

HIV | SURVEILLANCE REPORT

**Diagnoses, Deaths, and
Prevalence of HIV in the
United States and 6 Territories and
Freely Associated States, 2022**



U.S. DEPARTMENT OF
HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE
CONTROL AND PREVENTION

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Guide to Acronyms and Initialisms

AGI	additional gender identity
AIDS	acquired immunodeficiency syndrome
CDC	Centers for Disease Control and Prevention
COVID-19	coronavirus disease 2019
EHE	Ending the HIV Epidemic in the U.S.
HHS	U.S. Department of Health and Human Services
HIV	human immunodeficiency virus
IDU	injection drug use
MMSC	male-to-male sexual contact
MSA	metropolitan statistical area
MSM	gay, bisexual, and other men who have sex with men
NHAS	National HIV/AIDS Strategy
NHSS	National HIV Surveillance System
NIR	no identified risk factor
OI	opportunistic illness
OMB	Office of Management and Budget
PrEP	preexposure prophylaxis
PWID	persons who inject drugs
SAAB	sex assigned at birth
SDOH	social determinants of health
STD	sexually transmitted disease
TB	tuberculosis

Commentary



OVERVIEW

The Centers for Disease Control and Prevention (CDC) collects, analyzes, and disseminates surveillance data on HIV; these data are one of the nation’s primary sources of information on HIV in the United States. The annual surveillance report, published by CDC, summarizes information about diagnosed HIV in the United States and 6 territories and freely associated states. HIV surveillance data are used by CDC and their public health partners in other federal agencies, health departments, nonprofit organizations, academic institutions, and the public to help focus prevention efforts; plan services; allocate resources; develop policy; detect, monitor, and intervene in HIV clusters; and monitor trends in HIV. Data in this report may be used to accelerate action to reach disproportionately affected populations and achieve national goals outlined in Healthy People 2030 [1], the National HIV/AIDS Strategy (NHAS) (2022–2025) [2], the Ending the HIV Epidemic in the U.S. (EHE) initiative [3], and the U.S. Playbook to Address Social Determinants of Health (the Playbook) [4].

Numbers, percentages, and rates of HIV diagnoses during 2022 are based on data from all 50 states, the District of Columbia, and 6 territories and freely associated states (American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the Republic of Palau, and the U.S. Virgin Islands). Data for 2022 and additional data stratifications and years are available via NCHHSTP AtlasPlus, available at <https://gis.cdc.gov/grasp/nchhstpatlas/main.html>. NCHHSTP AtlasPlus is an interactive tool that gives users the ability to create customized tables, maps, and charts using CDC’s surveillance data on HIV, viral hepatitis, sexually transmitted diseases, and tuberculosis. AtlasPlus also provides access to indicators on social determinants of health (SDOH). Data on stage 3 (AIDS) classifications can be found in the Stage 3 (AIDS) classification slide set (for cumulative data through the most recent year), available at <https://www.cdc.gov/hiv-data/resources/index.html>, and in AtlasPlus.

REPORT CHANGES



- Death data are now presented for HIV-related and non-HIV-related deaths
- Terminology was updated for the following:
 - Gender identity labels (i.e., “Male” updated to “Man”; “Female” updated to “Woman”)
 - “Mother” updated to “Birthing Person”
 - “U.S. dependent areas” updated to “U.S. territories and freely associated states”
- Age groups were expanded to “≥75 years”

National Profile

Data presented in this report are based on case data reported to CDC through December 31, 2023. The data are provisional with a 12-month reporting delay for the assessment of diagnoses, deaths, and prevalence for the year 2022. The statements in this section, unless otherwise indicated, are based on 12 or more cases. All rates are per 100,000 population. The standard used for reporting changes in numbers and rates is an increase or a decrease of 5% or more based on the relative percentage change when comparing data for the year 2022 to data for the year 2018. The exceptions to this standard are where numbers are small (i.e., less than 12) or rates are based on small numbers. Numbers less than 12, and rates based on these numbers, should be interpreted with caution.

Data for the year 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. There was underdiagnosis of HIV in the United States in 2020 due to disruptions in clinical care services, patient hesitancy in accessing clinical services, and shortages in HIV testing reagents/materials with the onset of the COVID-19 pandemic [5–10]. During 2021, the overall number of HIV diagnoses (35,724) partially rebounded and was 18% higher than in 2020 [11]. The partial rebound may be due to the identification and reporting of HIV diagnoses missed in 2020; however, a larger percentage increase was expected [12]. In 2022, reporting of HIV diagnoses was 5% higher than in 2021. Based on pre-pandemic data, an increase in diagnoses of 2%–3% is expected each year. As the COVID-19 pandemic lasted beyond 2020, readers should consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for years 2021–2022. Deaths in 2020 and beyond should be interpreted considering the impact of the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm.

Important notes

- When presenting rates by race/ethnicity, data are only provided for the United States (50 states and the District of Columbia) because denominator data are not available by race/ethnicity for all U.S. territories and freely associated states.
- Please use caution when interpreting data for additional gender identity (AGI) persons, transgender men, American Indian/Alaska Native persons, and Native Hawaiian/other Pacific Islander persons as many percentages and/or rates are based on small numbers.
- Assessment of trends in HIV diagnoses, deaths, and prevalence that include data for the year 2020 should be interpreted with caution. See COVID-19 Suggested Readings for additional information on COVID-19 and HIV.
- For disparity measures, reference groups are based on the rate of the lowest group with more than 5 percent of cases.
- Please read all titles and footnotes carefully to ensure a complete understanding of the displayed data. See Technical Notes for information on definitions and data specifications. Please note important, actionable findings are called to attention with the exclamation  icon and key points with the magnifying glass  icon.

DIAGNOSES

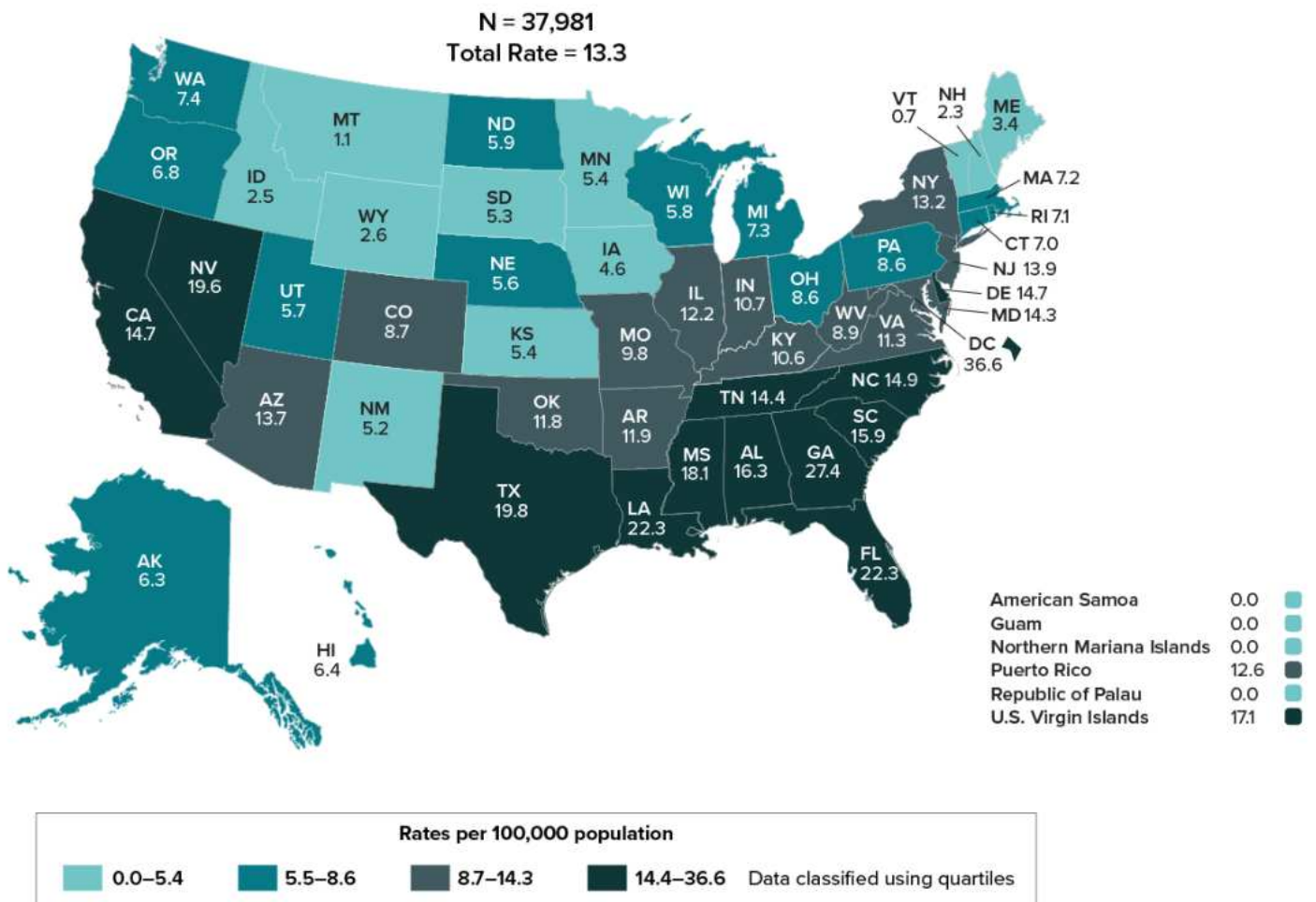
HIV Diagnoses

In 2022 in the United States and 6 territories and freely associated states, HIV diagnoses were as follows:



- Annual number and rate—stable when compared to 2018 (Table 1b)
- Overall total—38,043 diagnoses (persons aged ≥ 13 years: 37,981) (Tables 1b and 3b)
- Overall rate—11.3 (persons aged ≥ 13 years: 13.3) (Figure 1, Tables 1b and 3b)

Figure 1. Diagnoses of HIV among persons aged ≥ 13 years, 2022—United States and 6 territories and freely associated states



Gender

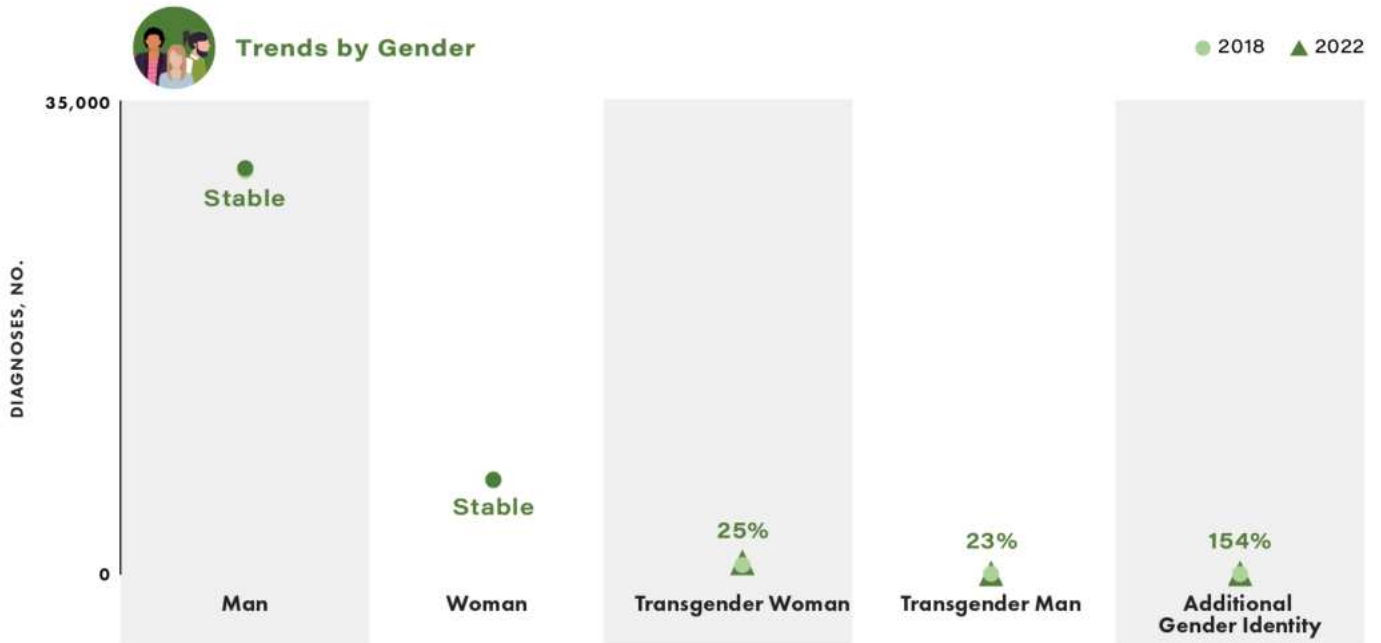
In 2022, compared with 2018, changes in the numbers of HIV diagnoses among persons aged ≥ 13 years were as follows (Figure 2):

- Increase—transgender women (25%), transgender men (23%), and AGI persons (154%)
- Decrease—none
- Stable—men and women

In 2022, numbers and percentages of HIV diagnoses were as follows (Table 1b):

- Men—30,041 (79%)
- Women—7,008 (18%)
- Transgender women/girls—869 (2%)
- Transgender men/boys—59 (<1%)
- AGI—66 (<1%)

Figure 2. Diagnoses of HIV among persons aged ≥13 years, by gender, 2018–2022—United States and 6 territories and freely associated states



Note. “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man. Additional gender identity examples include “nonbinary,” “gender queer,” and “two-spirit.”

Age group

In 2022, compared with 2018, changes in rates of HIV diagnoses among persons aged ≥13 years were as follows (Figure 3):

- Increase—persons aged 25–34 (6%) and 35–44 years (10%)
- Decrease—persons aged 13–24 (-14%), 45–54 (-10%), and 65–74 (-8%) years
- Stable—persons aged 55–64 and ≥75 years

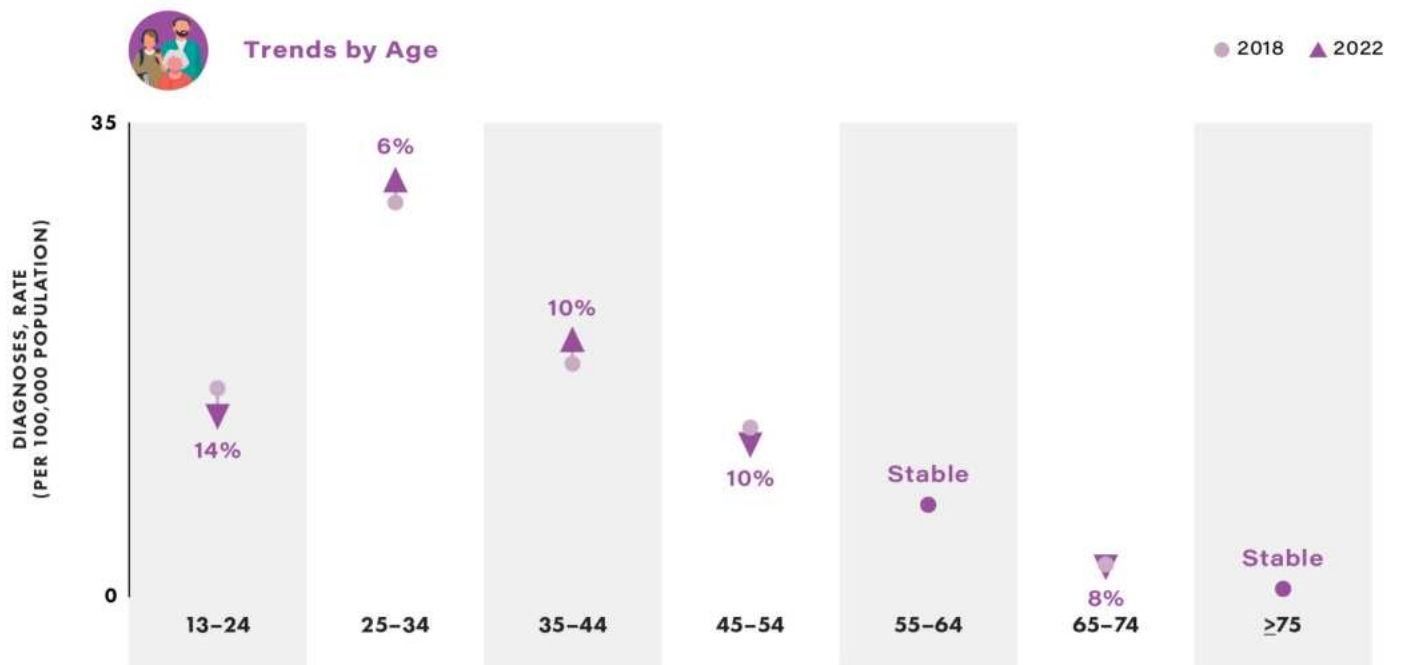
In 2022, numbers and percentages of HIV diagnoses among persons aged ≥13 years were as follows (Figure 3):

- 13–24 years—7,099 (19%)
- 25–34 years—14,160 (37%)
- 35–44 years—8,367 (22%)
- 45–54 years—4,576 (12%)
- 55–64 years—2,886 (8%)
- 65–74 years—754 (2%)
- ≥75 years—139 (<1%)



For additional data by 5-year age groups, see Table 3b.

Figure 3. Diagnoses of HIV among persons aged ≥ 13 years, by age at diagnosis, 2018–2022—United States and 6 territories and freely associated states



Rates among persons aged ≥ 13 years (United States only) (Figure 4)

- Highest: persons aged 25–34 years (30.8)
- Lowest: persons aged ≥ 75 years (0.6)

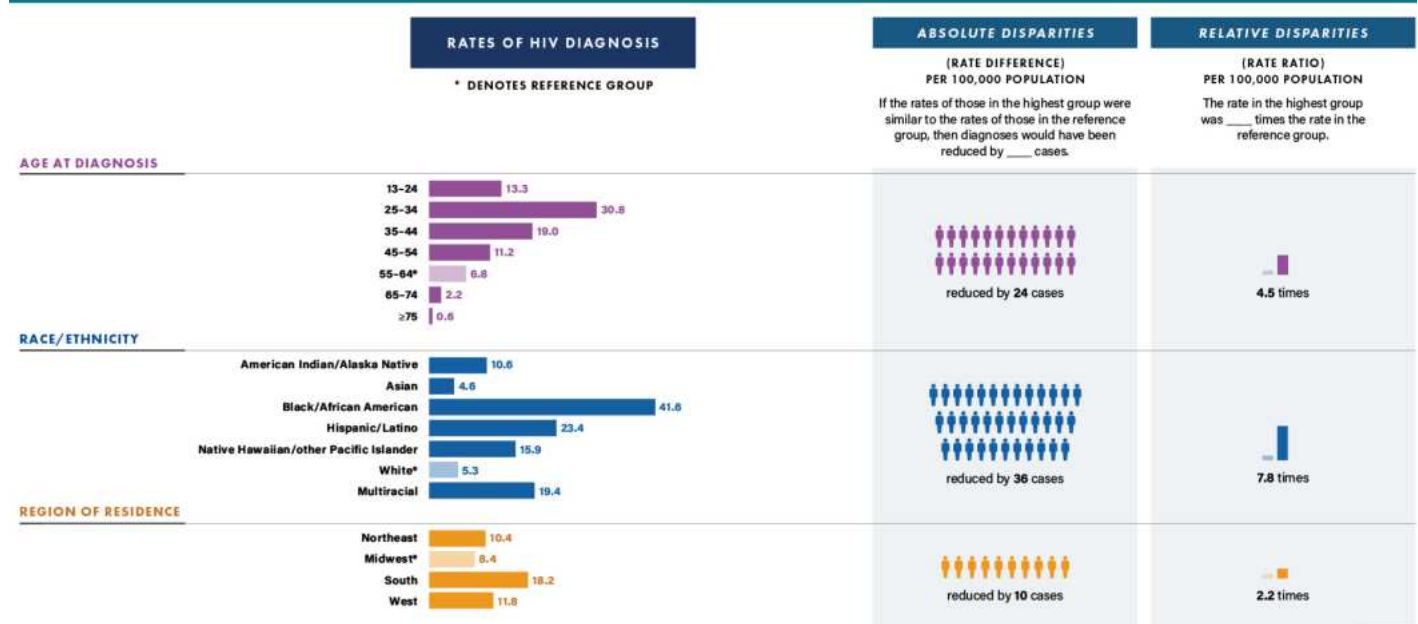


For additional data by 5-year age groups, see Table 3a.

Disparities by age group (Figure 4)

- Absolute disparity (rate difference)—If the rate of HIV diagnoses among persons aged 25–34 years (30.8) was similar to the rate among persons aged 55–64 years (6.8), then diagnoses would have been reduced by 24 cases per 100,000 population.
- Relative disparity (rate ratio)—The rate of diagnoses among persons aged 25–34 years was 4.5 times the rate among persons aged 55–64 years.

Figure 4. Rates and disparities of diagnoses of HIV among persons aged ≥13 years, by selected characteristics, 2022—United States



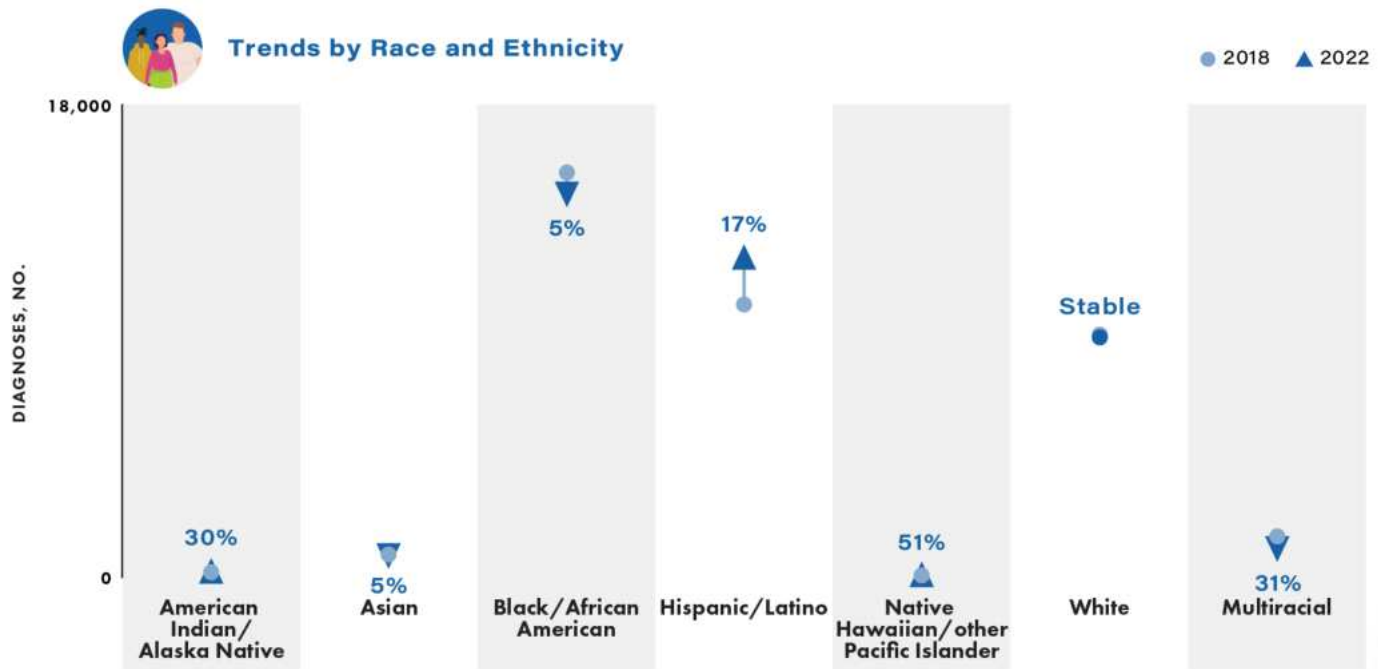
Note. Rates are per 100,000 population. Reference groups are based on the rate of the lowest group with >5% of cases. Hispanic/Latino persons can be of any race. Absolute disparity (rate difference) measures the difference between rates in groups with the highest rates and a reference group ($\text{Rate}_{\text{highest group}} - \text{Rate}_{\text{reference group}}$). Relative disparity (rate ratio) measures the rates in groups with the highest rates divided by a reference group ($\text{Rate}_{\text{highest group}} \div \text{Rate}_{\text{reference group}}$).

Race/ethnicity

In 2022, compared with 2018, changes in numbers of HIV diagnoses among persons aged ≥13 years were as follows (Figure 5):

- Increase—American Indian/Alaska Native (30%), Hispanic/Latino (17%), and Native Hawaiian/other Pacific Islander (51%)
- Decrease—Asian (-5%), Black/African American (-5%), and multiracial (-31%)
- Stable—White

Figure 5. Diagnoses of HIV among persons aged ≥ 13 years, by race/ethnicity, 2018–2022—United States and 6 territories and freely associated states



Note. Hispanic/Latino persons can be of any race.

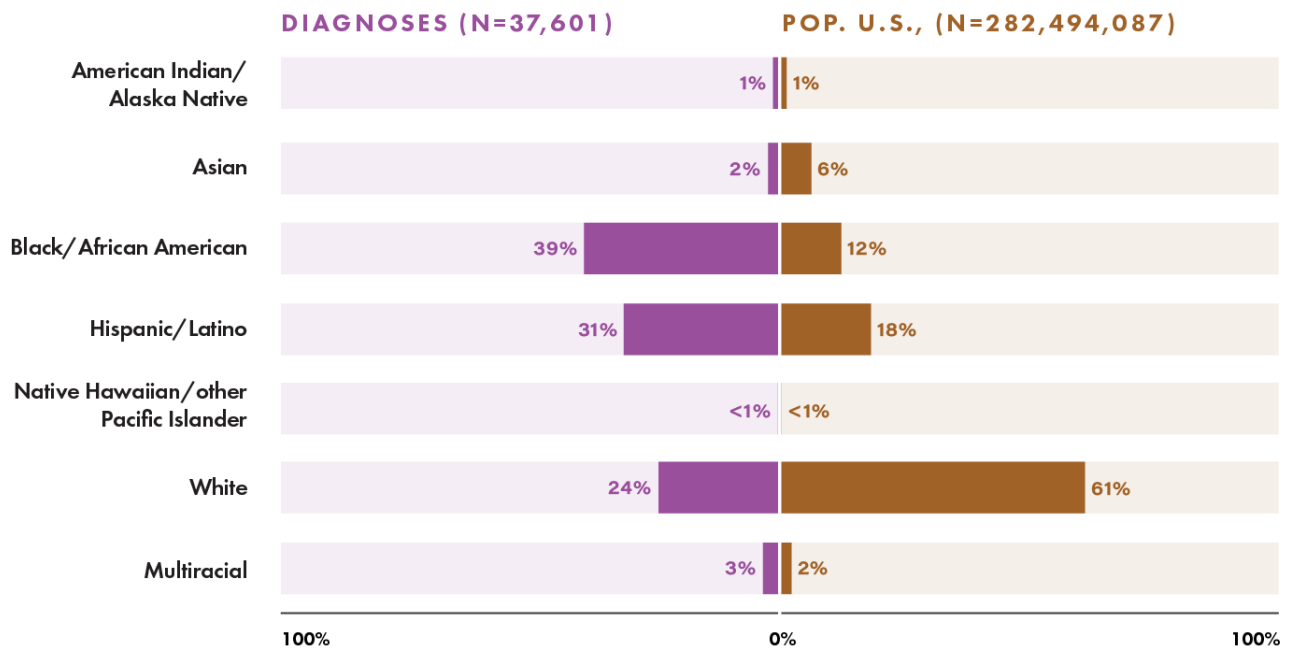
In 2022, numbers and percentages of HIV diagnoses among persons aged ≥ 13 years were as follows (Figure 6):

- American Indian/Alaska Native—215 (1%)
- Asian—795 (2%)
- Black/African American—14,546 (39%)
- Hispanic/Latino—11,804 (31%)
- Native Hawaiian/other Pacific Islander—83 (<1%)
- White—9,102 (24%)
- Multiracial—1,056 (3%)



For percentages by race/ethnicity and U.S. population, see Figure 6.

Figure 6. Diagnoses of HIV and population among persons aged ≥13 years, by race/ethnicity, 2022—United States



Note. Hispanic/Latino persons can be of any race.

Rates among persons aged ≥13 years (United States only) (Figure 4)

- Highest—Black/African American (41.6)
- Lowest—Asian (4.6)

Disparities by race/ethnicity (Figure 4)

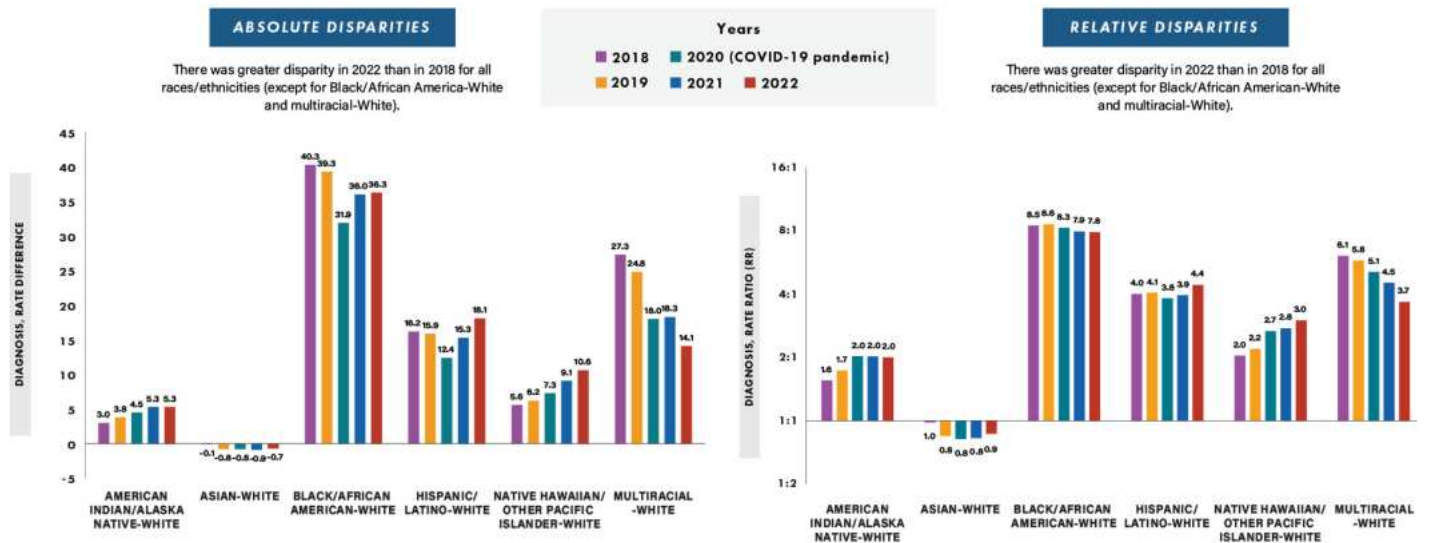
- Absolute disparity (rate difference)—If the rate of HIV diagnoses among Black/African American persons aged ≥13 years (41.6) was similar to the rate among White persons aged ≥13 years (5.3), then diagnoses would have been reduced by 36 cases per 100,000 population.
- Relative disparity (rate ratio)—The rate of diagnoses among Black/African American persons aged ≥13 years was 7.8 times the rate among White persons aged ≥13 years.

Changes in disparities by race/ethnicity

In 2022, compared with 2018, changes in rates of HIV diagnoses by race/ethnicity among persons aged ≥13 years were as follows (Figure 7):

- Absolute disparity (rate difference)—for the difference between the rate of HIV diagnoses among a select race/ethnicity minus the rate among White persons, there was a wider gap (or greater disparity) in 2022 than 2018 for all races/ethnicities except for Black/African American–White and multiracial–White.
- Relative disparity (rate ratio)—for the rates of HIV diagnoses among a select race/ethnicity divided by the rates among White persons, there was greater disparity in 2022 than in 2018 for all races/ethnicities (except for Black/African American–White and multiracial–White).

Figure 7. Absolute and relative disparities of diagnoses of HIV among persons aged ≥13 years, by race/ethnicity, 2018–2022—United States



Note. The data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022. Hispanic/Latino persons can be of any race. Absolute disparity (rate difference) measures the difference between rates among a select race/ethnicity and rates among White persons ($\text{Rate}_{\text{select race/ethnicity}} - \text{Rate}_{\text{White persons}}$). Relative disparity (rate ratio) measures the rates among a select race/ethnicity and rates among White persons ($\text{Rate}_{\text{select race/ethnicity}} \div \text{Rate}_{\text{White persons}}$).

