

HIV

SURVEILLANCE REPORT

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Volume 23, Number 4

Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data United States and 6 Dependent Areas, 2016

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



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Contents

Commentary	4
Technical Notes	11
References	16
Tables	
1a Stage 3 (AIDS) at the time of diagnosis of HIV infection, among persons aged ≥ 13 years, by year of diagnosis and selected characteristics, 2010–2016—United States	17
1b Stage 3 (AIDS) at the time of diagnosis of HIV infection, among persons aged ≥ 13 years, by year of diagnosis and selected characteristics, 2010–2016—United States and 6 dependent areas	18
1c Stage 3 (AIDS) at the time of diagnosis of HIV infection, among persons aged ≥ 13 years, by year of diagnosis and area of residence, 2010–2016—United States and 6 dependent areas	19
1d Stage 3 (AIDS) at the time of diagnosis of HIV infection, among persons aged ≥ 13 years, by race/ethnicity and area of residence, 2016—United States	21
2a Stage of disease at diagnosis of HIV infection during 2016, among persons aged ≥ 13 years, by selected characteristics—39 states and the District of Columbia	22
2b Stage of disease at diagnosis of HIV infection during 2016, among persons aged ≥ 13 years, by area of residence—39 states and the District of Columbia	23
3a Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥ 13 years, by selected characteristics—39 states and the District of Columbia	24
3b Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥ 13 years, by area of residence—39 states and the District of Columbia	25
4a Receipt of HIV medical care among persons aged ≥ 13 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by selected characteristics—39 states and the District of Columbia	26
4b Receipt of HIV medical care among persons aged ≥ 13 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by area of residence—39 states and the District of Columbia	27
5a HIV viral suppression during 2015 among persons aged ≥ 13 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by selected characteristics—39 states and the District of Columbia	28
5b HIV viral suppression during 2015 among persons aged ≥ 13 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by area of residence—39 states and the District of Columbia	29
6a Deaths of persons aged ≥ 13 years with diagnosed HIV infection, by year of death, 2010–2015—United States	30
6b Deaths of persons aged ≥ 13 years with diagnosed HIV infection, by year of death, 2010–2015—United States and 6 dependent areas	31
6c Deaths of persons aged ≥ 13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2015—United States and 6 dependent areas	32
6d Deaths of persons aged ≥ 13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death, 2010–2015—United States	38
6e Deaths of persons aged ≥ 13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death, 2010–2015—United States and 6 dependent areas	39
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, 2010–2015—United States and 6 dependent areas	40
7a Persons surviving >3 years after a diagnosis of HIV infection during 2007–2012, by year of diagnosis and area of residence—United States and 6 dependent areas	46
7b Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2007–2012, by year and area of residence—United States and 6 dependent areas	47
8a Perinatally acquired HIV infection, by year of birth and mother’s race/ethnicity, 2010–2015—United States	48
8b Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother’s race/ethnicity, 2010–2015—United States	48
9 Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2017—50 states, District of Columbia, and U.S. dependent areas	49
10 Monitoring national HIV prevention goals by using data from the National HIV Surveillance System (NHSS) and other surveillance systems	51

Commentary

The Centers for Disease Control and Prevention (CDC) collects data to monitor progress toward achieving national goals [1] and the objectives set forth in other federal directives, including the updated strategic plan [2] of the Division of HIV/AIDS Prevention (DHAP). This surveillance supplemental report complements the 2016 *HIV Surveillance Report* [3] and presents the results of focused analyses of National HIV Surveillance System (NHSS) [4] data to measure progress toward achieving national goals. Data in this report are also used to assess Department of Health and Human Services (HHS) core indicators [5, 6] and monitor progress toward attainment of HIV-related national objectives in Healthy People 2020 [7]. 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, Healthy People 2020) (Tables 1a–d)
- Increase to 85% or more the percentage of persons linked to HIV medical care ≤ 1 month after diagnosis of HIV infection (national indicator, DHAP strategic plan, HHS core indicator, Healthy People 2020) (Tables 3a/b)
- Increase to 90% or more the percentage of persons with HIV who are in continuous HIV medical care (i.e., retained in care) (national indicator, DHAP strategic plan, HHS core indicator, Healthy People 2020) (Tables 4a/b)
- Increase to 80% or more the percentage of persons with diagnosed HIV infection who are virally suppressed (national indicator, 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 (national indicator, 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 (national indicator, DHAP strategic plan, Healthy People 2020) (Table 5a)

- Reduce by 33% or more the death rate among persons with diagnosed HIV infection (national indicator, 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 (national indicator, DHAP strategic plan, Healthy People 2020) (Table 10)
- 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 (national indicator, DHAP strategic plan) (Table 10)

Monitoring 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 2017, 40 jurisdictions (39 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 2017 (for specimens collected from at least January 2015 through September 2017). (For a list of the 40 jurisdictions, see Technical Notes.)

In this report, data from the 40 jurisdictions that reported complete CD4 and viral load laboratory results to CDC were used for the analyses that require laboratory data (Tables 2a/b–5a/b). Data from these 40 jurisdictions represent 85.9% of all persons aged ≥ 13 years living with diagnosed HIV infection at year-end 2015 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/b), 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/b–5a/b include data from 40 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 2015 report, the 2016 report includes data from 2 additional states that met the criteria.

Tables on estimated HIV prevalence (diagnosed and undiagnosed infection) are no longer included in this report. HIV prevalence data for years 2010–2015 were published earlier this year in a new *HIV Surveillance Supplemental Report* [8].

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.
- 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 diagnosis of HIV infection

Among persons with an HIV diagnosis during 2016, 21.3% of infections were classified as stage 3 (AIDS) at the time of diagnosis (Table 1a). The overall percentages decreased from 2010 through 2016.

The following percentages are for persons with stage 3 (AIDS) classification at the time of HIV diagnosis during 2016.

- **Age group:** The percentage increased as age increased (e.g., 8.8% of persons aged 13–24 years and 36.3% of persons aged ≥ 55 years).
- **Race/ethnicity:** The highest percentages were for Native Hawaiians/other Pacific Islanders (23.8%) and Asians (23.3%), followed by Hispanics/Latinos (22.2%), American Indians/Alaska Natives (22.1%), whites (21.9%), persons of multiple races (20.7%), and blacks/African Americans (20.2%). Please use caution when interpreting data on Native Hawaiians/other Pacific Islanders: the numbers are small.

- **Transmission category:** The highest percentage was for males with infection attributed to heterosexual contact (33.9%), followed by males with infection attributed to injection drug use (27.3%), females with infection attributed to heterosexual contact (22.5%), females with infection attributed to injection drug use (21.8%), males with infection attributed to male-to-male sexual contact (19.3%), and males with infection attributed to male-to-male sexual contact *and* injection drug use (17.9%).

Stage of disease at diagnosis of HIV infection

Stage of disease at diagnosis (i.e., HIV infection, stage 1, 2, 3 [AIDS], or unknown) was based on data for persons with HIV infection diagnosed during 2016 in the 40 jurisdictions that reported complete CD4 and viral load test results to CDC. Among 33,680 persons, the stage of disease at diagnosis was classified as follows (Table 2a): stage 1 (24.8%), stage 2 (29.7%), stage 3 (AIDS) (20.9%), stage unknown (24.7%).

- **Age group:** The highest percentages of persons whose infection was diagnosed at an earlier stage (stage 1 or 2) were for persons aged 13–24 (26.8% [stage 1]; 34.3% [stage 2]), followed by those for persons aged 25–34 (27.2% [stage 1]; 31.0% [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, >50% of infections were diagnosed at an earlier stage (stage 1 or 2), except American Indians/Alaska Natives. The highest percentages of persons whose infection was diagnosed at an earlier stage (stage 1 or 2) were for Native Hawaiians/other Pacific Islanders (33.3% [stage 1]; 25.6% [stage 2]), followed by those for persons of multiple races (25.2% [stage 1]; 32.6% [stage 2]), whites (29.0% [stage 1]; 27.4% [stage 2]), Hispanics/Latinos (24.5% [stage 1]; 30.6% [stage 2]) and Asians (17.9% [stage 1]; 36.3% [stage 2]). The stage-unknown percentages were slightly higher among blacks/African Americans and American Indians/Alaska Natives (27.0% and 26.4%, 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:** The highest percentages of persons whose infection was diagnosed at an earlier stage of HIV disease were for males with infection attributed to male-to-male sexual contact (25.2% [stage 1]; 31.0% [stage 2]) and male-to-male sexual contact *and* injection drug use (26.7% [stage 1]; 28.5% [stage 2]). The lowest percentages were for males with infection attributed to heterosexual contact (16.0% [stage 1]; 26.1% [stage 2]) and for males with infection attributed to injection drug use (22.3% [stage 1]; 24.9% [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 2016 in the 40 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 33,680 persons whose infection was diagnosed during 2016, 75.9% were linked to HIV medical care ≤ 1 month after diagnosis, and 85.2% 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:** In general, linkage to HIV medical care increased as age group at diagnosis increased. The highest percentage was for persons aged 45–54 years (79.6%), followed by that for persons aged ≥ 55 years (79.5%). The lowest percentage was for persons aged 13–24 years (72.0%).
- **Race/ethnicity:** The highest percentage was for persons of multiple races (81.0%). The percentages for other races/ethnicities were as follows: whites (79.9%), Asians (79.5%), Native Hawaiians/other Pacific Islanders (79.5%), American Indians/Alaska Natives (77.8%), Hispanics/Latinos (77.6%), and blacks/African Americans (72.1%).
- **Transmission category:** The percentages were relatively similar for all transmission categories. The highest percentage was for males with infection attributed to male-to-male sexual contact (76.3%), followed by females with infection

attributed to heterosexual contact (75.9%) and females with infection attributed to injection drug use (75.5%). The lowest percentage was for males with infection attributed to heterosexual contact (73.4%).

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

- **Age group:** In general, linkage to HIV medical care increased as age group at diagnosis increased. The highest percentage was for persons aged 45–54 years (87.5%), followed by that for persons aged ≥ 55 years (87.3%). The lowest percentage was for persons aged 13–24 years (83.3%).
- **Race/ethnicity:** The highest percentages were for Native Hawaiians/other Pacific Islanders (94.9%) and persons of multiple races (91.5%). The percentages for other races/ethnicities were 88.5%, whites; 86.2%, Hispanics/Latinos; 85.7%, Asians; 84.0%, American Indians/Alaska Natives; and 82.5%, blacks/African Americans.
- **Transmission category:** The percentages were relatively similar for all transmission categories. The highest percentage was for males with infection attributed to male-to-male sexual contact *and* injection drug use (85.6%) and males with infection attributed to male-to-male sexual contact (85.6%), followed by females with infection attributed to heterosexual contact (85.3%). The lowest percentages were for males with infection attributed to heterosexual contact (83.0%) and for males with infection attributed to injection drug use (82.4%).

Receipt of HIV medical care

Receipt of HIV medical care was based on data for persons with HIV infection diagnosed by year-end 2014 and alive at year-end 2015 in the 40 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 2015; 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 2015. During 2015, 73.4% of 794,145 persons received HIV medical care, and

57.2% 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 (74.9%). The lowest percentage was for persons aged 35–44 years (72.4%).
- **Race/ethnicity:** The highest percentage was for persons of multiple races (85.6%), followed by whites (76.9%), American Indians/Alaska Natives (73.0%), Asians (72.3%), blacks/African Americans (71.1%), Hispanics/Latinos (71.0%), and Native Hawaiians/other Pacific Islanders (70.2%).
- **Transmission category:** The highest percentage was for males with infection attributed to male-to-male sexual contact *and* injection drug use (77.8%), followed by males with infection attributed to male-to-male sexual contact (74.9%). The lowest percentage was for males with infection attributed to injection drug use (63.4%).

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 (59.4%) and persons aged 45–54 years (58.8%). In general, the percentage increased as age increased; however, the lowest percentage was for persons aged 25–34 years (53.3%).
- **Race/ethnicity:** The highest percentage was for persons of multiple races (67.7%), followed by whites (58.8%), Hispanics/Latinos (58.1%), Asians (57.0%), blacks/African Americans (54.7%), American Indians/Alaska Natives (52.7%), and Native Hawaiians/other Pacific Islanders (49.4%).
- **Transmission category:** The highest percentages were for males with infection attributed to male-to-male sexual contact *and* injection drug use (61.5%), males with infection attributed to male-to-male sexual contact (57.9%), and females with infection attributed to heterosexual contact (57.5%). The lowest percentage was for males with infection attributed to injection drug use (51.1%).

Viral suppression

Viral suppression was measured for persons with HIV infection diagnosed by year-end 2014 and alive at year-end 2015 in the 40 jurisdictions that reported complete CD4 and viral load test results to CDC. Viral suppression was defined as a viral load result of <200 copies/mL at the most recent viral load test during 2015.

During 2015, 73.4% of 794,145 persons had at least 1 CD4 *or* viral load test (i.e., received any care in 2015), and 70.3% had at least 1 viral load test. At the most recent viral load test during 2015, viral load was suppressed in 81.5% of persons who received care (at least 1 CD4 *or* viral load test) in 2015 and in 85.2% of persons with a viral load test during 2015. The persons with suppressed viral load represented 59.8% of the total number of persons with an HIV diagnosis by year-end 2014 and alive at year-end 2015 in the 40 jurisdictions (Table 5a).

The following percentages are for persons whose most recent viral load test result in 2015 indicated viral suppression (denominator: persons who were alive at year-end 2015).

- **Age group:** The percentage increased as age increased (51.2% [persons aged 13–24 years]; 62.8% [persons aged ≥55 years]).
- **Race/ethnicity:** The highest percentage was for persons of multiple races (68.1%), followed by whites (66.6%), Asians (65.0%), Native Hawaiians/other Pacific Islanders (60.8%), Hispanics/Latinos (60.0%), American Indians/Alaska Natives (58.8%), and blacks/African Americans (54.0%).
- **Transmission category:** The highest percentage was for males with infection attributed to male-to-male sexual contact (63.0%), followed by males with infection attributed to male-to-male sexual contact *and* injection drug use (60.1%).

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 2015 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 2015, the age-adjusted rate was 5.8 per 100,000 population and 14.4 per 1,000 persons living with diagnosed HIV infection.

Deaths of persons with stage 3 (AIDS) classification

From 2010 through 2015 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); however, trends in rates varied by area of residence at death (Table 6f). In 2015, the age-adjusted rates were 4.6 per 100,000 population and 21.1 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 for diagnoses that were made during 2007–2012 (Table 7a). For diagnoses in 2012, at least 90% of persons survived >3 years after diagnosis in all but 1 area of residence.

Survival after stage 3 (AIDS) classification increased over time (Table 7b). By area of residence for classifications during 2012, at least 80% of persons survived >3 years after stage 3 (AIDS) classification in all but 1 area of residence.

Perinatally acquired HIV infection

The overall annual rate of perinatally acquired HIV infections in the United States (regardless of place of birth) decreased from 2.6 per 100,000 live births in 2010 to 1.4 in 2015 (Table 8a). However, annual rates differed by race/ethnicity. Although the annual rate among blacks/African Americans decreased from 10.0 in 2010 to 5.8 in 2015, the 2015 rate among blacks/African Americans (5.8) was substantially higher than the 2015 rates among Hispanics/Latinos (0.9) and whites (0.4).

Among infants born in the United States, the overall annual rate of perinatally acquired HIV infections decreased from 1.7 per 100,000 live births in 2010 to 1.3 in 2015 (Table 8b). Annual rates differed by race/

ethnicity. The annual rate among blacks/African Americans decreased from 6.6 in 2010 to 5.4 in 2015; however, the 2015 rate among blacks/African Americans (5.4) was substantially higher than the 2015 rates among Hispanics/Latinos (0.9) and whites (0.4).

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SURVEILLANCE OF HIV INFECTION

This report includes data reported to the Centers for Disease Control and Prevention (CDC) through December 31, 2017, 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 40 jurisdictions (39 states and the District of Columbia) that reported complete CD4+ T-lymphocyte (CD4) and viral load test results to CDC as of December 2017. Data from these 40 jurisdictions represent 85.9% of all persons aged ≥ 13 years living with diagnosed HIV infection at year-end 2015 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 2017, 40 jurisdictions (39 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, 2017, the jurisdiction had reported (to CDC) at least 95% of all CD4 and viral load test results received from January 2015 through September 2017.

The 39 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, 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/b, 3a/b, 4a/b, 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 reclassified 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 1 or 2) can be assessed, stage of disease at diagnosis was calculated for the 40 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/b) were determined by using the first CD4 test result or documentation of an AIDS-defining condition ≤ 3 months after the HIV diagnosis date, unless documentation indicated disease stage 0. If ≥ 2 events occurred during the same month and could thus qualify as “first,” the following conditions were applied:

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

For stage of disease at 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. Infections classified as stage 0 were also included in the “stage unknown” category.

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 on a stable, suppressive antiretroviral therapy (ART) regimen for ≤ 2 years, viral load testing is recommended every 3 to 4 months or as clinically indicated to confirm continuous viral suppression. For adherent patients with suppressed viral load and stable immunologic status for >2 years, monitoring at 6-month intervals may be considered. For patients who have not taken ART, CD4 count

should be monitored every 3 to 6 months. Frequent monitoring of CD4 counts, especially among persons with higher counts (>300 cells/ μL) and consistently suppressed viral loads, is generally not required for patient management. For patients who have been taking ART and whose CD4 counts have consistently ranged between 300 and 500 cells/ μL for ≥ 2 years, annual monitoring of CD4 count is recommended. Continued CD4 monitoring for virally suppressed patients whose CD4 counts have consistently been >500 cells/ μL for ≥ 2 years is optional. 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 2016 and who resided in any of the 40 jurisdictions at the time of diagnosis (Tables 3a/b). 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 2014, who resided in any of the 40 jurisdictions as of their most recent known address, and who were alive at year-end 2015 (Tables 4a/b). Receipt of any HIV medical care was measured by documentation of ≥ 1 CD4 or viral load tests performed during 2015. 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 2015.

