.2	1,950	4.8	9.9
45–54	6,303	14.0	21.6	5,992	13.4	19.7	5,738	13.0	18.3	5,527	12.6	17.4	5,185	11.9	16.2	4,977	11.5	15.5	4,614	10.8	14.5
≥55	5,911	7.7	39.8	6,222	7.8	37.2	6,525	8.0	34.8	6,939	8.3	33.1	7,597	8.8	32.7	7,755	8.8	30.2	8,386	9.2	29.6
Race/ethnicity																					
American Indian/Alaska Native	73	4.0	32.0	57	3.1	24.3	53	2.9	21.6	64	3.4	25.1	62	3.3	23.3	62	3.2	22.2	47	2.4	15.9
Asian ^b	69	0.6	8.1	85	0.7	9.2	71	0.5	7.2	74	0.5	6.9	63	0.4	5.5	82	0.6	6.6	101	0.7	7.5
Black/African American	8,171	26.6	23.1	7,835	25.2	21.5	7,622	24.2	20.3	7,464	23.4	19.4	7,416	23.0	18.8	7,198	22.0	17.8	7,176	21.7	17.2
Hispanic/Latino ^c	2,646	7.0	15.2	2,706	6.9	15.0	2,458	6.1	13.1	2,551	6.2	13.1	2,659	6.3	13.2	2,505	5.8	12.0	2,606	5.9	12.0
Native Hawaiian/Other Pacific Islander	7	1.8	12.3	7	1.7	11.3	7	1.7	10.6	10	2.3	14.3	9	2.0	12.3	6	1.3	7.5	13	2.8	15.6
White	5,061	3.0	18.7	4,922	2.9	17.8	5,051	3.0	17.9	4,918	2.9	17.1	5,058	3.0	17.2	5,087	3.0	17.0	5,291	3.1	17.4
Multiple races	857	24.1	21.1	823	22.3	19.8	856	22.4	20.1	941	23.7	21.7	956	23.3	21.7	993	23.4	22.4	975	22.2	21.8
Transmission category^d																					
Male-to-male sexual contact	6,487	—	15.2	6,370	—	14.3	6,327	—	13.6	6,448	—	13.3	6,574	—	13.0	6,635	—	12.6	6,865	—	12.6
Injection drug use																					
Male	2,821	—	34.9	2,624	—	33.0	2,516	—	32.0	2,405	—	31.1	2,441	—	32.0	2,309	—	30.7	2,237	—	30.1
Female	1,605	—	29.9	1,592	—	29.8	1,491	—	28.2	1,504	—	28.7	1,464	—	28.2	1,350	—	26.2	1,360	—	26.6
Male-to-male sexual contact and injection drug use	1,341	—	24.4	1,324	—	24.0	1,281	—	23.1	1,333	—	24.0	1,333	—	24.0	1,389	—	25.0	1,362	—	24.5
Heterosexual contact ^e																					
Male	1,716	—	25.1	1,732	—	24.6	1,657	—	23.0	1,643	—	22.2	1,583	—	20.9	1,587	—	20.5	1,673	—	21.1
Female	2,744	—	17.9	2,591	—	16.4	2,673	—	16.4	2,521	—	15.1	2,674	—	15.6	2,489	—	14.2	2,536	—	14.1
Other ^f																					
Male	115	—	16.9	122	—	17.4	116	—	16.2	111	—	15.2	93	—	12.7	106	—	14.2	104	—	13.7
Female	60	—	10.5	82	—	13.6	78	—	12.5	62	—	9.6	64	—	9.7	73	—	10.8	74	—	10.6
Region of residence																					
Northeast	4,333	9.3	19.9	4,163	8.9	18.8	3,832	8.1	17.1	3,884	8.2	17.1	3,761	7.9	16.3	3,606	7.5	15.5	3,714	7.7	15.6
Midwest	1,944	3.5	19.4	1,886	3.4	18.2	1,913	3.4	17.9	1,794	3.2	16.3	1,847	3.3	16.4	1,814	3.2	15.7	1,830	3.2	15.4
South	8,172	8.6	22.1	7,896	8.2	20.6	7,915	8.1	19.9	7,794	7.9	19.0	8,022	8.1	19.0	7,907	7.8	18.1	7,939	7.8	17.7
West	2,440	4.1	14.9	2,492	4.2	14.8	2,479	4.1	14.3	2,554	4.2	14.4	2,597	4.2	14.2	2,612	4.1	13.8	2,728	4.3	13.9
Total^g	16,889	6.6	19.9	16,437	6.4	18.8	16,139	6.2	17.9	16,026	6.1	17.3	16,227	6.1	17.1	15,939	5.9	16.3	16,211	6.0	16.2

Abbreviation: PLWDH, persons living with diagnosed HIV infection.

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.

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

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

^c Hispanics/Latinos 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.

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

^f Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

^g Includes persons of unknown race/ethnicity.

Table 6b. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death, 2010–2016—United States and 6 dependent areas

	2010			2011			2012			2013			2014			2015			2016		
	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per
		100,000	1,000		100,000	1,000		100,000	1,000		100,000	1,000		100,000	1,000		100,000	1,000		100,000	1,000
Sex																					
Male	12,891	10.2	19.8	12,576	9.8	18.8	12,238	9.5	17.7	12,279	9.4	17.3	12,365	9.4	16.9	12,324	9.3	16.4	12,559	9.4	16.2
Female	4,555	3.4	20.9	4,398	3.3	19.7	4,362	3.2	19.2	4,209	3.1	18.2	4,334	3.1	18.4	4,020	2.9	16.8	4,064	2.9	16.7
Age at death (yr)																					
13–24	248	0.5	5.5	233	0.4	4.9	200	0.4	4.2	185	0.3	3.8	190	0.4	3.9	162	0.3	3.4	169	0.3	3.7
25–34	1,221	2.9	9.7	1,135	2.7	8.7	1,155	2.7	8.6	1,091	2.5	7.9	1,029	2.3	7.1	1,018	2.3	6.8	1,112	2.5	7.1
35–44	3,391	8.2	13.7	3,010	7.3	12.8	2,662	6.5	11.8	2,388	5.8	11.0	2,309	5.6	10.9	2,111	5.1	10.3	2,012	4.9	10.0
45–54	6,516	14.3	21.9	6,201	13.7	20.0	5,898	13.2	18.5	5,704	12.9	17.6	5,345	12.2	16.4	5,126	11.8	15.7	4,735	10.9	14.6
≥55	6,070	7.7	39.9	6,395	7.9	37.4	6,685	8.1	34.8	7,120	8.4	33.2	7,826	9.0	33.0	7,927	8.8	30.3	8,595	9.4	29.8
Race/ethnicity																					
American Indian/Alaska Native	73	—	32.0	57	—	24.3	53	—	21.6	64	—	25.1	62	—	23.3	62	—	22.2	47	—	15.9
Asian ^b	70	—	8.2	87	—	9.4	73	—	7.3	74	—	6.9	65	—	5.6	83	—	6.6	101	—	7.5
Black/African American	8,177	—	23.1	7,842	—	21.5	7,633	—	20.4	7,470	—	19.4	7,425	—	18.8	7,204	—	17.8	7,185	—	17.3
Hispanic/Latino ^c	3,193	—	16.7	3,230	—	16.4	2,904	—	14.2	3,001	—	14.2	3,120	—	14.3	2,901	—	12.8	3,005	—	12.8
Native Hawaiian/Other Pacific Islander	8	—	13.5	10	—	15.6	7	—	10.3	12	—	16.6	9	—	11.9	7	—	8.5	15	—	17.3
White	5,062	—	18.7	4,922	—	17.8	5,052	—	17.9	4,920	—	17.1	5,058	—	17.2	5,087	—	17.0	5,292	—	17.4
Multiple races	858	—	21.1	824	—	19.8	857	—	20.1	943	—	21.7	956	—	21.7	994	—	22.4	976	—	21.8
Transmission category^d																					
Male-to-male sexual contact	6,559	—	15.2	6,453	—	14.3	6,386	—	13.6	6,530	—	13.3	6,660	—	13.1	6,711	—	12.7	6,940	—	12.6
Injection drug use																					
Male	3,029	—	35.5	2,830	—	33.7	2,679	—	32.4	2,545	—	31.2	2,586	—	32.2	2,444	—	30.8	2,367	—	30.3
Female	1,647	—	30.0	1,637	—	30.0	1,525	—	28.2	1,546	—	28.8	1,505	—	28.3	1,375	—	26.1	1,395	—	26.7
Male-to-male sexual contact and injection drug use	1,384	—	24.7	1,361	—	24.2	1,311	—	23.3	1,363	—	24.1	1,361	—	24.1	1,416	—	25.1	1,394	—	24.7
Heterosexual contact ^e																					
Male	1,802	—	25.5	1,808	—	24.8	1,743	—	23.3	1,728	—	22.6	1,664	—	21.3	1,645	—	20.6	1,748	—	21.4
Female	2,845	—	18.1	2,676	—	16.5	2,757	—	16.5	2,600	—	15.2	2,764	—	15.8	2,571	—	14.3	2,592	—	14.1
Other ^f																					
Male	116	—	16.7	123	—	17.2	119	—	16.2	113	—	15.2	95	—	12.7	109	—	14.2	110	—	14.2
Female	62	—	10.6	85	—	13.8	81	—	12.7	63	—	9.6	65	—	9.7	74	—	10.7	77	—	10.9
Region of residence																					
Northeast	4,333	9.3	19.9	4,163	8.9	18.8	3,832	8.1	17.1	3,884	8.2	17.1	3,761	7.9	16.3	3,606	7.5	15.5	3,714	7.7	15.6
Midwest	1,944	3.5	19.4	1,886	3.4	18.2	1,913	3.4	17.9	1,794	3.2	16.3	1,847	3.3	16.4	1,814	3.2	15.7	1,830	3.2	15.4
South	8,172	8.6	22.1	7,896	8.2	20.6	7,915	8.1	19.9	7,794	7.9	19.0	8,022	8.1	19.0	7,907	7.8	18.1	7,939	7.8	17.7
West	2,440	4.1	14.9	2,492	4.2	14.8	2,479	4.1	14.3	2,554	4.2	14.4	2,597	4.2	14.2	2,612	4.1	13.8	2,728	4.3	13.9
U.S. dependent areas	557	16.3	32.4	537	15.8	31.2	461	13.7	26.8	462	13.8	26.7	472	14.2	27.2	405	12.3	23.3	412	12.7	23.7
Total^g	17,446	6.7	20.1	16,974	6.5	19.0	16,600	6.3	18.1	16,488	6.2	17.5	16,699	6.2	17.3	16,344	6.0	16.5	16,623	6.1	16.3

Abbreviation: PLWDH, persons living with diagnosed HIV infection.

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.

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

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

^c Hispanics/Latinos 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.

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

^f Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

^g Includes persons of unknown race/ethnicity.

