

Volume 25, Number 1

# Estimated HIV Incidence and Prevalence in the United States 2014–2018



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

Estimates are presented for the incidence and prevalence of HIV infection among adults and adolescents (aged 13 years and older) based on data reported to CDC through December 2019.

The *HIV Surveillance Supplemental Report* is not copyrighted and may be used and reproduced without permission. Citation of the source is, however, appreciated.

#### Suggested citation

Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2014–2018. *HIV Surveillance Supplemental Report* 2020;25(No. 1). http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 2020. Accessed [date].

On the Web: http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html

#### Confidential information, referrals, and educational material on HIV infection

CDC-INFO 1-800-232-4636 (in English, en Español) 1-888-232-6348 (TTY) http://wwwn.cdc.gov/dcs/ContactUs/Form

#### Acknowledgments

Publication of this report was made possible by the contributions of the state and territorial health departments and the HIV surveillance programs that provided surveillance data to CDC.

This report was prepared by the following staff and contractors of the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, CDC: Laurie Linley, Anna Satcher Johnson, Ruiguang Song, Sherry Hu, Baohua Wu, Zanetta Gant, Timothy Green, Betsy Gunnels, H. Irene Hall, Angela Hernandez, Michael Friend (editing and desktop publishing), the HIV Incidence and Case Surveillance Branch, and the Data Management Team of the Quantitative Sciences and Data Management Branch.

## **Contents**

	mmentary	4
5	Suggested Readings	10
Ted	chnical Notes	11
Re	ferences	17
Tal	oles	
	Section 1 Estimated Incidence of HIV Infection among Persons Aged ≥13 Years	
1	Estimated HIV incidence among persons aged ≥13 years, by year of infection and selected characteristics, 2014–2018—United States	18
2	Estimated HIV incidence among blacks/African Americans aged ≥13 years, by year of infection, sex at birth, and selected characteristics, 2014–2018—United States	21
3	Estimated HIV incidence among Hispanics/Latinos aged ≥13 years, by year of infection, sex at birth, and selected characteristics, 2014–2018—United States	24
4	Estimated HIV incidence among whites aged ≥13 years, by year of infection, sex at birth, and selected characteristics, 2014–2018—United States	27
5	Estimated HIV incidence among men who have sex with men, by year of infection, race/ethnicity, and age at infection, 2014–2018—United States	30
6	Estimated HIV incidence among persons aged ≥13 years, by year of infection and area of residence at diagnosis, 2014–2018—United States and Puerto Rico	35
	Section 2 Estimated Prevalence of HIV Infection among Persons Aged ≥13 Years	
7	Estimated HIV prevalence and undiagnosed infection among persons aged ≥13 years, by selected characteristics, 2018—United States	40
8	Estimated HIV prevalence among persons aged $\geq$ 13 years, by year and selected characteristics, 2014–2018—United States	41
9	Estimated HIV prevalence among blacks/African Americans aged $\geq$ 13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States	46
10	Estimated HIV prevalence among Hispanics/Latinos aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States	51
11	Estimated HIV prevalence among whites aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States	56
12	Estimated HIV prevalence among men who have sex with men, by year, race/ethnicity, and age, 2014–2018—United States	61
13	Estimated HIV prevalence among persons aged ≥13 years, by year and area of residence, 2014–2018—United States and Puerto Rico	66
Ар	pendix: Estimates of Incidence and Prevalence for Ending the HIV Epidemic Initiative Phase I Jurisdictions	
<b>A</b> 1	Estimated HIV incidence among persons aged ≥13 years, by year of infection and area of residence at diagnosis, 2017 and 2018—Ending the HIV Epidemic Initiative Phase I jurisdictions	71
A2	Estimated HIV prevalence among persons aged ≥13 years, by year and area of residence, 2017 and 2018— Ending the HIV Epidemic Initiative Phase I jurisdictions	75

### Commentary

The primary goal of the initiative, Ending the HIV Epidemic: A Plan for America (EHE), is to reduce the annual number of new HIV infections by 75% in 5 years and by at least 90% in 10 years [1]. A key objective to reaching this goal is to increase the percentage of persons living with HIV who are aware of their infection [2]. Persons who are aware of their HIV infection can be linked to care and receive treatment to reduce morbidity and viral load levels, making them less likely to transmit the virus to others [3]. Estimates of (1) HIV incidence, (2) prevalence (persons living with diagnosed or undiagnosed HIV infection), and (3) percentage of diagnosed infections among persons living with HIV (percentage of persons living with HIV who are aware of their infection) are essential to determining whether prevention program efforts are reducing the annual number of new HIV infections (incidence) and achieving prevention outcomes.

Incidence measures the number of infections during a specified time (e.g., year). These estimates can be used to assess changes in characteristics of persons most at risk for acquiring HIV infection. Diagnoses refer to persons who may have been infected years before diagnosis.

Prevalence refers to the number of persons living with HIV disease at a given time regardless of the time of infection or whether the person has received a diagnosis. Prevalence and the percentage of diagnosed infections among persons living with HIV reflect the number of persons in need of care and treatment services for HIV infection.

To produce the HIV incidence and prevalence estimates in this report, we used the result of the first CD4+ T-lymphocyte (CD4) test after HIV diagnosis and an estimation method based on a CD4 depletion model (referred to hereafter as the "CD4 model") [4–7]. The first CD4 test results after HIV diagnosis are routinely collected by all jurisdictions as part of the National HIV Surveillance System (NHSS).

#### CD4 Model

CD4 cells, a type of white blood cell, aid in fighting infections. HIV targets CD4 cells: without treatment, HIV reduces the number of CD4 cells in a person's body. A person's CD4 cell count is used to determine stage of disease. Assuming that no treatment has been

received, the CD4 cell count can be used to estimate the time since infection at the date of CD4 test. We applied the CD4 model to NHSS data, estimated the distribution of delay from infection to diagnosis, and then produced national and jurisdiction-level estimates of HIV incidence and prevalence among adults and adolescents. Reporting of the first CD4 test result after diagnosis of HIV infection is a required data element on the HIV case report form. By December 2019, a CD4 test result had been reported to NHSS for 92.4% of persons with HIV diagnosed during 2014–2018. Completeness of reporting varied among states and local jurisdictions.

#### REPORT CHANGES

Recognizing the changing needs for data and in response to requests for expanded data, CDC has made several changes to this surveillance supplemental report. This report is based on data reported to NHSS through December 31, 2019 to allow for a 12-month reporting delay. Prevalence estimates for the year 2018 are preliminary and based on death data received by CDC through December 2019. Prevalence trends through 2018 should be interpreted with caution.

- The methods for producing incidence and prevalence estimates were updated (see Technical Notes for additional information).
- Table titles and labels have been changed to indicate that estimates are being presented by sex at birth.
- For the first time, estimates for Puerto Rico are included (Tables 6 and 13).
- Estimates of incidence and prevalence for the EHE Phase I jurisdictions are included as an appendix (Tables A1 and A2) [1].

#### REPORT FORMAT

All numbers and percentages in this surveillance supplemental report (except numbers of diagnosed cases) were estimated by using the CD4 model. Not all percentages mentioned in the text are displayed in the tables.

The tables are organized into 3 sections:

1. Estimated incidence of HIV infection among adults and adolescents (Tables 1–6)

- 2. Estimated prevalence of HIV infection among adults and adolescents (Tables 7–13)
- 3. Appendix: Estimated incidence and prevalence of HIV infection among adults and adolescents for EHE Phase 1 jurisdictions (Tables A1 and A2)

Relative standard errors (RSEs; see Technical Notes for additional information) were calculated for estimated numbers and percentages and are presented in the tables. The standard of reliability for estimates presented in this report is RSE < 30%. Estimates with RSEs of 30%–50% are designated by an asterisk (\*) and should be interpreted with caution. Estimates with RSEs of >50% are statistically unreliable and thus are not shown. Additional stratifications for small race/ ethnicity groups, and stratifications by race/ethnicity and age for transmission categories other than male-tomale sexual contact, are not provided because high RSEs resulted from small numbers. To reflect model uncertainty, incidence and prevalence estimates are rounded to the nearest 100 for estimates of > 1,000 and to the nearest 10 for estimates of  $\leq 1.000$ .

Readers who are reviewing jurisdiction-level incidence (Tables 6 and A1) and prevalence estimates (Tables 13 and A2) to guide prevention efforts should refer to diagnosis data presented in the 2018 *HIV Surveillance Report (Updated)* if estimates for the jurisdiction of interest have RSEs ≥30% [8].

#### **DEFINITIONS AND DATA SPECIFICATIONS**

All numbers and percentages in this report (except numbers of diagnosed cases) are estimated. Estimates of annual HIV infections (incidence) and persons living with HIV infection (prevalence) are based on NHSS data from the 50 states and the District of Columbia (and for jurisdiction-level estimates only, Puerto Rico; Tables 6 and 13) for persons aged ≥13 years. Estimates of persons living with HIV infection in the United States include persons with diagnosed or undiagnosed HIV infection. Numbers of persons aged ≥13 years living with diagnosed infection (prevalence of diagnosed infection; Tables 8-13) are reported numbers, not estimates. These numbers are based on diagnosed cases with vital status information reported to CDC through December 2019. Incidence and prevalence estimates for the following jurisdictions should be interpreted with caution because the jurisdiction does not have laws requiring complete reporting of laboratory data or has incomplete reporting. Areas without laws are Idaho, New Jersey, and Pennsylvania

(excluding Philadelphia). Areas with incomplete reporting are Arizona, Arkansas, Connecticut (2018 only), Kansas, Kentucky, Nevada (2017 only), Vermont, and Puerto Rico. Prevalence estimates for the year 2018 are preliminary and based on deaths reported to CDC through December 2019. For tables that include estimates by transmission category, the data are statistically adjusted to account for missing transmission category (see Technical Notes).

In this report, residence of persons living with diagnosed HIV infection is based on the most recent known address at the end of each year during 2014–2018.

#### HIGHLIGHTS OF ANALYSES

All highlights are based on reliable estimates (i.e., RSEs of < 30%). All rates are per 100,000 population.

Differences in estimated numbers of HIV infections (Tables 1–6) and estimated percentages of diagnosed infections among persons living with HIV (Tables 8–13) for 2018, compared with 2014, were assessed by the z test. Differences were deemed statistically significant when P < .05. If estimates for 2014 and 2018 did not differ significantly, the estimates for these years were considered stable.

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

#### **HIV** incidence

HIV incidence remained stable in 2018, compared with 2014 (Table 1). In 2018, the estimated number of HIV infections was 36,400; the rate was 13.3.

- Sex at birth: The annual number of HIV infections in 2018, compared with 2014, remained stable among males and females. In 2018, the rate for males (22.1) was 5 times the rate for females (4.8).
- **Age group**: The annual number of HIV infections in 2018, compared with 2014, decreased among persons aged 13–24, but remained stable among all other age groups. In 2018, the rate was highest for persons aged 25–34 (31.5), followed by the rate for persons aged 35–44 years (16.9).
- Race/ethnicity: The annual number of HIV infections in 2018, compared with 2014, decreased among persons of multiple races, but remained stable for all other races/ethnicities. In 2018, the highest rate was for blacks/African Americans (45.4), followed by the rates for Hispanics/Latinos (22.4) and persons of multiple races (19.3). Please use caution when interpreting the estimated num-

bers of HIV infection for American Indians/ Alaska Natives: the RSEs are 30%–50%. The estimated numbers for Native Hawaiians/other Pacific Islanders are not presented because the RSEs are >50%.

- Transmission category: The annual number of HIV infections in 2018, compared with 2014, remained stable among all transmission categories. In 2018, the largest percentages of HIV infections were attributed to male-to-male sexual contact (67% overall and 82% among males). In 2018, among females, the largest percentage of HIV infections was attributed to heterosexual contact (85%).
- **Region**: The annual number of HIV infections in 2018, compared with 2014, remained stable in all regions. In 2018, rates were 18.4 in the South, 11.6 in the West, 10.5 in the Northeast, and 8.1 in the Midwest.

#### HIV incidence among blacks/African Americans

HIV incidence in 2018, compared with 2014, remained stable among blacks/African Americans (Table 2). In 2018, blacks/African Americans accounted for 42% of HIV infections (Table 1). Of HIV infections among blacks/African Americans in 2018, 61% were attributed to male-to-male sexual contact, and 33% were attributed to heterosexual contact (Table 2). The rate for blacks/African Americans (45.4) was 9 times the rate for whites (5.2) (Table 1). The rate for black/African American males (72.4) was 3 times the rate for black/African American females (21.3) (Table 2).

• Black/African American males: The annual number of HIV infections in 2018, compared with 2014, remained stable overall. The annual number increased among those aged 25-34 years but decreased among those aged 13-24 years (Table 2). The annual number remained stable for each transmission category. In 2018, among all blacks/ African Americans, males accounted for 75% of HIV infections, most of which (82%) were attributed to male-to-male sexual contact. By age at infection, the largest percentage of HIV infections among black/African American males in 2018 was among those aged 25–34 years (43%) (Table 2), followed by those aged 13–24 years (27%). The percentage of black/African American males aged 13-24 years was higher than the percentage of Hispanic/Latino males in the same age

- group (22%) (Table 3) and higher than the percentage among white males (15%) (Table 4). In 2018, the rate for black/African American males (72.4) (Table 2) was 8 times the rate for white males (8.9) (Table 4) and nearly twice the rate for Hispanic/Latino males (39.4) (Table 3).
- Black/African American females: The annual number of HIV infections in 2018, compared with 2014, remained stable overall and for each age group and transmission category (Table 2). In 2018, 92% of infections were attributed to heterosexual contact. In 2018, the rate for black/African American females (21.3) (Table 2) was 13 times the rate for white females (1.7) (Table 4) and 4 times higher than Hispanic/Latino females (5.0) (Table 3).

#### HIV incidence among Hispanics/Latinos

HIV incidence in 2018, compared with 2014, remained stable among Hispanics/Latinos (Table 3). In 2018, Hispanics/Latinos accounted for 28% of HIV infections (Table 1). Of HIV infections among Hispanics/Latinos in 2018, 78% were attributed to male-to-male sexual contact, and 15% were attributed to heterosexual contact (Table 3). The rate for Hispanics/Latinos (22.4) was 4 times the rate for whites (5.2) (Table 1). The rate for Hispanic/Latino males (39.4) was 8 times the rate for Hispanic/Latino females (5.0) (Table 3).

- Hispanic/Latino males: The annual number of HIV infections in 2018, compared with 2014, remained stable overall (Table 3). The annual number remained stable for each age group up to age 54 years and for males with infection attributed to male-to-male sexual contact. Estimates for all other age and transmission category groups had RSEs of 30%–50%. In 2018, among all Hispanics/Latinos, males accounted for 89% of HIV infections, most of which (87%) were attributed to male-to-male sexual contact. The rate of HIV infections for Hispanic/Latino males (39.4) (Table 3) was 4 times that for white males (8.9) (Table 4).
- Hispanic/Latino females: The annual number of HIV infections in 2018, compared with 2014, remained stable overall (Table 3). The annual number remained stable among females aged 25–34 years and females with infection attributed to heterosexual contact. Estimates for all other age and transmission category groups had RSEs of

30%–50%. In 2018, most HIV infections (83%) were attributed to heterosexual contact. The rate of HIV infections for Hispanic/Latino females (5.0) (Table 3) was 3 times that for white females (1.7) (Table 4).

#### HIV incidence among whites

HIV incidence in 2018, compared with 2014, remained stable (Table 4). In 2018, whites accounted for 25% of HIV infections (Table 1). Of HIV infections among whites in 2018, 63% were attributed to male-to-male sexual contact, and 15% were attributed to heterosexual contact (Table 4).

- White males: The annual number of HIV infections in 2018, compared with 2014, remained stable overall. The annual number increased among those with HIV infection attributed to injection drug use. The annual number decreased among those aged 13–24 years and among those with HIV infection attributed to male-to-male sexual contact. The annual number remained stable for all other age groups and transmission categories. In 2018, among all whites, males accounted for 83% of HIV infections, most of which (76%) were attributed to male-to-male sexual contact (Table 4).
- White females: The annual number of HIV infections in 2018, compared with 2014, remained stable overall and for each age group and transmission category. In 2018, most HIV infections among white females (61%) were attributed to heterosexual contact (Table 4). The percentage of annual infections attributed to injection drug use among white females in 2018 was 37%.

## HIV incidence among males with HIV infection attributed to male-to-male sexual contact

HIV incidence among males with HIV infection attributed to male-to-male sexual contact in 2018, compared with 2014, remained stable overall but decreased among those aged 13–24 years (Table 5). Although only approximately 7% of adult and adolescent males reported having had male-to-male sexual contact at some point in their lives [9], 82% of HIV infections among males in 2018 were attributed to male-to-male sexual contact (Table 1).

#### • Race/ethnicity and age group:

 Among black/African American males, the annual number of HIV infections in 2018, compared with 2014, remained stable overall; however, the annual number of HIV infections in 2018, compared with 2014, increased among those aged 25–34 years but decreased among those aged 13–24 years (Table 5). In 2018, among all race/ethnicity-age group combinations, the largest number of HIV infections occurred among young blacks/African Americans aged 25–34 years, who accounted for 47% of HIV infections among black/African American males with infection attributed to male-to-male sexual contact. Black/African American males accounted for 48% of HIV infections among males aged 13–24 years with infection attributed to male-to-male sexual contact.

- o Among Hispanic/Latino males, the annual number of HIV infections in 2018, compared with 2014, remained stable overall and for those aged 13–24, 25–34, 35–44, and 45–54 years (Table 5).
- Among white males, the annual number of HIV infections in 2018, compared with 2014, decreased overall; the annual number also decreased among those aged 13–24 and 45– 54 years.

#### HIV incidence by area of residence

The change in the annual number of HIV infections in 2018, compared with 2014, varied by area of residence (Table 6). In 2018, estimates in 24 areas were statistically reliable (RSEs of <30%; see Technical Notes for more information on the RSE). In a comparison of 2014 and 2018 estimates, the annual number decreased for New York. The estimated annual number of HIV infections remained stable for the remaining 23 of 24 areas with reliable estimates (RSEs of <30%) (Table 6). To guide prevention efforts, states with estimates with RSEs ≥30% should refer to HIV diagnosis data in the 2018 HIV Surveillance Report (Updated). (See also the Reliability section in Technical Notes.)

# Prevalence: adults and adolescents living with diagnosed or undiagnosed HIV infection

At year-end 2018, an estimated 1,173,900 persons aged ≥13 years were living with HIV infection (prevalence), including 161,800 (13.8%) persons whose infection had not been diagnosed; the prevalence rate was 427.5 (Table 7). The percentage of diagnosed infections among persons living with HIV at year-end 2018, compared with 2014, remained stable (Table 8).

The following estimates are for persons living with diagnosed or undiagnosed HIV infection at year-end 2018 (Table 7).

- Age group: The highest prevalence rate was that among persons aged 45-54 years (733.3), followed by the rates for those aged 35–44 years (545.5), 25–34 years (474.1),  $\geq 55$  years (400.2), and 13-24 years (93.1). Among persons living with HIV, the percentage of persons with undiagnosed HIV infection decreased as age increased. The largest percentage of undiagnosed infection was that among persons aged 13–24 years (44.9%), followed by the percentages among persons aged 25-34 years (29.3%), 35-44 years (15.6%), 45-54 years (7.6%), and  $\geq 55$  years (4.9%) (Table 7). The percentage of persons living with diagnosed HIV infection in 2018, compared with 2014, increased among persons aged 13–24 years but decreased among persons 35-44 years (Table 8).
- Race/ethnicity: The highest prevalence rate was that among blacks/African Americans (1,434.3), followed by the rates among persons of multiple races (1,125.5), Hispanics/Latinos (593.0), whites (198.7), American Indians/Alaska Natives (196.0), and Asians (109.2). Among persons living with HIV, the largest percentage of persons with undiagnosed HIV infection was that among Hispanics/Latinos (16.7%), followed by blacks/ African Americans (14.0%), persons of multiple races (12.1%), and whites (11.3%) (Table 7). Please use caution when interpreting the prevalence rate for Native Hawaiians/other Pacific Islanders: the RSE for the estimated number of persons living with HIV is between 30% and 50%. Please use caution when interpreting the percentage of undiagnosed infection for Asians: the RSE is between 30% and 50%; the estimate of undiagnosed infection for Asians is not presented because the RSE is >50%.

The estimates and percentages of undiagnosed infection for American Indians/Alaska Natives and Native Hawaiians/other Pacific Islanders are not presented because the RSEs are >50%.

The percentages of persons living with diagnosed HIV infection in 2018, compared with 2014, remained stable among American Indians/ Alaska Natives, Asians, blacks/African Americans, Hispanics/Latinos, whites, and persons of multiple races (Table 8).

The percentage of diagnosed infection for Native Hawaiians/Pacific Islanders is not presented because the RSE is >50%.

- Sex at birth: The prevalence rate among males in 2018 (679.3) was 4 times the rate among females (186.5). Among persons living with HIV, the percentage of undiagnosed HIV infection was larger among males (14.7%) than among females (10.5%) (Table 7). The percentage of persons living with diagnosed HIV infection in 2018, compared with 2014, remained stable among males and females (Table 8).
- Transmission category: Most (78%) persons living with HIV were male; among those, 75% of infections were attributed to male-to-male sexual contact. The largest percentages of persons with undiagnosed infection were among males with infection attributed to heterosexual contact (17.1%) and among males with infection attributed to male-to-male sexual contact (15.9%) (Table 7).

Please use caution when interpreting the estimates of undiagnosed infection for males with infection attributed to male-to-male sexual contact and injection drug use: the RSEs are 30%–50%.

The estimates of undiagnosed infection for males and females with infection attributed to injection drug use are not presented because the RSEs are >50%.

The percentages of persons living with diagnosed HIV infection in 2018, compared with 2014, remained stable among all transmission categories (Table 8).

• Region: At year-end 2018, the prevalence rate was highest in the Northeast at 533.9, followed by 517.4 in the South, 361.3 in the West, and 250.0 in the Midwest. Among persons living with HIV, the largest percentage of persons with undiagnosed HIV infection was in the Midwest (15.4), followed by the South (15.1), West (14.4), and Northeast (9.5) (Table 7). The percentage of persons living with diagnosed HIV infection in 2018, compared with 2014, remained stable in all regions (Table 8).

#### HIV prevalence among blacks/African Americans

At year-end 2018, an estimated 482,900 black/ African American adults and adolescents were living with HIV infection, including 67,800 (14.0%) whose infection had not been diagnosed (Table 7). Of the estimated number of persons living with diagnosed or undiagnosed HIV infection, 41% were blacks/African Americans (Table 7), 68% of whom were male (Table 9). The prevalence rate for blacks/African Americans (1,434.3) was 7 times the rate for whites (198.7) (Table 7). The rate for black/African American males (2,067.7) was 2 times that for black/African American females (868.0). Among blacks/African Americans living with HIV, the percentage (86.0%) living with diagnosed HIV infection in 2018, compared with 2014, remained stable (Table 9).

- Black/African American males: At year-end 2018, an estimated 328,600 black/African American males were living with HIV infection (84.3% of whom were living with diagnosed HIV). The percentage of blacks/African American males living with diagnosed HIV infection in 2018, compared with 2014, remained stable overall but increased among those aged 13−24 years. At year-end 2018, by age, the largest percentage of black/African American males living with diagnosed infection was among those aged ≥55 years (94.8%); the smallest percentage was among those aged 13−24 years (55.9%) (Table 9). By transmission category, the largest percentage was among those with infection attributed to injection drug use (95.8%).
- Black/African American females: At year-end 2018, an estimated 154,300 black/African American females were living with HIV infection (89.6% of whom were living with diagnosed HIV). The percentage of black/African American females living with diagnosed HIV infection in 2018, compared with 2014, remained stable overall but increased among those aged 13-24 years. At yearend 2018, by age, the largest percentages of black/ African American females living with diagnosed HIV infection were among persons aged ≥55 years (93.6%) and aged 45–54 years (93.3%); the smallest percentage was among those aged 13-24 years (60.4%) (Table 9). By transmission category, the larger percentage was among those with infection attributed to injection drug use (96.3%).

#### HIV prevalence among Hispanics/Latinos

At year-end 2018, an estimated 274,100 Hispanic/Latino adults and adolescents were living with HIV infection, including 45,700 (16.7%) whose infection had not been diagnosed (Table 7). Of the estimated number of persons living with diagnosed or undiagnosed HIV infection, 23% were Hispanics/Latinos (Table 7), of whom 83% were male (Table 10). The prevalence rate for Hispanics/Latinos (593.0) was

3 times the rate for whites (198.7) (Table 7). The prevalence rate for Hispanic/Latino males (975.9) was 5 times that for Hispanic/Latino females (204.7) (Table 10). Among Hispanics/Latinos living with HIV, the percentage living with diagnosed HIV infection in 2018, compared with 2014, remained stable (Table 10).

- Hispanic/Latino males: At year-end 2018, an estimated 227,100 Hispanic/Latino males were living with HIV infection (81.9% of whom were living with diagnosed HIV). The percentage of Hispanic/Latino males living with diagnosed HIV infection in 2018, compared with 2014, increased among those aged 13–24 years. At year-end 2018, the largest percentages were among those aged ≥55 years (94.8%) and among those with HIV infection attributed to injection drug use (93.9%); the smallest percentage was among those aged 13–24 years (49.1%) (Table 10).
- Hispanic/Latino females: At year-end 2018, an estimated 47,000 Hispanic/Latino females were living with HIV infection (90.3% of whom were living with diagnosed HIV). The percentage of Hispanic/Latino females living with diagnosed HIV infection in 2018, compared with 2014, remained stable. At year-end 2018, the largest percentages were among those with HIV infection attributed to injection drug use (95.7%) and among those aged ≥55 years (95.4%); the smallest percentage was among those aged 13–24 years (60.3%) (Table 10).

#### HIV prevalence among whites

At year-end 2018, an estimated 340,700 white adults and adolescents were living with HIV infection, including 38,300 (11.3%) whose infection had not been diagnosed (Table 7). Of the estimated number of persons living with diagnosed or undiagnosed HIV infection, 29% were white (Table 7), 87% of whom were male (Table 11). The prevalence rate for whites was 198.7. The prevalence rate for white males (352.4) was 6.9 times that for white females (50.9). Among whites living with HIV, the percentage living with diagnosed HIV infection in 2018, compared with 2014, remained stable (Table 11).

• White males: At year-end 2018, an estimated 296,200 white males were living with HIV infection (88.9% of whom were living with diagnosed HIV). The percentage of white males living with diagnosed HIV infection in 2018, compared with

- 2014, increased among those aged 13-24 years. At year-end 2018, the largest percentage was among those aged  $\geq 55$  years (95.9%), followed by those aged 45-54 years (92.2%); the smallest percentage was among those aged 13-24 years (57.2%) (Table 11).
- White females: At year-end 2018, an estimated 44,500 white females were living with HIV infection (88.0% of whom were living with diagnosed HIV). The percentage of white females living with diagnosed HIV infection in 2018, compared with 2014, remained stable. At year-end 2018, the largest percentage was among those aged ≥55 years (94.8%), followed by those aged 45–54 years (92.1%); the smallest percentage was among those aged 13–24 years (57.2%) (Table 11).

## HIV prevalence among males with HIV infection attributed to male-to-male sexual contact

At year-end 2018, an estimated 679,800 adult and adolescent males were living with HIV infection attributed to male-to-male sexual contact, including 107,900 (15.9%) whose infection had not been diagnosed (Table 7). In 2018, among all males with HIV infection attributed to male-to-male sexual contact, the smallest percentage of males with diagnosed infection (54.3%) was among those aged 13–24 years (Table 12). In 2018, compared with 2014, among adult and adolescent males living with HIV infection attributed to male-to-male sexual contact, the percentage of males living with diagnosed infection increased among those aged 13–24 years, but the percentage decreased among those aged 35–44 years.

• Race/ethnicity and age group: At year-end 2018, the number of males living with HIV infection attributed to male-to-male sexual contact was highest among whites (241,800), followed by blacks/ African Americans (218,600) and Hispanics/ Latinos (173,000). Among males aged 13–24 years living with HIV, the percentages of those living with diagnosed HIV infection in 2018, compared with 2014, increased among blacks/African Americans, Hispanics/Latinos, and whites. Among males living with HIV at year-end 2018, the percentages of males with diagnosed infection were lower among Hispanics/Latinos and blacks/ African Americans than among whites.

#### HIV prevalence by area of residence

Among persons living with HIV, percentages of persons living with diagnosed HIV infection varied by

area of residence. In 2018, estimates in 43 areas were statistically reliable (RSEs of <30%; see Technical Notes for more information on the RSE). At year-end 2018, among areas with reliable estimates (RSEs of <30%), the percentage of diagnosed HIV infection ranged from 79.7% in Nevada to 93.0% in the District of Columbia (Table 13). In a comparison of 2014 and 2018 estimates, among the 43 areas with reliable estimates (RSEs of <30%), the percentages of persons living with diagnosed HIV infection remained stable (Table 13).

#### SUGGESTED READINGS

- CDC. *HIV Surveillance Report 2018 (Updated)*; vol. 31. http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 7, 2020. Accessed May 7, 2020.
- CDC. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. *MMWR* 2006;55(RR-14):1–17. http://www.cdc.gov/mmwr/indrr\_2006.html. Accessed May 7, 2020.
- CDC [Selik RM, Mokotoff ED, Branson B, Owen SM, Whitmore S, Hall HI]. Revised surveillance case definition for HIV infection—United States, 2014. MMWR 2014;63(RR-03):1–10. http://www.cdc.gov/mmwr/indrr\_2014.html. Accessed May 7, 2020.
- CDC [Schneider E, Whitmore S, Glynn MK, Dominguez K, Mitsch A, McKenna MT]. Revised surveillance case definitions for HIV infection among adults, adolescents, and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. 

  MMWR 2008;57(RR-10):1–12. http://www.cdc.gov/mmwr/indrr\_2008.html. Accessed May 7, 2020.
- Hall HI, Song R, Tang T, et al. HIV trends in the United States: diagnoses and estimated incidence. *JMIR Public Health Surveill* 2017;3(1):e8. doi.10.2196/publichealth.7051.
- Satcher Johnson A, Song R, Hall HI. Estimated HIV incidence, prevalence, and undiagnosed infections in US states and Washington, DC, 2010–2014. *J Acquir Immune Defic Syndr* 2017;76(2):116–122. doi:10.1097/QAI.0000000000001495.
- Singh S, Song R, Satcher Johnson A, McCray E, Hall HI. HIV incidence, prevalence, and undiagnosed infections in U.S. men who have sex with men. *Ann Intern Med* 2018;168(10):685–694. doi:10.7326/M17-2082.

#### SURVEILLANCE OF HIV INFECTION

Estimates presented in this report are based on case reports from the 50 states and the District of Columbia (and for jurisdiction-level estimates only, Puerto Rico [Tables 6 and 13]), all of which have laws or regulations that require confidential reporting to the jurisdiction (not to the Centers for Disease Control and Prevention [CDC]), by name, for adults, adolescents, and children with a confirmed diagnosis of HIV infection. After the removal of personally identifiable information, data from these reports were submitted to CDC's National HIV Surveillance System (NHSS). Although AIDS cases have been reported to CDC since 1981, the date of implementation of HIV infection reporting has differed from jurisdiction to jurisdiction. All states, the District of Columbia, and Puerto Rico had fully implemented name-based HIV infection reporting by April 2008 [10].

#### **TABULATION AND PRESENTATION OF DATA**

Numbers and percentages in this surveillance supplemental report (except numbers of persons living with diagnosed HIV infection) were estimated by using the CD4 model [4–7]. This report is based on HIV surveillance data reported to CDC through December 2019.

The estimated numbers and rates of HIV incidence and the estimated numbers, rates, and percentages of persons living with diagnosed or undiagnosed infection are presented with associated 95% confidence intervals in the tables. The tables are organized in 3 sections:

- Section 1
  - Tables 1–6: numbers and rates of estimated HIV incidence among persons aged ≥13 years
- Section 2
  - Table 7: numbers and rates of estimated HIV prevalence (persons living with diagnosed or undiagnosed infection); numbers and percentages of persons living with undiagnosed infection
  - Tables 8–13: numbers and rates of estimated HIV prevalence (persons living with diagnosed or undiagnosed infection); numbers (reported to NHSS) and estimated percentages of persons living with diagnosed infection

- Appendix
  - Table A1: numbers and rates of estimated HIV incidence among persons aged ≥13 years residing in Ending the HIV Epidemic Phase I jurisdictions
  - Table A2: numbers and rates of estimated HIV prevalence (persons living with diagnosed or undiagnosed infection); numbers (reported to NHSS) and estimated percentage of persons living with diagnosed infection residing in Ending the HIV Epidemic Phase I jurisdictions

Relative standard errors (RSEs) were calculated for estimates of incidence, prevalence, and percentages of persons living with diagnosed HIV infection and were used to determine the reliability of estimates, as follows:

- RSE of <30%—Estimate meets the standard of reliability and is displayed.
- RSE of 30%–50%—Estimate meets a lower standard of reliability and is displayed but should be interpreted with caution; these estimates are designated by an asterisk (\*).
- RSE of > 50%—Estimate is statistically unreliable and is not displayed; these estimates are expressed by an ellipsis (...).

We used the z test to assess differences between estimated numbers of HIV infections and estimated percentages of persons living with diagnosed HIV infection in 2018, compared with 2014 (Tables 1–6 and 8–13, respectively). Differences were deemed statistically significant when P < .05.

#### ESTIMATING HIV INCIDENCE AND PREVALENCE

We used the first CD4 test result after HIV diagnosis and a CD4-depletion model (referred to hereafter as the "CD4 model") indicating disease progression or duration after infection [4], to estimate HIV incidence and prevalence (persons living with diagnosed or undiagnosed infection) among adults and adolescents during 2014–2018. The following data were used:

- CD4 model parameters adapted for the United States (predominately HIV subtype B)
  - Stratified by sex at birth, transmission category, and age

- NHSS data for HIV incidence estimation
  - All cases of diagnosed HIV infection during 2008–2018
  - First CD4 test result at or after diagnosis, but presumed to be before treatment
  - Case information on geographic and demographic characteristics, transmission category, and most current vital and disease (AIDS) status
- NHSS data for estimation of HIV prevalence and percentage of diagnosed infections
  - Persons living with diagnosed HIV infection (at year-end 2007)
  - Annual numbers of deaths among persons with diagnosed HIV infection (during 2008–2018)

#### Estimates were obtained in 5 steps:

- 1. The date of HIV infection was estimated for each person with a CD4 test result by using the CD4 model [7]. Not all persons with diagnosed HIV had a CD4 test result. The number of persons with a CD4 test result was weighted to account for those without a CD4 test result; weighting was based on the year of HIV diagnosis, sex at birth, race/ethnicity, transmission category, age at diagnosis, disease classification, and vital status at year-end 2018. Because the CD4 model is based on transmission categories for adults and adolescents, persons aged <13 years at diagnosis and persons with infection attributed to a pediatric risk factor, such as perinatal exposure, were excluded.
- 2. The distribution of delay (from HIV infection to diagnosis) was used to estimate the annual number of HIV infections, which includes persons with diagnosed infection and persons with undiagnosed infection [4, 5].
- 3. HIV prevalence, which represents counts of persons with diagnosed or undiagnosed HIV infection who were alive at the end of a given year, was estimated by subtracting reported cumulative deaths from cumulative infections.
- 4. The number of persons with undiagnosed HIV infection was estimated by subtracting the number of persons living with diagnosed infection from the total prevalence.
- 5. The percentage of diagnosed (or undiagnosed) infections was determined by dividing the number of persons living with diagnosed (or undiag-

nosed) infections by the total HIV prevalence for each year.