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 2014, who resided in any of the 40 jurisdictions as of their most recent known address during 2015, and who were alive at year-end 2015. Viral suppression was defined as a viral load result of <200 copies/mL at the most recent viral load test during 2015. 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, 6 years (2010–2015) 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/b) 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, 2015, tables were limited to data on persons whose diagnosis or stage 3 (AIDS) classification was made during 2007–2012. 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 2017. 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 2010–2015).

- Tables 4a/b and 5a/b (receipt of care and viral suppression): age was based on the person's age at year-end 2014.
- Tables 6a–f (deaths): age was based on the person's age at the time of death.
- All other tables: age was based on the person's age at the time of HIV diagnosis.

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 foot-noted) 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 2008–2014, 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 7a/b. In Tables 4a/b 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 2016 file (for years 2010 to 2015) 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].

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Table 1a. Stage 3 (AIDS) at the time of diagnosis of HIV infection, among persons aged ≥13 years, by year of diagnosis and selected characteristics, 2010–2016—United States

	2010			2011			2012			2013			2014			2015			2016		
	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.	No.	%	No.	No.	%	No.	No.	%	
Sex																					
Male	33,861	9,732	28.7	32,840	9,261	28.2	32,656	8,885	27.2	31,684	8,667	27.4	32,449	7,205	22.2	32,326	6,848	21.2	31,819	6,676	21.0
Female	9,535	2,565	26.9	8,776	2,392	27.3	8,222	2,240	27.2	7,662	2,094	27.3	7,613	1,846	24.2	7,390	1,741	23.6	7,512	1,684	22.4
Age at diagnosis (yr)																					
13–24	9,149	1,205	13.2	9,090	1,203	13.2	9,091	1,136	12.5	8,764	1,204	13.7	9,133	803	8.8	9,016	766	8.5	8,540	753	8.8
25–34	11,779	2,689	22.8	11,552	2,608	22.6	11,925	2,681	22.5	11,841	2,575	21.7	12,635	2,187	17.3	13,018	2,164	16.6	13,555	2,233	16.5
35–44	10,235	3,473	33.9	9,211	3,101	33.7	8,600	2,774	32.3	7,890	2,656	33.7	8,035	2,336	29.1	7,663	2,136	27.9	7,467	2,029	27.2
45–54	8,303	3,251	39.2	7,898	3,053	38.7	7,470	2,904	38.9	6,905	2,642	38.3	6,515	2,255	34.6	6,307	2,136	33.9	5,963	1,965	33.0
≥55	3,930	1,679	42.7	3,865	1,688	43.7	3,792	1,630	43.0	3,946	1,684	42.7	3,744	1,470	39.3	3,712	1,387	37.4	3,806	1,380	36.3
Race/ethnicity																					
American Indian/Alaska Native	159	58	36.5	141	47	33.3	174	49	28.2	149	39	26.2	179	45	25.1	190	46	24.2	235	52	22.1
Asian	683	215	31.5	736	209	28.4	776	223	28.7	784	234	29.8	927	227	24.5	942	210	22.3	961	224	23.3
Black/African American	19,827	5,295	26.7	18,841	4,962	26.3	18,075	4,755	26.3	17,273	4,447	25.7	17,484	3,809	21.8	17,384	3,518	20.2	17,199	3,481	20.2
Hispanic/Latino ^b	9,220	2,870	31.1	9,040	2,709	30.0	9,114	2,624	28.8	8,925	2,618	29.3	9,489	2,213	23.3	9,533	2,163	22.7	9,713	2,152	22.2
Native Hawaiian/Other Pacific Islander	50	25	50.0	55	22	40.0	51	17	33.3	47	16	34.0	43	10	23.3	76	17	22.4	42	10	23.8
White	11,623	3,357	28.9	11,122	3,255	29.3	11,023	3,059	27.8	10,641	3,017	28.4	10,598	2,452	23.1	10,433	2,368	22.7	10,147	2,227	21.9
Multiple races	1,834	477	26.0	1,681	449	26.7	1,665	398	23.9	1,527	390	25.5	1,342	295	22.0	1,158	267	23.1	1,034	214	20.7
Transmission category^c																					
Male-to-male sexual contact	26,157	6,913	26.4	25,913	6,806	26.3	26,190	6,576	25.1	25,582	6,516	25.5	26,551	5,351	20.2	26,392	5,094	19.3	26,057	5,019	19.3
Injection drug use																					
Male	1,973	764	38.7	1,649	628	38.1	1,475	544	36.9	1,402	502	35.8	1,289	454	35.2	1,356	392	28.9	1,281	350	27.3
Female	1,455	383	26.3	1,289	379	29.4	1,172	308	26.3	1,017	275	27.1	968	230	23.8	1,024	211	20.6	967	211	21.8
Male-to-male sexual contact and injection drug use	1,679	432	25.7	1,515	358	23.6	1,493	372	24.9	1,383	295	21.4	1,366	237	17.3	1,391	265	19.1	1,332	239	17.9
Heterosexual contact ^d																					
Male	4,004	1,604	40.1	3,717	1,451	39.0	3,442	1,375	40.0	3,273	1,337	40.8	3,201	1,149	35.9	3,146	1,083	34.4	3,116	1,057	33.9
Female	8,042	2,167	26.9	7,449	1,998	26.8	7,013	1,922	27.4	6,597	1,806	27.4	6,612	1,605	24.3	6,334	1,522	24.0	6,500	1,464	22.5
Other ^e																					
Male	48	18	38.3	45	18	39.9	56	19	33.2	44	17	38.5	42	14	33.9	41	15	36.4	32	11	35.5
Female	38	16	41.3	39	15	40.2	37	10	28.6	49	13	26.5	33	10	32.0	32	8	26.8	45	9	20.4
Total	43,396	12,297	28.3	41,616	11,653	28.0	40,878	11,125	27.2	39,346	10,761	27.3	40,062	9,051	22.6	39,716	8,589	21.6	39,331	8,360	21.3

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 the time of diagnosis of HIV infection, among persons aged ≥13 years, by year of diagnosis and selected characteristics, 2010–2016—United States and 6 dependent areas

	2010			2011			2012			2013			2014			2015			2016		
	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.	%	No.	No.	%	No.	No.	%	No.	No.	%
Sex																					
Male	34,477	9,906	28.7	33,404	9,423	28.2	33,215	9,022	27.2	32,200	8,800	27.3	32,958	7,310	22.2	32,790	6,944	21.2	32,253	6,784	21.0
Female	9,749	2,622	26.9	8,989	2,443	27.2	8,422	2,295	27.3	7,828	2,136	27.3	7,760	1,886	24.3	7,499	1,765	23.5	7,619	1,710	22.4
Age at diagnosis (yr)																					
13–24	9,253	1,214	13.1	9,196	1,221	13.3	9,215	1,145	12.4	8,875	1,218	13.7	9,272	813	8.8	9,106	774	8.5	8,626	765	8.9
25–34	11,987	2,724	22.7	11,736	2,643	22.5	12,125	2,717	22.4	12,015	2,604	21.7	12,790	2,207	17.3	13,172	2,185	16.6	13,689	2,253	16.5
35–44	10,454	3,537	33.8	9,404	3,154	33.5	8,766	2,823	32.2	8,023	2,692	33.6	8,190	2,378	29.0	7,788	2,162	27.8	7,590	2,063	27.2
45–54	8,491	3,324	39.1	8,093	3,126	38.6	7,638	2,966	38.8	7,063	2,688	38.1	6,623	2,293	34.6	6,428	2,175	33.8	6,070	2,001	33.0
≥55	4,041	1,729	42.8	3,964	1,722	43.4	3,893	1,666	42.8	4,052	1,734	42.8	3,843	1,505	39.2	3,795	1,413	37.2	3,897	1,412	36.2
Race/ethnicity																					
American Indian/Alaska Native	159	58	36.5	141	47	33.3	174	49	28.2	149	39	26.2	179	45	25.1	190	46	24.2	235	52	22.1
Asian	685	215	31.4	737	210	28.5	777	224	28.8	784	234	29.8	928	228	24.6	947	211	22.3	962	224	23.3
Black/African American	19,841	5,301	26.7	18,857	4,966	26.3	18,079	4,757	26.3	17,290	4,450	25.7	17,500	3,816	21.8	17,393	3,523	20.3	17,205	3,483	20.2
Hispanic/Latino ^b	10,026	3,089	30.8	9,797	2,916	29.8	9,863	2,811	28.5	9,583	2,789	29.1	10,117	2,349	23.2	10,086	2,273	22.5	10,238	2,280	22.3
Native Hawaiian/Other Pacific Islander	54	27	50.0	55	22	40.0	54	18	33.3	48	16	33.3	46	10	21.7	79	19	24.1	48	12	25.0
White	11,626	3,360	28.9	11,124	3,255	29.3	11,024	3,060	27.8	10,647	3,018	28.3	10,605	2,453	23.1	10,435	2,370	22.7	10,150	2,229	22.0
Multiple races	1,835	478	26.0	1,682	450	26.8	1,666	398	23.9	1,527	390	25.5	1,343	295	22.0	1,159	267	23.0	1,034	214	20.7
Transmission category^c																					
Male-to-male sexual contact	26,457	6,985	26.4	26,192	6,871	26.2	26,498	6,642	25.1	25,880	6,581	25.4	26,877	5,399	20.1	26,691	5,149	19.3	26,340	5,075	19.3
Injection drug use																					
Male	2,112	804	38.0	1,760	662	37.6	1,563	569	36.4	1,482	522	35.2	1,355	468	34.6	1,413	401	28.4	1,318	362	27.5
Female	1,479	389	26.3	1,322	381	28.8	1,195	311	26.0	1,042	282	27.0	983	234	23.8	1,031	212	20.6	978	213	21.7
Male-to-male sexual contact and injection drug use	1,707	438	25.7	1,538	363	23.6	1,519	377	24.8	1,404	298	21.2	1,373	237	17.2	1,410	268	19.0	1,343	243	18.1
Heterosexual contact ^d																					
Male	4,153	1,661	40.0	3,868	1,508	39.0	3,579	1,416	39.6	3,390	1,382	40.8	3,311	1,192	36.0	3,235	1,111	34.3	3,220	1,093	33.9
Female	8,232	2,218	26.9	7,629	2,047	26.8	7,190	1,974	27.4	6,737	1,842	27.3	6,744	1,641	24.3	6,436	1,545	24.0	6,596	1,488	22.6
Other ^e																					
Male	48	18	38.3	46	19	41.2	56	19	33.2	44	17	38.5	42	14	33.8	41	15	36.4	32	11	35.5
Female	38	16	41.3	39	15	40.2	37	10	28.6	49	13	26.3	33	11	32.6	32	9	27.0	45	9	20.4
Total	44,226	12,528	28.3	42,393	11,866	28.0	41,637	11,317	27.2	40,028	10,936	27.3	40,718	9,196	22.6	40,289	8,709	21.6	39,872	8,494	21.3

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 the time of diagnosis of HIV infection, among persons aged ≥13 years, by year of diagnosis and area of residence, 2010–2016—United States and 6 dependent areas

	2010			2011			2012			2013			2014			2015			2016		
	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.	%
Alabama	682	144	21.1	682	160	23.5	665	164	24.7	636	165	25.9	674	147	21.8	659	159	24.1	668	143	21.4
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	5	13.5
Arizona	619	219	35.4	563	168	29.8	625	156	25.0	695	192	27.6	744	153	20.6	697	151	21.7	733	146	19.9
Arkansas	235	61	26.0	243	54	22.2	249	61	24.5	262	70	26.7	315	65	20.6	274	62	22.6	311	69	22.2
California	5,270	1,481	28.1	5,061	1,359	26.9	5,154	1,365	26.5	4,681	1,218	26.0	5,154	1,013	19.7	5,025	931	18.5	5,031	947	18.8
Colorado	423	142	33.6	365	109	29.9	372	101	27.2	312	92	29.5	377	103	27.3	381	98	25.7	425	83	19.5
Connecticut	396	140	35.4	354	125	35.3	292	116	39.7	327	103	31.5	290	90	31.0	273	72	26.4	265	68	25.7
Delaware	129	46	35.7	110	35	31.8	136	47	34.6	110	48	43.6	116	34	29.3	102	28	27.5	112	34	30.4
District of Columbia	795	175	22.0	632	147	23.3	571	114	20.0	494	103	20.9	410	69	16.8	361	55	15.2	333	54	16.2
Florida	4,669	1,284	27.5	4,599	1,235	26.9	4,410	1,163	26.4	4,323	1,229	28.4	4,507	1,031	22.9	4,605	991	21.5	4,724	998	21.1
Georgia	2,703	731	27.0	2,746	764	27.8	2,673	721	27.0	2,350	614	26.1	2,388	562	23.5	2,618	533	20.4	2,487	481	19.3
Hawaii	108	34	31.5	83	28	33.7	84	30	35.7	99	35	35.4	99	31	31.3	120	23	19.2	80	14	17.5
Idaho	44	20	45.5	36	10	27.8	39	11	28.2	25	8	32.0	22	7	31.8	40	14	35.0	46	7	15.2
Illinois	1,681	496	29.5	1,642	459	28.0	1,685	447	26.5	1,597	410	25.7	1,526	324	21.2	1,521	327	21.5	1,410	304	21.6
Indiana	489	131	26.8	467	140	30.0	494	134	27.1	473	118	24.9	463	117	25.3	634	120	18.9	483	109	22.6
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	132	31	23.5
Kansas	136	50	36.8	136	43	31.6	152	52	34.2	148	51	34.5	129	37	28.7	155	37	23.9	144	34	23.6
Kentucky	335	99	29.6	310	104	33.5	360	96	26.7	356	99	27.8	341	90	26.4	339	79	23.3	327	106	32.4
Louisiana	1,112	332	29.9	1,203	366	30.4	1,038	347	33.4	1,136	338	29.8	1,208	277	22.9	1,099	240	21.8	1,129	263	23.3
Maine	55	16	29.1	49	15	30.6	47	11	23.4	33	14	42.4	55	8	14.5	46	13	28.3	51	12	23.5
Maryland	1,779	423	23.8	1,445	366	25.3	1,334	322	24.1	1,308	351	26.8	1,251	286	22.9	1,189	262	22.0	1,087	228	21.0
Massachusetts	709	220	31.0	697	227	32.6	696	205	29.5	677	192	28.4	641	147	22.9	592	136	23.0	635	137	21.6
Michigan	766	226	29.5	772	199	25.8	793	196	24.7	754	226	30.0	784	180	23.0	727	162	22.3	744	178	23.9
Minnesota	336	93	27.7	297	85	28.6	313	84	26.8	306	94	30.7	306	76	24.8	295	72	24.4	289	66	22.8
Mississippi	457	151	33.0	528	161	30.5	447	116	26.0	476	141	29.6	478	129	27.0	508	118	23.2	424	118	27.8
Missouri	573	125	21.8	525	153	29.1	528	139	26.3	464	120	25.9	469	110	23.5	462	95	20.6	510	121	23.7
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	20	4	20.0
Nebraska	115	40	34.8	79	27	34.2	83	25	30.1	79	29	36.7	88	28	31.8	81	22	27.2	76	18	23.7
Nevada	377	124	32.9	381	124	32.5	361	116	32.1	434	135	31.1	432	113	26.2	479	109	22.8	515	114	22.1
New Hampshire	50	11	22.0	39	13	33.3	47	20	42.6	34	10	29.4	41	9	22.0	25	3	12.0	43	11	25.6
New Jersey	1,370	415	30.3	1,189	349	29.4	1,288	373	29.0	1,199	362	30.2	1,236	330	26.7	1,180	308	26.1	1,166	275	23.6
New Mexico	148	53	35.8	137	41	29.9	118	38	32.2	141	38	27.0	132	39	29.5	134	32	23.9	135	28	20.7

Table 1c. Stage 3 (AIDS) at the time of diagnosis of HIV infection, among persons aged ≥13 years, by year of diagnosis and area of residence, 2010–2016—United States and 6 dependent areas (cont)