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWDH ^a	Age-adjusted rate per 1,000 PLWDH
2010					
Alabama	274	6.9	7.0	24.9	25.5
Alaska	16	2.8	2.7	24.2	25.5
Arizona	202	3.9	3.9	16.2	15.5
Arkansas	114	4.7	4.8	25.9	26.0
California	1,546	5.0	5.0	14.3	13.8
Colorado	140	3.4	3.3	14.0	11.9
Connecticut	210	7.0	6.4	20.4	19.0
Delaware	77	10.2	9.9	25.4	26.1
District of Columbia	259	48.8	54.1	18.0	17.1
Florida	2,031	12.7	12.2	22.3	21.9
Georgia	911	11.5	11.5	22.0	23.8
Hawaii	36	3.1	3.0	14.6	12.1
Idaho	15	1.2	1.3	16.9	15.0
Illinois	665	6.3	6.2	21.2	22.8
Indiana	171	3.2	3.3	19.2	17.7
Iowa	28	1.1	1.0	13.9	13.8
Kansas	49	2.1	2.1	18.4	22.7
Kentucky	119	3.3	3.3	21.9	22.5
Louisiana	461	12.3	12.7	28.4	28.7
Maine	22	1.9	1.8	17.3	14.9
Maryland	615	12.7	12.2	21.7	21.0
Massachusetts	282	5.1	4.9	16.2	14.9
Michigan	313	3.8	3.8	23.0	23.5
Minnesota	77	1.8	1.7	11.7	12.5
Mississippi	208	8.6	8.9	25.6	27.0
Missouri	210	4.2	4.3	20.3	20.3
Montana	11	1.3	1.3	25.6	24.1
Nebraska	31	2.1	2.1	17.3	19.2
Nevada	126	5.7	5.6	18.1	17.0
New Hampshire	18	1.6	1.4	16.2	15.8
New Jersey	811	11.0	10.3	23.4	21.6
New Mexico	63	3.7	3.8	21.5	19.4
New York	2,235	13.7	13.1	18.7	16.6
North Carolina	582	7.3	7.2	23.4	23.0
North Dakota	6	1.1	1.2	28.7	29.3
Ohio	288	3.0	3.0	16.7	16.9
Oklahoma	108	3.5	3.6	21.8	21.6
Oregon	97	3.0	3.0	16.8	15.4
Pennsylvania	703	6.5	6.3	22.6	21.7
Rhode Island	37	4.1	4.2	17.5	17.4
South Carolina	336	8.7	8.8	23.5	22.8
South Dakota	12	1.8	1.8	31.9	29.4
Tennessee	377	7.1	7.2	25.1	27.1
Texas	1,356	6.7	6.9	20.4	21.3
Utah	24	1.1	1.3	11.1	8.4
Vermont	15	2.8	2.3	32.2	26.6
Virginia	316	4.7	4.6	17.1	16.9
Washington	156	2.8	2.7	14.7	14.3
West Virginia	28	1.8	1.7	17.7	16.6
Wisconsin	94	2.0	1.9	18.9	19.7
Wyoming	8	1.7	1.7	29.9	40.0
Subtotal	16,889	6.6	6.5	19.9	19.4
U.S. dependent areas					
American Samoa	1	2.6	2.8	1,000.0	199.8
Guam	3	2.5	2.6	36.1	18.3
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	546	17.6	18.3	33.0	29.4
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	7	8.0	8.6	12.2	10.5
Subtotal	557	16.3	17.0	32.4	28.8
Total	17,446	6.7	6.6	20.1	19.6

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWDH ^a	Age-adjusted rate per 1,000 PLWDH
2011					
Alabama	256	6.4	6.4	22.3	23.9
Alaska	12	2.1	2.0	17.8	13.3
Arizona	192	3.6	3.7	14.9	14.0
Arkansas	113	4.7	4.9	25.1	25.9
California	1,615	5.2	5.2	14.6	13.7
Colorado	127	3.0	2.9	12.3	10.6
Connecticut	219	7.2	6.7	21.3	18.8
Delaware	70	9.2	8.6	22.5	18.9
District of Columbia	279	51.4	56.2	19.3	18.3
Florida	2,023	12.4	12.0	21.7	20.7
Georgia	824	10.3	10.3	19.3	20.6
Hawaii	41	3.5	3.3	16.5	13.9
Idaho	15	1.2	1.3	16.2	12.6
Illinois	575	5.4	5.3	17.8	17.7
Indiana	201	3.7	3.8	21.7	22.3
Iowa	37	1.5	1.4	17.6	20.0
Kansas	47	2.0	2.1	17.2	13.9
Kentucky	110	3.0	3.0	19.5	18.8
Louisiana	473	12.6	12.7	27.7	28.9
Maine	24	2.1	1.9	18.6	17.6
Maryland	585	12.0	11.4	20.0	18.8
Massachusetts	262	4.7	4.5	14.5	13.1
Michigan	306	3.7	3.6	21.9	21.6
Minnesota	89	2.0	2.0	13.0	13.1
Mississippi	211	8.7	8.7	24.7	26.3
Missouri	184	3.7	3.6	17.2	17.1
Montana	8	1.0	0.9	16.6	19.6
Nebraska	24	1.6	1.6	13.1	17.0
Nevada	132	5.9	5.9	18.3	16.8
New Hampshire	14	1.2	1.1	12.4	16.8
New Jersey	767	10.4	9.7	22.1	19.3
New Mexico	51	3.0	3.1	16.9	14.7
New York	2,168	13.2	12.6	17.9	16.2
North Carolina	543	6.8	6.6	21.1	21.4
North Dakota	4	0.7	0.6	18.3	29.2
Ohio	314	3.3	3.2	17.5	18.0
Oklahoma	122	3.9	4.1	23.7	23.9
Oregon	99	3.0	2.9	16.6	15.5
Pennsylvania	657	6.1	5.8	20.7	19.8
Rhode Island	46	5.1	4.7	21.6	23.1
South Carolina	327	8.4	8.4	19.3	19.4
South Dakota	7	1.0	1.0	17.8	14.1
Tennessee	323	6.1	6.0	20.9	22.0
Texas	1,285	6.2	6.4	18.5	19.3
Utah	24	1.1	1.3	10.6	8.4
Vermont	6	1.1	0.9	12.1	8.9
Virginia	315	4.7	4.5	16.6	15.6
Washington	170	3.0	2.9	15.7	13.8
West Virginia	37	2.3	2.3	21.9	19.9
Wisconsin	98	2.1	2.0	19.1	17.5
Wyoming	6	1.3	1.1	23.4	27.7
Subtotal	16,437	6.4	6.2	18.8	18.0
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	5	4.1	4.5	63.3	30.3
Northern Mariana Islands	1	2.5	1.8	100	165.7
Puerto Rico	522	16.9	17.4	31.6	27.4
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	9	10.2	9.7	15.8	12.5
Subtotal	537	15.8	16.3	31.2	27.0
Total	16,974	6.5	6.4	19.0	18.2

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWDH ^a	Age-adjusted rate per 1,000 PLWDH
2012					
Alabama	282	7.0	7.0	23.9	24.6
Alaska	11	1.9	1.9	16.6	12.8
Arizona	212	3.9	3.9	15.8	15.5
Arkansas	90	3.7	3.8	19.3	17.7
California	1,558	5.0	4.9	13.7	12.4
Colorado	112	2.6	2.5	10.6	8.5
Connecticut	193	6.3	5.7	18.8	16.3
Delaware	77	10.0	9.4	24.3	21.9
District of Columbia	231	41.7	46.6	15.3	14.1
Florida	1,980	12.0	11.5	20.3	19.0
Georgia	846	10.4	10.4	18.8	19.8
Hawaii	50	4.3	4.0	20.1	15.5
Idaho	24	1.9	1.9	24.3	24.3
Illinois	559	5.2	5.1	16.9	16.5
Indiana	169	3.1	3.1	17.7	18.1
Iowa	43	1.7	1.8	19.5	15.8
Kansas	44	1.9	1.8	15.8	15.8
Kentucky	118	3.2	3.2	20.1	19.8
Louisiana	470	12.4	12.6	27.1	27.2
Maine	19	1.7	1.4	14.6	12.7
Maryland	637	12.9	12.3	21.3	19.9
Massachusetts	267	4.7	4.4	14.2	11.8
Michigan	340	4.1	4.1	23.5	22.3
Minnesota	86	1.9	1.8	12.0	12.5
Mississippi	199	8.1	8.4	22.9	23.7
Missouri	191	3.8	3.8	17.3	17.0
Montana	5	0.6	0.7	10.1	5.7
Nebraska	32	2.1	2.1	17.1	16.5
Nevada	160	7.0	7.0	21.4	22.3
New Hampshire	22	1.9	1.8	19.1	15.9
New Jersey	658	8.8	8.1	18.8	16.5
New Mexico	58	3.4	3.5	19.3	18.3
New York	2,043	12.3	11.6	16.7	14.3
North Carolina	525	6.5	6.2	19.5	19.0
North Dakota	3	0.5	0.5	12.2	16.9
Ohio	350	3.6	3.5	18.8	18.9
Oklahoma	115	3.7	3.7	21.7	19.6
Oregon	111	3.4	3.3	18.0	16.0
Pennsylvania	581	5.4	5.1	17.8	16.2
Rhode Island	43	4.8	4.4	19.9	19.6
South Carolina	317	8.0	7.9	20.2	19.2
South Dakota	10	1.5	1.8	23.9	18.0
Tennessee	343	6.4	6.4	21.3	20.7
Texas	1,312	6.3	6.4	18.0	18.8
Utah	25	1.1	1.3	10.8	9.5
Vermont	6	1.1	1.0	10.8	8.3
Virginia	334	4.9	4.7	16.7	15.5
Washington	151	2.6	2.5	13.5	12.2
West Virginia	39	2.5	2.2	22.0	20.2
Wisconsin	86	1.8	1.7	16.4	15.2
Wyoming	2	0.4	0.4	7.8	3.7
Subtotal	16,139	6.2	6.0	17.9	16.7
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	1	0.8	0.9	12.0	7.7
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	445	14.5	14.9	26.9	23.6
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	15	17.0	15.6	26.9	36.1
Subtotal	461	13.7	13.9	26.8	23.8
Total	16,600	6.3	6.1	18.1	16.9

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWDH ^a	Age-adjusted rate per 1,000 PLWDH
2013					
Alabama	243	6.0	6.1	20.0	19.5
Alaska	16	2.7	2.7	24.1	23.2
Arizona	221	4.1	4.1	15.8	14.4
Arkansas	123	5.0	5.3	25.3	23.2
California	1,616	5.1	5.0	13.8	12.3
Colorado	115	2.6	2.6	10.7	9.2
Connecticut	174	5.7	5.2	16.6	13.2
Delaware	72	9.2	8.5	22.7	19.7
District of Columbia	202	35.8	39.5	13.4	12.9
Florida	2,006	12.0	11.2	20.1	18.1
Georgia	848	10.3	10.2	17.5	17.7
Hawaii	40	3.4	3.1	15.8	10.3
Idaho	14	1.1	1.1	13.7	11.9
Illinois	517	4.8	4.6	15.3	14.5
Indiana	181	3.3	3.3	18.3	18.4
Iowa	43	1.7	1.6	18.8	17.9
Kansas	56	2.4	2.4	19.9	19.1
Kentucky	120	3.3	3.3	18.8	16.7
Louisiana	418	10.9	11.3	23.1	22.5
Maine	30	2.6	2.5	22.2	18.4
Maryland	619	12.5	11.7	20.4	18.2
Massachusetts	269	4.7	4.3	14.0	11.7
Michigan	281	3.4	3.2	19.0	18.4
Minnesota	78	1.7	1.6	10.6	11.7
Mississippi	229	9.3	9.4	25.9	25.6
Missouri	186	3.7	3.6	16.5	16.4
Montana	13	1.5	1.6	24.2	19.8
Nebraska	33	2.2	2.3	17.3	15.2
Nevada	146	6.3	6.1	18.9	16.9
New Hampshire	15	1.3	1.2	12.9	10.8
New Jersey	739	9.9	9.0	20.6	17.8
New Mexico	46	2.7	2.7	15.5	12.8
New York	1,981	11.9	11.1	16.1	13.4
North Carolina	534	6.5	6.3	19.2	17.8
North Dakota	5	0.8	0.8	19.3	22.1
Ohio	313	3.2	3.2	16.3	15.0
Oklahoma	126	4.0	4.1	22.8	21.7
Oregon	112	3.4	3.3	18.1	14.8
Pennsylvania	634	5.8	5.4	19.1	17.3
Rhode Island	34	3.8	3.5	15.5	12.9
South Carolina	320	8.0	8.0	20.4	18.7
South Dakota	9	1.3	1.3	20.0	11.8
Tennessee	336	6.2	6.1	20.5	20.1
Texas	1,230	5.8	5.9	16.2	16.5
Utah	44	2.0	2.2	17.4	15.2
Vermont	8	1.5	1.2	13.3	9.5
Virginia	326	4.7	4.5	16.1	14.6
Washington	165	2.8	2.7	14.2	12.7
West Virginia	42	2.7	2.6	24.0	20.4
Wisconsin	92	1.9	1.8	16.0	14.4
Wyoming	6	1.2	1.3	22.9	17.5
Subtotal	16,026	6.1	5.9	17.3	15.8
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	2	1.6	1.7	24.1	14.0
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	449	14.8	14.6	26.9	22.8
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	11	12.5	11.1	19.5	25.1
Subtotal	462	13.8	13.7	26.7	22.8
Total	16,488	6.2	6.0	17.5	15.9