After estimates were produced, confidence intervals were calculated. To reflect model uncertainty, numbers were rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤1,000. Jurisdiction-level estimates for HIV prevalence (Tables 13 and A2) were produced by using NHSS case data that reflected the person's most recent known address (i.e., at the end of the specified year).

#### Areas with incomplete reporting of laboratory data

Estimates for the following jurisdictions should be interpreted with caution because the jurisdiction does not have laws requiring complete reporting of laboratory data or has incomplete reporting. Areas without such laws are Idaho, New Jersey, and Pennsylvania (excluding Philadelphia). Areas with incomplete reporting are Arizona, Arkansas, Connecticut (2018 only), Kansas, Kentucky, Nevada (2017 only), Vermont, and Puerto Rico.

#### Areas with incomplete ascertainment of deaths

Prevalence estimates for the year 2018 are preliminary and based on deaths reported to CDC through December 2019. The following jurisdictions had incomplete reporting of deaths for the year 2018 and should be interpreted with caution: Alabama, Oklahoma, and South Carolina.

The following changes were made to previous methods used to produce HIV incidence and prevalence estimates:

- CD4 exclusion
  - CD4 data for persons with evidence of antiretroviral therapy (ART) use prior to their first CD4 test result were excluded from the CD4 model.
     CD4 counts for these persons were treated as missing and accounted for through weighting.
  - OCD4 data for persons who had a viral load result <200 prior to their first CD4 test result were excluded from the CD4 model. CD4 counts for these persons were treated as missing and accounted for through weighting.
- Jurisdiction-level estimates (50 states, the District of Columbia, and Puerto Rico)
  - In previous reports, jurisdiction-level estimates (Tables 6 and 13) were produced using a "national model" in which information for all adults and adolescents with diagnosed HIV infection in the United States (excluding those

with a pediatric risk factor) were used to model diagnosis delay and produce weights accounting for persons without a CD4 test result. For this report, we applied a "state model," in which information only for persons residing in the jurisdiction of interest was used to model diagnosis delay and produce weights accounting for persons without a CD4 result. Note that the two procedures use the same CD4 depletion model to estimate infection date at a case level; however, a different "data level" is used to model diagnosis delay and produce weights to account for persons without a CD4 test.

- o In previous reports, a person's most recent known address was used when producing jurisdiction-level estimates for both incidence and prevalence. In this report, a person's residence at diagnosis was selected when producing jurisdiction-level estimates for incidence and most recent known address was selected to determine prevalence of infections (based on data reported to NHSS). The change to use residence at diagnosis when estimating incidence was made because a person's residence at diagnosis is more likely to represent where a person was infected than their most recent known address.
- Estimates for EHE Phase I Jurisdictions:
  - o For the first time, incidence and prevalence estimates were produced at the county level for the EHE Phase I jurisdictions. These estimates were produced using the "state model" described above. Considering that EHE and non-EHE counties may have different completeness of CD4 tests and/or different diagnosis delay distributions, a new covariate was included in the "state model" to account for whether the jurisdiction was an EHE jurisdiction or non-EHE jurisdiction when modeling diagnosis delay and when generating weights to account for persons without a CD4 test result.

#### Persons Living with Diagnosed HIV Infection

Numbers of persons aged ≥13 years living with diagnosed infection presented in Tables 8–13 and A2 are reported numbers, not estimates. These numbers are based on case reports with vital status information reported to CDC through December 2019; data for the year 2018 are preliminary. Persons reported to the NHSS are assumed alive unless their deaths have been reported to CDC.

Reported numbers of adults and adolescents living with diagnosed HIV infection presented in this report differ from the numbers published in the 2018 HIV Surveillance Report (Updated) (Table 19) because of differences in case selection [8]. In this report, the tabulation for the number of persons aged ≥13 years living with diagnosed HIV infection excluded cases among persons with infection attributed to pediatric-related HIV transmission categories (e.g., perinatal exposure). Numbers of persons living with diagnosed HIV infection presented in the 2018 HIV Surveillance Report (Updated) include all persons aged ≥13 years living with diagnosed HIV infection at the end of the specified year, regardless of HIV transmission category.

Please use caution when interpreting data on diagnoses of 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. In addition, testing patterns are influenced by many factors, including the extent to which testing is routinely offered to specific groups and the availability of, and access to, medical care and testing services. Finally, although all jurisdictions use a uniform case report form, surveillance practices in data collection and updating of case records may differ by jurisdiction.

#### Age

The designation "adults and adolescents" refers to persons aged ≥13 years. For presentations of estimated HIV incidence (Tables 1–6), the age-group assignment (e.g., 13–24 years) is based on the person's age at infection. For tables that present prevalence estimates (Tables 7–13), the age-group assignment is based on the person's age as of December 31 of the specified year.

#### Sex at birth

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

#### Race and ethnicity

In the Federal Register [11] for October 30, 1997, the Office of Management and Budget (OMB) announced the Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Implementation by January 1, 2003, was mandated. At a minimum, data on the following racial categories should be collected:

- 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 racial categories are reported. In addition to data on race, data on two categories of ethnicity should be collected:

- Hispanic or Latino
- not Hispanic or Latino

The Asian or Pacific Islander category displayed in annual surveillance reports published prior to the 2007 surveillance report was split into 2 categories: (1) Asian and (2) Native Hawaiian or other Pacific Islander. The Asian category (in tables where footnoted) includes the cases in Asians/Pacific Islanders (referred to as legacy cases) that were reported before the implementation of the new race categories in 2003 and a small percentage of cases that were reported after 2003 but that were reported according to the old race category (Asian/Pacific Islander).

This report also presents estimates for persons for whom multiple race categories are reported. 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.

#### **Transmission categories**

Transmission category is the term for the classification of cases that summarizes a person's possible HIV risk factors; the summary classification results from selecting, from the presumed hierarchical order of probability, the 1 (single) risk factor most likely to have been responsible for transmission. For surveil-lance purposes, a diagnosis of HIV infection is counted only once in the hierarchy of transmission categories [12]. Persons with more than 1 reported risk factor for HIV infection are classified in the

transmission category listed first in the hierarchy. The exception is men who had sexual contact with other men *and* injected drugs; this group makes up a separate transmission category.

#### Hierarchical categories

- Male-to-male sexual contact: men who have had sexual contact with men (i.e., homosexual contact) and men who have had sexual contact with both men and women (i.e., bisexual contact)
- **Injection drug use (IDU)**: persons who have injected non-prescription drugs
- Male-to-male sexual contact and injection drug use (male-to-male sexual contact and IDU): men who have had sexual contact with other men and injected non-prescription drugs
- **Heterosexual contact**: persons who have ever had heterosexual contact with a person known to have, or to be at high risk for, HIV infection
- Other: all other transmission categories (e.g., blood transfusion, hemophilia, risk factor not reported or not identified).

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

Because a substantial proportion of cases of HIV infection are reported to CDC without an identified risk factor, multiple imputation is used to assign a transmission category to these cases [12]. 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 [13]. Each resulting data set containing the plausible values is analyzed by using standard procedures, and the results from these analyses are then combined to produce the final results.

#### Geographic designations

Estimates by region or area of residence were produced by using NHSS case data. For incidence (Tables 1, 6, and A1), the values reflect address at time of diagnosis. For prevalence (Tables 7, 8, 13, and

A2), the values reflect most recent known address (i.e., at the end of the specified year).

The 4 regions of residence used in this report are defined by the U.S. Census Bureau as follows:

Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont Midwest: Illinois, Indiana, Iowa, Kansas,

Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin

**South**: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia

**West**: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming

#### Use of death data in prevalence estimates

Death data are used in the CD4 model for estimating prevalence. Deaths are ascertained by linking HIV surveillance data to vital records, and death information from death certificates is imported into the HIV surveillance system. Death ascertainment for a given year of death is completed within 12 months; therefore, this report includes data that allow for a reporting delay of 12 months.

#### Rates

Rates per 100,000 population were calculated for (1) estimated numbers of HIV infections (incidence) and (2) estimated numbers of persons living with HIV infection (prevalence; diagnosed or undiagnosed). The population denominators used to compute the rates for the 50 states, the District of Columbia, and Puerto Rico were based on the Vintage 2018 postcensal estimates file (for years 2014–2018) from the U.S. Census Bureau [14]. Each rate was calculated by dividing the total number of infections (or prevalence) for the calendar year by the population for that calendar year and then multiplying the result by 100,000. The denominators used for calculating the rates specific to age, sex at birth, and race/ethnicity were computed by applying the appropriate vintage estimates for age, sex at birth, and race/ethnicity for the 50 states and the District of Columbia [14]. Rates for transmission categories are not provided in this report because of the absence of denominator data from the U.S. Census Bureau, the source of data used for calculating all rates in this report.

#### Limitations

The CD4 model can be used to produce estimates of HIV incidence, prevalence, and undiagnosed infection for any population, at any level of stratification for which surveillance data are available. However, when stratifying variables to produce estimates for select populations one must take the following into consideration:

- Reliability of estimates, as measured by RSE (primary consideration). Smaller populations generally result in less reliable estimates.
- Stratification variables. Sex at birth, race/ethnicity, transmission category, and age are acceptable variables for stratifications. Other variables should be used with caution because the modeling for diagnosis delay does not account for them.
- Completeness of CD4 data. By December 2019, a CD4 test result had been reported to NHSS for 92.4% of persons with HIV infection diagnosed during 2014–2018. However, completeness of reporting varied among states and local jurisdictions.
- Impact of migration (for geographic analyses). Geographic areas are assumed to be closed (people get infected, receive a diagnosis, and die in the area under consideration) or balanced (approximately the same number of infected people moved into or out of the area under consideration). Smaller geographic areas are less likely to be closed or balanced; estimates should be interpreted with caution.

#### **Assumptions**

The CD4 model relies on a series of assumptions: (1) the CD4 model is accurate; (2) persons received no treatment before the first CD4 test; (3) all data adjustments (e.g., multiple imputation for missing values of transmission category, weighting to account for cases without a CD4 test) are unbiased; (4) the distribution of diagnosis delay is relatively stable (no significant change over time); and (5) a person's HIV infection, diagnosis, and death occur in a closed population (no migration).

#### Reliability

The RSE was used to assess the reliability of each point estimate of HIV incidence, prevalence, and undiagnosed infection. The National Center for Health Statistics (NCHS) encourages caution when using estimates with an RSE of >30% because they

are subject to high estimation error [15]. Estimates that do not meet NCHS's requirement for a minimum degree of reliability are typically not published. RSE is defined as follows:

$$RSE = \frac{Standard\ error\ of\ estimate}{Estimate} \times 100 \cong \frac{(U95 - L95)/(2 \times 1.96)}{Estimate} \times 100$$

where U95 and L95 are the upper and lower limits of the 95% confidence interval

To align with the reliability standards NCHS uses in many of its statistical reports, the Division of HIV/AIDS Prevention used the following criteria when presenting estimates of HIV incidence, prevalence, and undiagnosed infection:

- 1. RSE of <30%—Estimate meets the standard of reliability and is displayed.
- 2. RSE of 30%–50%—Estimate meets a lower standard of reliability and is displayed but should be interpreted with caution; these estimates are designated by an asterisk (\*).
- 3. RSE of > 50%—Estimate is statistically unreliable and is not displayed; these estimates are expressed by an ellipsis (...).

Confidence intervals were calculated by using the estimate of the population value and its associated standard error. The confidence intervals reflect the uncertainty of the estimate and represent the likely range in which the true population value lies.

#### References

- 1. Fauci AS, Redfield RR, Sigounas G, Weahkee MD, Giroir BP. Ending the HIV Epidemic: a plan for the United States [editorial]. *JAMA* 2019;321(9):844–845. doi:10.1001/jama.2019.1343.
- Division of HIV/AIDS Prevention Strategic Plan 2017– 2020. http://www.cdc.gov/hiv/dhap/strategicplan/. Updated July 2017. Accessed May 7, 2020.
- 3. Rodger AJ, Cambiano V, Bruun T, et al. Sexual activity without condoms and risk of HIV transmission in serodifferent couples when the HIV-positive partner is using suppressive antiretroviral therapy. *JAMA* 2016;316(2):171–181. doi:10.1001/jama.2016.5148.
- Song R, Hall HI, Green TA, Szwarcwald CL, Pantazis N. Using CD4 data to estimate HIV incidence, prevalence, and percent of undiagnosed infections in the United States. *J Acquir Immune Defic Syndr* 2017;74(1):3–9. doi:10.1097/ QAI.000000000001151.
- Hall HI, Song R, Szwarcwald CL, Green T. Time from infection with the human immunodeficiency virus to diagnosis, United States. *J Acquir Immune Defic Syndr* 2015; 69(2):248–251. doi:10.1097/ OAI.0000000000000589.
- 6. Lodi S, Phillips A, Touloumi G, et al; for CASCADE Collaboration in EuroCoord. Time from human immunodeficiency virus seroconversion to reaching CD4+ cell count thresholds <200, <350, and <500 cells/mm<sup>3</sup>: assessment of need following changes in treatment guidelines. *Clin Infect Dis* 2011;53(8):817–825. doi:10.1093/cid/cir494.
- 7. Touloumi G, Pantazis N, Pillay D, et al; for CAS-CADE Collaboration in EuroCoord. Impact of HIV-1 subtype on CD4 count at HIV seroconversion, rate of decline, and viral load set point in European seroconverter cohorts. *Clin Infect Dis* 2013;56(6):888–897. doi:10.1093/cid/cis1000
- 8. CDC. *HIV Surveillance Report 2018 (Updated)*; vol. 31. http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 7, 2020. Accessed May 7, 2020.
- 9. Purcell D, Johnson CH, Lansky A, et al. Estimating the population size of men who have sex with men in the United States to obtain HIV and syphilis rates. *Open AIDS J* 2012;6:98–107. doi:10.2174/1874613601206010098.

- Cohen SM, Gray KM, Ocfemia MC, Satcher Johnson A, Hall HI. The status of the National HIV Surveillance System, United States, 2013. *Public Health Rep* 2014;129(4):335–341. doi:10.1177/ 003335491412900408.
- 11. Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. *Federal Register* 1997;62:58782–58790. https://go.usa.gov/xnV9T. Accessed May 7, 2020.
- Harrison KM, Kajese T, Hall HI, Song R. Risk factor redistribution of the national HIV/AIDS surveillance data: an alternative approach. *Public Health Rep* 2008;123(5):618–627. doi:10.1177/ 003335490812300512.
- 13. Rubin DB. *Multiple Imputation for Nonresponse in Surveys*. New York: John Wiley & Sons Inc; 1987.
- 14. U.S. Census Bureau. Population and housing unit estimates datasets. https://go.usa.gov/xn4cc. Accessed May 7, 2020.
- 15. Klein RJ, Proctor SE, Boudreault MA, Turczyn KM. Healthy People 2010 criteria for data suppression. Healthy People 2010 Statistical Notes, No. 24. Hyatts-ville, Maryland: National Center for Health Statistics. July 2002. http://www.cdc.gov/nchs/data/statnt/statnt24.pdf. Accessed May 7, 2020.

Table 1. Estimated HIV incidence among persons aged ≥13 years, by year of infection and selected characteristics, 2014–2018—United States

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2014		
<b>Sex at birth</b> Male	31,300	2.0	20 100 20 500	24.1	23.2–25.0
Male Female	6,700	2.0 4.0	30,100–32,500 6,200–7,300	4.9	23.2–25.0 4.6–5.3
Age at infection (yr)	0,700	1.0	0,200 1,000	1.0	1.0 0.0
13–24	10,900	3.3	10,200-11,600	20.8	19.4-22.1
25–34	12,900	3.0	12,100-13,600	29.6	27.8-31.4
35–44	6,600	4.3	6,000–7,100	16.2	14.9–17.6
45–54 ≥55	5,100 2,600	4.9 6.9	4,600–5,500	11.7 3.1	10.5–12.8 2.7–3.5
Race/ethnicity	2,000	0.9	2,300–3,000	3.1	2.1-3.5
American Indian/Alaska Native	*140	*30.0	*60-*210	*7.1	*2.9-*11.3
Asian	720	13.1	540–910	5.1	3.8–6.4
Black/African American	16,000	2.7	15,200-16,900	49.7	47.0-52.3
Hispanic/Latino <sup>b</sup>	9,700	3.7	9,000–10,400	23.2	21.5–24.9
Native Hawaiian/Other Pacific Islander White	9,800	3.3	0.200 10.500	5.8	5.4 <b>–</b> 6.1
write Multiple races	9,600 1,500	3.3 9.1	9,200–10,500 1,200–1,800	36.2	5.4–6.1 29.7–42.7
'	1,500	3.1	1,200-1,000	30.2	25.1-42.1
<b>Transmission category<sup>c</sup></b> Male-to-male sexual contact	26,100	2.1	25,000–27,200	_	_
Injection drug use	2,000	7.4	1,700–27,200	_	_
Male	1,100	10.8	830–1,300	_	_
Female	930	9.5	750-1,100	_	_
Male-to-male sexual contact and injection drug use	1,400	8.3	1,100–1,600	_	_
Heterosexual contact <sup>a</sup> Male	8,600 2,800	4.0 8.2	7,900–9,300 2.400–3.300	_	_
Female	5,800	6.2 4.5	5,300–6,300	_	_
Region of residence	0,000	4.0	0,000 0,000		
Northeast	6,000	4.5	5,500-6,500	12.6	11.5-13.7
Midwest	4,900	4.8	4,500-5,400	8.7	7.9-9.5
South	19,200	2.5	18,300–20,200	19.3	18.4–20.3
West	7,800	3.9	7,200–8,400	12.6	11.7–13.6
Total <sup>e</sup>	38,000	1.8	36,700–39,300	14.3	13.8–14.8
Consert blods			2015		
Sex at birth Male	31,600	2.3	30.200-33.000	24.1	23.1–25.2
Female	6,800	4.4	6,200-7,400	5.0	4.5–5.4
Age at infection (yr)	.,		, ,		
13–24	10,200	3.9	9,400-10,900	19.5	18.0-21.0
25–34	13,700	3.4	12,800-14,600	31.1	29.0–33.2
35–44	6,800	4.8	6,100–7,400	16.7	15.1–18.3
45–54 ≥55	5,000 2,800	5.6 7.7	4,500–5,600 2,400–3,200	11.7 3.1	10.4–13.0 2.7–3.6
Race/ethnicity	2,000	1.1	2,400-0,200	0.1	2.1-0.0
American Indian/Alaska Native	200	28.2	90–310	10.3	4.6–16.1
Asian	720	15.2	500-930	4.9	3.4-6.4
Black/African American	16,100	3.1	15,100–17,100	49.3	46.3–52.3
Hispanic/Latino <sup>D</sup>	10,200	4.2	9,400–11,000	23.7	21.8–25.7
Native Hawaiian/Other Pacific Islander White	9,800	3.7	9.100–10.500	5.7	5.3–6.1
Multiple races	1,400	10.7	1,100–10,300	32.3	25.5–39.0
Transmission category <sup>c</sup>	,		,	- *	
Male-to-male sexual contact	26,100	2.4	24,900-27,400	_	_
Injection drug use	2,300	7.2	1,900–2,600	_	_
Male	1,300	10.7	990-1,500	_	_
Female	1,000	10.4	800–1,200	_	_
Male-to-male sexual contact and injection drug use Heterosexual contact <sup>d</sup>	1,400 8,600	9.3 4.5	1,100–1,600 7,900–9,400	_	
Male	2,800	9.2	2,300–3,300	_	_
Female	5,800	4.9	5,200–6,400	_	_
Region of residence	,		. , , , , ,		
Northeast	5,700	5.3	5,100-6,300	12.0	10.7–13.2
Midwest	5,200	5.4	4,600–5,700	9.1	8.2–10.1
South	19,700	2.8	18,600–20,800	19.6	18.5–20.7
West	7,800	4.5	7,100–8,500	12.4	11.4–13.5
Total <sup>e</sup>	38,400	2.0	36,900–39,900	14.3	13.8–14.9

Table 1. Estimated HIV incidence among persons aged ≥13 years, by year of infection and selected characteristics, 2014–2018—United States (cont)

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2016		
Sex at birth	24 700	0.6	20,000, 22,200	24.0	20.7.25.0
Male Female	31,700 6,800	2.6 5.0	30,000–33,300 6,100–7,500	24.0 4.9	22.7–25.2 4.4–5.4
Age at infection (yr)	0,000	0.0	0,100 1,000	1.0	4.4 0.4
13–24	9,100	4.8	8,300-10,000	17.7	16.0-19.3
25–34	14,600	3.8	13,500–15,700	32.6	30.2–35.0
35–44 45–54	7,000 4,900	5.5 6.5	6,200–7,700	17.2 11.3	15.3–19.0 9.9–12.8
45–54 ≥55	2,900	8.3	4,200–5,500 2,500–3,400	3.2	9.9–12.6 2.7–3.8
Race/ethnicity	2,000	0.0	2,000 0,100	0.2	2.7 0.0
American Indian/Alaska Native	*190	*32.5	*70-*320	*10	*3.6-*16.4
Asian	720	17.4	480–970	4.8	3.1–6.4
Black/African American Hispanic/Latino <sup>b</sup>	16,000 10,500	3.6 4.8	14,900–17,200 9,500–11,500	48.6 23.8	45.2–52.0 21.5–26.0
Native Hawaiian/Other Pacific Islander	10,500	4.0	9,300-11,300	23.0	21.5-20.0
White	9,700	4.3	8,900–10,500	5.6	5.2–6.1
Multiple races	1,300	12.6	1,000-1,700	30.3	22.8–37.8
Transmission category <sup>c</sup>					
Male-to-male sexual contact	26,200	2.9	24,700–27,700	_	_
Injection drug use Male	2,100 1,200	8.9 12.5	1,800–2,500 910–1,500	_	_
riviale Female	920	12.5	700–1,100	_	_
Male-to-male sexual contact and injection drug use	1,400	10.5	1,100–1,700	_	_
Heterosexual contact <sup>d</sup>	8,800	5.0	7,900–9,600	_	_
Male	2,900	10.2	2,300–3,500	_	_
Female	5,900	5.5	5,200–6,500	_	_
Region of residence Northeast	5,600	6.2	4,900-6,300	11.7	10.3–13.1
Midwest	4,700	6.5	4,100–5,300	8.2	7.2–9.3
South	19,800	3.2	18,600-21,100	19.5	18.2–20.7
West	8,400	5.0	7,500–9,200	13.1	11.8–14.4
Total <sup>e</sup>	38,500	2.3	36,700–40,200	14.2	13.6–14.9
• 41:4			2017		
Sex at birth Male	30,300	3.1	28,400–32,100	22.7	21.3–24.1
Female	6,700	5.7	6,000–7,500	4.8	4.3–5.4
Age at infection (yr)	,				
13–24	8,200	5.9	7,300-9,200	16.0	14.1–17.8
25–34	14,400	4.4	13,200–15,700	31.8	29.1–34.6
35–44 45–54	6,900 4,400	6.3 7.8	6,100–7,800 3,800–5,100	17.0 10.5	14.9–19.1 8.9–12.1
≥55	3,000	9.5	2,400–3,600	3.2	2.6–3.8
Race/ethnicity	,				
American Indian/Alaska Native	*190	*38.3	*50-*340	*9.9	*2.5-*17.4
Asian	610	22.3	340–870	3.9	2.2–5.6
Black/African American Hispanic/Latino <sup>b</sup>	15,500 10,200	4.2 5.7	14,200–16,800 9,000–11,300	46.5 22.5	42.7–50.3 20.0–25.1
Native Hawaiian/Other Pacific Islander			3,000-11,000		20.0 20.1
White	9,400	5.0	8,500-10,300	5.5	4.9-6.0
Multiple races	1,100	16.3	760–1,500	24.5	16.6–32.4
Transmission category <sup>c</sup>					
Male-to-male sexual contact	25,300	3.4	23,600–27,000	_	_
Injection drug use Male	2,200 1,300	10.0 14.1	1,800–2,700 910–1,600	_	_
Female	1,000	14.0	720–1,300	_	_
Male-to-male sexual contact and injection drug use	1,200	12.9	920-1,500	_	_
Heterosexual contact <sup>d</sup>	8,200	5.8 12.7	7,300–9,200	_	_
M = I =		12.7	1,900–3,100	_	_
Male Female	2,500 5,700		5 000_6 400	_	_
Female	2,500 5,700	6.3	5,000–6,400	_	_
Female	5,700		5,000–6,400 4,400–5,900	10.8	9.2–12.3
Female  Region of residence  Northeast Midwest	5,700 5,100 5,000	6.3 7.4 7.3	4,400–5,900 4,200–5,700	8.7	7.4-9.9
Female  Region of residence  Northeast  Midwest  South	5,700 5,100 5,000 19,300	7.4 7.3 3.8	4,400–5,900 4,200–5,700 17,800–20,700	8.7 18.7	7.4–9.9 17.3–20.1
Female  Region of residence  Northeast Midwest	5,700 5,100 5,000	6.3 7.4 7.3	4,400–5,900 4,200–5,700	8.7	7.4-9.9

Table 1. Estimated HIV incidence among persons aged ≥13 years, by year of infection and selected characteristics, 2014–2018—United States (cont)

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2018		
Sex at birth					
Male	29,700	3.7	27,500–31,900	22.1	20.5–23.7
Female	6,700	6.5	5,900-7,600	4.8	4.2-5.4
Age at infection (yr)					
13–24	7,600 <sup>f</sup>	7.2	6,500-8,700	14.8	12.7-16.9
25–34	14,400	5.2	12,900-15,900	31.5	28.3-34.8
35–44	7,000	7.4	6,000-8,000	16.9	14.4-19.3
45–54	4,200	9.4	3,500-5,000	10.2	8.3-12.1
≥55	3,200	10.7	2,500-3,800	3.3	2.6-4.1
Race/ethnicity	•		, ,		
American Indian/Alaska Native	*210	*43.9	*30-*380	*10.4	*1.4-*19.4
Asian	620	26.4	300–940	3.9	1.9–5.9
Black/African American	15,300	4.9	13,800–16,800	45.4	41.0–49.8
Hispanic/Latino <sup>b</sup>	10,300	6.7	9.000–11.700	22.4	19.4–25.3
Native Hawaiian/Other Pacific Islander	. 0,000		0,000 11,100		
White	9.000	5.9	7.900-10.000	5.2	4.6–5.8
Multiple races	910 <sup>f</sup>	21.2	530–1,300	19.3	11.3–27.4
Transmission category <sup>c</sup>					
Male-to-male sexual contact	24.400	4.1	22.400-26.400	_	_
Injection drug use	2,400	11.4	1,900–2,900	_	_
Male	1,400	15.6	970–1.800	_	_
Female	1,000	16.3	680–1,300	_	_
Male-to-male sexual contact and injection drug use	1,400	13.8	1.000-1.700	_	_
Heterosexual contact <sup>d</sup>	8,200	6.6	7,100–9,300	_	_
Male	2,500	14.4	1.800–3.200	_	_
Female	5,700	7.1	4,900–6,500	_	_
Region of residence	-,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Northeast	5,000	8.8	4,100-5,900	10.5	8.7-12.3
Midwest	4.700	8.9	3.800-5.500	8.1	6.7–9.5
South	19,200	4.5	17,500–20,900	18.4	16.8–20.0
West	7,500	7.3	6,500-8,600	11.6	9.9–13.2
Total <sup>e</sup>	36.400	3.3	34.100–38.700	13.3	12.4–14.1

 $Abbreviations: RSE, relative \ standard \ error; CI, confidence \ interval; CD4, CD4+ T-lymphocyte \ count \ (cells/\mu L) \ or \ percentage \ [footnotes \ only].$ 

Note. Estimates derived by using HIV surveillance and CD4 data for persons aged  $\geq$ 13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of  $\leq$ 1,000 to reflect model uncertainty. Estimates with an RSE of 30%–50% are preceded by an asterisk (\*) and should be used with caution. Estimates with an RSE of >50% are not shown and are replaced by an ellipsis (...).

a Rates are per 100,000 population. Rates are not calculated for transmission category because of the lack of denominator data.

b Hispanics/Latinos can be of any race.

<sup>&</sup>lt;sup>C</sup> Data by transmission category have been statistically adjusted to account for missing risk-factor information.

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

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

 $<sup>^{\</sup>rm f}$  Indicates that difference from 2014 estimate was deemed statistically significant (P < .05).

Table 2. Estimated HIV incidence among blacks/African Americans aged ≥13 years, by year of infection, sex at birth, and selected characteristics, 2014–2018—United States

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2014		
Male					
Age at infection (yr)	4.900	4.9	4 400 5 300	124.8	112.7–136.8
13–24 25–34	4,800 4,000	4.9 5.4	4,400–5,300 3,600–4,500	145.0	129.6–160.5
35–44	1,400	9.5	1,200–1,700	58.6	47.7–69.5
45–54	1,200	10.5	960–1,400	48.1	38.2–58
≥55	690	14.1	500–880	18.9	13.7–24.2
Transmission category <sup>b</sup>					
Male-to-male sexual contact	9,800	3.4	9,100-10,400	_	_
Injection drug use	380	18.0	240-510	_	_
Male-to-male sexual contact and injection drug use	240	22.0	140-340	_	_
Heterosexual contact <sup>c</sup>	1,800	9.7	1,400-2,100	_	_
Subtotal <sup>d</sup>	12,200	3.2	11,400–12,900	80.0	75.0–85.0
Female					
Age at infection (yr)		44.0	0.40.000		400.000
13–24	790	11.8	610–980	21.1	16.3–26.0
25–34	1,000	10.3	830–1,200	35.3	28.2–42.4
35–44	890	11.1	700–1,100	32.9	25.8–40.0
45–54 ≥55	650 500	12.9 14.8	490–820 350–640	23.1 10.2	17.2–28.9 7.3–13.2
	500	14.0	330-040	10.2	7.3-13.2
Transmission category <sup>b</sup>	210	17.0	200 440		
Injection drug use Heterosexual contact <sup>c</sup>	310	17.2	200–410	_	_
Subtotal <sup>d</sup>	3,600	5.7 5.3	3,200–4,000	22.7	20.3–25.0
	3,900		3,500–4,300		
Total <sup>d</sup>	16,000	2.7	15,200–16,900	49.7	47.0–52.3
Male			2015		
Age at infection (yr)					
13–24	4,400	6.0	3,800-4,900	114.3	100.8-127.7
25–34	4,400	6.0	3,900–4,900	152.6	134.6–170.7
35–44	1,600	10.2	1,300-1,900	64.3	51.4-77.3
45–54	1,200	12.0	890-1,400	46.8	35.8-57.9
≥55	720	15.6	500–940	19.0	13.2–24.8
Transmission category <sup>b</sup>					
Male-to-male sexual contact	9,800	4.0	9,000-10,500	_	_
Injection drug use	340	20.7	200–480	_	_
Male-to-male sexual contact and injection drug use	250	25.2	130–370	_	_
Heterosexual contact <sup>c</sup>	1,800	10.7	1,400–2,200	_	
Subtotal <sup>d</sup>	12,200	3.6	11,300–13,100	79.2	73.5–84.8
Female					
Age at infection (yr)		40.0	-10.000	40.0	
13–24	730	13.8	540–930	19.8	14.5–25.2
25–34	1,100	11.2	840–1,300	35.9	28.0–43.8
35–44 45–54	870 710	12.5 13.7	650–1,100 520–900	31.8	24.0–39.6
45–54 ≥55	510	16.1	350–670	25.4 10.2	18.6–32.2 7.0–13.4
i	010	10.1	550-070	10.2	7.0-10.4
Transmission category <sup>D</sup> Injection drug use	280	20.9	160–390		
Heterosexual contact <sup>c</sup>	3,600	6.2	3,200–4,100	_	_
Subtotal <sup>d</sup>	3,900	5.9	3,500–4,400	22.6	20.0–25.2
Total <sup>d</sup>	16,100	3.1	15,100–17,100	49.3	46.3–52.3
IUlai	10,100	ა. i	13,100-17,100	43.3	40.3-32.3

Table 2. Estimated HIV incidence among blacks/African Americans aged ≥13 years, by year of infection, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2016	-	
Male					
Age at infection (yr)	0.000	<b>-</b> 4	0.000 4.400	400.0	00.0 447.0
13–24	3,900	7.4	3,300–4,400	102.9	88.0–117.9
25–34	4,800	6.6	4,200–5,400	161.2	140.2–182.2
35–44	1,600	11.6	1,200–2,000	65.8	50.8–80.8
45–54 ≥55	1,100 750	14.5 17.3	750–1,400 500–1,000	42.5 19.1	30.4–54.7 12.6–25.6
	730	17.5	300-1,000	13.1	12.0-23.0
Transmission category <sup>b</sup>	0.700	4.7	0.000 40.000		
Male-to-male sexual contact	9,700	4.7	8,800–10,600	_	_
Injection drug use Male-to-male sexual contact and injection drug use	360 230	22.0 28.1	200–510 100–350	_	_
Heterosexual contact <sup>c</sup>	1,700	12.2	1,300–2,200	_	_
Subtotal <sup>d</sup>	12,100	4.2	11,100–13,100	— 77.5	71.1–84.0
Female	12,100	7.2	11,100-10,100	11.5	71.1-04.0
Age at infection (yr)					
13–24	640	16.1	440-850	17.7	12.1–23.2
25–34	1,100	12.3	850–1,400	36.0	27.4–44.7
35–44	840	14.2	600–1,100	30.7	22.2–39.3
45–54	760	14.8	540–980	27.1	19.2–34.9
≥55	610	16.4	420–810	11.9	8.0–15.7
Transmission category <sup>b</sup>					
Injection drug use	280	22.0	160-400	_	_
Heterosexual contact <sup>c</sup>	3,700	6.8	3,200–4,200	_	_
Subtotal <sup>d</sup>	4,000	6.5	3,500–4,500	22.7	19.8–25.6
Total <sup>d</sup>	16,000	3.6	14,900–17,200	48.6	45.2-52.0
Total	10,000	3.0	2017	40.0	43.Z-3Z.U
Male			2011		
Age at infection (yr)					
13–24	3,500	9.0	2,900-4,100	94.3	77.5-111.0
25–34	4,800	7.7	4,100-5,500	156.5	132.8-180.2
35–44	1,600	13.5	1,200-2,100	66.0	48.5-83.4
45–54	980	17.5	640-1,300	39.9	26.2-53.5
≥55	740	20.3	440–1,000	18.2	10.9–25.4
Transmission category <sup>b</sup>					
Male-to-male sexual contact	9,600	5.4	8,600-10,600	_	_
Injection drug use	290	28.4	130–460	_	_
Male-to-male sexual contact and injection drug use	*230	*32.2	*80-*370	_	_
Heterosexual contact <sup>c</sup>	1,500	15.2	1,100-2,000	_	_
Subtotal <sup>d</sup>	11,600	5.0	10,500-12,800	73.9	66.7–81.2
Female					
Age at infection (yr)					
13–24	600	18.8	380-820	16.8	10.6-23.0
25–34	1,100	13.8	810-1,400	35.3	25.8-44.9
35–44	850	15.9	580–1,100	31.0	21.3–40.6
45–54	660	18.0	430–890	23.6	15.3–32.0
≥55	630	18.3	400–860	11.8	7.6–16.1
Transmission category <sup>b</sup>					
Injection drug use	230	29.7	100–370	_	_
Heterosexual contact <sup>c</sup>	3,600	7.7	3,100-4,200	_	_
Subtotal <sup>d</sup>	3,900	7.4	3,300-4,400	21.9	18.7–25.1
Total <sup>d</sup>	0,000		0,000 1,100		10.7 20.1

Table 2. Estimated HIV incidence among blacks/African Americans aged ≥13 years, by year of infection, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	No.	RSE (%)	95% CI	Ratea	95% CI
			2018		
Male					
Age at infection (yr)					
13–24	3,100 <sup>e</sup>	11.4	2,400-3,800	86.2	67.0-105.4
25–34	5,000 <sup>e</sup>	8.9	4,100-5,900	158.7	130.9-186.6
35–44	1,600	15.8	1,100-2,100	65.1	44.9-85.2
45–54	930	21.0	550-1,300	38.2	22.5-54.0
≥55	790	22.7	440-1,100	19.0	10.6-27.5
Transmission category <sup>b</sup>					
Male-to-male sexual contact	9,400	6.6	8,200-10,600	_	_
Injection drug use	350	28.3	160–540	_	_
Male-to-male sexual contact and injection drug use	*250	*34.3	*80-*420	_	_
Heterosexual contact <sup>c</sup>	1,500	17.5	970-2,000	_	_
Subtotal <sup>d</sup>	11,500	5.9	10,200-12,800	72.4	64.0-80.8
Female					
Age at infection (yr)					
13–24	610	21.1	360-870	17.3	10.1-24.5
25–34	1,000	16.3	700-1,400	32.0	21.7-42.2
35–44	850	17.9	550-1,100	30.8	20.0-41.6
45–54	640	20.7	380-900	23.2	13.8-32.6
≥55	650	20.4	390-910	11.9	7.1–16.6
Transmission category <sup>b</sup>					
Injection drug use	*240	*32.1	*90-*390	_	_
Heterosexual contact <sup>c</sup>	3,500	8.8	2.900-4.100	_	_
Subtotal <sup>d</sup>	3,800	8.5	3,200–4,400	21.3	17.7-24.8
Total <sup>d</sup>	15,300	4.9	13,800-16,800	45.4	41.0-49.8

Abbreviations: RSE, relative standard error; CI, confidence interval; CD4, CD4+ T-lymphocyte count (cells/ $\mu$ L) or percentage [footnotes only]. *Note*. Estimates derived by using HIV surveillance and CD4 data for persons aged  $\geq$  13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of  $\leq$  1,000 to reflect model uncertainty. Estimates with an RSE of 30%–50% are preceded by an asterisk (\*) and should be used with caution.