	2010			2011			2012			2013			2014			2015			2016		
	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.	%
New York	3,991	1,079	27.0	3,813	993	26.0	3,583	913	25.5	3,271	823	25.2	3,356	725	21.6	3,080	658	21.4	2,854	582	20.4
North Carolina	1,444	360	24.9	1,447	360	24.9	1,233	280	22.7	1,284	335	26.1	1,315	283	21.5	1,326	289	21.8	1,390	273	19.6
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
Ohio	986	273	27.7	1,050	282	26.9	1,016	285	28.1	1,046	274	26.2	951	212	22.3	931	197	21.2	977	221	22.6
Oklahoma	287	71	24.7	314	81	25.8	284	78	27.5	332	66	19.9	304	71	23.4	318	70	22.0	292	74	25.3
Oregon	240	87	36.3	241	88	36.5	269	86	32.0	229	87	38.0	240	79	32.9	220	67	30.5	223	57	25.6
Pennsylvania	1,500	476	31.7	1,393	415	29.8	1,434	451	31.5	1,314	364	27.7	1,212	317	26.2	1,188	303	25.5	1,135	274	24.1
Rhode Island	117	36	30.8	100	39	39.0	78	27	34.6	79	32	40.5	89	24	27.0	64	19	29.7	69	18	26.1
South Carolina	770	281	36.5	743	295	39.7	700	251	35.9	710	252	35.5	757	168	22.2	663	171	25.8	743	180	24.2
South Dakota	32	6	18.8	21	10	47.6	24	8	33.3	32	11	34.4	28	7	25.0	23	11	47.8	41	12	29.3
Tennessee	835	228	27.3	817	196	24.0	824	188	22.8	747	217	29.0	757	158	20.9	741	129	17.4	713	114	16.0
Texas	4,467	1,262	28.3	4,282	1,218	28.4	4,333	1,169	27.0	4,339	1,123	25.9	4,423	945	21.4	4,489	966	21.5	4,488	956	21.3
Utah	83	26	31.3	106	30	28.3	124	46	37.1	109	26	23.9	115	23	20.0	122	27	22.1	135	19	14.1
Vermont	21	6	28.6	12	5	41.7	14	3	21.4	12	5	41.7	17	4	23.5	13	3	23.1	5	3	60.0
Virginia	996	292	29.3	904	244	27.0	933	253	27.1	956	239	25.0	903	198	21.9	965	182	18.9	904	181	20.0
Washington	538	164	30.5	483	162	33.5	494	140	28.3	442	117	26.5	440	105	23.9	449	104	23.2	426	104	24.4
West Virginia	75	26	34.7	88	33	37.5	82	29	35.4	72	27	37.5	86	23	26.7	72	26	36.1	67	20	29.9
Wisconsin	252	63	25.0	245	77	31.4	217	77	35.5	243	75	30.9	217	56	25.8	225	46	20.4	230	47	20.4
Wyoming	19	8	42.1	15	10	66.7	7	3	42.9	16	8	50.0	9	1	11.1	17	3	17.6	21	8	38.1
Subtotal	43,396	12,297	28.3	41,616	11,653	28.0	40,878	11,125	27.2	39,346	10,761	27.3	40,062	9,051	22.6	39,716	8,589	21.6	39,331	8,360	21.3
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
Guam	5	2	40.0	0	0	0.0	6	2	33.3	1	0	0.0	4	0	0.0	6	2	33.3	4	2	50.0
Northern Mariana Islands	0	0	0.0	2	1	50.0	0	0	0.0	0	0	0.0	0	0	0.0	3	2	66.7	0	0	0.0
Puerto Rico	795	215	27.0	747	203	27.2	740	185	25.0	653	169	25.9	626	134	21.4	551	110	20.0	523	127	24.3
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
U.S. Virgin Islands	30	14	46.7	27	8	29.6	13	5	38.5	27	6	22.2	26	11	42.3	12	6	50.0	12	5	41.7
Subtotal	830	231	27.8	777	213	27.4	759	192	25.3	682	175	25.7	656	145	22.1	573	120	20.9	541	134	24.8
Total	44,226	12,528	28.3	42,393	11,866	28.0	41,637	11,317	27.2	40,028	10,936	27.3	40,718	9,196	22.6	40,289	8,709	21.6	39,872	8,494	21.3

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 the time of diagnosis of HIV infection, among persons aged ≥13 years, by race/ethnicity and area of residence, 2016—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	443	84	19.0	20	7	35.0	181	44	24.3	24	8	33.3
Alaska	5	0	0.0	3	1	33.3	9	2	22.2	20	2	10.0
Arizona	134	25	18.7	277	55	19.9	249	50	20.1	73	16	21.9
Arkansas	148	27	18.2	28	6	21.4	128	33	25.8	7	3	42.9
California	947	146	15.4	2,265	467	20.6	1,334	239	17.9	485	95	19.6
Colorado	60	13	21.7	152	26	17.1	196	39	19.9	17	5	29.4
Connecticut	110	26	23.6	78	16	20.5	69	23	33.3	8	3	37.5
Delaware	76	18	23.7	8	4	50.0	26	11	42.3	2	1	50.0
District of Columbia	239	37	15.5	37	5	13.5	50	12	24.0	7	0	0.0
Florida	1,991	454	22.8	1,542	282	18.3	1,072	230	21.5	119	32	26.9
Georgia	1,809	353	19.5	182	42	23.1	381	67	17.6	115	19	16.5
Hawaii	11	1	9.1	9	2	22.2	20	2	10.0	40	9	22.5
Idaho	7	1	14.3	10	3	30.0	25	1	4.0	4	2	50.0
Illinois	739	142	19.2	294	79	26.9	302	63	20.9	75	20	26.7
Indiana	215	37	17.2	57	17	29.8	190	48	25.3	21	7	33.3
Iowa	43	9	20.9	10	1	10.0	71	17	23.9	8	4	50.0
Kansas	32	4	12.5	23	9	39.1	80	18	22.5	9	3	33.3
Kentucky	112	36	32.1	35	11	31.4	169	57	33.7	11	2	18.2
Louisiana	817	179	21.9	69	22	31.9	233	61	26.2	10	1	10.0
Maine	17	3	17.6	1	1	100	33	8	24.2	0	0	0.0
Maryland	799	159	19.9	91	15	16.5	143	42	29.4	54	12	22.2
Massachusetts	200	52	26.0	159	35	22.0	244	43	17.6	32	7	21.9
Michigan	426	88	20.7	47	13	27.7	233	67	28.8	38	10	26.3
Minnesota	130	35	26.9	24	5	20.8	116	25	21.6	19	1	5.3
Mississippi	352	97	27.6	4	1	25.0	61	19	31.1	7	1	14.3
Missouri	248	56	22.6	40	8	20.0	205	56	27.3	17	1	5.9
Montana	0	0	0.0	1	1	100	18	2	11.1	1	1	100
Nebraska	15	2	13.3	16	5	31.3	38	9	23.7	7	2	28.6
Nevada	160	34	21.3	167	33	19.8	151	35	23.2	37	12	32.4
New Hampshire	7	1	14.3	7	3	42.9	26	6	23.1	3	1	33.3
New Jersey	465	100	21.5	407	109	26.8	229	49	21.4	65	17	26.2
New Mexico	5	1	20.0	77	14	18.2	27	5	18.5	26	8	30.8
New York	1,093	234	21.4	972	186	19.1	493	99	20.1	296	63	21.3
North Carolina	860	157	18.3	145	47	32.4	324	54	16.7	61	15	24.6
North Dakota	18	5	27.8	7	2	28.6	18	2	11.1	3	2	66.7
Ohio	500	99	19.8	54	16	29.6	380	98	25.8	43	8	18.6
Oklahoma	74	18	24.3	38	9	23.7	140	40	28.6	40	7	17.5
Oregon	15	3	20.0	38	9	23.7	151	42	27.8	19	3	15.8
Pennsylvania	545	118	21.7	200	49	24.5	338	95	28.1	52	12	23.1
Rhode Island	17	5	29.4	18	4	22.2	31	9	29.0	3	0	0.0
South Carolina	514	115	22.4	51	21	41.2	156	40	25.6	22	4	18.2
South Dakota	11	1	9.1	6	3	50.0	19	4	21.1	5	4	80.0
Tennessee	420	52	12.4	37	10	27.0	242	49	20.2	14	3	21.4
Texas	1,604	292	18.2	1,747	438	25.1	930	182	19.6	207	44	21.3
Utah	21	3	14.3	32	7	21.9	72	8	11.1	10	1	10.0
Vermont	1	1	100	0	0	0.0	4	2	50.0	0	0	0.0
Virginia	530	109	20.6	129	26	20.2	200	41	20.5	45	5	11.1
Washington	89	23	25.8	72	18	25.0	200	44	22.0	65	19	29.2
West Virginia	12	2	16.7	0	0	0.0	49	16	32.7	6	2	33.3
Wisconsin	111	23	20.7	25	7	28.0	77	15	19.5	17	2	11.8
Wyoming	2	1	50.0	2	2	100	14	4	28.6	3	1	33.3
Total	17,199	3,481	20.2	9,713	2,152	22.2	10,147	2,227	21.9	2,272	500	22.0

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 diagnosis of HIV infection during 2016, among persons aged ≥13 years, by selected characteristics—39 states and the District of Columbia

	Total No.	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 ^a		
		No.	%	No.	%	No.	%	No.	%	
Sex										
Male	27,273	6,616	24.3	8,231	30.2	5,601	20.5	6,825	25.0	
Female	6,407	1,730	27.0	1,760	27.5	1,436	22.4	1,481	23.1	
Age at diagnosis (yr)										
13–24	7,323	1,962	26.8	2,509	34.3	642	8.8	2,210	30.2	
25–34	11,593	3,155	27.2	3,591	31.0	1,873	16.2	2,974	25.7	
35–44	6,378	1,495	23.4	1,735	27.2	1,702	26.7	1,446	22.7	
45–54	5,084	1,079	21.2	1,333	26.2	1,650	32.5	1,022	20.1	
≥55	3,302	655	19.8	823	24.9	1,170	35.4	654	19.8	
Race/ethnicity										
American Indian/Alaska Native	144	32	22.2	39	27.1	35	24.3	38	26.4	
Asian	859	154	17.9	312	36.3	191	22.2	202	23.5	
Black/African American	15,021	3,458	23.0	4,492	29.9	3,018	20.1	4,053	27.0	
Hispanic/Latino ^b	8,474	2,075	24.5	2,589	30.6	1,852	21.9	1,958	23.1	
Native Hawaiian/ Other Pacific Islander	39	13	33.3	10	25.6	10	25.6	6	15.4	
White	8,254	2,390	29.0	2,259	27.4	1,749	21.2	1,856	22.5	
Multiple races	889	224	25.2	290	32.6	182	20.5	193	21.7	
Transmission category^c										
Male-to-male sexual contact	22,417	5,655	25.2	6,949	31.0	4,215	18.8	5,598	25.0	
Injection drug use										
Male	1,030	230	22.3	257	24.9	276	26.8	267	25.9	
Female	807	223	27.6	213	26.4	180	22.3	191	23.7	
Male-to-male sexual contact and injection drug use	1,104	295	26.7	315	28.5	200	18.1	294	26.6	
Heterosexual contact ^d										
Male	2,694	432	16.0	704	26.1	899	33.4	658	24.4	
Female	5,563	1,494	26.9	1,537	27.6	1,248	22.4	1,285	23.1	
Total^e	33,680	8,346	24.8	9,991	29.7	7,037	20.9	8,306	24.7	

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

Note. Stage of disease at diagnosis of HIV infection based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection. Data are based on residence at diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

^a Includes persons with no CD4 information and persons with HIV disease classified as stage 0.

^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 2b. Stage of disease at diagnosis of HIV infection during 2016, among persons aged ≥13 years, by area of residence—39 states and the District of Columbia

	Total No.	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 ^a	
		No.	%	No.	%	No.	%	No.	%
Alabama	668	167	25.0	200	29.9	143	21.4	158	23.7
Alaska	37	10	27.0	14	37.8	5	13.5	8	21.6
California	5,031	1,285	25.5	1,393	27.7	947	18.8	1,406	27.9
Colorado	425	128	30.1	126	29.6	83	19.5	88	20.7
Connecticut	265	60	22.6	82	30.9	68	25.7	55	20.8
Delaware	112	20	17.9	27	24.1	34	30.4	31	27.7
District of Columbia	333	101	30.3	97	29.1	54	16.2	81	24.3
Florida	4,724	1,320	27.9	1,352	28.6	998	21.1	1,054	22.3
Georgia	2,487	642	25.8	790	31.8	481	19.3	574	23.1
Hawaii	80	18	22.5	31	38.8	14	17.5	17	21.3
Illinois	1,410	327	23.2	459	32.6	304	21.6	320	22.7
Indiana	483	119	24.6	127	26.3	109	22.6	128	26.5
Iowa	132	33	25.0	45	34.1	31	23.5	23	17.4
Louisiana	1,129	273	24.2	347	30.7	263	23.3	246	21.8
Maine	51	18	35.3	14	27.5	12	23.5	7	13.7
Maryland	1,087	265	24.4	319	29.3	228	21.0	275	25.3
Massachusetts	635	189	29.8	214	33.7	137	21.6	95	15.0
Michigan	744	176	23.7	232	31.2	178	23.9	158	21.2
Minnesota	289	58	20.1	98	33.9	66	22.8	67	23.2
Mississippi	424	47	11.1	97	22.9	118	27.8	162	38.2
Missouri	510	118	23.1	140	27.5	121	23.7	131	25.7
Montana	20	3	15.0	8	40.0	4	20.0	5	25.0
Nebraska	76	24	31.6	17	22.4	18	23.7	17	22.4
New Hampshire	43	11	25.6	13	30.2	11	25.6	8	18.6
New Mexico	135	42	31.1	46	34.1	28	20.7	19	14.1
New York	2,854	723	25.3	884	31.0	582	20.4	665	23.3
North Carolina	1,390	298	21.4	380	27.3	273	19.6	439	31.6
North Dakota	46	17	37.0	14	30.4	11	23.9	4	8.7
Oregon	223	49	22.0	76	34.1	57	25.6	41	18.4
Rhode Island	69	17	24.6	21	30.4	18	26.1	13	18.8
South Carolina	743	182	24.5	247	33.2	180	24.2	134	18.0
South Dakota	41	5	12.2	9	22.0	12	29.3	15	36.6
Tennessee	713	157	22.0	178	25.0	114	16.0	264	37.0
Texas	4,488	1,023	22.8	1,386	30.9	956	21.3	1,123	25.0
Utah	135	34	25.2	37	27.4	19	14.1	45	33.3
Virginia	904	208	23.0	247	27.3	181	20.0	268	29.6
Washington	426	102	23.9	142	33.3	104	24.4	78	18.3
West Virginia	67	13	19.4	19	28.4	20	29.9	15	22.4
Wisconsin	230	59	25.7	59	25.7	47	20.4	65	28.3
Wyoming	21	5	23.8	4	19.0	8	38.1	4	19.0
Total	33,680	8,346	24.8	9,991	29.7	7,037	20.9	8,306	24.7

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

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

^a Includes persons with no CD4 information and persons with HIV disease classified as stage 0.

Table 3a. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥13 years, by selected characteristics—39 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	27,273	81.0	20,686	75.8	6,587	24.2	23,246	85.2	4,027	14.8
Female	6,407	19.0	4,864	75.9	1,543	24.1	5,464	85.3	943	14.7
Age at diagnosis (yr)										
13–24	7,323	21.7	5,270	72.0	2,053	28.0	6,099	83.3	1,224	16.7
25–34	11,593	34.4	8,696	75.0	2,897	25.0	9,832	84.8	1,761	15.2
35–44	6,378	18.9	4,909	77.0	1,469	23.0	5,448	85.4	930	14.6
45–54	5,084	15.1	4,049	79.6	1,035	20.4	4,450	87.5	634	12.5
≥55	3,302	9.8	2,626	79.5	676	20.5	2,881	87.3	421	12.7
Race/ethnicity										
American Indian/Alaska Native	144	0.4	112	77.8	32	22.2	121	84.0	23	16.0
Asian	859	2.6	683	79.5	176	20.5	736	85.7	123	14.3
Black/African American	15,021	44.6	10,831	72.1	4,190	27.9	12,394	82.5	2,627	17.5
Hispanic/Latino ^b	8,474	25.2	6,575	77.6	1,899	22.4	7,308	86.2	1,166	13.8
Native Hawaiian/Other Pacific Islander	39	0.1	31	79.5	8	20.5	37	94.9	2	5.1
White	8,254	24.5	6,598	79.9	1,656	20.1	7,301	88.5	953	11.5
Multiple races	889	2.6	720	81.0	169	19.0	813	91.5	76	8.5
Transmission category^c										
Male-to-male sexual contact	22,417	66.6	17,111	76.3	5,306	23.7	19,195	85.6	3,222	14.4
Injection drug use										
Male	1,030	3.1	760	73.8	270	26.2	848	82.4	182	17.6
Female	807	2.4	609	75.5	198	24.5	684	84.8	123	15.2
Male-to-male sexual contact and injection drug use	1,104	3.3	816	73.9	288	26.1	946	85.6	159	14.4
Heterosexual contact ^d										
Male	2,694	8.0	1,978	73.4	716	26.6	2,235	83.0	459	17.0
Female	5,563	16.5	4,222	75.9	1,342	24.1	4,746	85.3	818	14.7
Total^e	33,680	100	25,550	75.9	8,130	24.1	28,710	85.2	4,970	14.8

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 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 2016, among persons aged ≥ 13 years, by area of residence—39 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	668	2.0	499	74.7	169	25.3	561	84.0	107	16.0
Alaska	37	0.1	33	89.2	4	10.8	35	94.6	2	5.4
California	5,031	14.9	3,761	74.8	1,270	25.2	4,147	82.4	884	17.6
Colorado	425	1.3	352	82.8	73	17.2	387	91.1	38	8.9
Connecticut	265	0.8	224	84.5	41	15.5	244	92.1	21	7.9
Delaware	112	0.3	83	74.1	29	25.9	90	80.4	22	19.6
District of Columbia	333	1.0	273	82.0	60	18.0	288	86.5	45	13.5
Florida	4,724	14.0	3,405	72.1	1,319	27.9	3,970	84.0	754	16.0
Georgia	2,487	7.4	1,878	75.5	609	24.5	2,120	85.2	367	14.8
Hawaii	80	0.2	69	86.3	11	13.8	74	92.5	6	7.5
Illinois	1,410	4.2	1,174	83.3	236	16.7	1,247	88.4	163	11.6
Indiana	483	1.4	331	68.5	152	31.5	393	81.4	90	18.6
Iowa	132	0.4	118	89.4	14	10.6	126	95.5	6	4.5
Louisiana	1,129	3.4	850	75.3	279	24.7	969	85.8	160	14.2
Maine	51	0.2	46	90.2	5	9.8	49	96.1	2	3.9
Maryland	1,087	3.2	886	81.5	201	18.5	960	88.3	127	11.7
Massachusetts	635	1.9	545	85.8	90	14.2	573	90.2	62	9.8
Michigan	744	2.2	583	78.4	161	21.6	657	88.3	87	11.7
Minnesota	289	0.9	249	86.2	40	13.8	266	92.0	23	8.0
Mississippi	424	1.3	302	71.2	122	28.8	357	84.2	67	15.8
Missouri	510	1.5	377	73.9	133	26.1	441	86.5	69	13.5
Montana	20	0.1	18	90.0	2	10.0	19	95.0	1	5.0
Nebraska	76	0.2	56	73.7	20	26.3	66	86.8	10	13.2
New Hampshire	43	0.1	36	83.7	7	16.3	40	93.0	3	7.0
New Mexico	135	0.4	114	84.4	21	15.6	122	90.4	13	9.6
New York	2,854	8.5	2,268	79.5	586	20.5	2,499	87.6	355	12.4
North Carolina	1,390	4.1	1,026	73.8	364	26.2	1,186	85.3	204	14.7
North Dakota	46	0.1	41	89.1	5	10.9	43	93.5	3	6.5
Oregon	223	0.7	175	78.5	48	21.5	201	90.1	22	9.9
Rhode Island	69	0.2	63	91.3	6	8.7	66	95.7	3	4.3
South Carolina	743	2.2	624	84.0	119	16.0	668	89.9	75	10.1
South Dakota	41	0.1	38	92.7	3	7.3	40	97.6	1	2.4
Tennessee	713	2.1	387	54.3	326	45.7	509	71.4	204	28.6
Texas	4,488	13.3	3,296	73.4	1,192	26.6	3,770	84.0	718	16.0
Utah	135	0.4	88	65.2	47	34.8	108	80.0	27	20.0
Virginia	904	2.7	654	72.3	250	27.7	737	81.5	167	18.5
Washington	426	1.3	369	86.6	57	13.4	396	93.0	30	7.0
West Virginia	67	0.2	48	71.6	19	28.4	60	89.6	7	10.4
Wisconsin	230	0.7	193	83.9	37	16.1	208	90.4	22	9.6
Wyoming	21	0.1	18	85.7	3	14.3	18	85.7	3	14.3
Total	33,680	100	25,550	75.9	8,130	24.1	28,710	85.2	4,970	14.8

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.