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWDH ^a	Age-adjusted rate per 1,000 PLWDH
2014					
Alabama	279	6.9	6.8	22.1	21.8
Alaska	12	2.0	2.0	18.8	17.6
Arizona	220	4.0	4.0	15.0	13.8
Arkansas	120	4.9	5.0	23.2	21.8
California	1,641	5.1	5.0	13.7	12.1
Colorado	148	3.3	3.3	13.3	12.1
Connecticut	186	6.1	5.4	18.2	14.5
Delaware	88	11.2	10.2	27.8	23.5
District of Columbia	211	36.9	39.9	14.5	13.2
Florida	1,972	11.6	10.8	19.0	16.7
Georgia	923	11.1	10.9	19.0	19.3
Hawaii	44	3.7	3.6	17.1	11.4
Idaho	21	1.6	1.6	20.4	29.4
Illinois	526	4.9	4.6	15.2	14.7
Indiana	180	3.3	3.3	17.5	16.9
Iowa	54	2.1	2.0	22.6	19.6
Kansas	46	1.9	2.0	16.0	15.0
Kentucky	119	3.2	3.2	18.1	16.5
Louisiana	424	11.0	11.2	22.3	22.5
Maine	19	1.7	1.2	13.5	10.3
Maryland	595	11.9	11.1	18.8	16.4
Massachusetts	266	4.6	4.2	13.6	11.4
Michigan	288	3.4	3.3	19.4	18.3
Minnesota	97	2.1	2.0	12.8	12.8
Mississippi	238	9.7	9.6	26.0	26.5
Missouri	172	3.4	3.4	14.8	13.4
Montana	10	1.2	1.1	18.1	16.7
Nebraska	30	1.9	2.0	15.0	14.2
Nevada	131	5.6	5.6	15.8	14.7
New Hampshire	13	1.1	1.1	10.7	7.9
New Jersey	667	8.9	8.0	18.5	15.3
New Mexico	67	3.9	3.9	21.4	18.5
New York	1,921	11.5	10.6	15.2	12.6
North Carolina	550	6.6	6.4	19.1	17.6
North Dakota	7	1.1	1.2	23.0	27.0
Ohio	348	3.6	3.5	17.4	16.3
Oklahoma	140	4.4	4.5	24.6	22.4
Oregon	103	3.1	2.9	16.4	14.2
Pennsylvania	649	6.0	5.5	19.2	16.3
Rhode Island	37	4.1	3.6	16.1	13.5
South Carolina	332	8.2	7.8	20.7	19.8
South Dakota	9	1.3	1.4	18.1	11.8
Tennessee	334	6.1	5.9	20.6	21.0
Texas	1,348	6.2	6.3	16.9	16.7
Utah	22	1.0	1.1	8.5	6.7
Vermont	3	0.6	0.4	4.7	3.2
Virginia	311	4.5	4.2	14.9	13.7
Washington	173	2.9	2.8	14.3	12.6
West Virginia	38	2.4	2.3	21.2	21.3
Wisconsin	90	1.9	1.8	15.3	14.6
Wyoming	5	1.0	1.1	18.7	13.7
Subtotal	16,227	6.1	5.9	17.1	15.4
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	2	1.6	1.9	24.1	32.8
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	459	15.2	14.6	27.5	22.4
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	11	12.5	10.9	19.1	16.0
Subtotal	472	14.2	13.6	27.2	22.1
Total	16,699	6.2	6.0	17.3	15.5

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWDH ^a	Age-adjusted rate per 1,000 PLWDH
2015					
Alabama	277	6.8	6.7	22.3	21.0
Alaska	12	2.0	2.1	18.1	17.3
Arizona	214	3.8	3.7	14.0	12.4
Arkansas	110	4.5	4.6	20.7	18.8
California	1,706	5.3	5.1	13.8	11.8
Colorado	124	2.7	2.7	10.8	8.1
Connecticut	184	6.0	5.2	17.8	13.9
Delaware	70	8.8	7.8	22.0	16.6
District of Columbia	254	43.8	47.4	17.4	15.2
Florida	2,089	12.0	11.1	19.5	16.9
Georgia	831	9.9	9.7	16.5	16.0
Hawaii	32	2.7	2.4	12.1	8.9
Idaho	14	1.0	1.1	13.3	10.1
Illinois	549	5.1	4.8	15.5	13.9
Indiana	177	3.2	3.2	16.5	16.9
Iowa	36	1.4	1.2	14.7	13.6
Kansas	52	2.2	2.1	18.2	17.0
Kentucky	123	3.3	3.3	18.2	16.9
Louisiana	423	10.9	11.0	21.4	20.9
Maine	19	1.7	1.4	13.2	8.2
Maryland	553	11.0	10.1	16.7	14.0
Massachusetts	298	5.1	4.6	14.9	11.6
Michigan	298	3.6	3.3	20.3	19.6
Minnesota	97	2.1	2.0	12.4	12.9
Mississippi	217	8.8	8.8	23.1	22.9
Missouri	171	3.4	3.2	14.3	13.5
Montana	13	1.5	1.4	22.4	19.5
Nebraska	28	1.8	1.9	13.7	13.3
Nevada	128	5.3	5.1	14.6	13.6
New Hampshire	29	2.5	2.2	24.6	19.0
New Jersey	652	8.6	7.8	18.1	14.7
New Mexico	75	4.3	4.4	22.9	20.3
New York	1,804	10.7	9.8	14.2	11.4
North Carolina	562	6.7	6.3	18.9	16.5
North Dakota	8	1.3	1.6	23.6	25.1
Ohio	307	3.2	3.0	14.8	13.4
Oklahoma	143	4.5	4.5	24.3	22.2
Oregon	111	3.3	3.1	16.7	13.2
Pennsylvania	589	5.4	4.9	17.2	14.1
Rhode Island	26	2.9	2.5	11.2	9.9
South Carolina	292	7.1	6.8	17.9	16.5
South Dakota	7	1.0	0.9	13.5	13.7
Tennessee	341	6.2	6.2	20.4	18.9
Texas	1,312	5.9	6.0	15.8	15.3
Utah	31	1.3	1.5	11.6	9.7
Vermont	5	0.9	0.7	7.7	5.2
Virginia	280	4.0	3.7	13.1	11.2
Washington	148	2.5	2.3	11.8	10.9
West Virginia	30	1.9	1.6	17.1	15.3
Wisconsin	84	1.7	1.6	14.1	12.4
Wyoming	4	0.8	0.8	13.8	10.9
Subtotal	15,939	5.9	5.7	16.3	14.3
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	2	1.6	1.8	22.2	13.5
Northern Mariana Islands	1	2.5	3.7	83.3	23.8
Puerto Rico	393	13.2	12.9	23.5	18.9
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	9	10.2	9.8	16.2	11.4
Subtotal	405	12.3	12.0	23.3	18.7
Total	16,344	6.0	5.7	16.5	14.4

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWDH ^a	Age-adjusted rate per 1,000 PLWDH
2016					
Alabama	265	6.5	6.2	20.6	19.5
Alaska	12	2.0	1.9	17.1	16.2
Arizona	241	4.2	4.0	15.3	13.1
Arkansas	92	3.7	3.6	16.6	15.0
California	1,770	5.4	5.2	13.9	11.7
Colorado	124	2.7	2.6	10.1	8.0
Connecticut	196	6.4	5.5	18.9	13.4
Delaware	54	6.7	5.9	16.8	15.8
District of Columbia	246	41.7	45.4	16.7	13.9
Florida	2,166	12.2	11.2	19.7	16.9
Georgia	824	9.7	9.4	15.8	15.2
Hawaii	35	2.9	2.7	13.3	9.6
Idaho	11	0.8	0.8	10.0	9.2
Illinois	523	4.9	4.6	14.5	13.1
Indiana	198	3.6	3.5	17.9	16.5
Iowa	32	1.2	1.2	12.4	10.5
Kansas	46	1.9	1.9	15.5	13.2
Kentucky	122	3.3	3.2	17.5	15.6
Louisiana	422	10.9	10.9	20.6	19.3
Maine	23	2.0	1.8	14.9	10.1
Maryland	522	10.3	9.5	15.8	13.6
Massachusetts	291	5.0	4.4	14.3	10.3
Michigan	285	3.4	3.1	18.4	17.0
Minnesota	75	1.6	1.5	9.2	9.1
Mississippi	206	8.3	8.2	21.6	20.6
Missouri	198	3.9	3.7	16.2	14.7
Montana	13	1.5	1.6	21.7	14.6
Nebraska	29	1.9	1.8	13.8	13.3
Nevada	150	6.1	5.9	16.2	15.1
New Hampshire	19	1.6	1.7	16.0	12.9
New Jersey	666	8.8	7.8	18.4	14.4
New Mexico	48	2.8	2.5	14.4	12.4
New York	1,868	11.1	10.0	14.5	11.6
North Carolina	520	6.1	5.7	17.0	15.5
North Dakota	4	0.6	0.7	10.6	7.6
Ohio	343	3.5	3.4	15.9	14.3
Oklahoma	122	3.8	3.7	20.2	18.3
Oregon	98	2.8	2.7	14.4	12.0
Pennsylvania	602	5.5	5.0	16.5	14.0
Rhode Island	39	4.3	3.7	16.1	11.8
South Carolina	337	8.1	7.5	20.1	17.8
South Dakota	11	1.6	1.5	20.6	19.7
Tennessee	325	5.8	5.5	19.7	18.8
Texas	1,359	6.0	6.1	15.8	15.4
Utah	47	2.0	2.2	16.9	16.3
Vermont	10	1.8	1.4	15.0	9.5
Virginia	318	4.5	4.2	14.6	12.9
Washington	174	2.9	2.7	13.5	12.5
West Virginia	39	2.5	2.3	21.6	20.4
Wisconsin	86	1.8	1.6	14.1	11.7
Wyoming	5	1.0	1.1	15.9	12.0
Subtotal	16,211	6.0	5.6	16.2	14.1
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	3	2.4	2.9	31.3	31.3
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	398	13.6	12.8	23.9	19.3
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	11	12.5	10.2	19.8	48.2
Subtotal	412	12.7	12.0	23.7	19.8
Total	16,623	6.1	5.7	16.3	14.2

Abbreviations: PLWDH, persons living with diagnosed HIV infection; pop, population.

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.

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

Table 6d. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death, 2010–2016—United States