<sup>&</sup>lt;sup>a</sup> Rates are per 100,000 population. Rates are not calculated for transmission category because of the lack of denominator data.

b Data by transmission category have been statistically adjusted to account for missing risk-factor information.

<sup>&</sup>lt;sup>C</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

d Includes persons with HIV infection attributed to hemophilia or blood transfusion, or whose risk factor was not reported or identified.

e Indicates that difference from 2014 estimate was deemed statistically significant (P < .05).

Table 3. Estimated HIV incidence among Hispanics/Latinos aged ≥13 years, by year of infection, sex at birth, and selected characteristics, 2014–2018—United States

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
Mala			2014		
Male					
Age at infection (yr)	2 500	7.4	2 200 2 000	42 C	27.2 40.0
13–24 25–34	2,500 3,300	7.4 6.4	2,200–2,900 2,900–3,700	43.6 70.6	37.3–49.9 61.7–79.5
35–44	1,600	9.5	1,300–1,900	38.5	31.4–45.7
45–54	910	12.5	690–1,100	28.9	21.8–36.0
≥55	320	22.3	180–450	9.1	5.1–13.1
Transmission category <sup>b</sup>					
Male-to-male sexual contact	7,500	4.3	6,900-8,100	_	_
Injection drug use	250	22.6	140–350	_	_
Male-to-male sexual contact and injection drug use	330	17.5	220–440	_	_
Heterosexual contact <sup>c</sup>	560	20.9	330–780	_	_
Subtotal <sup>d</sup>	8,600	4.0	7,900–9,300	40.7	37.5-44.0
Female					
Age at infection (yr)					
13–24	210	23.1	110-300	3.8	2.1-5.5
25–34	310	18.7	200-430	7.4	4.7-10.1
35–44	270	20.3	160–370	6.8	4.1-9.5
45–54	220	22.5	120-320	7.1	4.0-10.3
≥55	*120	*30.6	*50–*190	*2.8	*1.1–*4.5
Transmission category <sup>b</sup>					
Injection drug use	130	24.8	70–200	_	_
Heterosexual contact <sup>c</sup>	990	10.8	780-1,200	_	_
Subtotal <sup>d</sup>	1,100	9.9	900-1,300	5.4	4.3-6.4
Total <sup>d</sup>	9,700	3.7	9,000-10,400	23.2	21.5-24.9
			2015		
Male					
Age at infection (yr)	0.500	0.5	0.400.0000	44.0	040 400
13–24	2,500	8.5	2,100–2,900	41.9	34.9–48.8
25–34	3,500	7.1	3,100–4,000	75.3	64.8–85.8
35–44	1,700	10.5	1,400–2,100	41.0	32.5–49.4
45–54 ≥55	1,000 360	13.6 24.4	760–1,300 190–530	31.7 9.7	23.2–40.2 5.1–14.4
i	300	24.4	190-550	9.1	5.1-14.4
Transmission category <sup>D</sup>	0.000	4 =	7.000 0.700		
Male-to-male sexual contact	8,000	4.7	7,300–8,700	_	_
Injection drug use	250	25.3	130–380	_	_
Male-to-male sexual contact and injection drug use	340	19.0	220–470	_	_
Heterosexual contact <sup>c</sup> Subtotal <sup>d</sup>	510	25.4	250–760	40.0	20 2 45 7
Female	9,100	4.5	8,300–9,900	42.0	38.3–45.7
Age at infection (yr) 13-24	190	27.0	90–290	3.4	1.6-5.2
25–34	350	19.9	210–490	8.3	5.0–11.5
35–44	220	25.5	110–330	5.5	2.7–8.2
45–54	230	24.6	120–340	7.2	3.7–10.6
≥55	*110	*35.7	*30-*180	*2.5	*0.7–*4.3
Transmission category <sup>b</sup>	• •			•	
Injection drug use	140	25.7	70–200	_	_
Heterosexual contact <sup>c</sup>	960	12.4	720–1,200	_	_
Subtotal <sup>d</sup>	1,100	11.3	860–1,300	5.1	4.0-6.3
Total <sup>d</sup>	10,200	4.2	9,400–11,000	23.7	21.8–25.7
	,		, , , , , , , , , ,		

Table 3. Estimated HIV incidence among Hispanics/Latinos aged ≥13 years, by year of infection, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
Mala			2016		
Male					
Age at infection (yr)	0.400	10.1	4 000 0 000	40.0	20.0.40.0
13–24 25–34	2,400 3,900	10.1 8.0	1,900–2,900	40.2 80.6	32.2–48.2 68.0–93.3
35–44			3,300–4,500	45.4	35.2–55.7
45–54	1,900 870	11.5 17.2	1,500–2,400 580–1,200	26.0	17.2–34.8
45–55	350	28.0	160–540	9.0	4.1–14.0
	330	20.0	100-340	3.0	4.1-14.0
Transmission category <sup>b</sup>	0.000		7 400 0 000		
Male-to-male sexual contact	8,300	5.5	7,400–9,200	_	_
Injection drug use	260	27.6	120–400	_	_
Male-to-male sexual contact and injection drug use	340	21.9	200–490	_	_
Heterosexual contact <sup>c</sup>	530	27.6	240–810	_	-
Subtotald	9,400	5.2	8,400–10,300	42.3	38.1–46.6
Female					
Age at infection (yr)	*450	*0= 0	*50 *050	*0.0	***
13–24	*150	*35.2	*50-*250	*2.6	*0.8–*4.4
25–34	330	23.1	180–480	7.6	4.2–11.0
35–44	250	26.6	120–380	6.2	3.0–9.5
45–54	210	29.8	90–330	6.2	2.6–9.8
≥55	*140	*36.4	*40–*230	*3.0	*0.9–*5.2
Transmission category <sup>b</sup>					
Injection drug use	*120	*32.1	*40–*200	_	_
Heterosexual contact <sup>c</sup>	950	14.1	690-1,200	_	_
Subtotal <sup>d</sup>	1,100	12.9	800–1,300	4.9	3.7–6.1
Total <sup>d</sup>	10,500	4.8	9,500-11,500	23.8	21.5-26.0
			2017		
Male					
Age at infection (yr)	0.400	40.0			
13–24	2,100	12.8	1,600–2,600	35.2	26.4–44.0
25–34	3,800	9.4	3,100–4,600	78.9	64.3–93.5
35–44	1,800	13.9	1,300–2,300	42.3	30.8–53.8
45–54	900	19.9	550–1,300	26.1	15.9–36.3
≥55	*400	*30.4	*160–*640	*9.8	*3.9–*15.6
Transmission category <sup>b</sup>					
Male-to-male sexual contact	8,000	6.6	7,000-9,100	_	_
Injection drug use	*270	*31.6	*100–*430	_	_
Male-to-male sexual contact and injection drug use	270	29.1	120–430	_	_
Heterosexual contact <sup>c</sup>	*510	*32.5	*180–*830	_	_
Subtotal <sup>d</sup>	9,100	6.2	8,000–10,200	40.0	35.1–44.8
Female					
Age at infection (yr)					
13–24	*190	*34.6	*60-*320	*3.3	*1.1–*5.6
25–34	340	25.8	170-510	7.6	3.8-11.5
35–44	260	29.4	110–400	6.3	2.6-9.9
45–54	*180	*35.8	*50-*310	*5.3	*1.6-*9.1
≥55	*120	*43.9	*20-*220	*2.5	*0.3-*4.6
Transmission category <sup>b</sup>					
Injection drug use	*150	*32.7	*50-*240	_	_
Heterosexual contact <sup>c</sup>	930	16.0	640-1,200	_	_
Subtotal <sup>d</sup>	1,100	14.4	780-1,400	4.8	3.5-6.2
Total <sup>d</sup>	10,200	5.7	9,000–11,300	22.5	20.0-25.1
Total	10,200	J.1	3,000-11,000	££.J	20.U-2J. I

Table 3. Estimated HIV incidence among Hispanics/Latinos aged ≥13 years, by year of infection, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
		. ,	2018		
Male					
Age at infection (yr)					
13–24	2,000	15.6	1,400-2,600	32.9	22.8-42.9
25–34	3,900	11.1	3,000-4,800	78.9	61.7-96.2
35–44	1,900	16.1	1,300-2,500	43.0	29.4-56.5
45–54	920	23.4	500-1,300	25.9	14.0-37.7
≥55	*470	*33.0	*170 <del>_*</del> 770	*10.9	*3.9-*18
Transmission category <sup>b</sup>					
Male-to-male sexual contact	8,000	7.8	6,800-9,300	_	_
Injection drug use	*290	*35.0	*90-*480	_	_
Male-to-male sexual contact and injection drug use	*330	*30.4	*130-*520	_	_
Heterosexual contact <sup>c</sup>	*520	*36.3	*150-*880	_	_
Subtotal <sup>d</sup>	9,200	7.3	7,900-10,500	39.4	33.8-45.1
Female					
Age at infection (yr)					
13–24	*170	*40.3	*40-*310	*3.0	*0.6-*5.4
25–34	340	29.2	140-530	7.5	3.2-11.8
35–44	*300	*30.7	*120-*490	*7.3	*2.9-*11.7
45–54	*190	*38.9	*50-*340	*5.5	*1.3-*9.7
≥55	*150	*44.0	*20-*280	*3.0	*0.4-*5.5
Transmission category <sup>b</sup>					
Injection drug use	*140	*41.3	*30-*250	_	_
Heterosexual contact <sup>c</sup>	1,000	17.1	680–1.400	_	_
Subtotal <sup>d</sup>	1,200	15.8	800–1,500	5.0	3.5-6.6
Total <sup>d</sup>	10,300	6.7	9,000-11,700	22.4	19.4–25.3

Abbreviations: RSE, relative standard error; CI, confidence interval; CD4, CD4+ T-lymphocyte count (cells/ $\mu$ L) or percentage [footnotes only].

Note. Hispanics/Latinos can be of any race. Estimates derived by using HIV surveillance and CD4 data for persons aged ≥13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤1,000 to reflect model uncertainty. Estimates with an RSE of 30%-50% are preceded by an asterisk (\*) and should be used with caution.

<sup>&</sup>lt;sup>a</sup> Rates are per 100,000 population. Rates are not calculated for transmission category because of the lack of denominator data.

<sup>&</sup>lt;sup>b</sup> Data by transmission category have been statistically adjusted to account for missing risk-factor information.

<sup>&</sup>lt;sup>C</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

d Includes persons with HIV infection attributed to hemophilia or blood transfusion, or whose risk factor was not reported or identified.

Table 4. Estimated HIV incidence among whites aged ≥13 years, by year of infection, sex at birth, and selected characteristics, 2014–2018—United States

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2014		
Male					
Age at infection (yr) 13-24	1,600	8.1	1 200 1 900	10.8	9.1–12.5
25–34	2,900	6.0	1,300–1,800 2,600–3,300	23.4	20.7–26.2
35–44	1,700	8.0	1,400–1,900	14.0	11.8–16.2
45–54	1,500	8.4	1,300–1,800	10.9	9.1–12.7
≥55	770	12.2	580–950	2.5	1.9–3.1
Transmission category <sup>b</sup>					
Male-to-male sexual contact	7,100	3.8	6,600-7,600	_	_
Injection drug use	370	17.2	250-500	_	_
Male-to-male sexual contact and injection drug use	690	10.8	540-830	_	_
Heterosexual contact <sup>c</sup>	350	25.6	180–530	_	_
Subtotal <sup>d</sup>	8,500	3.5	7,900–9,100	10.2	9.5–10.9
Female					
Age at infection (yr)	050	00.0	450.040	4.0	44.05
13–24	250	20.2	150–340	1.8	1.1–2.5
25–34 35–44	410 300	15.4 18.4	290–540 190–410	3.4 2.6	2.4–4.4 1.6–3.5
45–54	250	20.0	150–410	2.0 1.7	1.0-3.5
45-54 ≥55	120	29.2	50–190	0.4	0.2-0.6
	120	25.2	00-100	0.4	0.2-0.0
Transmission category <sup>b</sup> Injection drug use	430	14.1	310–550		
Heterosexual contact <sup>c</sup>	900	11.3	700–1,100	_	_
Subtotal <sup>d</sup>	1,300	8.7	1,100–1,600	1.5	1.3–1.8
Total <sup>d</sup>		3.3		5.8	5.4–6.1
Total	9,800	3.3	9,200–10,500	5.0	3.4-0.1
Male			2015		
Age at infection (yr)					
13–24	1,600	9.3	1,300-1,900	10.8	8.8-12.8
25–34	2,900	6.8	2,600-3,300	23.3	20.2-26.4
35–44	1,600	9.3	1,300-1,900	13.8	11.3–16.3
45–54	1,400	10.3	1,100–1,600	9.7	7.7–11.7
≥55	820	13.5	610–1,000	2.7	2.0–3.4
Transmission category <sup>b</sup>					
Male-to-male sexual contact	6,700	4.5	6,100–7,200	_	_
Injection drug use	600	15.0	420–770	_	_
Male-to-male sexual contact and injection drug use	690	12.2	520–850	_	_
Heterosexual contact <sup>c</sup>	380	27.4	180–580	_	
Subtotal <sup>d</sup>	8,300	4.1	7,700–9,000	9.9	9.1–10.7
Female					
Age at infection (yr) 13-24	230	22.8	130–340	1.7	0.9–2.5
13–24 25–34	480	22.6 15.7	330–630	3.9	0.9 <del>–</del> 2.5 2.7–5.1
35–44	350	18.4	230–480	3.9	1.9–4.1
45–54	260	22.0	250 <u>–</u> 460 150–370	3.0 1.8	1.9–4.1
≥55	*130	*31.5	*50-*210	*0.4	*0.1–*0.6
Transmission category <sup>b</sup>					
Injection drug use	540	13.5	400–680	_	_
Heterosexual contact <sup>c</sup>	910	12.2	690–1,100	_	_
Subtotal <sup>d</sup>	1,500	9.1	1,200–1,700	1.7	1.4-2.0
Total <sup>d</sup>	9,800	3.7	9,100-10,500	5.7	5.3-6.1
	-,	<del></del>	-, •,•••	J	

Table 4. Estimated HIV incidence among whites aged ≥13 years, by year of infection, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2016		
Male					
Age at infection (yr)					
13–24	1,400	11.4	1,100–1,700	9.6	7.5–11.8
25–34	3,000	7.7	2,600–3,500	23.8	20.2–27.4
35–44 45–54	1,500	10.9 11.2	1,200–1,900	13.2	10.4–16.1
45–54 ≥55	1,500 800	15.4	1,100–1,800 560–1,000	10.8 2.5	8.4–13.1 1.8–3.3
	000	10.4	300-1,000	2.0	1.0-0.0
Transmission category <sup>b</sup> Male-to-male sexual contact	6 500	5.2	E 900 7 200		
Injection drug use	6,500 530	19.0	5,800–7,200 330–730	_	_
Male-to-male sexual contact and injection drug use	700	13.8	510–880	_	_
Heterosexual contact <sup>c</sup>	470	26.4	230–720		_
Subtotal <sup>d</sup>	8,200	4.7	7,500–9,000	9.8	8.9-10.7
Female	0,200		1,000 0,000	0.0	0.0 10.7
Age at infection (yr)					
13–24	210	27.3	100–330	1.6	0.7-2.4
25–34	510	17.5	340–690	4.1	2.7–5.6
35–44	340	21.5	200–480	3.0	1.7–4.2
45–54	220	26.6	110–340	1.6	0.8–2.5
≥55	*160	*32.0	*60-*260	*0.4	*0.2-*0.7
Transmission category <sup>b</sup>					
Injection drug use	470	17.4	310-630	_	_
Heterosexual contact <sup>c</sup>	980	13.2	720–1,200	_	_
Subtotal <sup>d</sup>	1,400	10.4	1,200-1,700	1.7	1.3-2.0
Total <sup>d</sup>	9,700	4.3	8,900-10,500	5.6	5.2-6.1
	.,		2017		
Male					
Age at infection (yr)					
13–24	1,200	13.9	870–1,500	8.4	6.1–10.8
25–34	3,000	8.9	2,500-3,500	23.3	19.2–27.4
35–44	1,600	12.2	1,200–2,000	13.6	10.3–16.8
45–54	1,300	13.8	910–1,600	9.4	6.8–11.9
≥55	880	16.9	590–1,200	2.7	1.8–3.7
Transmission category <sup>b</sup>					
Male-to-male sexual contact	6,200	6.1	5,400–6,900	_	_
Injection drug use	660	19.4	410–910	_	_
Male-to-male sexual contact and injection drug use	650	16.5	440–870	_	_
Heterosexual contact <sup>c</sup> <b>Subtota</b> l <sup>d</sup>	*390	*33.5 5.5	*130–*650	9.4	8.4 <b>–</b> 10.4
	7,900	5.5	7,000–8,700	3.4	0.4-10.4
Female					
Age at infection (yr) 13-24	230	29.7	100–360	1.7	0.7–2.7
25–34	510	19.9	310–700	4.1	2.5–5.7
35–44	380	22.8	210–550	3.3	1.8–4.8
45–54	240	28.9	110–380	1.8	0.8–2.9
≥55	*150	*37.7	*40–*250	*0.4	*0.1–*0.7
Transmission category <sup>b</sup>				***	
Injection drug use	560	18.4	360–770	_	_
Heterosexual contact <sup>c</sup>	940	15.0	670–1,200	_	_
Subtotald	1,500	11.6	1,200–1,900	1.7	1.3–2.1
Total <sup>d</sup>	9,400	5.0	8,500–10,300	5.5	4.9–6.0
i Viui	9,400	J.U	0,000-10,000	3.3	7.3-0.0

Table 4. Estimated HIV incidence among whites aged ≥13 years, by year of infection, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2018		
Male					
Age at infection (yr)					
13–24	1,100 <sup>e</sup>	17.0	730-1,500	7.9	5.2-10.5
25–34	2,800	10.6	2,200-3,400	22.1	17.5-26.7
35–44	1,600	14.3	1,200–2,100	13.8	10.0-17.7
45–54	1,100	17.2	740–1,500	8.6	5.7-11.5
≥55	840	20.1	510-1,200	2.6	1.6-3.6
Transmission category <sup>b</sup>					
Male-to-male sexual contact	5,700 <sup>e</sup>	7.5	4,800-6,500	_	_
Injection drug use	730 <sup>e</sup>	22.4	410–1.100	_	_
Male-to-male sexual contact and injection drug use	710	18.2	460-960	_	_
Heterosexual contact <sup>c</sup>	*410	*37.1	*110-*700	_	_
Subtotal <sup>d</sup>	7,500	6.6	6,500-8,500	8.9	7.8-10.1
Female					
Age at infection (yr)					
13–24	*200	*37.2	*50-*340	*1.5	*0.4-*2.6
25–34	520	23.0	290-760	4.2	2.3-6.1
35–44	380	26.8	180–580	3.3	1.6-5.0
45–54	*230	*34.5	*70-*380	*1.8	*0.6-*3.0
≥55	*140	*44.1	*20-*260	*0.4	*0.1-*0.7
Transmission category <sup>b</sup>					
Injection drug use	560	22.4	310-810	_	_
Heterosexual contact <sup>c</sup>	910	17.3	600–1.200	_	_
Subtotal <sup>d</sup>	1,500	13.6	1,100–1,900	1.7	1.2–2.1
Total <sup>d</sup>	9,000	5.9	7,900-10,000	5.2	4.6-5.8

Abbreviations: RSE, relative standard error; CI, confidence interval; CD4, CD4+ T-lymphocyte count (cells/ $\mu$ L) or percentage [footnotes only].

Note. Estimates derived by using HIV surveillance and CD4 data for persons aged ≥13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of >1,000 to reflect model uncertainty. Estimates with an RSE of 30%–50% are preceded by an asterisk (\*) and should be used with caution.

<sup>&</sup>lt;sup>a</sup> Rates are per 100,000 population. Rates are not calculated for transmission category because of the lack of denominator data.

<sup>&</sup>lt;sup>b</sup> Data by transmission category have been statistically adjusted to account for missing risk-factor information.

<sup>&</sup>lt;sup>C</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

d Includes persons with HIV infection attributed to hemophilia or blood transfusion, or whose risk factor was not reported or identified.

e Indicates that difference from 2014 estimate was deemed statistically significant (P < .05).

Table 5. Estimated HIV incidence among men who have sex with men, by year of infection, race/ethnicity, and age at infection, 2014–2018—United States

	No.	RSE (%)	95% CI
		2014	4
Black/African American			
Age at infection (yr)			
13–24	4,500	5.0	4,000–4,900
25–34	3,400	5.8	3,000–3,800
35–44	950	11.1	740–1,200
45–54	650	13.5	480–830
≥55	260	21.0	150–360
Subtotal	9,800	3.4	9,100–10,400
Hispanic/Latino <sup>a</sup>			
Age at infection (yr)			
13–24	2,300	7.6	2,000-2,700
25–34	2,900	6.7	2,500-3,300
35–44	1,300	10.0	1,100-1,600
45–54	700	13.8	510-890
≥55	200	26.0	100–300
Subtotal	7,500	4.3	6,900-8,100
White			
Age at infection (yr)			
13–24	1,400	8.7	1,200–1,600
25–34	2,400	6.6	2,100-2,700
35–44	1,400	8.8	1,100–1,600
45–54	1,300	9.0	1,100–1,500
≥55	640	12.7	480-800
Subtotal	7,100	3.8	6,600-7,600
All MSMb			
Age at infection (yr)			
13–24	8,800	3.7	8,100-9,400
25–34	9,400	3.6	8,700–10,000
35–44	3,900	5.5	3,500-4,300
45–54	2,800	6.4	2,500-3,200
≥55	1,200	9.9	930–1,400
Total <sup>b</sup>	26,100	2.1	25,000–27,200

Table 5. Estimated HIV incidence among men who have sex with men, by year of infection, race/ethnicity, and age at infection, 2014–2018—United States (cont)

6.2 6.4 12.1 15.2 24.2 4.0 8.8 7.5 11.2 14.5	3,600–4,600 3,300–4,200 800–1,300 460–860 140–410 9,000–10,500 1,900–2,700 2,700–3,700 1,100–1,700
6.4 12.1 15.2 24.2 4.0 8.8 7.5	3,300–4,200 800–1,300 460–860 140–410 9,000–10,500 1,900–2,700 2,700–3,700 1,100–1,700
6.4 12.1 15.2 24.2 4.0 8.8 7.5	3,300–4,200 800–1,300 460–860 140–410 9,000–10,500 1,900–2,700 2,700–3,700 1,100–1,700
6.4 12.1 15.2 24.2 4.0 8.8 7.5	3,300–4,200 800–1,300 460–860 140–410 9,000–10,500 1,900–2,700 2,700–3,700 1,100–1,700
12.1 15.2 24.2 4.0 8.8 7.5 11.2	800–1,300 460–860 140–410 9,000–10,500 1,900–2,700 2,700–3,700 1,100–1,700
15.2 24.2 4.0 8.8 7.5 11.2	460–860 140–410 9,000–10,500 1,900–2,700 2,700–3,700 1,100–1,700
24.2 4.0 8.8 7.5 11.2	140–410 9,000–10,500 1,900–2,700 2,700–3,700 1,100–1,700
4.0 8.8 7.5 11.2	9,000–10,500 1,900–2,700 2,700–3,700 1,100–1,700
8.8 7.5 11.2	1,900–2,700 2,700–3,700 1,100–1,700
7.5 11.2	2,700–3,700 1,100–1,700
7.5 11.2	2,700–3,700 1,100–1,700
7.5 11.2	2,700–3,700 1,100–1,700
11.2	1,100–1,700
14.5	
	610–1,100
28.6	100–340
4.7	7,300–8,700
10.0	1,100–1,600
7.7	2,000–2,700
10.4	1,000–1,500
11.3	840–1,300
14.4	470-840
4.5	6,100–7,200
4.4	7,500-8,900
4.0	9,100-10,700
6.2	3,500-4,500
7.5	2,400-3,200
	950–1,500
11.1	24,900–27,400
	4.0 6.2 7.5

Table 5. Estimated HIV incidence among men who have sex with men, by year of infection, race/ethnicity, and age at infection, 2014–2018—United States (cont)

	No.	RSE (%)	95% CI
		2016	6
Black/African American			
Age at infection (yr)			
13–24	3,600	7.6	3,100–4,100
25–34	4,100	7.1	3,500–4,700
35–44	1,100	13.6	820–1,400
45–54	580	19.1	360–790
≥55	310	25.9	150–470
Subtotal	9,700	4.7	8,800–10,600
Hispanic/Latino <sup>a</sup>			
Age at infection (yr)			
13–24	2,200	10.6	1,700-2,700
25–34	3,500	8.4	2,900-4,100
35–44	1,600	12.3	1,200-2,000
45–54	700	18.7	440–960
≥55	*240	*32.0	*90-*390
Subtotal	8,300	5.5	7,400–9,200
White			
Age at infection (yr)			
13–24	1,200	12.4	870–1,400
25–34	2,400	8.7	2,000-2,800
35–44	1,200	12.4	880–1,400
45–54	1,200	12.3	880–1,400
≥55	670	16.3	450-880
Subtotal	6,500	5.2	5,800-7,200
All MSM <sup>b</sup>			
Age at infection (yr)			
13–24	7,400	5.4	6,600-8,200
25–34	10,700	4.5	9,800-11,700
35–44	4,200	7.2	3,600-4,800
45–54	2,600	8.9	2,200-3,100
≥55	1,300	12.5	960–1,600
Total <sup>b</sup>	26,200	2.9	24,700–27,700

Table 5. Estimated HIV incidence among men who have sex with men, by year of infection, race/ethnicity, and age at infection, 2014–2018—United States (cont)

	No.	RSE (%)	95% CI			
		2017				
Black/African American						
Age at infection (yr)						
13–24	3,300	9.3	2,700–3,900			
25–34	4,300	8.2	3,600–5,000			
35–44	1,200	15.7	800–1,500			
45–54	590	22.2	330–850			
≥55	*300	*31.1	*120–*490			
Subtotal	9,600	5.4	8,600–10,600			
Hispanic/Latino <sup>a</sup>						
Age at infection (yr)						
13–24	2,000	13.2	1,500–2,500			
25–34	3,400	10.0	2,800-4,100			
35–44	1,600	14.8	1,100-2,000			
45–54	740	21.6	430–1,100			
≥55	*280	*35.4	*80–*470			
Subtotal	8,000	6.6	7,000–9,100			
White						
Age at infection (yr)						
13–24	1,000	15.1	710–1,300			
25–34	2,300	9.9	1,900–2,800			
35–44	1,200	14.1	850–1,500			
45–54	990	15.3	690–1,300			
≥55	680	18.5	430–920			
Subtotal	6,200	6.1	5,400–6,900			
All MSM <sup>b</sup>						
Age at infection (yr)						
13–24	6,600	6.7	5,700-7,500			
25–34	10,700	5.2	9,600–11,800			
35–44	4,200	8.4	3,500-4,900			
45–54	2,500	10.7	1,900–3,000			
≥55	1,300	14.5	920–1,700			
Total <sup>b</sup>	25,300	3.4	23,600–27,000			

Table 5. Estimated HIV incidence among men who have sex with men, by year of infection, race/ethnicity, and age at infection, 2014–2018—United States (cont)

	No.	RSE (%)	95% CI		
		2018			
Black/African American					
Age at infection (yr)					
13–24	2,900 <sup>c</sup>	11.7	2,300–3,600		
25–34	4,400 <sup>c</sup>	9.6	3,600-5,200		
35–44	1,200	18.6	750–1,600		
45–54	550	27.3	250–840		
≥55	*350	*34.7	*110–*590		
Subtotal	9,400	6.6	8,200–10,600		
Hispanic/Latino <sup>a</sup>					
Age at infection (yr)					
13–24	1,900	16.2	1,300-2,500		
25–34	3,500	11.8	2,700-4,300		
35–44	1,600	17.5	1,100-2,200		
45–54	720	26.2	350-1,100		
≥55	*340	*38.1	*80-*590		
Subtotal	8,000	7.8	6,800-9,300		
White					
Age at infection (yr)					
13–24	940 <sup>c</sup>	18.3	610–1,300		
25–34	2,000	12.4	1,500-2,500		
35–44	1,100	16.8	750–1,500		
45–54	870 <sup>c</sup>	19.1	540-1,200		
≥55	680	21.6	390–970		
Subtotal	5,700 <sup>c</sup>	7.5	4,800-6,500		
AII MSM <sup>b</sup>					
Age at infection (yr)					
13–24	6,100 <sup>c</sup>	8.3	5,100-7,100		
25–34	10,500	6.3	9,200-11,800		
35–44	4,100	10.1	3,300-4,900		
45–54	2,300	13.3	1,700-2,800		
≥55	1,400	16.5	970–1,900		
Total <sup>b</sup>	24,400	4.1	22,400-26,400		

Abbreviations: RSE, relative standard error; CI, confidence interval; MSM, men who have sex with men; CD4, CD4+ T-lymphocyte count (cells/ $\mu$ L) or percentage [footnotes only].

*Note*. Estimates derived by using HIV surveillance and CD4 data for persons aged  $\geq$ 13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of  $\leq$ 1,000 to reflect model uncertainty. Estimates with an RSE of 30%–50% are preceded by an asterisk (\*) and should be used with caution.

<sup>&</sup>lt;sup>a</sup> Hispanics/Latinos can be of any race.

b Includes data for all races/ethnicities.

 $<sup>^{\</sup>rm C}$  Indicates that difference from 2014 estimate was deemed statistically significant (P < .05).