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

Table 4a. Receipt of HIV medical care among persons aged ≥13 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by selected characteristics—39 states and the District of Columbia

	Persons alive at year-end 2015 Total No.	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
		No.	%	No.	%
Sex					
Male	603,410	442,316	73.3	344,575	57.1
Female	190,735	140,406	73.6	109,698	57.5
Age at year-end 2014 (yr)					
13–24	32,149	24,094	74.9	17,874	55.6
25–34	117,121	85,146	72.7	62,370	53.3
35–44	166,905	120,903	72.4	91,675	54.9
45–54	266,344	198,993	74.7	156,737	58.8
≥55	211,626	153,586	72.6	125,617	59.4
Race/ethnicity					
American Indian/Alaska Native	1,716	1,253	73.0	904	52.7
Asian ^b	10,626	7,680	72.3	6,054	57.0
Black/African American	335,265	238,265	71.1	183,440	54.7
Hispanic/Latino ^c	172,027	122,144	71.0	99,888	58.1
Native Hawaiian/Other Pacific Islander	694	487	70.2	343	49.4
White	239,856	184,346	76.9	141,060	58.8
Multiple races	33,280	28,481	85.6	22,538	67.7
Transmission category^d					
Male-to-male sexual contact	431,446	323,157	74.9	249,900	57.9
Injection drug use					
Male	59,683	37,831	63.4	30,511	51.1
Female	41,375	29,946	72.4	23,717	57.3
Male-to-male sexual contact and injection drug use	45,145	35,143	77.8	27,787	61.5
Heterosexual contact ^e					
Male	60,915	41,778	68.6	33,008	54.2
Female	143,606	106,159	73.9	82,513	57.5
Other ^f					
Male	6,221	4,406	70.8	3,370	54.2
Female	5,754	4,301	74.7	3,468	60.3
Total^g	794,145	582,722	73.4	454,273	57.2

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, 2015 (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 2015.

^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 681 persons of unknown race/ethnicity.

Table 4b. Receipt of HIV medical care among persons aged ≥13 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by area of residence—39 states and the District of Columbia

	Persons alive at year-end 2015 Total No.	≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
		No.	%	No.	%
Alabama	11,539	8,580	74.4	6,900	59.8
Alaska	631	551	87.3	397	62.9
California	117,118	87,437	74.7	67,094	57.3
Colorado	11,114	7,009	63.1	5,003	45.0
Connecticut	10,052	8,029	79.9	6,466	64.3
Delaware	3,061	2,349	76.7	1,816	59.3
District of Columbia	14,023	9,043	64.5	6,635	47.3
Florida	101,004	74,106	73.4	61,407	60.8
Georgia	47,130	33,667	71.4	27,094	57.5
Hawaii	2,600	1,814	69.8	1,306	50.2
Illinois	33,835	23,095	68.3	16,648	49.2
Indiana	10,090	7,440	73.7	5,350	53.0
Iowa	2,300	1,980	86.1	1,507	65.5
Louisiana	18,337	13,793	75.2	10,889	59.4
Maine	1,420	1,134	79.9	825	58.1
Maryland	31,366	21,127	67.4	14,490	46.2
Massachusetts	19,052	14,773	77.5	11,484	60.3
Michigan	13,849	11,094	80.1	8,195	59.2
Minnesota	7,468	5,532	74.1	3,729	49.9
Mississippi	8,737	5,889	67.4	4,399	50.3
Missouri	11,394	9,026	79.2	7,152	62.8
Montana	555	494	89.0	390	70.3
Nebraska	1,942	1,471	75.7	957	49.3
New Hampshire	1,194	920	77.1	726	60.8
New Mexico	3,074	2,417	78.6	1,859	60.5
New York	123,329	88,976	72.1	75,710	61.4
North Carolina	28,068	21,048	75.0	15,241	54.3
North Dakota	317	265	83.6	185	58.4
Oregon	6,375	5,656	88.7	4,132	64.8
Rhode Island	2,270	1,841	81.1	1,291	56.9
South Carolina	15,505	11,930	76.9	9,829	63.4
South Dakota	491	262	53.4	151	30.8
Tennessee	15,040	11,353	75.5	8,284	55.1
Texas	77,449	58,669	75.8	45,794	59.1
Utah	2,546	1,727	67.8	1,115	43.8
Virginia	20,216	12,005	59.4	7,859	38.9
Washington	12,013	10,323	85.9	7,465	62.1
West Virginia	1,676	1,126	67.2	784	46.8
Wisconsin	5,691	4,559	80.1	3,562	62.6
Wyoming	274	212	77.4	153	55.8
Total	794,145	582,722	73.4	454,273	57.2

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, 2015 (i.e., most recent known address).

^a Performed \geq 3 months apart during 2015.

Table 5a. HIV viral suppression during 2015 among persons aged ≥13 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by selected characteristics—39 states and the District of Columbia

	Persons alive at year-end 2015		Persons with ≥1 CD4 or VL tests		Persons with ≥1 VL tests		VL of <200 copies/mL			
	No.	% ^a	No.	%	No.	%	Among persons alive at year-end 2015		Among persons with ≥1 CD4 or VL tests	
							No.	%	No.	%
Sex										
Male	603,410	76.0	442,316	73.3	423,160	70.1	365,063	60.5	82.5	86.3
Female	190,735	24.0	140,406	73.6	134,842	70.7	110,079	57.7	78.4	81.6
Age at year-end 2014 (yr)										
13–24	32,149	4.0	24,094	74.9	23,206	72.2	16,449	51.2	68.3	70.9
25–34	117,121	14.7	85,146	72.7	81,941	70.0	63,463	54.2	74.5	77.4
35–44	166,905	21.0	120,903	72.4	116,235	69.6	96,340	57.7	79.7	82.9
45–54	266,344	33.5	198,993	74.7	190,724	71.6	166,092	62.4	83.5	87.1
≥55	211,626	26.6	153,586	72.6	145,896	68.9	132,798	62.8	86.5	91.0
Race/ethnicity										
American Indian/Alaska Native	1,716	0.2	1,253	73.0	1,197	69.8	1,009	58.8	80.5	84.3
Asian ^b	10,626	1.3	7,680	72.3	7,406	69.7	6,908	65.0	89.9	93.3
Black/African American	335,265	42.2	238,265	71.1	227,293	67.8	181,159	54.0	76.0	79.7
Hispanic/Latino ^c	172,027	21.7	122,144	71.0	118,944	69.1	103,155	60.0	84.5	86.7
Native Hawaiian/Other Pacific Islander	694	0.1	487	70.2	465	67.0	422	60.8	86.7	90.8
White	239,856	30.2	184,346	76.9	175,253	73.1	159,758	66.6	86.7	91.2
Multiple races	33,280	4.2	28,481	85.6	27,378	82.3	22,669	68.1	79.6	82.8
Transmission category^d										
Male-to-male sexual contact	431,446	54.3	323,157	74.9	309,993	71.8	271,695	63.0	84.1	87.6
Injection drug use										
Male	59,683	7.5	37,831	63.4	35,625	59.7	29,673	49.7	78.4	83.3
Female	41,375	5.2	29,946	72.4	28,610	69.1	22,935	55.4	76.6	80.2
Male-to-male sexual contact and injection drug use	45,145	5.7	35,143	77.8	33,483	74.2	27,152	60.1	77.3	81.1
Heterosexual contact ^e										
Male	60,915	7.7	41,778	68.6	39,860	65.4	33,493	55.0	80.2	84.0
Female	143,606	18.1	106,159	73.9	102,057	71.1	84,268	58.7	79.4	82.6
Other ^f										
Male	6,221	0.8	4,406	70.8	4,200	67.5	3,049	49.0	69.2	72.6
Female	5,754	0.7	4,301	74.7	4,175	72.6	2,876	50.0	66.9	68.9
Total^g	794,145	100	582,722	73.4	558,002	70.3	475,142	59.8	81.5	85.2

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, 2015 (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 2015.

^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 681 persons of unknown race/ethnicity.

Table 5b. HIV viral suppression during 2015 among persons aged ≥ 13 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by area of residence—39 states and the District of Columbia

	Persons alive at year-end 2015		Persons with ≥ 1 CD4 or VL tests		Persons with ≥ 1 VL tests		VL of <200 copies/mL			
							Among persons alive at year-end 2015		Among persons with ≥ 1 CD4 or VL tests	
	No.	% ^a	No.	%	No.	%	No.	%	%	%
	Alabama	11,539	1.5	8,580	74.4	8,253	71.5	6,857	59.4	79.9
Alaska	631	0.1	551	87.3	536	84.9	472	74.8	85.7	88.1
California	117,118	14.7	87,437	74.7	84,727	72.3	75,358	64.3	86.2	88.9
Colorado	11,114	1.4	7,009	63.1	6,797	61.2	5,671	51.0	80.9	83.4
Connecticut	10,052	1.3	8,029	79.9	7,630	75.9	6,664	66.3	83.0	87.3
Delaware	3,061	0.4	2,349	76.7	2,303	75.2	1,964	64.2	83.6	85.3
District of Columbia	14,023	1.8	9,043	64.5	8,665	61.8	7,075	50.5	78.2	81.7
Florida	101,004	12.7	74,106	73.4	71,897	71.2	60,984	60.4	82.3	84.8
Georgia	47,130	5.9	33,667	71.4	32,406	68.8	26,746	56.7	79.4	82.5
Hawaii	2,600	0.3	1,814	69.8	1,754	67.5	1,602	61.6	88.3	91.3
Illinois	33,835	4.3	23,095	68.3	20,980	62.0	17,874	52.8	77.4	85.2
Indiana	10,090	1.3	7,440	73.7	7,223	71.6	6,262	62.1	84.2	86.7
Iowa	2,300	0.3	1,980	86.1	1,954	85.0	1,763	76.7	89.0	90.2
Louisiana	18,337	2.3	13,793	75.2	13,578	74.0	10,882	59.3	78.9	80.1
Maine	1,420	0.2	1,134	79.9	1,058	74.5	977	68.8	86.2	92.3
Maryland	31,366	3.9	21,127	67.4	19,053	60.7	15,024	47.9	71.1	78.9
Massachusetts	19,052	2.4	14,773	77.5	13,813	72.5	12,380	65.0	83.8	89.6
Michigan	13,849	1.7	11,094	80.1	10,622	76.7	9,095	65.7	82.0	85.6
Minnesota	7,468	0.9	5,532	74.1	5,466	73.2	4,894	65.5	88.5	89.5
Mississippi	8,737	1.1	5,889	67.4	5,422	62.1	4,292	49.1	72.9	79.2
Missouri	11,394	1.4	9,026	79.2	8,350	73.3	7,280	63.9	80.7	87.2
Montana	555	0.1	494	89.0	482	86.8	433	78.0	87.7	89.8
Nebraska	1,942	0.2	1,471	75.7	1,316	67.8	1,169	60.2	79.5	88.8
New Hampshire	1,194	0.2	920	77.1	911	76.3	843	70.6	91.6	92.5
New Mexico	3,074	0.4	2,417	78.6	2,368	77.0	2,145	69.8	88.7	90.6
New York	123,329	15.5	88,976	72.1	88,127	71.5	75,592	61.3	85.0	85.8
North Carolina	28,068	3.5	21,048	75.0	20,179	71.9	17,252	61.5	82.0	85.5
North Dakota	317	0.0	265	83.6	251	79.2	222	70.0	83.8	88.4
Oregon	6,375	0.8	5,656	88.7	4,161	65.3	3,621	56.8	64.0	87.0
Rhode Island	2,270	0.3	1,841	81.1	1,813	79.9	1,631	71.9	88.6	90.0
South Carolina	15,505	2.0	11,930	76.9	11,525	74.3	9,533	61.5	79.9	82.7
South Dakota	491	0.1	262	53.4	246	50.1	209	42.6	79.8	85.0
Tennessee	15,040	1.9	11,353	75.5	9,888	65.7	7,957	52.9	70.1	80.5
Texas	77,449	9.8	58,669	75.8	56,092	72.4	46,025	59.4	78.4	82.1
Utah	2,546	0.3	1,727	67.8	1,688	66.3	1,294	50.8	74.9	76.7
Virginia	20,216	2.5	12,005	59.4	10,933	54.1	9,065	44.8	75.5	82.9
Washington	12,013	1.5	10,323	85.9	9,842	81.9	8,995	74.9	87.1	91.4
West Virginia	1,676	0.2	1,126	67.2	1,067	63.7	915	54.6	81.3	85.8
Wisconsin	5,691	0.7	4,559	80.1	4,434	77.9	3,966	69.7	87.0	89.4
Wyoming	274	0.0	212	77.4	192	70.1	159	58.0	75.0	82.8
Total	794,145	100	582,722	73.4	558,002	70.3	475,142	59.8	81.5	85.2

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, 2015 (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 2015.^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, 2010–2015—United States