	2010			2011			2012			2013			2014			2015			2016			
	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	
		100,000	1,000		100,000	1,000		100,000	1,000		100,000	1,000		100,000	1,000		100,000	1,000		100,000	1,000	100,000
		PLWA ^a			PLWA ^a			PLWA ^a			PLWA ^a			PLWA ^a			PLWA ^a			PLWA ^a		
Sex																						
Male	10,269	8.2	27.9	9,963	7.9	26.4	9,754	7.7	25.3	9,721	7.6	24.6	9,772	7.5	24.5	9,732	7.4	24.1	9,719	7.3	23.8	
Female	3,558	2.7	31	3,502	2.6	29.7	3,403	2.5	28.2	3,340	2.5	27.2	3,348	2.5	26.9	3,118	2.3	24.8	3,117	2.3	24.6	
Age at death (yr)																						
13–24	179	0.3	14.3	169	0.3	13.2	145	0.3	11.3	129	0.2	10.1	127	0.2	10.9	115	0.2	11.0	93	0.2	10.0	
25–34	923	2.2	19.0	863	2.1	17.5	874	2.1	17.5	829	1.9	16.4	765	1.8	15.2	756	1.7	15.1	768	1.7	15.3	
35–44	2,755	6.7	20.3	2,420	6.0	19.0	2,115	5.2	17.7	1,917	4.7	16.9	1,827	4.5	17.0	1,645	4.1	16.2	1,528	3.8	15.9	
45–54	5,238	11.6	28.1	5,029	11.2	25.9	4,798	10.8	24.1	4,598	10.5	22.9	4,319	10.0	21.6	4,147	9.6	21.0	3,787	8.8	19.6	
≥55	4,732	6.1	47.4	4,984	6.3	44.5	5,225	6.4	41.6	5,588	6.7	39.9	6,082	7.1	39.4	6,187	7.0	36.5	6,660	7.3	35.8	
Race/ethnicity																						
American Indian/Alaska Native	56	3.1	44.6	47	2.6	36.3	41	2.2	30.6	52	2.8	37.7	44	2.3	31.2	51	2.7	35.1	37	1.9	24.6	
Asian ^b	55	0.4	11.8	68	0.5	13.8	61	0.5	11.7	65	0.5	11.8	48	0.3	8.3	64	0.4	10.6	81	0.5	12.8	
Black/African American	6,674	21.7	34.0	6,367	20.5	31.6	6,192	19.6	29.9	6,027	18.9	28.4	5,978	18.5	27.8	5,751	17.6	26.4	5,675	17.2	25.7	
Hispanic/Latino ^c	2,284	6.0	21.5	2,308	5.9	21.1	2,109	5.3	18.8	2,180	5.3	19.0	2,248	5.3	19.2	2,119	4.9	17.8	2,152	4.9	17.8	
Native Hawaiian/Other Pacific Islander	6	1.5	18.8	6	1.5	17.5	6	1.4	16.8	7	1.6	18.8	6	1.4	15.7	4	0.9	10.1	9	2.0	22.0	
White	4,013	2.4	26.7	3,948	2.3	25.9	4,015	2.4	25.9	3,910	2.3	25.0	3,982	2.3	25.3	4,012	2.3	25.4	4,066	2.4	25.6	
Multiple races	739	20.7	30.1	721	19.5	28.7	733	19.2	28.6	819	20.7	31.3	814	19.8	30.9	849	20.0	32.2	816	18.6	31.0	
Transmission category^d																						
Male-to-male sexual contact	5,270	—	22.7	5,178	—	21.6	5,135	—	20.7	5,197	—	20.3	5,262	—	20.2	5,298	—	19.9	5,339	—	19.7	
Injection drug use																						
Male	2,324	—	42.7	2,145	—	39.9	2,074	—	39.0	1,989	—	37.9	2,001	—	38.8	1,911	—	37.8	1,824	—	36.8	
Female	1,319	—	40.1	1,331	—	40.5	1,232	—	37.7	1,260	—	38.7	1,200	—	37.4	1,100	—	34.7	1,102	—	35.1	
Male-to-male sexual contact and injection drug use	1,164	—	32.4	1,140	—	31.6	1,098	—	30.4	1,129	—	31.3	1,141	—	31.9	1,171	—	33.1	1,133	—	32.3	
Heterosexual contact ^e																						
Male	1,410	—	33.8	1,392	—	32.3	1,346	—	30.2	1,319	—	28.8	1,289	—	27.7	1,261	—	26.6	1,339	—	27.7	
Female	2,186	—	27.9	2,100	—	25.8	2,100	—	25.0	2,023	—	23.4	2,092	—	23.7	1,950	—	21.7	1,950	—	21.3	
Other ^f																						
Male	101	—	23.3	107	—	24.2	101	—	22.6	87	—	19.4	80	—	17.6	91	—	20.0	84	—	18.4	
Female	54	—	15.7	71	—	20.1	71	—	19.5	57	—	15.3	55	—	14.6	68	—	17.6	66	—	16.7	
Region of residence																						
Northeast	3,577	7.7	27.1	3,429	7.3	25.8	3,188	6.7	23.8	3,203	6.7	23.8	3,031	6.3	22.4	2,909	6.1	21.6	2,924	6.1	21.5	
Midwest	1,576	2.8	29.5	1,523	2.7	27.6	1,506	2.7	26.7	1,427	2.5	24.7	1,447	2.6	24.7	1,427	2.5	24.1	1,424	2.5	23.6	
South	6,656	7.0	33.1	6,448	6.7	30.9	6,403	6.6	29.6	6,321	6.4	28.4	6,490	6.5	28.6	6,361	6.3	27.6	6,282	6.2	27.0	
West	2,018	3.4	20.8	2,065	3.4	20.9	2,060	3.4	20.5	2,110	3.4	20.6	2,152	3.5	20.8	2,153	3.4	20.6	2,206	3.5	20.8	
Total^g	13,827	5.4	28.6	13,465	5.2	27.2	13,157	5.0	26.0	13,061	5.0	25.2	13,120	4.9	25.0	12,850	4.8	24.3	12,836	4.7	24.0	

Abbreviation: PLWA, persons living with diagnosed HIV infection ever classified as stage 3 (AIDS).

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.

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

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

^c Hispanics/Latinos 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.

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

^f Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

^g Includes persons of unknown race/ethnicity.

Table 6e. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death, 2010–2016—United States and 6 dependent areas

	2010			2011			2012			2013			2014			2015			2016			
	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	No.	Rate per	Rate per	
		100,000	1,000		100,000	1,000		100,000	1,000		100,000	1,000		100,000	1,000		100,000	1,000		100,000	1,000	100,000
Sex																						
Male	10,582	8.4	28.2	10,275	8.0	26.7	10,001	7.7	25.5	9,968	7.7	24.8	10,021	7.6	24.7	9,958	7.5	24.3	9,944	7.4	24.0	
Female	3,676	2.8	31.2	3,604	2.7	29.9	3,491	2.6	28.3	3,423	2.5	27.2	3,454	2.5	27.1	3,195	2.3	24.9	3,180	2.3	24.5	
Age at death (yr)																						
13–24	182	0.3	14.3	172	0.3	13.3	149	0.3	11.5	134	0.3	10.3	129	0.2	10.9	117	0.2	11.0	98	0.2	10.4	
25–34	952	2.3	19.3	887	2.1	17.8	899	2.1	17.8	846	2.0	16.6	781	1.8	15.4	776	1.7	15.3	776	1.7	15.3	
35–44	2,850	6.9	20.6	2,504	6.1	19.3	2,180	5.3	17.9	1,961	4.8	17.0	1,868	4.6	17.1	1,682	4.1	16.3	1,570	3.8	16.1	
45–54	5,418	11.9	28.4	5,204	11.5	26.3	4,923	11.0	24.3	4,727	10.7	23.1	4,437	10.1	21.8	4,261	9.8	21.2	3,875	8.9	19.7	
≥55	4,856	6.2	47.5	5,112	6.3	44.6	5,341	6.4	41.6	5,723	6.7	40.0	6,260	7.2	39.7	6,317	7.0	36.5	6,805	7.4	35.9	
Race/ethnicity																						
American Indian/Alaska Native	56	—	44.6	47	—	36.3	41	—	30.6	52	—	37.7	44	—	31.2	51	—	35.0	37	—	24.6	
Asian ^b	56	—	12.0	70	—	14.1	62	—	11.8	65	—	11.7	49	—	8.5	64	—	10.6	81	—	12.8	
Black/African American	6,680	—	34.0	6,374	—	31.6	6,201	—	29.9	6,030	—	28.4	5,982	—	27.8	5,755	—	26.4	5,684	—	25.7	
Hispanic/Latino ^c	2,706	—	23.5	2,709	—	22.9	2,432	—	20.0	2,501	—	20.1	2,598	—	20.6	2,416	—	18.9	2,427	—	18.7	
Native Hawaiian/Other Pacific Islander	7	—	20.9	9	—	25.2	6	—	16.2	9	—	23.4	6	—	15.3	5	—	12.1	11	—	25.8	
White	4,014	—	26.7	3,948	—	25.9	4,016	—	25.9	3,912	—	25.0	3,982	—	25.3	4,012	—	25.3	4,067	—	25.6	
Multiple races	739	—	30.1	722	—	28.7	734	—	28.6	821	—	31.3	814	—	30.9	850	—	32.2	817	—	31.1	
Transmission category^d																						
Male-to-male sexual contact	5,330	—	22.8	5,249	—	21.7	5,175	—	20.7	5,262	—	20.4	5,322	—	20.2	5,357	—	20.0	5,392	—	19.8	
Injection drug use																						
Male	2,481	—	43.4	2,295	—	40.7	2,195	—	39.4	2,083	—	37.9	2,111	—	39.1	2,010	—	38.0	1,914	—	36.9	
Female	1,353	—	40.2	1,371	—	40.8	1,258	—	37.6	1,290	—	38.8	1,237	—	37.7	1,116	—	34.4	1,127	—	35.2	
Male-to-male sexual contact and injection drug use	1,198	—	32.8	1,173	—	32.0	1,125	—	30.7	1,154	—	31.5	1,164	—	32.1	1,195	—	33.2	1,162	—	32.7	
Heterosexual contact ^e																						
Male	1,471	—	34.2	1,450	—	32.6	1,402	—	30.6	1,380	—	29.3	1,342	—	27.9	1,303	—	26.7	1,387	—	27.9	
Female	2,267	—	28.2	2,160	—	25.9	2,160	—	25.0	2,075	—	23.4	2,161	—	23.9	2,010	—	21.8	1,986	—	21.2	
Other ^f																						
Male	102	—	23.1	108	—	23.9	104	—	22.8	89	—	19.4	82	—	17.7	92	—	19.8	88	—	18.9	
Female	56	—	15.9	73	—	20.1	74	—	19.8	58	—	15.2	56	—	14.5	69	—	17.5	68	—	16.8	
Region of residence																						
Northeast	3,577	7.7	27.1	3,429	7.3	25.8	3,188	6.7	23.8	3,203	6.7	23.8	3,031	6.3	22.4	2,909	6.1	21.6	2,924	6.1	21.5	
Midwest	1,576	2.8	29.5	1,523	2.7	27.6	1,506	2.7	26.7	1,427	2.5	24.7	1,447	2.6	24.7	1,427	2.5	24.1	1,424	2.5	23.6	
South	6,656	7.0	33.1	6,448	6.7	30.9	6,403	6.6	29.6	6,321	6.4	28.4	6,490	6.5	28.6	6,361	6.3	27.6	6,282	6.2	27.0	
West	2,018	3.4	20.8	2,065	3.4	20.9	2,060	3.4	20.5	2,110	3.4	20.6	2,152	3.5	20.8	2,153	3.4	20.6	2,206	3.5	20.8	
U.S. dependent areas	431	12.6	44.7	414	12.2	43.1	335	9.9	35.2	330	9.8	34.3	355	10.7	36.9	303	9.2	31.8	288	8.9	30.6	
Total^g	14,258	5.5	28.9	13,879	5.3	27.5	13,492	5.1	26.1	13,391	5.0	25.4	13,475	5.0	25.3	13,153	4.8	24.4	13,124	4.8	24.1	

Abbreviation: PLWA, persons living with diagnosed HIV infection ever classified as stage 3 (AIDS).

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.

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

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

^c Hispanics/Latinos 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.

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

^f Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

^g Includes persons of unknown race/ethnicity.

Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWA ^a	Age-adjusted rate per 1,000 PLWA
2010					
Alabama	188	4.7	4.8	40.0	41.1
Alaska	12	2.1	2.1	31.3	35.2
Arizona	170	3.3	3.3	25.9	23.6
Arkansas	87	3.6	3.7	39.9	42.7
California	1,280	4.2	4.2	19.3	19.1
Colorado	115	2.8	2.7	25.4	22.6
Connecticut	183	6.1	5.6	26.9	22.6
Delaware	62	8.2	8.0	32.3	31.8
District of Columbia	221	41.6	46.2	26.7	24.7
Florida	1,721	10.7	10.4	32.8	31.6
Georgia	742	9.4	9.4	32.6	33.1
Hawaii	33	2.9	2.8	21.3	16.6
Idaho	12	1.0	1.1	26.5	22.5
Illinois	541	5.1	5.1	31.5	34.0
Indiana	148	2.8	2.8	30.4	27.3
Iowa	23	0.9	0.9	18.9	17.2
Kansas	40	1.7	1.7	26.3	34.5
Kentucky	95	2.6	2.6	31.9	29.7
Louisiana	370	9.9	10.2	41.6	40.5
Maine	18	1.6	1.5	25.4	19.8
Maryland	511	10.6	10.1	31.9	30.0
Massachusetts	229	4.1	3.9	21.8	19.4
Michigan	253	3.1	3.1	33.9	32.2
Minnesota	67	1.5	1.5	21.2	19.7
Mississippi	156	6.4	6.6	40.5	41.4
Missouri	175	3.5	3.6	30.6	30.8
Montana	10	1.2	1.2	37.3	31.5
Nebraska	26	1.7	1.8	26.8	28.8
Nevada	101	4.5	4.5	27.5	25.2
New Hampshire	18	1.6	1.4	28.7	25.9
New Jersey	650	8.8	8.3	34.4	30.8
New Mexico	47	2.8	2.8	25.9	23.8
New York	1,870	11.4	11.0	25.1	21.1
North Carolina	418	5.3	5.2	38.0	34.3
North Dakota	5	0.9	1.0	47.6	54.2
Ohio	218	2.3	2.3	25.5	26.4
Oklahoma	84	2.7	2.8	32.6	28.3
Oregon	80	2.5	2.5	22.3	19.2
Pennsylvania	563	5.2	5.0	30.8	29.1
Rhode Island	33	3.7	3.7	25.5	27.8
South Carolina	288	7.5	7.5	35.4	32.3
South Dakota	6	0.9	1.0	36.8	34.5
Tennessee	297	5.6	5.6	38.8	43.1
Texas	1,154	5.7	5.9	30.8	30.5
Utah	21	1.0	1.2	17.0	11.8
Vermont	13	2.4	2.0	48.0	31.1
Virginia	240	3.6	3.5	26.3	23.8
Washington	130	2.3	2.3	20.7	18.4
West Virginia	22	1.4	1.4	23.8	22.5
Wisconsin	74	1.6	1.5	29.2	28.8
Wyoming	7	1.5	1.5	49.0	75.7
Subtotal	13,827	5.4	5.3	28.6	27.3
U.S. dependent areas					
American Samoa	1	2.6	2.8	1,000.0	199.8
Guam	2	1.6	1.7	58.8	31.7
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	422	13.6	14.1	45.5	39.3
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	6	6.8	7.5	18.6	18.2
Subtotal	431	12.6	13.1	44.7	38.7
Total	14,258	5.5	5.4	28.9	27.5

Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWA ^a	Age-adjusted rate per 1,000 PLWA
2011					
Alabama	184	4.6	4.6	36.2	39.6
Alaska	9	1.5	1.5	23.2	17.5
Arizona	157	3.0	3.0	23.3	22.2
Arkansas	92	3.8	4.0	41.5	46.3
California	1,341	4.3	4.3	19.9	18.1
Colorado	107	2.5	2.5	22.8	19.8
Connecticut	181	6.0	5.5	26.8	23.4
Delaware	56	7.4	6.9	28.7	20.8
District of Columbia	228	42.0	46.2	27.8	25.9
Florida	1,729	10.6	10.3	32.2	31.2
Georgia	667	8.3	8.3	28.7	29.6
Hawaii	32	2.8	2.6	20.9	16.7
Idaho	12	0.9	1.0	25.2	17.3
Illinois	459	4.3	4.2	26.1	23.2
Indiana	171	3.2	3.2	33.6	32.7
Iowa	29	1.1	1.1	23.1	29.8
Kansas	41	1.8	1.8	26.3	19.0
Kentucky	92	2.5	2.5	30.0	27.6
Louisiana	406	10.8	10.9	43.4	42.3
Maine	15	1.3	1.1	21.2	17.9
Maryland	486	10.0	9.5	29.6	25.9
Massachusetts	222	3.9	3.8	20.5	18.5
Michigan	244	3.0	2.9	32.0	27.0
Minnesota	70	1.6	1.6	21.2	23.2
Mississippi	156	6.4	6.4	38.1	37.7
Missouri	156	3.1	3.0	26.4	25.8
Montana	7	0.8	0.8	23.3	23.7
Nebraska	20	1.3	1.4	20.0	22.5
Nevada	111	5.0	5.0	29.5	26.2
New Hampshire	13	1.2	1.0	20.6	33.4
New Jersey	606	8.2	7.7	32.0	26.6
New Mexico	44	2.6	2.6	23.8	20.5
New York	1,829	11.1	10.6	24.4	21.8
North Carolina	372	4.6	4.5	32.6	31.5
North Dakota	4	0.7	0.6	37.4	40.4
Ohio	246	2.6	2.5	27.7	28.0
Oklahoma	94	3.0	3.2	35.6	36.6
Oregon	84	2.6	2.5	22.8	22.6
Pennsylvania	519	4.8	4.6	28.0	25.5
Rhode Island	38	4.2	3.8	29.3	25.8
South Carolina	283	7.3	7.2	28.5	28.3
South Dakota	5	0.7	0.7	27.3	28.6
Tennessee	242	4.5	4.5	30.9	29.4
Texas	1,093	5.3	5.4	28.0	27.7
Utah	16	0.7	0.9	12.6	8.8
Vermont	6	1.1	0.9	21.3	13.0
Virginia	238	3.5	3.4	25.5	23.6
Washington	140	2.5	2.4	22.0	17.6
West Virginia	30	1.9	1.8	30.6	24.8
Wisconsin	78	1.6	1.6	29.5	25.6
Wyoming	5	1.1	0.9	34.7	36.2
Subtotal	13,465	5.2	5.1	27.2	25.4
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	5	4.1	4.5	151.5	66.6
Northern Mariana Islands	1	2.5	1.8	333.3	0.0
Puerto Rico	399	12.9	13.3	43.1	37.1
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	9	10.2	9.7	28.7	20.1
Subtotal	414	12.2	12.5	43.1	36.9
Total	13,879	5.3	5.2	27.5	25.6

Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWA ^a	Age-adjusted rate per 1,000 PLWA
2012					
Alabama	202	5.0	5.1	38.1	38.4
Alaska	8	1.3	1.3	21.0	11.6
Arizona	168	3.1	3.1	24.0	24.8
Arkansas	73	3.0	3.1	32.3	30.9
California	1,308	4.2	4.2	19.1	17.6
Colorado	86	2.0	2.0	17.9	14.8
Connecticut	171	5.6	5.1	25.4	23.4
Delaware	70	9.1	8.5	35.4	28.9
District of Columbia	191	34.5	38.6	22.7	20.8
Florida	1,682	10.2	9.8	30.0	27.9
Georgia	677	8.3	8.3	27.7	28.3
Hawaii	44	3.8	3.6	28.8	21.4
Idaho	17	1.3	1.3	33.5	50.1
Illinois	435	4.1	4.0	24.3	21.5
Indiana	145	2.7	2.6	27.8	28.3
Iowa	36	1.4	1.5	27.4	22.2
Kansas	39	1.7	1.6	24.9	22.8
Kentucky	88	2.4	2.4	28.0	27.0
Louisiana	393	10.4	10.6	41.0	38.6
Maine	17	1.5	1.3	23.7	23.8
Maryland	508	10.3	9.8	30.4	27.5
Massachusetts	222	3.9	3.7	19.8	17.2
Michigan	274	3.3	3.3	35.1	31.8
Minnesota	68	1.5	1.4	19.7	18.8
Mississippi	145	5.9	6.2	34.7	31.8
Missouri	154	3.1	3.1	25.4	22.8
Montana	4	0.5	0.6	13.2	7.5
Nebraska	24	1.6	1.5	23.8	19.4
Nevada	136	6.0	5.9	35.1	40.5
New Hampshire	16	1.4	1.2	25.1	18.2
New Jersey	538	7.2	6.6	28.4	24.9
New Mexico	42	2.5	2.6	22.8	19.1
New York	1,714	10.3	9.7	22.8	19.1
North Carolina	364	4.5	4.3	29.8	27.3
North Dakota	3	0.5	0.5	25.9	29.7
Ohio	254	2.6	2.5	27.8	25.4
Oklahoma	93	3.0	3.0	34.1	29.1
Oregon	90	2.7	2.7	24.1	19.3
Pennsylvania	473	4.4	4.2	25.1	21.7
Rhode Island	34	3.8	3.5	26.0	23.5
South Carolina	266	6.7	6.6	29.5	27.3
South Dakota	7	1.0	1.3	35.9	26.8
Tennessee	259	4.8	4.9	31.6	28.3
Texas	1,105	5.3	5.4	27.2	26.4
Utah	24	1.1	1.2	18.3	14.6
Vermont	3	0.6	0.6	9.8	7.8
Virginia	255	3.7	3.6	25.6	23.5
Washington	132	2.3	2.2	20.4	16.5
West Virginia	32	2.0	1.8	30.9	25.8
Wisconsin	67	1.4	1.3	24.8	20.2
Wyoming	1	0.2	0.2	6.7	2.6
Subtotal	13,157	5.0	4.9	26.0	23.7
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	1	0.8	0.9	33.3	25.0
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	321	10.5	10.7	35.0	32.3
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	13	14.7	13.8	41.7	63.0
Subtotal	335	9.9	10.1	35.2	33.4
Total	13,492	5.1	5.0	26.1	23.8

Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWA ^a	Age-adjusted rate per 1,000 PLWA
2013					
Alabama	186	4.6	4.7	34.0	32.5
Alaska	13	2.2	2.2	34.3	34.4
Arizona	179	3.3	3.3	24.8	22.1
Arkansas	93	3.8	4.1	39.3	36.7
California	1,347	4.2	4.2	19.3	17.2
Colorado	96	2.2	2.1	19.6	19.1
Connecticut	156	5.1	4.6	22.9	17.5
Delaware	62	8.0	7.2	31.2	27.4
District of Columbia	166	29.4	32.4	19.8	18.5
Florida	1,678	10.0	9.4	29.3	26.0
Georgia	658	8.0	8.0	24.8	23.7
Hawaii	29	2.5	2.3	18.7	11.5
Idaho	11	0.8	0.8	21.0	16.5
Illinois	402	3.7	3.6	22.2	19.0
Indiana	152	2.8	2.8	28.6	27.7
Iowa	38	1.5	1.4	28.1	23.3
Kansas	42	1.8	1.8	26.8	24.6
Kentucky	90	2.5	2.5	26.7	23.2
Louisiana	357	9.3	9.7	35.8	34.3
Maine	24	2.1	1.9	32.2	25.1
Maryland	500	10.1	9.4	29.5	24.4
Massachusetts	220	3.8	3.5	19.4	16.1
Michigan	230	2.8	2.7	28.9	25.3
Minnesota	65	1.4	1.4	18.5	18.4
Mississippi	178	7.2	7.4	40.6	39.0
Missouri	153	3.0	3.0	24.9	24.3
Montana	12	1.4	1.4	36.6	25.9
Nebraska	27	1.8	1.9	26.2	22.2
Nevada	118	5.1	5.0	29.8	25.9
New Hampshire	12	1.1	1.0	18.8	13.4
New Jersey	565	7.6	6.9	29.1	25.6
New Mexico	39	2.3	2.3	21.5	17.7
New York	1,677	10.1	9.4	22.4	17.7
North Carolina	395	4.8	4.7	31.0	28.5
North Dakota	3	0.5	0.5	23.3	22.1
Ohio	234	2.4	2.4	24.9	21.7
Oklahoma	107	3.4	3.4	38.0	35.9
Oregon	95	2.9	2.8	25.6	19.9
Pennsylvania	511	4.7	4.4	26.9	23.3
Rhode Island	31	3.4	3.1	23.4	16.3
South Carolina	253	6.3	6.3	28.3	25.2
South Dakota	5	0.7	0.8	24.9	13.9
Tennessee	258	4.8	4.7	30.4	27.5
Texas	1,049	4.9	5.0	24.9	24.9
Utah	31	1.4	1.6	22.0	17.3
Vermont	7	1.3	1.0	21.5	12.8
Virginia	260	3.8	3.6	26.1	22.6
Washington	134	2.3	2.2	20.2	15.8
West Virginia	31	2.0	1.9	30.5	22.9
Wisconsin	76	1.6	1.5	25.1	21.5
Wyoming	6	1.2	1.3	39.2	35.2
Subtotal	13,061	5.0	4.8	25.2	22.4
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	2	1.6	1.7	66.7	44.3
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	320	10.5	10.3	34.5	31.3
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	8	9.1	8.3	25.9	45.0
Subtotal	330	9.8	9.7	34.3	32.0
Total	13,391	5.0	4.9	25.4	22.6

Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWA ^a	Age-adjusted rate per 1,000 PLWA
2014					
Alabama	210	5.2	5.1	37.0	36.3
Alaska	10	1.7	1.7	28.2	24.9
Arizona	172	3.1	3.1	23.1	22.1
Arkansas	96	3.9	4.0	38.8	34.6
California	1,387	4.3	4.2	19.9	17.5
Colorado	121	2.7	2.7	24.0	28.5
Connecticut	161	5.2	4.7	24.5	20.0
Delaware	70	8.9	8.0	35.4	27.6
District of Columbia	173	30.3	32.8	21.8	19.5
Florida	1,659	9.7	9.1	28.2	24.7
Georgia	740	8.9	8.8	28.5	26.7
Hawaii	36	3.0	3.0	23.1	15.0
Idaho	16	1.2	1.2	30.4	25.2
Illinois	425	4.0	3.7	23.2	20.4
Indiana	142	2.6	2.6	26.3	25.1
Iowa	49	1.9	1.9	35.2	27.0
Kansas	35	1.5	1.5	21.9	20.4
Kentucky	87	2.4	2.4	25.3	22.8
Louisiana	342	8.9	9.1	33.2	33.3
Maine	15	1.3	0.9	19.8	13.2
Maryland	483	9.6	8.9	27.7	22.0
Massachusetts	215	3.7	3.4	18.8	15.8
Michigan	219	2.6	2.5	27.5	23.4
Minnesota	70	1.5	1.5	19.3	19.4
Mississippi	192	7.8	7.8	42.0	38.6
Missouri	135	2.7	2.6	21.6	18.6
Montana	7	0.8	0.8	21.3	17.5
Nebraska	23	1.5	1.6	21.7	16.1
Nevada	107	4.5	4.6	25.4	25.8
New Hampshire	9	0.8	0.7	13.9	12.5
New Jersey	514	6.8	6.1	26.6	23.1
New Mexico	52	3.0	3.1	28.0	24.1
New York	1,579	9.4	8.7	20.9	16.8
North Carolina	402	4.8	4.7	30.4	26.9
North Dakota	6	1.0	1.1	39.7	38.0
Ohio	260	2.7	2.6	26.9	24.0
Oklahoma	116	3.6	3.7	40.1	31.2
Oregon	81	2.4	2.3	21.7	21.0
Pennsylvania	502	4.6	4.3	26.2	21.7
Rhode Island	33	3.6	3.1	24.6	19.1
South Carolina	275	6.8	6.5	30.9	29.2
South Dakota	6	0.9	0.9	26.4	19.5
Tennessee	262	4.8	4.6	31.2	29.9
Texas	1,117	5.1	5.3	25.8	23.6
Utah	17	0.7	0.9	12.0	8.1
Vermont	3	0.6	0.4	8.8	5.0
Virginia	237	3.4	3.2	23.4	21.7
Washington	141	2.4	2.3	20.6	16.8
West Virginia	29	1.8	1.7	28.2	28.8
Wisconsin	77	1.6	1.5	25.3	27.5
Wyoming	5	1.0	1.1	32.9	22.0
Subtotal	13,120	4.9	4.7	25.0	22.1
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	1	0.8	0.9	34.5	37.5
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	349	11.6	11.0	37.6	31.7
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	5	5.7	4.4	16.0	10.6
Subtotal	355	10.7	10.1	36.9	30.9
Total	13,475	5.0	4.8	25.3	22.2

Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWA ^a	Age-adjusted rate per 1,000 PLWA
2015					
Alabama	211	5.2	5.2	37.3	33.4
Alaska	9	1.5	1.6	24.2	20.8
Arizona	174	3.1	3.0	22.9	20.5
Arkansas	83	3.4	3.5	33.2	30.9
California	1,415	4.4	4.3	20.1	16.7
Colorado	103	2.3	2.2	19.9	14.6
Connecticut	159	5.2	4.5	24.2	21.9
Delaware	57	7.1	6.4	28.8	19.9
District of Columbia	191	32.9	35.9	24.1	22.2
Florida	1,737	10.0	9.3	29.0	25.7
Georgia	654	7.8	7.6	24.8	22.4
Hawaii	27	2.3	2.1	17.6	12.4
Idaho	7	0.5	0.5	13.3	10.0
Illinois	453	4.2	4.0	24.6	20.5
Indiana	138	2.5	2.5	25.0	28.8
Iowa	29	1.1	1.0	20.9	17.2
Kansas	44	1.8	1.8	28.7	23.6
Kentucky	93	2.5	2.5	26.8	23.8
Louisiana	350	9.1	9.1	33.4	32.8
Maine	15	1.3	1.2	19.7	10.9
Maryland	460	9.1	8.4	25.3	19.9
Massachusetts	225	3.9	3.5	19.6	14.9
Michigan	238	2.8	2.6	30.5	28.0
Minnesota	68	1.5	1.4	18.2	23.7
Mississippi	175	7.1	7.1	37.7	34.9
Missouri	127	2.5	2.4	19.8	18.1
Montana	11	1.3	1.2	32.0	27.3
Nebraska	22	1.4	1.4	20.3	26.3
Nevada	104	4.3	4.2	23.8	22.7
New Hampshire	24	2.1	1.8	38.2	28.2
New Jersey	524	6.9	6.3	27.3	22.6
New Mexico	68	3.9	3.9	35.9	37.3
New York	1,477	8.8	8.0	19.6	15.8
North Carolina	407	4.8	4.6	29.8	23.9
North Dakota	7	1.1	1.3	40.5	39.3
Ohio	230	2.4	2.3	23.1	20.6
Oklahoma	122	3.8	3.9	41.5	39.1
Oregon	88	2.6	2.4	22.7	16.5
Pennsylvania	464	4.3	3.9	24.1	18.0
Rhode Island	18	2.0	1.6	13.4	10.4
South Carolina	232	5.6	5.4	25.8	24.7
South Dakota	6	0.9	0.7	25.6	26.0
Tennessee	252	4.6	4.6	29.6	28.2
Texas	1,089	4.9	5.0	24.6	21.9
Utah	27	1.2	1.3	18.7	13.4
Vermont	3	0.6	0.4	8.5	5.1
Virginia	220	3.1	2.9	21.5	17.9
Washington	119	2.0	1.9	17.1	16.4
West Virginia	28	1.8	1.5	28.1	22.0
Wisconsin	65	1.3	1.2	21.6	18.9
Wyoming	1	0.2	0.2	6.5	2.8
Subtotal	12,850	4.8	4.6	24.3	21.1
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	2	1.6	1.8	60.6	32.6
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	295	9.9	9.6	32.2	29.0
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	6	6.8	6.2	19.4	13.2
Subtotal	303	9.2	8.9	31.8	28.4
Total	13,153	4.8	4.6	24.4	21.2

Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)

	No.	Rate per 100,000 pop	Age-adjusted rate per 100,000 pop	Rate per 1,000 PLWA ^a	Age-adjusted rate per 1,000 PLWA
2016					
Alabama	198	4.9	4.7	34.3	32.4
Alaska	7	1.2	1.1	18.0	14.2
Arizona	193	3.4	3.2	25.0	19.8
Arkansas	66	2.7	2.5	25.8	20.2
California	1,453	4.4	4.3	20.4	17.5
Colorado	96	2.1	2.0	17.5	13.4
Connecticut	161	5.2	4.6	24.7	16.8
Delaware	46	5.7	5.0	23.2	25.7
District of Columbia	189	32.1	35.0	23.9	19.3
Florida	1,762	10	9.1	29.2	24.8
Georgia	645	7.6	7.4	24.1	22.0
Hawaii	28	2.3	2.2	18.5	12.9
Idaho	8	0.6	0.5	14.4	10.9
Illinois	409	3.8	3.6	22.2	18.6
Indiana	159	2.9	2.8	28.4	24.6
Iowa	28	1.1	1.0	19.1	15.3
Kansas	34	1.4	1.4	21.9	16.6
Kentucky	94	2.5	2.4	26.5	22.6
Louisiana	333	8.6	8.6	31.2	29.4
Maine	16	1.4	1.2	20.2	11.7
Maryland	423	8.4	7.7	23.9	19.9
Massachusetts	216	3.7	3.2	18.8	12.2
Michigan	224	2.7	2.5	27.5	22.8
Minnesota	58	1.3	1.2	15.2	14.8
Mississippi	164	6.6	6.5	34.8	30.5
Missouri	165	3.2	3.0	25.6	22.0
Montana	9	1.0	1.1	26.0	15.7
Nebraska	26	1.7	1.6	24.0	21.4
Nevada	117	4.8	4.6	25.6	25.9
New Hampshire	14	1.2	1.2	22.4	17.7
New Jersey	484	6.4	5.7	25.7	21.2
New Mexico	41	2.4	2.1	21.8	17.6
New York	1,535	9.1	8.2	20.4	16.3
North Carolina	381	4.5	4.2	27.4	25.6
North Dakota	3	0.5	0.5	16.2	10.2
Ohio	246	2.5	2.5	23.8	19.3
Oklahoma	93	2.9	2.8	31.2	25.7
Oregon	78	2.3	2.1	19.9	13.9
Pennsylvania	454	4.2	3.8	22.2	18.9
Rhode Island	34	3.7	3.2	24.7	14.7
South Carolina	276	6.6	6.2	30.3	25.1
South Dakota	6	0.9	0.8	24.9	23.6
Tennessee	242	4.3	4.2	28.9	25.3
Texas	1,089	4.8	4.9	24.2	21.9
Utah	36	1.5	1.7	24.6	19.3
Vermont	10	1.8	1.4	27.7	14.8
Virginia	248	3.5	3.3	23.9	21.8
Washington	136	2.2	2.0	19.3	17.5
West Virginia	33	2.1	1.9	32.4	25.8
Wisconsin	66	1.4	1.2	21.7	17.0
Wyoming	4	0.8	0.9	22.7	12.5
Subtotal	12,836	4.7	4.5	24.0	20.4
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	3	2.4	2.9	81.1	69.1
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	274	9.3	8.8	30.2	27.5
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	11	12.5	10.2	35.3	99.5
Subtotal	288	8.9	8.4	30.6	30.5
Total	13,124	4.8	4.5	24.1	20.6

Abbreviations: PLWA, persons living with diagnosed HIV infection ever classified as stage 3 (AIDS); pop, population.

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.

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

Table 7a. Persons surviving >3 years after a diagnosis of HIV infection during 2008–2013, by year of diagnosis and selected characteristics—United States

	No.	Proportion survived >3 years					
		2008	2009	2010	2011	2012	2013
Sex							
Male	199,874	0.92	0.93	0.94	0.94	0.94	0.94
Female	55,379	0.92	0.92	0.93	0.93	0.93	0.93
Age at diagnosis (yr)							
13–24	52,955	0.98	0.98	0.99	0.99	0.99	0.99
25–34	70,896	0.96	0.97	0.97	0.97	0.97	0.97
35–44	59,549	0.93	0.93	0.94	0.94	0.95	0.94
45–54	48,358	0.88	0.88	0.89	0.89	0.90	0.90
≥55	23,495	0.76	0.78	0.79	0.8	0.81	0.81
Race/ethnicity							
American Indian/Alaska Native	901	0.89	0.87	0.88	0.91	0.92	0.90
Asian	4,150	0.93	0.94	0.95	0.96	0.97	0.96
Black/African American	115,310	0.91	0.92	0.93	0.94	0.94	0.94
Hispanic/Latino ^a	55,055	0.94	0.94	0.95	0.95	0.95	0.95
Native Hawaiian/Other Pacific Islander	292	*	*	*	*	*	*
White	68,280	0.92	0.93	0.93	0.93	0.94	0.93
Multiple races	11,265	0.94	0.94	0.94	0.95	0.95	0.94
Transmission category^b							
Male-to-male sexual contact	154,963	0.94	0.94	0.95	0.95	0.96	0.95
Injection drug use							
Male	11,017	0.84	0.85	0.85	0.86	0.86	0.85
Female	8,344	0.89	0.88	0.89	0.89	0.89	0.88
Male-to-male sexual contact and injection drug use	9,819	0.93	0.94	0.93	0.95	0.94	0.94
Heterosexual contact ^c							
Male	23,805	0.88	0.88	0.90	0.90	0.90	0.89
Female	46,798	0.93	0.93	0.94	0.93	0.94	0.93
Total^d	255,253	0.92	0.93	0.93	0.94	0.94	0.94

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 diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

^a Hispanics/Latinos can be of any race.

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

^c Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

^d Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

Table 7b. Persons surviving >3 years after a diagnosis of HIV infection during 2008–2013, by year of diagnosis and selected characteristics—United States and 6 dependent areas

	No.	Proportion survived >3 years					
		2008	2009	2010	2011	2012	2013
Sex							
Male	203,389	0.92	0.93	0.93	0.94	0.94	0.94
Female	56,680	0.92	0.92	0.93	0.92	0.93	0.92
Age at diagnosis (yr)							
13–24	53,593	0.98	0.98	0.99	0.99	0.99	0.99
25–34	72,125	0.96	0.96	0.97	0.97	0.97	0.97
35–44	60,783	0.93	0.93	0.94	0.94	0.95	0.94
45–54	49,438	0.88	0.88	0.89	0.89	0.90	0.90
≥55	24,130	0.75	0.77	0.78	0.80	0.81	0.80
Race/ethnicity							
American Indian/Alaska Native	901	0.89	0.87	0.88	0.91	0.92	0.90
Asian	4,155	0.93	0.94	0.95	0.96	0.97	0.96
Black/African American	115,402	0.91	0.92	0.93	0.94	0.94	0.94
Hispanic/Latino ^a	59,740	0.93	0.93	0.94	0.94	0.94	0.94
Native Hawaiian/Other Pacific Islander	304	*	*	*	*	*	*
White	68,296	0.92	0.93	0.93	0.93	0.94	0.93
Multiple races	11,271	0.94	0.94	0.94	0.95	0.95	0.94
Transmission category^b							
Male-to-male sexual contact	156,643	0.94	0.94	0.95	0.95	0.96	0.95
Injection drug use							
Male	11,816	0.84	0.84	0.84	0.84	0.85	0.84
Female	8,536	0.89	0.88	0.89	0.89	0.89	0.88
Male-to-male sexual contact and injection drug use	9,984	0.93	0.94	0.93	0.95	0.94	0.94
Heterosexual contact ^c							
Male	24,670	0.87	0.88	0.89	0.89	0.90	0.89
Female	47,904	0.93	0.93	0.93	0.93	0.94	0.93
Total^d	260,069	0.92	0.93	0.93	0.93	0.94	0.94

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 diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

^a Hispanics/Latinos can be of any race.