Table 6. Estimated HIV incidence among persons aged ≥13 years, by year of infection and area of residence at diagnosis, 2014–2018—United States and Puerto Rico

Area of residence at diagnosis	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2014		
Alabama	580	14.1	420-740	14.3	10.4-18.3
Alaska					
Arizona <sup>b</sup>	790	12.6	600-990	14.2	10.7-17.8
Arkansas <sup>b</sup>	370	18.7	230-510	15.1	9.5-20.6
California	5,000	4.6	4,600-5,500	15.7	14.3-17.1
Colorado	380	16.5	260–500	8.5	5.7-11.3
Connecticut <sup>b</sup>	280	20.2	170-390	9.1	5.5-12.6
Delaware	*110	*35.2	*30-*180	*13.9	*4.3-*23.5
District of Columbia	310	17.7	210–420	54.9	35.8-74.0
Florida	4,300	5.1	3,800-4,700	25.2	22.6-27.7
Georgia	2,300	7.1	2,000–2,600	27.9	24.0–31.8
Hawaii	*90	*33.3	*30-*150	*7.6	*2.6–*12.6
Idaho <sup>b</sup>					
Illinois	1,400	9.2	1,100–1,600	12.9	10.6–15.3
Indiana	560	15.7	380–730	10.2	7.0–13.3
lowa	*120	*33.0	*40–*190	*4.5	*1.6–*7.5
Kansas <sup>b</sup>	*140	*32.2	*50–*220	*5.8	*2.1–*9.4
Kentucky <sup>b</sup>	350	19.1	220–480	9.4	5.9–12.9
Louisiana	1,100	10.4	880–1,300	28.7	22.8–34.5
Maine	*50	*49.7	*0*100	*4.3	*0.1–*8.6
Maryland	1,000	10.2	840–1,300	21.0	16.7–25.2
Massachusetts	620	13.3	460–790	10.8	8.0–13.6
Michigan	820	12.2	620–1,000	9.7	7.4–12.1
Minnesota	300	19.8	180–420	6.7	4.1–9.2
Mississippi	440	19.7	270–620	18.0	11.1–25.0
Missouri	440	15.8	310–580	8.7	6.0–11.4
Montana					
Nebraska	*60	*46.2	*10–*120	*4.2	*0.4.*9.0
Nevada <sup>b</sup>	470	16.3	320–630	20.2	*0.4-*8.0
	*50	*39.1	*10-*90	*4.2	13.7–26.7 *1.0–*7.5
New Hampshire		11.1			
New Jersey <sup>b</sup>	1,200		900–1,400	15.5	12.1–18.9
New Mexico	120	29.6	50–190	7.1	3.0–11.2
New York	2,800	6.2	2,500–3,200	17.1	15.0–19.1
North Carolina	1,100	9.7	920–1,400	13.7	11.1–16.3
North Dakota			700 4 000		
Ohio	990	11.5	760–1,200	10.1	7.9–12.4
Oklahoma	270	21.4	150–380	8.3	4.8–11.8
Oregon	230	22.1	130–340	7.0	4.0–10.0
Pennsylvania <sup>b</sup>	1,000	15.0	710–1,300	9.2	6.5–11.9
Puerto Rico <sup>b</sup>	510	15.6	350–660	16.8	11.6–22.0
Rhode Island	*70	*43.0	*10–*120	*7.5	*1.2–*13.8
South Carolina	750	13.8	540–950	18.4	13.4–23.4
South Dakota					
Tennessee	720	12.2	550-890	13.1	10.0–16.2
Texas	4,200	5.3	3,800–4,600	19.3	17.3–21.3
Utah	130	27.4	60–200	5.8	2.7–8.9
Vermont <sup>b</sup>					
Virginia	920	11.2	720–1,100	13.2	10.3-16.1
Washington	400	18.4	250-540	6.7	4.3-9.2
West Virginia	*100	*37.6	*30-*170	*6.2	*1.6-*10.8
Wisconsin	200	24.5	110–300	4.2	2.2-6.2
Wyoming					

Table 6. Estimated HIV incidence among persons aged ≥13 years, by year of infection and area of residence at diagnosis, 2014–2018—United States and Puerto Rico (cont)

Area of residence at diagnosis	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2015		
Nabama	580	16.2	400–770	14.3	9.8-18.9
Alaska					
Arizona <sup>b</sup>	720	15.6	500-950	12.8	8.9-16.7
Arkansas <sup>b</sup>	280	25.9	140-430	11.5	5.6-17.3
California	5,100	5.3	4,500-5,600	15.6	14.0-17.2
Colorado	380	19.3	240-520	8.4	5.2-11.5
Connecticut <sup>b</sup>	250	24.1	130-370	8.2	4.3-12.1
Delaware	*100	*42.9	*20-*180	*12.3	*1.9-*22.7
District of Columbia	320	19.3	200-440	54.5	33.8-75.2
Florida	4,500	5.6	4,000-5,000	25.9	23.1-28.7
Georgia	2,600	7.8	2,200-3,000	30.5	25.8-35.2
Hawaii	*110	*33.3	*40-*190	*9.6	*3.3-*15.8
daho <sup>b</sup>					
Illinois	1,400	10.2	1,100-1,700	13.3	10.6-16.0
Indiana	720	15.3	510–940	13.2	9.2–17.1
owa	*150	*32.9	*50–*250	*5.9	*2.1–*9.7
Kansas <sup>b</sup>	*180	*30.8	*70–*290	*7.7	*3.0–*12.3
Kentucky <sup>b</sup>	400	20.1	240–550	10.8	6.5–15.0
Louisiana	1,000	12.4	790–1,300	27.2	20.5–33.8
Maine					_0.0 00.0
Maryland	970	12.0	740–1,200	19.3	14.8–23.9
Massachusetts	580	15.8	400–760	9.9	6.9–13.0
Michigan	760	14.7	540–980	9.0	6.4–11.6
Minnesota	250	25.0	130–380	5.5	2.8–8.3
Mississippi	450	22.4	250–650	18.3	10.3–26.3
Missouri	410	18.9	260–560	8.0	5.0–11.0
Montana					0.0 11.0
Nebraska	*70	*48.7	*0–*140	*4.7	*0.2–*9.2
Vevada <sup>b</sup>	570	17.1	380–770	24.0	15.9–32.1
New Hampshire			000 110		10.0 02.1
New Jersey <sup>b</sup>	1,100	13.6	770–1,300	14.1	10.3–17.9
New Mexico	*120	*33.2	*40–*210	*7.2	*2.5–*11.9
New York	2,600	7.5	2,200–3,000	15.7	13.4–18.0
North Carolina	1,100	10.9	900–1,400	13.6	10.7–16.5
North Dakota	•				
Ohio	980	13.1	730–1,200	10.0	7.5–12.6
Oklahoma	300	22.6	170–430	9.3	5.2–13.4
	210	27.3	100–320	6.2	2.9–9.4
Oregon Pennsylvania <sup>b</sup>	1,100	17.7	700–1,400	9.8	6.4–13.2
Puerto Rico <sup>b</sup>	470	18.4	300–650	16.0	10.2–21.7
Rhode Island	*70	*45.6	*10–*130	*7.8	*0.8–*14.8
South Carolina South Dakota	700	16.8	470–930	16.9	11.3–22.6
	 670		400 960	12.2	00155
Tennessee	670	14.1	490–860	12.2	8.8–15.5
Texas	4,500	5.8	4,000–5,000	20.2	17.9–22.5
Jtah /ormantb	*110	*35.3	*30–*190	*4.8	*1.5–*8.1
Vermont <sup>b</sup>			700 4 000		
√irginia	950	12.5	720–1,200	13.5	10.2–16.8
Washington	420	20.2	250–580	6.9	4.2–9.7
West Virginia					
Wisconsin	230	25.4	120–350	4.8	2.4–7.2
Wyoming			•••	•••	

Table 6. Estimated HIV incidence among persons aged ≥13 years, by year of infection and area of residence at diagnosis, 2014–2018—United States and Puerto Rico (cont)

Area of residence at diagnosis	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2016		
Alabama	650	17.1	440-870	16.0	10.7-21.4
Alaska					
Arizona <sup>b</sup> _	770	17.1	510-1,000	13.4	8.9–17.8
Arkansas <sup>b</sup>	320	27.3	150-490	12.8	6.0-19.7
California	5,300	5.9	4,700-5,900	16.2	14.3-18.1
Colorado	530	18.4	340-720	11.5	7.4-15.6
Connecticut <sup>b</sup>	240	28.8	100-370	7.7	3.4-12.0
Delaware	*100	*49.3	*0*190	*11.9	*0.4-*23.5
District of Columbia	270	23.4	150-400	46.1	24.9-67.3
Florida	4,400	6.4	3,900-5,000	25.0	21.9-28.2
Georgia	2,600	8.9	2,100-3,000	30.4	25.1-35.6
Hawaii					
ldaho <sup>b</sup>					
Illinois	1,300	12.5	980-1,600	12.1	9.1-15.0
Indiana	520	22.5	290-750	9.4	5.2-13.5
lowa	*150	*40.6	*30-*270	*5.8	*1.2-*10.4
Kansas <sup>b</sup>	*180	*37.4	*50-*320	*7.6	*2.0-*13.2
Kentucky <sup>b</sup>	350	25.8	170-530	9.5	4.7-14.3
Louisiana	1,100	14.1	800-1,400	28.5	20.6-36.4
Maine					
Maryland	960	13.4	710-1,200	19.1	14.1–24.1
Massachusetts	600	17.4	400-810	10.3	6.8-13.8
Michigan	660	18.7	420-900	7.8	5.0-10.7
Minnesota	240	29.1	110-380	5.3	2.3-8.4
Mississippi	420	28.2	190–660	17.1	7.7–26.6
Missouri	420	20.8	250-590	8.3	4.9-11.7
Montana					
Nebraska	*90	*46.7	*10*180	*6.0	*0.5-*11.4
Nevada <sup>b</sup>	600	19.9	360-830	24.5	14.9-34.1
New Hampshire					
New Jersey <sup>b</sup>	1,100	15.3	760-1,400	14.5	10.1-18.9
New Mexico	*150	*34.7	*50-*250	*8.4	*2.7-*14.1
New York	2,600	8.6	2,100-3,000	15.3	12.7-17.9
North Carolina	1,200	11.8	930-1,500	14.2	10.9-17.5
North Dakota					
Ohio	870	16.0	600-1,100	8.9	6.1–11.7
Oklahoma	270	27.5	120-420	8.4	3.9-12.9
Oregon	230	29.9	90-360	6.6	2.7-10.5
Pennsylvania <sup>b</sup>	1,100	20.6	630-1,500	9.7	5.8-13.6
Puerto Rico <sup>b</sup>	480	20.0	290–670	16.3	9.9-22.7
Rhode Island					
South Carolina	770	18.3	490-1,000	18.4	11.7–25.0
South Dakota					
Tennessee	690	15.5	480–900	12.4	8.6–16.1
Texas	4,500	6.7	3,900–5,100	19.9	17.2–22.5
Utah	*140	*34.0	*50–*240	*6.0	*2.0–*10.0
Vermont <sup>b</sup>					2.0 10.0
Virginia	820	16.2	560–1,100	11.5	7.9–15.2
Washington	420	23.1	230–610	6.9	3.8–10.1
West Virginia			200-010		0.0 10.1
Wisconsin	240	28.8	110–380	5.0	2.2–7.8
Wyoming	210	20.0	1.0 000	0.0	L 1.0

Table 6. Estimated HIV incidence among persons aged ≥13 years, by year of infection and area of residence at diagnosis, 2014–2018—United States and Puerto Rico (cont)

Area of residence at diagnosis	No.	RSE (%)	95% CI	Ratea	95% CI
			2017		
Alabama	630	20.3	380-880	15.4	9.2–21.5
Alaska	•••				
Arizona <sup>b</sup>	800	19.6	490-1,100	13.6	8.4-18.9
Arkansas <sup>b</sup>	*300	*32.8	*110*500	*12.1	*4.3-*19.9
California	4,800	7.4	4,100-5,500	14.5	12.4-16.6
Colorado	470	23.7	250-690	10.1	5.4-14.7
Connecticut <sup>b</sup>	*240	*32.0	*90-*390	*7.8	*2.9-*12.7
Delaware	*140	*43.5	*20-*260	*17.3	*2.5-*32.1
District of Columbia	*210	*31.8	*80-*340	*35.4	*13.3-*57.5
Florida	4,400	7.3	3,700-5,000	24.2	20.8-27.7
Georgia	2,500	10.5	2,000–3,100	29.3	23.3-35.4
Hawaii	*110	*47.8	*10-*220	*9.4	*0.6-*18.2
ldaho <sup>b</sup>					
Illinois	1,400	14.0	990-1,700	12.7	9.2-16.2
Indiana	550	24.9	280–820	10.0	5.1–14.9
lowa					
Kansas <sup>b</sup>					
Kentucky <sup>b</sup>	350	29.4	150–550	9.3	4.0–14.7
Louisiana	1,100	16.7	730–1,400	28.1	18.9–37.4
Maine	.,				
Maryland	750	18.2	480–1,000	14.8	9.5–20.0
Massachusetts	580	20.3	350–820	9.9	6.0–13.9
Michigan	730	20.2	440–1,000	8.7	5.2–12.1
Minnesota	*230	*34.4	*70–*380	*4.9	*1.6–*8.3
Mississippi	*470	*30.8	*180–*750	*18.8	*7.4–*30.2
Missouri	540	20.1	330–760	10.6	6.4–14.8
Montana					0.4 14.0
Nebraska	*120	*47.8	*10–*230	*7.4	*0.5–*14.4
Nevada <sup>b</sup>	600	24.0	320–880	24.1	12.8–35.5
New Hampshire			020 000		12.0 00.0
New Hampshire New Jersey <sup>b</sup>	1,100	 17.7	710–1,500	14.5	9.5–19.6
New dersey	*130	*44.4	*20-*240	*7.5	*1.0–*14.0
New York	2,200	10.7	1,800–2,700	13.4	10.6–16.2
North Carolina	1,100	13.9	830–1,500	13.2	9.6–16.9
North Dakota					
Ohio	950	 17.0	640–1,300	9.7	6.5–12.9
Oklahoma	320	28.5	140–510	10.0	4.4–15.6
Oregon	*200	*37.6	*50-*360	*5.8	*1.5–*10.1
Pennsylvania <sup>b</sup>	940	24.5	490–1,400	8.6	4.5–10.1
Puerto Rico <sup>b</sup>	400	25.4	200–600	13.8	6.9–20.7
Rhode Island					0.9-20.7
Rnode Island South Carolina	700	22.7	390–1,000	16.6	9.2–24.0
					5.2-24.0
South Dakota	 670		 440–910		7.0.16.0
Tennessee	670	17.9		12.0	7.8–16.2
Texas	4,400	8.0	3,700–5,100	19.0	16.0–22.0
Utah	*120	*45.6	*10–*220	*4.8	*0.5–*9.1
Vermont <sup>b</sup>					77.400
Virginia	850	17.8	550–1,100	11.9	7.7–16.0
Washington	480	24.5	250–720	7.8	4.0–11.5
West Virginia	****				
Wisconsin	*240	*33.4	*80–*390	*4.8	*1.7–*8.0
Wyoming					

Table 6. Estimated HIV incidence among persons aged ≥13 years, by year of infection and area of residence at diagnosis, 2014–2018—United States and Puerto Rico (cont)

Area of residence at diagnosis	No.	RSE (%)	95% CI	Ratea	95% CI
			2018		
Alabama	580	24.5	300–870	14.2	7.4–21.1
Alaska					
Arizona <sup>b</sup>	850	22.4	480–1,200	14.2	8.0–20.5
Arkansas <sup>b</sup>	*250	*43.5	*40–*460	*9.9	*1.5–*18.4
California	4,600	8.9	3,800–5,300	13.8	11.4–16.2
Colorado	*380	*32.8	*140–*620	7.9	2.8–13.0
Connecticut <sup>b</sup>	*190	*43.2	*30–*350	*6.1	*0.9–*11.3
Delaware					0.0 11.0
District of Columbia	*210	*34.8	*70–*350	*34.8	*11.0–*58.7
Florida	4,300	8.5	3,600–5,000	23.5	19.6–27.4
Georgia	2,600	12.4	1,900–3,200	29.4	22.2–36.6
Hawaii	2,000				22.2 00.0
Idaho <sup>b</sup>					•••
Illinois	1,300	16.9	880–1,700	12.3	8.2–16.3
Indiana	590	28.1	260–910	10.5	4.7–16.4
lowa				10.0	7.7-10.4
Kansas <sup>b</sup>					
Kentucky <sup>b</sup>	 440	29.9	180–690	11.6	4.8–18.5
Louisiana	1,100	18.9	720–1,600	29.7	18.7–40.8
Maine			720-1,000		10.7-40.0
Maryland	 850	 18.4	540–1,200	16.8	10.7–22.8
Massachusetts	710	20.5	430–1,000	12.0	7.2–16.8
Michigan	700	24.3	360–1,000	8.2	4.3–12.2
Minnesota	*310	*34.0	*100–*520	*6.7	*2.2–*11.1
Mississippi	*430	*38.8	*100– 320	*17.3	*4.1–*30.4
Missouri	450	27.0	210–690	8.8	4.1–13.5
Montana					
Nebraska					
Nevada <sup>b</sup>		 27.1	210 1 000	 05.7	10 1 20 2
	650		310–1,000	25.7	12.1–39.3
New Hampshire				 12.7	7.4.40.0
New Jersey <sup>b</sup>	950	22.4	530–1,400		7.1–18.3
New Mexico	 0.4000		1 600 0 600		
New York	2,100 <sup>c</sup>	12.9	1,600–2,600	12.5	9.3–15.6
North Carolina	970	18.2	620–1,300	11.1	7.1–15.0
North Dakota					
Ohio	880	20.8	520–1,200	8.9	5.3–12.6
Oklahoma	*310	*37.7	*80-*540	*9.5	*2.5–*16.5
Oregon	*210	*45.3	*20-*400	*5.9	*0.7–*11.1
Pennsylvania <sup>b</sup>	890	26.7	430–1,400	8.2	3.9–12.5
Puerto Rico <sup>b</sup>	*330	*31.5	*130–*540	*11.9	*4.5–*19.2
Rhode Island					
South Carolina	700	27.0	330–1,100	16.3	7.6–24.9
South Dakota					
Tennessee	660	20.6	390–920	11.6	6.9–16.2
Texas	4,600	9.2	3,800–5,400	19.7	16.1–23.2
Utah		•••			
Vermont <sup>b</sup>					
Virginia	800	21.4	460–1,100	11.1	6.4–15.7
Washington	540	27.1	250-830	8.6	4.0–13.1
West Virginia					
Wisconsin	*190	*45.4	*20-*360	*3.9	*0.4–*7.3
Wyoming					

Abbreviations: RSE, relative standard error; CI, confidence interval; CD4, CD4+ T-lymphocyte count (cells/µL) or percentage [footnotes only]. *Note*. Estimates derived by using HIV surveillance and CD4 data for persons aged ≥ 13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤1,000 to reflect model uncertainty. Estimates with an RSE of 30%–50% are preceded by an asterisk (\*) and should be used with caution. Estimates with an RSE of >50% are not shown and are replaced by an ellipsis (...).

<sup>&</sup>lt;sup>a</sup> Rates are per 100,000 population.

b Estimates should be interpreted with caution because the jurisdiction does not have laws requiring complete reporting of laboratory data or has incomplete reporting. Areas without laws: Idaho, New Jersey, and Pennsylvania. Areas with incomplete reporting: Arizona, Arkansas, Connecticut (2018 only), Kansas, Kentucky, Nevada (2017 only), Vermont, and Puerto Rico.

<sup>&</sup>lt;sup>C</sup> Indicates that difference from 2014 estimate was deemed statistically significant (P < .05).

Table 7. Estimated HIV prevalence and undiagnosed infection among persons aged ≥13 years, by selected characteristics, 2018—United States

	Per	sons living w	ith diagnosed or undiagr	nosed HIV ir	nfection		Per	sons living with undiag	nosed HIV in	fection	
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No.	RSE (%)	95% CI	%	RSE (%)	95% CI
Sex at birth											
Male	912,100	1.1	892,000-932,100	679.3	664.4-694.2	134,200	7.6	114,200-154,300	14.7	6.5	12.8-16.6
Female	261,800	1.8	252,400-271,100	186.5	179.9-193.2	27,600	17.3	18,200–37,000	10.5	15.5	7.2-13.6
Age at infection (yr)											
13–24	47,800	1.9	46,000-49,600	93.1	89.6-96.6	21,500	4.3	19,700-23,300	44.9	2.4	42.8-46.9
25–34	216,600	0.7	213,600-219,700	474.1	467.4-480.7	63,400	2.4	60,400-66,400	29.3	1.7	28.3-30.2
35–44	225,200	0.5	222,800-227,500	545.5	539.7-551.2	35,000	3.5	32,700-37,400	15.6	2.9	14.7-16.4
45–54	305,300	0.4	303,000-307,600	733.3	727.8-738.8	23,200	5.0	20,900-25,500	7.6	4.7	6.9-8.3
≥55	379,000	0.4	376,000-382,000	400.2	397.1-403.4	18,700	8.1	15,800-21,700	4.9	7.7	4.2-5.7
Race/ethnicity											
American Indian/Alaska Native	3,900	18.3	2,500-5,300	196.0	125.5-266.5			•••			
Asian <sup>b</sup>	17,600	7.8	14,900–20,300	109.2	92.4-126.0			•••	*15.0	*45.6	*0.0-*26.3
Black/African American	482,900	1.5	468,700–497,200	1434.3	1,392.0-1,476.7	67,800	10.7	53,500-82,000	14.0	9.2	11.4–16.5
Hispanic/Latino <sup>c</sup>	274,100	2.1	263,000–285,200	593.0	569.0-617.1	45,700	12.4	34,600–56,800	16.7	10.3	13.2-19.9
Native Hawaiian/Other	•					,		, ,			
Pacific Islander	*1,100	*33.6	*360-*1,800	*220.7	*75.1-*366.2						
White	340,700	1.7	329,200-352,100	198.7	192.0-205.4	38,300	15.2	26,900-49,800	11.3	13.5	8.2-14.1
Multiple races	52,900	4.0	48,700–57,100	1125.5	1,036.9-1,214.0	*6,400	*33.2	*2,200-*10,600	12.1	29.3	4.6–18.5
Transmission category <sup>d</sup>											
Male-to-male sexual contact	679,800	1.3	662,700-696,900	_	_	107,900	8.1	90,700-125,000	15.9	6.8	13.7-17.9
Injection drug use	125,900	2.8	118.900-132.800	_	_	*8,200	*43.3	*1,200-*15,100	*6.5	*40.6	*1.0-*11.4
Male	73,900	3.9	68,300-79,500	_	_						
Female	52,000	4.0	47,900-56,100	_	_						
Male-to-male sexual contact and	•		, ,								
injection drug use	60,600	3.7	56,100-65,000	_	_	*4,800	*47.2	*360-*9,300	*7.9	*43.7	*0.6-*14.2
Heterosexual contacte	304,200	1.8	293,400-315,000	_	_	40,800	13.5	30,000-51,600	13.4	11.7	10.2-16.4
Male	95,800	3.7	88,800-102,700	_	_	16,400	21.6	9,400-23,300	17.1	18.0	10.6-22.7
Female	208,400	2.0	200,100-216,700	_	_	24,400	17.3	16,200–32,700	11.7	15.3	8.1–15.1
Region of residence											
Northeast	255,600	2.0	245,700-265,500	533.9	513.3-554.5	24,300	20.7	14,500-34,200	9.5	18.7	5.9-12.9
Midwest	143,200	2.7	135,500-150,900	250.0	236.5-263.4	22,100	17.8	14,400–29,800	15.4	15.1	10.6-19.7
South	539,600	1.4	524,300-554,900	517.4	502.7-532.1	81,600	9.6	66,300–96,900	15.1	8.1	12.7-17.5
West	235,400	2.1	225,600-245,300	361.3	346.2-376.5	33,800	14.9	23,900-43,600	14.4	12.8	10.6–17.8
Total <sup>f</sup>	1.173.900	1.0	1.151.700-1.196.000	427.5	419.4–435.5	161.800	7.0	139.700-184.000	13.8	6.0	12.1–15.4

Note. Estimates for the year 2018 data are preliminary and based on deaths reported to CDC through December 2019. Estimates derived by using HIV surveillance and CD4 data for persons aged ≥13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤1,000 to reflect model uncertainty. Estimates with an RSE of 30%–50% are preceded by an asterisk (\*) and should be used with caution. Estimates with an RSE of >50% are not shown and are replaced by an ellipsis (...).

Rates are per 100,000 population. Rates are not calculated for transmission category because of the lack of denominator data.

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

<sup>&</sup>lt;sup>C</sup> Hispanics/Latinos can be of any race.

d Data by transmission category have been statistically adjusted to account for missing risk-factor information.

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

f Includes persons with HIV infection attributed to hemophilia or blood transfusion, or whose risk factor was not reported or identified.

Table 8. Estimated HIV prevalence among persons aged ≥13 years, by year and selected characteristics, 2014–2018—United States

	Per	sons living wi	th diagnosed or undiagn	osed HIV in	fection	Persor	s living with c	diagnosed HIV in	fection
	No.	RSE (%)	95% CI	Ratea	95% CI	No.b	%	RSE (%)	95% CI
					2014				
Sex at birth									
Male	835,500	0.8	822,600-848,300	643.6	633.7-653.5	696,935	83.4	0.8	82.2-84.7
Female	249,600	1.3	243,200-256,000	183.6	178.9–188.3	218,592	87.6	1.3	85.4-89.9
Age at infection (yr)									
13–24	73,400	0.9	72,100-74,700	140.2	137.7-142.7	30,086	41.0	0.9	40.3-41.7
25–34	185,200	0.5	183,500-187,000	426.2	422.2-430.2	132,128	71.3	0.5	70.7-72.0
35–44	224,400	0.4	222,800-226,000	555.1	551.1-559.1	192,271	85.7	0.4	85.1-86.3
45–54	337,300	0.3	335,300-339,300	778.0	773.4-782.7	310,814	92.1	0.3	91.6-92.7
≥55	264,800	0.5	262,400-267,100	307.3	304.5-310.0	250,228	94.5	0.5	93.7-95.4
Race/ethnicity									
American Indian/Alaska Native	3,300	12.9	2,400-4,100	172.0	128.3-215.7	2,496	76.4	13.9	60.9-100
Asian <sup>c</sup>	15,100	5.5	13,400-16,700	106.3	94.8-117.7	11,239	74.6	5.6	67.4-83.6
Black/African American	447,200	1.1	437,900-456,600	1,385.2	1,356.3-1,414.1	374,753	83.8	1.1	82.1-85.6
Hispanic/Latino <sup>d</sup>	242,500	1.4	235,800-249,200	578.3	562.3-594.3	197,227	81.3	1.4	79.1-83.6
Native Hawaiian/Other Pacific Islander	890	23.3	490-1,300	203.4	110.5-296.3	689	77.0	29.4	52.9-100
White	323,100	1.2	315,200-330,900	189.0	184.4-193.6	282,697	87.5	1.2	85.4-89.7
Multiple races	52,300	2.7	49,500-55,000	1,274.4	1,207.2-1,341.7	45,672	87.4	2.7	83.0-92.2
Transmission category <sup>e</sup>									
Male-to-male sexual contact	603,700	0.9	593,000-614,400	_	_	494,027	81.8	0.9	80.4-83.3
Injection drug use	130,800	2.0	125,700-136,000	_	_	121,909	93.2	2.0	89.6-97.0
Male	77,400	2.7	73,300-81,600	_	_	72,006	93.0	2.8	88.2-98.3
Female	53,400	2.9	50,400-56,500	_	_	49,903	93.4	2.9	88.4-99.1
Male-to-male sexual contact and injection drug use	60,700	2.7	57,600-63,900	_	_	55,544	91.5	2.7	86.9-96.5
Heterosexual contact <sup>f</sup>	286,200	1.3	279,100-293,300	_	_	240,687	84.1	1.3	82.1-86.2
Male	91,400	2.5	86,900-95,900	_	_	73,276	80.2	2.5	76.4-84.3
Female	194,800	1.4	189,300-200,300	_	_	167,411	85.9	1.4	83.6-88.4
Region of residence									
Northeast	246,800	1.4	240,000-253,600	518.7	504.4-533.0	220,731	89.4	1.4	87.0-92.0
Midwest	130,900	1.9	126,000-135,900	231.6	222.8-240.3	108,694	83.0	1.9	80.0-86.3
South	492,900	1.0	483,200-502,700	495.4	485.6-505.2	408,270	82.8	1.0	81.2-84.5
West	214,400	1.5	208,100–220,700	345.2	335.1-355.3	177,832	82.9	1.5	80.6-85.4
Total <sup>g</sup>	1,085,100	0.7	1,070,700-1,099,400	408.3	402.9-413.7		84.4	0.7	83.3-85.5

Table 8. Estimated HIV prevalence among persons aged ≥13 years, by year and selected characteristics, 2014–2018—United States (cont)

	Per	sons living wi	th diagnosed or undiagn	osed HIV in	fection	Persor	ns living with o	liagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No. <sup>b</sup>	%	RSE (%)	95% CI
					2015				
Sex									
Male	855,600	0.9	841,300–869,900	653.3	642.4-664.2	717,946	83.9	0.9	82.5-85.3
Female	252,800	1.4	245,700-259,800	184.4	179.3–189.6	222,442	88.0	1.4	85.6-90.5
Age at infection (yr)									
13–24	67,700	1.1	66,300-69,100	130.2	127.5-132.9	29,365	43.4	1.1	42.5-44.3
25–34	193,500	0.5	191,600-195,500	439.3	434.8-443.8	137,538	71.1	0.5	70.3-71.8
35–44	220,400	0.4	218,600-222,100	544.6	540.3-548.8	188,130	85.4	0.4	84.7-86.1
45–54	335,200	0.3	333,200-337,300	778.9	774.1-783.7	309,293	92.3	0.3	91.7-92.8
≥55	291,500	0.4	289,000-294,000	329.7	326.9-332.5	276,062	94.7	0.4	93.9-95.5
Race/ethnicity									
American Indian/Alaska Native	3,400	14.1	2,500-4,300	177.3	128.3-226.3	2,613	76.8	15.3	60.2-100
Asian <sup>c</sup>	15,800	6.0	13,900–17,600	107.5	94.9-120.0	12,156	77.1	6.0	69.1-87.3
Black/African American	456,500	1.2	446,100-466,800	1,397.9	1,366.3-1,429.6	385,148	84.4	1.2	82.5-86.3
Hispanic/Latino <sup>d</sup>	250,500	1.5	242,900-258,100	582.8	565.2-600.4	204,840	81.8	1.5	79.4-84.3
Native Hawaiian/Other Pacific Islander	940	25.3	470–1,400	208.7	105.3-312.1	751	*80.0	*33.5	*53.5-*100
White	327,900	1.3	319,300-336,500	191.7	186.6-196.7	287,978	87.8	1.3	85.6-90.2
Multiple races	52,700	3.0	49,600–55,700	1,240.5	1,168.4–1,312.6	46,154	87.7	3.0	82.8-93.1
Transmission category <sup>e</sup>									
Male-to-male sexual contact	623,600	1.0	611,700–635,600	_	_	514,232	82.5	1.0	80.9-84.1
Injection drug use	129,500	2.2	124,000-135,100	_	_	120,668	93.2	2.2	89.3-97.3
Male	76,500	3.0	72,000-80,900	_	_	71,061	92.9	3.0	87.8–98.7
Female	53,100	3.1	49,800-56,300	_	_	49,607	93.5	3.2	88.0-99.6
Male-to-male sexual contact and injection drug use	60,700	2.9	57,300-64,200	_	_	55,615	91.6	2.9	86.7–97.1
Heterosexual contact <sup>†</sup>	291,000	1.4	283,100–298,900	_	_	246,549	84.7	1.4	82.5–87.1
Male	92,700	2.8	87,700–97,700	_	_	74,996	80.9	2.8	76.8–85.6
Female	198,300	1.6	192,200–204,400	_	_	171,553	86.5	1.6	83.9–89.3
Region of residence									
Northeast	249,500	1.5	242,000-256,900	523.5	507.9-539.1	222,850	89.3	1.5	86.7-92.1
Midwest	134,400	2.1	128,800-139,900	237.0	227.2-246.7	111,320	82.9	2.1	79.6-86.4
South	504,800	1.1	493,900-515,600	501.0	490.3-511.8	421,996	83.6	1.1	81.8-85.4
West	219,800	1.6	212,800-226,800	349.4	338.3-360.5	184,222	83.8	1.6	81.2-86.6

Table 8. Estimated HIV prevalence among persons aged ≥13 years, by year and selected characteristics, 2014–2018—United States (cont)