Sex assigned at birth (SAAB) and transmission category

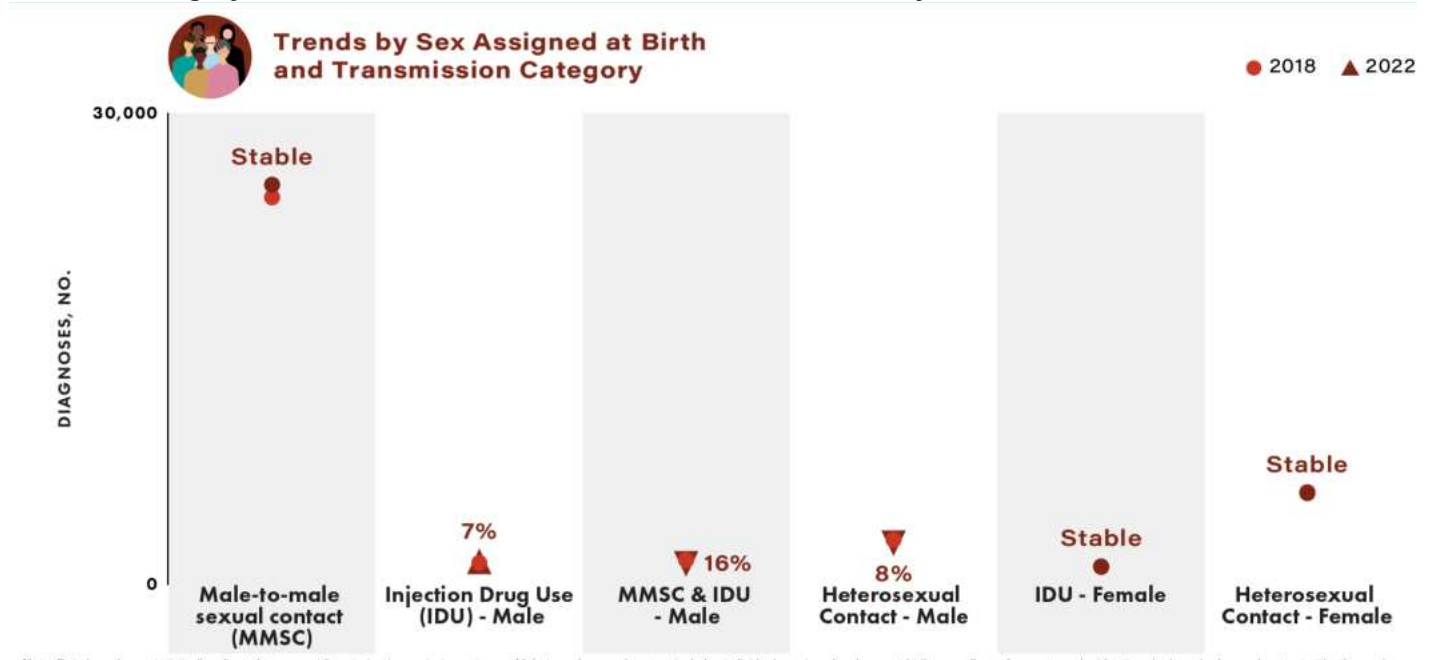
In 2022, compared with 2018, changes in numbers of HIV diagnoses among persons aged ≥13 years were as follows (Figure 8, Table 1b):

- Increase—males with HIV attributed to injection drug use (IDU) (7%)
- Decrease—males with HIV attributed to male-to-male sexual contact *and* injection drug use (MMSC *and* IDU) (-16%) and males with HIV attributed to heterosexual contact (-8%)
- Stable—males with HIV attributed to male-to-male sexual contact (MMSC), females with HIV attributed to IDU, and females with HIV attributed to heterosexual contact

In 2022, percentages of HIV diagnoses among persons aged ≥13 years were as follows—highest percentages (Table 1b):

- Overall—MMSC (67%)
- Male—MMSC (82%)
- Female—heterosexual contact (83%)

Figure 8. Diagnoses of HIV among persons aged ≥ 13 years, by sex assigned at birth and transmission category, 2018–2022—United States and 6 territories and freely associated states



Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male sexual contact includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact). Injection drug use includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers). Heterosexual contact includes heterosexual contact with a person known to have, or with a risk factor for, HIV.

Gender and exposure category

In 2022, compared with 2018, changes in numbers of HIV diagnoses among persons aged ≥ 13 years were as follows (Table 4b):

- Increase—transgender women (24%), transgender men (33%), and AGI (136%) with HIV attributed to sexual contact
- Decrease—none
- Stable—transgender women with HIV attributed to sexual contact *and* IDU

In 2022, percentages of HIV diagnoses among persons aged ≥ 13 years were as follows—highest percentages (Table 4b):

- Transgender women—sexual contact (89%)
- Transgender men—sexual contact (90%)
- AGI—sexual contact (89%)

Region of residence

In 2022, compared with 2018, percent changes in rates of HIV diagnoses among all persons were as follows (Table 1b):

- Increase—none
- Decrease—Northeast (-10%), and U.S. territories and freely associated states (-19%)
- Stable—Midwest, South, and West

In 2022, numbers and percentages of HIV diagnoses among all persons were as follows (Table 1b):

- Northeast—5,080 (13%)
- Midwest—4,903 (13%)
- South—19,822 (52%)
- West—7,858 (21%)
- U.S. territories and freely associated states—380 (1%)

Rates among persons aged ≥ 13 years (United States only) (Figure 4)

- Highest—South (18.2)
- Lowest—Midwest (8.4)

Disparities by region (Figure 4)

- Absolute disparities (rate difference)—If the rate of HIV diagnoses among persons in the South (18.2) was similar to the rate among persons in the Midwest (8.4), then diagnoses would have been reduced by 10 cases per 100,000 population.
- Relative disparities (rate ratio)—The rate of diagnoses among persons in the South was 2.2 times the rate among persons in the Midwest.

DEATHS

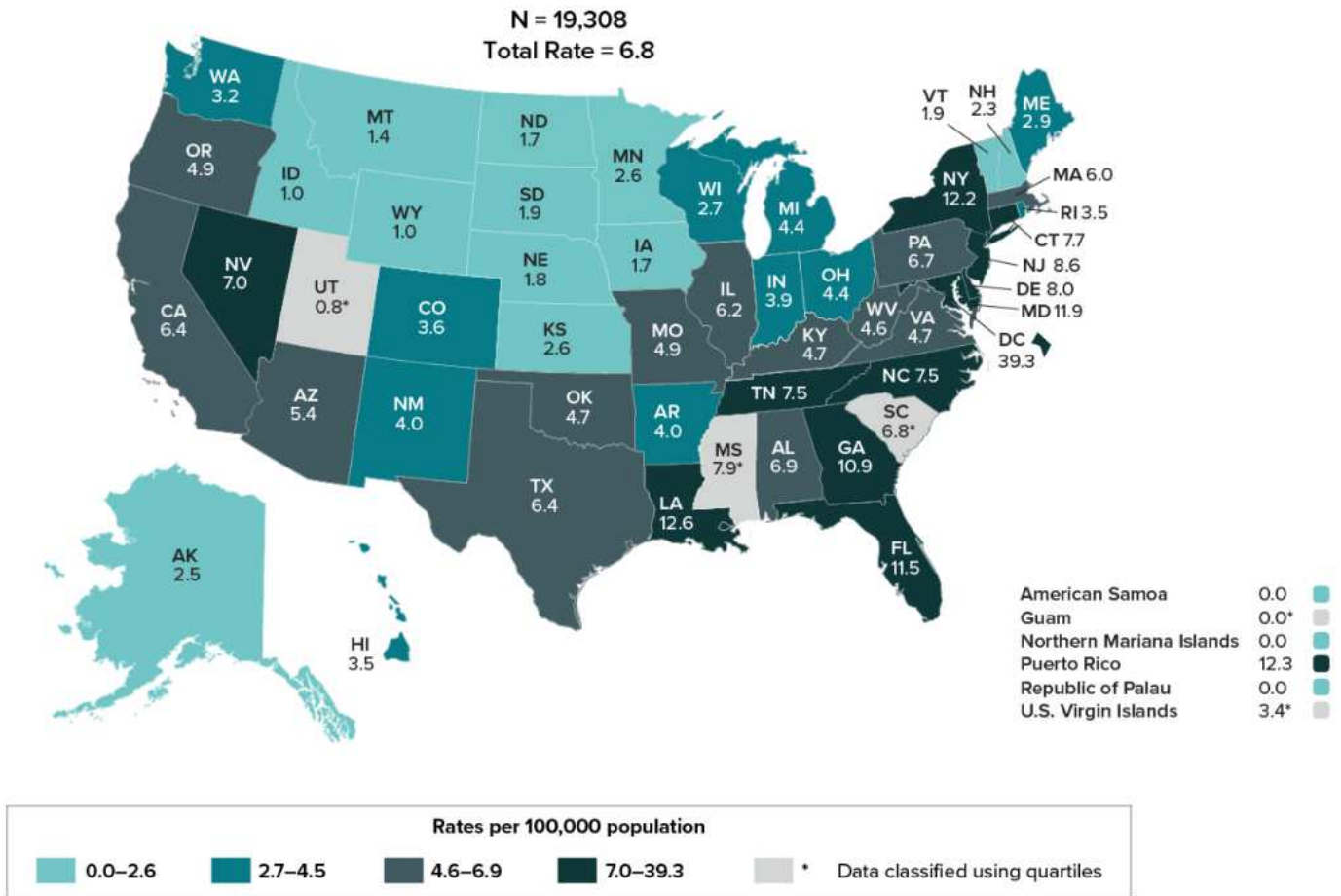
Deaths (Any Cause) of Persons with Diagnosed HIV

In 2022 in the United States and 6 territories and freely associated states, deaths (any cause) among persons with diagnosed HIV were as follows:

- Annual number and rate—increased (17% and 14%, respectively) when compared to 2018 (Table 11b)
- Overall number—19,310 (persons aged ≥ 13 years: 19,308) (Tables 11b and 13b, Figure 9)
- Overall rate—5.7 (persons aged ≥ 13 years: 6.8) (Figure 9, Tables 11b and 12b)



Figure 9. Deaths (any cause) of persons aged ≥13 years with diagnosed HIV, 2022—United States and 6 territories and freely associated states



Note. Deaths of persons with a diagnosis of HIV may be due to any cause. Data for the year 2022 are preliminary and based on deaths reported to CDC as of December 2023. Asterisk (*) indicates incomplete ascertainment of deaths.

Gender

In 2022, compared with 2018, changes in numbers of deaths (any cause) among persons with diagnosed HIV were as follows (Table 11b):

- Increase—men (17%), women (12%), and transgender women/girls (99%)
- Decrease—none
- Stable—none

In 2022, numbers and percentages of deaths (any cause) among persons with diagnosed HIV were as follows (Table 11b):

- Men—14,532 (75%)
- Women—4,522 (23%)
- Transgender women/girls—243 (1%)
- Transgender men/boys—7 (<1%)
- AGI—6 (<1%)

Age group

In 2022, compared with 2018, changes in rates of deaths (any cause) among persons with diagnosed HIV were as follows (Table 11b):

- Increase—persons aged 25–29 (22%), 30–34 (39%), 35–39 (29%), 40–44 (24%), 55–59 (7%), 60–64 (20%), 65–69 (33%), 70–74 (45%), and ≥ 75 (42%) years
- Decrease—persons aged 20–24 (-17%), 45–49 (-13%), and 50–54 (-22%) years
- Stable—none

In 2022, numbers and percentages of deaths (any cause) among persons aged ≥ 13 years with diagnosed HIV were as follows (Figure 10):

- 13–24 years—124 (1%)
- 25–34 years—1,403 (7%)
- 35–44 years—2,436 (13%)
- 45–54 years—3,420 (18%)
- 55–64 years—6,248 (32%)
- 65–74 years—4,190 (22%)
- ≥ 75 years—1,487 (8%)



For additional data by 5-year age groups, see Table 11b.

Rates among persons aged ≥ 13 years (United States only) (Figure 11)

- Highest—persons aged 55–64 years (14.5)
- Lowest—persons aged 13–24 years (0.2)



For additional data by 5-year age groups, see Table 11a.

Disparities by age group (Figure 11)

- Absolute disparity (rate difference)—If the rate of deaths (any cause) among persons aged 55–64 (14.5) years with diagnosed HIV was similar to the rate among persons aged 25–34 years (3.1), then deaths (any cause) would have been reduced by 11 per 100,000 population.
- Relative disparity (rate ratio)—The rate of death (any cause) among persons aged 55–64 years was 4.7 times the rate among persons aged 25–34 years.

Race/ethnicity

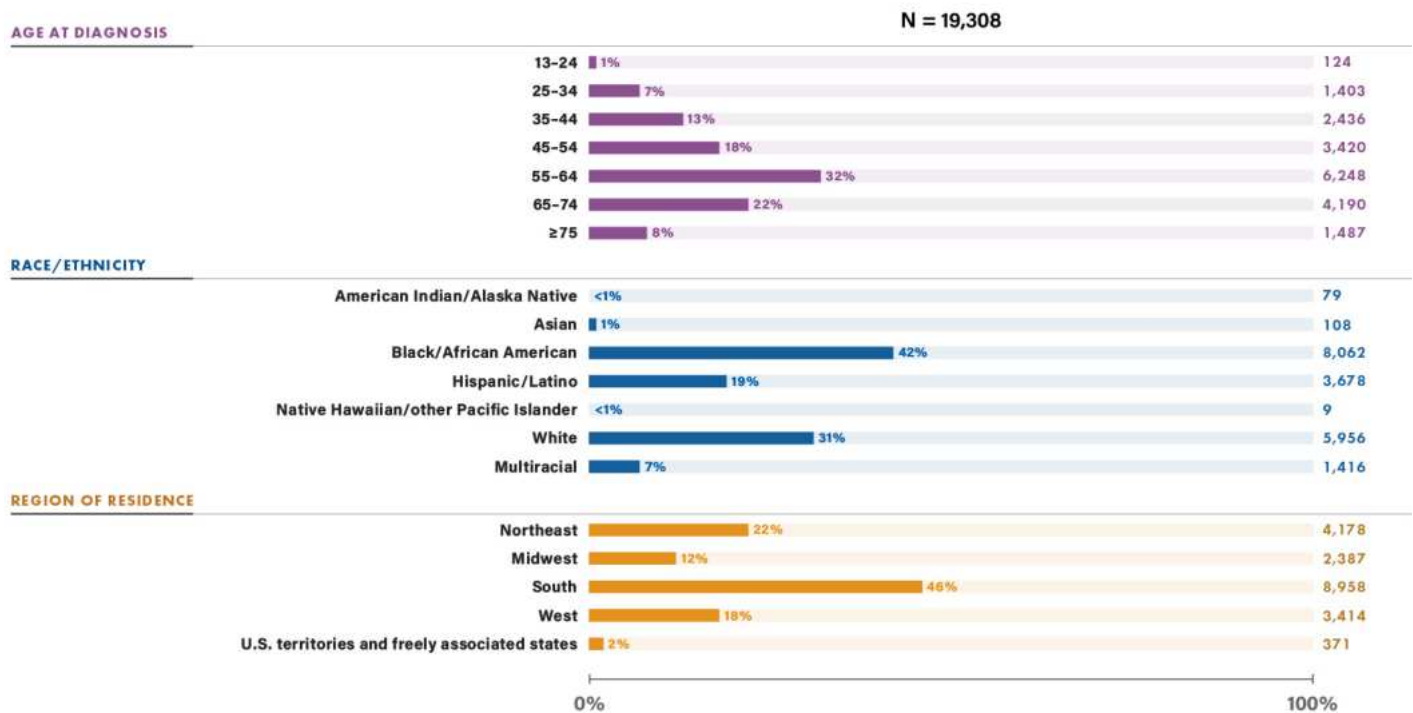
In 2022, compared with 2018, changes in numbers of deaths (any cause) among persons with diagnosed HIV were as follows (Table 11b):

- Increase—American Indian/Alaska Native (63%), Asian (29%), Black/African American (15%), Hispanic/Latino (15%), White (16%), and multiracial (30%)
- Decrease—none
- Stable—none

In 2022, numbers and percentages of deaths (any cause) among persons aged ≥ 13 years with diagnosed HIV were as follows (Figure 10):

- American Indian/Alaska Native—79 (<1%)
- Asian—108 (1%)
- Black/African American—8,062 (42%)
- Hispanic/Latino—3,678 (19%)
- Native Hawaiian/other Pacific Islander—9 (<1%)
- White—5,956 (31%)
- Multiracial—1,416 (7%)

Figure 10. Deaths (any cause) of persons aged ≥ 13 years with diagnosed HIV, by selected characteristics, 2022—United States and 6 territories and freely associated states



Note. Deaths of persons with a diagnosis of HIV may be due to any cause. Data for the year 2022 are preliminary and based on deaths reported to CDC as of December 2023. Asian includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race.

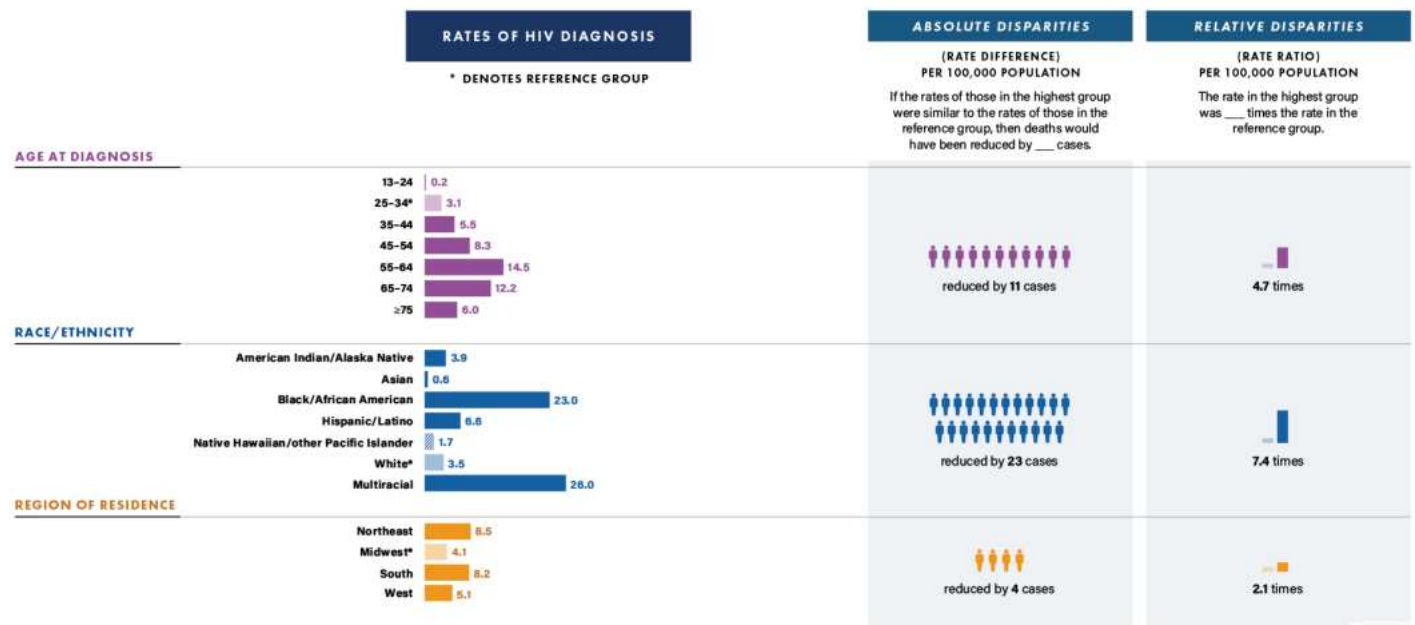
Rates among persons aged ≥ 13 years (United States only) (Figure 11)

- Highest—multiracial (26.0)
- Lowest—Asian (0.6)

Disparities by race/ethnicity

- Absolute disparity (rate difference)—If the rate of deaths (any cause) among multiracial persons aged ≥ 13 years (26.0) with diagnosed HIV was similar to the rate among White persons aged ≥ 13 years (3.5), then deaths (any cause) would have been reduced by 23 per 100,000 population.
- Relative disparity (rate ratio)—The rate of death (any cause) among multiracial persons aged ≥ 13 years was 7.4 times the rate among White persons aged ≥ 13 years.

Figure 11. Rates and disparities of deaths (any cause) of persons aged ≥13 years with diagnosed HIV, by selected characteristics, 2022—United States



Note. Deaths of persons with a diagnosis of HIV may be due to any cause. Data for the year 2022 are preliminary and based on deaths reported to CDC as of December 2023. Rates are per 100,000 population. Reference groups are based on the rate of the lowest group with >5% of cases. Asian includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race. Striped bars indicate rates based on small numbers (i.e., less than 12 diagnoses) and should be interpreted with caution. Absolute disparity measures the difference between rates in groups with the highest rates and a reference group ($\text{Rate}_{\text{highest group}} - \text{Rate}_{\text{reference group}}$). Relative disparity (rate ratio) measures the rates in groups with the highest rates divided by a reference group ($\text{Rate}_{\text{highest group}} \div \text{Rate}_{\text{reference group}}$).

SAAB and transmission category

In 2022, compared with 2018, changes in numbers of deaths (any cause) among persons aged ≥13 years with diagnosed HIV were as follows (Table 11b):

- Increase—MMSC (27%), heterosexual contact (male [11%]; female [13%]), MMSC and IDU (16%), and IDU (female [8%])
- Decrease—none
- Stable— IDU (male)

In 2022, percentages of deaths (any cause) among persons aged ≥13 years with diagnosed HIV were as follows—highest percentages (Table 11b):

- Overall—MMSC (46%)
- Male—MMSC (60%)
- Female—heterosexual contact (66%)

Gender and exposure category

In 2022, compared with 2018, changes in numbers of deaths (any cause) among persons aged ≥ 13 years with diagnosed HIV were as follows (Table 14b):

- Increase—transgender women with HIV attributed to sexual contact (120%) and sexual contact *and* IDU (38%)
- Decrease—none
- Stable—none

In 2022, percentages of deaths (any cause) among persons aged ≥ 13 years with diagnosed HIV were as follows—highest percentages (Table 14b):

- Transgender women—sexual contact (73%)
- Transgender men—sexual contact (57%)
- AGI—sexual contact (100%)

Region of residence

In 2022, compared with 2018, changes in rates of deaths (any cause) among persons with diagnosed HIV were as follows (Table 11b):

- Increase—Northeast (16%), Midwest (21%), South (11%), and West (19%)
- Decrease—none
- Stable—U.S. territories and freely associated states

In 2022, numbers and percentages of deaths (any cause) among persons with diagnosed HIV were as follows (Table 11b):

- Northeast—4,178 (22%)
- Midwest—2,387 (12%)
- South—8,959 (46%)
- West—3,415 (18%)
- U.S. territories and freely associated states—371 (2%)

Rates among persons aged ≥ 13 years (United States only) (Figure 11)

- Highest—Northeast (8.5)
- Lowest—Midwest (4.1)

Disparities by region

- Absolute disparities (rate difference)—If the rate of death (any cause) among persons in the Northeast (8.5) with diagnosed HIV was similar to the rate among persons in the Midwest (4.1), then deaths (any cause) would have been reduced by 4 per 100,000 population.
- Relative disparities (rate ratio)—The rate of death (any cause) among persons in the Northeast was 2.1 times the rate among persons in the Midwest.

HIV-related Deaths of Persons with Diagnosed HIV

In 2022 in the United States and 6 territories and freely associated states, HIV-related deaths among persons with diagnosed HIV were as follows:

- Annual number and rate—decreased (-19% and -25%, respectively) when compared with 2018 (Table 11b)
- Overall number and rate—4,243 and 1.3, respectively (Table 11b).

Gender

In 2022, compared with 2018, changes in numbers of HIV-related deaths among persons with diagnosed HIV were as follows (Table 11b):

- Increase—transgender women/girls (20%)
- Decrease—men (-17%), women (-27%),
- Stable—none

In 2022, numbers and percentages of HIV-related deaths among persons with diagnosed HIV were as follows (Table 11b):

- Men—3,220 (76%)
- Women—967 (23%)
- Transgender women/girls—54 (1%)
- Transgender men/boys—2 (<1%)
- AGI—0 (0%)

Age group

In 2022, compared with 2018, changes in rates of HIV-related deaths among persons with diagnosed HIV were as follows (Table 11b):

- Increase—persons aged 70–74 (6%) and ≥ 75 (9%) years
- Decrease—persons aged 20–24 (-67%), 25–29 (-25%), 30–34 (-8%), 35–39 (-13%), 40–44 (-11%), 45–49 (-32%), 50–54 (-45%), 55–59 (-29%), 60–64 (-18%) years
- Stable—persons aged 65–69 years

In 2022, numbers and percentages of HIV-related deaths among persons aged ≥ 13 years with diagnosed HIV were as follows (Figure 12):

- 13–24 years—34 (1%)
- 25–34 years—401 (10%)
- 35–44 years—679 (16%)
- 45–54 years—831 (20%)
- 55–64 years—1,220 (29%)
- 65–74 years—783 (18%)
- ≥ 75 years—294 (7%)



For additional data by 5-year age groups, see Table 11b.

Rates among persons aged ≥ 13 years (United States only) (Figure 13)

- Highest—persons aged 55–64 years (2.8)
- Lowest—persons aged 13–24 years (0.1)



For additional data by 5-year age groups, see Table 11a.

Disparities by age group (Figure 13)

- Absolute disparity (rate difference)—If the rate of HIV-related deaths among persons aged 55–64 years (2.8) with diagnosed HIV was similar to the rate among persons aged 25–34 years (0.9), then deaths would have been reduced by 2 per 100,000 population.
- Relative disparity (rate ratio)—The rate of HIV-related death among persons aged 55–64 years was 3.1 times the rate among persons aged 25–34 years.

Race/ethnicity

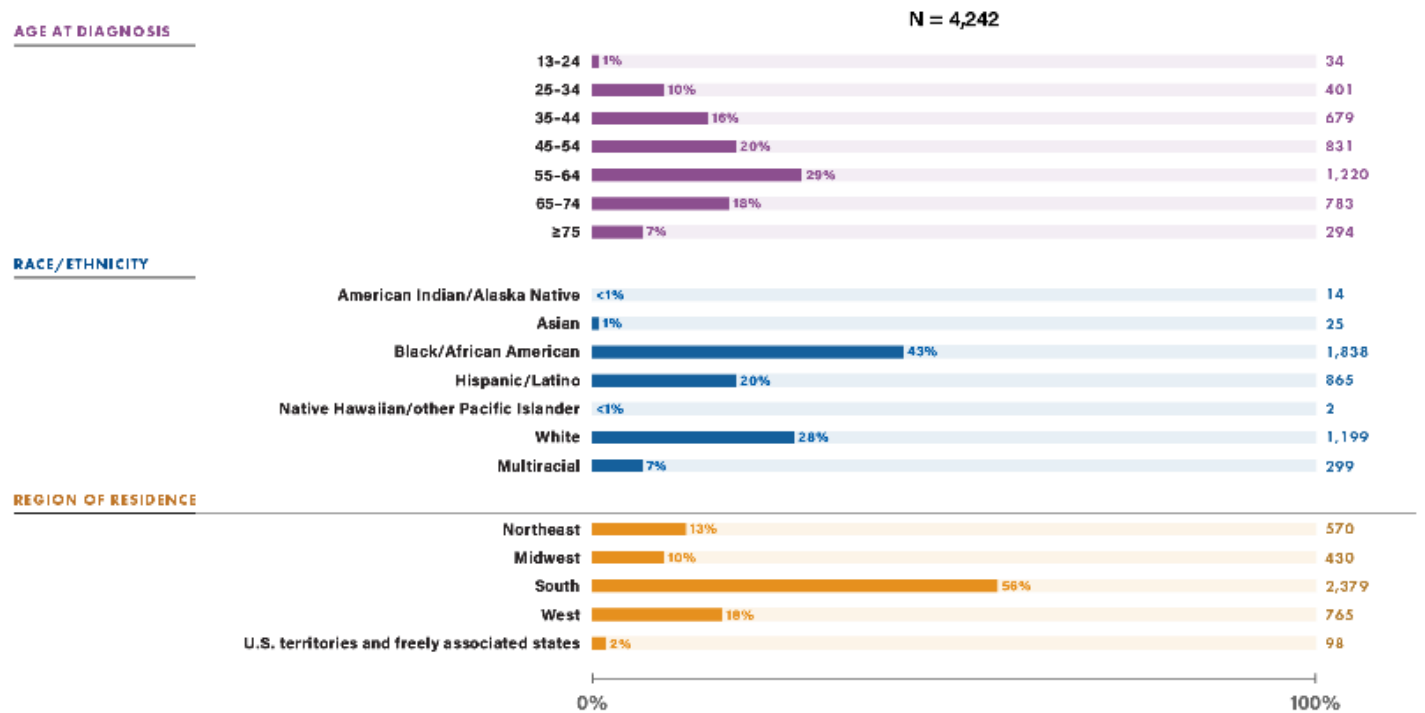
In 2022, compared with 2018, changes in numbers of HIV-related deaths among persons with diagnosed HIV were as follows (Table 11b):

- Increase—none
- Decrease—American Indian/Alaska Native (-17%), Black/African American (-21%), Hispanic/Latino (-17%), White (-19%), and multiracial (-16%)
- Stable—Asian

In 2022, numbers and percentages of HIV-related deaths among persons aged ≥ 13 years with diagnosed HIV were as follows (Figure 12):

- American Indian/Alaska Native—14 (<1%)
- Asian—25 (1%)
- Black/African American—1,838 (43%)
- Hispanic/Latino—865 (20%)
- Native Hawaiian/other Pacific Islander—2 (<1%)
- White—1,199 (28%)
- Multiracial—299 (7%)

Figure 12. HIV-related deaths of persons aged ≥ 13 years with diagnosed HIV, by selected characteristics, 2022—United States and 6 territories and freely associated states



Note. HIV-related deaths include deaths with an underlying cause with an International Classification of Diseases, Tenth Revision code of B20–B24, O98.7, or R75. Data for the year 2022 are preliminary and based on deaths reported to CDC as of December 2023. Asian includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race.

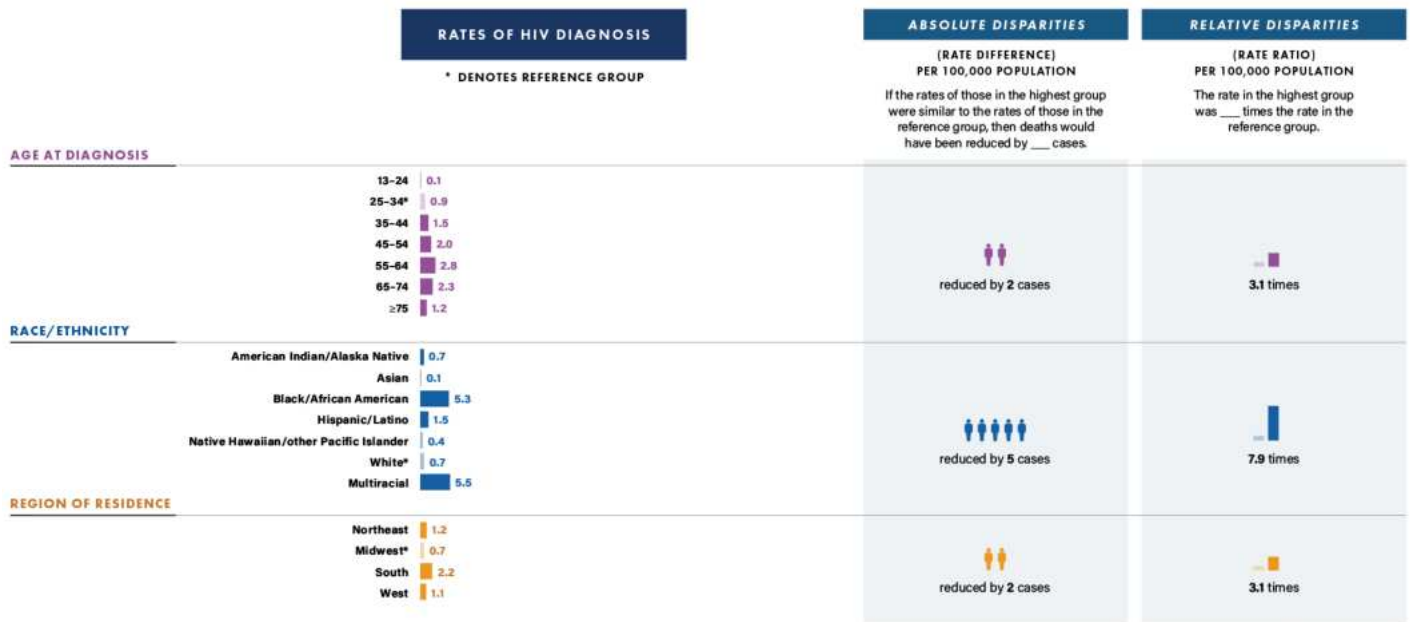
Rates among persons aged ≥ 13 years (United States only) (Figure 13)

- Highest—multiracial (5.5)
- Lowest—Asian (0.1)

Disparities by race/ethnicity (Figure 13)

- Absolute disparity (rate difference)—If the rate of HIV-related deaths among multiracial persons (5.5) aged ≥ 13 years with diagnosed HIV was similar to the rate among White persons aged ≥ 13 years (0.7), then HIV-related deaths would have been reduced by 5 per 100,000 population.
- Relative disparity (rate ratio)—The rate of HIV-related death among multiracial persons aged ≥ 13 years was 7.9 times the rate among White persons aged ≥ 13 years.

Figure 13. Rates and disparities of HIV-related deaths of persons aged ≥13 years with diagnosed HIV, by selected characteristics, 2022—United States



Note. HIV-related deaths include deaths with an underlying cause with an International Classification of Diseases, Tenth Revision code of B20–B24, O98.7, or R75. Data for the year 2022 are preliminary and based on deaths reported to CDC as of December 2023. Rates are per 100,000 population. Reference groups are based on the rate of the lowest group with >5% of cases. Asian includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race. Striped bars indicate rates based on small numbers (i.e., less than 12 diagnoses) and should be interpreted with caution. Absolute disparity measures the difference between rates in groups with the highest rates and a reference group ($\text{Rate}_{\text{highest group}} - \text{Rate}_{\text{reference group}}$). Relative disparity (rate ratio) measures the rates in groups with the highest rates divided by a reference group ($\text{Rate}_{\text{highest group}} \div \text{Rate}_{\text{reference group}}$).