	2010			2011			2012			2013			2014			2015		
	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
	population	PLWDH ^a	population	PLWDH ^a	population	PLWDH ^a	population	PLWDH ^a	population	PLWDH ^a	population	PLWDH ^a	population	PLWDH ^a	population	PLWDH ^a	population	PLWDH ^a
Sex																		
Male	12,595	10.1	19.6	12,244	9.7	18.5	11,941	9.4	17.5	11,968	9.3	17.0	12,046	9.3	16.6	12,099	9.2	16.2
Female	4,436	3.4	20.7	4,284	3.2	19.6	4,259	3.2	19.1	4,080	3.0	18.0	4,211	3.1	18.2	3,926	2.9	16.7
Age at death (yr)																		
13–24	240	0.5	5.4	229	0.4	4.9	198	0.4	4.2	180	0.3	3.8	187	0.4	3.9	163	0.3	3.5
25–34	1,183	2.9	9.5	1,106	2.6	8.6	1,111	2.6	8.4	1,056	2.5	7.7	1,007	2.3	7.1	999	2.3	6.7
35–44	3,295	8.0	13.5	2,901	7.1	12.5	2,585	6.4	11.6	2,328	5.8	10.9	2,254	5.6	10.8	2,071	5.1	10.2
45–54	6,370	14.2	21.7	6,043	13.5	19.7	5,768	13.0	18.3	5,538	12.6	17.3	5,202	12.0	16.1	5,011	11.6	15.5
≥55	5,943	7.7	39.7	6,249	7.9	37.1	6,538	8.0	34.6	6,946	8.3	32.9	7,607	8.8	32.5	7,781	8.8	30.1
Race/ethnicity																		
American Indian/Alaska Native	74	4.1	31.5	57	3.1	23.6	54	2.9	21.3	64	3.4	24.3	61	3.2	22.2	64	3.3	22.2
Asian ^b	72	0.6	8.2	86	0.7	9.1	71	0.5	7.0	74	0.5	6.8	63	0.4	5.3	80	0.5	6.2
Black/African American	8,235	26.8	23.1	7,870	25.3	21.4	7,642	24.2	20.2	7,457	23.4	19.2	7,424	23.0	18.6	7,254	22.2	17.7
Hispanic/Latino ^c	2,666	7.0	15.4	2,719	7.0	15.1	2,467	6.2	13.2	2,567	6.3	13.2	2,662	6.3	13.2	2,503	5.8	12.0
Native Hawaiian/Other Pacific Islander	7	1.8	11.2	10	2.4	14.8	7	1.7	9.8	10	2.3	13.2	8	1.8	10.1	6	1.3	7.0
White	5,128	3.0	18.7	4,978	2.9	17.8	5,097	3.0	17.8	4,941	2.9	16.9	5,092	3.0	17.1	5,130	3.0	16.9
Multiple races	844	23.7	22.0	806	21.8	20.5	841	22.0	20.9	931	23.5	22.7	943	23.0	22.8	982	23.1	23.6
Transmission category^d																		
Male-to-male sexual contact	6,553	—	15.2	6,423	—	14.3	6,355	—	13.5	6,492	—	13.3	6,583	—	12.9	6,710	—	12.7
Injection drug use																		
Male	2,863	—	34.9	2,673	—	33.0	2,543	—	31.8	2,436	—	30.9	2,455	—	31.6	2,333	—	30.4
Female	1,614	—	29.6	1,609	—	29.7	1,506	—	28.0	1,514	—	28.4	1,475	—	27.9	1,373	—	26.2
Male-to-male sexual contact and injection drug use	1,347	—	24.6	1,328	—	24.1	1,295	—	23.4	1,325	—	23.9	1,338	—	24.2	1,386	—	25.0
Heterosexual contact ^e																		
Male	1,718	—	25.3	1,699	—	24.3	1,631	—	22.8	1,601	—	21.8	1,572	—	21.0	1,563	—	20.4
Female	2,761	—	18.0	2,592	—	16.4	2,675	—	16.4	2,505	—	15.0	2,672	—	15.6	2,478	—	14.1
Other ^f																		
Male	114	—	16.7	122	—	17.3	118	—	16.3	113	—	15.5	97	—	13.1	107	—	14.2
Female	61	—	10.5	83	—	13.6	78	—	12.4	61	—	9.4	64	—	9.6	76	—	11.1
Region of residence																		
Northeast	4,388	9.4	20.0	4,212	9.0	18.9	3,862	8.2	17.1	3,917	8.2	17.1	3,786	7.9	16.2	3,646	7.6	15.5
Midwest	1,965	3.5	19.4	1,890	3.4	18.1	1,915	3.4	17.7	1,793	3.2	16.1	1,846	3.3	16.2	1,823	3.2	15.6
South	8,219	8.7	22.2	7,916	8.2	20.6	7,932	8.2	19.9	7,780	7.9	18.9	8,029	8.1	18.9	7,946	7.9	18.1
West	2,459	4.1	14.9	2,510	4.2	14.8	2,491	4.1	14.3	2,558	4.2	14.3	2,596	4.2	14.1	2,610	4.1	13.7
Total^g	17,031	6.6	19.9	16,528	6.4	18.8	16,200	6.2	17.9	16,048	6.1	17.2	16,257	6.1	17.0	16,025	6.0	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 6b. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death, 2010–2015—United States and 6 dependent areas

	2010			2011			2012			2013			2014			2015		
	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
Sex																		
Male	13,013	10.3	19.9	12,651	9.9	18.8	12,286	9.5	17.7	12,313	9.5	17.2	12,386	9.4	16.8	12,401	9.4	16.4
Female	4,587	3.4	20.9	4,419	3.3	19.7	4,382	3.2	19.2	4,203	3.1	18.1	4,344	3.2	18.4	4,033	2.9	16.8
Age at death (yr)																		
13–24	246	0.5	5.4	234	0.4	5.0	203	0.4	4.2	185	0.3	3.8	189	0.4	3.9	165	0.3	3.5
25–34	1,233	3.0	9.7	1,140	2.7	8.7	1,154	2.7	8.5	1,089	2.5	7.8	1,030	2.3	7.1	1,026	2.3	6.8
35–44	3,426	8.3	13.8	3,017	7.3	12.7	2,678	6.5	11.8	2,396	5.8	11.0	2,312	5.6	10.9	2,128	5.2	10.3
45–54	6,587	14.5	22.0	6,254	13.8	20.0	5,931	13.2	18.5	5,718	12.9	17.5	5,363	12.2	16.3	5,161	11.8	15.7
≥55	6,108	7.8	39.9	6,425	8.0	37.3	6,702	8.1	34.7	7,128	8.4	33.0	7,836	9.0	32.8	7,954	8.9	30.1
Race/ethnicity																		
American Indian/Alaska Native	74	—	31.4	57	—	23.5	54	—	21.3	64	—	24.3	61	—	22.2	64	—	22.2
Asian ^b	73	—	8.3	88	—	9.2	73	—	7.1	74	—	6.7	65	—	5.5	81	—	6.3
Black/African American	8,241	—	23.1	7,878	—	21.4	7,653	—	20.2	7,463	—	19.2	7,433	—	18.6	7,260	—	17.7
Hispanic/Latino ^c	3,225	—	16.9	3,248	—	16.4	2,920	—	14.3	3,023	—	14.3	3,124	—	14.3	2,902	—	12.9
Native Hawaiian/Other Pacific Islander	8	—	12.3	12	—	17.2	7	—	9.5	12	—	15.4	8	—	9.8	7	—	7.9
White	5,129	—	18.7	4,978	—	17.8	5,098	—	17.8	4,943	—	16.9	5,092	—	17.1	5,131	—	16.9
Multiple races	845	—	22.0	807	—	20.5	842	—	20.9	933	—	22.8	943	—	22.8	983	—	23.6
Transmission category^d																		
Male-to-male sexual contact	6,625	—	15.3	6,507	—	14.4	6,415	—	13.5	6,576	—	13.3	6,670	—	13.0	6,788	—	12.7
Injection drug use																		
Male	3,076	—	35.4	2,884	—	33.7	2,708	—	32.1	2,581	—	31.0	2,598	—	31.7	2,469	—	30.5
Female	1,658	—	29.7	1,655	—	29.8	1,539	—	28.0	1,556	—	28.5	1,516	—	28.1	1,396	—	26.1
Male-to-male sexual contact and injection drug use	1,391	—	24.9	1,359	—	24.3	1,324	—	23.6	1,353	—	24.1	1,365	—	24.3	1,414	—	25.1
Heterosexual contact ^e																		
Male	1,805	—	25.7	1,777	—	24.5	1,718	—	23.1	1,688	—	22.2	1,654	—	21.3	1,621	—	20.5
Female	2,866	—	18.2	2,678	—	16.5	2,761	—	16.5	2,585	—	15.1	2,763	—	15.7	2,560	—	14.3
Other ^f																		
Male	115	—	16.4	123	—	17.0	121	—	16.3	115	—	15.4	100	—	13.1	109	—	14.1
Female	63	—	10.6	86	—	13.8	82	—	12.8	62	—	9.3	65	—	9.5	77	—	11.0
Region of residence																		
Northeast	4,388	9.4	20.0	4,212	9.0	18.9	3,862	8.2	17.1	3,917	8.2	17.1	3,786	7.9	16.2	3,646	7.6	15.5
Midwest	1,965	3.5	19.4	1,890	3.4	18.1	1,915	3.4	17.7	1,793	3.2	16.1	1,846	3.3	16.2	1,823	3.2	15.6
South	8,219	8.7	22.2	7,916	8.2	20.6	7,932	8.2	19.9	7,780	7.9	18.9	8,029	8.1	18.9	7,946	7.9	18.1
West	2,459	4.1	14.9	2,510	4.2	14.8	2,491	4.1	14.3	2,558	4.2	14.3	2,596	4.2	14.1	2,610	4.1	13.7
U.S. dependent areas	569	16.7	32.1	542	16.0	30.6	468	13.9	26.4	468	13.9	26.2	473	14.2	26.5	409	12.4	22.9
Total^g	17,600	6.8	20.2	17,070	6.5	19.0	16,668	6.3	18.0	16,516	6.2	17.4	16,730	6.2	17.2	16,434	6.1	16.5

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, 2010–2015—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	24.8	25.4
Alaska	16	2.8	2.7	23.7	25.1
Arizona	203	3.9	3.9	16.1	15.4
Arkansas	116	4.8	4.9	25.6	25.8
California	1,558	5.1	5.1	14.4	13.8
Colorado	142	3.4	3.3	14.1	11.9
Connecticut	218	7.2	6.6	20.8	19.2
Delaware	77	10.2	9.9	24.9	25.4
District of Columbia	261	49.2	54.4	18.1	17.3
Florida	2,036	12.7	12.3	22.3	21.7
Georgia	918	11.6	11.6	22.1	23.7
Hawaii	38	3.3	3.2	14.9	12.2
Idaho	15	1.2	1.3	16.4	14.5
Illinois	672	6.3	6.3	21.1	22.5
Indiana	175	3.3	3.4	19.4	17.7
Iowa	28	1.1	1.0	13.8	13.6
Kansas	49	2.1	2.1	18.4	22.6
Kentucky	121	3.4	3.3	22.3	22.8
Louisiana	463	12.4	12.8	28.3	28.5
Maine	24	2.1	1.9	18.5	15.8
Maryland	621	12.9	12.3	21.9	21.2
Massachusetts	284	5.1	4.9	16.3	14.9
Michigan	316	3.8	3.8	22.9	23.3
Minnesota	79	1.8	1.8	11.9	12.6
Mississippi	208	8.6	8.9	25.5	26.8
Missouri	211	4.2	4.3	20.3	20.2
Montana	11	1.3	1.3	25.2	23.9
Nebraska	31	2.1	2.1	17.3	19.2
Nevada	126	5.7	5.6	17.5	16.5
New Hampshire	18	1.6	1.4	16.1	15.9
New Jersey	813	11.1	10.4	23.4	21.6
New Mexico	64	3.8	3.9	21.4	19.3
New York	2,272	13.9	13.3	18.8	16.8
North Carolina	587	7.4	7.3	23.4	23.0
North Dakota	6	1.1	1.2	28.0	28.5
Ohio	290	3.0	3.0	16.6	16.7
Oklahoma	109	3.5	3.6	21.9	21.6
Oregon	99	3.1	3.0	17.0	15.7
Pennsylvania	704	6.5	6.3	22.5	21.6
Rhode Island	38	4.2	4.3	17.8	17.5
South Carolina	340	8.8	8.9	23.6	22.9
South Dakota	12	1.8	1.8	31.7	29.5
Tennessee	380	7.2	7.2	26.1	28.2
Texas	1,359	6.7	6.9	20.4	21.4
Utah	24	1.1	1.3	10.9	8.3
Vermont	17	3.2	2.7	35.1	28.0
Virginia	321	4.8	4.7	17.3	17.1
Washington	155	2.8	2.7	14.5	14.2
West Virginia	28	1.8	1.8	17.4	15.6
Wisconsin	96	2.0	2.0	19.0	19.8
Wyoming	8	1.7	1.7	29.3	37.0
Subtotal	17,031	6.6	6.5	19.9	19.4
U.S. dependent areas					
American Samoa	1	2.4	2.5	1000.0	199.8
Guam	3	2.5	2.6	33.0	16.7
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	558	18.0	18.7	32.8	29.3
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	7	7.9	8.2	11.9	10.3
Subtotal	569	16.7	17.3	32.1	28.7
Total	17,600	6.8	6.7	20.2	19.6

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2015—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	257	6.4	6.5	22.3	23.9
Alaska	13	2.2	2.2	18.9	13.7
Arizona	195	3.7	3.8	15.0	14.0
Arkansas	115	4.7	5.0	24.9	25.8
California	1,623	5.2	5.2	14.6	13.7
Colorado	126	3.0	2.9	12.1	10.4
Connecticut	223	7.4	6.8	21.3	18.8
Delaware	71	9.3	8.7	22.3	18.6
District of Columbia	279	51.4	56.2	19.3	18.3
Florida	2,021	12.4	12.0	21.6	20.6
Georgia	827	10.3	10.3	19.3	20.6
Hawaii	42	3.6	3.4	16.4	13.5
Idaho	16	1.3	1.4	16.7	12.6
Illinois	571	5.4	5.2	17.4	17.2
Indiana	199	3.7	3.8	21.2	21.8
Iowa	37	1.5	1.4	17.5	19.8
Kansas	47	2.0	2.1	17.0	13.7
Kentucky	111	3.1	3.0	19.7	18.9
Louisiana	475	12.6	12.8	27.6	28.8
Maine	25	2.2	1.9	19.0	17.9
Maryland	586	12.0	11.4	20.0	18.8
Massachusetts	266	4.7	4.5	14.7	13.3
Michigan	310	3.7	3.6	21.8	21.5
Minnesota	91	2.1	2.0	13.2	13.3
Mississippi	210	8.6	8.6	24.5	26.0
Missouri	184	3.7	3.6	17.1	17.0
Montana	8	1.0	0.9	16.2	19.2
Nebraska	24	1.6	1.6	13.1	17.1
Nevada	134	6.0	6.0	18.0	16.6
New Hampshire	14	1.2	1.1	12.3	16.8
New Jersey	770	10.4	9.8	22.1	19.3
New Mexico	52	3.1	3.1	16.9	14.9
New York	2,196	13.3	12.7	18.0	16.2
North Carolina	543	6.8	6.6	21.0	21.3
North Dakota	4	0.7	0.6	17.9	28.4
Ohio	318	3.3	3.3	17.5	17.8
Oklahoma	121	3.9	4.1	23.5	23.7
Oregon	101	3.1	3.0	16.7	15.6
Pennsylvania	666	6.2	5.9	20.8	19.8
Rhode Island	47	5.2	4.9	21.7	23.2
South Carolina	330	8.5	8.4	19.4	19.5
South Dakota	7	1.0	1.0	17.9	14.3
Tennessee	324	6.1	6.0	21.6	22.7
Texas	1,291	6.3	6.4	18.5	19.3
Utah	24	1.1	1.3	10.5	8.3
Vermont	5	0.9	0.8	9.8	8.1
Virginia	317	4.7	4.6	16.7	15.6
Washington	171	3.0	2.9	15.7	13.9
West Virginia	38	2.4	2.4	22.1	19.9
Wisconsin	98	2.1	2.0	18.8	17.3
Wyoming	5	1.1	0.9	19.3	24.5
Subtotal	16,528	6.4	6.3	18.8	18.0
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	4	3.3	3.7	46.5	22.8
Northern Mariana Islands	1	2.5	2.0	166.7	165.7
Puerto Rico	527	17.1	17.5	30.9	26.9
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	10	11.3	10.0	17.2	13.1
Subtotal	542	16.0	16.4	30.6	26.5
Total	17,070	6.5	6.4	19.0	18.1

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2015—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	283	7.0	7.1	23.8	24.5
Alaska	11	1.9	1.9	16.4	12.8
Arizona	215	4.0	4.0	15.8	15.5
Arkansas	90	3.7	3.8	18.9	17.3
California	1,559	5.0	4.9	13.6	12.4
Colorado	116	2.7	2.6	10.9	8.8
Connecticut	201	6.6	5.9	19.2	16.5
Delaware	79	10.3	9.6	24.4	22.4
District of Columbia	231	41.7	46.7	15.3	14.0
Florida	1,982	12.0	11.5	20.3	18.9
Georgia	845	10.4	10.4	18.8	19.7
Hawaii	50	4.3	4.0	19.4	14.8
Idaho	24	1.9	1.9	23.7	23.6
Illinois	558	5.2	5.1	16.6	16.1
Indiana	166	3.1	3.0	17.2	17.6
Iowa	43	1.7	1.8	19.3	15.7
Kansas	44	1.9	1.8	15.8	15.8
Kentucky	118	3.2	3.2	20.1	19.8
Louisiana	474	12.5	12.7	27.2	27.3
Maine	19	1.7	1.4	14.3	12.4
Maryland	638	13.0	12.3	21.3	19.9
Massachusetts	271	4.8	4.5	14.4	11.9
Michigan	341	4.1	4.1	23.2	21.9
Minnesota	86	1.9	1.8	12.0	12.4
Mississippi	200	8.2	8.4	23.0	23.5
Missouri	192	3.8	3.8	17.3	17.1
Montana	5	0.6	0.7	9.9	5.5
Nebraska	32	2.1	2.1	17.0	16.5
Nevada	161	7.1	7.0	20.9	21.9
New Hampshire	23	2.0	1.9	19.8	16.2
New Jersey	657	8.8	8.1	18.7	16.4
New Mexico	58	3.4	3.5	19.1	18.1
New York	2,055	12.4	11.7	16.6	14.3
North Carolina	527	6.5	6.3	19.4	19.0
North Dakota	3	0.5	0.5	12.0	16.5
Ohio	352	3.6	3.5	18.7	18.6
Oklahoma	115	3.7	3.7	21.6	19.5
Oregon	112	3.4	3.3	18.0	16.0
Pennsylvania	586	5.4	5.2	17.8	16.2
Rhode Island	44	4.9	4.4	20.1	20.2
South Carolina	318	8.1	7.9	20.1	19.1
South Dakota	10	1.5	1.8	24.2	18.0
Tennessee	342	6.4	6.4	22.0	21.3
Texas	1,314	6.3	6.4	18.0	18.8
Utah	27	1.2	1.4	11.5	10.5
Vermont	6	1.1	1.0	10.5	8.2
Virginia	337	4.9	4.8	16.8	15.6
Washington	151	2.6	2.5	13.4	12.2
West Virginia	39	2.5	2.2	21.7	19.9
Wisconsin	88	1.8	1.8	16.6	15.4
Wyoming	2	0.4	0.4	7.7	3.7
Subtotal	16,200	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	11.1	6.7
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	452	14.8	15.1	26.5	23.3
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	15	17.0	15.0	26.3	34.0
Subtotal	468	13.9	14.1	26.4	23.5
Total	16,668	6.3	6.1	18.0	16.8