Sex         Male       875,400         Female       255,700         Age at infection (yr)       13–24       61,400         25–34       202,300         35–44       219,500         45–54       328,900         ≥55       319,000         Race/ethnicity       3,600         Asian <sup>c</sup> 16,400         Black/African American       465,500         Hispanic/Latino <sup>d</sup> 258,600         Native Hawaiian/Other Pacific Islander       970         White       332,400         Multiple races       53,000	0.9 1.5	95% CI 859.400–891.400	Rate <sup>a</sup>	95% CI 2016	No. <sup>b</sup>	%	RSE (%)	95% CI
Male       875,400         Female       255,700         Age at infection (yr)       55,700         13–24       61,400         25–34       202,300         35–44       219,500         45–54       328,900         ≥55       319,000         Race/ethnicity       3,600         Asian <sup>c</sup> 16,400         Black/African American       465,500         Hispanic/Latino <sup>d</sup> 258,600         Native Hawaiian/Other Pacific Islander       970         White       332,400		859.400–891.400		2016			. ,	00 /0 OI
Male       875,400         Female       255,700         Age at infection (yr)       55,700         13–24       61,400         25–34       202,300         35–44       219,500         45–54       328,900         ≥55       319,000         Race/ethnicity         American Indian/Alaska Native       3,600         Asian <sup>c</sup> 16,400         Black/African American       465,500         Hispanic/Latino <sup>d</sup> 258,600         Native Hawaiian/Other Pacific Islander       970         White       332,400		859.400–891.400		2010				
Female       255,700         Age at infection (yr)       13–24       61,400         25–34       202,300       35–44       219,500         45–54       328,900       ≥55       319,000         Race/ethnicity       3,600       Asian <sup>c</sup> 16,400         Black/African American       465,500       Hispanic/Latino <sup>d</sup> 258,600         Native Hawaiian/Other Pacific Islander       970         White       332,400		859.400-891.400						
Age at infection (yr)         13–24       61,400         25–34       202,300         35–44       219,500         45–54       328,900         ≥55       319,000         Race/ethnicity         American Indian/Alaska Native       3,600         Asian <sup>c</sup> 16,400         Black/African American       465,500         Hispanic/Latino <sup>d</sup> 258,600         Native Hawaiian/Other Pacific Islander       970         White       332,400	1.5	000,.00 00.,100	662.5	650.4-674.6	738,475	84.4	0.9	82.8-85.9
13–24 61,400 25–34 202,300 35–44 219,500 45–54 328,900 ≥55 319,000  Race/ethnicity  American Indian/Alaska Native 3,600 Asian <sup>c</sup> 16,400 Black/African American 465,500 Hispanic/Latino <sup>d</sup> 258,600 Native Hawaiian/Other Pacific Islander 970 White 332,400		248,000–263,500	185.1	179.5–190.7	226,405	88.5	1.5	85.9–91.3
25–34 202,300 35–44 219,500 45–54 328,900 ≥55 319,000  Race/ethnicity  American Indian/Alaska Native 3,600 Asian <sup>c</sup> 16,400 Black/African American 465,500 Hispanic/Latino <sup>d</sup> 258,600 Native Hawaiian/Other Pacific Islander 970 White 332,400								
35–44 219,500 45–54 328,900 ≥55 319,000  Race/ethnicity  American Indian/Alaska Native 3,600 Asian <sup>c</sup> 16,400 Black/African American 465,500 Hispanic/Latino <sup>d</sup> 258,600 Native Hawaiian/Other Pacific Islander 970 White 332,400	1.3	59,900-62,900	118.7	115.8-121.7	28,531	46.5	1.3	45.4-47.7
45–54 328,900 ≥55 319,000  Race/ethnicity  American Indian/Alaska Native 3,600 Asian <sup>c</sup> 16,400  Black/African American 465,500  Hispanic/Latino <sup>d</sup> 258,600  Native Hawaiian/Other Pacific Islander 970  White 332,400	0.6	200,100-204,600	452.2	447.1-457.3	143,370	70.9	0.6	70.1–71.7
≥55 319,000  Race/ethnicity  American Indian/Alaska Native 3,600  Asian <sup>c</sup> 16,400  Black/African American 465,500  Hispanic/Latino <sup>d</sup> 258,600  Native Hawaiian/Other Pacific Islander 970  White 332,400	0.4	217,700-221,400	542.3	537.6-547.0	186,828	85.1	0.4	84.4-85.8
Race/ethnicity         3,600           American Indian/Alaska Native         3,600           Asian <sup>c</sup> 16,400           Black/African American         465,500           Hispanic/Latino <sup>d</sup> 258,600           Native Hawaiian/Other Pacific Islander         970           White         332,400	0.3	326,800-331,000	769.6	764.6-774.5	303,532	92.3	0.3	91.7-92.9
American Indian/Alaska Native       3,600         Asian <sup>c</sup> 16,400         Black/African American       465,500         Hispanic/Latino <sup>d</sup> 258,600         Native Hawaiian/Other Pacific Islander       970         White       332,400	0.4	316,300-321,600	351.9	349.0-354.9	302,619	94.9	0.4	94.1-95.7
American Indian/Alaska Native       3,600         Asian <sup>c</sup> 16,400         Black/African American       465,500         Hispanic/Latino <sup>d</sup> 258,600         Native Hawaiian/Other Pacific Islander       970         White       332,400								
Black/African American 465,500 Hispanic/Latino <sup>d</sup> 258,600 Native Hawaiian/Other Pacific Islander 970 White 332,400	15.3	2,500-4,600	183.3	128.3-238.3	2,789	78.5	16.8	60.4-100
Hispanic/Latino <sup>d</sup> 258,600 Native Hawaiian/Other Pacific Islander 970 White 332,400	6.5	14,300-18,500	108.4	94.5-122.2	13,075	79.6	6.6	70.6-91.2
Native Hawaiian/Other Pacific Islander 970 White 332,400	1.3	454,000-477,000	1,410.4	1,375.6-1,445.2	395,440	84.9	1.3	82.9-87.1
White 332,400	1.7	250,000-267,200	587.0	567.5-606.4	212,763	82.3	1.7	79.6-85.1
	27.6	450-1,500	211.5	97.2-325.9	777	*79.8	*39.0	*51.8-*100
Multiple races 53,000	1.4	322,900-341,800	194.0	188.5-199.5	292,788	88.1	1.5	85.7-90.7
	3.3	49,600–56,400	1,205.9	1,128.5–1,283.4	46,504	87.8	3.3	82.5–93.8
Transmission category <sup>e</sup>								
Male-to-male sexual contact 643,200	1.1	629,800-656,600	_	_	533,998	83.0	1.1	81.3-84.8
Injection drug use 128,100	2.4	122,100-134,000	_	_	119,366	93.2	2.4	89.1–97.7
Male 75,400	3.2	70,700-80,200	_	_	70,086	92.9	3.2	87.4–99.2
Female 52,600	3.4	49,100–56,100	_	_	49,281	93.6	3.4	87.8–100
Male-to-male sexual contact and injection drug use 60,700	3.1	57,000-64,500	_	_	55,702	91.7	3.1	86.4–97.7
Heterosexual contact <sup>†</sup> 295,700	1.5	286,900–304,400	_	_	252,519	85.4	1.5	82.9-88.0
Male 93,900	3.0	88,300–99,500	_	_	76,683	81.6	3.1	77.1–86.8
Female 201,700	1.7	195,000–208,500	_	_	175,836	87.2	1.7	84.3–90.2
Region of residence								
Northeast 251,900	1.7	243,800-260,100	528.0	510.9-545.1	226,945	90.1	1.7	87.3-93.1
Midwest 137,300	2.3	131,100-143,400	241.4	230.6-252.2	114,941	83.7	2.3	80.1-87.6
South 516,400	1.2	504,300-528,500	506.3	494.4-518.2	432,414	83.7	1.2	81.8-85.8
West 225,500	1.8	217,700–233,400	354.0	341.7–366.3	190,580	84.5	1.8	81.7–87.5
Total <sup>g</sup> 1,131,100	0.8	1,113,400-1,148,900	418.5	411.9-425.0	964,880	85.3	0.8	84.0-86.7

Table 8. Estimated HIV prevalence among persons aged ≥13 years, by year and selected characteristics, 2014–2018—United States (cont)

	Per	sons living wi	th diagnosed or undiagn	osed HIV in	fection	Persons living with diagnosed HIV infection				
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No. <sup>b</sup>	%	RSE (%)	95% CI	
					2017					
Sex										
Male	893,800	1.0	875,900–911,600	671.0	657.6-684.4	758,229	84.8	1.0	83.2-86.6	
Female	258,700	1.7	250,200-267,100	185.7	179.7–191.8	230,317	89.0	1.7	86.2-92.1	
Age at infection (yr)										
13–24	54,400	1.5	52,800-56,100	105.8	102.5-109.0	27,464	50.5	1.5	49.0-52.1	
25–34	210,000	0.6	207,300-212,600	463.7	458.0-469.5	148,461	70.7	0.6	69.8-71.6	
35–44	221,400	0.5	219,300-223,500	542.9	537.8-548.1	187,660	84.8	0.5	84.0-85.6	
45–54	318,200	0.4	316,000-320,400	752.9	747.7-758.1	293,939	92.4	0.4	91.7-93.0	
≥55	348,500	0.4	345,700-351,300	375.9	372.9-379.0	331,022	95.0	0.4	94.2-95.8	
Race/ethnicity										
American Indian/Alaska Native	3.700	16.7	2,500-4,900	189.6	127.5-251.6	2,958	79.7	18.7	60.0-100	
Asian <sup>c</sup>	17,000	7.1	14,600–19,400	108.7	93.6-123.9	14,030	82.6	7.3	72.5-96.0	
Black/African American	474,100	1.4	461,300-486,800	1,421.9	1,383.6-1,460.2	405,295	85.5	1.4	83.3-87.9	
Hispanic/Latino <sup>d</sup>	266,300	1.9	256,600–276,100	590.4	568.8–612.0	220,585	82.8	1.9	79.9-86.0	
Native Hawaiian/Other Pacific Islander	*1,000	*30.2	*410-*1,600	*215.9	*87.8-*343.9	819	*80.7	*46.7	*50.6-*100	
White	336,600	1.6	326,200-346,900	196.3	190.3-202.4	297,526	88.4	1.6	85.8-91.2	
Multiple races	53,000	3.6	49,300–56,800	1,167.0	1,084.0-1,250.0	46,591	87.8	3.6	82.0-94.6	
Transmission category <sup>e</sup>										
Male-to-male sexual contact	661,800	1.2	646,600–676,900	_	_	553,173	83.6	1.2	81.7-85.5	
Injection drug use	126,800	2.6	120,400-133,200	_	_	118,416	93.4	2.6	88.9-98.3	
Male	74,600	3.5	69,400-79,700	_	_	69,360	93.0	3.5	87.0-99.9	
Female	52,300	3.7	48,500-56,000	_	_	49,056	93.9	3.7	87.5-100	
Male-to-male sexual contact and injection drug use	60,600	3.4	56,500-64,600	_	_	55,760	92.0	3.4	86.2-98.6	
Heterosexual contact <sup>†</sup>	299,800	1.7	290,100-309,500	_	_	257,923	86.0	1.7	83.3-88.9	
Male	94,800	3.4	88,500-101,000	_	_	77,963	82.3	3.4	77.2-88.1	
Female	205,000	1.9	197,600–212,500	_	_	179,961	87.8	1.9	84.7-91.1	
Region of residence										
Northeast	253,800	1.8	244,800-262,800	531.1	512.4-549.9	228,985	90.2	1.8	87.1-93.5	
Midwest	140,400	2.5	133,500-147,300	246.0	234.0-258.0	118,040	84.1	2.5	80.1-88.4	
South	527,700	1.3	514,100-541,300	511.5	498.4-524.7	445,343	84.4	1.3	82.3-86.6	
West	230,600	1.9	221,800-239,300	357.8	344.2-371.4	196,178	85.1	1.9	82.0-88.4	

Table 8. Estimated HIV prevalence among persons aged ≥13 years, by year and selected characteristics, 2014–2018—United States (cont)

	Per	sons living w	ith diagnosed or undiagr	osed HIV in	fection	Persor	ns living with o	liagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No.b	%	RSE (%)	95% CI
					2018				
Sex									
Male	912,100	1.1	892,000–932,100	679.3	664.4-694.2	777,859	85.3	1.1	83.4–87.2
Female	261,800	1.8	252,400–271,100	186.5	179.9–193.2	234,181	89.5	1.8	86.4–92.8
Age at infection (yr)									
13–24	47,800	1.9	46,000-49,600	93.1	89.6-96.6	26,296	55.1 <sup>h</sup>	1.9	53.1-57.2
25–34	216,600	0.7	213,600-219,700	474.1	467.4-480.7	153,228	70.7	0.7	69.8-71.7
35–44	225,200	0.5	222,800-227,500	545.5	539.7-551.2	190,122	84.4 <sup>h</sup>	0.5	83.6-85.3
45–54	305,300	0.4	303,000-307,600	733.3	727.8-738.8	282,123	92.4	0.4	91.7-93.1
≥55	379,000	0.4	376,000-382,000	400.2	397.1-403.4	360,271	95.1	0.4	94.3-95.8
Race/ethnicity									
American Indian/Alaska Native	3,900	18.3	2,500-5,300	196.0	125.5-266.5	3,104	80.1	21.1	58.9-100
Asian <sup>c</sup>	17,600	7.8	14,900–20,300	109.2	92.4-126.0	14,922	85.0	8.0	73.7-100
Black/African American	482,900	1.5	468,700–497,200	1,434.3	1,392.0-1,476.7	415,175	86.0	1.5	83.5-88.6
Hispanic/Latino <sup>d</sup>	274,100	2.1	263,000-285,200	593.0	569.0-617.1	228,379	83.3	2.1	80.1-86.8
Native Hawaiian/Other Pacific Islander	*1,100	*33.6	*360-*1,800	*220.7	*75.1-*366.2	875			
White	340,700	1.7	329,200-352,100	198.7	192.0-205.4	302,340	88.7	1.7	85.9-91.8
Multiple races	52,900	4.0	48,700–57,100	1,125.5	1,036.9–1,214.0	46,503	87.9	4.0	81.5–95.4
Transmission category <sup>e</sup>									
Male-to-male sexual contact	679,800	1.3	662,700-696,900	_	_	571,934	84.1	1.3	82.1-86.3
Injection drug use	125,900	2.8	118,900-132,800	_	_	117,710	93.5	2.8	88.6-99.0
Male	73,900	3.9	68,300-79,500	_	_	68,794	93.1	3.9	86.6-100
Female	52,000	4.0	47,900-56,100	_	_	48,916	94.1	4.1	87.2-100
Male-to-male sexual contact and injection drug use	60,600	3.7	56,100-65,000	_	_	55,781	92.1	3.8	85.8-99.4
Heterosexual contact <sup>f</sup>	304,200	1.8	293,400-315,000	_	_	263,355	86.6	1.8	83.6-89.8
Male	95,800	3.7	88,800-102,700	_	_	79,401	82.9	3.7	77.3-89.4
Female	208,400	2.0	200,100–216,700	_	_	183,955	88.3	2.0	84.9–91.9
Region of residence									
Northeast	255,600	2.0	245,700-265,500	533.9	513.3-554.5	231,282	90.5	2.0	87.1-94.1
Midwest	143,200	2.7	135,500-150,900	250.0	236.5-263.4	121,147	84.6	2.7	80.3-89.4
South	539,600	1.4	524,300-554,900	517.4	502.7-532.1	457,974	84.9	1.4	82.5-87.3
West	235,400	2.1	225,600-245,300	361.3	346.2–376.5	201,637	85.6	2.1	82.2-89.4
Total <sup>g</sup>	1,173,900	1.0	1,151,700-1,196,000	427.5	419.4-435.5	1,012,040	86.2	1.0	84.6-87.9

Note. Estimates for the year 2018 data are preliminary and based on deaths reported to CDC through December 2019. Estimates derived by using HIV surveillance and CD4 data for persons aged ≥ 13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of >1,000 and to the nearest 10 for estimates with an RSE of 30%–50% are preceded by an asterisk (\*) and should be used with caution. Estimates with an RSE of >50% are not shown and are replaced by an ellipsis (...).

a Rates are per 100,000 population. Rates are not calculated for transmission category because of the lack of denominator data.

b Reported to the National HIV Surveillance System.

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

d Hispanics/Latinos can be of any race.

e Data by transmission category have been statistically adjusted to account for missing risk-factor information.

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

g Includes persons with HIV infection attributed to hemophilia or blood transfusion, or whose risk factor was not reported or identified.

h Indicates that difference from 2014 estimate was deemed statistically significant (P < .05).

Table 9. Estimated HIV prevalence among blacks/African Americans aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States

,	<u> </u>						<u> </u>					
	Pers	ons living wit	h diagnosed or undia	gnosed HIV	infection	Person	ns living with o	diagnosed HIV in	fection			
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No.b	%	RSE (%)	95% CI			
					2014							
Male												
Age at infection (yr)												
13–24	34,200	1.3	33,300-35,000	883.8	861.3-906.4	14,291	41.8	1.3	40.8-42.9			
25–34	62,400	0.8	61,400-63,400	2,244.5	2,209.0-2,279.9	45,775	73.3	0.8	72.2-74.5			
35–44	52,600	0.8	51,800-53,400	2,178.1	2,145.5-2,210.6	45,199	85.9	0.8	84.7-87.2			
45–54	80,900	0.6	79,900-81,900	3,237.0	3,195.9-3,278.1	74,641	92.3	0.6	91.1-93.5			
≥55	69,700	0.9	68,400-71,000	1,911.4	1,876.1–1,946.7	65,888	94.5	0.9	92.8-96.3			
Transmission category <sup>c</sup>												
Male-to-male sexual contact	188,300	1.6	182,300-194,200	_	_	147,836	78.5	1.6	76.1-81.1			
Injection drug use	37,100	4.1	34,100-40,100	_	_	35,241	95.0	4.1	88.0-100			
Male-to-male sexual contact and injection drug use	17,300	5.2	15,500-19,000	_	_	16,107	93.3	5.2	84.7-100			
Heterosexual contact <sup>d</sup>	56,700	3.1	53,200-60,200	_	_	46,126	81.4	3.2	76.7-86.8			
Subtotal <sup>e</sup>	299,800	1.3	291,900–307,700	1,971.2	1,919.4–2,023.0	245,794	82.0	1.3	79.9–84.2			
Female												
Age at infection (yr)												
13–24	6,000	3.1	5,600-6,300	159.0	149.4-168.6	3,129	52.4	3.1	49.4-55.7			
25–34	22,400	1.3	21,800-22,900	759.3	740.6-778.1	17,431	77.9	1.3	76.0-79.9			
35–44	38,000	0.9	37,400-38,600	1,403.2	1,379.8-1,426.6	33,578	88.4	0.9	86.9-89.9			
45–54	45,700	8.0	45,000-46,500	1,621.4	1,595.2-1,647.6	42,076	92.0	8.0	90.5-93.5			
≥55	35,300	1.1	34,600-36,100	729.5	713.2–745.9	32,745	92.6	1.1	90.6-94.8			
Transmission category <sup>c</sup>												
Injection drug use	26,100	4.3	23,900-28,300	_	_	24,750	95.0	4.4	87.5-100			
Heterosexual contact <sup>d</sup>	120,700	1.8	116,300–125,100	_	_	103,654	85.9	1.9	82.9-89.1			
Subtotal <sup>e</sup>	147,400	1.7	142,400–152,400	863.2	834.0-892.4	128,959	87.5	1.7	84.6-90.5			
Total <sup>e</sup>	447,200	1.1	437,900-456,600	1,385.2	1,356.3-1,414.1	374,753	83.8	1.1	82.1-85.6			

Table 9. Estimated HIV prevalence among blacks/African Americans aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	Pers	ons living with	n diagnosed or undia	gnosed HIV	infection	Persor	ns living with o	liagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No. <sup>b</sup>	%	RSE (%)	95% CI
					2015				
Male									
Age at infection (yr)									
13–24	31,500	1.5	30,600-32,500	825.9	801.3-850.5	13,951	44.2	1.5	43.0-45.6
25–34	68,000	0.9	66,800-69,100	2,369.4	2,329.7-2,409.2	49,713	73.1	0.9	71.9-74.4
35–44	52,400	8.0	51,600-53,300	2,155.5	2,120.7-2,190.3	44,919	85.7	0.8	84.3-87.1
45–54	79,400	0.7	78,400-80,400	3,197.1	3,155.1-3,239.1	73,413	92.5	0.7	91.3-93.7
≥55	76,000	0.9	74,700–77,400	2,005.2	1,969.5-2,041.0	71,956	94.6	0.9	93.0-96.4
Transmission category <sup>c</sup>									
Male-to-male sexual contact	196,000	1.8	189,300-202,800	_	_	155,804	79.5	1.8	76.8-82.3
Injection drug use	36,300	4.4	33,100-39,400	_	_	34,506	95.1	4.4	87.6-100
Male-to-male sexual contact and injection drug use	17,100	5.6	15,200-19,000	_	_	15,971	93.4	5.7	84.1-100
Heterosexual contact <sup>d</sup>	57,400	3.5	53,500-61,300	_	_	47,193	82.2	3.5	77.0-88.2
Subtotal <sup>e</sup>	307,400	1.5	298,600-316,100	1,996.6	1,939.7–2,053.6	253,952	82.6	1.5	80.3-85.1
Female									
Age at infection (yr)									
13–24	5,400	3.6	5,000-5,700	144.5	134.3-154.7	2,861	53.5	3.6	49.9-57.5
25–34	21,500	1.4	20,900-22,100	713.7	694.0-733.4	16,656	77.5	1.4	75.5-79.7
35–44	37,000	0.9	36,400-37,700	1,361.3	1,336.9-1,385.6	32,726	88.4	0.9	86.8-90.0
45–54	46,200	0.8	45,400-47,000	1,646.9	1,619.8-1,673.9	42,666	92.4	0.8	90.9-93.9
≥55	39,000	1.1	38,200-39,900	777.9	761.0–794.8	36,287	92.9	1.1	90.9-95.0
Transmission category <sup>c</sup>									
Injection drug use	25,700	4.6	23,400-28,000	_	_	24,452	95.1	4.7	87.2-100
Heterosexual contact <sup>d</sup>	122,800	2.0	117,900-127,600	_	_	106,180	86.5	2.0	83.2-90.0
Subtotal <sup>e</sup>	149,100	1.9	143,700–154,600	864.0	832.3-895.6	131,196	88.0	1.9	84.9–91.3
Total <sup>e</sup>	456,500	1.2	446,100-466,800	1,397.9	1,366.3–1,429.6	385,148	84.4	1.2	82.5-86.3

Table 9. Estimated HIV prevalence among blacks/African Americans aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	Pers	ons living with	n diagnosed or undia	gnosed HIV	infection	Persor	s living with o	liagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No.b	%	RSE (%)	95% CI
					2016				
Male									
Age at infection (yr)									
13–24	28,400	1.8	27,400-29,400	757.0	730.0-783.9	13,468	47.4	1.8	45.8-49.1
25–34	73,700	0.9	72,400-75,000	2,476.2	2,431.3-2,521.1	53,628	72.8	0.9	71.5-74.1
35–44	53,100	0.9	52,100-54,000	2,175.2	2,137.1-2,213.4	45,355	85.5	0.9	84.0-87.0
45–54	77,200	0.7	76,200-78,300	3,122.5	3,079.5-3,165.5	71,588	92.7	0.7	91.4-94.0
≥55	82,200	0.9	80,800-83,600	2,095.7	2,059.2-2,132.1	77,840	94.7	0.9	93.1-96.4
Transmission category <sup>c</sup>									
Male-to-male sexual contact	203,700	1.9	196,000-211,300	_	_	163,596	80.3	1.9	77.4-83.4
Injection drug use	35,500	4.8	32,200-38,800	_	_	33,813	95.2	4.8	87.1-100
Male-to-male sexual contact and injection drug use	16,900	6.1	14,900-18,900	_	_	15,830	93.6	6.2	83.7-100
Heterosexual contact <sup>d</sup>	58,100	3.8	53,800-62,400	_	_	48,170	82.9	3.8	77.2-89.6
Subtotal <sup>e</sup>	314,700	1.6	304,900-324,400	2,021.1	1,958.3-2,083.9	261,879	83.2	1.6	80.7-85.9
Female									
Age at infection (yr)									
13–24	4,800	4.2	4,400-5,200	132.9	122.0-143.8	2,654	54.8	4.2	50.7-59.7
25–34	20,700	1.6	20,100-21,300	669.8	649.1-690.6	16,061	77.6	1.6	75.3-80.1
35–44	36,300	1.0	35,600-37,000	1,333.1	1,307.5-1,358.8	32,189	88.7	1.0	87.0-90.4
45–54	46,200	0.9	45,400-47,000	1,651.5	1,623.5-1,679.5	42,784	92.6	0.9	91.0-94.2
≥55	42,800	1.1	41,900-43,700	825.6	808.1-843.2	39,873	93.1	1.1	91.2-95.2
Transmission category <sup>c</sup>									
Injection drug use	25,300	5.0	22,800-27,800	_	_	24,148	95.4	5.0	86.9-100
Heterosexual contact <sup>d</sup>	124,900	2.2	119,600–130,200	_	_	108,838	87.1	2.2	83.6-91.0
Subtotal <sup>e</sup>	150,900	2.0	144,900–156,800	865.1	830.8–899.5	133,561	88.5	2.0	85.2-92.2
Total <sup>e</sup>	465,500	1.3	454,000–477,000	1,410.4	1,375.6-1,445.2	395,440	84.9	1.3	82.9-87.1

Table 9. Estimated HIV prevalence among blacks/African Americans aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	Pers	ons living with	n diagnosed or undia	gnosed HIV	infection	Persor	s living with o	liagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No.b	%	RSE (%)	95% CI
					2017				
Male									
Age at infection (yr)									
13–24	25,200	2.2	24,100-26,300	682.3	652.7-711.9	12,875	51.1	2.2	49.0-53.4
25–34	78,800	1.0	77,200-80,300	2,560.1	2,509.6-2,610.6	57,068	72.4	1.0	71.0-73.9
35–44	54,600	1.0	53,600-55,700	2,219.7	2,177.3-2,262.1	46,523	85.2	1.0	83.6-86.8
45–54	74,200	0.7	73,200-75,300	3,023.0	2,978.6-3,067.4	68,820	92.7	0.7	91.3-94.1
≥55	88,700	0.9	87,200-90,200	2,192.0	2,154.6-2,229.3	84,068	94.8	0.9	93.2-96.4
Transmission category <sup>c</sup>									
Male-to-male sexual contact	211,100	2.1	202,500-219,800	_	_	171,131	81.1	2.1	77.9-84.5
Injection drug use	34,700	5.1	31,200-38,200	_	_	33,192	95.6	5.2	86.8-100
Male-to-male sexual contact and injection drug use	16,700	6.6	14,500-18,900	_	_	15,688	93.9	6.7	83.1-100
Heterosexual contact <sup>d</sup>	58,500	4.2	53,700-63,200	_	_	48,880	83.6	4.2	77.3-91.0
Subtotal <sup>e</sup>	321,500	1.7	310,600-332,500	2,043.7	1,974.2–2,113.2	269,354	83.8	1.7	81.0-86.7
Female									
Age at infection (yr)									
13–24	4,300	4.9	3,900-4,700	120.6	108.9-132.3	2,499	57.8	5.0	52.7-64.0
25–34	20,100	1.8	19,400-20,800	635.4	613.2-657.6	15,556	77.5	1.8	74.9-80.3
35–44	35,300	1.1	34,600-36,100	1,289.5	1,262.5-1,316.6	31,363	88.8	1.1	87.0-90.7
45–54	45,800	0.9	45,000-46,600	1,646.9	1,617.8-1,676.1	42,585	93.0	0.9	91.4-94.6
≥55	47,000	1.1	46,000-48,000	880.1	861.8-898.4	43,938	93.4	1.1	91.5-95.4
Transmission category <sup>c</sup>									
Injection drug use	24,900	5.4	22,300-27,500	_	_	23,877	95.9	5.4	86.8-100
Heterosexual contact <sup>d</sup>	127,000	2.4	121,100-132,900	_	_	111,474	87.8	2.4	83.9-92.1
Subtotal <sup>e</sup>	152,500	2.2	146,000–159,100	866.4	829.0-903.7	135,941	89.1	2.2	85.4-93.1
Total <sup>e</sup>	474,100	1.4	461,300-486,800	1,421.9	1,383.6-1,460.2	405,295	85.5	1.4	83.3-87.9

Vol. 25, No. 1

Table 9. Estimated HIV prevalence among blacks/African Americans aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	Pers	ons living with	h diagnosed or undia	gnosed HIV	infection	Persor	s living with o	liagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No. <sup>b</sup>	%	RSE (%)	95% CI
					2018				
Male									
Age at infection (yr)									
13–24	22,100	2.8	20,900-23,200	606.5	573.7-639.2	12,319	55.9 <sup>f</sup>	2.8	53.0-59.0
25–34	83,400	1.1	81,500-85,200	2,629.8	2,572.5-2,687.2	60,108	72.1	1.1	70.6-73.7
35–44	57,000	1.1	55,800-58,200	2,287.8	2,240.1-2,335.5	48,405	84.9	1.1	83.1-86.7
45–54	70,800	8.0	69,600-71,900	2,914.7	2,868.2-2,961.2	65,697	92.9	0.8	91.4-94.4
≥55	95,400	0.9	93,800-97,000	2,290.1	2,251.6-2,328.6	90,427	94.8	0.9	93.2-96.4
Transmission category <sup>c</sup>									
Male-to-male sexual contact	218,600	2.3	208,700-228,500	_	_	178,685	81.7	2.3	78.2-85.6
Injection drug use	34,000	5.6	30,300-37,800	_	_	32,619	95.8	5.6	86.4-100
Male-to-male sexual contact and injection drug use	16,500	7.2	14,200-18,900	_	_	15,532	93.9	7.4	82.3-100
Heterosexual contact <sup>d</sup>	58,900	4.6	53,700-64,200	_	_	49,661	84.3	4.6	77.3-92.6
Subtotal <sup>e</sup>	328,600	1.9	316,400-340,900	2,067.7	1,990.4–2,145.0	276,956	84.3	1.9	81.2-87.5
Female									
Age at infection (yr)									
13–24	3,900	6.0	3,400-4,300	109.2	96.5-122.0	2,334	60.4 <sup>f</sup>	6.0	54.1-68.4
25–34	19,400	2.0	18,600-20,100	601.1	577.3-624.9	14,975	77.3	2.0	74.4-80.5
35–44	34,800	1.2	34,000-35,600	1,258.7	1,229.7-1,287.7	30,935	88.9	1.2	86.9-91.0
45–54	45,000	1.0	44,100-45,800	1,632.8	1,602.3-1,663.3	41,958	93.3	1.0	91.6-95.1
≥55	51,300	1.0	50,300-52,400	933.2	914.1-952.3	48,017	93.6	1.0	91.7-95.6
Transmission category <sup>c</sup>									
Injection drug use	24,600	5.8	21,800-27,400	_	_	23,664	96.3	5.9	86.5-100
Heterosexual contact <sup>d</sup>	129,100	2.6	122,500-135,600	_	_	113,952	88.3	2.6	84.0-93.0
Subtotal <sup>e</sup>	154,300	2.4	147,100–161,500	868.0	827.4–908.7	138,219	89.6	2.4	85.6-94.0
Total <sup>e</sup>	482,900	1.5	468,700–497,200	1,434.3	1,392.0-1,476.7	415,175	86.0	1.5	83.5-88.6

Note. Estimates for the year 2018 data are preliminary and based on deaths reported to CDC through December 2019. Estimates derived by using HIV surveillance and CD4 data for persons aged ≥13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤1,000 to reflect model uncertainty.

<sup>&</sup>lt;sup>a</sup> Rates are per 100,000 population. Rates are not calculated for transmission category because of the lack of denominator data.

b Reported to the National HIV Surveillance System.

<sup>&</sup>lt;sup>C</sup> Data by transmission category have been statistically adjusted to account for missing risk-factor information.

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

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

f Indicates that difference from 2014 estimate was deemed statistically significant (P < .05).

Table 10. Estimated HIV prevalence among Hispanics/Latinos aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States

	Pers	ons living with	n diagnosed or undia	gnosed HIV	infection	Persor	ns living with o	diagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No.b	%	RSE (%)	95% CI
					2014				
Male									
Age at infection (yr)									
13–24	16,100	2.1	15,400-16,700	276.1	264.8-287.4	5,470	34.0	2.1	32.7-35.5
25–34	41,800	1.1	40,900-42,700	898.2	878.7-917.7	27,259	65.2	1.1	63.8-66.7
35–44	47,700	0.8	46,900-48,500	1,177.4	1,158.0-1,196.8	39,709	83.2	0.8	81.9-84.6
45–54	57,300	0.7	56,500-58,100	1,811.8	1,785.9-1,837.6	52,341	91.4	0.7	90.1-92.7
≥55	35,000	1.2	34,100-35,800	1,012.9	988.8-1,037.1	33,064	94.5	1.2	92.3-96.9
Transmission category <sup>c</sup>									
Male-to-male sexual contact	144,500	1.8	139,300-149,600	_	_	111,372	77.1	1.8	74.4-80.0
Injection drug use	21,400	4.9	19,300–23,400	_	_	19,825	92.8	4.9	84.7–100
Male-to-male sexual contact and injection drug use	13,600	5.3	12,100–15,000	_	_	12,173	89.8	5.3	81.4–100
Heterosexual contact <sup>d</sup>	18,200	5.7	16,100-20,200	_	_	14,185	78.1	5.8	70.3-87.9
Subtotal <sup>e</sup>	197,800	1.6	191,700–204,000	935.7	906.4-964.9	157,843	79.8	1.6	77.4-82.4
Female									
Age at infection (yr)									
13–24	1,500	6.2	1,300-1,700	27.5	24.2-30.9	744	49.3	6.3	43.9-56.1
25–34	6,200	2.4	5,900-6,500	147.8	141.0-154.6	4,846	77.9	2.4	74.5-81.7
35–44	11,100	1.5	10,800-11,400	285.5	277.0-293.9	9,788	88.1	1.5	85.6-90.8
45–54	14,500	1.4	14,100-14,900	464.8	452.3-477.3	13,317	92.1	1.4	89.7-94.6
≥55	11,400	1.8	11,000-11,800	277.8	267.9-287.7	10,689	94.0	1.8	90.8-97.5
Transmission category <sup>c</sup>									
Injection drug use	10.200	6.1	9.000-11.400	_	_	9,611	94.4	6.2	84.3-100
Heterosexual contact <sup>d</sup>	34,300	3.3	32,100–36,500	_	_	29,578	86.3	3.3	81.1–92.2
Subtotal <sup>e</sup>	44,700	2.9	42,100–47,200	214.9	202.6–227.2	39,384	88.2	2.9	83.4–93.5
Total <sup>e</sup>	242,500	1.4	235,800–249,200	578.3	562.3-594.3	197,227	81.3	1.4	79.1–83.6

Table 10. Estimated HIV prevalence among Hispanics/Latinos aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	Pers	ons living with	n diagnosed or undia	gnosed HIV	infection	Persor	s living with d	liagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No.b	%	RSE (%)	95% CI
					2015				
Male									
Age at infection (yr)									
13–24	15,200	2.4	14,500-15,900	258.1	245.8-270.3	5,637	37.2	2.4	35.5-39.0
25–34	44,100	1.2	43,000-45,100	935.0	912.9-957.0	28,600	64.9	1.2	63.4-66.5
35–44	48,200	0.9	47,400-49,100	1,162.1	1,141.2-1,183.1	39,924	82.8	0.9	81.3-84.3
45–54	58,500	0.8	57,700-59,400	1,793.8	1,767.3-1,820.3	53,387	91.2	0.8	89.9-92.6
≥55	39,200	1.2	38,300-40,100	1,070.7	1,046.4-1,094.9	37,138	94.7	1.2	92.6-96.9
Transmission category <sup>c</sup>									
Male-to-male sexual contact	151,600	2.0	145,700-157,500	_	_	117,877	77.8	2.0	74.8-80.9
Injection drug use	21,200	5.3	19,000-23,300	_	_	19,675	93.0	5.3	84.3-100
Male-to-male sexual contact and injection drug use	13,700	5.7	12,100-15,200	_	_	12,286	89.8	5.8	80.7-100
Heterosexual contact <sup>d</sup>	18,500	6.3	16,200-20,700	_	_	14,565	78.9	6.4	70.2-90.0
Subtotal <sup>e</sup>	205,200	1.7	198,200–212,200	947.1	914.7–979.4	164,686	80.3	1.7	77.6-83.1
Female									
Age at infection (yr)									
13–24	1,400	7.2	1,200-1,600	24.7	21.2-28.2	710	51.7	7.4	45.3-60.2
25–34	6,000	2.7	5,700-6,300	140.1	132.8-147.5	4,589	76.8	2.7	73.0-81.1
35–44	10,800	1.6	10,500-11,200	273.2	264.6-281.8	9,600	88.5	1.6	85.8-91.4
45–54	14,600	1.4	14,200-15,000	454.4	441.9-467.0	13,428	92.2	1.4	89.7-94.8
≥55	12,500	1.8	12,100-13,000	290.6	280.6-300.6	11,827	94.3	1.8	91.2-97.7
Transmission category <sup>c</sup>									
Injection drug use	10,100	6.5	8,800-11,400	_	_	9,549	94.5	6.7	83.7-100
Heterosexual contact <sup>d</sup>	35,000	3.6	32,600-37,400	_	_	30,411	86.9	3.6	81.2-93.4
Subtotale	45,300	3.2	42,500–48,100	212.5	199.4–225.7	40,154	88.6	3.2	83.5–94.5
Total <sup>e</sup>	250,500	1.5	242,900–258,100	582.8	565.2-600.4	204,840	81.8	1.5	79.4–84.3