SAAB and transmission category

In 2022, compared with 2018, changes in numbers of HIV-related deaths among persons aged ≥13 years with diagnosed HIV were as follows (Table 11b):

- Increase—none
- Decrease—MMSC (-9%), heterosexual contact (male [-24%]; female [-25%]), MMSC and IDU (-29%), and IDU (male [-29%]; female [-33%])
- Stable—none

In 2022, percentages of HIV-related deaths among persons aged ≥13 years with diagnosed HIV were as follows—highest percentages (Table 11b):

- Overall—MMSC (49%)
- Male—MMSC (64%)
- Female—heterosexual contact (70%)

Region of residence

In 2022, compared with 2018, changes in rates of HIV-related deaths among persons with diagnosed HIV were as follows (Table 11b):

- Increase—none
- Decrease—Northeast (-38%), Midwest (-33%), South (-18%), West (-9%), and U.S. territories and freely associated states (-31%)
- Stable—none

In 2022, numbers and percentages of HIV-related deaths among persons with diagnosed HIV were as follows (Table 11b):

- Northeast—570 (13%)
- Midwest—430 (10%)
- South—2,379 (56%)
- West—766 (18%)
- U.S. territories and freely associated states—98 (2%)

Rates among persons aged ≥ 13 years (United States only) (Figure 13)

- Highest—South (2.2)
- Lowest—Midwest (0.7)

Disparities by region

- Absolute disparities (rate difference)—If the rate of HIV-related death among persons in the South (2.2) with diagnosed HIV was similar to the rate among persons in the Midwest (0.7), then HIV-related deaths would have been reduced by 2 per 100,000 population.
- Relative disparities (rate ratio)—The rate of HIV-related death among persons in the South was 3.1 times the rate among persons in the Midwest.

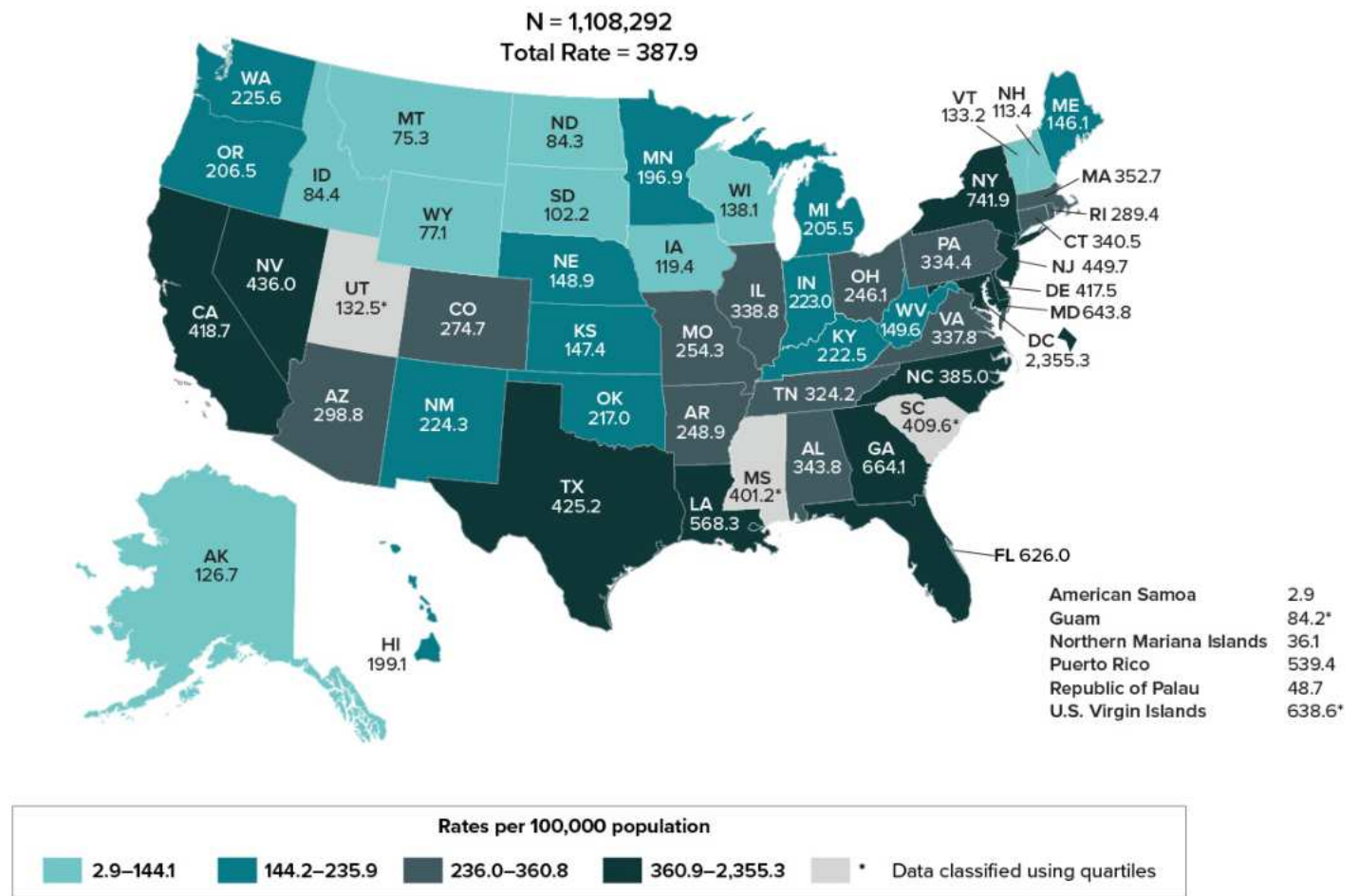
PREVALENCE

Persons living with diagnosed HIV

At year-end 2022 in the United States and 6 territories and freely associated states, persons living with diagnosed HIV were as follows:

- Overall total—1,109,418 (persons aged ≥ 13 years: 1,108,292) (Tables 15b and 17b, Figure 14)
- Overall rate—329.3 (persons aged ≥ 13 years: 387.9) (Tables 15b and 17b, Figure 14)

Figure 14. Persons aged ≥13 years living with diagnosed HIV, year-end 2022—United States and 6 territories and freely associated states



Note. Data for the year 2022 are preliminary and based on deaths reported to CDC as of December 2023. Data are based on address of residence as of December 2022 (i.e., most recent known address). Asterisk (*) indicates incomplete ascertainment of deaths.

Persons living with diagnosed HIV percentages and/or rates were as follows:

Gender (Table 15b)

- Men—840,579 (76%)
- Women—253,150 (23%)
- Transgender women/girls—14,565 (1%)
- Transgender men/boys—656 (<1%)
- AGI—466 (<1%)

Age group (Table 15b)

- <13 years—1,126 (<1%)
- 13–24 years—28,087 (3%)
- 25–34 years—166,554 (15%)
- 35–44 years—212,652 (19%)
- 45–54 years—239,336 (22%)

- 55–64 years—298,037 (27%)
- 65–74 years—133,513 (12%)
- ≥75 years—30,113 (3%)



For additional data by 5-year age groups, see Table 15b.

Race/ethnicity (Table 15b)

- American Indian/Alaska Native—3,274 (<1%)
- Asian—17,406 (2%)
- Black/African American—436,028 (39%)
- Hispanic/Latino—285,014 (26%)
- Native Hawaiian/other Pacific Islander—1,010 (<1%)
- White—307,118 (28%)
- Multiracial—58,916 (5%)

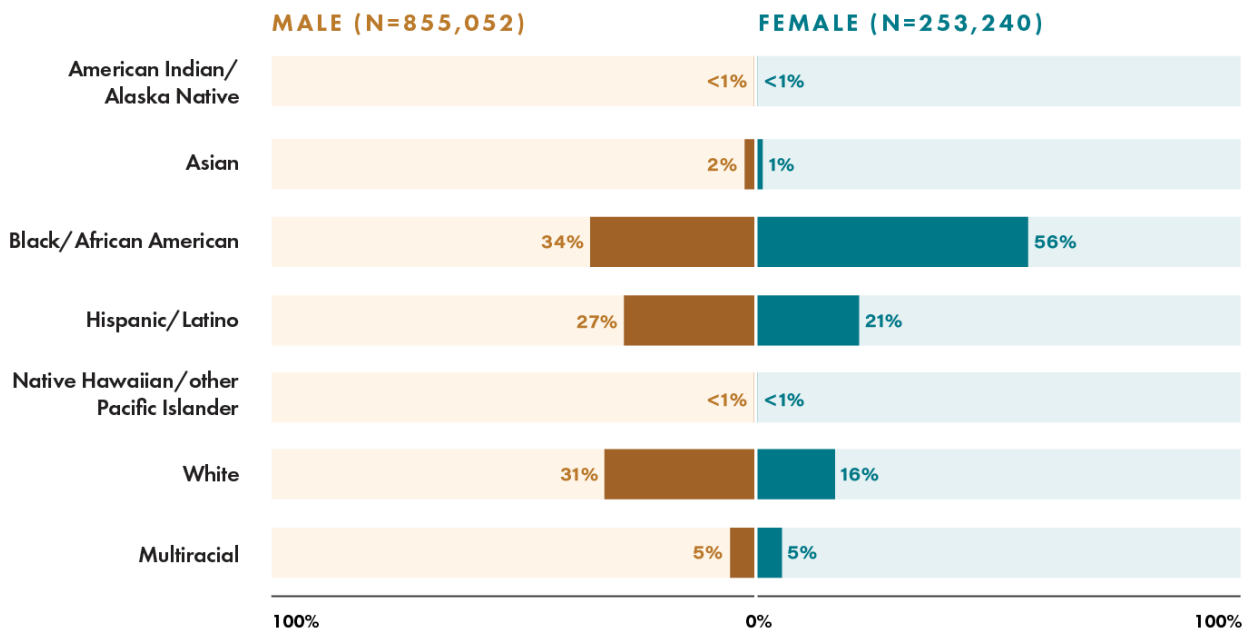
Rates (United States only) (Table 15a)

- American Indian/Alaska Native—135.2
- Asian—85.5
- Black/African American—1,035.6
- Hispanic/Latino—423.0
- Native Hawaiian/other Pacific Islander—153.5
- White—156.5
- Multiracial—736.7

SAAB and race/ethnicity—highest percentages (Figure 15)

- Male—Black/African American (34%)
- Female—Black/African American (56%)

Figure 15. Persons aged ≥13 years living with diagnosed HIV, by sex assigned at birth and race/ethnicity, year-end 2022—United States and 6 territories and freely associated states



Note. Data for the year 2022 are preliminary and based on deaths reported to CDC as of December 2023. Data are based on address of residence as of December 2022 (i.e., most recent known address). Asian includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race.

SAAB and transmission category, persons aged ≥13 years—highest percentages (Table 17b)

- Overall—MMSC (58%)
- Male—MMSC (75%)
- Female—heterosexual contact (78%)

Gender and exposure category (Table 18b)

- Transgender women—sexual contact (86%)
- Transgender men—sexual contact (77%)
- AGI—sexual contact (87%)

Region of residence (Table 15b)

- Northeast—236,341 (21%)
- Midwest—131,602 (12%)
- South—506,546 (46%)
- West—218,658 (20%)
- U.S. territories and freely associated states—16,271 (1%)

Rates (United States only) (Table 15a)

- Highest—Northeast (414.3)
- Lowest—Midwest (191.3)

Special Focus Profiles



Note. This is not a stock image. The persons in this image are living with HIV or are advocates for those living with HIV.

Scientific advances in HIV treatment and prevention have led to tremendous progress in improving care for persons living with HIV and reducing the number of annual HIV infections in the United States. Yet, longstanding disparities in HIV and care outcomes persist among select populations of interest. Intersecting social, political, and structural determinants—such as poverty, unemployment, housing insecurity, stigma, discrimination, residential and rural segregation—create barriers that drive those disparities and impact health outcomes [13–16]. With these barriers, people who do not know that they have HIV do not get medical care or receive treatment and can unknowingly transmit HIV through sex or sharing needles, syringes, or other drug injection equipment [11]. This lack of awareness of HIV status is due to not getting tested, underestimation of personal risk, fewer opportunities to get tested, having a recent infection, and/or fear of HIV status disclosure and social isolation [11, 17–20]. Evidence-based strategies must be tailored, be informed by persons with HIV, incorporate stigma reduction/smart disclosure strategies, and provide social support to address the unique needs of each population of interest [17]. Consistent, comprehensive, and sustainable health care with supportive services is critical to save lives and prevent community transmission to end the HIV epidemic.

The Special Focus Profiles are adapted from the NHAS priority populations [1]. This section highlights the distribution of HIV in 7 populations of interest to HIV prevention programs in state and local health departments: (1) Gay, Bisexual, and Other Men Who Have Sex With Men (MSM); (2) Persons Who Inject Drugs (PWID); (3) Transgender Persons; (4) Women; (5) Persons Residing in the Southern Region of the United States; (6) Persons Aged 13–24 Years; and (7) Children Aged <13 Years. See suggested readings for additional information on reducing inequities among populations of interest.

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

Social and structural issues—such as HIV stigma, homophobia, discrimination, poverty, and limited access to high-quality health care—make gay, bisexual, and other men who have sex with men (collectively referred to as MSM) of all races/ethnicities susceptible to multiple physical and mental health problems and can affect whether they seek and receive high-quality health services, including HIV testing, treatment, and other prevention services [21]. MSM are the population most affected by HIV in the United States.



In 2022, HIV attributed to MMSC accounted for 67% (25,422 MMSC, excluding MMSC *and* IDU) of the 38,043 HIV diagnoses in the United States and 6 territories and freely associated states (Table 1b). Many Black/African American and Hispanic/Latino MSM with HIV, particularly young MSM (aged 13–24 years), are unaware of their HIV infection [22]. Lack of awareness of HIV status among young MSM may be due to recent infection, not getting tested due to underestimation of personal risk, or fewer opportunities to get tested. Persons who do not know that they have HIV do not get medical care or receive treatment and can unknowingly transmit HIV to others through sex and sharing of drug equipment, e.g., needles.

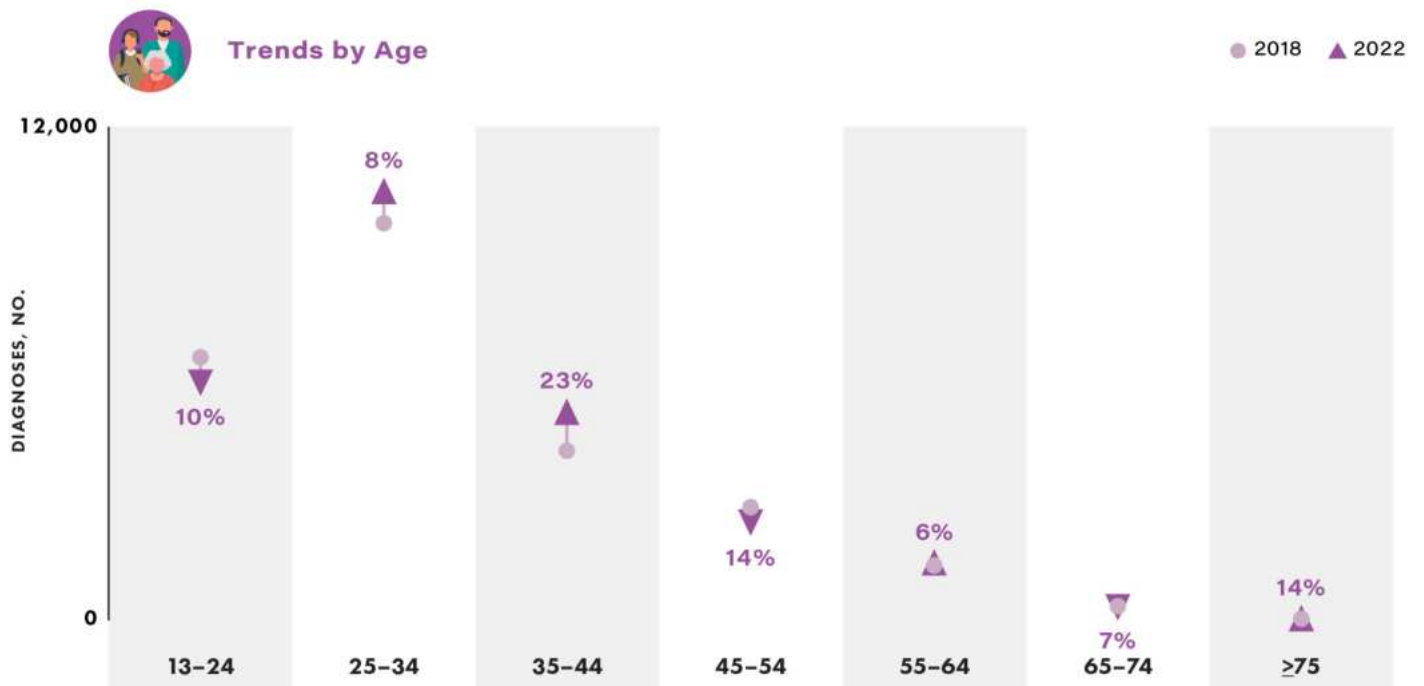
HIV Diagnoses Among MSM

Age group

In 2022, compared with 2018, changes in numbers of HIV diagnoses attributed to MMSC were as follows (Figure 16):

- Increase—persons aged 25–34 (8%), 35–44 years (23%), 55–64 (6%), and ≥ 75 (14%) years
- Decrease—persons aged 13–24 (-10%), 45–54 (-14%), and 65–74 (-7%) years
- Stable—none

Figure 16. Diagnoses of HIV among males, based on sex assigned at birth, attributed to male-to-male sexual contact, by age group, 2018–2022—United States and 6 territories and freely associated states



Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male sexual contact includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

In 2021, numbers and percentages of HIV diagnoses attributed to MMSC were as follows (Figure 17):


- 13–24 years—5,773 (23%)
- 25–34 years—10,436 (41%)
- 35–44 years—5,065 (20%)
- 45–54 years—2,373 (9%)
- 55–64 years—1,407 (6%)
- 65–74 years—318 (1%)
- ≥75 years—49 (<1%)



For additional data by 5-year age groups, see Table 5b.

Race/ethnicity

In 2022, compared with 2018, changes in numbers of HIV diagnoses attributed to MMSC were as follows (Table 5b):

- Increase—American Indian/Alaska Native (15%), Hispanic/Latino (22%), and Native Hawaiian/other Pacific Islander (43%) 
- Decrease—Asian (-5%), White (-5%), and multiracial (-32%)
- Stable—Black/African American

In 2022, numbers and percentages of HIV diagnoses attributed to MMSC were as follows (Figure 17, Table 5b):

- American Indian/Alaska Native—114 (<1%)
- Asian—625 (2%)
- Black/African American—8,831 (35%)
- Hispanic/Latino—9,374 (37%)
- Native Hawaiian/other Pacific Islander—60 (<1%)
- White—5,737 (23%)
- Multiracial—680 (3%)

Region of residence

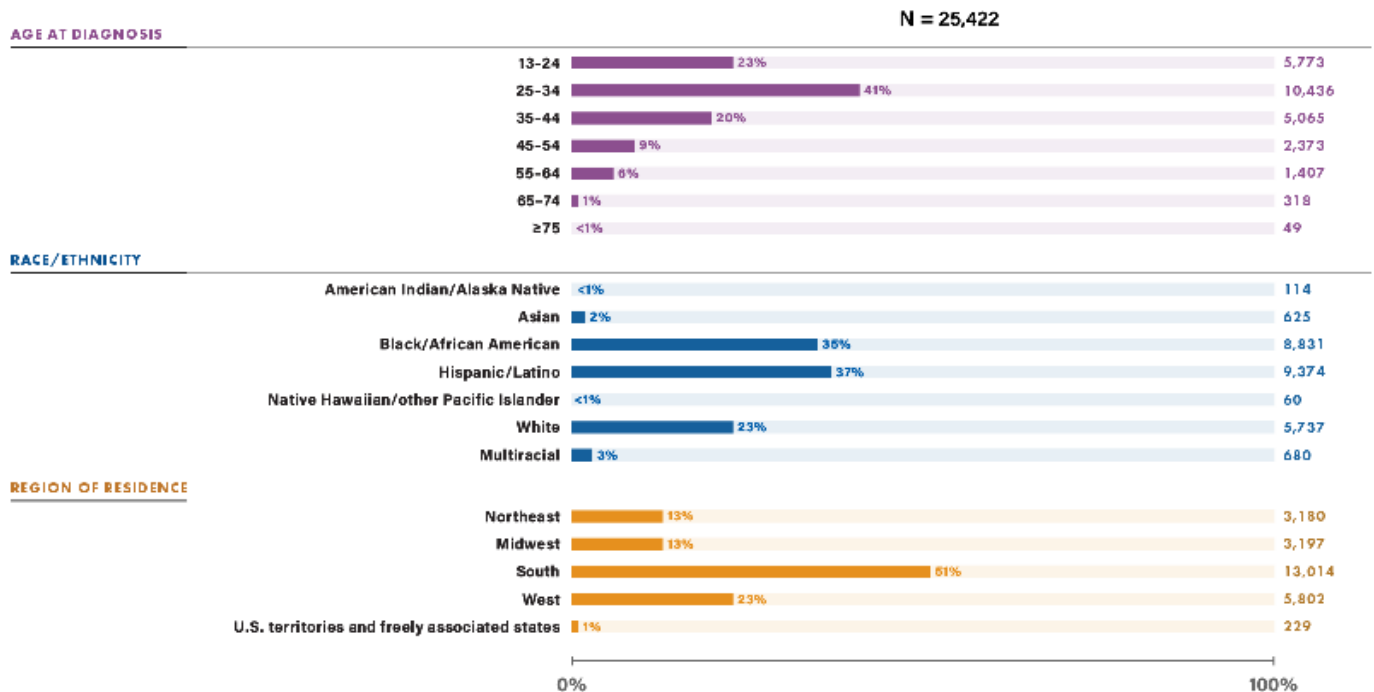
In 2022, compared with 2018, changes in numbers of HIV diagnoses attributed to MMSC were as follows (Table 5b):

- Increase—South (6%)
- Decrease—U.S. territories and freely associated states (-17%)
- Stable—Northeast, Midwest, and West

In 2022, numbers and percentages of HIV diagnoses attributed to MMSC were as follows (Figure 17, Table 5b):

- Northeast—3,180 (13%)
- Midwest—3,197 (13%)
- South—13,014 (51%)
- West—5,802 (23%)
- U.S. territories and freely associated states—229 (1%)

Figure 17. Diagnoses of HIV among males, based on sex assigned at birth, attributed to male-to-male sexual contact, by selected characteristics, 2022—United States and 6 territories and freely associated states



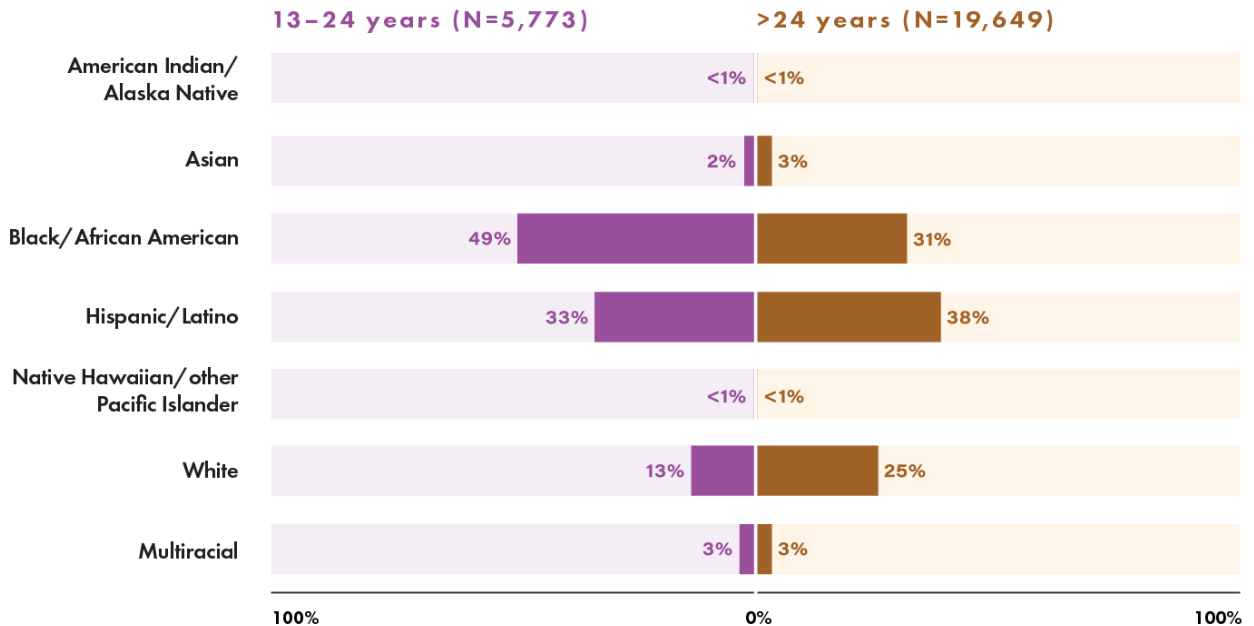
Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male sexual contact includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact). Hispanic/Latino persons can be of any race.

Age group and race/ethnicity

In 2022, the highest percentages by age group (Figure 18):

- Aged 13–24 years—Black/African American (49%)
- Aged >24 years—Hispanic/Latino (38%)

Figure 18. Diagnoses of HIV among males, based on sex assigned at birth, attributed to male-to-male sexual contact, by age group and race/ethnicity, 2022—United States and 6 territories and freely associated states

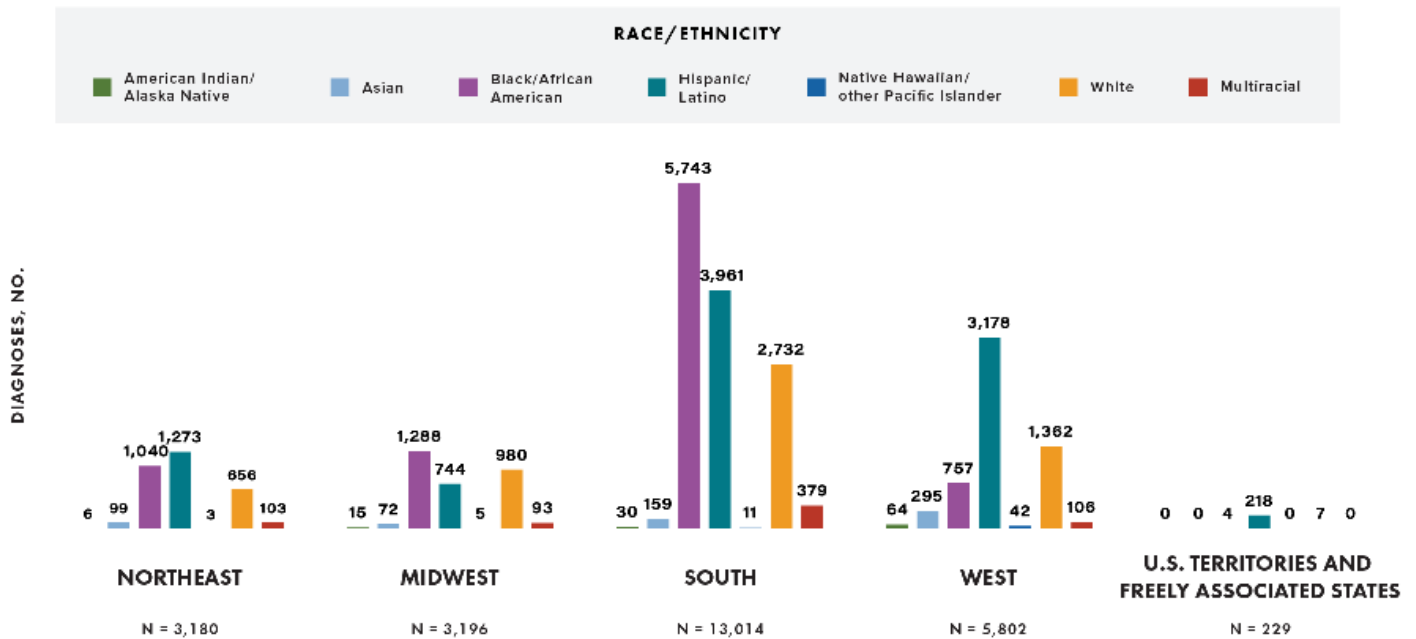


Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male sexual contact includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact). Hispanic/Latino persons can be of any race.

Region of residence and race/ethnicity—highest numbers and percentages by region (Figure 19):

- Northeast—Hispanic/Latino (1,273; 40%)
- Midwest—Black/African American (1,288; 40%)
- South—Black/African American (5,743; 44%)
- West—Hispanic/Latino (3,178; 55%)
- U.S. territories and freely associated states—Hispanic/Latino (218; 95%)

Figure 19. Diagnoses of HIV among males, based on sex assigned at birth, attributed to male-to-male sexual contact, by region and race/ethnicity, 2022—United States and 6 territories and freely associated states



Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male sexual contact includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact). Hispanic/Latino persons can be of any race.

Prevalence and Race/Ethnicity Among MSM

At year-end 2022 in the United States and 6 territories and freely associated states, 639,235 MSM (Table 16b) were living with diagnosed HIV attributed to MMSC.

Prevalence by race/ethnicity was as follows (Table 16b):

- American Indian/Alaska Native—1,775 (<1%)
- Asian—12,251 (2%)
- Black/African American—196,884 (31%)
- Hispanic/Latino—176,094 (28%)
- Native Hawaiian/other Pacific Islander—722 (<1%)
- White—217,377 (34%)
- Multiracial—33,814 (5%)

PERSONS WHO INJECT DRUGS

HIV attributed to injection drug use (IDU) in nonurban areas has created prevention challenges and brought attention to populations who would benefit from HIV prevention efforts [23]. In recent years, the opioid (including prescription and synthetic opioids) and heroin crisis has led to increased numbers of persons who inject drugs (PWID). HIV diagnoses among PWID have increased in the 50 states and District of Columbia [11]. PWID can get HIV if they use and share needles, syringes, or other drug injection equipment (e.g., cookers) that someone with HIV has used. In 2022, IDU accounted for about 1 in 14 HIV diagnoses in the United States (Table 6a).



HIV Diagnoses Among PWID

In 2022 in the United States and 6 territories and freely associated states, 2,650 diagnoses of HIV were attributed to IDU (1,490 among male and 1,161 among female PWID) (Table 6b).

Age group

In 2022, compared with 2018, changes in numbers of HIV diagnoses attributed to IDU were as follows (Table 6b):

- Increase—persons aged 25–34 (12%), 35–44 (20%), and 65–74 (23%) years
- Decrease—persons aged 13–24 (-21%), 45–54 (-10%), and 55–64 (-6%) years
- Stable—persons aged ≥ 75 years

In 2022, numbers and percentages of HIV diagnoses attributed to IDU were as follows (Figure 20):

- 13–24 years—181 (7%)
- 25–34 years—830 (31%)
- 35–44 years—785 (30%)
- 45–54 years—458 (17%)
- 55–64 years—297 (11%)
- 65–74 years—85 (3%)
- ≥ 75 years—15 (1%)




For additional data by 5-year age groups, see Table 6b.