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2015—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	19.9	19.3
Alaska	16	2.7	2.7	24.0	23.1
Arizona	221	4.0	4.1	15.7	14.3
Arkansas	124	5.1	5.4	24.9	22.8
California	1,616	5.1	5.0	13.8	12.3
Colorado	116	2.7	2.6	10.7	9.2
Connecticut	177	5.8	5.3	16.5	13.1
Delaware	73	9.4	8.6	22.7	19.3
District of Columbia	203	36.1	39.8	13.5	13.1
Florida	1,995	11.9	11.2	19.9	17.9
Georgia	848	10.3	10.2	17.4	17.8
Hawaii	39	3.3	3.1	14.8	9.7
Idaho	14	1.1	1.1	13.3	11.5
Illinois	514	4.8	4.6	15.0	14.1
Indiana	179	3.3	3.3	17.9	18.0
Iowa	43	1.7	1.6	18.8	17.8
Kansas	57	2.4	2.4	20.1	19.1
Kentucky	119	3.2	3.3	18.7	16.5
Louisiana	417	10.9	11.3	23.0	22.3
Maine	30	2.6	2.5	21.6	17.8
Maryland	620	12.5	11.7	20.4	18.2
Massachusetts	272	4.8	4.3	14.1	11.8
Michigan	282	3.4	3.2	18.7	18.1
Minnesota	77	1.7	1.6	10.5	11.4
Mississippi	228	9.3	9.4	25.7	25.2
Missouri	187	3.7	3.7	16.5	16.5
Montana	14	1.6	1.6	25.4	21.7
Nebraska	33	2.2	2.3	17.2	15.2
Nevada	147	6.4	6.2	18.5	16.6
New Hampshire	15	1.3	1.2	12.8	10.8
New Jersey	740	9.9	9.0	20.6	17.8
New Mexico	48	2.8	2.8	16.1	13.4
New York	1,996	12.0	11.2	16.1	13.4
North Carolina	533	6.5	6.3	19.1	17.6
North Dakota	6	1.0	0.9	22.9	27.5
Ohio	313	3.2	3.2	16.1	14.7
Oklahoma	125	4.0	4.1	22.6	21.4
Oregon	110	3.3	3.2	17.6	14.3
Pennsylvania	643	5.9	5.5	19.2	17.4
Rhode Island	35	3.9	3.6	15.8	12.9
South Carolina	322	8.1	8.0	20.4	18.7
South Dakota	9	1.3	1.3	20.0	12.1
Tennessee	333	6.1	6.0	21.0	20.7
Texas	1,231	5.8	5.9	16.2	16.5
Utah	45	2.0	2.2	17.6	15.2
Vermont	9	1.7	1.3	14.5	10.0
Virginia	324	4.7	4.5	16.0	14.5
Washington	166	2.9	2.7	14.2	12.6
West Virginia	42	2.7	2.6	23.6	20.2
Wisconsin	93	1.9	1.8	16.0	14.5
Wyoming	6	1.2	1.3	22.5	17.4
Subtotal	16,048	6.1	5.9	17.2	15.7
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	2	1.6	1.8	22.2	11.8
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	455	15.0	14.9	26.5	22.4
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	11	12.5	10.6	19.0	23.6
Subtotal	468	13.9	13.8	26.2	22.4
Total	16,516	6.2	6.0	17.4	15.8

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2015—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	277	6.8	6.7	21.8	21.5
Alaska	12	2.0	2.0	18.8	17.5
Arizona	222	4.0	4.1	15.0	13.7
Arkansas	125	5.1	5.2	23.7	22.2
California	1,643	5.1	5.0	13.7	12.0
Colorado	149	3.4	3.3	13.3	12.1
Connecticut	190	6.2	5.5	18.4	14.7
Delaware	90	11.4	10.4	27.9	23.6
District of Columbia	210	36.9	40.0	14.4	13.2
Florida	1,972	11.6	10.8	18.9	16.6
Georgia	937	11.3	11.1	19.2	19.4
Hawaii	42	3.5	3.4	15.7	10.6
Idaho	21	1.6	1.6	19.9	28.6
Illinois	527	4.9	4.6	15.0	14.5
Indiana	180	3.3	3.3	17.3	16.7
Iowa	55	2.1	2.1	22.9	19.8
Kansas	47	2.0	2.0	16.2	15.2
Kentucky	118	3.2	3.2	17.9	16.3
Louisiana	422	11.0	11.2	22.1	22.3
Maine	19	1.7	1.2	13.0	9.9
Maryland	594	11.9	11.1	18.8	16.4
Massachusetts	264	4.6	4.2	13.4	11.3
Michigan	290	3.5	3.4	19.3	18.1
Minnesota	97	2.1	2.0	12.8	12.7
Mississippi	235	9.5	9.5	25.6	25.9
Missouri	171	3.4	3.4	14.7	13.3
Montana	10	1.2	1.1	18.0	16.4
Nebraska	29	1.9	1.9	14.5	13.8
Nevada	129	5.5	5.5	15.2	13.7
New Hampshire	14	1.2	1.2	11.5	8.2
New Jersey	666	8.9	8.0	18.5	15.3
New Mexico	67	3.9	3.9	21.3	18.5
New York	1,939	11.6	10.7	15.2	12.6
North Carolina	550	6.6	6.4	19.0	17.5
North Dakota	7	1.1	1.2	22.8	27.0
Ohio	343	3.5	3.4	17.0	15.8
Oklahoma	140	4.4	4.5	24.5	22.3
Oregon	102	3.0	2.9	16.1	14.0
Pennsylvania	654	6.0	5.6	19.2	16.3
Rhode Island	37	4.1	3.6	15.9	13.4
South Carolina	330	8.1	7.7	20.4	19.5
South Dakota	9	1.3	1.4	18.3	12.1
Tennessee	331	6.0	5.9	21.2	21.6
Texas	1,351	6.2	6.3	16.9	16.7
Utah	22	1.0	1.1	8.4	6.7
Vermont	3	0.6	0.4	4.5	3.1
Virginia	310	4.4	4.2	14.8	13.6
Washington	173	2.9	2.8	14.2	12.6
West Virginia	37	2.3	2.2	20.4	20.8
Wisconsin	91	1.9	1.8	15.4	14.6
Wyoming	4	0.8	0.8	14.7	10.5
Subtotal	16,257	6.1	5.9	17.0	15.3
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	2	1.6	1.8	22.2	32.8
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	460	15.3	14.6	26.8	21.8
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	11	12.5	10.4	18.6	15.7
Subtotal	473	14.2	13.6	26.5	21.6
Total	16,730	6.2	6.0	17.2	15.5

Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2015—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	282	6.9	6.9	22.6	21.3
Alaska	12	2.0	2.1	18.0	17.2
Arizona	216	3.8	3.8	14.0	12.4
Arkansas	114	4.6	4.8	21.0	18.9
California	1,700	5.2	5.1	13.7	11.8
Colorado	124	2.7	2.7	10.7	8.0
Connecticut	186	6.1	5.3	17.7	13.8
Delaware	68	8.5	7.6	21.1	15.9
District of Columbia	256	44.3	48.2	17.5	15.6
Florida	2,092	12.1	11.2	19.5	16.8
Georgia	838	10.0	9.8	16.6	16.1
Hawaii	32	2.7	2.4	11.6	8.5
Idaho	14	1.0	1.1	13.0	9.9
Illinois	547	5.1	4.8	15.3	13.6
Indiana	178	3.2	3.2	16.3	17.0
Iowa	36	1.4	1.2	14.6	13.5
Kansas	52	2.2	2.1	18.1	17.0
Kentucky	123	3.3	3.3	18.2	17.0
Louisiana	427	11.1	11.1	21.5	21.0
Maine	20	1.7	1.5	13.4	8.4
Maryland	555	11.0	10.1	16.8	14.1
Massachusetts	300	5.2	4.7	15.0	11.8
Michigan	303	3.6	3.4	20.4	19.6
Minnesota	99	2.2	2.0	12.6	13.2
Mississippi	221	8.9	8.9	23.4	23.1
Missouri	173	3.4	3.3	14.4	13.6
Montana	14	1.6	1.5	23.8	19.9
Nebraska	28	1.8	1.9	13.6	13.2
Nevada	128	5.3	5.1	14.2	13.3
New Hampshire	29	2.5	2.2	23.2	18.1
New Jersey	653	8.7	7.9	18.1	14.6
New Mexico	75	4.4	4.3	22.9	20.2
New York	1,834	11.0	10.0	14.3	11.5
North Carolina	562	6.7	6.3	18.8	16.4
North Dakota	8	1.3	1.6	23.3	24.8
Ohio	306	3.1	3.0	14.6	13.0
Oklahoma	146	4.5	4.6	24.7	22.5
Oregon	110	3.2	3.1	16.4	13.1
Pennsylvania	593	5.4	5.0	17.1	14.0
Rhode Island	26	2.9	2.5	11.0	9.9
South Carolina	293	7.1	6.9	17.8	16.4
South Dakota	7	1.0	0.9	13.4	13.9
Tennessee	343	6.2	6.3	21.3	19.8
Texas	1,314	5.9	6.0	15.8	15.3
Utah	33	1.4	1.6	12.2	10.3
Vermont	5	0.9	0.7	7.5	5.1
Virginia	282	4.0	3.8	13.2	11.3
Washington	148	2.5	2.3	11.7	10.8
West Virginia	30	1.9	1.6	16.9	15.1
Wisconsin	86	1.8	1.6	14.3	12.6
Wyoming	4	0.8	0.8	13.6	10.7
Subtotal	16,025	6.0	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	20.6	11.5
Northern Mariana Islands	1	2.5	2.0	125.0	33.3
Puerto Rico	397	13.3	13.0	23.1	18.6
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	9	10.2	9.0	15.8	11.2
Subtotal	409	12.4	12.1	22.9	18.4
Total	16,434	6.1	5.8	16.5	14.4

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, 2010–2015—United States

	2010			2011			2012			2013			2014			2015		
	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
		PLWA ^a			PLWA ^a			PLWA ^a			PLWA ^a			PLWA ^a			PLWA ^a	
Sex																		
Male	10,339	8.3	27.9	10,005	7.9	26.4	9,778	7.7	25.2	9,741	7.6	24.6	9,791	7.5	24.4	9,772	7.5	24.1
Female	3,581	2.7	31.1	3,514	2.7	29.7	3,412	2.6	28.2	3,336	2.5	27.1	3,346	2.5	26.8	3,125	2.3	24.8
Age at death (yr)																		
13–24	178	0.3	14.3	170	0.3	13.3	147	0.3	11.5	129	0.2	10.1	126	0.2	10.8	117	0.2	11.2
25–34	931	2.3	19.1	866	2.1	17.6	873	2.1	17.4	827	1.9	16.4	763	1.8	15.2	756	1.7	15.1
35–44	2,781	6.8	20.4	2,427	6.0	19.0	2,125	5.2	17.7	1,923	4.7	16.9	1,832	4.5	17.0	1,652	4.1	16.2
45–54	5,279	11.7	28.1	5,062	11.3	25.9	4,819	10.9	24.1	4,612	10.5	22.9	4,329	10.0	21.5	4,172	9.7	21.0
≥55	4,751	6.1	47.3	4,994	6.3	44.3	5,226	6.4	41.4	5,586	6.7	39.6	6,087	7.1	39.2	6,200	7.0	36.4
Race/ethnicity																		
American Indian/Alaska Native	57	3.2	43.8	47	2.6	35.0	41	2.2	29.6	52	2.8	36.4	43	2.3	29.5	53	2.8	35.2
Asian ^b	58	0.5	12.1	68	0.5	13.3	60	0.5	11.1	65	0.5	11.4	48	0.3	8.1	64	0.4	10.3
Black/African American	6,717	21.9	33.9	6,393	20.5	31.4	6,204	19.7	29.7	6,024	18.9	28.1	5,986	18.5	27.5	5,789	17.7	26.3
Hispanic/Latino ^c	2,295	6.0	21.7	2,308	5.9	21.2	2,106	5.3	18.9	2,187	5.3	19.1	2,249	5.4	19.3	2,113	4.9	17.9
Native Hawaiian/Other Pacific Islander	6	1.5	16.9	9	2.2	23.7	6	1.4	15.2	8	1.9	19.6	5	1.1	12.0	4	0.9	9.2
White	4,061	2.4	26.7	3,985	2.3	25.8	4,052	2.4	25.8	3,930	2.3	24.8	4,006	2.3	25.1	4,038	2.4	25.2
Multiple races	726	20.4	31.2	709	19.2	29.7	721	18.8	29.6	810	20.4	32.7	800	19.5	32.1	836	19.7	33.6
Transmission category^d																		
Male-to-male sexual contact	5,320	—	22.8	5,216	—	21.6	5,158	—	20.6	5,230	—	20.3	5,272	—	20.1	5,350	—	20.0
Injection drug use																		
Male	2,347	—	42.5	2,178	—	39.9	2,095	—	38.9	2,017	—	37.9	2,010	—	38.4	1,927	—	37.5
Female	1,327	—	39.9	1,339	—	40.3	1,242	—	37.5	1,262	—	38.4	1,205	—	37.1	1,116	—	34.8
Male-to-male sexual contact and injection drug use	1,167	—	32.7	1,139	—	31.8	1,105	—	30.8	1,126	—	31.4	1,146	—	32.2	1,167	—	33.1
Heterosexual contact ^e																		
Male	1,404	—	33.9	1,366	—	31.9	1,319	—	29.9	1,279	—	28.2	1,278	—	27.7	1,238	—	26.4
Female	2,199	—	28.0	2,103	—	25.9	2,098	—	24.9	2,019	—	23.3	2,085	—	23.6	1,939	—	21.6
Other ^f																		
Male	100	—	23.1	106	—	23.9	101	—	22.6	89	—	19.7	84	—	18.5	90	—	19.5
Female	54	—	15.7	73	—	20.4	72	—	19.7	56	—	14.8	56	—	14.6	71	—	18.1
Region of residence																		
Northeast	3,610	7.7	27.2	3,455	7.3	25.9	3,201	6.8	23.8	3,227	6.8	23.8	3,044	6.4	22.4	2,932	6.1	21.6
Midwest	1,592	2.9	29.4	1,525	2.7	27.3	1,503	2.7	26.3	1,427	2.5	24.4	1,446	2.6	24.4	1,429	2.5	23.9
Southeast	6,686	7.0	33.2	6,460	6.7	30.9	6,417	6.6	29.7	6,307	6.4	28.3	6,497	6.5	28.6	6,386	6.3	27.7
West	2,032	3.4	20.8	2,079	3.5	20.9	2,069	3.4	20.4	2,116	3.4	20.6	2,150	3.5	20.7	2,150	3.4	20.4
Total^g	13,920	5.4	28.7	13,519	5.2	27.2	13,190	5.1	25.9	13,077	5.0	25.2	13,137	4.9	25.0	12,897	4.8	24.3

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

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).