Table 10. Estimated HIV prevalence among Hispanics/Latinos aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	Pers	ons living with	n diagnosed or undia	gnosed HIV	infection	Persor	s living with d	liagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No.b	%	RSE (%)	95% CI
					2016				
Male									
Age at infection (yr)									
13–24	14,100	2.9	13,300-14,900	237.7	224.3-251.2	5,760	40.8	2.9	38.6-43.3
25–34	46,700	1.3	45,400-47,900	972.9	947.5-998.2	30,306	65.0	1.3	63.3-66.7
35–44	49,400	1.0	48,400-50,400	1,166.7	1,143.4-1,189.9	40,668	82.3	1.0	80.7-83.9
45–54	59,100	0.8	58,200-60,000	1,755.7	1,728.5-1,783.0	53,836	91.1	0.8	89.7-92.6
≥55	43,500	1.1	42,600-44,500	1,125.6	1,101.0-1,150.1	41,308	94.9	1.1	92.9-97.0
Transmission category <sup>c</sup>									
Male-to-male sexual contact	159,000	2.2	152,100-165,800	_	_	124,674	78.4	2.2	75.2-81.9
Injection drug use	21,000	5.7	18,600-23,300	_	_	19,510	93.1	5.8	83.8-100
Male-to-male sexual contact and injection drug use	13,800	6.2	12,100-15,500	_	_	12,425	90.1	6.4	80.3-100
Heterosexual contact <sup>d</sup>	18,800	7.0	16,200-21,400	_	_	14,988	79.8	7.1	70.2-92.4
Subtotal <sup>e</sup>	212,800	1.9	204,800-220,800	958.5	922.6-994.4	171,878	80.8	1.9	77.9-83.9
Female									
Age at infection (yr)									
13–24	1,200	8.5	1,000-1,400	21.4	17.8-24.9	661	54.9	8.7	47.1-65.9
25–34	5,700	3.0	5,400-6,100	132.5	124.6-140.4	4,416	76.8	3.1	72.5-81.7
35–44	10,600	1.8	10,300-11,000	263.0	254.0-272.1	9,423	88.7	1.8	85.8-91.9
45–54	14,400	1.5	14,000-14,900	436.6	424.0-449.2	13,315	92.2	1.5	89.7-95.0
≥55	13,800	1.7	13,300-14,300	304.0	293.8-314.2	13,070	94.7	1.7	91.6-98.0
Transmission category <sup>c</sup>									
Injection drug use	10,000	7.1	8,600-11,400	_	_	9,479	95.0	7.2	83.4-100
Heterosexual contact <sup>d</sup>	35,600	3.9	32,900-38,300	_	_	31,214	87.6	3.9	81.4-94.8
Subtotale	45,800	3.4	42,700–48,900	209.6	195.4–223.7	40,885	89.3	3.5	83.6-95.7
Total <sup>e</sup>	258,600	1.7	250,000–267,200	587.0	567.5-606.4	212,763	82.3	1.7	79.6–85.1

Table 10. Estimated HIV prevalence among Hispanics/Latinos aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	Pers	ons living with	n diagnosed or undia	gnosed HIV	infection	Persor	s living with d	liagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No.b	%	RSE (%)	95% CI
					2017				
Male									
Age at infection (yr)									
13–24	12,700	3.5	11,800-13,600	211.6	196.9-226.3	5,669	44.7	3.6	41.8-48.0
25–34	49,000	1.5	47,600-50,500	1,007.3	978.1-1,036.6	31,924	65.1	1.5	63.3-67.0
35–44	50,800	1.1	49,700-51,900	1,174.7	1,148.7-1,200.8	41,579	81.8	1.1	80.1-83.7
45–54	59,200	0.8	58,200-60,200	1,712.8	1,684.4-1,741.2	53,963	91.2	0.8	89.7-92.7
≥55	48,300	1.1	47,200-49,300	1,183.1	1,158.0-1,208.2	45,786	94.9	1.1	92.9-96.9
Transmission category <sup>c</sup>									
Male-to-male sexual contact	166,100	2.4	158,200-173,900	_	_	131,374	79.1	2.4	75.5-83.0
Injection drug use	20,700	6.2	18,200-23,300	_	_	19,397	93.5	6.3	83.4-100
Male-to-male sexual contact and injection drug use	13,800	6.8	12,000-15,700	_	_	12,548	90.8	7.0	80.1-100
Heterosexual contact <sup>d</sup>	19,100	7.7	16,200–22,000	_	_	15,325	80.3	7.9	69.7-94.7
Subtotal <sup>e</sup>	220,000	2.1	210,900–229,100	968.1	928.1-1,008.2	178,921	81.3	2.1	78.1–84.8
Female									
Age at infection (yr)									
13–24	1,100	10.2	880-1,300	19.2	15.4-23.1	635	57.9	10.6	48.3-72.4
25–34	5,400	3.5	5,000-5,800	122.9	114.4-131.4	4,160	76.7	3.5	71.8-82.4
35–44	10,500	1.9	10,100-10,900	256.0	246.3-265.7	9,297	88.5	1.9	85.3-92.0
45–54	14,100	1.5	13,700-14,600	416.2	403.6-428.8	13,159	93.0	1.5	90.3-96.0
≥55	15,200	1.7	14,700-15,700	318.2	307.8-328.6	14,413	95.0	1.7	92.0-98.2
Transmission category <sup>c</sup>									
Injection drug use	9,900	7.6	8,400-11,400	_	_	9,438	95.5	7.8	83.0-100
Heterosexual contact <sup>d</sup>	36,300	4.2	33,200-39,300	_	_	32,035	88.4	4.3	81.6-96.4
Subtotal <sup>e</sup>	46,300	3.7	42,900–49,700	207.0	191.8–222.2	41,664	89.9	3.8	83.7–97.0
Total <sup>e</sup>	266,300	1.9	256,600–276,100	590.4	568.8-612.0	220,585	82.8	1.9	79.9–86.0

Vol. 25, No. 1

Table 10. Estimated HIV prevalence among Hispanics/Latinos aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	Pers	ons living with	h diagnosed or undia	gnosed HIV	infection	Persor	s living with d	liagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No.b	%	RSE (%)	95% CI
					2018				
Male									
Age at infection (yr)									
13–24	11,300	4.4	10,300-12,300	186.5	170.3-202.7	5,565	49.1 <sup>f</sup>	4.5	45.2-53.8
25–34	51,100	1.7	49,400-52,800	1,034.7	1,000.9-1,068.4	33,460	65.5	1.7	63.4-67.7
35–44	52,500	1.3	51,200-53,800	1,188.8	1,159.4-1,218.3	42,734	81.4	1.3	79.4-83.4
45–54	58,800	0.9	57,800-59,900	1,661.9	1,631.5-1,692.2	53,625	91.1	0.9	89.5-92.8
≥55	53,300	1.1	52,200-54,400	1,240.2	1,214.4-1,265.9	50,568	94.8	1.1	92.9-96.8
Transmission category <sup>c</sup>									
Male-to-male sexual contact	173,000	2.7	163,900-182,100	_	_	138,023	79.8	2.7	75.8-84.2
Injection drug use	20,500	6.8	17,800-23,300	_	_	19,288	93.9	6.9	82.9-100
Male-to-male sexual contact and injection drug use	13,900	7.5	11,800-15,900	_	_	12,647	91.1	7.7	79.4-100
Heterosexual contact <sup>d</sup>	19,400	8.6	16,100-22,700	_	_	15,719	81.0	8.9	69.3-97.4
Subtotal <sup>e</sup>	227,100	2.3	216,700–237,600	975.9	931.1–1,020.7	185,952	81.9	2.3	78.3–85.8
Female									
Age at infection (yr)									
13–24	1,000	12.1	770-1,300	17.4	13.3-21.6	610	60.3	12.9	48.7-79.2
25–34	5,200	4.0	4,800-5,700	116.8	107.5-126.1	3,998	76.3	4.1	70.6-82.8
35–44	10,400	2.2	9,900-10,800	248.3	237.8-258.8	9,126	88.1	2.2	84.6-92.0
45–54	13,900	1.6	13,500-14,400	399.4	386.5-412.3	13,003	93.4	1.6	90.5-96.5
≥55	16,400	1.7	15,900–17,000	328.3	317.7-338.9	15,690	95.4	1.7	92.4-98.6
Transmission category <sup>c</sup>									
Injection drug use	9,800	8.3	8,200-11,400	_	_	9,388	95.7	8.5	82.3-100
Heterosexual contact <sup>d</sup>	37,000	4.6	33,600-40,300	_	_	32,848	88.9	4.7	81.5-97.7
Subtotal <sup>e</sup>	47,000	4.1	43,200–50,700	204.7	188.2–221.1	42,427	90.3	4.1	83.6-98.2
Total <sup>e</sup>	274,100	2.1	263,000–285,200	593.0	569.0-617.1	228,379	83.3	2.1	80.1–86.8

Note. Hispanics/Latinos can be of any race. Estimates for the year 2018 data are preliminary and based on deaths reported to CDC through December 2019. Estimates derived by using HIV surveillance and CD4 data for persons aged ≥13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of >1,000 to reflect model uncertainty.

<sup>&</sup>lt;sup>a</sup> Rates are per 100,000 population. Rates are not calculated for transmission category because of the lack of denominator data.

b Reported to the National HIV Surveillance System.

<sup>&</sup>lt;sup>C</sup> Data by transmission category have been statistically adjusted to account for missing risk-factor information.

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

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

f Indicates that difference from 2014 estimate was deemed statistically significant (P < .05).

Table 11. Estimated HIV prevalence among whites aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States

	Pers	ons living witl	h diagnosed or undiag	nosed HIV ir	nfection	Persor	s living with c	liagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No.b	%	RSE (%)	95% CI
					2014				
Male									
Age at infection (yr)									
13–24	9,000	2.6	8,600-9,500	61.4	58.3-64.5	3,519	38.9	2.6	37.1-41.0
25–34	32,700	1.2	32,000-33,500	261.2	255.2-267.2	22,462	68.6	1.2	67.1-70.2
35–44	48,700	0.8	47,900-49,400	408.5	402.2-414.9	41,263	84.8	0.8	83.5-86.1
45–54	103,200	0.5	102,100-104,300	725.4	717.5-733.2	95,477	92.5	0.6	91.5-93.5
≥55	87,700	0.8	86,300-89,100	289.7	285.0-294.4	83,570	95.3	0.8	93.8-96.9
Transmission category <sup>c</sup>									
Male-to-male sexual contact	228,900	1.5	222,300-235,400	_	_	200,659	87.7	1.5	85.2-90.3
Injection drug use	14,900	6.5	13,000–16,800	_	_	13,178	88.3	6.6	78.3-100
Male-to-male sexual contact and injection drug use	24,500	4.3	22,400-26,500	_	_	22,240	90.8	4.3	83.8-99.2
Heterosexual contact <sup>d</sup>	11,900	7.5	10,100-13,600	_	_	9,054	76.2	7.6	66.5-89.3
Subtotal <sup>e</sup>	281,400	1.3	274,000–288,800	336.3	327.5–345.1	246,291	87.5	1.3	85.3-89.9
Female									
Age at infection (yr)									
13–24	1,400	6.6	1,200-1,500	9.8	8.5-11.0	661	48.6	6.7	43.0-55.8
25–34	5,800	2.5	5,500-6,100	47.5	45.1-49.9	4,318	74.3	2.5	70.8-78.2
35–44	9,800	1.7	9,400-10,100	82.9	80.1-85.6	8,461	86.8	1.7	84.0-89.7
45–54	14,100	1.5	13,700-14,500	98.3	95.4-101.1	12,978	91.8	1.5	89.2-94.6
≥55	10,600	2.1	10,200-11,100	30.5	29.2-31.7	9,988	94.0	2.1	90.2-98.1
Transmission category <sup>c</sup>									
Injection drug use	13,400	5.9	11,800-14,900	_	_	11,957	89.3	5.9	80.1-100
Heterosexual contact <sup>d</sup>	27,900	3.9	25,800-30,000	_	_	24,031	86.2	3.9	80.1-93.3
Subtotal <sup>e</sup>	41,700	3.3	39,000–44,400	47.8	44.7–50.8	36,406	87.3	3.3	82.1–93.3
Total <sup>e</sup>	323,100	1.2	315,200–330,900	189.0	184.4–193.6	282,697	87.5	1.2	85.4-89.7

Table 11. Estimated HIV prevalence among whites aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	Pers	ons living with	h diagnosed or undiag	nosed HIV ir	nfection	Persons living with diagnosed HIV infection				
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No. <sup>b</sup>	%	RSE (%)	95% CI	
					2015					
Male										
Age at infection (yr)										
13–24	8,300	3.0	7,800-8,800	57.2	53.9-60.6	3,424	41.2	3.0	38.9-43.8	
25–34	33,900	1.3	33,100-34,800	268.5	261.8-275.2	23,311	68.8	1.3	67.1-70.5	
35–44	46,100	0.9	45,300-46,900	391.2	384.4-397.9	38,852	84.2	0.9	82.8-85.7	
45–54	100,800	0.6	99,700-101,900	721.5	713.5-729.5	93,328	92.6	0.6	91.6-93.6	
≥55	96,400	0.8	94,900-97,900	311.8	307.0-316.7	91,995	95.5	0.8	94.0-97.0	
Transmission category <sup>c</sup>										
Male-to-male sexual contact	232,600	1.6	225,400-239,700	_	_	204,910	88.1	1.6	85.5-90.9	
Injection drug use	15,100	7.1	13,000-17,200	_	_	13,221	87.7	7.2	77.0-100	
Male-to-male sexual contact and injection drug use	24,600	4.6	22,400-26,900	_	_	22,401	91.0	4.7	83.4-100	
Heterosexual contact <sup>d</sup>	12,000	8.2	10,100-14,000	_	_	9,244	76.8	8.5	66.1-91.6	
Subtotal <sup>e</sup>	285,500	1.4	277,400–293,600	340.7	331.0–350.3	250,910	87.9	1.4	85.5-90.4	
Female										
Age at infection (yr)										
13–24	1,300	7.5	1,100-1,500	9.3	7.9–10.7	614	48.1	7.7	41.9-56.5	
25–34	5,800	2.8	5,500-6,100	46.9	44.3-49.5	4,232	73.3	2.8	69.5-77.6	
35–44	9,400	1.8	9,100-9,800	81.1	78.2-84.0	8,113	85.9	1.8	83.0-89.2	
45–54	14,100	1.5	13,700-14,500	100.2	97.2-103.2	12,976	91.9	1.5	89.2-94.7	
≥55	11,800	2.0	11,300-12,300	33.2	31.9-34.6	11,133	94.3	2.0	90.7-98.3	
Transmission category <sup>c</sup>										
Injection drug use	13,600	6.3	11,900-15,300	_	_	12,085	89.0	6.4	79.2-100	
Heterosexual contact <sup>d</sup>	28,400	4.2	26,100–30,800	_	_	24,568	86.5	4.2	79.9–94.2	
Subtotal <sup>e</sup>	42,400	3.5	39,500–45,400	48.6	45.2–52.0	37,068	87.4	3.5	81.7–93.9	
Total <sup>e</sup>	327,900	1.3	319,300–336,500	191.7	186.6–196.7	287,978	87.8	1.3	85.6-90.2	

Table 11. Estimated HIV prevalence among whites aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	Pers	ons living witl	h diagnosed or undiag	nosed HIV ir	nfection	Person	s living with o	liagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No.b	%	RSE (%)	95% CI
					2016				
Male									
Age at infection (yr)									
13–24	7,500	3.6	7,000-8,100	52.6	48.9-56.3	3,378	44.9	3.6	41.9-48.3
25–34	35,000	1.4	34,100-36,000	275.1	267.5-282.6	24,008	68.6	1.4	66.7-70.5
35–44	44,600	1.0	43,700-45,500	381.9	374.6-389.3	37,333	83.7	1.0	82.1-85.3
45–54	96,500	0.6	95,400-97,700	704.9	696.6-713.2	89,266	92.5	0.6	91.4-93.6
≥55	105,600	0.8	104,000-107,200	334.9	329.9-339.9	101,027	95.7	0.8	94.3-97.1
Transmission category <sup>c</sup>									
Male-to-male sexual contact	236,000	1.7	228,100-243,800	_	_	208,727	88.5	1.7	85.6-91.5
Injection drug use	15,100	7.7	12,800–17,400	_	_	13,200	87.2	7.9	75.7-100
Male-to-male sexual contact and injection drug use	24,700	5.0	22,300-27,200	_	_	22,507	91.1	5.1	82.9-100
Heterosexual contact <sup>d</sup>	12,300	9.1	10,100-14,500	_	_	9,467	77.1	9.4	65.4-94.0
Subtotal <sup>e</sup>	289,200	1.6	280,400-298,100	344.6	334.1–355.2	255,012	88.2	1.6	85.5–91.0
Female									
Age at infection (yr)									
13–24	1,200	8.7	980-1,400	8.7	7.2-10.2	594	50.3	9.0	43.0-60.7
25–34	5,700	3.2	5,400-6,100	46.4	43.5-49.3	4,189	72.9	3.2	68.6-77.8
35–44	9,200	2.0	8,900-9,600	80.1	77.0-83.3	7,862	85.1	2.0	81.9-88.6
45–54	13,900	1.6	13,500-14,300	100.9	97.7-104.0	12,821	92.1	1.6	89.4-95.1
≥55	13,000	2.0	12,500-13,500	36.1	34.7–37.5	12,310	94.5	2.0	90.9-98.3
Transmission category <sup>c</sup>									
Injection drug use	13,700	6.9	11,800-15,600	_	_	12,184	88.9	7.0	78.3-100
Heterosexual contact <sup>d</sup>	29,000	4.6	26,400-31,600	_	_	25,179	86.9	4.6	79.7-95.4
Subtotal <sup>e</sup>	43,100	3.8	39,900–46,400	49.3	45.6–53.1	37,776	87.6	3.9	81.5–94.8
Total <sup>e</sup>	332,400	1.4	322,900-341,800	194.0	188.5–199.5	292,788	88.1	1.5	85.7–90.7

Table 11. Estimated HIV prevalence among whites aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	Pers	ons living witl	h diagnosed or undiag	nosed HIV ir	nfection	Persor	s living with d	liagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No.b	%	RSE (%)	95% CI
					2017				
Male									
Age at infection (yr)									
13–24	6,700	4.3	6,100-7,200	47.3	43.3-51.3	3,401	50.9	4.3	46.9-55.6
25–34	35,600	1.5	34,600-36,700	278.9	270.4-287.3	24,522	68.8	1.5	66.8-70.9
35–44	44,700	1.1	43,700-45,600	382.5	374.4-390.6	37,190	83.2	1.1	81.5-85.0
45–54	90,200	0.6	89,100-91,400	675.7	667.1-684.2	83,355	92.4	0.6	91.2-93.6
≥55	115,500	0.7	113,900-117,200	360.2	355.1-365.4	110,637	95.8	0.7	94.4-97.2
Transmission category <sup>c</sup>									
Male-to-male sexual contact	239,000	1.8	230,400-247,600	_	_	212,420	88.9	1.8	85.8-92.2
Injection drug use	15,400	8.5	12,800–17,900	_	_	13,301	86.5	8.7	74.2–100
Male-to-male sexual contact and injection drug use	24,800	5.5	22,100–27,500	_	_	22,617	91.2	5.5	82.4–100
Heterosexual contact <sup>d</sup>	12,400	10.1	10,000–14,900	_	_	9,675	77.8	10.5	65.0–97.0
Subtotal <sup>e</sup>	292,800	1.7	283,000–302,500	348.5	336.9–360.1	259,105	88.5	1.7	85.7–91.5
Female									
Age at infection (yr)									
13–24	1.100	10.4	860-1,300	8.1	6.4-9.7	577	53.5	10.9	44.4–67.3
25–34	5,800	3.6	5,400–6,200	47.0	43.7–50.3	4,193	72.0	3.6	67.2–77.4
35–44	9,200	2.2	8,800-9,600	79.4	75.9–82.9	7,721	84.4	2.2	80.8–88.2
45–54	13,500	1.7	13,100–14,000	100.8	97.5-104.2	12,491	92.2	1.7	89.3-95.4
≥55	14,200	1.9	13,700–14,700	38.7	37.2-40.2	13,439	94.7	1.9	91.2-98.4
Transmission category <sup>c</sup>	,		, ,			•			
Injection drug use	13,900	7.6	11,800–16,000	_	_	12,321	88.7	7.7	77.2–100
Heterosexual contact <sup>d</sup>	29,500	5.0	26,600–32,400	_	_	25,695	87.1	5.0	79.4–96.6
Subtotal <sup>e</sup>	43,800	4.2	40,200–47,400	50.1	46.0–54.2	38,421	87.7	4.2	81.1–95.6
	45,000	4.4	+0,200-41,400	JU. I	40.0-04.2	JU,42 I	01.1	4.4	01.1-33.0
Total <sup>e</sup>	336,600	1.6	326,200-346,900	196.3	190.3-202.4	297,526	88.4	1.6	85.8-91.2

Vol. 25, No. 1

Table 11. Estimated HIV prevalence among whites aged ≥13 years, by year, sex at birth, and selected characteristics, 2014–2018—United States (cont)

	Pers	ons living witl	h diagnosed or undiag	nosed HIV ir	nfection	Persor	s living with d	iagnosed HIV in	fection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No. <sup>b</sup>	%	RSE (%)	95% CI
					2018				
Male									
Age at infection (yr)									
13–24	5,700	5.4	5,100-6,300	41.1	36.8-45.5	3,281	57.2 <sup>f</sup>	5.4	51.7-63.9
25–34	36,400	1.7	35,200-37,700	284.6	275.1-294.2	25,353	69.6	1.7	67.3-72.0
35–44	44,900	1.2	43,900-46,000	381.9	372.9-390.9	37,186	82.7	1.2	80.8-84.7
45–54	83,400	0.7	82,200-84,500	643.3	634.3-652.3	76,876	92.2	0.7	90.9-93.5
≥55	125,700	0.7	123,900-127,400	385.9	380.6-391.3	120,482	95.9	0.7	94.5-97.2
Transmission category <sup>c</sup>									
Male-to-male sexual contact	241,800	2.0	232,300-251,200	_	_	215,956	89.3	2.0	86.0-92.9
Injection drug use	15,700	9.3	12,800–18,600	_	_	13,500	86.0	9.7	72.7–100
Male-to-male sexual contact and injection drug use	25,000	6.0	22,100–27,900	_	_	22,754	91.1	6.1	81.6-100
Heterosexual contact <sup>d</sup>	12,600	11.1	9,900-15,400	_	_	9,895	78.4	11.7	64.4-100
Subtotal <sup>e</sup>	296,200	1.8	285,500-306,900	352.4	339.6–365.1	263,178	88.9	1.8	85.8-92.2
Female									
Age at infection (yr)									
13–24	990	12.5	750-1,200	7.5	5.6-9.3	564	57.2	13.3	46.0-75.7
25–34	5,800	4.1	5,300-6,300	46.8	43.0-50.5	4,145	71.5	4.1	66.3-77.8
35–44	9,200	2.5	8,700-9,600	79.1	75.2-83.0	7,739	84.2	2.5	80.3-88.6
45–54	13,000	1.8	12,600-13,500	100	96.4-103.6	11,996	92.1	1.8	89.0-95.6
≥55	15,500	1.9	14,900-16,100	41.7	40.2-43.3	14,718	94.8	1.9	91.4-98.5
Transmission category <sup>c</sup>									
Injection drug use	14,100	8.4	11,800-16,400	_	_	12,495	88.6	8.6	76.1–100
Heterosexual contact <sup>d</sup>	30,000	5.4	26,800-33,200	_	_	26,263	87.5	5.5	79.1–98.0
Subtotal <sup>e</sup>	44,500	4.6	40,500–48,500	50.9	46.3–55.5	39,162	88.0	4.6	80.7–96.7
Total <sup>e</sup>	340,700	1.7	329,200–352,100	198.7	192.0–205.4	302,340	88.7	1.7	85.9–91.8

Note. Estimates for the year 2018 data are preliminary and based on deaths reported to CDC through December 2019. Estimates derived by using HIV surveillance and CD4 data for persons aged  $\geq$ 13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of  $\geq$ 1,000 and to the nearest 10 for estimates of  $\leq$ 1,000 to reflect model uncertainty.

<sup>&</sup>lt;sup>a</sup> Rates are per 100,000 population. Rates are not calculated for transmission category because of the lack of denominator data.

b Reported to the National HIV Surveillance System.

<sup>&</sup>lt;sup>C</sup> Data by transmission category have been statistically adjusted to account for missing risk-factor information.

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

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

f Indicates that difference from 2014 estimate was deemed statistically significant (P < .05).

Table 12. Estimated HIV prevalence among men who have sex with men, by year, race/ethnicity, and age, 2014–2018— United States

		iving with diag	-	Men	living with dia	gnosed HIV infe	ction
	No.	RSE (%)	95% CI	No. <sup>a</sup>	%	RSE (%)	95% CI
				2014			
Black/African American							
Age at infection (yr)							
13–24	31,500	1.3	30,700-32,400	13,227	42.0	1.3	40.9-43.1
25-34	52,900	0.9	52,000-53,800	39,311	74.3	0.9	73.1-75.6
35–44	35,100	0.9	34,400–35,700	30,623	87.3	0.9	85.8-88.9
45–54	43,300	0.9	42,600-44,100	40,400	93.2	0.9	91.7-94.8
≥55	25,400	1.5	24,700-26,200	24,275	95.5	1.5	92.8-98.4
Subtotal	188,300	1.6	182,300-194,200	147,836	78.5	1.6	76.1–81.1
Hispanic/Latino <sup>b</sup>							
Age at infection (yr)							
13–24	14,700	2.2	14,100-15,400	4,997	33.9	2.2	32.6-35.4
25–34	35,700	1.2	34,800-36,500	23,101	64.8	1.2	63.3-66.4
35–44	36,200	1.0	35,500-36,900	29,963	82.8	1.0	81.2-84.4
45–54	38,800	0.9	38,100-39,500	35,334	91.1	0.9	89.5-92.6
≥55	19,100	1.6	18,500-19,600	17,976	94.3	1.6	91.5-97.3
Subtotal	144,500	1.8	139,300–149,600	111,372	77.1	1.8	74.4–80.0
White							
Age at infection (yr)							
13–24	7,800	2.8	7,400-8,200	3,080	39.4	2.8	37.4-41.7
25–34	27,300	1.3	26,600-28,000	18,883	69.2	1.3	67.5–71.0
35–44	39,100	0.9	38,400-39,700	33,194	85.0	0.9	83.5-86.4
45–54	83,700	0.6	82,700-84,600	77,475	92.6	0.6	91.5–93.7
≥55	71,000	0.9	69,800-72,300	68,027	95.8	0.9	94.1–97.5
Subtotal	228,900	1.5	222,300–235,400	200,659	87.7	1.5	85.2–90.3
AII MSM <sup>c</sup>							
Age at infection (yr)							
13–24	58,300	1.0	57,100-59,400	23,051	39.6	1.0	38.8-40.4
25–34	125,700	0.6	124,200-127,100	88,278	70.2	0.6	69.4-71.1
35–44	120,000	0.5	118,800-121,100	101,944	85.0	0.5	84.1-85.8
45–54	177,500	0.4	176,000-178,900	164,015	92.4	0.4	91.7-93.2
≥55	122,300	0.7	120,700-123,900	116,739	95.4	0.7	94.2–96.7
Total <sup>c</sup>	603,700	0.9	593,000-614,400	494,027	81.8	0.9	80.4-83.3

Table 12. Estimated HIV prevalence among men who have sex with men, by year, race/ethnicity, and age, 2014–2018— United States (cont)

		iving with diag		Men living with diagnosed HIV infection			
	No.	RSE (%)	95% CI	No. <sup>a</sup>	%	RSE (%)	95% CI
				2015			
Black/African American							
Age at infection (yr)							
13–24	29,200	1.6	28,300-30,100	12,941	44.3	1.6	43.0-45.7
25–34	58,600	0.9	57,500-59,600	43,326	74.0	0.9	72.7-75.3
35-44	35,900	1.0	35,200-36,600	31,254	87.1	1.0	85.5-88.8
45-54	43,800	0.9	43,100-44,600	40,907	93.4	0.9	91.8-95.0
≥55	28,600	1.4	27,800-29,400	27,376	95.8	1.4	93.2-98.5
Subtotal	196,000	1.8	189,300–202,800	155,804	79.5	1.8	76.8-82.3
Hispanic/Latino <sup>b</sup>							
Age at infection (yr)							
13–24	14,000	2.5	13,300-14,700	5,184	37.1	2.5	35.4-39.0
25–34	38,200	1.3	37,200-39,200	24,687	64.6	1.3	63.0-66.3
35-44	37,100	1.1	36,300-37,900	30,532	82.3	1.1	80.6-84.1
45-54	40,500	0.9	39,800-41,200	36,864	90.9	0.9	89.4-92.6
≥55	21,800	1.5	21,200-22,400	20,610	94.6	1.5	91.9-97.4
Subtotal	151,600	2.0	145,700–157,500	117,877	77.8	2.0	74.8-80.9
White							
Age at infection (yr)							
13–24	7,200	3.2	6,700-7,600	2,984	41.5	3.3	39.0-44.3
25–34	28,200	1.4	27,500-29,000	19,658	69.6	1.4	67.8-71.5
35-44	37,000	1.0	36,300-37,800	31,312	84.5	1.0	82.9-86.2
45-54	81,900	0.6	80,900-82,900	75,948	92.8	0.6	91.7-93.9
≥55	78,200	0.9	76.900-79.500	75,007	95.9	0.9	94.3-97.5
Subtotal	232,600	1.6	225,400–239,700	204,910	88.1	1.6	85.5-90.9
All MSM <sup>c</sup>							
Age at infection (yr)							
13–24	54.200	1.2	52.900-55.400	22.805	42.1	1.2	41.1–43.1
25–34	135,500	0.6	133,800–137,200	95,173	70.3	0.6	69.4–71.1
35–44	119,600	0.6	118.300–120.900	101,218	84.6	0.6	83.7–85.6
45–54	178,200	0.4	176,700–179,600	164,791	92.5	0.4	91.7–93.3
≥55	136,200	0.6	134,500–137,900	130,245	95.6	0.6	94.4–96.8
Total <sup>c</sup>	623,600	1.0	611,700–635,600	514,232	82.5	1.0	80.9-84.1

Table 12. Estimated HIV prevalence among men who have sex with men, by year, race/ethnicity, and age, 2014–2018— United States (cont)

		iving with diag		Men	living with dia	gnosed HIV infe	ction
	No.	RSE (%)	95% CI	No. <sup>a</sup>	%	RSE (%)	95% CI
				2016			
Black/African American							
Age at infection (yr)							
13–24	26,500	1.9	25,500-27,400	12,539	47.4	1.9	45.7-49.2
25–34	64,300	1.0	63,100-65,500	47,256	73.5	1.0	72.1-74.9
35–44	37,200	1.0	36,400-37,900	32,246	86.7	1.0	85.0-88.5
45–54	43,700	0.9	42,900-44,500	40,918	93.6	0.9	91.9-95.3
≥55	32,000	1.3	31,100-32,800	30,637	95.8	1.3	93.3-98.4
Subtotal	203,700	1.9	196,000–211,300	163,596	80.3	1.9	77.4-83.4
Hispanic/Latino <sup>b</sup>							
Age at infection (yr)							
13–24	13,000	3.0	12,300-13,800	5,308	40.7	3.0	38.4-43.3
25-34	41,000	1.4	39,900-42,200	26,532	64.7	1.4	62.9-66.5
35–44	38,500	1.2	37,600-39,400	31,503	81.9	1.2	80.1-83.8
45-54	41,700	0.9	41,000-42,500	37,924	90.9	0.9	89.2-92.6
≥55	24,700	1.4	24,000-25,400	23,407	94.7	1.4	92.2-97.4
Subtotal	159,000	2.2	152,100-165,800	124,674	78.4	2.2	75.2-81.9
White							
Age at infection (yr)							
13–24	6,500	3.8	6,000-7,000	2,925	45.1	3.9	41.9-48.8
25-34	29,200	1.5	28,300-30,000	20,273	69.5	1.5	67.5-71.6
35–44	35,900	1.1	35,100-36,600	30,212	84.2	1.1	82.5-86.0
45–54	78,600	0.6	77,600-79,600	72,819	92.7	0.6	91.5-93.9
≥55	85,900	0.8	84,500-87,300	82,499	96.1	0.8	94.5-97.6
Subtotal	236,000	1.7	228,100–243,800	208,727	88.5	1.7	85.6-91.5
All MSM <sup>c</sup>							
Age at infection (yr)							
13–24	49.300	1.4	47.900-50.700	22.369	45.4	1.4	44.1–46.7
25–34	145,600	0.7	143,600–147,500	101,995	70.1	0.7	69.1–71.0
35–44	121.300	0.6	119.800–122.700	102,220	84.3	0.6	83.3–85.3
45–54	176,100	0.4	174,500–177,600	162,807	92.5	0.4	91.7–93.3
≥55	151,000	0.6	149,200–152,800	144,607	95.8	0.6	94.7–96.9
Total <sup>c</sup>	643,200	1.1	629,800-656,600	533,998	83.0	1.1	81.3-84.8

Table 12. Estimated HIV prevalence among men who have sex with men, by year, race/ethnicity, and age, 2014–2018— United States (cont)

		iving with diag		Men	living with dia	gnosed HIV infe	ction
	No.	RSE (%)	95% CI	No. <sup>a</sup>	%	RSE (%)	95% CI
				2017			
Black/African American							
Age at infection (yr)							
13–24	23,500	2.3	22,500-24,600	12,012	51.1	2.3	48.9-53.5
25–34	69,600	1.1	68,200-71,100	50,735	72.9	1.1	71.4–74.4
35-44	39,400	1.1	38,500-40,200	33,996	86.3	1.1	84.5-88.2
45–54	42,900	1.0	42,100-43,700	40,171	93.6	1.0	91.8-95.4
≥55	35,700	1.3	34,800-36,600	34,217	96.0	1.3	93.6-98.5
Subtotal	211,100	2.1	202,500-219,800	171,131	81.1	2.1	77.9-84.5
Hispanic/Latino <sup>b</sup>							
Age at infection (yr)							
13–24	11,800	3.7	10,900-12,600	5,248	44.5	3.7	41.6-48.0
25–34	43,600	1.6	42,200-44,900	28,242	64.8	1.6	62.9-66.9
35-44	40,200	1.3	39,200-41,300	32,750	81.4	1.3	79.4-83.5
45–54	42,400	1.0	41,600-43,300	38,615	91.0	1.0	89.2-92.8
≥55	28,000	1.4	27,300-28,800	26,520	94.7	1.4	92.2-97.2
Subtotal	166,100	2.4	158,200–173,900	131,374	79.1	2.4	75.5-83.0
White							
Age at infection (yr)							
13–24	5,800	4.6	5,300-6,300	2,964	51.4	4.6	47.1-56.4
25–34	29,700	1.7	28,700-30,700	20,712	69.7	1.7	67.5-72.1
35-44	35,900	1.2	35,100-36,700	30,123	83.9	1.2	82.0-85.9
45–54	73,500	0.7	72,400-74,500	68,058	92.7	0.7	91.4-93.9
≥55	94,200	0.8	92,700-95,600	90,564	96.2	0.8	94.7-97.7
Subtotal	239,000	1.8	230,400–247,600	212,420	88.9	1.8	85.8-92.2
All MSM <sup>c</sup>							
Age at infection (yr)							
13–24	43.800	1.7	42.300-45.300	21.673	49.5	1.7	47.9–51.2
25–34	154,500	0.8	152,200–156,700	108,014	69.9	0.8	68.9–71.0
35–44	125,500	0.7	123.900–127.200	105,291	83.9	0.7	82.8–85.0
45–54	170,800	0.5	169,200–172,300	157,868	92.5	0.5	91.6–93.3
≥55	167,300	0.6	165,300–169,200	160,326	95.9	0.6	94.8–97.0
Total <sup>c</sup>	661,800	1.2	646,600-676,900	553,173	83.6	1.2	81.7–85.5

Table 12. Estimated HIV prevalence among men who have sex with men, by year, race/ethnicity, and age, 2014–2018— United States (cont)

		iving with diag		Men living with diagnosed HIV infection				
	No.	RSE (%)	95% CI	No. <sup>a</sup>	%	RSE (%)	95% CI	
				2018				
Black/African American								
Age at infection (yr)								
13–24	20,700	2.8	19,500-21,800	11,522	55.8 <sup>d</sup>	2.9	52.8-59.1	
25-34	74,300	1.2	72,600-76,000	53,772	72.3	1.2	70.7-74.0	
35-44	42,200	1.2	41,200-43,200	36,247	85.9	1.2	83.9-87.9	
45–54	41,700	1.0	40,800-42,600	39,073	93.7	1.0	91.8-95.7	
≥55	39,700	1.3	38,700-40,700	38,071	95.9	1.3	93.6-98.3	
Subtotal	218,600	2.3	208,700–228,500	178,685	81.7	2.3	78.2-85.6	
Hispanic/Latino <sup>b</sup>								
Age at infection (yr)								
13–24	10,600	4.6	9,600-11,500	5,169	48.9 <sup>d</sup>	4.6	44.8-53.7	
25–34	45,800	1.8	44,200-47,400	29,838	65.2	1.8	63.0-67.5	
35-44	42,200	1.4	41,000-43,300	34,094	80.9	1.4	78.7-83.2	
45–54	42,900	1.1	41,900-43,800	38,988	90.9	1.1	89.0-92.9	
≥55	31,600	1.3	30,800-32,500	29,934	94.6	1.3	92.2-97.1	
Subtotal	173,000	2.7	163,900–182,100	138,023	79.8	2.7	75.8-84.2	
White								
Age at infection (yr)								
13–24	5,000	5.7	4,400-5,600	2,886	57.8 <sup>d</sup>	5.8	52.0-65.1	
25–34	30,200	1.8	29,100-31,300	21,307	70.6	1.8	68.2-73.3	
35-44	36,100	1.3	35,100-37,000	30,142	83.6	1.3	81.5-85.8	
45-54	67,800	0.8	66,800-68,900	62,802	92.6	0.8	91.2-94.0	
≥55	102,700	0.8	101,200-104,200	98,819	96.2	0.8	94.8-97.7	
Subtotal	241,800	2.0	232,300–251,200	215,956	89.3	2.0	86.0-92.9	
All MSM <sup>c</sup>								
Age at infection (yr)								
13–24	38,500	2.2	36,800-40,100	20,873	54.3 <sup>d</sup>	2.2	52.0-56.7	
25–34	162,100	0.8	159,400–164,700	113,483	70.0	0.8	68.9–71.2	
35–44	130,700	0.7	128,800–132,500	109,109	83.5 <sup>d</sup>	0.7	82.3–84.7	
45–54	164,100	0.5	162,400–165,800	151,648	92.4	0.5	91.5–93.4	
≥55	184,500	0.6	182,400–186,500	176,821	95.8	0.6	94.8–96.9	
Total <sup>c</sup>	679,800	1.3	662,700-696,900	571,934	84.1	1.3	82.1–86.3	

Note. Estimates for the year 2018 data are preliminary and based on deaths reported to CDC through December 2019. Estimates derived by using HIV surveillance and CD4 data for persons aged ≥ 13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤1,000 to reflect model uncertainty. Data by transmission category have been statistically adjusted to account for missing risk-factor information.