Race/ethnicity

In 2022, compared with 2018, changes in numbers of HIV diagnoses attributed to IDU were as follows (Table 6b):

- Increase—American Indian/Alaska Native (71%), Asian (41%), and White (13%)
- Decrease—multiracial (-25%)
- Stable—Black/African American and Hispanic/Latino

In 2022, numbers and percentages of HIV diagnoses attributed to IDU were as follows (Figure 20):

- American Indian/Alaska Native—41 (2%)
- Asian—23 (1%)
- Black/African American—706 (27%)
- Hispanic/Latino—533 (20%)
- Native Hawaiian/other Pacific Islander—9 (<1%)
- White—1,252 (47%) 
- Multiracial—86 (3%)

Region of residence

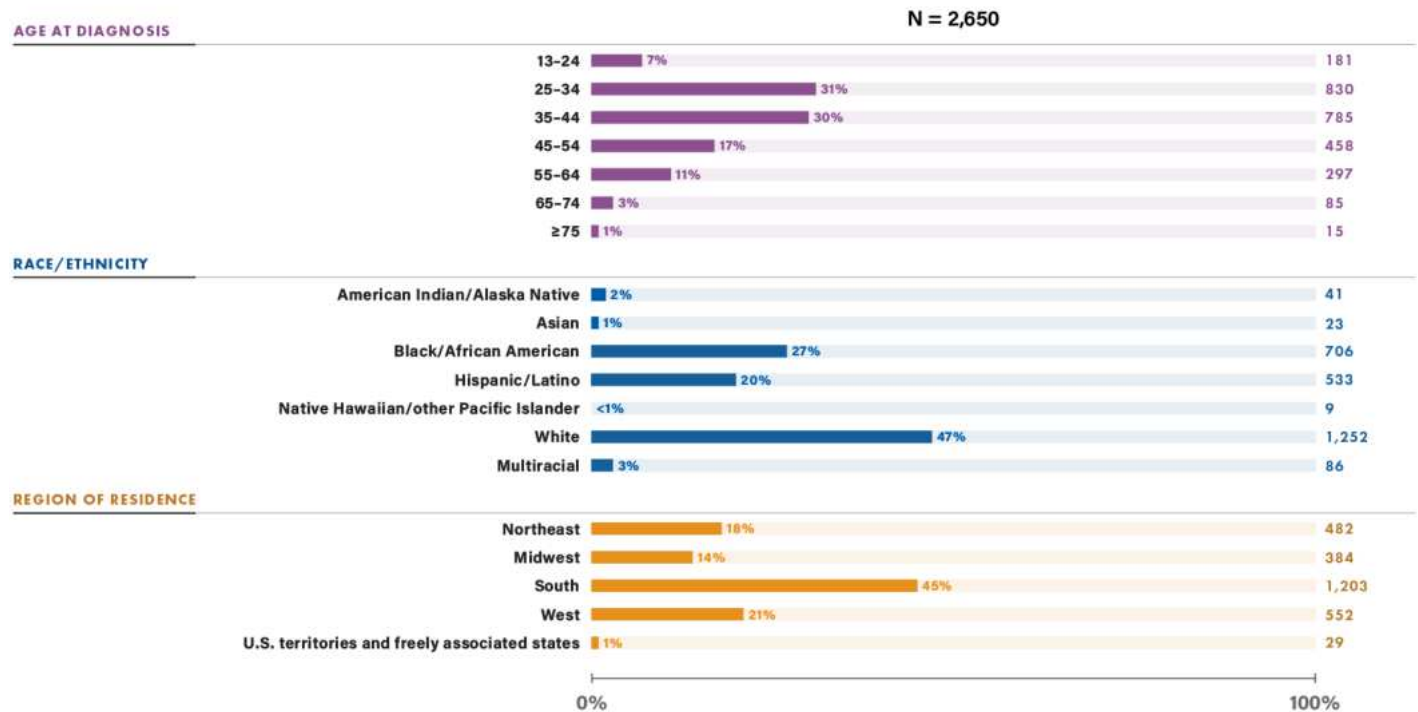
In 2022, compared with 2018, changes in numbers of HIV diagnoses attributed to IDU were as follows (Table 6b):

- Increase—South (21%)
- Decrease—Northeast (-18%)
- Stable—Midwest, West, and U.S. territories and freely associated states

In 2022, numbers and percentages of HIV diagnoses attributed to IDU were as follows (Figure 20):

- Northeast—482 (18%)
- Midwest—384 (14%)
- South—1,203 (45%)
- West—552 (21%)
- U.S. territories and freely associated states—29 (1%)

Figure 20. Diagnoses of HIV attributed to injection drug use, by selected characteristics, 2022—United States and 6 territories and freely associated states



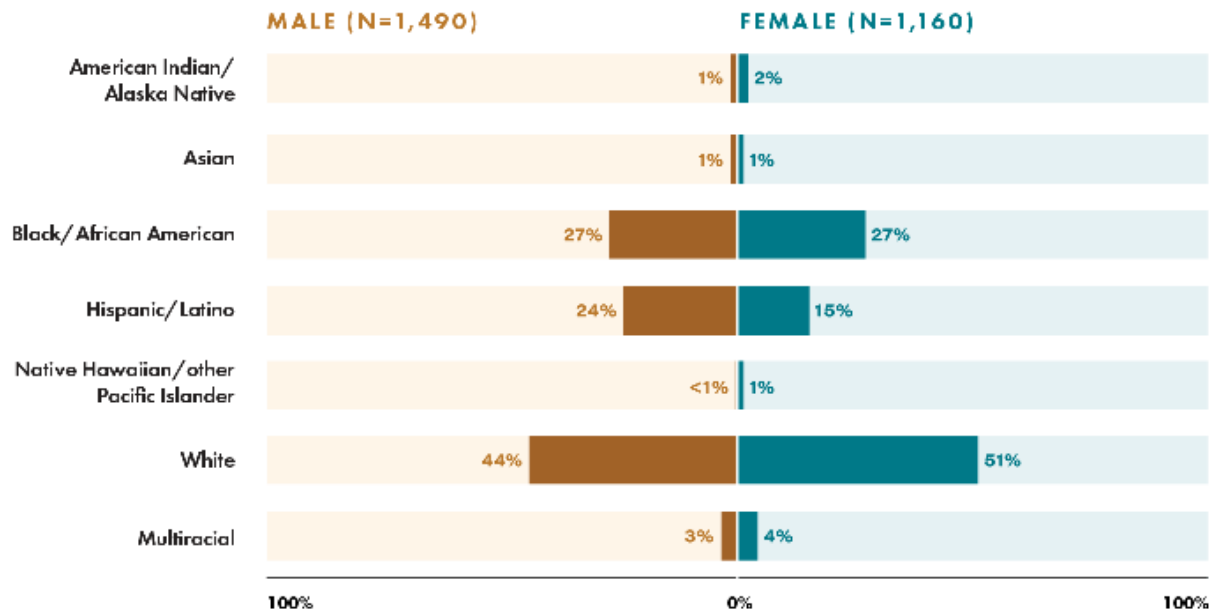
Note. Data have been statistically adjusted to account for missing transmission category. Injection drug use includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers). Hispanic/Latino persons can be of any race.

SAAB and race/ethnicity

In 2022, the highest percentages of HIV diagnoses attributed to IDU were as follows (Figure 21):

- Male—White (44%)
- Female—White (51%)

Figure 21. Diagnoses of HIV attributed to injection drug use, by sex assigned at birth and race/ethnicity, 2022—United States and 6 territories and freely associated states



Note. Data have been statistically adjusted to account for missing transmission category. Injection drug use includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers). Hispanic/Latino persons can be of any race.

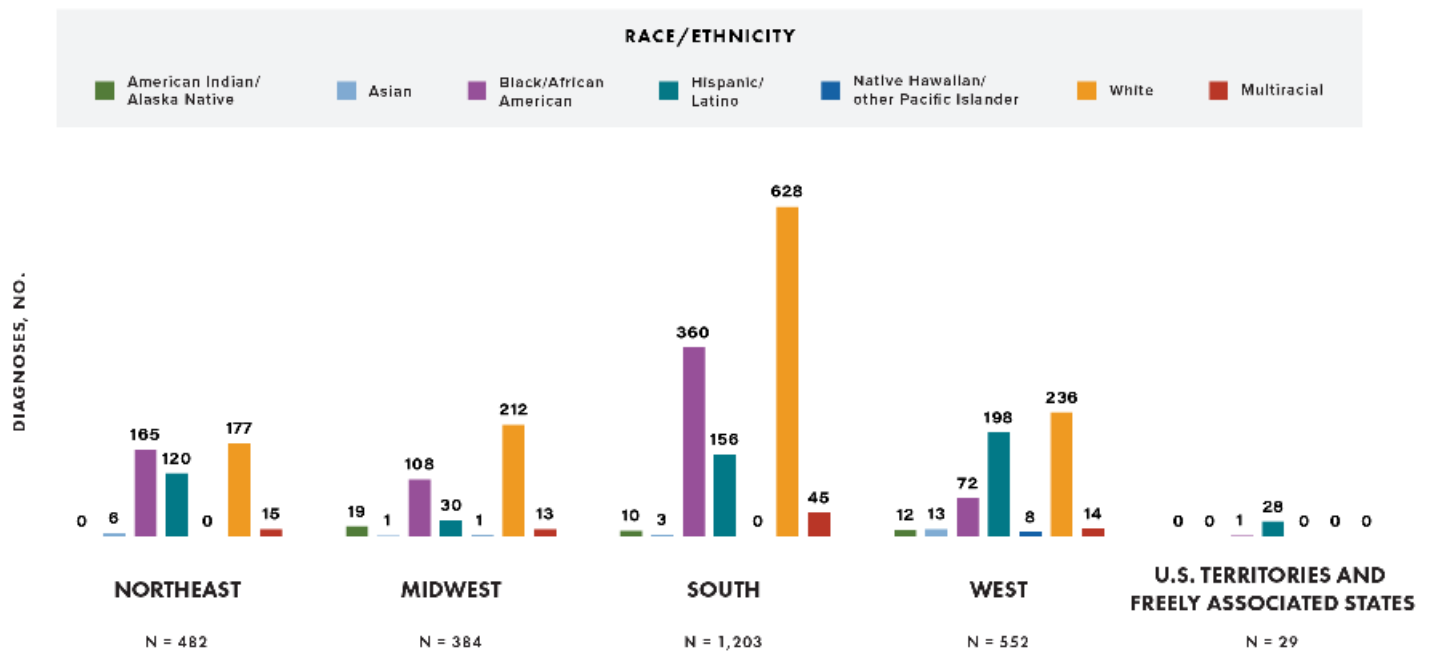
Region of residence and race/ethnicity

In 2022, the highest numbers and percentages of HIV diagnoses attributed to IDU were as follows (Figure 22):



- Northeast—White (177; 37%)
- Midwest—White (212; 55%)
- South—White (628; 52%)
- West—White (236; 43%)
- U.S. territories and freely associated states—Hispanic/Latino (28; 97%)

Figure 22. Diagnoses of HIV attributed to injection drug use, by region and race/ethnicity, 2022—United States and 6 territories and freely associated states



Note. Data have been statistically adjusted to account for missing transmission category. Injection drug use includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers). Hispanic/Latino persons can be of any race.

Prevalence and Race/Ethnicity Among PWID

At year-end 2022 in the United States and 6 territories and freely associated states, 114,742 PWID were living with diagnosed HIV. Prevalence by race/ethnicity was as follows (Table 16b):

- American Indian/Alaska Native—497 (<1%)
- Asian—666 (1%)
- Black/African American—49,717 (43%)
- Hispanic/Latino—31,428 (27%)
- Native Hawaiian/other Pacific Islander—57 (<1%)
- White—26,431 (23%)
- Multiracial—5,821 (5%)

TRANSGENDER AND ADDITIONAL GENDER IDENTITY PERSONS

Transgender is an umbrella term that is used to identify persons whose sex assigned at birth does not match current gender identity or expression. *Gender identity* refers to one’s internal understanding of one’s own gender, or the gender with which a person identifies [24]. *Additional gender identity* (AGI) is a term used to identify persons assigned “male” or “female” sex at birth who do not identify as male, female, transgender woman, or transgender man (e.g., those identifying as “nonbinary,” “gender queer,” or “two-spirit”) [24]. *Gender expression* is a term used to describe a person’s outward presentation of their gender [24]. Gender identity and sexual orientation are different facets of identity. Transgender and AGI persons are understudied in HIV prevention (e.g., preexposure prophylaxis [PrEP]) and treatment interventions and face numerous prevention challenges, including social rejection and exclusion and lack of public/provider knowledge about transgender and AGI issues [25].



HIV Diagnoses Among Transgender and AGI Persons

In 2022 in the United States and 6 territories and freely associated states, HIV diagnoses among transgender persons accounted for approximately 2% of diagnoses, while diagnoses among AGI persons accounted for <1%. Of the 994 diagnoses of HIV among transgender and AGI persons in 2022 (Table 4b), transgender women accounted for the highest percentage of diagnoses 🚨 (87%).

In 2022, numbers and percentages of HIV diagnoses among transgender and AGI persons aged ≥ 13 years were as follows (Figure 23):

Age group

- 13–24 years—309 (31%)
- 25–34 years—451 (45%)
- 35–44 years—151 (15%)
- 45–54 years—59 (6%)
- 55–64 years—21 (2%)
- 55–64 years—3 (<1%)
- ≥ 65 years—0 (0%)



For additional data by 5-year age groups, see Table 4b.

Race/ethnicity

- American Indian/Alaska Native—7 (1%)
- Asian—20 (2%)
- Black/African American—396 (40%)
- Hispanic/Latino—379 (38%)
- Native Hawaiian/other Pacific Islander—4 (<1%)

- White—147 (15%)
- Multiracial—41 (4%)

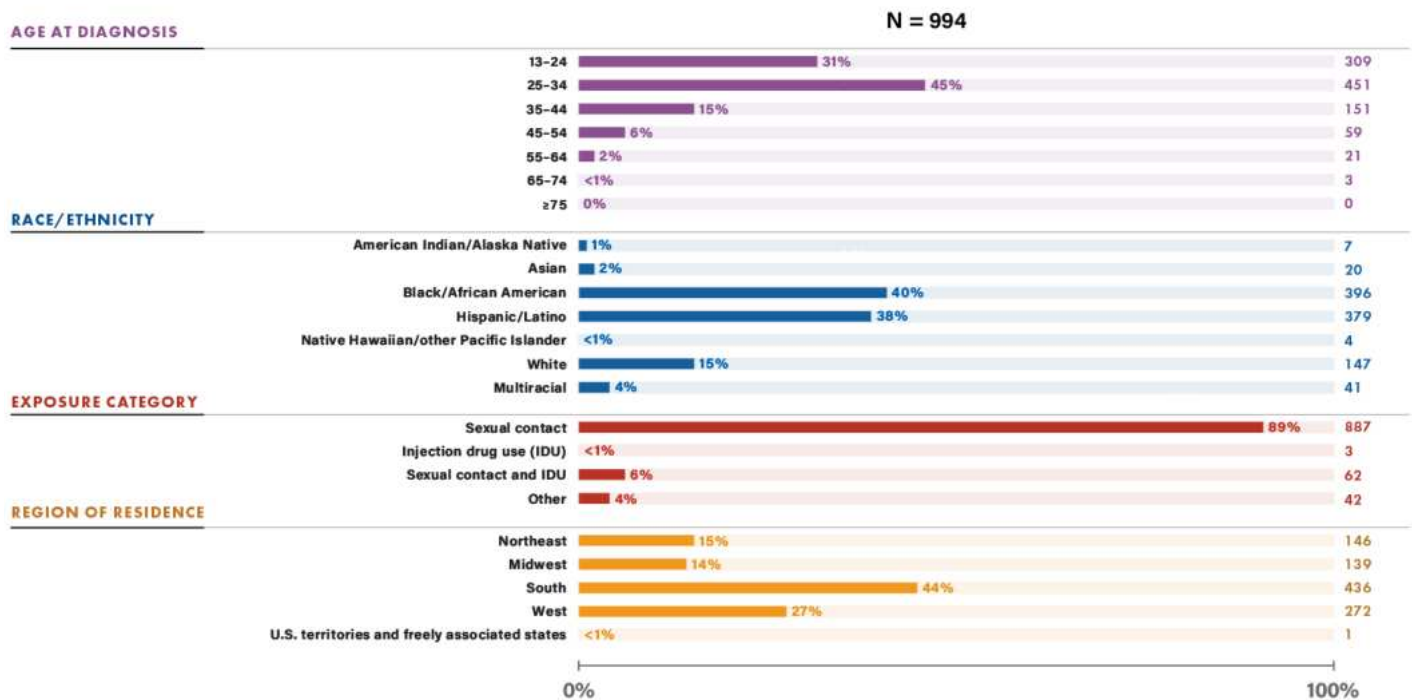
Exposure category

- Sexual contact—887 (89%)
- IDU—3 (<1%)
- Sexual contact and IDU—62 (6%)
- Other—42 (4%)

Region of residence

- Northeast—146 (15%)
- Midwest—139 (14%)
- South—436 (44%)
- West—272 (27%)
- U.S. territories and freely associated states—1 (<1%)

Figure 23. Diagnoses of HIV among transgender and additional gender identity persons aged ≥13 years, by selected characteristics, 2022—United States and 6 territories and freely associated states



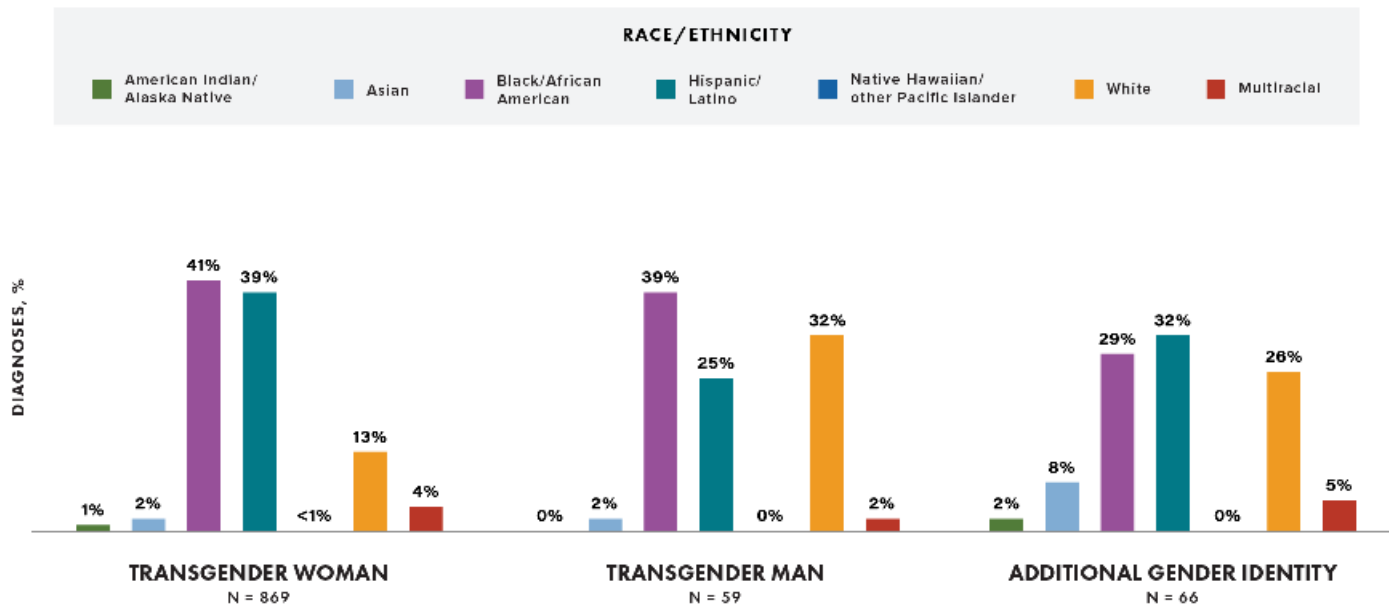
Note. “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man. Additional gender identity examples include “nonbinary,” “gender queer,” and “two-spirit.” Hispanic/Latino persons can be of any race. Sexual contact for persons assigned “male” sex at birth, sexual contact with any person. For persons assigned “female” sex at birth, sexual contact with a person assigned “male” sex at birth. Injection drug use includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers). Other includes other risk factors, including perinatal exposure, hemophilia, blood transfusion, and risk factor not reported or not identified. Data were not statistically adjusted to account for missing exposure category; therefore, case counts for “Other” might be high.

Gender and race/ethnicity—highest percentages

In 2022, the highest percentages of HIV diagnoses among persons aged ≥ 13 years were as follows (Figure 24):

- Transgender women—Black/African American (41%)
- Transgender men—Black/African American (39%)
- AGI—Hispanic/Latino (32%)

Figure 24. Diagnoses of HIV among transgender and additional gender identity persons aged ≥ 13 years, by gender and race/ethnicity, 2022—United States and 6 territories and freely associated states



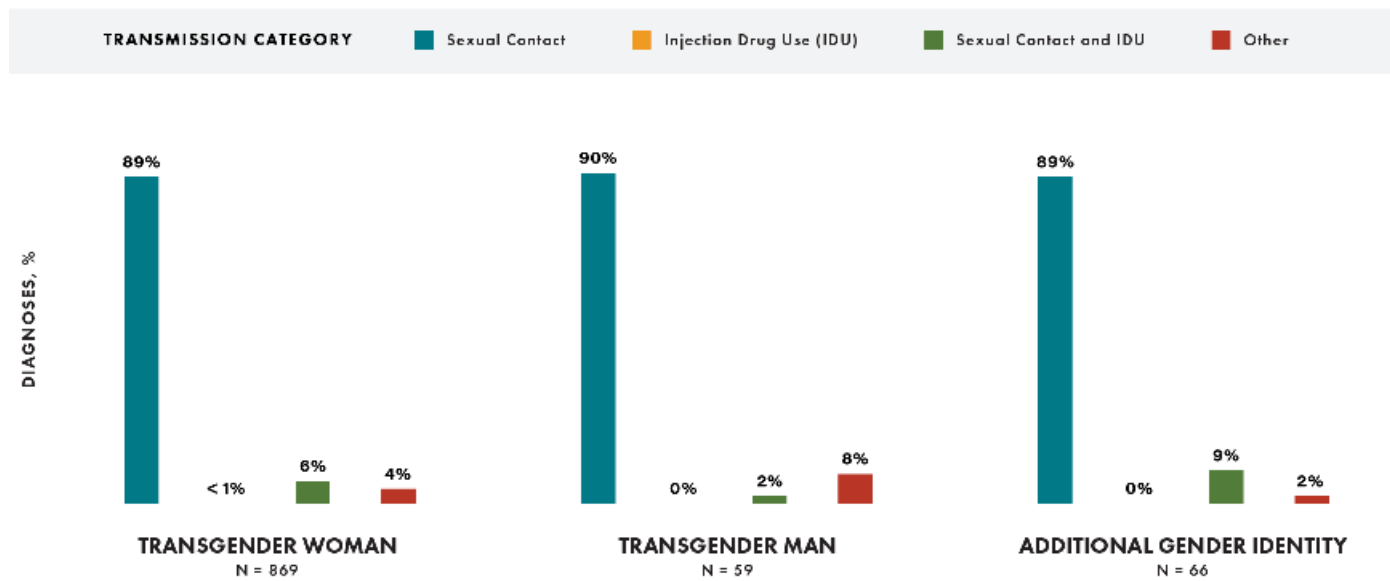
Note. “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man. Additional gender identity examples include “nonbinary,” “gender queer,” and “two-spirit.” Hispanic/Latino persons can be of any race.

Gender and exposure category—highest percentages

In 2022, the highest percentages of HIV diagnoses among persons aged ≥ 13 years were as follows (Figure 25):

- Transgender women—sexual contact (89%)
- Transgender men—sexual contact (90%)
- AGI—sexual contact (89%)

Figure 25. Diagnoses of HIV among transgender and additional gender identity persons aged ≥13 years, by gender and exposure category, 2022—United States and 6 territories and freely associated states



Note. “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man. Additional gender identity examples include “nonbinary,” “gender queer,” and “two-spirit.” Sexual contact for persons assigned “male” sex at birth, sexual contact with any person. For persons assigned “female” sex at birth, sexual contact with a person assigned “male” sex at birth. Injection drug use includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers). Other includes other risk factors, including perinatal exposure, hemophilia, blood transfusion, and risk factor not reported or not identified. Data were not statistically adjusted to account for missing exposure category; therefore, case counts for “Other” might be high.

WOMEN

Social barriers such as racism, discrimination, and HIV stigma have a major impact on health and well-being. These factors prevent some women from seeking and receiving high-quality health care, including HIV testing, treatment, and other prevention services [26]. In addition to the social issues that affect some women, other factors can increase the chances of getting or transmitting HIV, such as a sex partner’s risk factors, knowledge of preexposure prophylaxis (PrEP), and knowledge of HIV status [26]. Additionally, women of color, particularly Black/African American, are disproportionately affected by HIV compared to other races/ethnicities [26].



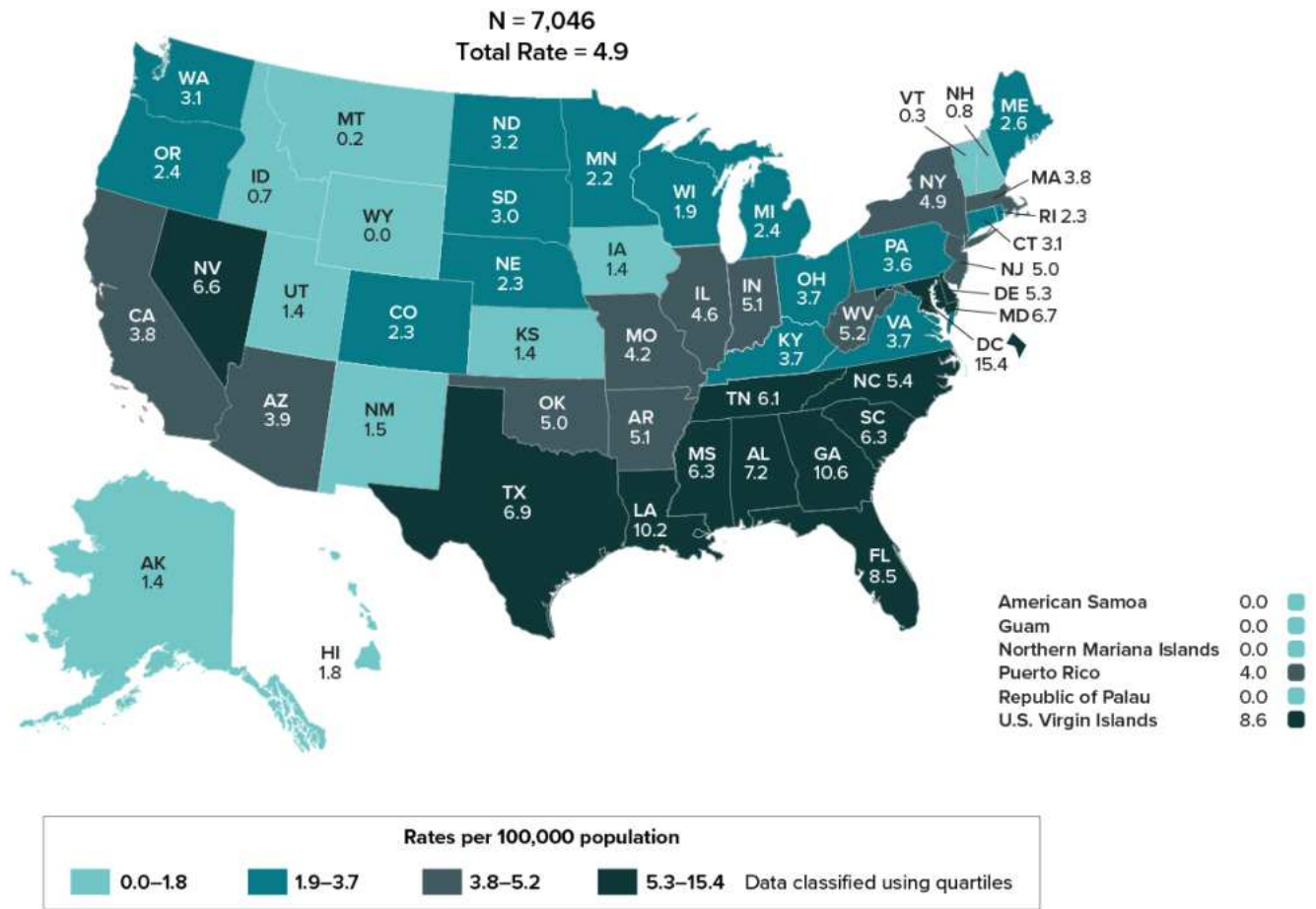
HIV Diagnoses Among Women

In 2022 in the United States and 6 territories and freely associated states, 7,046 HIV diagnoses were among females aged ≥13 years (based on SAAB), and the rate of HIV diagnoses was 4.9 (Figure 26).



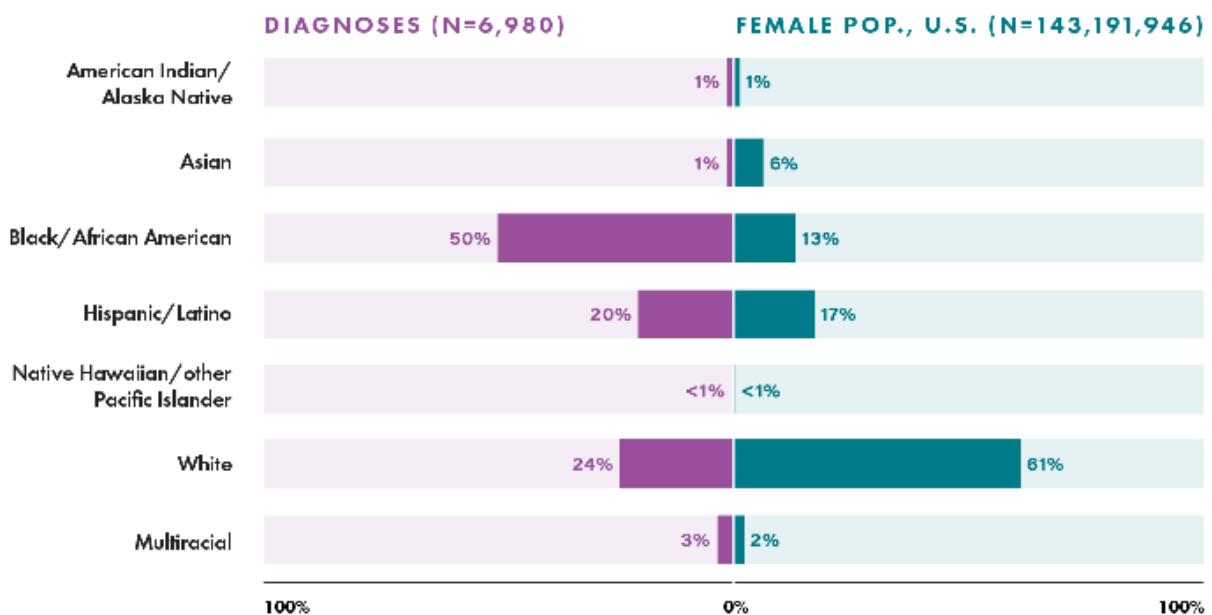
For rates of HIV diagnoses among females aged ≥13 years (based on SAAB) by state and U.S. territories and freely associated states, see Figure 26.

Figure 26. Diagnoses of HIV among females aged ≥13 years, based on sex assigned at birth, 2022—United States and 6 territories and freely associated states



For percentages of HIV diagnoses among females by race/ethnicity and U.S. population, see Figure 27.

Figure 27. Diagnoses of HIV and population among females aged ≥13 years, based on sex assigned at birth, by race/ethnicity, 2022—United States



Note. Hispanic/Latino persons can be of any race.

Age group

In 2022, rates for HIV diagnoses among females aged ≥ 13 years were as follows (United States only) (Figure 28):

- 13–24 years—3.4
- 25–34 years—9.1
- 35–44 years—8.3
- 45–54 years—6.2
- 55–64 years—3.6
- 65–74 years—1.2
- ≥ 75 years—0.3



For additional data by 5-year age groups, see Table 3a.

Disparities by age group


- Absolute disparity (rate difference)—If the rate of HIV diagnoses among females aged 25–34 years was similar to the rate among females aged 13–24 years, then diagnoses would have been reduced by 6 cases per 100,000 population.
- Relative disparity (rate ratio)—The rate of diagnoses among females aged 25–34 years was 2.7 times the rate among females aged 13–24 years.


Race/ethnicity

In 2022, rates for HIV diagnoses among females aged ≥ 13 years were as follows (United States only) (Figure 28):

- American Indian/Alaska Native—5.5
- Asian—1.1
- Black/African American—19.2
- Hispanic/Latino—5.5
- Native Hawaiian/other Pacific Islander—4.6
- White—1.9
- Multiracial—8.2

Disparities by race/ethnicity (Figure 28)

Absolute disparity (rate difference)—If the rate of HIV diagnoses among Black/African American females aged ≥ 13 years (19.2) was similar to the rate among White females aged ≥ 13 years (1.9), then diagnoses would have been reduced by 17 per 100,000 population. 

Relative disparity (rate ratio)—The rate of diagnoses among Black/African American females aged ≥ 13 years was 10.1 times the rate among White females aged ≥ 13 years. 

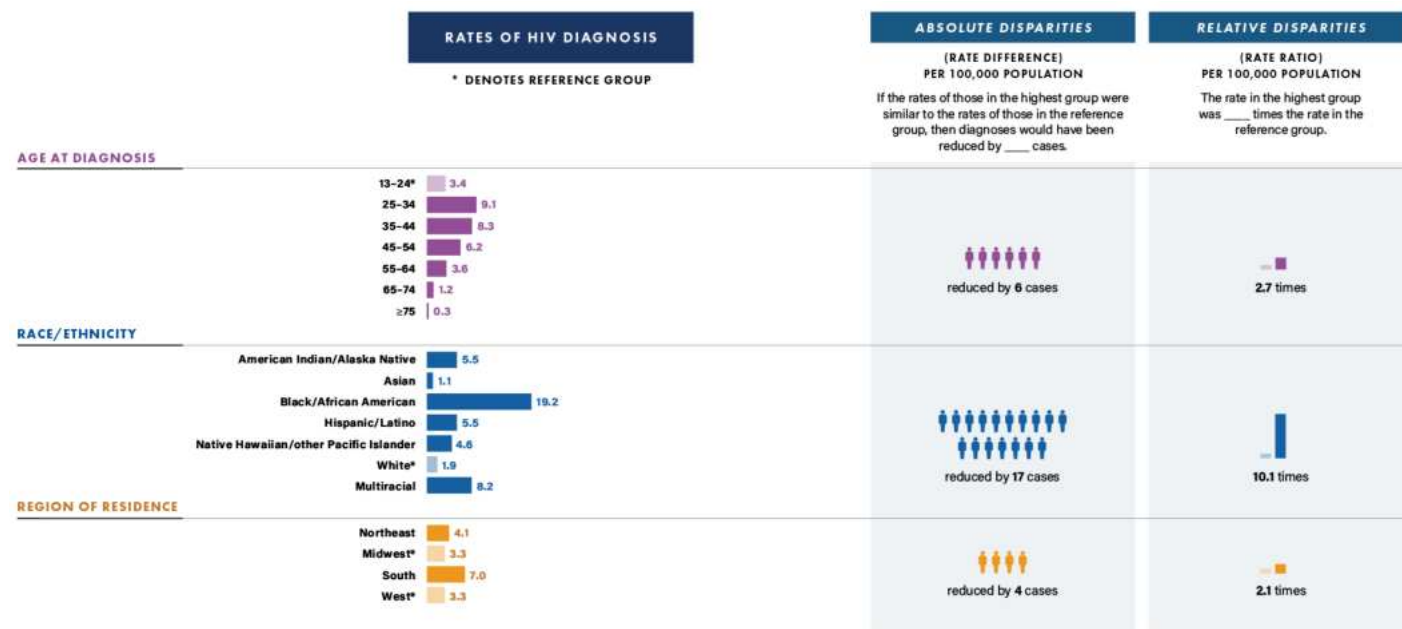
Changes in disparities by race/ethnicity

In 2022, compared with 2018, changes in rates of HIV diagnoses by race/ethnicity among females aged ≥ 13 years were as follows (Figure 29):

Absolute disparity (rate difference)—for the difference between rate of HIV diagnoses among a select race/ethnicity minus the rate among White females, there was a narrower gap (or less disparity) for Black/African American-White and multiracial-White disparities, a wider gap (or greater disparity) for American Indian/Alaska Native-White and Asian-White disparities, and no change in disparity for Hispanic/Latino-White disparities in 2022 than in 2018.