^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, 2010–2015—United States and 6 dependent areas

	2010		2011		2012		2013		2014		2015							
	Rate per 100,000	Rate per 1,000 PLWA ^a	Rate per 100,000	Rate per 1,000 PLWA ^a	Rate per 100,000	Rate per 1,000 PLWA ^a	Rate per 100,000	Rate per 1,000 PLWA ^a	Rate per 100,000	Rate per 1,000 PLWA ^a	Rate per 100,000	Rate per 1,000 PLWA ^a						
	No.	population	No.	population	No.	population	No.	population	No.	population	No.	population						
Sex																		
Male	10,659	8.4	28.2	10,320	8.1	26.7	10,029	7.8	25.4	9,989	7.7	24.8	10,041	7.6	24.6	10,000	7.5	24.2
Female	3,702	2.8	31.3	3,616	2.7	29.9	3,502	2.6	28.3	3,419	2.5	27.1	3,452	2.5	27.0	3,202	2.3	24.8
Age at death (yr)																		
13–24	181	0.3	14.2	173	0.3	13.3	151	0.3	11.6	134	0.3	10.3	128	0.2	10.8	119	0.2	11.2
25–34	961	2.3	19.4	890	2.1	17.8	898	2.1	17.7	844	1.9	16.5	779	1.8	15.3	777	1.7	15.3
35–44	2,876	6.9	20.7	2,511	6.1	19.3	2,190	5.3	17.9	1,967	4.8	17.0	1,872	4.6	17.1	1,689	4.1	16.3
45–54	5,463	12.0	28.5	5,237	11.6	26.3	4,946	11.0	24.3	4,742	10.7	23.1	4,449	10.1	21.7	4,285	9.8	21.2
≥55	4,880	6.2	47.5	5,125	6.4	44.4	5,346	6.5	41.4	5,721	6.7	39.7	6,265	7.2	39.4	6,332	7.1	36.4
Race/ethnicity																		
American Indian/Alaska Native	57	—	43.8	47	—	35.0	41	—	29.6	52	—	36.4	43	—	29.5	53	—	35.2
Asian ^b	59	—	12.2	70	—	13.7	61	—	11.3	65	—	11.4	49	—	8.2	64	—	10.2
Black/African American	6,723	—	33.9	6,401	—	31.4	6,213	—	29.7	6,027	—	28.1	5,990	—	27.5	5,793	—	26.3
Hispanic/Latino ^c	2,727	—	23.6	2,712	—	22.9	2,435	—	20.1	2,509	—	20.2	2,600	—	20.6	2,411	—	18.9
Native Hawaiian/Other Pacific Islander	7	—	19.0	11	—	28.1	6	—	14.8	10	—	23.8	5	—	11.7	5	—	11.1
White	4,062	—	26.7	3,985	—	25.8	4,053	—	25.8	3,932	—	24.8	4,006	—	25.1	4,039	—	25.2
Multiple races	726	—	31.2	710	—	29.8	722	—	29.7	812	—	32.7	800	—	32.1	837	—	33.6
Transmission category^d																		
Male-to-male sexual contact	5,380	—	22.8	5,286	—	21.7	5,198	—	20.6	5,295	—	20.4	5,334	—	20.1	5,409	—	20.0
Injection drug use																		
Male	2,508	—	43.2	2,332	—	40.7	2,218	—	39.2	2,112	—	37.9	2,121	—	38.6	2,028	—	37.7
Female	1,362	—	40.0	1,378	—	40.5	1,265	—	37.4	1,292	—	38.4	1,241	—	37.3	1,130	—	34.4
Male-to-male sexual contact and injection drug use	1,201	—	33.1	1,167	—	32.0	1,131	—	31.0	1,149	—	31.5	1,168	—	32.4	1,191	—	33.3
Heterosexual contact ^e																		
Male	1,468	—	34.3	1,427	—	32.3	1,377	—	30.2	1,342	—	28.7	1,331	—	27.9	1,281	—	26.5
Female	2,284	—	28.4	2,163	—	25.9	2,161	—	25.1	2,070	—	23.3	2,154	—	23.8	2,001	—	21.7
Other ^f																		
Male	102	—	22.8	107	—	23.6	104	—	22.8	91	—	19.7	86	—	18.6	91	—	19.4
Female	56	—	15.9	75	—	20.5	76	—	20.3	57	—	14.7	57	—	14.5	72	—	18.0
Region																		
Northeast	3,610	7.7	27.2	3,455	7.3	25.9	3,201	6.8	23.8	3,227	6.8	23.8	3,044	6.4	22.4	2,932	6.1	21.6
Midwest	1,592	2.9	29.4	1,525	2.7	27.3	1,503	2.7	26.3	1,427	2.5	24.4	1,446	2.6	24.4	1,429	2.5	23.9
Southeast	6,686	7.0	33.2	6,460	6.7	30.9	6,417	6.6	29.7	6,307	6.4	28.3	6,497	6.5	28.6	6,386	6.3	27.7
West	2,032	3.4	20.8	2,079	3.5	20.9	2,069	3.4	20.4	2,116	3.4	20.6	2,150	3.4	20.7	2,150	3.4	20.4
U.S. dependent areas	441	12.9	44.2	417	12.3	41.9	341	10.1	34.5	331	9.9	33.2	356	10.7	35.8	305	9.3	31.0
Total^g	14,361	5.5	29.0	13,936	5.3	27.5	13,531	5.1	26.1	13,408	5.0	25.3	13,493	5.0	25.2	13,202	4.9	24.4

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

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).

^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, 2010–2015—United States and 6 dependent areas

	No.	Age-adjusted rate per		Age-adjusted rate per	
		Rate per 100,000 pop	100,000 pop	Rate per 1,000 PLWA ^a	1,000 PLWA
			2010		
Alabama	188	4.7	4.8	39.8	41.0
Alaska	12	2.1	2.1	30.9	34.7
Arizona	170	3.3	3.3	25.7	23.4
Arkansas	89	3.7	3.8	40.3	43.1
California	1,289	4.2	4.2	19.3	19.1
Colorado	117	2.8	2.7	25.7	22.7
Connecticut	187	6.2	5.7	27.2	22.7
Delaware	62	8.2	8.0	31.9	31.2
District of Columbia	222	41.8	46.4	26.8	24.9
Florida	1,723	10.8	10.5	32.7	31.5
Georgia	745	9.4	9.4	32.7	32.9
Hawaii	34	3.0	2.9	21.4	16.4
Idaho	12	1.0	1.1	25.9	21.8
Illinois	547	5.1	5.1	31.4	33.7
Indiana	151	2.8	2.9	30.6	27.1
Iowa	23	0.9	0.9	18.9	17.1
Kansas	40	1.7	1.7	26.2	34.3
Kentucky	97	2.7	2.7	32.6	30.1
Louisiana	371	9.9	10.2	41.5	40.3
Maine	20	1.8	1.6	28.1	21.5
Maryland	514	10.6	10.2	32.1	30.1
Massachusetts	230	4.1	3.9	21.8	19.4
Michigan	255	3.1	3.1	33.8	32.1
Minnesota	68	1.5	1.5	21.4	19.7
Mississippi	157	6.5	6.7	40.7	41.4
Missouri	176	3.5	3.6	30.5	30.7
Montana	10	1.2	1.2	36.6	30.8
Nebraska	26	1.7	1.8	26.7	29.0
Nevada	101	4.5	4.5	26.6	24.5
New Hampshire	18	1.6	1.4	28.3	26.0
New Jersey	652	8.9	8.3	34.4	30.8
New Mexico	48	2.8	2.9	26.0	23.8
New York	1,892	11.6	11.1	25.2	21.2
North Carolina	421	5.3	5.3	38.1	34.5
North Dakota	5	0.9	1.0	47.2	59.4
Ohio	220	2.3	2.3	25.3	26.3
Oklahoma	85	2.8	2.8	32.9	28.4
Oregon	82	2.5	2.5	22.6	19.8
Pennsylvania	563	5.2	5.0	30.6	29.0
Rhode Island	33	3.7	3.7	24.8	27.1
South Carolina	292	7.6	7.7	35.6	32.5
South Dakota	6	0.9	1.0	38.5	35.7
Tennessee	299	5.7	5.7	40.5	45.1
Texas	1,157	5.7	5.9	30.8	30.5
Utah	21	1.0	1.2	16.7	11.6
Vermont	15	2.8	2.4	53.4	35.1
Virginia	244	3.6	3.6	26.7	24.2
Washington	129	2.3	2.2	20.4	18.3
West Virginia	20	1.3	1.3	21.4	20.4
Wisconsin	75	1.6	1.5	29.2	29.1
Wyoming	7	1.5	1.5	49.0	67.9
Subtotal	13,920	5.4	5.4	28.7	27.3
U.S. dependent areas					
American Samoa	1	2.4	2.5	1000.0	199.8
Guam	2	1.6	1.7	55.6	29.1
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	432	13.9	14.4	44.9	39.0
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	6	6.8	7.2	18.2	17.7
Subtotal	441	12.9	13.3	44.2	38.3
Total	14,361	5.5	5.5	29.0	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, 2010–2015—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	
			2011	Age-adjusted rate per 1,000 PLWA	
Alabama	184	4.6	4.6	35.9	39.5
Alaska	10	1.7	1.7	25.4	18.3
Arizona	159	3.0	3.1	23.3	22.2
Arkansas	94	3.9	4.1	41.9	46.5
California	1,347	4.3	4.3	19.9	18.1
Colorado	106	2.5	2.5	22.5	19.5
Connecticut	180	5.9	5.4	26.4	23.0
Delaware	57	7.5	7.0	28.8	20.6
District of Columbia	228	42.0	46.2	27.8	25.8
Florida	1,729	10.6	10.3	32.1	31.1
Georgia	667	8.3	8.3	28.6	29.8
Hawaii	33	2.9	2.7	21.0	16.4
Idaho	12	0.9	1.0	24.6	16.8
Illinois	456	4.3	4.2	25.6	22.6
Indiana	169	3.1	3.2	32.9	32.0
Iowa	29	1.1	1.1	22.9	29.6
Kansas	41	1.8	1.8	26.0	18.8
Kentucky	93	2.6	2.6	30.3	27.9
Louisiana	406	10.8	10.9	43.1	42.0
Maine	15	1.3	1.1	21.1	17.6
Maryland	486	10.0	9.5	29.6	25.9
Massachusetts	225	4.0	3.9	20.7	18.6
Michigan	247	3.0	2.9	31.9	27.1
Minnesota	72	1.6	1.6	21.6	23.6
Mississippi	155	6.4	6.4	37.9	37.4
Missouri	156	3.1	3.0	26.2	25.5
Montana	7	0.8	0.8	22.8	23.3
Nebraska	20	1.3	1.4	19.9	22.7
Nevada	113	5.0	5.1	29.0	25.9
New Hampshire	13	1.2	1.0	20.4	34.3
New Jersey	608	8.2	7.7	32.1	26.6
New Mexico	45	2.6	2.7	23.9	20.9
New York	1,845	11.2	10.7	24.5	21.9
North Carolina	372	4.7	4.5	32.5	31.3
North Dakota	4	0.7	0.6	37.0	38.9
Ohio	248	2.6	2.5	27.5	27.7
Oklahoma	93	3.0	3.2	35.2	36.4
Oregon	86	2.6	2.6	23.1	22.7
Pennsylvania	525	4.9	4.6	28.1	25.5
Rhode Island	39	4.3	4.0	29.2	25.6
South Carolina	285	7.3	7.3	28.6	28.4
South Dakota	5	0.7	0.7	28.6	30.1
Tennessee	243	4.6	4.5	32.1	30.4
Texas	1,097	5.3	5.4	28.0	27.8
Utah	16	0.7	0.9	12.4	8.6
Vermont	5	0.9	0.8	17.5	12.0
Virginia	240	3.5	3.5	25.6	23.7
Washington	141	2.5	2.4	22.1	17.8
West Virginia	31	2.0	1.9	31.2	25.0
Wisconsin	78	1.6	1.6	29.1	25.3
Wyoming	4	0.9	0.7	27.6	31.6
Subtotal	13,519	5.2	5.1	27.2	25.4
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	4	3.3	3.7	114.3	49.9
Northern Mariana Islands	1	2.5	2.0	1000.0	0.0
Puerto Rico	402	13.0	13.4	41.9	36.2
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	10	11.3	10.0	31.1	21.2
Subtotal	417	12.3	12.6	41.9	36.0
Total	13,936	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, 2010–2015—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	203	5.0	5.1	38.0	38.3
Alaska	8	1.3	1.3	21.0	11.6
Arizona	170	3.2	3.1	24.1	24.7
Arkansas	73	3.0	3.1	31.9	30.5
California	1,308	4.2	4.2	19.0	17.5
Colorado	90	2.1	2.1	18.6	15.2
Connecticut	175	5.8	5.2	25.6	23.5
Delaware	72	9.4	8.7	35.9	29.7
District of Columbia	190	34.3	38.4	22.5	20.7
Florida	1,684	10.2	9.8	29.9	27.8
Georgia	675	8.3	8.3	27.6	28.1
Hawaii	44	3.8	3.6	28.0	20.7
Idaho	17	1.3	1.3	33.1	49.9
Illinois	435	4.1	4.0	24.0	21.1
Indiana	142	2.6	2.6	27.0	27.6
Iowa	36	1.4	1.5	27.2	22.1
Kansas	39	1.7	1.6	24.8	22.7
Kentucky	88	2.4	2.4	28.1	27.1
Louisiana	396	10.4	10.7	41.1	38.7
Maine	17	1.5	1.3	23.5	23.3
Maryland	509	10.3	9.8	30.4	27.6
Massachusetts	226	4.0	3.8	20.1	17.4
Michigan	274	3.3	3.3	34.5	31.3
Minnesota	68	1.5	1.4	19.5	18.7
Mississippi	146	6.0	6.2	35.0	31.9
Missouri	154	3.1	3.1	25.2	22.7
Montana	4	0.5	0.6	12.8	7.1
Nebraska	24	1.6	1.5	23.7	19.4
Nevada	137	6.0	6.0	34.3	39.9
New Hampshire	17	1.5	1.3	26.5	18.8
New Jersey	537	7.2	6.6	28.2	24.8
New Mexico	42	2.5	2.6	22.6	19.0
New York	1,717	10.4	9.8	22.8	19.2
North Carolina	366	4.5	4.4	29.9	27.3
North Dakota	3	0.5	0.5	25.6	28.7
Ohio	253	2.6	2.5	27.2	24.6
Oklahoma	93	3.0	3.0	34.1	29.0
Oregon	91	2.8	2.7	24.1	19.4
Pennsylvania	476	4.4	4.2	25.1	21.7
Rhode Island	33	3.7	3.4	24.6	22.4
South Carolina	267	6.8	6.6	29.3	27.2
South Dakota	7	1.0	1.3	37.2	28.3
Tennessee	259	4.8	4.9	32.8	29.3
Texas	1,106	5.3	5.4	27.2	26.4
Utah	25	1.1	1.3	18.7	15.2
Vermont	3	0.6	0.6	9.8	7.7
Virginia	258	3.8	3.7	25.8	23.7
Washington	132	2.3	2.2	20.3	16.5
West Virginia	32	2.0	1.8	30.5	25.5
Wisconsin	68	1.4	1.4	24.8	20.1
Wyoming	1	0.2	0.2	6.5	2.6
Subtotal	13,190	5.1	4.9	25.9	23.7
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	1	0.8	0.9	30.3	20.0
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	327	10.7	10.9	34.4	31.7
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	13	14.7	13.4	40.8	62.4
Subtotal	341	10.1	10.2	34.5	32.8
Total	13,531	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, 2010–2015—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	187	4.6	4.7	33.9	32.3
Alaska	13	2.2	2.2	34.5	34.7
Arizona	179	3.3	3.3	24.6	22.0
Arkansas	94	3.8	4.1	39.3	36.7
California	1,348	4.2	4.2	19.3	17.1
Colorado	97	2.2	2.2	19.7	19.2
Connecticut	158	5.2	4.7	22.9	17.5
Delaware	62	8.0	7.2	30.9	27.0
District of Columbia	166	29.5	32.6	19.8	19.3
Florida	1,670	10.0	9.4	29.0	25.8
Georgia	658	8.0	8.0	24.8	23.8
Hawaii	29	2.5	2.3	18.2	11.1
Idaho	11	0.8	0.8	20.8	16.2
Illinois	403	3.8	3.6	22.0	18.8
Indiana	150	2.8	2.7	27.9	27.0
Iowa	38	1.5	1.4	28.1	23.2
Kansas	43	1.8	1.8	27.2	24.8
Kentucky	89	2.4	2.4	26.4	22.9
Louisiana	356	9.3	9.7	35.6	34.2
Maine	24	2.1	1.9	31.7	24.5
Maryland	499	10.0	9.4	29.4	24.4
Massachusetts	221	3.9	3.5	19.4	16.1
Michigan	230	2.8	2.7	28.5	24.8
Minnesota	64	1.4	1.3	18.0	18.0
Mississippi	177	7.2	7.3	40.4	38.1
Missouri	154	3.1	3.0	24.9	24.3
Montana	12	1.4	1.4	35.4	25.0
Nebraska	27	1.8	1.9	26.1	22.2
Nevada	119	5.1	5.0	29.2	25.5
New Hampshire	12	1.1	1.0	18.7	13.3
New Jersey	566	7.6	6.9	29.1	25.6
New Mexico	42	2.4	2.5	23.0	18.8
New York	1,690	10.2	9.5	22.4	17.8
North Carolina	394	4.8	4.7	30.9	28.3
North Dakota	4	0.7	0.6	31.0	30.5
Ohio	233	2.4	2.4	24.4	21.1
Oklahoma	106	3.4	3.4	37.7	35.5
Oregon	94	2.8	2.8	25.1	19.4
Pennsylvania	516	4.8	4.4	26.9	23.4
Rhode Island	32	3.5	3.2	23.5	16.1
South Carolina	254	6.4	6.3	28.2	25.2
South Dakota	4	0.6	0.6	20.6	7.7
Tennessee	255	4.7	4.6	31.3	28.4
Texas	1,050	4.9	5.0	24.9	24.9
Utah	32	1.4	1.6	22.5	17.4
Vermont	8	1.5	1.2	24.4	14.3
Virginia	260	3.8	3.6	26.1	22.5
Washington	134	2.3	2.2	20.1	15.7
West Virginia	30	1.9	1.8	29.3	21.8
Wisconsin	77	1.6	1.5	25.2	21.7
Wyoming	6	1.2	1.3	38.7	37.1
Subtotal	13,077	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	1.8	60.6	35.3
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	321	10.5	10.4	33.4	30.4
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	8	9.1	8.1	25.4	49.5
Subtotal	331	9.9	9.7	33.2	31.1
Total	13,408	5.0	4.9	25.3	22.5