<sup>&</sup>lt;sup>a</sup> Reported to the National HIV Surveillance System.

b Hispanics/Latinos can be of any race.

<sup>&</sup>lt;sup>C</sup> Includes data for all races/ethnicities.

 $<sup>^{</sup>m d}$  Indicates that difference from 2014 estimate was deemed statistically significant (P < .05).

Table 13. Estimated HIV prevalence among persons aged ≥13 years, by year and area of residence, 2014–2018—United States and Puerto Rico

-	Pers	ons living wit	h diagnosed or undiag	gnosed HIV i	nfection		s living with	diagnosed HIV	infection
	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI	No. <sup>b</sup>	%	RSE (%)	95% CI
					2014				
Alabama <sup>c</sup>	14,600	6.0	12,900-16,300	360.2	317.9-402.4	12,082	82.6	6.1	74.0-93.6
Alaska <sub>.</sub>	750	24.3	390–1,100	124.5	65.2-183.9	615	82.4	31.5	55.8–100
Arizona <sup>d</sup> ˌ	17,400	5.1	15,600–19,100	312.2	280.7-343.6	14,127	81.3	5.2	73.8–90.4
Arkansas <sup>d</sup>	6,300	8.9	5,200-7,400	255.2	210.7–299.7	4,950	78.9	9.2	67.2–95.5
California	136,900	1.9	132,000–141,900	427.0	411.5–442.5	116,837	85.3	1.9	82.3-88.5
Colorado	13,200	5.4	11,800–14,600	297.6	266.0-329.3	10,660	80.5	5.5	72.8–90.1
Connecticut <sup>d</sup>	11,200	6.4	9,800–12,600	366.5	320.2–412.8	9,815	87.5	6.5	77.7–100
Delaware	3,600	11.9	2,800–4,400	457.8	351.1–564.5	3,022	83.9	12.6	68.1–100
District of Columbia	15,100	5.7	13,400–16,800	2,634.9	2,338.2–2,931.6	14,118	93.5	5.8	84.1–100
Florida	117,400	2.0	112,700–122,200	691.4	663.6–719.2	99,088	84.4	2.1	81.1–87.9
Georgia	58,100	2.8	54,900–61,400	701.4	662.5-740.4	46,696	80.3	2.8	76.1–85.0
Hawaij	2,600	13.4	1,900–3,200	214.9	158.5–271.3	2,425	95.0	14.4	75.3–100
ldaho <sup>d</sup>	1,300	20.6	750–1,800	95.2	56.7–133.7	968	77.0	24.7	54.8–100
Illinois	37,700	3.6	35,100–40,400	350.8	326.0–375.6	32,928	87.2	3.6	81.5–93.9
Indiana	12,200	6.4	10,700–13,800	223.9	195.8–252.1	9,911	81.0	6.5	71.9–92.6
lowa	2,900	12.3	2,200–3,700	113.9	86.4–141.4	2,310	78.5	13.1	63.2–100
Kansas <sup>d</sup> ,	3,300	12.4	2,500–4,100	139.4	105.6–173.2	2,799	84.4	13.1	68.0–100
Kentucky <sup>d</sup>	7,900	7.7	6,700–9,000	213.3	181.1–245.5	6,394	81.3	7.9	70.7–95.8
Louisiana	22,600	4.9	20,500–24,800	589.4	533.2–645.6	18,360	81.1	4.9	74.1–89.7
Maine	1,700	16.0	1,200–2,300	149.8	102.8–196.9	1,385	80.4	17.8	61.2–100
Maryland	35,400	3.7	32,800–38,000	709.2	657.5–760.9	30,428	85.9	3.7	80.1–92.7
Massachusetts	21,300	4.5	19,400–23,200	368.8	336.1–401.4	19,020	89.1	4.6	81.9–97.8
Michigan	17,200	5.6	15,300–19,100	205.9	183.3–228.6	14,364	83.3	5.7	75.1–93.6
Minnesota	9,100	6.8	7,900–10,300	200.1	173.5–226.8	7,347	81.1	6.9	71.6–93.6
Mississippi	10,500	7.3	9,000–12,000	425.8	364.5–487.2	8,636	82.2	7.5	71.9–96.0
Missouri	13,400	5.8	11,900–15,000	265.5	235.0–295.9	11,303	84.2	5.9	75.5–95.1
Montana	690	24.2	360–1,000	80.5	42.3–118.7	540	*78.1	*31.2	*53.0-*100
Nebraska	2,300	14.0	1,700–2,900	148.9	107.9–189.8	1,913	83.6	15.2	65.5–100
Nevada <sup>d</sup>	10,900	6.4	9,500–12,300	464.6	406.4–522.8	7,910	72.7	6.5	64.6–83.1
New Hampshire	1,300	17.2	880–1,800	116.1	76.9–155.4	1,171	87.8	19.5	65.6–100
New Jersey <sup>d</sup>	37,200	4.0	34,300–40,200	499.8	460.7–538.8	33,696	90.5	4.0	83.9–98.1
New Mexico	3,800	10.9	3,000–4,600	217.7	171.3–264.2	3,041	80.9	11.4	66.6–100
New York	133,300	1.9	128,400–138,200	800.5	771.1–829.9	120,324	90.3	1.9	87.1–93.7
North Carolina	33,500	3.7	31,000–35,900	403.3	374.0–432.7	27,775	83.0	3.7	77.3–89.5
North Dakota	*480	*36.7	*130–*830	*78.6	*22.0–*135.3	288			
Ohio	24,200	4.5	22,100–26,300	248.8	226.8–270.7	19,358	80.0	4.5	73.5–87.7
Oklahoma <sup>c</sup>	6,700	8.7	5,600–7,800	210.3	174.4–246.2	5,451	81.4	9.0	69.5–98.1
Oregon	7,600	7.4	6,500–8,700	226.9	193.8–260.0	6,113	80.5	7.6	70.2–94.2
Pennsylvania <sup>d</sup>	37,900	3.7	35,100–40,600	348.0	322.6–373.5	32,430	85.6	3.7	79.8–92.4
Puerto Rico <sup>d</sup>	17,000	6.3	14,900–19,100	565.7	495.9–635.5	15,924	93.4	6.4	83.2–100
Rhode Island	2,800	13.0	2,100–3,500	303.4	226.1–380.8	2,269	82.4	13.9	65.7–100
South Carolina <sup>c</sup>	18,900	5.1	17,000–20,800	467.8	420.7–514.9	15,476	81.8	5.2	74.3–90.9
South Dakota	630	26.3	310–960	91.0	44.0–138.1	491	*77.7	*36.0	*51.2-*100
Tennessee	18,700	5.1	16,900–20,600	342.4	308.1–376.6	15,725	83.9	5.2	76.3–93.3
Texas	97,400	2.2	93,100–101,700	446.7	427.0–466.4	77,824	79.9	2.3	76.5–83.6
Utah	3,100	11.9	2,300–3,800	134.9	103.3–166.4	2,519	82.2	12.6	66.6–100
Vermont <sup>d</sup>	800	27.5	370–1,200	147.0	67.7–226.2	621	*78.1	*38.8	*50.7-*100
Virginia .	24,000	4.3	22,000–26,100	344.7	315.3–374.0	20,532	85.5	4.4	78.8–93.4
Washington	14,300	5.6	12,700–15,900	242.6	216.0–269.1	11,823	82.7	5.7	74.5–92.8
West Virginia	2,100	15.5	1,400–2,700	131.3	91.3–171.4	1,713	82.6	17.1	63.3–100
Wisconsin	6,700	8.2	5,700–7,800	139.4	117.1–161.8	5,682	84.4	8.4	72.8–100
Wyoming	*360	*36.7	*100–*620	*75.0	*20.9–*129.1	254			

Table 13. Estimated HIV prevalence among persons aged ≥13 years, by year and area of residence, 2014–2018—United States and Puerto Rico *(cont)* 

	Pers	ons living wit	h diagnosed or undia	gnosed HIV i	nfection	Person	s living with	diagnosed HIV	infection
	No.	RSE (%)	95% CI	Ratea	95% CI	No. <sup>b</sup>	%	RSE (%)	95% CI
					2015				
Alabama <sup>c</sup>	14,900	6.5	13,000-16,900	367.2	320.4-414.1	12,007	80.3	6.6	71.2–92.1
Alaska	770	26.3	370–1,200	127.7	61.9-193.6	641	*83.5	*35.8	*55.1-*100
Arizona <sup>d</sup>	17,900	5.6	15,900-19,900	316.1	281.2-350.9	14,724	82.2	5.7	74.1–92.4
Arkansas <sup>d</sup>	6,500	9.8	5,200–7,700	261.2	211.1–311.4	5,099	79.0	10.2	66.3–97.8
California	140,300	2.0	134,800–145,800	433.1	416.0–450.1	120,592	86.0	2.0	82.7–89.5
Colorado	13,500	5.9	12,000–15,100	298.1	263.5–332.6	11,049	81.6	6.0	73.1–92.3
Connecticut <sup>d</sup>	11,300	7.0	9.800–12.900	369.4	318.9–420.0	9,969	88.1	7.1	77.5–100
Delaware	3,600	12.9	2,700–4,600	457.6	341.7–573.5	3,049	83.8	13.8	66.8–100
District of Columbia	15,100	6.2	13,300–17,000	2,601.4	2,287.0–2,915.8	14,171	93.6	6.3	83.5–100
Florida	119,700	2.2	114,500–125,000	691.9	661.7–722.1	102,255	85.4	2.2	81.8–89.3
Georgia	59,900	3.1	56,300–63,600	713.8	670.6–757.0	48,644	81.2	3.1	76.5–86.4
Hawaii	2,600	14.4	1,900–3,400	219.9	157.7–282.2	2,484	94.6	15.7	73.7–100
ldaho <sup>d</sup>	1,300	22.5	710–1,800	94.4	52.8–136.0	1,002	79.2	27.9	55.0–100
Illinois	38,600	3.9	35,700–41,600	359.1	331.6–386.7	33,660	87.1	3.9	80.9–94.4
Indiana		7.0		233.3	201.2–265.3		81.2	7.2	71.4–94.1
	12,800	13.4	11,000–14,600	118.2		10,384 2,384	77.7	14.5	
lowa Kansas <sup>d</sup>	3,100		2,300–3,900		87.0–149.3				61.5–100
	3,400	13.5	2,500–4,300	143.5	105.4–181.6	2,769	80.8	14.6	63.8–100
Kentucky <sup>d</sup>	8,200	8.4	6,800–9,500	220.6	184.2–257.0	6,541	80.1	8.6	68.8–96.0
Louisiana	23,300	5.3	20,900–25,700	603.2	540.5–666.0	19,058	81.9	5.4	74.2–91.4
Maine	1,800	17.2	1,200–2,400	154.5	102.2–206.7	1,409	79.4	19.5	59.3–100
Maryland	35,900	4.0	33,100–38,700	714.8	658.5–771.2	32,017	89.2	4.0	82.7–96.8
Massachusetts	21,700	4.9	19,600–23,800	373.0	337.2–408.7	19,389	89.3	4.9	81.5–98.8
Michigan	17,700	6.1	15,600–19,800	211.0	185.7–236.2	14,200	80.3	6.2	71.7–91.2
Minnesota	9,200	7.4	7,900–10,600	203.0	173.7–232.4	7,601	82.2	7.5	71.8–96.1
Mississippi	10,700	8.1	9,000–12,400	433.9	365.0–502.7	8,922	83.3	8.3	71.9–99.0
Missouri	13,700	6.3	12,000–15,400	269.7	236.3–303.1	11,660	85.2	6.4	75.8–97.2
Montana	690	26.2	340–1,000	80.0	38.9–121.1	566	*81.6	*35.6	*53.9–*100
Nebraska	2,400	15.2	1,700–3,100	152.1	106.7–197.6	1,971	83.7	16.8	64.4–100
Nevada <sup>d</sup>	11,300	7.0	9,800-12,900	474.7	409.5-539.9	8,396	74.1	7.1	65.2-85.9
New Hampshire	1,300	19.0	850–1,900	116.9	73.3–160.4	1,124	83.4	22.1	60.7–100
New Jersey <sup>d</sup>	37,500	4.3	34,300–40,700	502.5	459.8-545.3	33,782	90.0	4.4	83.0-98.4
New Mexico	3,800	11.8	3,000-4,700	221.8	170.4–273.1	3,171	82.6	12.5	67.1–100
New York	134,500	2.0	129,200-139,800	807.0	775.0-838.9	121,253	90.2	2.0	86.7-93.9
North Carolina	34,100	4.0	31,400-36,800	405.8	373.8-437.8	28,729	84.3	4.0	78.1–91.5
North Dakota	*500	*40.4	*100-*900	*80.2	*16.6-*143.9	324			
Ohio	24,900	4.9	22,500-27,300	255.6	231.1-280.1	20,089	80.6	4.9	73.5-89.1
Oklahoma <sup>c</sup>	6,900	9.5	5,600-8,100	213.8	173.9-253.7	5,634	82.1	9.9	69.2-100
Oregon	7,700	8.1	6,500-8,900	227.0	190.8-263.2	6,487	84.1	8.3	72.6-100
Pennsylvania <sup>d</sup>	38,400	4.1	35,300-41,500	352.8	324.1-381.5	33,004	86.0	4.2	79.5–93.6
Puerto Rico <sup>d</sup>	17,100	6.8	14,800–19,400	573.8	497.4-650.2	15,997	93.7	6.9	82.7-100
Rhode Island	2,800	14.0	2,000–3,600	308.4	223.9-392.8	2,293	81.9	15.1	64.3-100
South Carolina <sup>c</sup>	19,400	5.6	17,200–21,500	470.9	418.9-522.9	15,807	81.7	5.7	73.6-91.8
South Dakota	670	28.8	290–1,000	95.8	41.6–150.0	515	*77.0	*42.5	*49.2–*100
Tennessee	19,100	5.5	17,000–21,100	345.4	307.9–382.9	16,185	84.9	5.6	76.6–95.3
Texas	100,600	2.4	95,700–105,400	452.0	430.4–473.7	81,224	80.8	2.5	77.1–84.8
Utah	3,200	12.9	2,400–4,000	136.3	101.9–170.7	2,601	82.5	13.8	65.8–100
Vermont <sup>d</sup>	*800	*30.2	*330–*1300	*147.6	*60.2–*234.9	627	*78.5	*46.5	*49.3–*100
Virginia	24,600	4.7	22,400–26,900	350.9	318.5–383.3	20,973	85.1	40.5	77.9–93.8
Washington	14,600	6.1	12,900–16,400	243.8	214.8–272.9	12,232	83.7	6.2	74.8–95.0
							79.2		59.1–100
West Virginia	2,100	17.3	1,400–2,800	135.0	89.3–180.8	1,681		19.5	
Wisconsin	6,900	8.9	5,700–8,100	142.1	117.4–166.8	5,763	83.8	9.1	71.4–100
Wyoming	*380	*39.3	*90–*670	78.6	17.9–139.2	277			

Table 13. Estimated HIV prevalence among persons aged ≥13 years, by year and area of residence, 2014–2018—United States and Puerto Rico *(cont)* 

_	Pers	ons living wit	h diagnosed or undiag	Persons living with diagnosed HIV infection					
_	No.	RSE (%)	95% CI	Ratea	95% CI	No.b	%	RSE (%)	95% CI
					2016				
Alabama <sup>c</sup>	15,300	7.1	13,200-17,500	375.7	323.6-427.9	12,413	80.9	7.2	71.1–94.
Alaska	790	28.3	350–1,200	131.3	58.4-204.2	677	85.4	41.0	54.9-10
Arizona <sup>d</sup>	18,400	6.2	16,200–20,700	319.3	280.6-357.9	15,212	82.6	6.3	73.6-93.
Arkansas <sup>d</sup>	6,700	10.8	5,300-8,100	268.2	211.6-324.8	5,349	80.3	11.3	66.3–10
California	143,700	2.2	137,600-149,900	440.0	421.2-458.8	124,461	86.6	2.2	83.1-90.
Colorado	14,000	6.5	12,200–15,800	302.1	263.8–340.4	11,824	84.5	6.6	75.0–96.
Connecticut <sup>d</sup>	11,400	7.6	9,700–13,000	371.0	315.8–426.1	9,952	87.7	7.8	76.3–10
Delaware	3,700	14.0	2,700–4,700	457.3	331.5–583.1	3,087	84.0	15.2	65.9–10
District of Columbia	15,100	6.6	13,200–17,100	2563.6	2,229.9–2,897.3	14,267	94.2	6.8	83.3–10
Florida	121,900	2.4	116,100–127,600	690.1	657.3–722.9	104,701	85.9	2.4	82.0–90.
Georgia	61,700	3.4	57,600–65,800	724.2	676.2–772.1	50,372	81.7	3.4	76.6–87.
Hawaii	2,600	15.6	1,800–3,500	220.4	152.8–288.1	2,468	93.3	17.3	71.4–10
ldaho <sup>d</sup>	1,300	24.7	670–1,900	94.3	48.7–140.0	1,059	82.0	32.2	55.3–10
Illinois	39,500	4.3	36,200–42,800	367.3	336.7–398.0	34,218	86.7	4.3	80.0–94.0
Indiana	13,100	7.7	11,100–15,100	237.8	201.7–273.9	10,689	81.6	7.9	70.8–96.2
lowa	3,200	14.8	2,300–4,100	122.2	86.8–157.6	2,524	79.3	16.2	61.5–10
Kansas <sup>d</sup>	3,600	14.0		148.6		2,887	81.2	16.3	62.8–10
		9.3	2,500–4,600		105.2–192.1				
Kentucky <sup>d</sup>	8,400		6,900–9,900	226.7	185.6–267.9	6,771	80.4	9.6	68.1–98.3
Louisiana	23,900	5.8	21,200–26,600	617.3	546.9–687.7	19,770	82.7	5.9	74.3–93.4
Maine	1,800	18.8	1,100–2,500	157.0	99.0–214.9	1,504	83.1	21.8	60.7–10
Maryland	36,300	4.3	33,200–39,400	720.2	658.8–781.7	31,679	87.3	4.4	80.4–95.4
Massachusetts	22,100	5.3	19,800–24,400	376.7	337.6–415.9	19,722	89.4	5.4	81.0–99.
Michigan	18,100	6.7	15,700–20,400	215.0	186.9–243.1	15,045	83.2	6.8	73.6–95.
Minnesota	9,400	8.0	7,900–10,900	205.2	173.0–237.4	7,894	83.8	8.2	72.5–99.4
Mississippi	10,900	9.0	9,000–12,800	440.1	362.6–517.5	9,067	83.3	9.3	70.9–10
Missouri	13,900	6.9	12,100–15,800	273.6	236.8–310.4	11,902	85.4	7.0	75.3–98.
Montana	700	28.6	310–1,100	80.3	35.3–125.3	*577	*82.1	*41.7	*52.6-*10
Nebraska	2,400	16.7	1,600–3,200	155.7	104.8–206.7	2,032	83.6	18.7	63.0–10
Nevada <sup>d</sup>	11,800	7.7	10,000–13,600	484.3	410.7–557.9	8,859	75.2	7.9	65.3–88.
New Hampshire	1,400	20.6	820–1,900	118.5	70.5–166.4	1,142	83.0	24.7	59.1–10
New Jersey <sup>d</sup>	37,800	4.7	34,300–41,300	505.8	458.9–552.8	33,766	89.3	4.8	81.7–98.4
New Mexico	4,000	12.8	3,000-5,000	229.8	172.0-287.5	3,260	81.6	13.7	65.2-10
New York	135,600	2.2	129,800-141,400	813.4	778.6-848.2	122,812	90.6	2.2	86.9-94.0
North Carolina	34,800	4.4	31,900-37,800	408.9	374.0-443.8	29,616	85.0	4.4	78.3-92.9
North Dakota	*580	*43.9	*80-*1,100	*93.5	*12.9-*174.2	364			
Ohio	25,500	5.3	22,800-28,100	260.4	233.1-287.7	20,959	82.3	5.4	74.5-92.0
Oklahoma <sup>c</sup>	7,000	10.4	5,600-8,400	217.1	172.9-261.3	5,808	82.9	10.8	68.9-10
Oregon	7,900	8.9	6,500-9,200	226.9	187.3-266.5	6,642	84.4	9.2	71.9–10
Pennsylvania <sup>d</sup>	38,900	4.6	35,400-42,500	357.6	325.1-390.1	35,038	90.0	4.7	82.5-99.0
Puerto Rico <sup>d</sup>	17,100	7.3	14,700-19,600	583.9	500.0-667.8	15,977	93.2	7.5	81.5-10
Rhode Island	2,800	15.2	2,000–3,700	311.8	219.1–404.5	2,367	83.4	16.6	64.3–100
South Carolina <sup>c</sup>	19,800	6.2	17,400–22,200	474.4	416.5–532.4	16,221	82.0	6.3	73.0–93.
South Dakota	*710	*31.8	*260–*1,100	*100	*37.6–*162.5	527			
Tennessee	19,400	6.0	17,100–21,700	348.8	307.6–390.0	16,065	82.7	6.1	73.9–93.
Texas	103,700	2.7	98,300–109,200	458.1	434.1–482.1	84,071	81.0	2.7	77.0–85.
Utah	3,300	14.0	2,400–4,200	138.8	100.6–177.0	2,672	81.2	15.2	63.6–10
Vermont <sup>d</sup>	*790	*32.9	*280-*1,300	*146.3	*51.8–*240.8	642			
Virginia	25,200	5.1	22,600–27,700	356.0	320.1–391.8	21,427	85.2	5.2	77.4–94.
Washington	14,900	6.6	12,900–27,700	243.3	211.6–275.0	12,568	84.5	6.8	74.8–94.
West Virginia	2,200	19.1	1,300–3,000	138.1	86.3–189.9	1,730	80.1	22.3	58.3–10
Wisconsin	7,000	9.7 *43.0	5,700–8,400 *60–*740	144.9 *82.8	117.4–172.5 *12.9–*152.8	5,900 301	83.8	10.1	70.4–10

Table 13. Estimated HIV prevalence among persons aged ≥13 years, by year and area of residence, 2014–2018—United States and Puerto Rico *(cont)* 

<u>-</u>	Pers	ons living wit	h diagnosed or undiag	gnosed HIV i	nfection	Person	s living with	diagnosed HIV	infection
	No.	RSE (%)	95% CI	Ratea	95% CI	No.b	%	RSE (%)	95% CI
					2017				
Alabama <sup>c</sup>	15,700	7.7	13,300-18,100	383.8	325.6-442.0	12,940	82.3	7.9	71.5–97.0
Alaska	*810	*30.5	*320-*1,300	*134.0	*53.7-*214.3	*703	*87.0	*47.7	*54.4-*100
Arizona <sup>d</sup>	19,000	6.8	16,400–21,500	322.7	279.5-365.9	15,779	83.2	7.0	73.4-96.1
Arkansas <sup>d</sup>	6,800	11.9	5,200-8,400	273.8	210.0-337.6	5,561	81.4	12.6	66.0-100
California	146,700	2.4	139,900–153,500	446.0	425.3-466.8	127,569	87.0	2.4	83.1–91.2
Colorado	14,400	7.1	12,400-16,300	304.6	262.2-347.1	12,137	84.6	7.3	74.2-98.3
Connecticut <sup>d</sup>	11,400	8.3	9,500–13,200	372.1	311.9–432.4	10,157	89.2	8.5	76.7–100
Delaware	3,800	15.4	2,600–4,900	462.5	323.1–601.9	3,233	86.1	16.9	66.2–100
District of Columbia	15,100	7.1	13,000–17,300	2,537.8	2,181.7–2,893.8	14,189	93.7	7.3	82.2–100
Florida	124,100	2.6	117,700–130,500	690.6	654.8–726.3	107,258	86.4	2.6	82.2–91.1
Georgia	63,400	3.7	58,800–68,000	734.8	681.4–788.2	52,338	82.6	3.7	77.0–89.0
Hawaii	2,700	17.2	1,800–3,600	227.3	150.8–303.9	2,470	90.7	19.4	67.8–100
Idaho <sup>d</sup>	1,300	27.6	600–2,000	93.3	42.7–143.9	*1,113	*85.1	*39.2	*55.2-*100
Illinois	40,300	4.6	36,700–44,000	375.9	341.8–410.1	34,703	86.0	4.7	78.8–94.6
Indiana	13,500	8.6	11,200–15,700	242.9	202.1–283.7	10,991	81.7	8.8	69.9–98.2
lowa	3,300	16.3	2,200–4,300	125.1	85.0–165.2	2,647	80.9	18.2	61.2–100
Kansas <sup>d</sup>	3,600	16.5		151.4		2,047	81.7		61.7–100
	,	10.5	2,500–4,800		102.3–200.4		81.3	18.5	
Kentucky <sup>d</sup> Louisiana	8,600		6,900–10,400	231.8	185.3–278.3	7,028		10.7	67.7–100
	24,600	6.4	21,500–27,700	635.2	555.4–714.9	20,229	82.3	6.5	73.1–94.1
Maine	1,800	20.6	1,100–2,500	156.7	93.3–220.0	1,545	85.2	24.7	60.6–100
Maryland	36,500	4.7	33,100–39,900	721.0	654.2–787.8	32,175	88.2	4.8	80.7–97.2
Massachusetts	22,400	5.8	19,900–24,900	379.9	337.0–422.8	20,106	89.7	5.8	80.6–100
Michigan	18,500	7.3	15,900–21,200	219.3	187.9–250.6	15,475	83.6	7.5	73.1–97.6
Minnesota	9,600	8.7	7,900–11,200	206.7	171.3–242.2	8,172	85.3	9.0	72.9–100
Mississippi	11,100	10.0	8,900–13,300	448.4	360.4–536.4	9,235	83.1	10.4	69.4–100
Missouri	14,300	7.5	12,200–16,400	278.6	237.6–319.6	12,210	85.6	7.7	74.7–100
Montana	*740	*31.2	*290–*1,200	*83.1	*32.2–*134.0	*613	*83.1	*50.0	*51.6–*100
Nebraska	2,500	18.3	1,600–3,500	161.8	103.6–220.1	2,100	82.6	21.1	60.7–100
Nevada <sup>d</sup>	12,200	8.6	10,200-14,300	493.5	409.8–577.2	9,503	77.6	8.9	66.4–93.5
New Hampshire	1,400	23.0	770–2,000	119.7	65.7–173.8	1,168	83.4	28.9	57.4–100
New Jersey <sup>d</sup>	38,200	5.2	34,300-42,100	509.3	457.5-561.2	34,212	89.6	5.2	81.3-99.7
New Mexico	4,100	14.0	3,000-5,200	235.5	170.9-300.1	3,388	82.5	15.1	64.7-100
New York	136,200	2.4	129,900-142,500	818.7	780.7-856.6	123,702	90.8	2.4	86.8-95.2
North Carolina	35,500	4.7	32,200-38,800	410.9	372.7-449.1	30,572	86.2	4.8	78.9–95.0
North Dakota	*630	*48.8	*30-*1,200	*101.0	*4.4-*197.6	399			
Ohio	26,100	5.9	23,100-29,100	265.6	235.0-296.1	21,696	83.3	6.0	74.7-94.1
Oklahoma <sup>c</sup>	7,200	11.3	5,600-8,800	222.6	173.1-272.2	5,983	83.0	11.9	67.9-100
Oregon	8,000	9.8	6,400-9,500	226.4	183.0-269.8	6,826	85.7	10.2	71.9–100
Pennsylvania <sup>d</sup>	39,200	5.1	35,300-43,200	359.7	323.4-396.0	34,916	89.0	5.2	80.9-99.0
Puerto Rico <sup>d</sup>	17,100	7.9	14,400–19,800	593.0	500.7-685.2	15,706	91.8	8.1	79.5–100
Rhode Island	2,900	16.4	2,000–3,800	317.0	215.0–419.0	2,501	86.6	18.3	65.5–100
South Carolina <sup>c</sup>	20,100	6.9	17,400–22,900	475.9	411.5–540.3	16,668	82.8	7.0	72.9–95.7
South Dakota	*730	*35.4	*220–*1,200	*101.9	*31.0–*172.7	564			
Tennessee	19,800	6.5	17,200–22,300	351.2	306.1–396.3	16,491	83.4	6.7	73.9–95.7
Texas	106,700	2.9	100,600–112,900	463.9	437.3–490.5	87,465	81.9	2.9	77.5–86.9
Utah	3,400	15.4	2,400–4,400	139.9	97.7–182.1	2,720	80.0	16.9	61.5–100
Vermont <sup>d</sup>	*810	*36.4	*230-*1,400	*149.1	*42.5–*255.6	678			01.0-100
Virginia	25,700	5.6	22,900–28,500	361.1	321.4–400.9	22,199	86.3	 5.7	77.8–97.0
Washington	15,200	7.3	13,000–17,400	243.8	208.9–278.7	13,040	85.9	7.5	75.2–100
West Virginia	2,200	21.1	1,300–3,100	142.5	83.5–201.4	1,779	80.3	25.5	56.8–100
Wisconsin	7,200	10.7	5,700–8,700	147.2	116.3–178.1	6,116	85.1	11.2	70.4–100
Wyoming	*400	*47.0	*30–*770	*83.5	*6.5–*160.4	317			

Table 13. Estimated HIV prevalence among persons aged ≥13 years, by year and area of residence, 2014–2018—United States and Puerto Rico (cont)