Relative disparity (rate ratio)—for the rates of HIV diagnoses among a select race/ethnicity divided by the rates among White females, there was less disparity in 2022 than in 2018 (except for American Indian/Alaska Native-White and Asian-White).

Figure 28. Rates and disparities of diagnoses of HIV among females aged ≥ 13 years, based on sex assigned at birth, by selected characteristics, 2022—United States and 6 territories and freely associated states



Note. Rates are per 100,000 population. Reference groups are based on the rate of the lowest group with $>5\%$ of cases. Hispanic/Latino persons can be of any race. Absolute disparity measures the difference between rates in groups with the highest rates and a reference group ($\text{Rate}_{\text{highest group}} - \text{Rate}_{\text{reference group}}$). Relative disparity (rate ratio) measures the rates in groups with the highest rates divided by a reference group ($\text{Rate}_{\text{highest group}} \div \text{Rate}_{\text{reference group}}$).

Region of residence

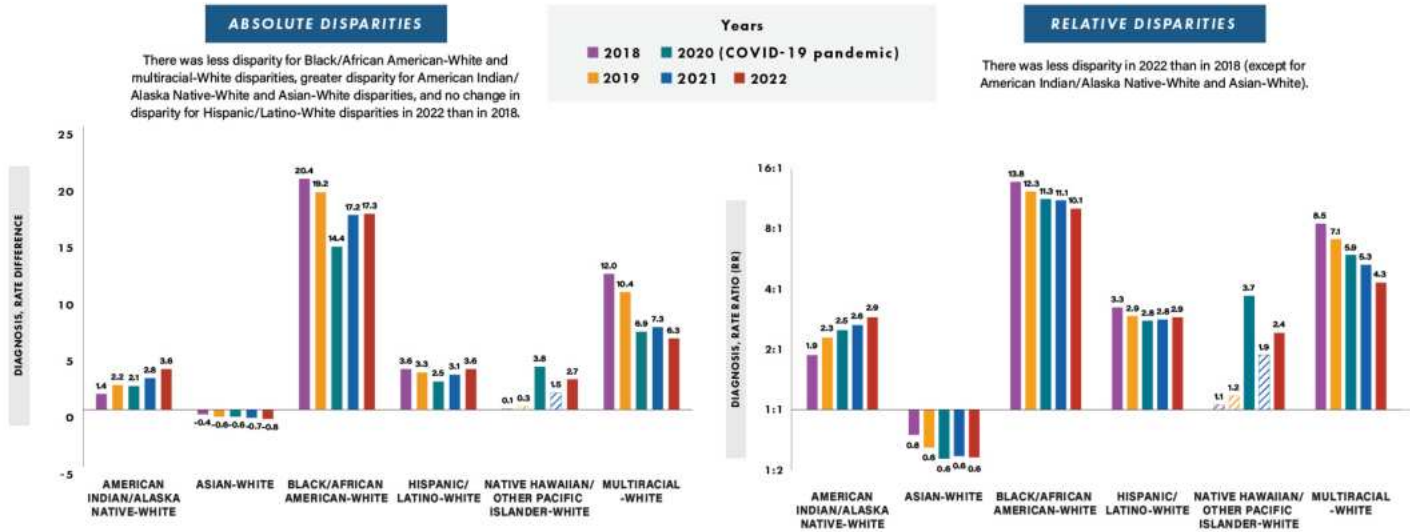
In 2022, rates for HIV diagnoses among females aged ≥ 13 years were as follows (United States only) (Figure 28):

- Northeast—4.1
- Midwest—3.3
- South—7.0
- West—3.3

Disparities by region

- Absolute disparities (rate difference)—If the rate of HIV diagnoses among females aged ≥ 13 years in the South was similar to the rate among females aged ≥ 13 years in the Midwest or West, then diagnoses would have been reduced by 4 cases per 100,000 population.
- Relative disparities (rate ratio)—The rate of HIV diagnoses among females aged ≥ 13 years in the South was 2.1 times the rate among females aged ≥ 13 years in the Midwest or West.


Figure 29. Absolute and relative disparities of diagnoses of HIV among females aged ≥ 13 years, based on sex assigned at birth, by race/ethnicity and year of diagnosis, 2018–2022—United States



Note. Hispanic/Latino persons can be of any race. Striped bars indicate rates based on small numbers (i.e., less than 12 diagnoses) and should be interpreted with caution. The data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022. Absolute disparity measures the difference between rates among a select race/ethnicity and rates among White persons ($\text{Rate}_{\text{select race/ethnicity}} - \text{Rate}_{\text{White persons}}$). Relative disparity (rate ratio) measures the rates among a select race/ethnicity divided by rates among White persons ($\text{Rate}_{\text{select race/ethnicity}} \div \text{Rate}_{\text{White persons}}$).

Transmission category and race/ethnicity

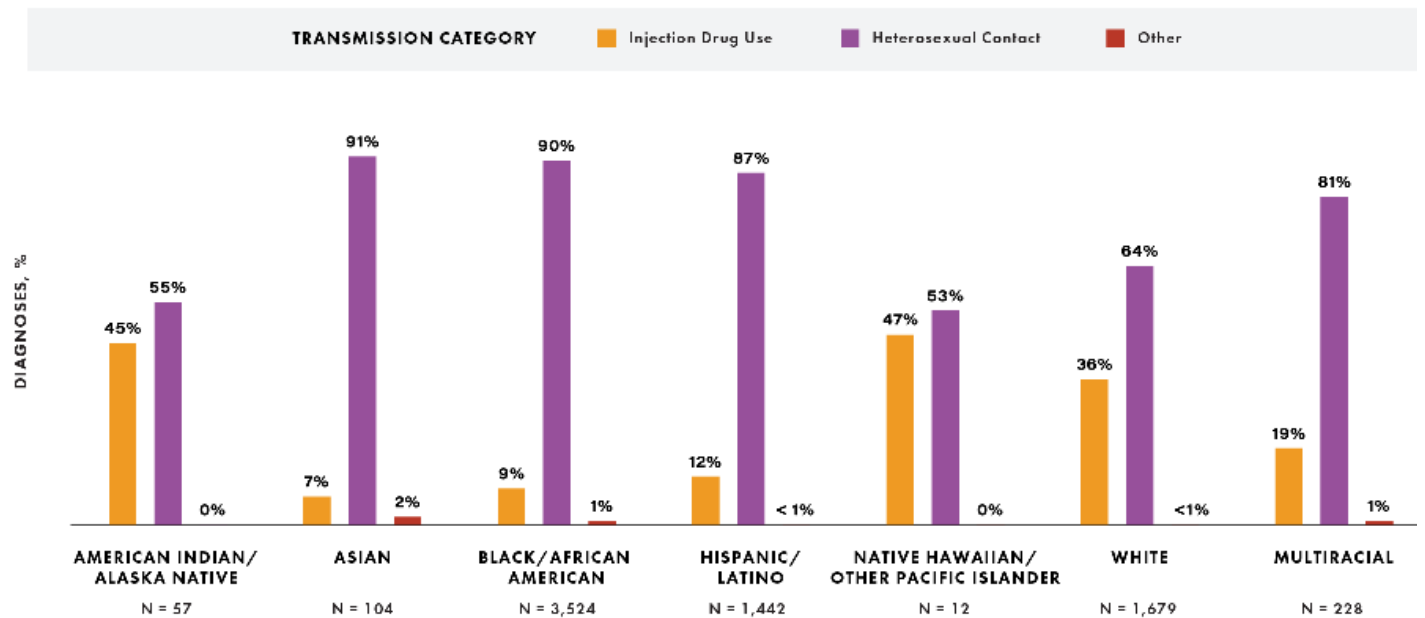
In 2022, the highest number of HIV diagnoses among females aged ≥ 13 years were as follows (Table 2b):

- IDU—White (597)
- Heterosexual contact—Black (3,182) 
- Other (including Perinatal)—Black (36)

In 2022, the highest percentages of HIV diagnoses among females aged ≥ 13 years were as follows (Figure 30):


- IDU—Native Hawaiian/other Pacific Islander (47%)
- Heterosexual contact—Asian (91%)
- Other—Asian (2%)

Figure 30. Diagnoses of HIV among females aged ≥ 13 years, based on sex assigned at birth, by transmission category and race/ethnicity, 2022—United States and 6 territories and freely associated states



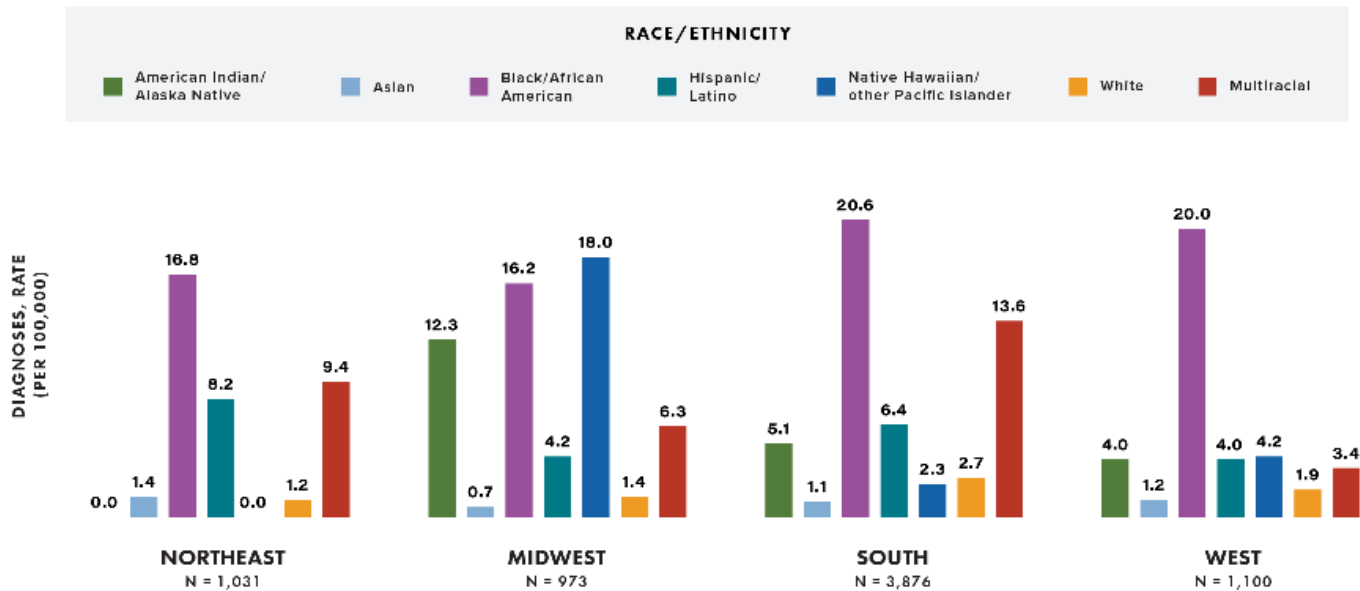
Note. Data have been statistically adjusted to account for missing transmission category. Injection drug use includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers). Heterosexual contact includes heterosexual contact with a person known to have, or with a risk factor for, HIV. Other includes other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified. Hispanic/Latino persons can be of any race.

Region of residence and race/ethnicity

In 2022, the highest rates of HIV diagnoses among females aged ≥ 13 years were as follows (United States only) (Figure 31): 

- Northeast—Black/African American (16.8)
- Midwest—Black/African American (16.2)
- South—Black/African American (20.6)
- West—Black/African American (20.0)

Figure 31. Diagnoses of HIV among females aged ≥13 years, based on sex assigned at birth, by race/ethnicity and region, 2022—United States and 6 territories and freely associated states



Note. Rates are per 100,000 population. Hispanic/Latino persons can be of any race.

Prevalence Among Women

At year-end 2022 in the United States and 6 territories and freely associated states, 253,240 females aged ≥13 years were living with diagnosed HIV. Prevalence by race/ethnicity was as follows (Table 17b):

- American Indian/Alaska Native—797 (<1%)
- Asian—2,928 (1%)
- Black/African American—142,544 (56%) 🚨
- Hispanic/Latino—51,975 (21%)
- Native Hawaiian/other Pacific Islander—159 (<1%)
- White—40,970 (16%)
- Multiracial—13,686 (5%)

PERSONS RESIDING IN THE SOUTHERN REGION OF THE UNITED STATES

The gap in knowledge of HIV status in the Southern region of the United States (South) is among the highest in the country and can result in fewer people living with HIV receiving timely HIV medical care and treatment and having a suppressed viral load. In 2022, for every 100 people with HIV (aged ≥13 years) in the South, 14 did not know their status [22]. Additionally, socioeconomic factors, such as poverty and median household income, contribute to HIV transmission. In comparison to other regions in the United States, the South has both the highest rate of poverty and the lowest median household income [27].



HIV Diagnoses Among Persons in the South


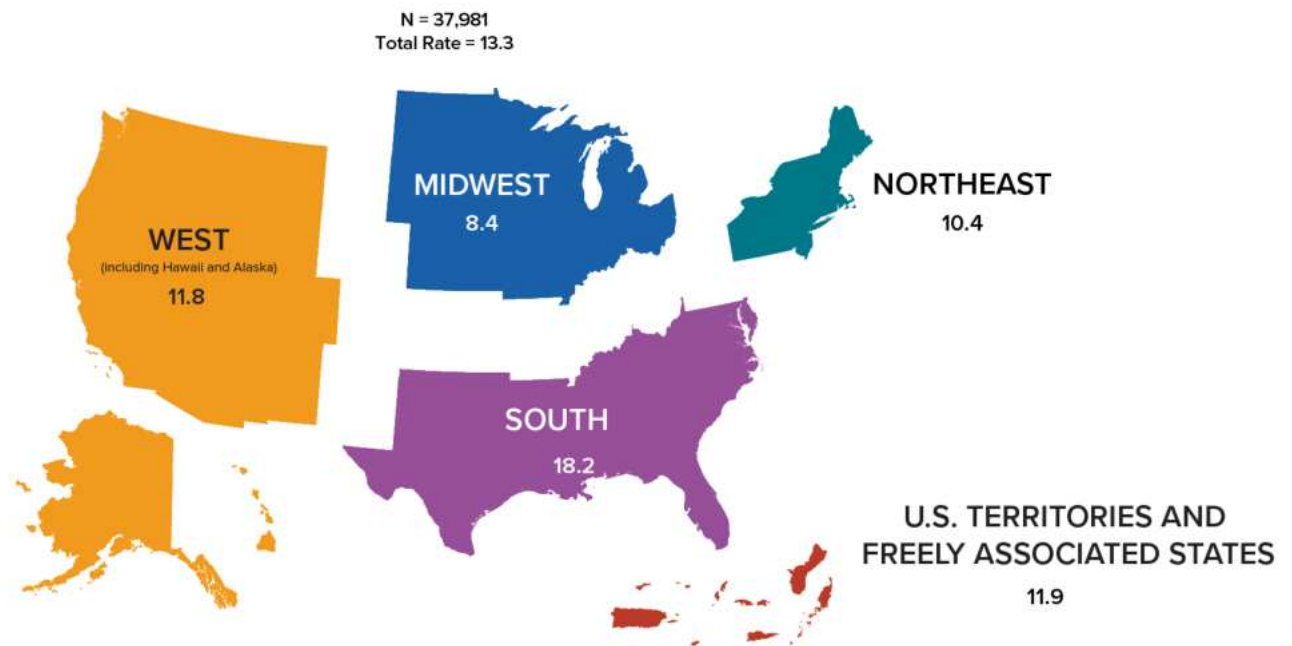
In 2022 among the 4 main regions in the United States (the Northeast, Midwest, South, and West) and 6 territories and freely associated states, 52% (19,822) of HIV diagnoses were in the South (Table 1b). The rate of HIV diagnoses among those aged ≥ 13 years was 18.2, greater than any other region  (Figure 32).

Figure 32. Diagnoses of HIV among persons aged ≥ 13 years, by region, 2022—United States and 6 territories and freely associated states

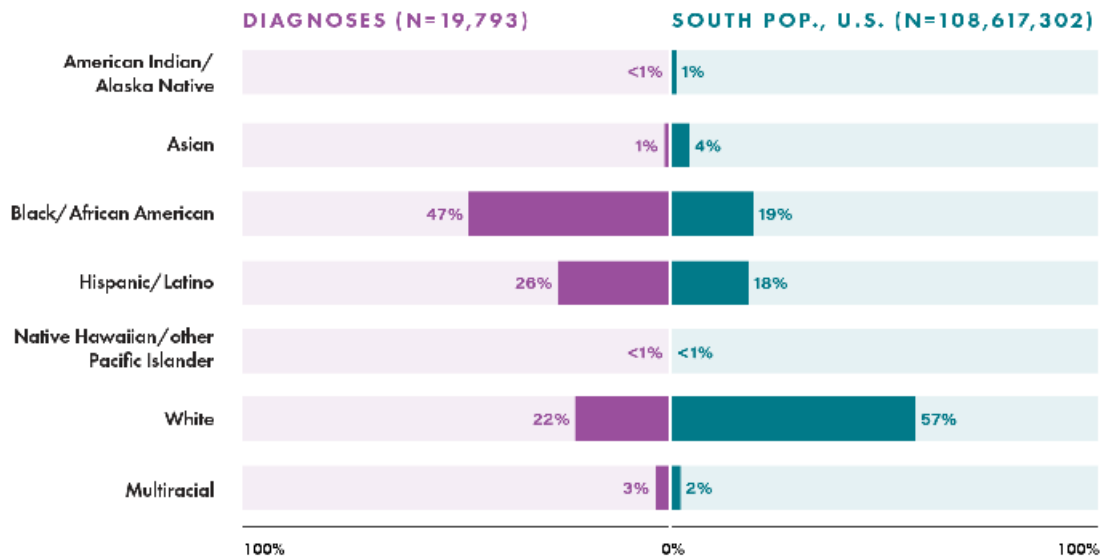


Note. Rates are per 100,000 population.



For percentages by race/ethnicity and U.S. Southern population, see Figure 33.

Figure 33. Diagnoses of HIV and population among persons aged ≥ 13 years, by race/ethnicity, 2022—U.S. Southern Region



Note. Hispanic/Latino persons can be of any race.

Age group

In 2022, rates for HIV diagnoses among persons aged ≥ 13 years in the South were as follows (Figure 34):

- 13–24 years—19.4
- 25–34 years—42.4
- 35–44 years—24.4
- 45–54 years—14.9
- 55–64 years—9.3
- 65–74 years—3.0
- ≥ 75 years—0.8

Disparities by age group

- Absolute disparity (rate difference)—If the rate of HIV diagnoses among persons aged 25–34 years (42.4) was similar to the rate among persons aged 55–64 years (9.3), then diagnoses would have been reduced by 33 cases per 100,000 population.
- Relative disparity (rate ratio)—The rate of HIV diagnoses among persons aged 25–34 years was 4.6 times the rate among persons aged 55–64 years.

Race/ethnicity

In 2022, rates for HIV diagnoses among persons aged ≥ 13 years in the South were as follows (Figure 34):

- American Indian/Alaska Native—8.2
- Asian—4.8
- Black/African American—45.9
- Hispanic/Latino—26.4
- Native Hawaiian/other Pacific Islander—16.0
- White—7.1
- Multiracial—31.5

Disparities by race/ethnicity

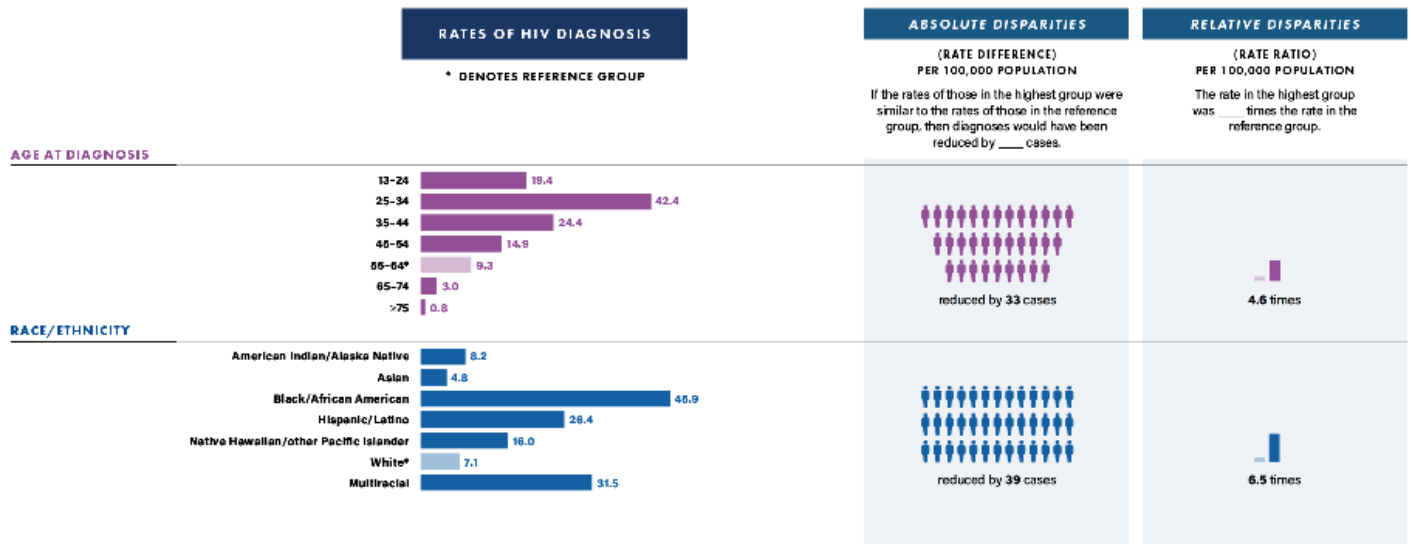
Absolute disparity (rate difference)—If the rates of HIV diagnoses among a select race/ethnicity with HIV diagnoses were similar to the rates among White persons aged ≥ 13 years, then diagnoses could have been reduced by the following number of cases per 100,000 population:

- American Indian/Alaska Native—1
- Asian—no reduction in cases
- Black/African American—39
- Hispanic/Latino—19
- Native Hawaiian/other Pacific Islander—9
- Multiracial—24

Relative disparity (rate ratio)—The rates of diagnoses among a select race/ethnicity were ___ times the rates of White persons aged ≥ 13 years as follows:

- American Indian/Alaska Native—1.2
- Asian—0.7
- Black/African American—6.5
- Hispanic/Latino—3.7
- Native Hawaiian/other Pacific Islander—2.3
- Multiracial—4.4

Figure 34. Rates and disparities of diagnoses of HIV among persons aged ≥ 13 years, by selected characteristics, 2022—U.S. Southern Region



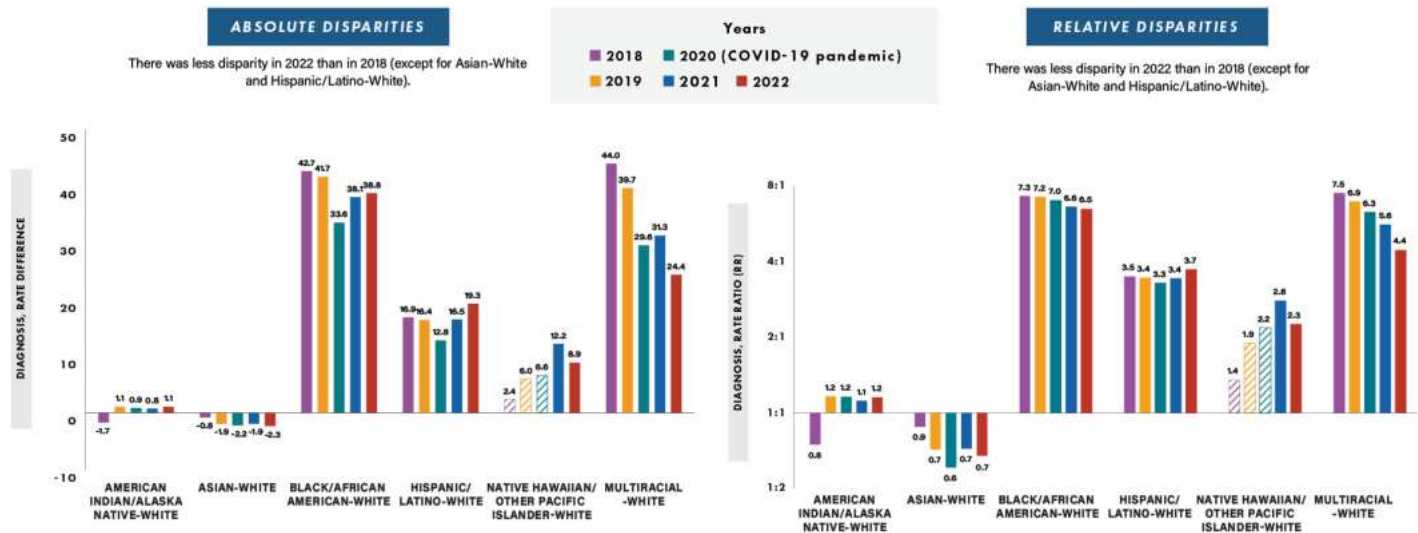
Note. Rates are per 100,000 population. Reference groups are based on the rate of the lowest group with $>5\%$ of cases. Hispanic/Latino persons can be of any race. Absolute disparity measures the difference between rates in groups with the highest rates and a reference group ($\text{Rate}_{\text{highest group}} - \text{Rate}_{\text{reference group}}$). Relative disparity (rate ratio) measures the rates in groups with the highest rates divided by a reference group ($\text{Rate}_{\text{highest group}} \div \text{Rate}_{\text{reference group}}$).

Changes in disparities by race/ethnicity

In 2022, compared with 2018, changes in rates of HIV diagnoses by race/ethnicity among persons aged ≥ 13 years were as follows (Figure 35):

- Absolute disparity (rate difference)—for the difference between rate of HIV diagnoses among a select race/ethnicity minus the rate among White persons, there was a narrower gap (or less disparity) in 2022 than in 2018 (except for Asian-White and Hispanic/Latino-White).
- Relative disparity (rate ratio)—for the rates of HIV diagnoses among a select race/ethnicity divided by the rates among White persons, there was less disparity in 2022 than in 2018 (except for Asian-White and Hispanic/Latino-White).

Figure 35. Absolute and relative disparities of diagnoses of HIV among persons aged ≥13 years, by race/ethnicity and year of diagnosis, 2018–2022—U.S. Southern Region



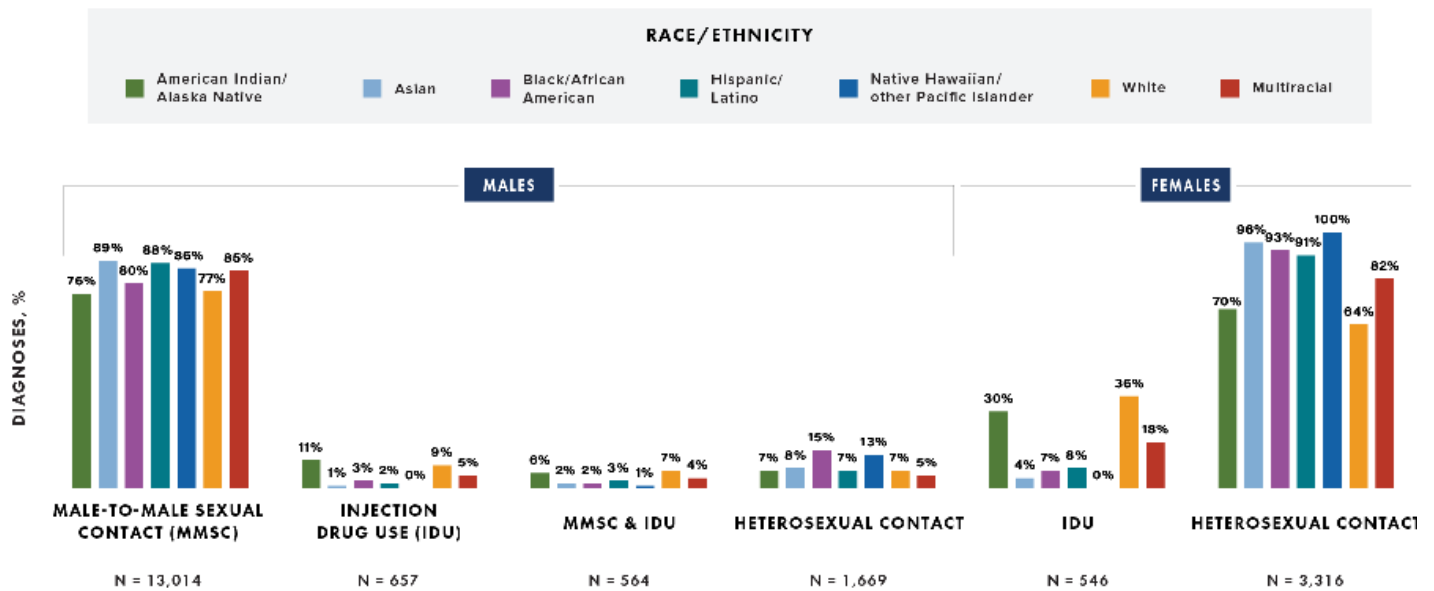
Note. Hispanic/Latino persons can be of any race. Striped bars indicate rates based on small numbers (i.e., less than 12 diagnoses) and should be interpreted with caution. The data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022. Absolute disparity measures the difference between rates among a select race/ethnicity and rates among White persons ($\text{Rate}_{\text{select race/ethnicity}} - \text{Rate}_{\text{White persons}}$). Relative disparity (rate ratio) measures the rates among a select race/ethnicity divided by rates among White persons ($\text{Rate}_{\text{select race/ethnicity}} \div \text{Rate}_{\text{White persons}}$).

Transmission category and race/ethnicity by SAAB

In 2022, the racial/ethnic group with the highest percentages of HIV diagnoses for each transmission category among persons aged ≥13 years were as follows (Figure 36):

- Male
 - MMSC—Asian (89%)
 - IDU—American Indian/Alaska Native (11%)
 - MMSC/IDU—White (7%)
 - Heterosexual contact—Black/African American (15%)
- Female
 - Heterosexual contact—Native Hawaiian/other Pacific Islander (100%)
 - IDU—White (36%)

Figure 36. Diagnoses of HIV among persons aged ≥13 years, by sex assigned at birth, transmission category, and race/ethnicity, 2022—U.S. Southern Region



Note. Data have been statistically adjusted to account for missing transmission category. Hispanic/Latino persons can be of any race. Male-to-male sexual contact includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact). Injection drug use includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers). Heterosexual contact includes heterosexual contact with a person known to have, or with a risk factor for, HIV.

Prevalence Among Persons in the South

At year-end 2022 in the South, 506,546 persons were living with diagnosed HIV. Prevalence by race/ethnicity was as follows (Table 16b):

- American Indian/Alaska Native—789 (<1%)
- Asian—3,792 (1%)
- Black/African American—258,639 (51%)
- Hispanic/Latino—96,462 (19%)
- Native Hawaiian/other Pacific Islander—162 (<1%)
- White—120,350 (24%)
- Multiracial—26,205 (5%)

PERSONS AGED 13–24 YEARS

Addressing HIV among persons aged 13–24 years requires that they have access to the information and tools they need to make healthy decisions, reduce their risk factors, get treatment, and stay in care. Among persons living with HIV, they are the most likely of any age group to be living with undiagnosed HIV [22]. Lack of awareness of HIV status may be due to recent infection or low rates of HIV testing. Persons who do not know that they have HIV do not get medical care or receive treatment and can unknowingly transmit HIV through sex or sharing drug equipment. In addition, persons aged 13–24 years have high rates of sexually transmitted diseases (STDs) and low rates of condom use, greatly increasing the chance of getting or transmitting HIV [28].