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, 2010–2015—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	207	5.1	5.0	36.3	35.5
Alaska	10	1.7	1.7	28.2	24.8
Arizona	174	3.1	3.2	23.1	22.0
Arkansas	100	4.1	4.1	40.0	35.7
California	1,388	4.3	4.2	19.8	17.3
Colorado	122	2.7	2.7	24.1	28.4
Connecticut	163	5.3	4.7	24.7	20.2
Delaware	72	9.1	8.2	36.1	27.9
District of Columbia	173	30.4	33.0	21.8	19.6
Florida	1,663	9.8	9.2	28.1	24.7
Georgia	745	9.0	8.8	28.6	26.8
Hawaii	35	2.9	2.9	21.9	14.3
Idaho	16	1.2	1.2	29.8	24.6
Illinois	427	4.0	3.8	23.0	20.1
Indiana	143	2.6	2.7	26.2	25.0
Iowa	50	1.9	1.9	35.7	27.2
Kansas	36	1.5	1.6	22.4	20.7
Kentucky	87	2.4	2.4	25.3	22.8
Louisiana	341	8.9	9.1	33.0	33.0
Maine	15	1.3	0.9	19.3	12.7
Maryland	484	9.7	9.0	27.8	22.0
Massachusetts	214	3.7	3.4	18.7	15.7
Michigan	221	2.6	2.6	27.6	23.3
Minnesota	70	1.5	1.5	19.2	19.3
Mississippi	189	7.7	7.7	41.4	37.8
Missouri	134	2.6	2.6	21.3	18.4
Montana	7	0.8	0.8	20.8	16.9
Nebraska	22	1.4	1.5	20.7	15.5
Nevada	105	4.5	4.5	24.3	23.1
New Hampshire	10	0.9	0.8	15.3	13.3
New Jersey	514	6.9	6.2	26.6	23.0
New Mexico	52	3.0	3.1	27.8	24.0
New York	1,589	9.5	8.8	20.9	16.9
North Carolina	402	4.8	4.7	30.3	26.8
North Dakota	6	1.0	1.1	39.7	38.3
Ohio	253	2.6	2.5	25.8	23.0
Oklahoma	116	3.6	3.7	40.1	31.2
Oregon	80	2.4	2.2	21.3	20.8
Pennsylvania	503	4.6	4.3	26.0	21.6
Rhode Island	33	3.6	3.1	23.8	18.5
South Carolina	276	6.8	6.5	30.7	29.1
South Dakota	6	0.9	0.9	27.8	21.3
Tennessee	259	4.7	4.6	32.1	31.0
Texas	1,119	5.1	5.3	25.8	23.6
Utah	16	0.7	0.8	11.2	7.7
Vermont	3	0.6	0.4	8.7	5.0
Virginia	236	3.4	3.2	23.2	21.6
Washington	141	2.4	2.3	20.5	16.7
West Virginia	28	1.8	1.7	26.9	28.1
Wisconsin	78	1.6	1.6	25.3	27.4
Wyoming	4	0.8	0.8	26.0	16.0
Subtotal	13,137	4.9	4.8	25.0	22.0
U.S. dependent areas					
American Samoa	0	0.0	0.0	0.0	0.0
Guam	1	0.8	0.9	31.3	37.5
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	350	11.6	11.0	36.5	30.6
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	5	5.7	4.1	15.7	10.3
Subtotal	356	10.7	10.2	35.8	30.0
Total	13,493	5.0	4.8	25.2	22.1

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, 2010–2015—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	
			1,000 PLWA		
			2015		
Alabama	215	5.3	5.3	37.9	33.8
Alaska	9	1.5	1.6	24.2	20.8
Arizona	174	3.1	3.0	22.7	20.3
Arkansas	86	3.5	3.6	34.1	31.4
California	1,409	4.3	4.2	19.9	16.6
Colorado	102	2.2	2.2	19.6	14.3
Connecticut	159	5.2	4.5	24.0	21.8
Delaware	56	7.0	6.3	28.0	19.4
District of Columbia	192	33.2	36.3	24.2	23.7
Florida	1,739	10.0	9.3	29.0	25.7
Georgia	658	7.8	7.7	24.8	22.5
Hawaii	27	2.3	2.1	17.0	12.0
Idaho	7	0.5	0.5	13.1	9.9
Illinois	451	4.2	4.0	24.1	20.1
Indiana	139	2.5	2.5	24.9	30.0
Iowa	29	1.1	1.0	20.7	17.0
Kansas	44	1.8	1.8	28.5	23.5
Kentucky	94	2.5	2.5	27.1	24.0
Louisiana	353	9.1	9.2	33.5	32.9
Maine	15	1.3	1.2	19.2	10.6
Maryland	461	9.2	8.4	25.4	19.9
Massachusetts	227	3.9	3.5	19.8	15.2
Michigan	240	2.9	2.6	30.6	27.9
Minnesota	68	1.5	1.4	18.1	23.7
Mississippi	178	7.2	7.2	38.3	35.4
Missouri	129	2.5	2.4	20.0	18.1
Montana	12	1.4	1.3	34.2	27.6
Nebraska	22	1.4	1.4	20.3	26.3
Nevada	106	4.4	4.3	23.6	22.4
New Hampshire	24	2.1	1.8	36.0	27.2
New Jersey	525	7.0	6.3	27.3	22.5
New Mexico	68	3.9	3.9	35.7	36.7
New York	1,495	8.9	8.1	19.8	15.8
North Carolina	407	4.8	4.6	29.7	23.8
North Dakota	7	1.1	1.3	40.5	39.7
Ohio	228	2.3	2.3	22.6	20.1
Oklahoma	125	3.9	4.0	42.4	40.1
Oregon	87	2.6	2.4	22.4	16.3
Pennsylvania	466	4.3	3.9	24.0	17.9
Rhode Island	18	2.0	1.6	13.0	10.1
South Carolina	234	5.7	5.5	25.8	24.7
South Dakota	6	0.9	0.7	26.4	27.0
Tennessee	253	4.6	4.6	31.0	29.7
Texas	1,088	4.9	5.0	24.6	21.9
Utah	29	1.2	1.4	19.9	14.5
Vermont	3	0.6	0.4	8.5	5.2
Virginia	219	3.1	2.9	21.4	17.7
Washington	119	2.0	1.9	17.0	16.4
West Virginia	28	1.8	1.5	27.8	21.8
Wisconsin	66	1.4	1.2	21.7	19.0
Wyoming	1	0.2	0.2	6.3	2.8
Subtotal	12,897	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	55.6	29.2
Northern Mariana Islands	0	0.0	0.0	0.0	0.0
Puerto Rico	297	10.0	9.6	31.4	28.6
Republic of Palau	0	0.0	0.0	0.0	0.0
U.S. Virgin Islands	6	6.8	5.8	19.0	13.0
Subtotal	305	9.3	9.0	31.0	28.0
Total	13,202	4.9	4.6	24.4	21.2

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 2007–2012, by year of diagnosis and area of residence—United States and 6 dependent areas

	No.	Proportion survived >3 years					
		2007	2008	2009	2010	2011	2012
Alabama	4,115	0.91	0.91	0.90	0.93	0.93	0.93
Alaska	178	*	*	*	*	*	*
Arizona	3,879	0.92	0.92	0.91	0.94	0.93	0.92
Arkansas	1,521	0.88	0.87	0.88	0.94	0.91	0.96
California	32,336	0.94	0.94	0.94	0.94	0.94	0.95
Colorado	2,385	0.94	0.95	0.94	0.96	0.95	0.97
Connecticut	2,181	0.91	0.95	0.95	0.96	0.93	0.95
Delaware	845	0.90	0.92	0.89	0.91	0.94	0.93
District of Columbia	4,983	0.93	0.93	0.93	0.95	0.95	0.96
Florida	30,704	0.90	0.91	0.92	0.93	0.92	0.94
Georgia	17,521	0.91	0.91	0.92	0.93	0.93	0.93
Hawaii	530	*	*	*	*	*	*
Idaho	256	*	*	*	*	*	*
Illinois	10,368	0.92	0.93	0.94	0.93	0.95	0.96
Indiana	2,853	0.91	0.92	0.92	0.93	0.94	0.95
Iowa	683	0.93	0.93	0.90	0.89	0.95	0.93
Kansas	887	0.95	0.94	0.93	0.95	0.96	0.95
Kentucky	2,077	0.90	0.91	0.93	0.92	0.93	0.93
Louisiana	6,684	0.91	0.89	0.91	0.93	0.93	0.92
Maine	313	*	*	*	*	*	*
Maryland	10,393	0.91	0.91	0.93	0.94	0.94	0.95
Massachusetts	4,245	0.95	0.95	0.96	0.97	0.96	0.98
Michigan	4,680	0.90	0.93	0.93	0.94	0.93	0.95
Minnesota	1,984	0.95	0.96	0.97	0.97	0.95	0.97
Mississippi	2,937	0.90	0.90	0.89	0.92	0.91	0.94
Missouri	3,280	0.93	0.95	0.96	0.95	0.95	0.95
Montana	130	*	*	*	*	*	*
Nebraska	573	*	*	*	*	*	*
Nevada	2,294	0.91	0.90	0.93	0.91	0.92	0.92
New Hampshire	262	*	*	*	*	*	*
New Jersey	8,240	0.89	0.92	0.90	0.93	0.91	0.93
New Mexico	861	0.86	0.89	0.86	0.90	0.95	0.97
New York	24,628	0.93	0.92	0.94	0.93	0.94	0.95
North Carolina	9,189	0.93	0.92	0.94	0.93	0.94	0.94
North Dakota	71	*	*	*	*	*	*
Ohio	6,129	0.95	0.94	0.94	0.96	0.95	0.95
Oklahoma	1,731	0.87	0.91	0.92	0.93	0.91	0.94
Oregon	1,498	0.94	0.95	0.94	0.93	0.94	0.93
Pennsylvania	9,635	0.91	0.91	0.93	0.91	0.93	0.93
Rhode Island	659	0.93	0.92	0.96	0.93	0.99	1.00
South Carolina	4,441	0.88	0.91	0.92	0.94	0.93	0.95
South Dakota	155	*	*	*	*	*	*
Tennessee	5,293	0.91	0.91	0.91	0.91	0.94	0.92
Texas	25,540	0.91	0.92	0.93	0.93	0.94	0.94
Utah	673	0.92	0.98	0.97	0.96	0.96	0.95
Vermont	92	*	*	*	*	*	*
Virginia	5,870	0.92	0.92	0.94	0.95	0.93	0.94
Washington	3,130	0.94	0.94	0.93	0.95	0.94	0.96
West Virginia	488	*	*	*	*	*	*
Wisconsin	1,492	0.94	0.95	0.95	0.97	0.96	0.96
Wyoming	100	*	*	*	*	*	*
Subtotal	265,992	0.92	0.92	0.93	0.93	0.94	0.94
U.S. dependent areas							
American Samoa	0	*	*	*	*	*	*
Guam	26	*	*	*	*	*	*
Northern Mariana Islands	3	*	*	*	*	*	*
Puerto Rico	4,983	0.83	0.83	0.82	0.85	0.86	0.88
Republic of Palau	3	*	*	*	*	*	*
U.S. Virgin Islands	174	*	*	*	*	*	*
Subtotal	5,189	0.83	0.83	0.82	0.86	0.86	0.88
Total	271,181	0.92	0.92	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 7b. Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2007–2012, by year and area of residence—United States and 6 dependent areas

	No.	Proportion survived >3 years					
		2007	2008	2009	2010	2011	2012
Alabama	2,194	0.80	0.82	0.79	0.81	0.84	0.81
Alaska	133	*	*	*	*	*	*
Arizona	2,608	0.84	0.83	0.87	0.87	0.85	0.82
Arkansas	871	0.78	0.76	0.80	0.78	0.78	0.87
California	19,406	0.88	0.88	0.88	0.88	0.88	0.87
Colorado	1,608	0.90	0.91	0.88	0.90	0.87	0.91
Connecticut	1,665	0.85	0.83	0.88	0.92	0.90	0.88
Delaware	622	0.85	0.87	0.85	0.84	0.88	0.83
District of Columbia	2,737	0.85	0.83	0.88	0.87	0.88	0.88
Florida	20,938	0.79	0.82	0.84	0.83	0.82	0.85
Georgia	10,627	0.82	0.83	0.84	0.85	0.85	0.86
Hawaii	382	*	*	*	*	*	*
Idaho	164	*	*	*	*	*	*
Illinois	6,220	0.84	0.85	0.87	0.85	0.88	0.90
Indiana	1,962	0.80	0.87	0.82	0.85	0.86	0.87
Iowa	443	*	*	*	*	*	*
Kansas	591	*	*	*	*	*	*
Kentucky	1,248	0.82	0.83	0.86	0.83	0.86	0.84
Louisiana	4,771	0.80	0.80	0.83	0.83	0.83	0.83
Maine	203	*	*	*	*	*	*
Maryland	5,756	0.83	0.83	0.84	0.86	0.88	0.88
Massachusetts	2,835	0.90	0.90	0.92	0.90	0.91	0.93
Michigan	3,051	0.83	0.85	0.83	0.86	0.87	0.86
Minnesota	1,163	0.86	0.89	0.91	0.92	0.90	0.91
Mississippi	1,890	0.81	0.80	0.79	0.84	0.86	0.82
Missouri	2,139	0.84	0.87	0.87	0.86	0.88	0.91
Montana	92	*	*	*	*	*	*
Nebraska	378	*	*	*	*	*	*
Nevada	1,443	0.83	0.81	0.81	0.81	0.80	0.80
New Hampshire	181	*	*	*	*	*	*
New Jersey	6,055	0.82	0.82	0.83	0.85	0.81	0.85
New Mexico	610	0.85	0.83	0.83	0.85	0.88	0.91
New York	18,600	0.87	0.86	0.88	0.89	0.88	0.88
North Carolina	5,093	0.83	0.83	0.86	0.85	0.85	0.86
North Dakota	42	*	*	*	*	*	*
Ohio	3,579	0.87	0.88	0.87	0.87	0.91	0.86
Oklahoma	1,050	0.82	0.85	0.83	0.84	0.81	0.81
Oregon	1,105	0.88	0.90	0.87	0.88	0.86	0.87
Pennsylvania	6,193	0.84	0.84	0.86	0.84	0.86	0.88
Rhode Island	426	*	*	*	*	*	*
South Carolina	3,600	0.81	0.85	0.84	0.85	0.85	0.88
South Dakota	82	*	*	*	*	*	*
Tennessee	3,278	0.81	0.81	0.83	0.86	0.83	0.85
Texas	16,302	0.83	0.84	0.86	0.86	0.87	0.86
Utah	414	*	*	*	*	*	*
Vermont	52	*	*	*	*	*	*
Virginia	3,538	0.83	0.85	0.84	0.89	0.85	0.84
Washington	2,005	0.87	0.88	0.88	0.89	0.86	0.91
West Virginia	339	*	*	*	*	*	*
Wisconsin	959	0.86	0.88	0.85	0.90	0.89	0.91
Wyoming	74	*	*	*	*	*	*
Subtotal	171,717	0.84	0.85	0.86	0.86	0.86	0.86
U.S. dependent areas							
American Samoa	0	*	*	*	*	*	*
Guam	20	*	*	*	*	*	*
Northern Mariana Islands	1	*	*	*	*	*	*
Puerto Rico	3,471	0.70	0.69	0.72	0.70	0.74	0.74
Republic of Palau	2	*	*	*	*	*	*
U.S. Virgin Islands	115	*	*	*	*	*	*
Subtotal	3,609	0.70	0.69	0.72	0.71	0.74	0.75
Total	175,326	0.84	0.84	0.85	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 exclude persons whose month of classification or month of death is unknown. Data are based on residence when infection was classified as stage 3 (AIDS).

Table 8a. Perinatally acquired HIV infection, by year of birth and mother's race/ethnicity, 2010–2015—United States

Race/ethnicity ^a	2010		2011		2012		2013		2014		2015	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Black/African American	59	10.0	56	9.6	71	12.2	36	6.2	39	6.6	34	5.8
Hispanic/Latino ^b	17	1.8	18	2.0	9	1.0	8	0.9	8	0.9	8	0.9
White	14	0.6	4	0.2	6	0.3	5	0.2	5	0.2	8	0.4
Other	12	4.4	10	3.6	11	3.7	7	2.4	3	1.0	5	1.7
Total	102	2.6	88	2.2	97	2.5	56	1.4	55	1.4	55	1.4

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, 2010–2015—United States

Race/ethnicity ^a	2010		2011		2012		2013		2014		2015	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Black/African American	39	6.6	36	6.2	53	9.1	28	4.8	34	5.8	32	5.4
Hispanic/Latino ^b	16	1.7	13	1.4	8	0.9	7	0.8	6	0.7	8	0.9
White	8	0.4	1	0.0	4	0.2	5	0.2	5	0.2	8	0.4
Other	6	2.2	6	2.1	6	2.0	6	2.1	3	1.0	5	1.7
Total	69	1.7	56	1.4	71	1.8	46	1.2	48	1.2	53	1.3

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. Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2017—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	<500 or <29%	Yes	Detectable
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 9. Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2017—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 10. Monitoring national HIV prevention goals by using data from the National HIV Surveillance System (NHSS) 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	83.1%	83.6%	84.1%	84.6%	85.0%	85.5%	n/a	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	40,324 ^b	n/a
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%	n/a
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%	n/a	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%	n/a	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%	n/a	n/a
Reduce the death rate among persons with diagnosed HIV infection by at least 33 percent ^e	19.4	18.0	16.7	15.7	15.3	14.3	n/a	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	22.7 ^b	n/a
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	115.5 ^b	n/a
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 ^b	n/a
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 ^b	n/a
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%	n/a	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%	n/a	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%	n/a
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	n/a
Decrease stigma among persons with diagnosed HIV infection by at least 25 percent, from a baseline median score of 40.0 to 30.0 (developmental) ⁱ	n/a	n/a	n/a	n/a	n/a	38.3	n/a	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 Estimates were derived by using HIV surveillance and CD4 data (CD4+ T-lymphocyte count [cells/μL] or percentage) for persons aged ≥13 years at diagnosis from the 50 states and the District of Columbia. Estimates from previous reports are no longer used.

^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/yrbss>.

^d 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. In 2015, MMP began sampling HIV diagnoses from the National HIV Surveillance System (NHSS). The homelessness estimate provided is subset to persons receiving HIV medical care in the past 12 months. For more information about MMP, see <http://www.cdc.gov/hiv/statistics/systems/mmp/>.

^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 and 2016.

^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 November 2017. Accessed April 27, 2018. 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.