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

^c Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

^d Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

Table 7c. Persons surviving >3 years after a diagnosis of HIV infection during 2008–2013, by year of diagnosis and area of residence—United States and 6 dependent areas

	No.	Proportion survived >3 years					
		2008	2009	2010	2011	2012	2013
Alabama	4,064	0.92	0.90	0.93	0.93	0.93	0.93
Alaska	169	*	*	*	*	*	*
Arizona	3,803	0.92	0.91	0.94	0.93	0.92	0.94
Arkansas	1,502	0.88	0.88	0.94	0.91	0.96	0.92
California	30,790	0.94	0.94	0.94	0.94	0.95	0.94
Colorado	2,271	0.95	0.94	0.96	0.95	0.97	0.97
Connecticut	2,034	0.96	0.95	0.96	0.93	0.95	0.94
Delaware	784	0.91	0.89	0.91	0.94	0.93	0.96
District of Columbia	4,328	0.93	0.93	0.95	0.95	0.96	0.97
Florida	28,673	0.91	0.92	0.93	0.92	0.94	0.93
Georgia	16,509	0.91	0.92	0.93	0.93	0.93	0.94
Hawaii	531	*	*	*	*	*	*
Idaho	239	*	*	*	*	*	*
Illinois	10,114	0.93	0.93	0.93	0.95	0.96	0.95
Indiana	2,832	0.92	0.92	0.93	0.94	0.95	0.93
Iowa	681	0.93	0.90	0.89	0.95	0.93	0.92
Kansas	860	0.93	0.93	0.95	0.96	0.95	0.90
Kentucky	2,049	0.90	0.93	0.92	0.93	0.93	0.92
Louisiana	6,703	0.89	0.91	0.93	0.93	0.92	0.94
Maine	285	*	*	*	*	*	*
Maryland	9,501	0.91	0.92	0.94	0.94	0.95	0.94
Massachusetts	4,141	0.95	0.96	0.97	0.96	0.98	0.97
Michigan	4,627	0.93	0.93	0.94	0.93	0.95	0.93
Minnesota	1,949	0.96	0.97	0.97	0.96	0.97	0.93
Mississippi	2,907	0.90	0.89	0.92	0.91	0.94	0.92
Missouri	3,149	0.95	0.96	0.95	0.95	0.95	0.94
Montana	136	*	*	*	*	*	*
Nebraska	558	*	*	*	*	*	*
Nevada	2,302	0.89	0.93	0.91	0.92	0.92	0.94
New Hampshire	251	*	*	*	*	*	*
New Jersey	7,891	0.92	0.90	0.93	0.91	0.93	0.91
New Mexico	854	0.89	0.86	0.90	0.95	0.97	0.94
New York	22,857	0.92	0.94	0.93	0.94	0.95	0.95
North Carolina	8,661	0.92	0.94	0.93	0.93	0.94	0.95
North Dakota	81	*	*	*	*	*	*
Ohio	6,170	0.94	0.94	0.96	0.95	0.95	0.95
Oklahoma	1,795	0.91	0.92	0.93	0.91	0.94	0.92
Oregon	1,480	0.95	0.94	0.93	0.94	0.93	0.96
Pennsylvania	8,988	0.91	0.93	0.91	0.93	0.93	0.93
Rhode Island	603	0.92	0.97	0.93	0.99	1.00	0.99
South Carolina	4,380	0.91	0.92	0.94	0.93	0.95	0.93
South Dakota	160	*	*	*	*	*	*
Tennessee	5,251	0.92	0.91	0.92	0.94	0.92	0.92
Texas	25,746	0.92	0.93	0.93	0.94	0.94	0.94
Utah	675	0.98	0.97	0.96	0.96	0.95	0.94
Vermont	92	*	*	*	*	*	*
Virginia	5,786	0.92	0.94	0.95	0.94	0.94	0.95
Washington	3,005	0.94	0.93	0.95	0.94	0.97	0.95
West Virginia	471	*	*	*	*	*	*
Wisconsin	1,466	0.95	0.95	0.97	0.95	0.96	0.95
Wyoming	99	*	*	*	*	*	*
Subtotal	255,253	0.92	0.93	0.93	0.94	0.94	0.94
U.S. dependent areas							
American Samoa	0	*	*	*	*	*	*
Guam	22	*	*	*	*	*	*
Northern Mariana Islands	4	*	*	*	*	*	*
Puerto Rico	4,622	0.83	0.81	0.86	0.86	0.88	0.86
Republic of Palau	3	*	*	*	*	*	*
U.S. Virgin Islands	165	*	*	*	*	*	*
Subtotal	4,816	0.83	0.82	0.86	0.86	0.88	0.86
Total	260,069	0.92	0.93	0.93	0.93	0.94	0.94

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 diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

Table 7d. Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2008–2013, by year of diagnosis and selected characteristics—United States

	No.	Proportion survived >3 years					
		2008	2009	2010	2011	2012	2013
Sex							
Male	121,985	0.85	0.86	0.86	0.86	0.87	0.86
Female	41,103	0.84	0.85	0.85	0.85	0.85	0.85
Age at year-end 2015 (yr)							
13–24	14,339	0.94	0.95	0.95	0.96	0.95	0.96
25–34	37,407	0.90	0.92	0.92	0.92	0.93	0.92
35–44	46,814	0.87	0.88	0.89	0.89	0.89	0.89
45–54	43,345	0.81	0.82	0.83	0.82	0.83	0.83
≥55	21,183	0.68	0.70	0.69	0.70	0.72	0.71
Race/ethnicity							
American Indian/Alaska Native	582	*	*	*	*	*	*
Asian	2,096	0.90	0.90	0.91	0.92	0.94	0.91
Black/African American	76,600	0.83	0.84	0.85	0.85	0.86	0.86
Hispanic/Latino ^a	34,200	0.88	0.88	0.88	0.88	0.89	0.88
Native Hawaiian/Other Pacific Islander	153	*	*	*	*	*	*
White	40,844	0.84	0.86	0.85	0.85	0.85	0.84
Multiple races	8,613	0.88	0.87	0.87	0.88	0.88	0.88
Transmission category^b							
Male-to-male sexual contact	83,258	0.87	0.88	0.88	0.88	0.89	0.88
Injection drug use							
Male	11,067	0.77	0.77	0.78	0.77	0.77	0.76
Female	8,405	0.79	0.80	0.80	0.80	0.80	0.79
Male-to-male sexual contact and injection drug use	8,622	0.86	0.87	0.86	0.86	0.86	0.84
Heterosexual contact ^c							
Male	18,297	0.81	0.82	0.83	0.83	0.84	0.83
Female	31,982	0.85	0.86	0.86	0.86	0.86	0.85
Total^d	163,088	0.85	0.86	0.86	0.86	0.86	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 diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

^a Hispanics/Latinos can be of any race.

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

^c Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

^d Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

Table 7e. Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2008–2013, by year of diagnosis and selected characteristics—United States and 6 dependent areas

	No.	Proportion survived >3 years					
		2008	2009	2010	2011	2012	2013
Sex							
Male	124,300	0.85	0.86	0.86	0.86	0.87	0.86
Female	42,080	0.83	0.84	0.85	0.85	0.85	0.84
Age at year-end 2015 (yr)							
13–24	14,487	0.94	0.95	0.95	0.96	0.95	0.96
25–34	37,982	0.90	0.92	0.92	0.92	0.93	0.92
35–44	47,784	0.87	0.88	0.88	0.89	0.89	0.89
45–54	44,386	0.81	0.82	0.82	0.82	0.83	0.83
≥55	21,741	0.67	0.70	0.69	0.70	0.71	0.71
Race/ethnicity							
American Indian/Alaska Native	582	*	*	*	*	*	*
Asian	2,102	0.90	0.90	0.91	0.91	0.94	0.91
Black/African American	76,658	0.83	0.84	0.85	0.85	0.86	0.86
Hispanic/Latino ^a	37,405	0.86	0.87	0.87	0.87	0.88	0.87
Native Hawaiian/Other Pacific Islander	161	*	*	*	*	*	*
White	40,855	0.84	0.86	0.85	0.85	0.85	0.84
Multiple races	8,617	0.88	0.87	0.87	0.88	0.88	0.88
Transmission category^b							
Male-to-male sexual contact	84,042	0.87	0.88	0.88	0.88	0.89	0.88
Injection drug use							
Male	11,828	0.76	0.76	0.77	0.77	0.76	0.75
Female	8,609	0.78	0.80	0.80	0.80	0.79	0.79
Male-to-male sexual contact and injection drug use	8,786	0.86	0.87	0.85	0.86	0.86	0.84
Heterosexual contact ^c							
Male	18,881	0.80	0.82	0.83	0.82	0.84	0.82
Female	32,745	0.85	0.86	0.86	0.86	0.86	0.85
Total^d	166,380	0.84	0.85	0.86	0.86	0.86	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 diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

^a Hispanics/Latinos can be of any race.

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

^c Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

^d Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

Table 7f. Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2008–2013, by year of diagnosis and area of residence—United States and 6 dependent areas

	No.	Proportion survived >3 years					
		2008	2009	2010	2011	2012	2013
Alabama	2,182	0.82	0.79	0.81	0.84	0.81	0.82
Alaska	120	*	*	*	*	*	*
Arizona	2,512	0.83	0.87	0.87	0.85	0.82	0.84
Arkansas	852	0.76	0.80	0.78	0.78	0.87	0.87
California	18,357	0.88	0.88	0.88	0.88	0.87	0.87
Colorado	1,491	0.91	0.88	0.90	0.87	0.91	0.89
Connecticut	1,540	0.83	0.88	0.91	0.90	0.89	0.88
Delaware	582	*	*	*	*	*	*
District of Columbia	2,416	0.83	0.87	0.87	0.88	0.88	0.89
Florida	19,831	0.82	0.84	0.83	0.82	0.85	0.82
Georgia	10,364	0.83	0.84	0.85	0.85	0.85	0.86
Hawaii	363	*	*	*	*	*	*
Idaho	161	*	*	*	*	*	*
Illinois	6,024	0.85	0.87	0.85	0.88	0.89	0.89
Indiana	1,860	0.87	0.81	0.85	0.86	0.87	0.85
Iowa	458	*	*	*	*	*	*
Kansas	537	*	*	*	*	*	*
Kentucky	1,188	0.83	0.85	0.83	0.85	0.84	0.81
Louisiana	4,667	0.80	0.83	0.83	0.83	0.83	0.84
Maine	183	*	*	*	*	*	*
Maryland	5,560	0.83	0.84	0.86	0.88	0.87	0.88
Massachusetts	2,624	0.90	0.92	0.90	0.91	0.93	0.91
Michigan	2,905	0.85	0.83	0.85	0.87	0.86	0.85
Minnesota	1,139	0.89	0.90	0.91	0.90	0.91	0.90
Mississippi	1,999	0.80	0.79	0.84	0.86	0.82	0.84
Missouri	2,012	0.87	0.87	0.86	0.88	0.91	0.86
Montana	97	*	*	*	*	*	*
Nebraska	373	*	*	*	*	*	*
Nevada	1,408	0.80	0.81	0.81	0.80	0.80	0.87
New Hampshire	163	*	*	*	*	*	*
New Jersey	5,529	0.82	0.83	0.85	0.81	0.85	0.84
New Mexico	569	*	*	*	*	*	*
New York	16,462	0.86	0.88	0.89	0.88	0.88	0.88
North Carolina	5,077	0.83	0.86	0.85	0.85	0.86	0.87
North Dakota	47	*	*	*	*	*	*
Ohio	3,560	0.88	0.87	0.87	0.91	0.86	0.89
Oklahoma	1,011	0.85	0.83	0.84	0.81	0.81	0.76
Oregon	1,049	0.90	0.87	0.88	0.86	0.87	0.89
Pennsylvania	5,624	0.85	0.86	0.84	0.86	0.88	0.85
Rhode Island	393	*	*	*	*	*	*
South Carolina	3,375	0.85	0.84	0.85	0.85	0.88	0.84
South Dakota	85	*	*	*	*	*	*
Tennessee	3,410	0.82	0.83	0.86	0.83	0.85	0.85
Texas	16,054	0.84	0.86	0.86	0.87	0.86	0.86
Utah	399	*	*	*	*	*	*
Vermont	44	*	*	*	*	*	*
Virginia	3,229	0.85	0.84	0.89	0.85	0.84	0.90
Washington	1,873	0.89	0.88	0.90	0.86	0.92	0.91
West Virginia	322	*	*	*	*	*	*
Wisconsin	927	0.88	0.85	0.90	0.89	0.91	0.86
Wyoming	81	*	*	*	*	*	*
Subtotal	163,088	0.85	0.86	0.86	0.86	0.86	0.86
U.S. dependent areas							
American Samoa	0	*	*	*	*	*	*
Guam	16	*	*	*	*	*	*
Northern Mariana Islands	3	*	*	*	*	*	*
Puerto Rico	3,173	0.70	0.71	0.70	0.74	0.74	0.76
Republic of Palau	2	*	*	*	*	*	*
U.S. Virgin Islands	98	*	*	*	*	*	*
Subtotal	3,292	0.69	0.71	0.71	0.74	0.74	0.77
Total	166,380	0.84	0.85	0.86	0.86	0.86	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 diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