HIV Diagnoses Among Persons Aged 13–24 Years

In 2022 in the United States and 6 territories and freely associated states, there were 7,099 HIV diagnoses among persons aged 13–24 years. Numbers and percentages of HIV diagnoses among persons aged 13–24 years were as follows (Figure 37, Table 8b):

Gender

- Men—5,934 (84%)
- Women—856 (12%)
- Transgender women/girls—270 (4%)
- Transgender men/boys—18 (<1%)
- AGI—21 (<1%)

Age group

- 13–14 years—22 (<1%)
- 15–17 years—313 (4%)
- 18–19 years—1,047 (15%)
- 20–22 years—3,157 (44%) 
- 23–24 years—2,560 (36%) 

Rates (United States only) (Figure 38)

- Highest—persons aged 23–24 years (28.6)
- Lowest—persons aged 13–14 years (0.3)

Disparities by age group

- Absolute disparity (rate difference)—If the rate of HIV diagnoses among persons aged 23–24 years (28.6) was similar to the rate among persons aged 18–19 years (12.1), then diagnoses would have been reduced by 17 cases per 100,000 population.
- Relative disparity (rate ratio)—The rate of diagnosis among persons aged 23–34 years was 2.4 times the rate among persons aged 18–19 years.

Race/ethnicity

In 2022, numbers and percentages of HIV diagnoses among persons aged 13–24 years were as follows (Table 8b, Figure 37):

- American Indian/Alaska Native—34 (<1%)
- Asian—117 (2%)
- Black/African American—3,555 (50%)
- Hispanic/Latino—2,173 (31%)
- Native Hawaiian/other Pacific Islander—15 (<1%)
- White—980 (14%)
- Multiracial—225 (3%)

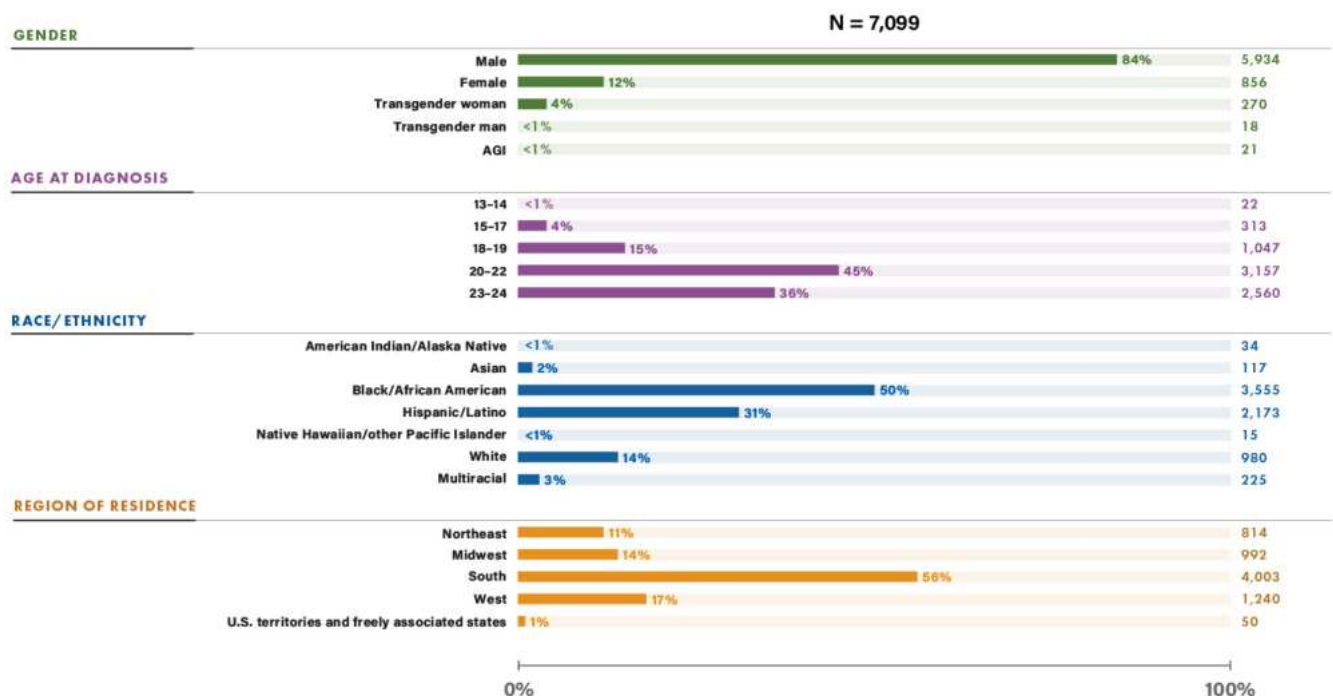
Rates (United States only) (Figure 38, Table 8a)

- Highest—Black/African American (48.7)
- Lowest—White (3.6)

Disparities by race/ethnicity

- Absolute disparity (rate difference)—If the rate of HIV diagnoses among Black/African American persons aged 13–24 years (48.7) was similar to the rate among White persons aged 13–24 years (3.6), then diagnoses would have been reduced by 45 cases per 100,000 population.
- Relative disparity (rate ratio)—The rate of diagnoses among Black/African American persons aged 13–24 years was 13.5 times the rate among White persons aged 13–24 years.

Figure 37. Diagnoses of HIV among persons aged 13–24 years, by selected characteristics, 2022—United States and 6 territories and freely associated states



Note. “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man. Additional gender identity examples include “nonbinary,” “gender queer,” and “two-spirit.” Hispanic/Latino persons can be of any race.

Region of residence

In 2022, numbers and percentages of HIV diagnoses among persons aged 13–24 years were as follows (Table 8b, Figure 37):

- Northeast—814 (11%)
- Midwest—992 (14%)
- South—4,003 (56%)
- West—1,240 (17%)
- U.S. territories and freely associated states—50 (1%)

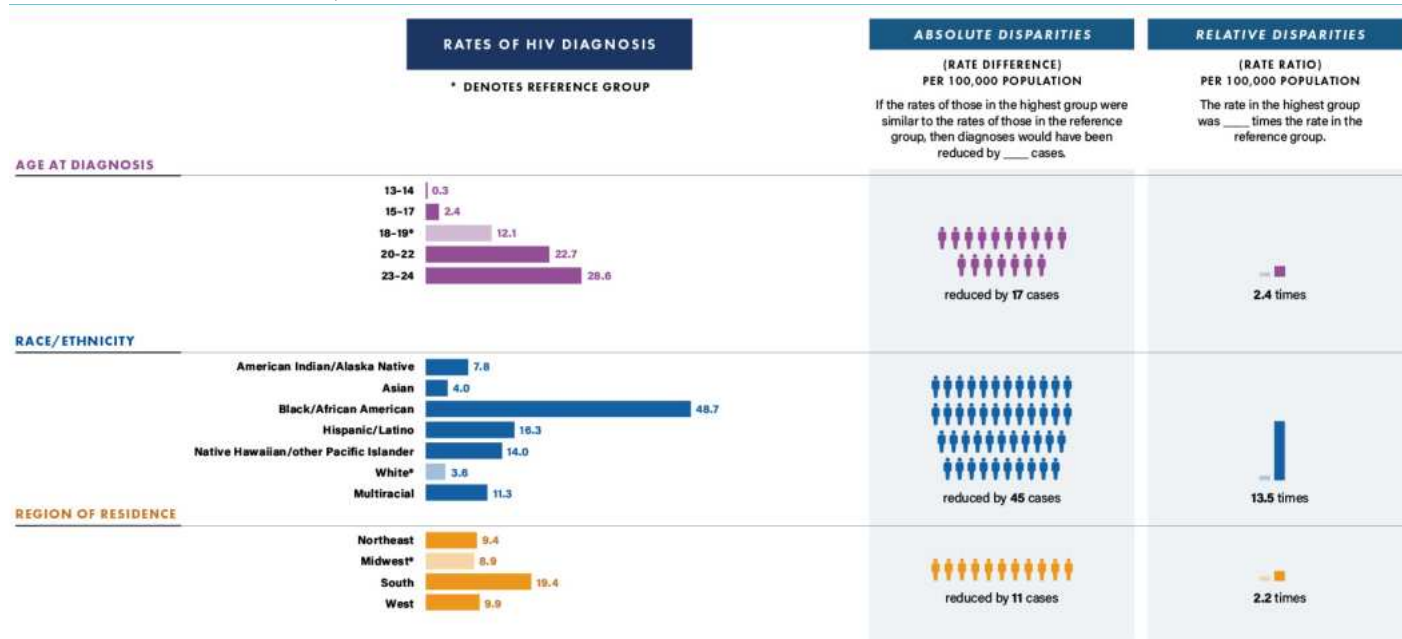
Rates (United States only) (Figure 38)

- Highest—South (19.4)
- Lowest—Midwest (8.9)

Disparities by region

- Absolute disparity (rate difference)—If the rate of HIV diagnoses among persons aged 13–24 years in the South (19.4) was similar to the rate among persons aged 13–24 years in the Midwest (8.9), diagnoses would have been reduced by 11 cases per 100,000 population.
- Relative disparity (rate ratio)—the rate of diagnoses among persons aged 13–24 years in the South was 2.2 times the rate among persons aged 13–24 years in the Midwest.

Figure 38. Rates and disparities of diagnoses of HIV among persons aged 13–24 years, by selected characteristics, 2022—United States



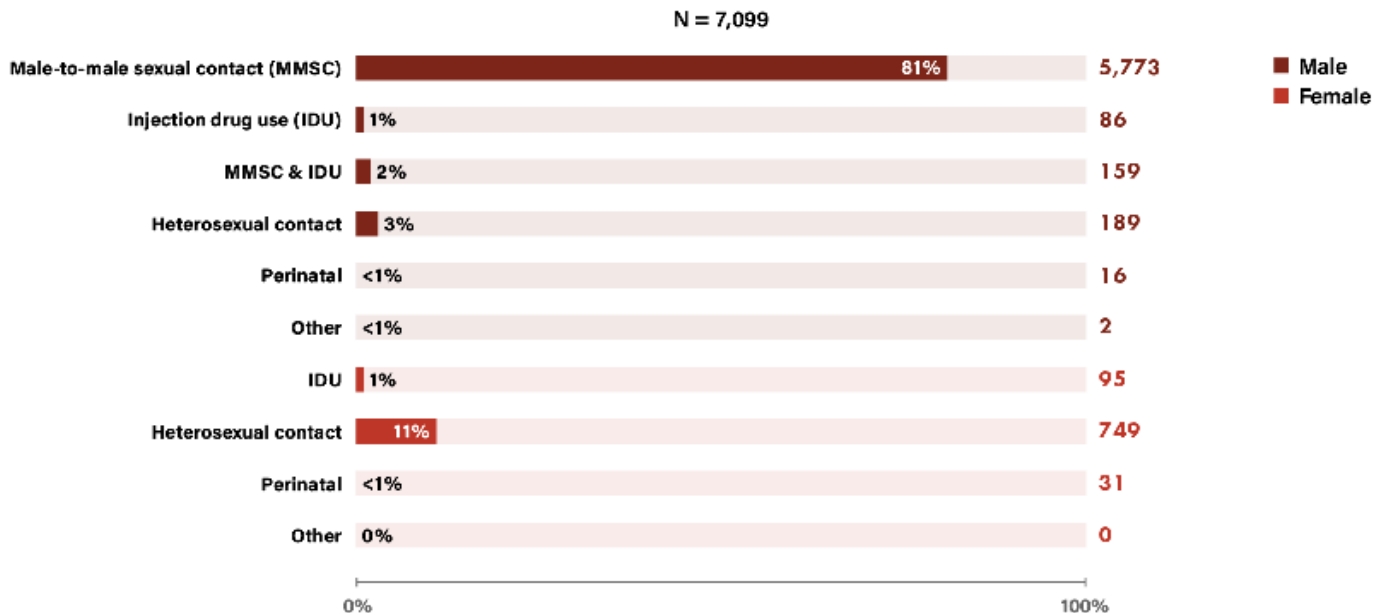
Note. Rates are per 100,000 population. Reference groups are based on the rate of the lowest group with >5% of cases. Hispanic/Latino persons can be of any race. Absolute disparity measures the difference between rates in groups with the highest rates and a reference group ($\text{Rate}_{\text{highest group}} - \text{Rate}_{\text{reference group}}$). Relative disparity (rate ratio) measures the rates in groups with the highest rates divided by a reference group ($\text{Rate}_{\text{highest group}} \div \text{Rate}_{\text{reference group}}$).

SAAB and transmission category

In 2022, the highest percentages of HIV diagnoses among persons aged 13–24 years were as follows (Figure 39):

- Male—MMSC (81%)
- Female—heterosexual contact (11%)

Figure 39. Diagnoses of HIV among persons aged 13–24 years, by sex assigned at birth and transmission category, 2022—United States and 6 territories and freely associated states



Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male sexual contact includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact). Injection drug use includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers). Heterosexual contact includes heterosexual contact with a person known to have, or with a risk factor for, HIV. Perinatal includes persons aged ≥ 13 years at time of diagnosis of HIV. Other includes other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

CHILDREN AGED <13 YEARS AND PERINATAL TRANSMISSION

To make informed decisions about antiretroviral therapy to reduce perinatal transmission of HIV to infants, pregnant persons should know their HIV status. In 1995, the first recommendations for HIV counseling and voluntary testing for pregnant persons were published [30]. In 2006, CDC released revised recommendations for HIV testing which specified that opt-out HIV screening should be included in the routine panel of prenatal screening tests for all pregnant persons [31]. The annual number of diagnoses of perinatal HIV in the United States and 6 territories and freely associated states has declined by more than 95% since the early 1990s [32]. The availability of effective interventions to prevent birthing person-to-child HIV transmission and the significant reduction in the number of infants with HIV in the United States have led CDC to develop goals to support the elimination of birthing person-to-child HIV transmission in the United States.

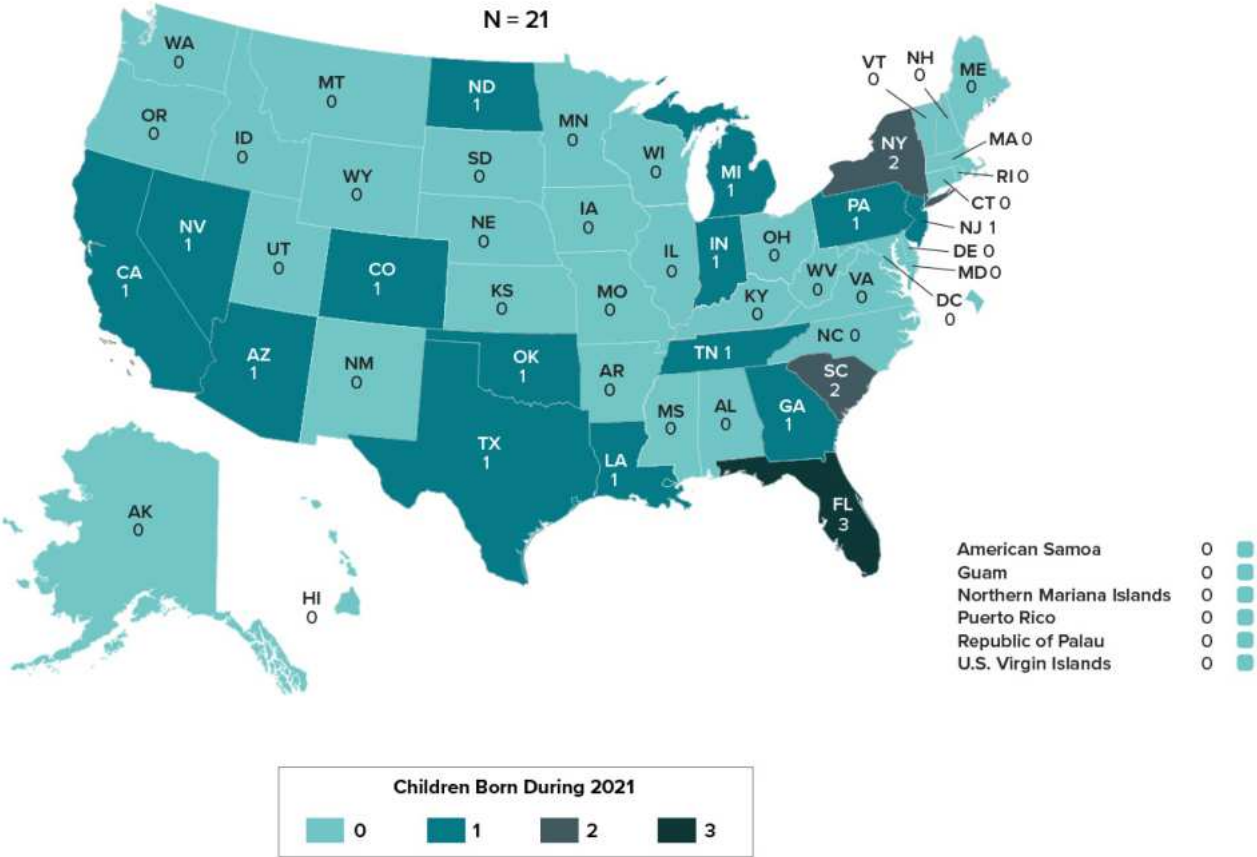


In 2021, 40 areas in the United States and 6 territories and freely associated states reported no perinatally acquired infections among infants born (Figure 40). Because of delays in the reporting of births and HIV diagnoses attributed to perinatal exposure, the exclusion of data for the most recent 2 years allowed at least 24 months for data from 2021 to be reported to CDC. Data reflect all infants with diagnosed, perinatally acquired HIV who were born in the United States and 6 territories and freely associated states during 2021, regardless of year of diagnosis.

HIV Diagnoses Among Children Aged <13 Years

In the United States and 6 territories and freely associated states, a total of 21 children aged <13 years and born during 2021 received an HIV diagnosis attributed to perinatal transmission (Figure 29).

Figure 40. Diagnoses of perinatally acquired HIV among children born during 2021—United States and 6 territories and freely associated states



Infected infants

From 2018 through 2021 in the United States and Puerto Rico, among the 170 children aged <13 years born with diagnosed, perinatally acquired HIV, time of birthing person’s HIV testing was as follows (Figure 41):

- 45% were born to birthing persons who were tested before pregnancy
- 13% were born to birthing persons who were tested during pregnancy
- 6% were born to birthing persons tested at the time of birth
- 26% were born to birthing persons who were tested after the child’s birth
- 9% were born to birthing persons whose time of birthing person’s HIV testing was unknown

Exposed but not infected

From 2018 through 2021 in the United States and Puerto Rico, among the 12,139 children aged <13 years born who were exposed but not perinatally infected with HIV, time of birthing person’s HIV testing was as follows (Figure 41):

- 84% were born to birthing persons who were tested before pregnancy
- 14% were born to birthing persons who were tested during pregnancy
- 1% were born to birthing persons tested at the time of birth
- <1% were born to birthing persons tested after birth
- 1% were born to birthing persons whose time of birthing person’s HIV testing was unknown


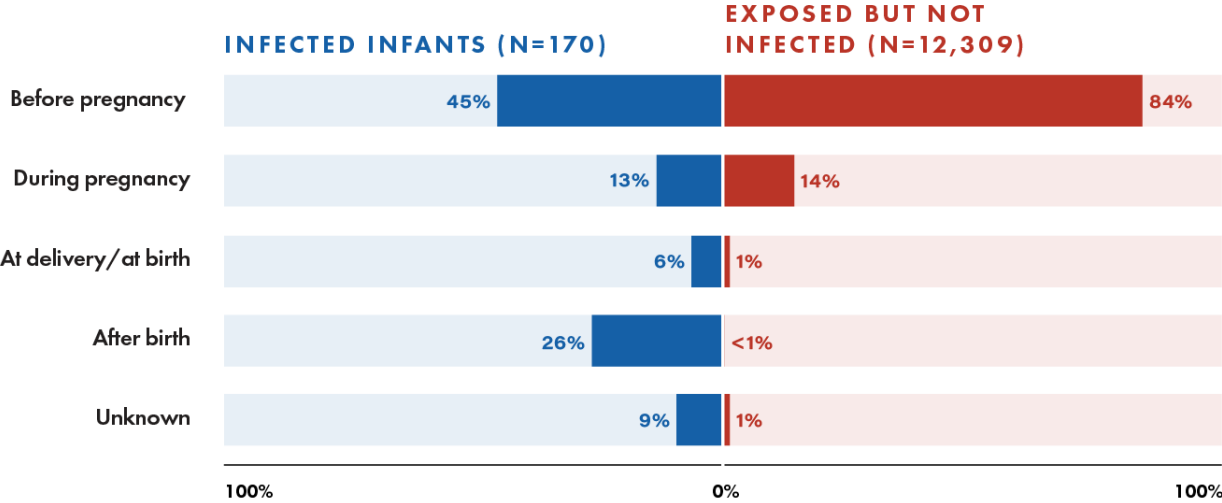
 *Note.* The number of areas contributing exposure data varied by year. Because not all jurisdictions have exposure reporting in place, the number presented is likely a minimum count of the number of exposed infants in the United States and Puerto Rico.

Figure 41. Time of birthing person’s HIV testing among children aged <13 years with diagnosed, perinatally acquired HIV and children exposed to HIV, birth years 2018–2021—United States and Puerto Rico



Note. The data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

Diagnoses


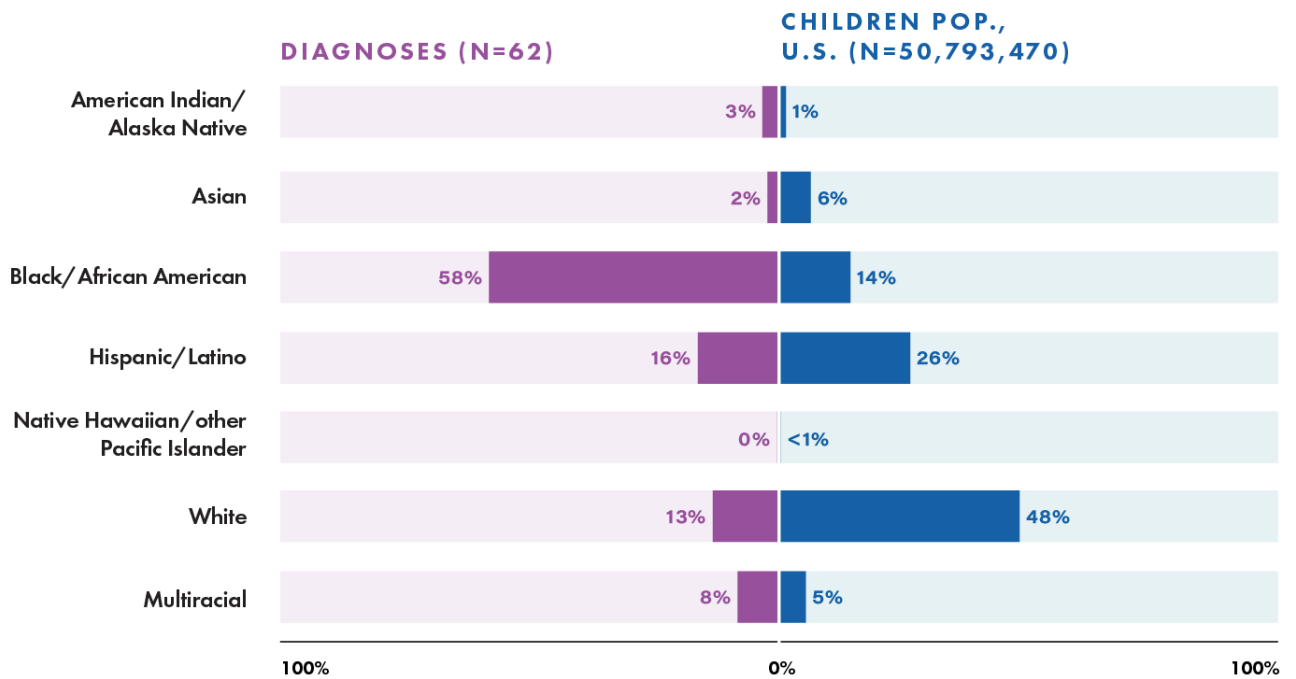
 For percentages among children aged <13 years by race/ethnicity and U.S. population, see Figure 42.

Figure 42. Diagnoses of HIV and population among children aged <13 years, by race/ethnicity, 2022—United States



Note. Hispanic/Latino persons can be of any race.

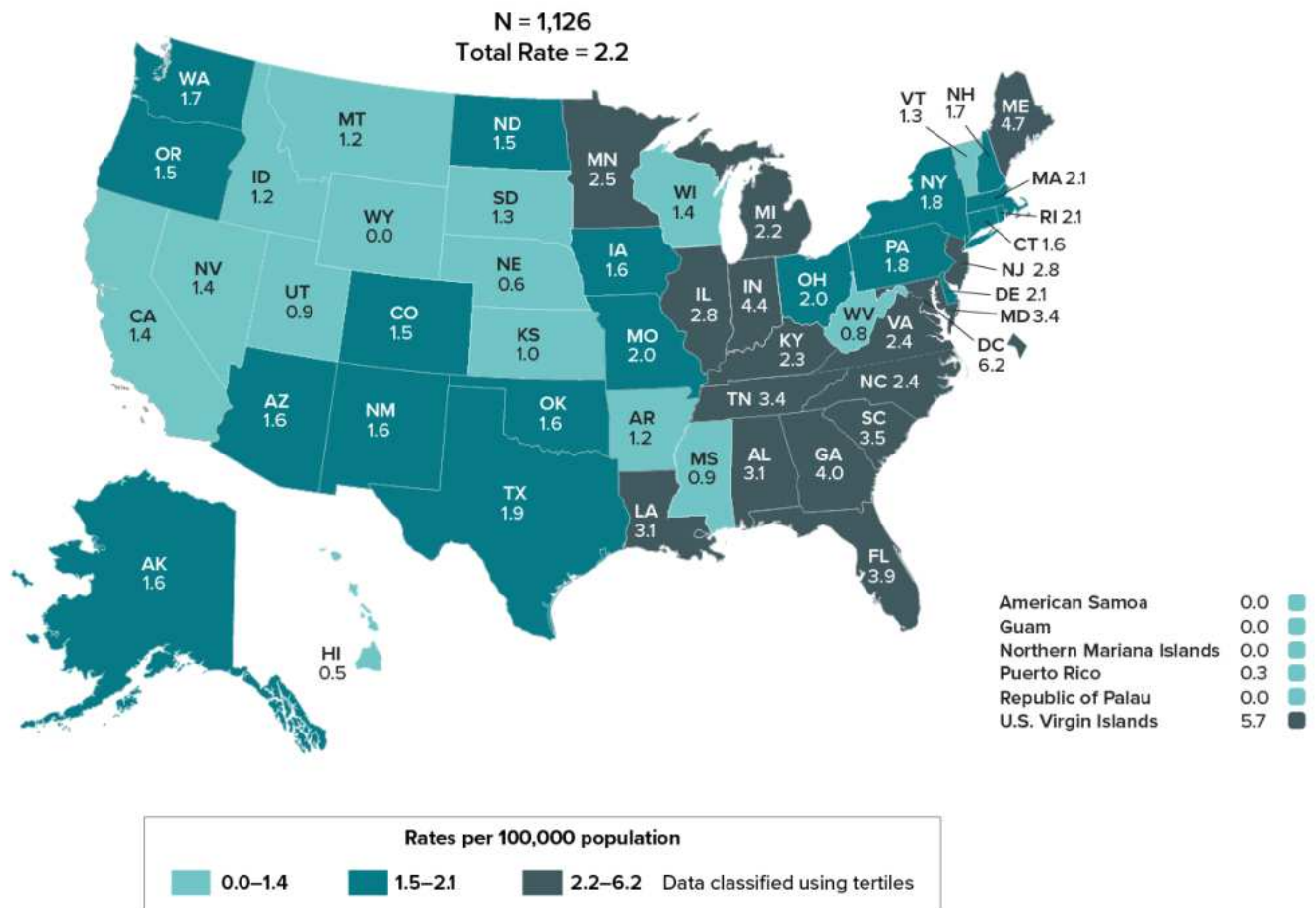
Prevalence Among Children Aged <13 Years

At year-end 2022 in the United States and 6 territories and freely associated states, children aged <13 years living with diagnosed HIV were as follows:

Overall (Figure 43)

- Approximately 1,126 children were living with diagnosed HIV
- The overall rate of children living with diagnosed HIV was 2.2

Figure 43. Children aged <13 years living with diagnosed HIV, year-end 2022—United States and 6 territories and freely associated states



Note. Data for the year 2022 are preliminary and based on deaths reported to CDC as of December 2023. Data are based on address of residence as of December 31, 2022 (i.e., most recent known address).

Prevalence and race/ethnicity (Table 16b)

- American Indian/Alaska Native—1%
- Asian—7%
- Black/African American—56%
- Hispanic/Latino—15%
- Native Hawaiian/other Pacific Islander—<1%
- White—12%
- Multiracial—8%

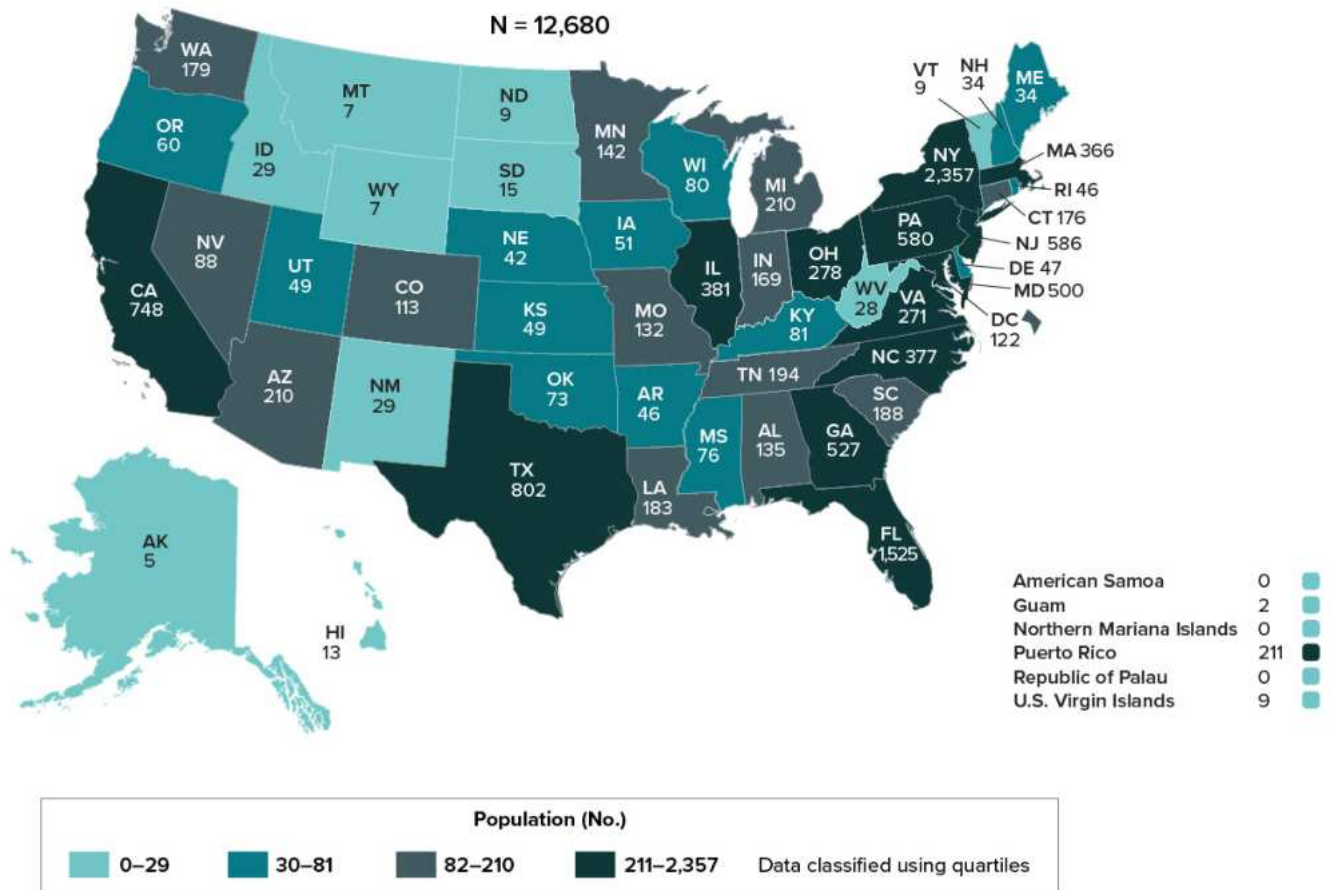
Prevalence, Perinatally Acquired HIV

At year-end 2022 in the United States and 6 territories and freely associated states, among those living with perinatally acquired HIV, percentages were as follows:

Overall (Figure 44, Table 16b)

- There were 12,680 persons living with diagnosed, perinatally acquired HIV
- Data reflect persons (i.e., children, adolescents, and adults) with diagnosed, perinatally acquired HIV who were alive at year-end 2022, regardless of their age at year-end 2022

Figure 44. Persons living with diagnosed, perinatally acquired HIV infection, year-end 2022—United States and 6 territories and freely associated states



Note. Data for the year 2022 are preliminary and based on deaths reported to CDC as of December 2023. Data are based on address of residence as of December 31, 2022 (i.e., most recent known address).