_	Pers	ons living wit	h diagnosed or undia	Persons living with diagnosed HIV infection					
	No.	RSE (%)	95% CI	Ratea	95% CI	No. <sup>b</sup>	%	RSE (%)	95% CI
					2018				
Alabama <sup>c</sup>	16,200	8.4	13,500-18,900	394.0	329.1-459.0	13,478	83.2	8.6	71.5–99.7
Alaska	*820	*33.3	*280-*1,400	*136.6	*47.3-*225.9	699			
Arizona <sup>d</sup>	19,600	7.6	16,700–22,500	326.6	278.0-375.3	16,445	84.0	7.8	73.1–98.6
Arkansas <sup>d</sup>	7,000	13.1	5,200-8,800	278.7	206.8-350.5	5,674	81.2	14.1	64.5-100
California	149,500	2.6	141,900–157,200	451.9	428.8-475.0	130,259	87.1	2.6	82.9–91.8
Colorado	14,600	7.8	12,400-16,900	305.0	258.0-351.9	12,604	86.3	8.0	74.8–100
Connecticut <sup>d</sup>	11,400	9.0	9,400-13,400	371.9	306.2-437.5	10,316	90.5	9.3	76.9–100
Delaware	3,800	16.9	2,500–5,000	461.4	308.5–614.3	3,269	86.2	19.0	64.8–100
District of Columbia	15,100	7.7	12,800–17,400	2,515.5	2,136.2–2,894.9	14,067	93.0	7.9	80.8–100
Florida	126,400	2.9	119,300–133,600	691.8	652.7–731.0	109,500	86.6	2.9	82.0–91.8
Georgia	65,200	4.1	59,900–70,400	745.6	685.7–805.6	54,117	83.1	4.1	76.9–90.3
Hawaii	2,700	18.9	1,700–3,800	229.4	144.3–314.5	2,421	88.2	21.9	64.4–100
ldaho <sup>d</sup>	*1,400	*31.7	*510–*2,200	*94.1	*35.6–*152.5	1,156			
Illinois	41,200	5.1	37,100–45,300	384.7	346.3–423.1	35,512	86.2	 5.1	78.3–95.7
Indiana	13,900	9.5	11,300–16,400	248.6	202.3–294.8	11,377	82.1	9.8	69.2–100
lowa	3,400	18.3	2,200–4,600	128.5	82.5–174.6	2,763	81.7	21.0	60.2–100
Kansas <sup>d</sup>	3,700	18.4	2,400–5,100	154.6	98.9–210.3	3,047	82.0	21.0	60.3–100
Kentucky <sup>d</sup>	9,000	11.3	7,000–10,900	239.2	186.0–292.4	7,274	81.2	11.9	66.4–100
Louisiana	25,300	7.1	21,800–28,800	654.4	563.5–745.3	20,739	82.0	7.2	72.0–95.2
Maine	1,800	22.6	1,000–2,700	158.0	88.0–228.0	1,590	86.5	28.1	60.0–100
Maryland	36,800	5.1	33,100–40,500	723.8	650.9–796.7	32,652	88.8	5.2	80.7–98.8
Massachusetts	22,900	6.3	20,100–25,700	385.2	337.6–432.7	20,413	89.2	6.4	79.4–100
Michigan	18,900	8.1	15,900–21,900	223.1	187.9–258.4	15,798	83.6	8.3	72.2–99.3
Minnesota	9,800	9.6	8,000–11,700	209.9	170.2–249.6	8,462	86.3	10.0	72.6–100
Mississippi	11,300	11.2	8,800–13,800	456.9	356.1–557.6	9,355	82.5	11.8	67.6–100
Missouri	14,500	8.3	12,100–16,800	281.9	236.2–327.5	12,529	86.5	8.5	74.4–100
Montana	*750	*34.5	*240-*1,300	*83.7	*27.0–*140.4	641			•••
Nebraska	2,600	20.1	1,500–3,600	161.3	97.8–224.8	2,145	84.0	23.8	60.2–100
Nevada <sup>d</sup>	12,700	9.7	10,300–15,100	501.4	406.2–596.5	10,138	79.7	10.0	67.0–98.4
New Hampshire	1,400	24.9	720–2,100	119.0	60.8–177.2	*1,238	*88.3	*32.8	*59.3-*100
New Jersey <sup>d</sup>	38,500	5.7	34,200-42,800	511.3	454.1-568.5	34,360	89.3	5.8	80.3-100
New Mexico	4,200	15.4	2,900-5,500	239.9	167.3-312.6	3,560	84.7	17.0	65.0-100
New York	136,700	2.6	129,800-143,600	822.7	781.3-864.0	124,555	91.1	2.6	86.8-95.9
North Carolina	36,000	5.2	32,300-39,600	411.4	369.7-453.1	31,514	87.6	5.2	79.5–97.5
North Dakota						438			
Ohio	26,600	6.4	23,200-29,900	270.1	235.9-304.2	22,222	83.6	6.6	74.2-95.7
Oklahoma <sup>c</sup>	7,500	12.5	5,600-9,300	229.2	172.8-285.6	6,194	83.1	13.4	66.7-100
Oregon	8,100	10.8	6,400-9,800	227.0	178.7-275.3	7,006	86.6	11.4	71.4–100
Pennsylvania <sup>d</sup>	39,500	5.7	35,100-44,000	361.8	321.4-402.3	35,559	89.9	5.8	80.9-100
Puerto Rico <sup>d</sup>	17,100	8.5	14,300–20,000	612.4	509.8-715.0	15,596	91.1	8.8	78.0-100
Rhode Island	2,900	17.8	1,900–3,900	318.4	207.4-429.3	2,553	87.8	20.2	65.1–100
South Carolina <sup>c</sup>	*20,600	7.6	*17,500–*23,700	480.8	408.7–552.9	17,222	83.5	7.8	72.6–98.2
South Dakota	*760	*40.4	*160–*1,400	104.9	21.8–188.1	601			
Tennessee	20,000	7.2	17,200–22,900	352.1	302.7–401.6	17,183	85.7	7.3	75.2–99.7
Texas	110,100	3.2	103,200–117,100	471.3	441.5–501.1	91,045	82.7	3.2	77.8–88.2
Utah	3,500	16.9	2,300–4,600	139.7	93.5–186.0	2,897	83.3	19.0	62.6–100
Vermont <sup>d</sup>	*820	*40.1	*170–*1,500	149.9	32.0–267.7	698			
Virginia	26,200	6.2	23,100–29,400	365.9	321.6–410.1	22,819	86.9	6.3	77.6–98.9
Washington	15,500	8.1	13,000–18,000	245.0	206.1–283.9	13,472	86.9	8.3	75.0–30.9
West Virginia					78.6–214.7				*56.4 <del>-</del> *100
	2,300	23.7	1,200–3,300	146.7		*1,872	*82.5	*30.2	
Wisconsin	7,300	11.8	5,600-9,000	148.3	114.1–182.5	6,253	85.9	12.4	69.8–100

Note. Estimates for the year 2018 data are preliminary and based on deaths reported to CDC through December 2019. Estimates derived by using HIV surveillance and CD4 data for persons aged ≥ 13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤1,000 to reflect model uncertainty. Estimates preceded by an asterisk (\*) have a relative standard error >30% and ≤50% and should be used with caution. Estimates with an RSE of >50% are not shown and are replaced by an ellipsis (...).

<sup>&</sup>lt;sup>a</sup> Rates are per 100,000 population.

b Reported to the National HIV Surveillance System.

<sup>&</sup>lt;sup>C</sup> Estimates should be interpreted with caution because of incomplete ascertainment of deaths that occurred during the year 2018.

d Estimates should be interpreted with caution because the jurisdiction does not have laws requiring complete reporting of laboratory data or has incomplete reporting. Areas without laws: Idaho, New Jersey, and Pennsylvania. Areas with incomplete reporting: Arizona, Arkansas, Connecticut (2018 only), Kansas, Kentucky, Nevada (2017 only), Vermont, and Puerto Rico.

Table A1. Estimated HIV incidence among persons aged ≥13 years, by year of infection and area of residence at diagnosis, 2017 and 2018—Ending the HIV Epidemic Initiative Phase I jurisdictions

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2017		
Arizona					
Maricopa County <sup>b</sup>	530	22.8	290–760	14.7	8.1–21.3
California					
Alameda County	*190	*36.1	*60-*320	*13.5	*3.9-*23.1
Los Angeles County	1,500	12.8	1,100-1,900	17.6	13.2–22.1
Orange County	290	29.0	130–460	11.0	4.7–17.2
Riverside County	*280	*30.1	*110–*440	*13.9	*5.7-*22.2
Sacramento County	*230	*32.6	*80–*380	*18.4	*6.6–*30.2
San Bernardino County	*260	*31.0	*100–*420	*14.9	*5.8–*24
San Diego County	480	22.8	260-690	17.1	9.5–24.7
San Francisco County	*180	*37.5	*50–*310	*22.4	*5.9–*38.8
District of Columbia	*210	*31.8	*80–*340	*35.4	*13.3–*57.5
Florida					
Broward County	670	17.7	440–900	40.8	26.6–55.0
Duval County	250	28.7	110–400	32.6	14.2–51.0
Hillsborough County	280	27.1	130–440	24.1	11.3–37.0
Miami-Dade County	1,100	13.6	830–1,400	48.6	35.7–61.6
Orange County	420	22.4	230–600	36.9	20.7–53.1
Palm Beach County	270	27.7	120-420	21.5	9.8-33.2
Pinellas County	*140	*38.7	*30-*250	*16.4	*4.0-*28.9
Georgia					
Cobb County	*180	*37.4	*50-*310	*28.5	*7.6-*49.4
DeKalb County	350	26.8	160–530	55.9	26.5-85.2
Fulton County	560	21.1	330–790	63.8	37.3-90.2
Gwinnett County	*150	*41.4	*30-*260	*19.6	*3.7-*35.6
Illinois					
Cook County	1,000	16.0	690-1,300	22.8	15.7–30.0
Indiana	,		,		
Marion County	*250	*34.9	*80–*420	*31.9	*10.1–*53.7
	200	01.0	00 120	01.0	10.1 00.7
Louisiana East Baton Rouge Parish	*190	*35.0	*60–*330	*52.5	*16 / *00 6
Orleans Parish	*190	*35.8	*60–*320	*55.8	*16.4–*88.6 *16.6–*94.9
	190	33.0	00- 320	55.6	10.0- 94.9
Maryland	*400	*07.4	*50 *040	*05.0	*** *** **
Baltimore City	*180	*37.1	*50-*310	*35.3	*9.6–*61.1
Montgomery County	*110	*47.4	*10–*220	*12.8	*0.9–*24.8
Prince George's County	*200	*35.9	*60–*330	*25.8	*7.6–*44.0
Massachusetts					
Suffolk County	*140	*41.4	*30–*260	*20.2	*3.8–*36.5
Michigan					
Wayne County	310	28.8	130–490	21.3	9.2–33.3
Nevada					
Clark County <sup>b</sup>	540	24.5	280-800	29.9	15.5-44.2

Table A1. Estimated HIV incidence among persons aged ≥13 years, by year of infection and area of residence at diagnosis, 2017 and 2018—Ending the HIV Epidemic Initiative Phase I jurisdictions (cont)

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2017 (cont)		
New Jersey					
Essex County <sup>b</sup>	*330	*30.0	*140*520	*50.1	*20.6-*79.6
Hudson County <sup>b</sup>	*160	*43.4	*20-*300	*28.2	*4.2–*52.2
New York					
Bronx County	390	24.6	200-580	33.3	17.2-49.4
Kings County	500	21.7	290-720	23.4	13.5-33.4
New York County	340	26.2	170-520	23.7	11.5–35.8
Queens County	320	27.1	150-490	16.5	7.7–25.3
North Carolina					
Mecklenburg County	270	27.6	120-420	30.5	14.0-46.9
Ohio					
Cuyahoga County	*130	*46.3	*10*260	*12.7	*1.2-*24.2
Franklin County	*200	*38.3	*50-*350	*18.4	*4.6-*32.2
Hamilton County	*160	*42.7	*30–*290	*23.3	*3.8–*42.8
Pennsylvania					
Philadelphia County	380	22.2	220-550	29.1	16.4–41.8
Puerto Rico					
San Juan Municipio <sup>b</sup>					
Tennessee					
Shelby County	*220	*30.7	*90-*350	*28.5	*11.3–*45.7
Texas					
Bexar County	310	29.5	130-490	19.5	8.2-30.7
Dallas County	790	18.4	510-1,100	37.6	24.0-51.1
Harris County	1,100	15.4	790–1,500	30.2	21.0-39.3
Tarrant County	310	29.8	130-480	18.4	7.7–29.1
Travis County	*210	*35.8	*60–*360	*20.5	*6.1–*34.8
Washington					
King County	*210	*36.5	*60-*370	*11.4	*3.2-*19.6

Table A1. Estimated HIV incidence among persons aged ≥13 years, by year of infection and area of residence at diagnosis, 2017 and 2018—Ending the HIV Epidemic Initiative Phase I jurisdictions (cont)

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2018		
Arizona					
Maricopa County <sup>b</sup>	560	25.9	280–850	15.4	7.6–23.2
California					
Alameda County	*180	*43.5	*30-*330	*12.6	*1.8-*23.4
Los Angeles County	1,400	15.7	950-1,800	16.1	11.1–21.1
Orange County	*270	*35.3	*80-*460	*10.1	*3.1–*17.1
Riverside County	*280	*34.7	*90*470	*14.0	*4.5-*23.6
Sacramento County	*180	*44.0	*20-*330	*13.7	*1.9–*25.6
San Bernardino County	*260	*36.1	*80*450	*14.8	*4.3-*25.3
San Diego County	440	27.6	200-690	15.8	7.2–24.4
San Francisco County	*170	*44.6	*20-*320	*21.5	*2.7-*40.4
District of Columbia	*210	*34.8	*70–*350	*34.8	*11.0–*58.7
Florida					
Broward County	580	21.9	330-830	35.3	20.1–50.4
Duval County	*210	*36.3	*60–*360	*26.9	*7.7–*46.0
Hillsborough County	*280	*31.4	*110–*460	*23.6	*9.0–*38.1
Miami-Dade County	1,100	15.6	790–1,500	48.5	33.6–63.3
Orange County	450	25.0	230–670	38.6	19.6–57.5
Palm Beach County	*240	*33.8	*80–*410	*19.0	*6.4–*31.6
Pinellas County	*140	*44.1	*20–*270	*16.7	*2.2–*31.1
Georgia					
Cobb County					
DeKalb County	*400	*30.0	*160–*640	*63.8	*26.2–*101.3
Fulton County	670	23.2	370–980	75.7	41.3–110.2
Gwinnett County	*150	*49.8	*0–*290	*19.3	*0.4–*38.2
Illinois					
Cook County	910	20.0	550-1,300	20.8	12.6–29.0
Indiana	310	20.0	000 1,000	20.0	12.0 23.0
Marion County	*230	*42.7	*40–*430	29.7	4.8–54.6
•	230	42.1	40- 430	29.1	4.0-54.0
Louisiana	*0.40	*00.7	*=0 *000	+=0.0	*440 *4000
East Baton Rouge Parish	*210	*38.7	*50-*380	*58.0	*14.0-*102.0
Orleans Parish	*180	*42.5	*30–*330	*53.4	*8.9–*97.8
Maryland					
Baltimore City	*210	*36.7	*60–*370	*42.1	*11.8–*72.4
Montgomery County					
Prince George's County	*270	*32.9	*90–*440	*35.2	*12.5–*58.0
Massachusetts					
Suffolk County	*140	*45.5	*10*260	*19.7	*2.1–*37.2
Michigan					
Wayne County	*300	*35.2	*90–*510	*20.7	*6.4-*35.0
Nevada					
Clark County <sup>b</sup>	590	27.8	270–920	31.9	14.5–49.3
J.am Joan,	000	20	2.0 020	01.0	1 1.5 10.0

Table A1. Estimated HIV incidence among persons aged ≥13 years, by year of infection and area of residence at diagnosis, 2017 and 2018—Ending the HIV Epidemic Initiative Phase I jurisdictions (cont)

	No.	RSE (%)	95% CI	Rate <sup>a</sup>	95% CI
			2018 (cont)		
New Jersey					
Essex County <sup>b</sup>	*220	*43.8	*30*410	*33.6	*4.7-*62.4
Hudson County <sup>b</sup>	*190	*48.0	*10-*360	*32.6	*1.9–*63.3
New York					
Bronx County	420	27.3	190-650	35.8	16.6–55.1
Kings County	460	26.1	230-700	21.5	10.5-32.6
New York County	*300	*32.4	*110*490	*20.6	*7.5-*33.7
Queens County	*320	*31.4	*120*510	*16.4	*6.3-*26.5
North Carolina					
Mecklenburg County	*170	*48.9	*10*330	*18.5	*0.8-*36.2
Ohio					
Cuyahoga County					
Franklin County	*200	*43.1	*30-*380	*18.9	*2.9-*34.8
Hamilton County					
Pennsylvania					
Philadelphia County	390	25.0	200-580	29.3	14.9-43.7
Puerto Rico					
San Juan Municipio <sup>b</sup>					
Tennessee					
Shelby County	*240	*32.0	*90-*390	*31.0	*11.5–*50.4
Texas					
Bexar County	*370	*32.0	*140*590	*22.6	*8.4-*36.7
Dallas County	810	21.5	470-1,200	38.0	22.0-53.9
Harris County	1,200	17.7	770–1,600	31.3	20.5-42.2
Tarrant County	*260	*38.0	*70*450	*15.2	*3.9-*26.6
Travis County	*250	*38.6	*60*440	*23.8	*5.8–*41.8
Washington					
King County	*310	*34.6	*100–*520	*16.2	*5.2-*27.1

Abbreviations: RSE, relative standard error; CI, confidence interval; MSM, men who have sex with men; CD4, CD4+ T-lymphocyte count (cells/ $\mu$ L) or percentage [footnotes only].

Note. Estimates derived by using HIV surveillance and CD4 data for persons aged ≥13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤1,000 to reflect model uncertainty. Estimates with an RSE of 30%–50% are preceded by an asterisk (\*) and should be used with caution. Estimates with an RSE>50% are not shown and are replaced with an ellipsis (...).

<sup>&</sup>lt;sup>a</sup> Rates are per 100,000 population.

b Estimates should be interpreted with caution because the jurisdiction does not have laws requiring complete reporting of laboratory data or has incomplete reporting. Area without laws: New Jersey. Areas with incomplete reporting: Arizona, Nevada (2017 only), and Puerto Rico.

Table A2. Estimated HIV prevalence among persons aged ≥13 years, by year and area of residence, 2017 and 2018—Ending the HIV Epidemic Initiative Phase I jurisdictions

	Person	V infection	Persons living with diagnosed HIV infection							
	No.	RSE (%)	95% CI	<b>Rate</b> <sup>a</sup>	95% CI	No. <sup>b</sup>	%	RSE (%)	95% CI	
	2017									
Arizona										
Maricopa County <sup>c</sup>	12,900	8.1	10,900–15,000	360.6	303.3-417.9	10,798	83.7	8.3	72.2–99.5	
California										
Alameda County	6,800	11.0	5,300-8,300	484.6	379.9-589.3	5,845	85.7	11.6	70.5-100	
Los Angeles County	54,000	3.8	50,000-58,100	634.4	586.6-682.2	48,364	89.5	3.9	83.2-96.8	
Orange County	8,000	10.2	6,400-9,600	298.8	239.1-358.5	6,738	84.2	10.6	70.2-100	
Riverside County	10,100	8.0	8,500-11,700	509.5	429.1-590.0	8,478	84.0	8.3	72.6-99.8	
Sacramento County	5,000	13.2	3,700–6,200	391.7	290.5–492.9	4,154	83.9	14.1	66.6–100	
San Bernardino County	5,300	13.0	3,900–6,600	302.2	225.3–379.2	4,077	77.4	13.9	61.7–100	
San Diego County	15,100	7.1	13,000–17,300	541.5	465.7–617.4	12,871	85.0	7.3	74.6–98.9	
San Francisco County	12,900	8.0	10,900–14,900	1,635.5	1,379.2–1,891.8	12,290	95.2	8.2	82.3–100	
<u>.                                      </u>	15,100	7.1	13,000–17,300	2,537.8	2,181.7–2,893.8	14,189	93.7	7.3	82.2–100	
District of Columbia	13,100	7.1	13,000-17,300	2,337.0	2,101.7-2,093.0	14,109	93.7	7.5	02.2-100	
Florida										
Broward County	21,500	6.0	19,000-24,000	1,312.5	1,158.0-1,467.0	18,936	88.0	6.1	78.7–99.7	
Duval County	7,100	11.1	5,600-8,700	912.7	714.2–1,111.2	5,818	81.7	11.6	67.1–100	
Hillsborough County	7,700	10.5	6,100-9,300	653.4	518.6-788.3	6,561	85.2	11.0	70.7-100	
Miami-Dade County	28,900	5.6	25,700-32,000	1,234.0	1,099.1-1,368.9	25,653	88.8	5.6	80.1-99.7	
Orange County	9,600	9.3	7,900–11,400	849.9	694.4-1,005.4	8,231	85.4	9.7	72.2-100	
Palm Beach County	8,800	9.8	7,100-10,500	691.9	559.3-824.5	7,706	87.7	10.1	73.6-100	
Pinellas County	5,000	12.9	3,800–6,300	586.8	438.5-735.1	4,410	87.8	13.8	70.0-100	
Georgia										
Cobb County	3,700	14.8	2,600-4,700	588.2	417.9–758.5	2,994	81.5	16.1	63.2-100	
DeKalb County	9,700	9.1	7,900–11,400	1,554.3	1,278.0–1,830.5	8,103	83.8	9.4	71.2–100	
Fulton County	17,500	7.0	15,000–19,900	1,998.5	1,722.1–2,274.9	14,267	81.7	7.2	71.8–94.8	
Gwinnett County	3,300	15.0	2,300–13,300	439.5	310.5–568.4	2,721	83.3	16.4	64.4–100	
•	3,300	13.0	2,000-4,200	+00.0	310.5–300. <del>4</del>	2,721	00.0	10.4	04.4-100	
Illinois	28,300	5.6	25,200–31,400	646.0	E7C 1 717 C	24,724	87.3	5.6	78.7–98.1	
Cook County	20,300	5.0	25,200-31,400	646.9	576.1–717.6	24,724	01.3	5.6	10.1-90.1	
Indiana										
Marion County	5,500	13.1	4,100–6,900	704.9	524.0-885.8	4,502	82.4	14.0	65.5–100	
Louisiana										
East Baton Rouge Parish	4,500	14.2	3,300-5,800	1,227.2	885.1-1,569.3	3,808	83.9	15.4	65.6-100	
Orleans Parish	5,600	13.0	4,100–7,000	1,671.7	1,244.7–2,098.6	4,798	86.1	13.9	68.6-100	
Maryland										
Baltimore City	10,300	9.4	8,400-12,200	1,997.2	1,630.5-2,363.8	10,053	97.7	9.7	82.5-100	
Montgomery County	3,900	14.1	2,800–5,000	451.9	326.5–577.3	3,320	84.2	15.3	65.9–100	
Prince George's County	6,600	14.1	5,100–8,100	864.6	667.8–1,061.4	5,897	89.9	12.3	73.2–100	
•	0,000	11.0	5,100-6,100	004.0	007.0-1,001.4	5,091	09.9	12.3	13.2-100	
Massachusetts										
Suffolk County	6,200	11.1	4,900–7,600	884.3	692.4–1,076.2	5,712	92.0	11.6	75.6–100	
Michigan										
Wayne County	7,800	11.4	6,100-9,600	536.3	416.0-656.6	6,363	81.4	12.1	66.5-100	

Table A2. Estimated HIV prevalence among persons aged ≥13 years, by year and area of residence, 2017 and 2018—Ending the HIV Epidemic Initiative Phase I jurisdictions (cont)

	Persons living with diagnosed or undiagnosed HIV infection					Persons living with diagnosed HIV infection			
	No.	RSE (%)	95% CI	<b>Rate</b> <sup>a</sup>	95% CI	No.b	%	RSE (%)	95% CI
					2017 (cont)				
Nevada									
Clark County <sup>c</sup>	10,300	9.3	8,500–12,200	570.3	466.0–674.6	7,991	77.3	9.7	65.3–94.6
New Jersey									
Essex County <sup>c</sup>	9,800	10.5	7,800-11,900	1,493.3	1,185.7-1,801.0	8,975	91.2	11.0	75.6–100
Hudson County <sup>c</sup>	5,400	13.6	3,900–6,800	944.1	691.8–1,196.4	4,811	89.7	14.7	70.8–100
New York									
Bronx County	29,300	4.9	26,500-32,100	2,491.1	2,252.9-2,729.3	26,610	90.8	4.9	82.9-100
Kings County	28,400	5.3	25,400-31,300	1,318.8	1,182.4-1,455.2	25,736	90.8	5.3	82.3-100
New York County	29,100	5.1	26,200-32,000	2,002.0	1,801.2-2,202.9	26,770	92.1	5.2	83.7-100
Queens County	17,000	6.5	14,800–19,200	870.2	759.0–981.4	15,401	90.6	6.6	80.3–100
North Carolina									
Mecklenburg County	6,500	11.1	5,100-7,900	732.1	573.3-890.9	5,642	86.6	11.6	71.1–100
Ohio									
Cuyahoga County	5,400	12.6	4,100-6,800	510.1	383.8-636.3	4,583	84.6	13.4	67.8-100
Franklin County	5,600	12.5	4,200-7,000	525.1	395.8-654.3	4,749	84.5	13.4	67.8-100
Hamilton County	3,500	16.3	2,400-4,600	514.8	349.9-679.6	2,888	82.8	18.2	62.7-100
Pennsylvania									
Philadelphia County	18,400	6.7	16,000-20,800	1,392.4	1,210.2-1,574.6	16,813	91.3	6.8	80.7-100
Puerto Rico									
San Juan Municipio <sup>c</sup>	3,400	18.9	2,100-4,600	1,150.0	722.9-1,577.1	3,170	93.6	22.0	68.2-100
Tennessee									
Shelby County	7,000	11.3	5,500-8,600	919.1	714.9-1,123.4	6,031	85.8	11.9	70.2-100
Texas									
Bexar County	7,300	11.2	5,700-8,900	457.4	356.8-558.0	6,083	83.5	11.8	68.4-100
Dallas County	20,900	6.5	18,300–23,600	988.0	862.3-1,113.8	17,348	83.0	6.6	73.6-95.1
Harris County	29,600	5.6	26,400-32,800	789.4	702.9–875.9	24,632	83.2	5.7	75.0-93.4
Tarrant County	6,600	11.6	5,100-8,100	395.5	305.7-485.3	5,435	82.6	12.2	67.3-100
Travis County	5,800	12.4	4,400-7,300	567.7	429.5-706.0	4,714	80.7	13.2	64.9-100
Washington									
King County	7,600	10.3	6,100-9,100	404.6	323.2-486.1	6,763	89.2	10.7	74.3-100

Table A2. Estimated HIV prevalence among persons aged ≥13 years, by year and area of residence, 2017 and 2018—Ending the HIV Epidemic Initiative Phase I jurisdictions (cont)

	Person	s living with	diagnosed or undi	V infection	Persons living with diagnosed HIV infection						
	No.	RSE (%)	95% CI	Ratea	95% CI	No.b	%	RSE (%)	95% CI		
		2018									
Arizona											
Maricopa County <sup>c</sup>	13,300	9.0	11,000-15,700	364.1	300.1-428.2	11,246	84.4	9.3	71.8–100		
California											
Alameda County	6,900	12.0	5,300-8,600	488.9	373.7-604.1	6,013	86.8	12.7	70.2-100		
Los Angeles County	54,900	4.2	50,300-59,400	643.2	590.4-696.0	49,184	89.7	4.2	82.9-97.7		
Orange County	8,200	11.2	6,400-10,000	304.2	237.6-370.8	6,836	83.6	11.7	68.5-100		
Riverside County	10,200	8.9	8,400-12,000	506.9	417.9-595.8	8,989	88.1	9.2	74.9-100		
Sacramento County	5,100	14.4	3,600–6,500	396.2	284.6-507.9	4,249	83.9	15.6	65.4-100		
San Bernardino County	5,500	14.3	3,900-7,000	310.8	223.8-397.7	4,426	80.9	15.5	63.2-100		
San Diego County	15,500	7.8	13,100–17,800	548.9	464.9-633.0	13,048	84.4	8.0	73.2-99.7		
San Francisco County	12,900	8.6	10,700–15,100	1,626.4	1,352.2-1,900.7	12,128	94.0	8.9	80.4-100		
District of Columbia	15,100	7.7	12,800–17,400	2,515.5	2,136.2–2,894.9	14,067	93.0	7.9	80.8-100		
Florida											
Broward County	21,900	6.5	19,100-24,600	1,320.5	1,151.6-1,489.3	19,249	88.1	6.6	78.1–100		
Duval County	7,200	12.1	5,500–8,900	911.7	696.1–1,127.3	6,006	83.3	12.8	67.4–100		
Hillsborough County	7,800	11.5	6,100–9,600	651.9	505.2–798.7	6,757	86.2	12.1	70.3–100		
Miami-Dade County	29,600	6.0	26,100–33,100	1,255.9	1,107.0–1,404.8	26,015	87.9	6.1	78.6–99.7		
Orange County	10,000	10.2	8,000–12,000	859.1	687.8–1,030.4	8,514	85.4	10.6	71.2–100		
Palm Beach County	8,900	10.6	7,000–10,700	689.7	546.0–833.4	7,790	87.9	11.1	72.8–100		
Pinellas County	5,100	14.1	3,700–6,500	586.4	424.5–748.2	4,427	87.5	15.2	68.5–100		
Georgia											
Cobb County	3,800	16.2	2,600-5,000	598.0	408.1-788.0	3,130	83.0	18.0	63.0-100		
DeKalb County	9,900	10.0	8,000-11,900	1,586.7	1,276.1-1,897.4	8,371	84.2	10.4	70.4-100		
Fulton County	18,000	7.7	15,200–20,700	2,027.6	1,719.9-2,335.3	15,044	83.7	7.9	72.7-98.7		
Gwinnett County	3,400	16.5	2,300–4,400	446.3	302.1–590.5	2,829	84.1	18.4	63.6-100		
Illinois											
Cook County	28,900	6.1	25,400–32,300	661.3	582.0-740.6	24,970	86.5	6.2	77.3–98.3		
Indiana											
Marion County	5,600	14.4	4,000–7,200	717.0	514.1–920.0	4,645	82.9	15.7	64.6–100		
Louisiana											
East Baton Rouge Parish	4,700	15.6	3,200–6,100	1,264.7	877.0–1,652.4	3,888	83.6	17.3	63.9–100		
Orleans Parish	5,700	14.2	4,100–7,300	1,700.0	1,225.0–2,175.0	4,893	86.3	15.5	67.5–100		
Maryland	40 400	40.0	0.400.40.000	4 000 0	4 507 0 0005 7	0.047	04.0	40.7	70.5.400		
Baltimore City	10,100	10.2	8,100–12,200	1,986.8	1,587.8–2,385.7	9,317	91.9	10.7	76.5–100		
Montgomery County	4,000	15.3	2,800–5,200	454.9	318.7–591.1	3,545	88.8	16.8	68.4–100		
Prince George's County	6,800	12.6	5,100–8,400	889.7	670.4–1,108.9	5,762	85.3	13.4	68.4–100		
Massachusetts	C 200	40.0	4 000 7 000	007.0	670 7 4 007 4	F 070	00.0	40.7	70.4.400		
Suffolk County	6,300	12.0	4,800–7,800	887.9	678.7–1,097.1	5,679	90.3	12.7	73.1–100		
Michigan	8,000	12.6	6,000,0000	E47 0	412.0–682.1	6,673	83.7	13.4	67.2–100		
Wayne County	8,000	12.0	6,000–9,900	547.0	412.0-082.1	0,073	03.7	13.4	07.2-100		

Table A2. Estimated HIV prevalence among persons aged ≥13 years, by year and area of residence, 2017 and 2018—Ending the HIV Epidemic Initiative Phase I jurisdictions (cont)

	Persons living with diagnosed or undiagnosed HIV infection					Persons living with diagnosed HIV infection			
	No.	RSE (%)	95% CI	Ratea	95% CI	No.b	%	RSE (%)	95% CI
					2018 (cont)				
Nevada									
Clark County <sup>c</sup>	10,800	10.4	8,600-13,000	580.0	461.3-698.7	8,541	79.3	10.9	65.8–99.7
New Jersey									
Essex County <sup>c</sup>	9,900	11.5	7,600-12,100	1,487.0	1,152.6-1,821.4	8,952	90.8	12.1	74.2-100
Hudson County <sup>c</sup>	5,500	14.9	3,900-7,100	956.6	676.6-1,236.6	4,821	88.3	16.3	68.3-100
New York									
Bronx County	29,300	5.3	26,200-32,300	2,497.6	2,238.0-2,757.2	26,849	91.7	5.4	83.1-100
Kings County	28,400	5.7	25,200-31,600	1,327.5	1,179.0-1,476.0	25,939	91.2	5.8	82.1-100
New York County	29,100	5.5	26,000-32,300	2,007.2	1,791.2-2,223.3	26,790	91.9	5.6	83.0-100
Queens County	17,200	7.1	14,800-19,600	888.5	765.5–1,011.5	15,620	90.6	7.2	79.6–100
North Carolina									
Mecklenburg County	6,600	12.1	5,000-8,200	729.7	556.4-903.0	5,831	88.1	12.8	71.2–100
Ohio									
Cuyahoga County	5,500	13.7	4,000-7,000	517.2	377.8-656.7	4,669	85.2	14.8	67.1-100
Franklin County	5,800	13.8	4,200-7,300	531.8	387.9-675.7	4,804	83.4	14.9	65.6-100
Hamilton County	3,600	17.9	2,300-4,800	523.6	339.2-708.0	2,923	82.1	20.5	60.7-100
Pennsylvania									
Philadelphia County	18,500	7.2	15,900–21,100	1,391.6	1,196.0-1,587.3	16,679	90.3	7.3	79.2–100
Puerto Rico									
San Juan Municipio <sup>c</sup>	3,400	20.3	2,000-4,700	1,191.9	716.3-1,667.5	3,213	95.1	24.2	68.0-100
Tennessee									
Shelby County	7,200	12.2	5,400-8,900	934.8	710.3–1,159.4	6,156	86.0	13.0	69.4-100
Texas									
Bexar County	7,600	12.3	5,800-9,400	469.3	355.7-582.9	6,266	82.5	13.1	66.4-100
Dallas County	21,500	7.1	18,500-24,500	1,007.1	866.6-1,147.6	18,032	83.9	7.3	73.6-97.5
Harris County	30,400	6.1	26,700-34,000	802.0	705.4-898.5	25,433	83.8	6.2	74.8-95.2
Tarrant County	6,800	12.8	5,100-8,500	399.7	299.5-499.9	5,662	83.8	13.6	67.0-100
Travis County	6,100	13.7	4,400–7,700	577.4	422.6–732.3	4,902	8.08	14.7	63.7–100
Washington									
King County	7,800	11.4	6,000-9,500	408.6	317.6-499.6	6,844	88.1	12.0	72.1-100

Note. Estimates for the year 2018 data are preliminary and based on deaths reported to CDC through December 2019. Estimates derived by using HIV surveillance data and CD4 data for persons aged ≥13 years at diagnosis. Estimates rounded to the nearest 100 for estimates >1,000 and to the nearest 10 for estimates ≤1,000 to reflect model uncertainty.

<sup>&</sup>lt;sup>a</sup> Rates are per 100,000 population.

<sup>&</sup>lt;sup>b</sup> Reported to the National HIV Surveillance System.

<sup>&</sup>lt;sup>C</sup> Estimates should be interpreted with caution because the jurisdiction does not have laws requiring complete reporting of laboratory data or has incomplete reporting. Area without laws: New Jersey. Areas with incomplete reporting: Arizona, Nevada (2017 only), and Puerto Rico.