Table 8a. Perinatally acquired HIV infection, by year of birth and mother's race/ethnicity, 2010–2016—United States

Race/ethnicity ^a	2010		2011		2012		2013		2014		2015		2016	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Black/African American	62	10.5	62	10.6	72	12.3	38	6.5	39	6.6	36	6.1	30	5.4
Hispanic/Latino ^b	19	2.0	20	2.2	9	1.0	9	1.0	8	0.9	8	0.9	12	1.3
White	15	0.7	4	0.2	7	0.3	5	0.2	5	0.2	8	0.4	3	0.1
Other	12	4.4	11	3.9	14	4.7	7	2.4	5	1.6	5	1.7	3	0.7
Total	108	2.7	97	2.5	102	2.6	59	1.5	57	1.4	57	1.4	48	1.2

Note. Rates are per 100,000 live births.

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

^b Hispanics/Latinos can be of any race.

Table 8b. Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother's race/ethnicity, 2010–2016—United States

Race/ethnicity ^a	2010		2011		2012		2013		2014		2015		2016	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Black/African American	40	6.8	38	6.5	51	8.7	26	4.5	34	5.8	33	5.6	28	5.0
Hispanic/Latino ^b	16	1.7	14	1.5	8	0.9	8	0.9	6	0.7	8	0.9	10	1.1
White	8	0.4	1	0.0	4	0.2	5	0.2	5	0.2	8	0.4	3	0.1
Other	6	2.2	7	2.5	8	2.7	6	2.1	3	1.0	5	1.7	3	0.7
Total	70	1.8	60	1.5	71	1.8	45	1.1	48	1.2	54	1.4	44	1.1

Note. Rates are per 100,000 live births.

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

^b Hispanics/Latinos can be of any race.

Table 9. Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2016, by selected characteristics—United States

	Persons with HIV infection alive at year-end 2016 ^a	Persons with diagnosed HIV infection alive at year-end 2016 ^b		Receipt of care ^c		Retention in care ^c		Viral suppression ^c	
	Total No.	No.	%	No.	%	No.	%	No.	%
Sex									
Male	882,300	748,652	84.8	555,500	63	431,200	49	465,700	53
Female	258,000	229,231	88.8	169,600	66	132,000	51	136,200	53
Age at year-end 2016 (yr)									
13–24	50,900	28,485	56.0	21,700	43	16,000	31	15,300	30
25–34	203,300	144,049	70.9	106,700	53	77,800	38	81,500	40
35–44	223,000	188,796	84.6	138,200	62	104,400	47	111,600	50
45–54	336,100	308,597	91.8	232,400	69	181,800	54	196,900	59
≥55	327,000	307,956	94.2	225,400	69	183,800	56	197,700	60
Race/ethnicity									
American Indian/Alaska Native	3,600	2,930	81.6	2,200	60	1,600	46	1,700	49
Asian ^d	16,600	13,411	80.9	9,900	59	7,800	47	8,900	54
Black/African American	476,100	405,738	85.2	290,900	61	222,800	47	227,600	48
Hispanic/Latino ^e	254,600	211,956	83.3	152,400	60	124,200	49	129,900	51
Native Hawaiian/Other Pacific Islander	1,000	845	82.4	600	60	430	43	540	54
White	339,400	300,483	88.5	233,800	69	178,200	53	203,700	60
Multiple races	48,200	41,647	86.4	35,800	74	28,100	58	29,100	60
Transmission category^f									
Male-to-male sexual contact	648,500	542,000	83.6	410,800	63	316,500	49	349,000	54
Injection drug use									
Male	78,000	72,956	93.5	46,400	59	37,200	48	37,400	48
Female	52,900	50,155	94.7	36,400	69	28,600	54	28,600	54
Male-to-male sexual contact and injection drug use	58,600	54,138	92.3	42,400	72	33,500	57	33,700	58
Heterosexual contact ^g									
Male	95,000	77,510	81.6	53,900	57	42,500	45	44,100	46
Female	203,700	177,783	87.3	132,100	65	102,600	50	107,200	53
Total^h	1,140,400	977,883	85.8	725,600	64	563,300	49	601,400	53

^a Estimates derived by using HIV surveillance and CD4 data for persons aged ≥13 years at diagnosis. 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. Data previously published in *HIV Surveillance Supplemental Report* 2019;24(No. 1). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. 2019. Accessed April 29, 2019. Rates are per 100,000 population.

^b Reported to National HIV Surveillance System. Data previously published in *HIV Surveillance Supplemental Report* 2019;24(No. 1). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. 2019. Accessed April 29, 2019.

^c Estimates are the result of extrapolating data from the 42 jurisdictions with complete CD4 and viral load reporting by applying the percentage in the 42 jurisdictions (found in Tables 4a and 5a) 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 Hispanics/Latinos 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.

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

^h Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified. Includes persons whose race/ethnicity is unknown.

Table 10. Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2018—50 states, District of Columbia, and U.S. 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 10. Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2018—50 states, District of Columbia, and U.S. 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	<200 or < 14%	Yes	Detectable
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	<200 or < 14%	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 11. Monitoring national HIV prevention goals by using data from the National HIV Surveillance System and other surveillance systems

Indicator	2010	2011	2012	2013	2014	2015	2016	2017
Increase the percentage of persons living with HIV who know their serostatus to at least 90 percent ^a	82.8%	83.4%	83.9%	84.3%	84.8%	85.3%	85.8%	n/a
Reduce the number of new diagnoses by at least 25 percent	43,806	42,218	42,616	40,628	40,873	40,442	40,142	38,739 ^b
Reduce the percentage of young gay and bisexual males who have engaged in HIV risk behaviors by at least 10 percent ^c	n/a	n/a	n/a	34.1%	n/a	35.2%	n/a	29.1%
Increase the percentage of newly diagnosed persons linked to HIV medical care within one month of diagnosis to at least 85 percent	70.2%	70.4%	71.4%	72.6%	74.5%	75.0%	75.9%	78.3%
Increase the percentage of persons with diagnosed HIV infection who are retained in HIV medical care to at least 90 percent	54.7%	53.6%	55.3%	56.5%	56.9%	57.2%	57.6%	n/a
Increase the percentage of persons with diagnosed HIV infection who are virally suppressed to at least 80 percent	46.0%	48.5%	51.6%	54.7%	57.9%	59.8%	61.5%	n/a
Reduce the percentage of persons in HIV medical care who are homeless to no more than 5 percent ^d	7.7%	8.1%	8.3%	7.9%	9.0%	8.4%	8.4%	n/a
Reduce the death rate among persons with diagnosed HIV infection by at least 33 percent ^e	19.4	18.0	16.7	15.8	15.4	14.3	14.1	n/a
Reduce disparities in the rate of new diagnoses by at least 15 percent among gay and bisexual men ^f	20.5	21.2	21.9	22.1	22.5	22.6	22.4	22.6 ^b
Reduce disparities in the rate of new diagnoses by at least 15 percent among young black gay and bisexual men ^f	109.4	112.4	112.9	117.2	118.5	118.0	115.7	112.3 ^b
Reduce disparities in the rate of new diagnoses by at least 15 percent among black females ^f	1.7	1.5	1.4	1.3	1.2	1.1	1.1	1.1 ^b
Reduce disparities in the rate of new diagnoses by at least 15 percent among persons living in the southern United States ^f	0.33	0.35	0.33	0.35	0.35	0.36	0.36	0.37 ^b
Increase the percentage of youth with diagnosed HIV infection who are virally suppressed to at least 80 percent	30.9%	34.3%	38.9%	43.7%	48.1%	51.2%	53.8%	n/a
Increase the percentage of persons who inject drugs with diagnosed HIV infection who are virally suppressed to at least 80 percent	39.6%	40.6%	44.1%	47.1%	50.3%	52.1%	53.6%	n/a
Increase the percentage of transgender women in HIV medical care who are virally suppressed to at least 90 percent (developmental) ^g	62.2%	65.3%	68.5%	72.0%	73.9%	77.0%	79.0%	80.5%
Increase the number of adults prescribed preexposure prophylaxis (PrEP) by at least 500 percent (developmental) ^h	n/a	n/a	n/a	n/a	7,972	33,273	64,763	99,647
Decrease stigma among persons with diagnosed HIV infection by at least 25 percent, from a baseline median score of 38.3 to 28.7 (developmental) ⁱ	n/a	n/a	n/a	n/a	n/a	38.3	39.0	n/a

Abbreviation: n/a, not available.

Note. National-level indicators adapted from National HIV/AIDS Strategy for the United States: Updated to 2020 [NHAS 2020]—Indicator Supplement. For the list of NHAS 2020 indicators and information on the rationale, data sources, and measures for each indicator, see <http://www.hiv.gov/sites/default/files/nhas-indicators-supplement-dec-2016.pdf>.

^a CDC. Estimated HIV incidence and prevalence in the United States, 2010–2016. *HIV Surveillance Supplemental Report* 2019;24(No. 1). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published February 2019.

^b Preliminary data.

^c The 2013 estimate is based on data from 15 large urban school districts; the 2015 estimate is a national estimate. For more information about the Youth Risk Behavior Surveillance System (YRBSS), see <http://www.cdc.gov/yrbs>.

^d Prior to 2015, the Medical Monitoring Project (MMP) used 3-stage sampling to collect data from a representative sample of adults receiving HIV medical care during 2010–2014 in the United States and Puerto Rico. Starting in 2015, MMP samples HIV diagnoses from the National HIV Surveillance System. The homelessness estimate provided is subset to persons receiving HIV medical care in the past 12 months. For more information about MMP, see <http://www.cdc.gov/hiv/statistics/systems/mmp/>.

^e Death rate is age-adjusted and measured per 1,000 persons with diagnosed HIV infection in the United States.

^f Measures shown are ratios of the disparity rate in the specified group to the overall rate. Population data from Vintage 2014 Census data were used to calculate rates for 2010–2013; Vintage 2015 Census data were used for 2014; Vintage 2016 Census data were used for 2015; Vintage 2017 Census data were used for 2016 and 2017.

^g Health Resources and Services Administration. Ryan White HIV/AIDS Program annual client-level data report 2016. <http://hab.hrsa.gov/data/data-reports>. Published December 2018. Accessed April 23, 2019. For 2010 baseline data, see <http://www.hiv.gov/sites/default/files/nhas-indicators-supplement-dec-2016.pdf>.

^h Data licensed from MarketScan Commercial Claims and Encounter Database (Truven Health Analytics, Ann Arbor, MI) are analyzed by CDC. Estimates are for persons aged ≥16 years.

ⁱ The stigma scale used for this indicator is a 10-item scale, ranging from 0 (no stigma) to 100 (high stigma) and measured among persons aged >18 years with diagnosed HIV infection living in the United States and Puerto Rico. The scale used for this indicator is discussed in Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98. Data are collected through MMP. The 2015 median score is weighted. The previously published median score was unweighted.