Prevalence and race/ethnicity (Table 16b)

- American Indian/Alaska Native—<1%
- Asian—2%
- Black/African American—57%
- Hispanic/Latino—24%
- Native Hawaiian/other Pacific Islander—<1%
- White—10%
- Multiracial—7%

Technical Notes



A. SURVEILLANCE OF HIV INFECTION OVERVIEW

This report includes HIV surveillance data through 2022 and reported to CDC's National HIV Surveillance System (NHSS) through December 31, 2023. The data are from 50 states, the District of Columbia, and 6 U.S. territories and freely associated states (American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the Republic of Palau, and the U.S. Virgin Islands) in which laws or regulations require confidential reporting to the jurisdiction (not to CDC), by name, for all persons (adults, adolescents, and children) with confirmed HIV diagnoses. Names and other directly identifying information are removed before reporting case information to CDC. 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 6 U.S. territories and freely associated states had fully implemented name-based HIV infection reporting by April 2008.

All data presented in this report are considered provisional (based on a ≥ 12 -month reporting delay) and subject to change as additional reports are submitted for HIV cases and HIV surveillance data quality improves with further evaluation of the surveillance system and data repository. Data are provisional and based on a 12-month reporting delay to allow sufficient time for HIV-related laboratory results and deaths to be reported to CDC. Because reporting delays can impact the reliability of data presented in this report, caution should be applied when interpreting the results. Please use caution when interpreting data on HIV diagnoses. HIV surveillance data on persons with diagnosed HIV may not be representative of all persons with HIV because not all persons have been (1) tested or (2) tested at a time when the infection could be detected and diagnosed. Also, some states offer anonymous HIV testing, and some persons complete self-testing at home or in a private location; the results of anonymous tests and of self-tests are not reported to the confidential, name-based HIV registries of state and local health departments [25, 26]. Therefore, reports of confidential test results may not represent all persons who tested positive for HIV. In addition, testing patterns are influenced by many factors, including the extent to which testing is routinely offered to specific groups and the availability of, and access to, medical care and testing services. The data presented in this report provide minimum counts of persons for whom HIV has been diagnosed and reported to the surveillance system. Although all jurisdictions use a uniform case report form, surveillance practices in data collection and updating of case records may differ among jurisdictions.

Based on annual standard evaluation results [27], the completeness of reporting of HIV, as of December 2023, is estimated to be at least 85% in all but 1 jurisdiction. Data re-release agreements between CDC and state/local

HIV surveillance programs require specific levels of cell suppression at the state and county level to ensure confidentiality of personally identifiable information.

Caution: Data for the year 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state/local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022. Deaths in 2020 and beyond should be interpreted considering the impact of the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm. Death and prevalence data for the year 2022 are preliminary and based on death data received by CDC as of December 2023.

B. STAGES OF HIV INFECTION—CASE DEFINITIONS

Both the 2008 and 2014 HIV case definitions were used to classify HIV infection among persons aged ≥ 13 years and among children < 13 years [28, 29]. In the following lists, some bulleted items are paraphrases, not quotations, from the published surveillance case definitions. The intention is to emphasize the differences between the 2008 and 2014 case definitions.

B1. 2008 Case Definition

The 2008 case definition was used to classify cases diagnosed through 2013. For persons aged ≥ 13 years, this definition incorporates an HIV infection staging system that includes AIDS (HIV infection, stage 3). The 2008 stages of HIV infection are defined as follows:

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

B2. 2014 Case Definition

The 2014 case definition was used to classify cases diagnosed in 2014 and later. It is similar to the 2008 case definition except for the following:

1. inclusion of criteria for stage 0
2. inclusion of CD4 lymphocyte testing criteria for stage 3 in children < 13 years
3. changes in the cutoffs for CD4 percentage of total lymphocytes used for classification of stages 1 and 2 in persons aged 6 years and older [3]

The stages of HIV infection in the 2014 case definition are based on age-specific CD4 lymphocyte counts or percentages of total lymphocytes and are defined as follows:

- **HIV infection, stage 0:** Determined by a first confirmed positive HIV test result of any type within 6 months after a negative or indeterminate HIV test result (antibody, combination antigen/antibody, or nucleic acid), or by a sequence of laboratory tests that demonstrate the presence of HIV-specific viral markers (such as p24 antigen or nucleic acid) within 6 months before or after an antibody test that had a

negative or indeterminate result. The stage 0 at HIV diagnosis classification remains stage 0 until 6 months after the first positive test result. The diagnosis of an AIDS-defining condition or a low CD4 test result within the first 6 months after stage 0 classification does not change the stage from stage 0 to stage 3. After 6 months, the stage may be classified as 1, 2, 3, or unknown if based on a CD4 test result or the diagnosis of an OI.

- **HIV infection, stages 1, 2, and 3:** Documentation of an AIDS-defining OI (excluding stage 0 as described above) is stage 3. Otherwise, the stage is determined by the lowest CD4 lymphocyte test result:
 - Stage 1—CD4 lymphocyte count of ≥ 500 or a CD4 percentage of total lymphocytes of ≥ 26
 - Stage 2—CD4 lymphocyte count of 200–499 or a CD4 percentage of total lymphocytes of 14–25
 - Stage 3—CD4 lymphocyte count of < 200 or a CD4 percentage of total lymphocytes of < 14 or documentation of an AIDS-defining condition.
- **HIV infection, stage unknown:** No reported information on AIDS-defining OIs and no information available on CD4 lymphocyte count or percentage.

C. TABULATION AND PRESENTATION OF DATA

The data in this report include information received by CDC through December 31, 2023. The data are organized into 2 sections: National Profile and Special Focus Profiles. Tables are presented in 2 formats: (1) the first format—labeled “a”—exclude data from the 6 U.S. territories and freely associated states (American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the Republic of Palau, and the U.S. Virgin Islands), and (2) the second format—labeled “b”—include data from the 6 U.S. territories and freely associated states.

Please use caution when interpreting numbers less than 12, and rates and trends based on these numbers.

C1. Definitions and Data Specifications

C1.1 Diagnoses

In this report, the term *diagnosis of HIV* is defined as a diagnosis of HIV regardless of the stage of disease (stage 0, 1, 2, 3 [AIDS], or unknown) and refers to all persons with a diagnosis of HIV.

The data on HIV diagnoses reflect the date of diagnosis (diagnosed by December 31, 2022; reported to NHSS as of December 31, 2023), not the date of report to NHSS. In addition,

- data from all areas are included in figures and tables displaying numbers and rates of HIV diagnoses, by selected characteristics, area of residence, and metropolitan statistical area (MSA) (Figures 1–8, 16–44; Tables 1a/b–10a/b, 20, 22, and A1).
- tables presenting diagnosis data, region or area of residence reflects the address at the time of HIV diagnosis.
- tables presenting exposure data, only include transgender and AGI persons aged ≥ 13 years at time of diagnosis of HIV.

Note. Because of reporting delays, the number of cases diagnosed in a given year may be lower than the numbers presented in later reports; however, fluctuations in the number of diagnoses for a calendar year typically subside after 2 to 3 years of reporting. An evaluation of surveillance data (2017–2021 diagnoses) found that, on average, approximately 80% of HIV diagnoses were reported to CDC during the year of diagnosis and approximately 98% of HIV diagnoses were reported to CDC by the end of the following year.

C1.2 Deaths (Any Cause and HIV-related)

Persons reported to NHSS are assumed alive unless their deaths have been reported to CDC. In addition,

- data for the year 2022 are preliminary and based on death data received by CDC as of December 31, 2023.
- deaths of persons with diagnosed HIV (Figures 9–11; Tables 11a/b–14a/b) labeled as “any cause” may not be due to HIV.
- data on HIV-related deaths of persons with diagnosed HIV (Figures 12 and 13; Tables 11a/b) are now included in the report.
- death data are based on a 12-month reporting delay to allow data to be reported to CDC.
- death data by region or area of residence is based on residence at death; when information on residence at death is not available, the state where a person’s death occurred is used; when both residence at death and state where a person’s death occurred are not available, the most recent known address on or before the date of death is used.
- due to incomplete reporting of deaths for the year 2022, death data for Guam, Mississippi, South Carolina, U.S. Virgin Islands, and Utah should be interpreted with caution.

C1.3 Prevalence

Prevalence data reflect persons living with diagnosed HIV, regardless of stage of disease, at year-end 2022 (Figures 14, 15, 43, and 44; Tables 15a/b–22 and A2). In addition,

- data for the year 2022 are preliminary and based on death data received by CDC as of December 31, 2023.
- for tables presenting prevalence data, region or area of residence is based on most recent known address as of the end of the specified year.
- due to incomplete reporting of deaths for the year 2022, prevalence data for Guam, Mississippi, South Carolina, U.S. Virgin Islands, and Utah should be interpreted with caution.

C2. Rates

Rates per 100,000 population were calculated for (1) the numbers of diagnoses of HIV, (2) the numbers of deaths of persons with diagnosed HIV, and (3) the numbers of persons living with diagnosed HIV.

Rates were computed as follows:

For the 50 states, the District of Columbia, and Puerto Rico, the population denominators used to compute rates were based on the Vintage 2022 postcensal estimates file from the U.S. Census Bureau [38].

- For American Samoa, Guam, the Northern Mariana Islands, the Republic of Palau, and the U.S. Virgin Islands, the population denominators were based on estimates and projections from the U.S. Census Bureau’s International Data Base [39].
- Each rate was calculated by dividing the total number of diagnoses (or deaths or prevalence) for the calendar year by the population for that calendar year and then multiplying the result by 100,000.
- The denominators used for calculating the rates specific to age, sex assigned at birth, and race/ethnicity were computed by applying the appropriate vintage estimates for age, sex assigned at birth, and race/ethnicity for the 50 states and the District of Columbia [38]. The same method was used to calculate the denominators for Puerto Rico, with the exception of race/ethnicity estimates; these data are not available for Puerto Rico (see Note below).
- For the other 5 U.S. territories and freely associated states, estimates from the U.S. Census Bureau’s International Data Base were used for age- and sex-specific population denominators [39].

Note. CDC currently does not provide subpopulation rates for the following:

- Race/ethnicity for the 6 U.S. territories and freely associated states because the U.S. Census Bureau does not collect information from all 6 U.S. territories and freely associated states.
- Gender, transmission categories, and exposure categories because of the absence of denominator data from the U.S. Census Bureau, the source of denominator data used for calculating all rates in this report.

C2.1 Disparity Measures

This report includes absolute and relative measures of disparities. The literature recommends use of at least one absolute and one relative disparity measure to monitor the magnitude and direction of disparities [40]. The absolute rate difference and the relative rate ratio disparity measures were chosen because they are used by federal initiatives—Healthy People 2030, NHAS, EHE, and the Playbook—to measure progress in HIV indicators. In addition,

- absolute disparity measures the simple difference between 2 rates (i.e., $\text{Rate}_1 - \text{Rate}_2$). The absolute difference measures the magnitude of the difference, which provides some indication of how many lives would be improved if the difference between the 2 rates was eliminated or reduced (i.e., preventable cases) [41].
- relative disparity measure is the rate ratio between 2 rates (i.e., $\text{Rate}_1 \div \text{Rate}_2$). The relative disparity measures the relative magnitude of the disparity.
- for this report, Rate_2 is the reference group and is based on the lowest group rate with more than 5% of cases.

D. DEMOGRAPHIC INFORMATION

D1. Age

For this report, age assignments are based on the following:

- For prevalence data, based on the person's age based on most recent known address as of the end of the specified year.
- For death data, determined by the person's age at time of death.
- For all other tables, based on the person's age at the time of HIV diagnosis.

D2. Sex/Gender

D2.1 Sex Assigned at Birth (SAAB)

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

D2.2 Gender

Gender identity refers to a person's internal understanding of their own gender, or gender with which a person identifies. HIV surveillance personnel collect data on gender identity, when available, from sources such as case report forms submitted by health care or HIV testing providers and medical records, or by matching with other health department databases (e.g., Ryan White program data). A person's transgender status in NHSS is determined based on two variables: sex assigned at birth and current gender identity. Both variables are examined, using a two-step approach, to assess transgender status. *Cisgender* is a term used to indicate that a person's sex assigned at birth and current gender identity are the same (i.e., a person assigned male at birth and who currently identifies as a man is a cisgender male).

Categories

- **Man:** a person assigned “male” sex at birth who identifies as a man.
- **Woman:** a person assigned “female” sex at birth who identifies as a woman.
- **Transgender woman/girl:** a person assigned “male” sex at birth who identifies as a woman.
- **Transgender man/boy:** a person assigned “female” sex at birth who identifies as a man.
- **Additional gender identity (AGI):** a person assigned “male” or “female” sex at birth who does not identify as a man, woman, transgender woman, or transgender man. AGI includes “nonbinary,” “gender queer,” and “two-spirit.”

D3. Race and Ethnicity

In the *Federal Register* [42] 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 race 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 race categories are reported. In addition to data on race, data on 2 categories of ethnicity should be collected:

- Hispanic or Latino
- not Hispanic or Latino

The Asian or Pacific Islander category displayed in annual surveillance reports published prior to the 2007 surveillance report was split into 2 categories: (1) Asian and (2) Native Hawaiian or other Pacific Islander. The Asian category (in tables where footnoted) includes the cases in Asian/Pacific Islander persons (referred to as legacy cases) that were reported before the implementation of the new race categories in 2003 (e.g., cases of HIV that were diagnosed and reported to CDC before 2003 but that were classified as stage 3 [AIDS] after 2003) and a small percentage of cases that were reported after 2003 but that were reported according to the old race category (Asian/Pacific Islander). In tables of HIV diagnoses during 2018–2022, the Asian category does not include Asian/Pacific Islander cases because these cases were diagnosed after 2003 and were reported to CDC in accordance with OMB’s Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity [42].

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

Race and ethnicity are not risk factors but are instead markers for many underlying problems of greater relevance to health, including socioeconomic status and cultural behavior-characteristics, which are social and not biological [43, 44]. Racial and ethnic differences in health are more likely to reflect profound differences in people’s experiences based on the relatively advantaged or disadvantaged position in society into which they are born [44, 45]. Social determinant of health factors, shaped by income, education, wealth, and socioeconomic conditions, vary systematically by race and ethnicity and are important in explaining differences in health outcomes [45].

D4. Transmission Categories

Transmission category is the term for the classification of cases that summarizes a person's (aged ≥ 13 years) possible HIV risk factors; the summary classification results from selecting, from the presumed hierarchical order of probability, the 1 (single) risk factor most likely to have been responsible for transmission. For surveillance purposes, a diagnosis of HIV is counted only once in the hierarchy of transmission categories [46]. Persons aged ≥ 13 years with more than 1 reported risk factor for HIV are classified in the transmission category listed first in the hierarchy. The exception is male-to-male sexual contact *and* injection drug use; this group makes up a separate transmission category.

Hierarchical Categories

- **Male-to-male sexual contact (MMSC):** includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).
- **Injection drug use (IDU):** includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).
- **Male-to-male sexual contact *and* injection drug use (MMSC/IDU):** includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males (or with both males and females [i.e., bisexual contact]) and injected nonprescription drugs or injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).
- **Heterosexual contact:** includes persons who have ever had heterosexual contact with a person known to have, or with a risk factor for, HIV.
- **Perinatal:** includes persons who acquired HIV through birthing person-to-child transmission (i.e., during pregnancy, childbirth, breastfeeding/chestfeeding, or when receiving premasticated/prechewed food).
- **Other:** includes persons with other risk factors (e.g., blood transfusion, hemophilia) or whose risk factor was not reported or not identified.

Cases of HIV 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 are reported to CDC without an identified risk factor, multiple imputation is used to assign a transmission category to these cases [46]. 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 [47]. Each resulting data set containing the plausible values is analyzed by using standard procedures, and the results from these analyses are then combined to produce the final results. In tables displaying transmission categories, multiple imputation was used for persons ≥ 13 years, but not for children aged < 13 years (because the number of cases in children is small, missing transmission categories were not imputed).

D4.2 Exposure category

Exposure category is the term for classifying patient history data (individual risk behaviors or events) by assigning individual risk behaviors or events into mutually exclusive categories. They are meant to convey all the known ways a person could have been exposed to HIV. The exposure category classification was developed as an alternative to the hierarchical transmission category classification. For the presentation of data in this report, exposure category is used for the classification of transgender and AGI persons based on the risk factors

that may have been responsible for HIV transmission; classification has no presumed hierarchical order of probability, except for rare circumstances where route of transmission has been confirmed through investigation. The categories are mutually exclusive. Data were not statistically adjusted to account for missing exposure category.

Categories

- **Sexual contact:** includes persons assigned “male” sex at birth, who reported sexual contact with any person. For persons assigned “female” sex at birth, they reported sexual contact with a person assigned “male” sex at birth.
- **Injection drug use (IDU):** includes persons who inject nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).
- **Sexual contact and IDU:** includes persons assigned “male” sex at birth, who reported sexual contact with any person and injected nonprescription drugs or injected prescription drugs for nonmedical purposes. For persons assigned “female” sex at birth, they reported sexual contact with a person assigned “male” sex at birth and injected nonprescription drugs or injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).
- **Perinatal:** includes persons who acquired HIV through birthing person-to-child transmission (i.e., during pregnancy, childbirth, breastfeeding/chestfeeding, or when receiving premasticated/prechewed food).
- **Other:** includes persons with other risk factors (e.g., blood transfusion, hemophilia) or whose risk factor was not reported or not identified.

Cases of HIV reported without a risk factor listed for exposure 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 declined to be interviewed, were lost to follow-up, or died; and cases in persons who were interviewed or for whom other follow-up information was available but for whom no risk factor was identified.

E. GEOGRAPHIC DESIGNATION

E1. U.S. Census Regions

Data by region reflect the following:

- For diagnoses, region is based on address at the time of diagnosis of HIV (Figures 4, 10, 17, 19, 20, 22, 23, 28, 31, 32, and 38; Tables 1a/b–8a/b).
- For prevalence, region is based on most recent known address as of the end of the specified year (Tables 15a/b–19a/b).
- For deaths, region is based on residence at death. When information on residence at death is not available, the state where a person’s death occurred is used (Figures 11–13; Tables 11a/b–14a/b).

The 4 regions of residence and 6 U.S. territories and freely associated states 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

U.S. territories and freely associated states: American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the Republic of Palau, and the U.S. Virgin Islands

E2. Metropolitan Statistical Areas

Table 22 (data on diagnosed HIV and prevalence of diagnosed HIV) presents numbers and rates of diagnoses and prevalence, by MSA, for areas with populations of 500,000 or more. The MSAs listed in these tables were defined according to OMB's last update (March 6, 2020) of statistical areas [48]. In 2022, U.S. Census Bureau county-level data transitioned from 8 counties to 9 planning regions in Connecticut [49]. While Census data was provided for Connecticut planning regions, these entities were not delineated to MSAs for the Vintage 2022 population estimates. Consequently, there were no available population estimates for MSAs that were defined by the OMB March 2020 Bulletin with respect to Connecticut planning regions.

F. LIMITATIONS OF DATA AND FINDINGS

Readers are encouraged to keep the following caveats and limitations in mind when reviewing and using data presented in the *HIV Surveillance Report* and other surveillance products.

- **Testing patterns.** The scope to which routine testing is offered to specific groups and the availability of, and access to, medical care and testing services may influence diagnosis trends.
- **Case reporting.** HIV surveillance programs collect HIV surveillance data in a standardized way; however, surveillance practices may vary among jurisdictions. For example, not all persons who received a positive HIV test result may be registered in the confidential, name-based HIV registries of HIV surveillance programs due to the use of anonymous HIV testing and home HIV self-testing. The data presented in this report provide minimum counts of persons for whom HIV has been diagnosed and reported to the HIV surveillance program. An evaluation of surveillance data (2017–2021 diagnoses) found that, on average, approximately 80% of HIV diagnoses were reported to CDC during the year of diagnosis and approximately 98% of HIV diagnoses were reported to CDC by the end of the following year. Consequently, these reporting delays may result in lower numbers than those presented in later reports; however, fluctuations in the number of diagnoses for a calendar year typically subside after two to three years of reporting.
- **Cases with no reported or identified risk factor.** A substantial proportion of cases in NHSS are reported without any, or insufficient, patient history information to be classified into a known transmission or exposure category and it varies across HIV surveillance programs. Multiple imputation is used to assign a transmission category to cases reported without any, or insufficient, risk information to be classified into a known transmission category [18]; thus, data on transmission category presented in national products do not directly reflect collected case data. Multiple imputation is not used for pediatric cases. If minimum criteria are met, HIV surveillance programs can opt to use a multiple imputation approach.
- **Duplicates.** Case records are routinely reviewed for potential duplicate entries at both the state/local jurisdiction- and national-level, and resolution is completed within and between states. However, there may be cases that appear more than once in the national dataset that have not been deemed duplicates; likewise, there may be cases that have been determined to be duplicates but are unique cases.

- **Data availability.**
 - **Preliminary data.** Data are considered preliminary when based on an NHSS dataset created before a 12-month reporting delay has been reached.
 - **Provisional data.** Data are considered provisional when based on an NHSS dataset created after a 12-month reporting delay has been reached. Diagnoses data in this report are provisional and replace all previously published data on HIV diagnoses for the same data years. The data provided in this report should not be combined with or compared to previously published data.
- **Death data.** Deaths of persons with diagnosed HIV labeled as “any cause” may be due to any cause (i.e., may or may not be related to HIV) and includes deaths with an unknown underlying cause. HIV-related deaths include deaths with an underlying cause with an International Classification of Diseases, Tenth Revision code of B20–B24, O98.7, or R75. Non–HIV-related deaths include all other deaths with a known underlying cause. HIV-related deaths and non–HIV-related deaths numbers and percentages exclude deaths with an unknown underlying cause. Deaths for the most recent report year (2022) should be considered preliminary and are based on a 12-month reporting delay to allow time for death data to be reported to CDC.
- **Denominator data.** Rates are not provided by race/ethnicity for the 6 U.S. territories and freely associated states and are also not provided for gender, transmission, and exposure categories due to the lack of population, or denominator, data from the U.S. Census. Due to the lack of rates, these demographics were not evaluated in this report for absolute and relative disparities (measures that could improve the understanding of health equity in these populations).

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ADDITIONAL RESOURCES

The following were prepared by using HIV surveillance data:

- NCHHSTP AtlasPlus [interactive tool for accessing HIV, STD, TB, and hepatitis data]: <https://gis.cdc.gov/grasp/nchhstpatlas/main.html>
- *MMWR* articles (selected): <https://www.cdc.gov/mmwr/index.html>
- Other surveillance reports: <https://www.cdc.gov/hiv-data/nhss/index.html>
- Public-use slides updated annually: <https://www.cdc.gov/hiv-data/resources/index.html>

SUGGESTED READINGS

- CDC. Establishing a holistic framework to reduce inequities in HIV, viral hepatitis, STDs, and tuberculosis in the United States. <http://stacks.cdc.gov/view/cdc/11585>. Published October 2010. Accessed May 1, 2024.
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Table 1a. Diagnoses of HIV infection, by year of diagnosis and selected characteristics, 2018–2022—United States

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Gender										
Man	29,453	—	28,762	—	24,203	—	28,268	—	29,728	—
Woman	6,999	—	6,847	—	5,386	—	6,476	—	6,942	—
Transgender woman/girl ^c	691	—	720	—	719	—	873	—	868	—
Transgender man/boy ^c	48	—	45	—	41	—	60	—	59	—
Additional gender identity ^d	26	—	34	—	26	—	47	—	66	—
Age at diagnosis (yr)										
<13	85	0.2	58	0.1	58	0.1	53	0.1	62	0.1
13–14	20	0.2	21	0.3	14	0.2	15	0.2	22	0.3
15–19	1,722	8.2	1,654	7.9	1,280	5.8	1,467	6.8	1,350	6.2
20–24	6,140	28.1	6,005	27.7	4,873	22.1	5,528	24.6	5,677	25.0
25–29	7,670	32.6	7,401	31.4	6,088	26.7	6,722	30.0	7,190	32.4
30–34	5,627	25.4	5,635	25.1	5,219	22.9	6,346	27.5	6,841	29.4
35–39	4,154	19.3	4,088	18.8	3,384	15.3	4,383	19.7	4,761	21.4
40–44	2,935	14.9	2,919	14.7	2,462	11.9	3,130	14.9	3,522	16.4
45–49	2,743	13.2	2,568	12.6	2,044	10.1	2,284	11.6	2,416	12.3
50–54	2,409	11.6	2,272	11.1	1,828	8.8	2,098	10.1	2,100	10.1
55–59	1,814	8.3	1,824	8.3	1,564	7.1	1,768	8.2	1,743	8.3
60–64	1,031	5.1	1,101	5.4	875	4.2	1,103	5.2	1,107	5.2
65–69	483	2.8	500	2.9	423	2.4	538	2.9	503	2.7
70–74	247	1.8	229	1.6	166	1.1	186	1.2	234	1.5
≥75	137	0.6	133	0.6	97	0.4	103	0.5	135	0.6
Race/ethnicity										
American Indian/Alaska Native	166	6.9	181	7.5	178	7.4	211	8.7	217	9.0
Asian	844	4.5	718	3.8	599	3.1	731	3.7	796	3.9
Black/African American	15,434	37.7	15,161	36.8	12,566	30.1	14,335	34.2	14,582	34.7
Hispanic/Latino ^e	9,944	16.7	9,932	16.4	8,173	13.2	10,147	16.2	11,814	18.6
Native Hawaiian/other Pacific Islander	53	8.9	56	9.3	60	9.7	73	11.7	83	13.1
White	9,230	4.7	8,894	4.5	7,655	3.9	8,986	4.6	9,110	4.6
Multiracial	1,546	21.5	1,466	19.9	1,144	15.0	1,241	15.9	1,061	13.3
Transmission category^f										
Male sex at birth (≥13 yr at diagnosis)^g										
Male-to-male sexual contact ^h	24,346	—	23,827	—	20,462	—	23,785	—	25,193	—
Injection drug use ⁱ	1,373	—	1,371	—	1,191	—	1,440	—	1,465	—
Male-to-male sexual contact ^h and injection drug use ⁱ	1,567	—	1,617	—	1,240	—	1,437	—	1,323	—
Heterosexual contact ^j	2,813	—	2,628	—	2,004	—	2,471	—	2,605	—
Perinatal ^k	15	—	20	—	9	—	11	—	19	—
Other ^l	17	—	17	—	14	—	16	—	17	—
Subtotal	30,131	22.5	29,481	21.8	24,921	18.1	29,159	21.0	30,621	22.0
Female sex at birth (≥13 yr at diagnosis)^g										
Injection drug use ⁱ	1,134	—	1,190	—	886	—	1,096	—	1,156	—
Heterosexual contact ^j	5,830	—	5,644	—	4,479	—	5,380	—	5,775	—
Perinatal ^k	31	—	30	—	27	—	30	—	45	—
Other ^l	7	—	5	—	5	—	5	—	4	—
Subtotal	7,001	5.0	6,869	4.9	5,396	3.8	6,512	4.6	6,980	4.9
Child (<13 yr at diagnosis)										
Perinatal	68	—	48	—	49	—	43	—	54	—
Other ^l	17	—	10	—	9	—	10	—	8	—
Subtotal	85	0.2	58	0.1	58	0.1	53	0.1	62	0.1
Region of residence^m										
Northeast	5,552	9.9	5,324	9.5	4,273	7.4	4,898	8.6	5,080	8.9
Midwest	4,948	7.2	4,784	7.0	4,125	6.0	4,837	7.0	4,903	7.1
South	19,075	15.3	18,856	15.0	15,498	12.3	18,628	14.6	19,822	15.4
West	7,642	9.8	7,444	9.5	6,479	8.2	7,361	9.4	7,858	10.0
Total	37,217	11.4	36,408	11.1	30,375	9.2	35,724	10.8	37,663	11.3

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

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b Rates are per 100,000 population. Rates are not calculated by gender or transmission or exposure category because of the lack of denominator data.

^c “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.

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

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

^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^g Data include transgender and additional gender identity persons.

^h Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

ⁱ Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^k Persons were aged ≥13 years at time of diagnosis of HIV infection.

^l Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^m Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

Table 1b. Diagnoses of HIV infection, by year of diagnosis and selected characteristics, 2018–2022—United States and 6 territories and freely associated states

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Gender										
Man	29,829	—	29,097	—	24,466	—	28,607	—	30,041	—
Woman	7,082	—	6,928	—	5,433	—	6,561	—	7,008	—
Transgender woman/girl ^c	694	—	722	—	722	—	874	—	869	—
Transgender man/boy ^c	48	—	45	—	41	—	60	—	59	—
Additional gender identity ^d	26	—	34	—	26	—	47	—	66	—
Age at diagnosis (yr)										
< 13	85	0.2	58	0.1	58	0.1	53	0.1	62	0.1
13–14	20	0.2	21	0.2	14	0.2	15	0.2	22	0.3
15–19	1,740	8.2	1,660	7.8	1,289	5.8	1,475	6.8	1,360	6.2
20–24	6,205	28.1	6,063	27.7	4,921	22.0	5,581	24.5	5,717	24.9
25–29	7,747	32.6	7,459	31.4	6,131	26.6	6,805	30.0	7,255	32.3
30–34	5,686	25.5	5,693	25.1	5,260	22.9	6,389	27.5	6,905	29.3
35–39	4,188	19.2	4,128	18.8	3,421	15.3	4,429	19.8	4,812	21.4
40–44	2,979	15.0	2,957	14.7	2,490	12.0	3,177	14.9	3,555	16.4
45–49	2,789	13.3	2,605	12.6	2,065	10.1	2,316	11.6	2,452	12.4
50–54	2,458	11.6	2,301	11.1	1,858	8.9	2,140	10.1	2,124	10.1
55–59	1,843	8.3	1,862	8.4	1,592	7.2	1,790	8.2	1,767	8.3
60–64	1,049	5.1	1,127	5.4	891	4.2	1,125	5.3	1,119	5.2
65–69	497	2.9	516	2.9	430	2.4	554	3.0	515	2.7
70–74	253	1.9	240	1.7	171	1.2	194	1.3	239	1.6
≥ 75	140	0.6	136	0.6	97	0.4	106	0.5	139	0.6
Race/ethnicity										
American Indian/Alaska Native	166	—	181	—	178	—	211	—	217	—
Asian	848	—	725	—	599	—	732	—	796	—
Black/African American	15,446	—	15,169	—	12,572	—	14,341	—	14,589	—
Hispanic/Latino ^e	10,382	—	10,325	—	8,478	—	10,558	—	12,177	—
Native Hawaiian/other Pacific Islander	55	—	60	—	61	—	73	—	83	—
White	9,235	—	8,900	—	7,656	—	8,993	—	9,120	—
Multiracial	1,547	—	1,466	—	1,144	—	1,241	—	1,061	—
Transmission category^f										
Male sex at birth (≥ 13 yr at diagnosis)^g										
Male-to-male sexual contact ^h	24,622	—	24,064	—	20,662	—	24,041	—	25,422	—
Injection drug use ⁱ	1,399	—	1,393	—	1,210	—	1,458	—	1,490	—
Male-to-male sexual contact ^h and injection drug use ⁱ	1,578	—	1,629	—	1,244	—	1,439	—	1,327	—
Heterosexual contact ^j	2,879	—	2,694	—	2,047	—	2,535	—	2,660	—
Perinatal ^k	15	—	20	—	9	—	11	—	19	—
Other ^l	17	—	17	—	14	—	16	—	17	—
Subtotal	30,510	22.5	29,818	21.9	25,187	18.1	29,499	21.1	30,935	22.0
Female sex at birth (≥ 13 yr at diagnosis)^g										
Injection drug use ⁱ	1,136	—	1,195	—	889	—	1,098	—	1,161	—
Heterosexual contact ^j	5,910	—	5,720	—	4,523	—	5,464	—	5,835	—
Perinatal ^k	31	—	30	—	27	—	30	—	46	—
Other ^l	7	—	5	—	5	—	5	—	4	—
Subtotal	7,084	5.0	6,950	4.9	5,443	3.8	6,597	4.6	7,046	4.9
Child (< 13 yr at diagnosis)										
Perinatal	68	—	48	—	49	—	43	—	54	—
Other ^l	17	—	10	—	9	—	10	—	8	—
Subtotal	85	0.2	58	0.1	58	0.1	53	0.1	62	0.1
Region of residence^m										
Northeast	5,552	9.9	5,324	9.5	4,273	7.4	4,898	8.6	5,080	8.9
Midwest	4,948	7.2	4,784	7.0	4,125	6.0	4,837	7.0	4,903	7.1
South	19,075	15.3	18,856	15.0	15,498	12.3	18,628	14.6	19,822	15.4
West	7,642	9.8	7,444	9.5	6,479	8.2	7,361	9.4	7,858	10.0
U.S. territories and freely associated states	462	12.9	418	11.6	313	8.5	425	11.6	380	10.5
Total	37,679	11.4	36,826	11.1	30,688	9.2	36,149	10.8	38,043	11.3

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b Rates are per 100,000 population. Rates are not calculated by gender or transmission or exposure category because of the lack of denominator data for territories and freely associated states.

^c “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.

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

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

^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^g Data include transgender and additional gender identity persons.

^h Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

ⁱ Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^k Persons were aged ≥ 13 years at time of diagnosis of HIV infection.

^l Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^m Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

Table 2a. Diagnoses of HIV infection, by race/ethnicity and selected characteristics, 2022—United States

	American Indian/ Alaska Native				Black/African American		Hispanic/ Latino ^a		Native Hawaiian/ other Pacific Islander		White		Multiracial		Total	
	No.		Rate ^b		No.		Rate ^b		No.		Rate ^b		No.		Rate ^b	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Gender																
Man	152	—	672	—	10,677	—	10,066	—	67	—	7,302	—	792	—	29,728	—
Woman	58	—	104	—	3,509	—	1,370	—	12	—	1,661	—	228	—	6,942	—
Transgender woman/girl ^c	6	—	14	—	354	—	342	—	4	—	111	—	37	—	868	—
Transgender man/boy ^c	0	—	1	—	23	—	15	—	0	—	19	—	1	—	59	—
Additional gender identity ^d	1	—	5	—	19	—	21	—	0	—	17	—	3	—	66	—
Age at diagnosis (yr)																
<13	2	0.5	1	0.0	36	0.5	10	0.1	0	0.0	8	0.0	5	0.2	62	0.1
13–14	0	0.0	0	0.0	11	0.9	7	0.3	0	0.0	1	0.0	3	0.8	22	0.3
15–19	3	1.7	18	1.6	751	25.6	375	6.9	1	2.3	149	1.4	53	6.2	1,350	6.2
20–24	31	16.6	99	7.6	2,793	88.4	1,742	32.6	14	31.1	829	7.0	169	22.1	5,677	25.0
25–29	41	22.6	149	10.1	2,869	89.9	2,513	51.4	17	36.6	1,382	11.7	219	34.3	7,190	32.4
30–34	44	23.3	150	8.7	2,501	74.2	2,343	48.6	16	29.9	1,594	12.6	193	36.7	6,841	29.4
35–39	34	20.8	105	6.1	1,582	54.8	1,584	34.4	8	15.3	1,316	10.6	132	32.1	4,761	21.4
40–44	24	16.0	101	6.4	1,131	41.2	1,175	26.4	11	23.4	992	8.2	88	24.7	3,522	16.4
45–49	10	7.3	58	3.9	808	32.7	760	18.8	6	15.3	721	6.4	53	18.4	2,416	12.3
50–54	13	9.2	52	3.8	749	29.2	519	14.3	3	8.1	705	5.5	59	22.2	2,100	10.1
55–59	10	6.8	29	2.4	564	22.1	424	13.6	4	11.3	674	4.9	38	16.2	1,743	8.3
60–64	3	2.1	21	2.0	438	17.9	206	8.1	1	3.1	412	2.8	26	11.7	1,107	5.2
65–69	1	0.8	6	0.6	207	10.4	85	4.5	0	0.0	189	1.4	15	8.3	503	2.7
70–74	1	1.1	2	0.3	89	6.0	46	3.4	1	5.1	89	0.8	6	4.5	234	1.5
≥75	0	0.0	5	0.4	53	2.7	25	1.2	1	3.7	49	0.3	2	1.0	135	0.6
Transmission category^e																
Male sex at birth (≥13 yr at diagnosis)^f																
Male-to-male sexual contact ^g	114	—	625	—	8,828	—	9,156	—	60	—	5,730	—	680	—	25,193	—
Injection drug use ^h	15	—	17	—	396	—	336	—	3	—	655	—	43	—	1,465	—
Male-to-male sexual contact ^g and injection drug use ^h	18	—	13	—	264	—	351	—	2	—	623	—	53	—	1,323	—
Heterosexual contact ⁱ	11	—	36	—	1,518	—	578	—	5	—	407	—	51	—	2,605	—
Perinatal ^j	0	—	0	—	13	—	3	—	0	—	3	—	1	—	19	—
Other ^k	0	—	1	—	6	—	3	—	0	—	6	—	1	—	17	—
Subtotal	158	15.8	691	8.3	11,023	66.3	10,426	40.8	71	26.9	7,424	8.7	828	31.0	30,621	22.0
Female sex at birth (≥13 yr at diagnosis)^f																
Injection drug use ^h	26	—	7	—	309	—	169	—	6	—	597	—	42	—	1,156	—
Heterosexual contact ⁱ	31	—	95	—	3,181	—	1,203	—	6	—	1,075	—	184	—	5,775	—
Perinatal ^j	0	—	2	—	31	—	6	—	0	—	4	—	2	—	45	—
Other ^k	0	—	0	—	1	—	0	—	0	—	3	—	0	—	4	—
Subtotal	57	5.5	104	1.1	3,523	19.2	1,378	5.5	12	4.6	1,678	1.9	228	8.2	6,980	4.9
Child (<13 yr at diagnosis)																
Perinatal	2	—	1	—	33	—	9	—	0	—	5	—	4	—	54	—
Other ^k	0	—	0	—	3	—	1	—	0	—	3	—	1	—	8	—
Subtotal	2	0.5	1	0.0	36	0.5	10	0.1	0	0.0	8	0.0	5	0.2	62	0.1
Region of residence^l																
Northeast	7	5.3	136	3.3	1,876	28.9	1,816	20.4	3	12.8	1,072	3.0	170	15.7	5,080	8.9
Midwest	51	12.4	87	3.5	2,071	28.4	940	15.8	9	20.5	1,592	3.1	153	10.0	4,903	7.1
South	57	7.0	205	4.1	9,420	38.2	5,126	20.9	14	12.9	4,424	6.2	576	21.1	19,822	15.4
West	102	9.6	368	4.3	1,215	33.3	3,932	16.2	57	12.4	2,022	5.3	162	6.1	7,858	10.0
Total	217	9.0	796	3.9	14,582	34.7	11,814	18.6	83	13.1	9,110	4.6	1,061	13.3	37,663	11.3

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

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

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

^c “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.

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

^e Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^f Data include transgender and additional gender identity persons.

^g Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^j Persons were aged ≥13 years at time of diagnosis of HIV infection.

^k Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^l Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

Table 2b. Diagnoses of HIV infection, by race/ethnicity and selected characteristics, 2022—United States and 6 territories and freely associated states

	American Indian/ Alaska Native No.	Asian No.	Black/African American No.	Hispanic/ Latino ^a No.	Native Hawaiian/ other Pacific Islander No.	White No.	Multiracial No.	Total No.
Gender								
Man	152	672	10,683	10,364	67	7,311	792	30,041
Woman	58	104	3,510	1,434	12	1,662	228	7,008
Transgender woman/girl ^b	6	14	354	343	4	111	37	869
Transgender man/boy ^b	0	1	23	15	0	19	1	59
Additional gender identity ^c	1	5	19	21	0	17	3	66
Age at diagnosis (yr)								
<13	2	1	36	10	0	8	5	62
13–14	0	0	11	7	0	1	3	22
15–19	3	18	751	385	1	149	53	1,360
20–24	31	99	2,793	1,781	14	830	169	5,717
25–29	41	149	2,869	2,576	17	1,384	219	7,255
30–34	44	150	2,502	2,403	16	1,597	193	6,905
35–39	34	105	1,584	1,631	8	1,318	132	4,812
40–44	24	101	1,134	1,204	11	993	88	3,555
45–49	10	58	808	796	6	721	53	2,452
50–54	13	52	749	543	3	705	59	2,124
55–59	10	29	565	447	4	674	38	1,767
60–64	3	21	438	218	1	412	26	1,119
65–69	1	6	207	96	0	190	15	515
70–74	1	2	89	51	1	89	6	239
≥75	0	5	53	29	1	49	2	139
Transmission category^d								
Male sex at birth (≥13 yr at diagnosis)^e								
Male-to-male sexual contact ^f	114	625	8,831	9,374	60	5,737	680	25,422
Injection drug use ^g	15	17	397	359	3	656	43	1,490
Male-to-male sexual contact ^f and injection drug use ^g	18	13	264	356	2	623	53	1,327
Heterosexual contact ^h	11	36	1,519	630	5	409	51	2,660
Perinatal ⁱ	0	0	13	3	0	3	1	19
Other ^j	0	1	6	3	0	6	1	17
Subtotal	158	691	11,029	10,725	71	7,433	828	30,935
Female sex at birth (≥13 yr at diagnosis)^e								
Injection drug use ^g	26	7	309	174	6	597	42	1,161
Heterosexual contact ^h	31	95	3,182	1,261	6	1,076	184	5,835
Perinatal ⁱ	0	2	32	7	0	4	2	46
Other ^j	0	0	1	0	0	3	0	4
Subtotal	57	104	3,524	1,442	12	1,679	228	7,046
Child (<13 yr at diagnosis)								
Perinatal	2	1	33	9	0	5	4	54
Other ^j	0	0	3	1	0	3	1	8
Subtotal	2	1	36	10	0	8	5	62
Region of residence^k								
Northeast	7	136	1,876	1,816	3	1,072	170	5,080
Midwest	51	87	2,071	940	9	1,592	153	4,903
South	57	205	9,420	5,126	14	4,424	576	19,822
West	102	368	1,215	3,932	57	2,022	162	7,858
U.S. territories and freely associated states	0	0	7	363	0	10	0	380
Total	217	796	14,589	12,177	83	9,120	1,061	38,043

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Numbers less than 12 should be interpreted with caution.

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

^b “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.

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

^d Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^e Data include transgender and additional gender identity persons.

^f Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^g Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

ⁱ Persons were aged ≥13 years at time of diagnosis of HIV infection.

^j Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^k Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

Table 3a. Diagnoses of HIV infection among persons aged ≥13 years, by year of diagnosis, sex assigned at birth, and selected characteristics, 2018–2022—United States

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Male sex at birth^c										
Age at diagnosis (yr)										
13–14	11	0.3	12	0.3	8	0.2	8	0.2	13	0.3
15–19	1,480	13.8	1,452	13.5	1,121	10.0	1,266	11.5	1,180	10.6
20–24	5,414	48.5	5,276	47.7	4,317	38.1	4,908	42.6	4,989	43.0
25–29	6,726	56.0	6,463	53.8	5,319	45.7	5,877	51.3	6,219	54.8
30–34	4,685	41.9	4,692	41.3	4,416	38.1	5,388	46.0	5,778	48.8
35–39	3,243	30.1	3,197	29.4	2,689	23.9	3,466	30.8	3,806	33.7
40–44	2,160	22.1	2,175	22.0	1,901	18.3	2,372	22.3	2,681	24.8
45–49	2,028	19.8	1,883	18.7	1,493	14.6	1,646	16.6	1,758	17.9
50–54	1,763	17.2	1,660	16.5	1,378	13.3	1,534	14.7	1,514	14.5
55–59	1,279	12.0	1,313	12.3	1,144	10.6	1,284	12.1	1,288	12.4
60–64	715	7.4	755	7.7	615	6.0	820	8.0	783	7.6
65–69	353	4.4	345	4.2	319	3.8	378	4.4	344	3.9
70–74	180	2.9	160	2.5	132	1.9	136	1.9	170	2.4
≥75	94	1.0	98	1.0	69	0.7	76	0.8	98	1.0
Race/ethnicity										
American Indian/Alaska Native	136	14.1	140	14.4	142	14.5	165	16.6	158	15.8
Asian	739	9.9	617	8.1	525	6.6	638	7.9	691	8.3
Black/African American	11,471	72.2	11,375	70.9	9,663	58.8	10,860	65.7	11,023	66.3
Hispanic/Latino ^d	8,747	37.8	8,746	37.0	7,224	29.4	8,963	35.8	10,426	40.8
Native Hawaiian/other Pacific Islander	49	20.2	51	20.7	46	18.1	65	25.1	71	26.9
White	7,778	9.3	7,393	8.8	6,394	7.5	7,471	8.8	7,424	8.7
Multiracial	1,211	53.1	1,159	49.1	927	37.2	997	38.6	828	31.0
Region of residence^e										
Northeast	4,326	18.7	4,173	18.0	3,386	14.1	3,875	16.2	4,038	16.9
Midwest	4,010	14.3	3,809	13.5	3,374	11.7	3,935	13.7	3,918	13.6
South	15,165	29.9	15,047	29.4	12,521	24.0	14,952	28.4	15,917	29.9
West	6,630	20.5	6,452	19.8	5,640	17.0	6,397	19.2	6,748	20.2
Subtotal	30,131	22.5	29,481	21.8	24,921	18.1	29,159	21.0	30,621	22.0
Female sex at birth^c										
Age at diagnosis (yr)										
13–14	9	0.2	9	0.2	6	0.1	7	0.2	9	0.2
15–19	242	2.3	202	2.0	159	1.5	201	1.9	170	1.6
20–24	726	6.8	729	6.9	556	5.2	620	5.7	688	6.2
25–29	944	8.2	938	8.1	769	6.9	845	7.7	971	9.0
30–34	942	8.6	943	8.5	803	7.2	958	8.5	1,063	9.3
35–39	911	8.5	891	8.2	695	6.4	917	8.4	955	8.7
40–44	775	7.8	744	7.4	561	5.5	758	7.3	841	7.9
45–49	715	6.8	685	6.6	551	5.5	638	6.5	658	6.7
50–54	646	6.1	612	5.9	450	4.4	564	5.4	586	5.6
55–59	535	4.8	511	4.5	420	3.8	484	4.5	455	4.3
60–64	316	3.0	346	3.2	260	2.4	283	2.6	324	3.0
65–69	130	1.4	155	1.7	104	1.1	160	1.7	159	1.6
70–74	67	0.9	69	0.9	34	0.4	50	0.6	64	0.8
≥75	43	0.3	35	0.3	28	0.2	27	0.2	37	0.3
Race/ethnicity										
American Indian/Alaska Native	30	3.0	40	3.9	35	3.5	46	4.5	57	5.5
Asian	98	1.2	95	1.1	72	0.8	91	1.0	104	1.1
Black/African American	3,916	22.0	3,755	20.9	2,870	15.8	3,444	18.9	3,523	19.2
Hispanic/Latino ^d	1,187	5.2	1,178	5.0	940	3.9	1,172	4.8	1,378	5.5
Native Hawaiian/other Pacific Islander	4	1.7	5	2.0	13	5.2	8	3.2	12	4.6
White	1,437	1.6	1,494	1.7	1,249	1.4	1,509	1.7	1,678	1.9
Multiracial	329	13.6	302	12.1	217	8.3	242	9.0	228	8.2
Region of residence^e										
Northeast	1,217	4.9	1,145	4.6	877	3.5	1,017	4.0	1,031	4.1
Midwest	926	3.2	968	3.3	742	2.5	893	3.0	973	3.3
South	3,864	7.2	3,776	7.0	2,948	5.4	3,651	6.7	3,876	7.0
West	994	3.0	980	3.0	829	2.5	951	2.9	1,100	3.3
Subtotal	7,001	5.0	6,869	4.9	5,396	3.8	6,512	4.6	6,980	4.9
Total	37,132	13.5	36,350	13.2	30,317	10.8	35,671	12.7	37,601	13.3

Note. Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b Rates are per 100,000 population.

^c Data include transgender and additional gender identity persons.

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

^e Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

Table 3b. Diagnoses of HIV infection among persons aged ≥13 years, by year of diagnosis, sex assigned at birth, and selected characteristics, 2018–2022—United States and 6 territories and freely associated states

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Male sex at birth^c										
Age at diagnosis (yr)										
13–14	11	0.3	12	0.3	8	0.2	8	0.2	13	0.3
15–19	1,496	13.7	1,458	13.4	1,130	10.0	1,272	11.4	1,188	10.6
20–24	5,470	48.4	5,329	47.6	4,360	38.0	4,951	42.5	5,023	42.8
25–29	6,795	56.0	6,516	53.7	5,358	45.6	5,957	51.4	6,276	54.7
30–34	4,738	42.0	4,741	41.3	4,454	38.1	5,426	45.9	5,835	48.8
35–39	3,273	30.1	3,231	29.4	2,723	24.0	3,498	30.8	3,851	33.8
40–44	2,195	22.2	2,201	22.0	1,923	18.3	2,406	22.4	2,710	24.8
45–49	2,060	19.9	1,909	18.7	1,510	14.7	1,671	16.7	1,782	17.9
50–54	1,801	17.4	1,682	16.5	1,403	13.4	1,566	14.8	1,532	14.5
55–59	1,300	12.1	1,340	12.5	1,164	10.6	1,302	12.1	1,308	12.5
60–64	728	7.4	776	7.8	628	6.1	834	8.0	791	7.6
65–69	363	4.5	356	4.3	322	3.7	389	4.4	351	3.9
70–74	184	2.9	166	2.5	135	2.0	141	2.0	174	2.4
≥75	96	1.0	101	1.1	69	0.7	78	0.8	101	1.0
Race/ethnicity										
American Indian/Alaska Native	136	—	140	—	142	—	165	—	158	—
Asian	743	—	624	—	525	—	639	—	691	—
Black/African American	11,482	—	11,380	—	9,668	—	10,866	—	11,029	—
Hispanic/Latino ^d	9,103	—	9,062	—	7,483	—	9,289	—	10,725	—
Native Hawaiian/other Pacific Islander	51	—	54	—	47	—	65	—	71	—
White	7,783	—	7,399	—	6,395	—	7,478	—	7,433	—
Multiracial	1,212	—	1,159	—	927	—	997	—	828	—
Region of residence^e										
Northeast	4,326	18.7	4,173	18.0	3,386	14.1	3,875	16.2	4,038	16.9
Midwest	4,010	14.3	3,809	13.5	3,374	11.7	3,935	13.7	3,918	13.6
South	15,165	29.9	15,047	29.4	12,521	24.0	14,952	28.4	15,917	29.9
West	6,630	20.5	6,452	19.8	5,640	17.0	6,397	19.2	6,748	20.2
U.S. territories and freely associated states	379	25.8	337	22.8	266	17.5	340	22.4	314	20.8
Subtotal	30,510	22.5	29,818	21.9	25,187	18.1	29,499	21.1	30,935	22.0
Female sex at birth^c										
Age at diagnosis (yr)										
13–14	9	0.2	9	0.2	6	0.1	7	0.2	9	0.2
15–19	244	2.3	202	1.9	159	1.5	203	1.9	172	1.6
20–24	735	6.8	734	6.9	561	5.2	630	5.7	694	6.2
25–29	952	8.2	943	8.1	773	6.9	848	7.7	979	8.9
30–34	948	8.6	952	8.5	806	7.1	963	8.4	1,070	9.2
35–39	915	8.4	897	8.2	698	6.3	931	8.4	961	8.7
40–44	784	7.8	756	7.5	567	5.5	771	7.3	845	7.9
45–49	729	6.9	696	6.7	555	5.4	645	6.5	670	6.8
50–54	657	6.1	619	5.9	455	4.4	574	5.5	592	5.6
55–59	543	4.8	522	4.6	428	3.8	488	4.4	459	4.3
60–64	321	3.0	351	3.2	263	2.4	291	2.7	328	3.0
65–69	134	1.5	160	1.7	108	1.1	165	1.7	164	1.7
70–74	69	0.9	74	1.0	36	0.5	53	0.6	65	0.8
≥75	44	0.3	35	0.3	28	0.2	28	0.2	38	0.3
Race/ethnicity										
American Indian/Alaska Native	30	—	40	—	35	—	46	—	57	—
Asian	98	—	95	—	72	—	91	—	104	—
Black/African American	3,917	—	3,758	—	2,871	—	3,444	—	3,524	—
Hispanic/Latino ^d	1,269	—	1,255	—	986	—	1,257	—	1,442	—
Native Hawaiian/other Pacific Islander	4	—	6	—	13	—	8	—	12	—
White	1,437	—	1,494	—	1,249	—	1,509	—	1,679	—
Multiracial	329	—	302	—	217	—	242	—	228	—
Region of residence^e										
Northeast	1,217	4.9	1,145	4.6	877	3.5	1,017	4.0	1,031	4.1
Midwest	926	3.2	968	3.3	742	2.5	893	3.0	973	3.3
South	3,864	7.2	3,776	7.0	2,948	5.4	3,651	6.7	3,876	7.0
West	994	3.0	980	3.0	829	2.5	951	2.9	1,100	3.3
U.S. territories and freely associated states	83	5.1	81	4.9	47	2.8	85	5.0	66	3.9
Subtotal	7,084	5.0	6,950	4.9	5,443	3.8	6,597	4.6	7,046	4.9
Total	37,594	13.6	36,768	13.2	30,630	10.8	36,096	12.7	37,981	13.3

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b Rates are per 100,000 population. Rates by race/ethnicity are not provided because U.S. census information is limited for U.S. territories and freely associated states.

^c Data include transgender and additional gender identity persons.

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

^e Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

Table 4a. Diagnoses of HIV infection among transgender and additional gender identity persons, by year of diagnosis and selected characteristics, 2018–2022—United States

	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a No.	2021 No.	2022 No.
Transgender woman^b					
Age at diagnosis (yr)					
13–14	0	0	0	1	0
15–19	52	49	39	64	64
20–24	186	190	171	247	206
25–29	204	183	224	191	211
30–34	100	140	130	169	175
35–39	72	64	50	85	81
40–44	34	46	39	51	54
45–49	24	19	32	27	33
50–54	7	16	22	14	22
55–59	6	8	6	13	15
60–64	4	4	5	10	4
65–69	0	1	1	1	1
70–74	1	0	0	0	2
≥75	1	0	0	0	0
Race/ethnicity					
American Indian/Alaska Native	9	5	8	10	6
Asian	11	11	14	19	14
Black/African American	317	346	341	390	354
Hispanic/Latino ^c	239	249	240	286	342
Native Hawaiian/other Pacific Islander	2	5	3	6	4
White	73	75	76	117	111
Multiracial	40	29	37	45	37
Exposure category^d					
Sexual contact ^e	624	641	649	769	774
Injection drug use ^f	4	2	1	4	3
Sexual contact ^e and injection drug use ^f	55	61	50	63	55
Other ^g	8	16	19	37	36
Region of residence^h					
Northeast	120	112	117	117	117
Midwest	110	98	101	151	124
South	303	318	317	375	387
West	158	192	184	230	240
Subtotal	691	720	719	873	868
Transgender man^b					
Age at diagnosis (yr)					
13–14	0	0	0	1	0
15–19	1	0	1	6	2
20–24	9	11	14	8	16
25–29	18	18	9	20	18
30–34	10	13	8	13	13
35–39	4	1	5	6	5
40–44	4	0	2	4	2
45–49	1	2	1	0	0
50–54	1	0	1	0	2
55–59	0	0	0	1	1
60–64	0	0	0	0	0
65–69	0	0	0	0	0
70–74	0	0	0	1	0
≥75	0	0	0	0	0
Race/ethnicity					
American Indian/Alaska Native	0	0	0	0	0
Asian	0	1	0	2	1
Black/African American	16	17	10	18	23
Hispanic/Latino ^c	11	13	12	17	15
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	18	10	14	20	19
Multiracial	3	4	5	3	1
Exposure category^d					
Sexual contact ^e	40	35	32	51	53
Injection drug use ^f	2	2	1	0	0
Sexual contact ^e and injection drug use ^f	4	3	5	1	1
Other ^g	2	5	3	8	5
Region of residence^h					
Northeast	7	7	8	9	10
Midwest	7	6	2	11	7
South	15	17	25	22	33
West	19	15	6	18	9
Subtotal	48	45	41	60	59

Table 4a. Diagnoses of HIV infection among transgender and additional gender identity persons, by year of diagnosis and selected characteristics, 2018–2022—United States (cont)

	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a No.	2021 No.	2022 No.
Additional gender identityⁱ					
Age at diagnosis (yr)					
13–14	0	0	0	0	0
15–19	5	5	3	4	5
20–24	9	15	7	24	16
25–29	4	7	9	7	21
30–34	4	4	2	5	12
35–39	2	2	2	2	5
40–44	0	0	1	1	4
45–49	2	0	1	2	0
50–54	0	1	0	2	2
55–59	0	0	0	0	1
60–64	0	0	1	0	0
65–69	0	0	0	0	0
70–74	0	0	0	0	0
≥75	0	0	0	0	0
Race/ethnicity					
American Indian/Alaska Native	1	0	0	0	1
Asian	2	0	0	0	5
Black/African American	9	13	13	14	19
Hispanic/Latino ^c	6	7	6	16	21
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	4	9	6	14	17
Multiracial	4	5	1	3	3
Exposure category^d					
Sexual contact ^e	25	29	22	41	59
Injection drug use ^f	0	0	0	0	0
Sexual contact ^e and injection drug use ^f	1	3	1	5	6
Other ^g	0	2	3	1	1
Region of residence^h					
Northeast	10	10	4	14	19
Midwest	5	10	6	7	8
South	7	10	9	9	16
West	4	4	7	17	23
Subtotal	26	34	26	47	66
Total	765	799	786	980	993

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

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.

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

^d Risk factor data for transgender and additional gender identity persons are presented using the exposure category classification, which is meant to convey all the known ways the person could have been exposed to HIV. Exposure categories are mutually exclusive and have no presumed hierarchical order of probability, except for rare circumstances where route of transmission has been confirmed through investigation. See Technical Notes for more information on exposure categories.

^e For persons assigned “male” sex at birth, sexual contact with any person. For persons assigned “female” sex at birth, sexual contact with a person assigned “male” sex at birth.

^f Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^g Other risk factors, including perinatal, hemophilia, blood transfusion, and risk factor not reported or not identified. Data were not statistically adjusted to account for missing exposure category; therefore, case counts for “Other” might be high.

^h Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

ⁱ Additional gender identity examples include “nonbinary,” “gender queer,” and “two-spirit.”

Table 4b. Diagnoses of HIV infection among transgender and additional gender identity persons aged ≥13 years, by year of diagnosis and selected characteristics, 2018–2022—United States and 6 territories and freely associated states

	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.
Transgender woman^b					
Age at diagnosis (yr)					
13–14	0	0	0	1	0
15–19	52	49	39	64	64
20–24	187	191	173	247	206
25–29	205	184	224	191	212
30–34	101	140	131	169	175
35–39	72	64	50	85	81
40–44	34	46	39	52	54
45–49	24	19	32	27	33
50–54	7	16	22	14	22
55–59	6	8	6	13	15
60–64	4	4	5	10	4
65–69	0	1	1	1	1
70–74	1	0	0	0	2
≥75	1	0	0	0	0
Race/ethnicity					
American Indian/Alaska Native	9	5	8	10	6
Asian	11	11	14	19	14
Black/African American	317	346	341	390	354
Hispanic/Latino ^c	242	251	243	287	343
Native Hawaiian/other Pacific Islander	2	5	3	6	4
White	73	75	76	117	111
Multiracial	40	29	37	45	37
Exposure category^d					
Sexual contact ^e	627	643	651	770	775
Injection drug use ^f	4	2	1	4	3
Sexual contact ^e and injection drug use ^f	55	61	51	63	55
Other ^g	8	16	19	37	36
Region of residence^h					
Northeast	120	112	117	117	117
Midwest	110	98	101	151	124
South	303	318	317	375	387
West	158	192	184	230	240
U.S. territories and freely associated states	3	2	3	1	1
Subtotal	694	722	722	874	869
Transgender man^b					
Age at diagnosis (yr)					
13–14	0	0	0	1	0
15–19	1	0	1	6	2
20–24	9	11	14	8	16
25–29	18	18	9	20	18
30–34	10	13	8	13	13
35–39	4	1	5	6	5
40–44	4	0	2	4	2
45–49	1	2	1	0	0
50–54	1	0	1	0	2
55–59	0	0	0	1	1
60–64	0	0	0	0	0
65–69	0	0	0	0	0
70–74	0	0	0	1	0
≥75	0	0	0	0	0
Race/ethnicity					
American Indian/Alaska Native	0	0	0	0	0
Asian	0	1	0	2	1
Black/African American	16	17	10	18	23
Hispanic/Latino ^c	11	13	12	17	15
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	18	10	14	20	19
Multiracial	3	4	5	3	1
Exposure category^d					
Sexual contact ^e	40	35	32	51	53
Injection drug use ^f	2	2	1	0	0
Sexual contact ^e and injection drug use ^f	4	3	5	1	1
Other ^g	2	5	3	8	5
Region of residence^h					
Northeast	7	7	8	9	10
Midwest	7	6	2	11	7
South	15	17	25	22	33
West	19	15	6	18	9
U.S. territories and freely associated states	0	0	0	0	0
Subtotal	48	45	41	60	59

Table 4b. Diagnoses of HIV infection among transgender and additional gender identity persons aged ≥13 years, by year of diagnosis and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.
Additional gender identityⁱ					
Age at diagnosis (yr)					
13–14	0	0	0	0	0
15–19	5	5	3	4	5
20–24	9	15	7	24	16
25–29	4	7	9	7	21
30–34	4	4	2	5	12
35–39	2	2	2	2	5
40–44	0	0	1	1	4
45–49	2	0	1	2	0
50–54	0	1	0	2	2
55–59	0	0	0	0	1
60–64	0	0	1	0	0
65–69	0	0	0	0	0
70–74	0	0	0	0	0
≥75	0	0	0	0	0
Race/ethnicity					
American Indian/Alaska Native	1	0	0	0	1
Asian	2	0	0	0	5
Black/African American	9	13	13	14	19
Hispanic/Latino ^c	6	7	6	16	21
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	4	9	6	14	17
Multiracial	4	5	1	3	3
Exposure category^d					
Sexual contact ^e	25	29	22	41	59
Injection drug use ^f	0	0	0	0	0
Sexual contact ^e and injection drug use ^f	1	3	1	5	6
Other ^g	0	2	3	1	1
Region of residence^h					
Northeast	10	10	4	14	19
Midwest	5	10	6	7	8
South	7	10	9	9	16
West	4	4	7	17	23
U.S. territories and freely associated states	0	0	0	0	0
Subtotal	26	34	26	47	66
Total	768	801	789	981	994

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Numbers less than 12, and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.

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

^d Risk factor data for transgender and additional gender identity persons are presented using the exposure category classification, which is meant to convey all the known ways the person could have been exposed to HIV. Exposure categories are mutually exclusive and have no presumed hierarchical order of probability, except for rare circumstances where route of transmission has been confirmed through investigation. See Technical Notes for more information on exposure categories.

^e For persons assigned “male” sex at birth, sexual contact with any person. For persons assigned “female” sex at birth, sexual contact with a person assigned “male” sex at birth.

^f Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^g Other risk factors, including perinatal, hemophilia, blood transfusion, and risk factor not reported or not identified. Data were not statistically adjusted to account for missing exposure category; therefore, case counts for “Other” might be high.

^h Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

ⁱ Additional gender identity examples include “nonbinary,” “gender queer,” and “two-spirit.”

Table 5a. Diagnoses of HIV infection among males, based on sex assigned at birth, attributed to male-to-male sexual contact and male-to-male sexual contact *and* injection drug use, by year of diagnosis and selected characteristics, 2018–2022—United States

	Male-to-male sexual contact					Male-to-male sexual contact <i>and</i> injection drug use				
	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a	2021 No.	2022 No.	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a	2021 No.	2022 No.
			No.					No.		
American Indian/Alaska Native										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	6	6	5	9	3	0	0	0	0	0
20–24	24	25	20	16	21	2	3	3	1	3
25–29	20	25	25	31	24	7	5	4	1	5
30–34	17	14	16	25	24	5	1	3	5	3
35–39	8	15	11	20	15	2	3	4	4	4
40–44	7	4	11	10	14	1	0	3	0	1
45–49	7	6	6	5	4	2	1	0	2	0
50–54	6	7	11	7	2	0	1	0	1	1
55–59	2	2	5	3	5	1	0	0	0	1
60–64	0	2	2	5	1	0	0	0	0	0
65–69	1	0	1	2	1	0	0	0	0	0
70–74	1	0	0	0	1	0	0	0	0	0
≥75	0	0	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	4	3	5	3	6	0	0	0	0	0
Midwest	12	7	8	18	15	4	1	4	6	2
South	15	34	32	38	30	3	2	0	1	2
West	68	61	68	73	64	13	11	13	8	13
Total	99	105	113	131	114	20	14	18	15	18
Asian										
Age at diagnosis (yr)										
13–14	1	0	0	0	0	0	0	0	0	0
15–19	22	18	17	21	17	0	0	0	0	1
20–24	108	94	57	83	86	0	2	1	2	1
25–29	163	123	121	123	123	5	4	4	2	3
30–34	115	93	86	114	130	3	4	4	4	3
35–39	68	70	49	72	80	4	1	0	4	2
40–44	62	41	44	47	76	1	0	2	2	0
45–49	56	52	39	39	45	1	1	0	1	2
50–54	22	34	24	36	33	0	0	0	0	0
55–59	20	15	14	23	17	0	0	0	1	0
60–64	9	8	10	8	12	0	0	0	0	0
65–69	6	2	7	3	2	0	0	0	0	0
70–74	2	5	1	1	2	0	0	0	0	0
≥75	3	2	1	1	1	0	0	0	0	0
Region of residence^b										
Northeast	119	98	73	104	99	2	3	0	2	2
Midwest	63	52	53	56	72	1	1	1	3	2
South	168	137	100	147	159	2	4	0	1	4
West	307	271	244	263	295	10	5	9	10	5
Total	657	558	470	570	625	14	13	11	16	13

Table 5a. Diagnoses of HIV infection among males, based on sex assigned at birth, attributed to male-to-male sexual contact and male-to-male sexual contact *and* injection drug use, by year of diagnosis and selected characteristics, 2018–2022—United States (cont)

	Male-to-male sexual contact					Male-to-male sexual contact <i>and</i> injection drug use				
	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a	2021 No.	2022 No.	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a	2021 No.	2022 No.
Black/African American										
Age at diagnosis (yr)										
13–14	7	7	2	3	5	0	0	0	0	0
15–19	801	782	602	691	610	12	14	13	9	8
20–24	2,371	2,346	2,061	2,328	2,222	55	41	43	33	46
25–29	2,454	2,315	1,946	2,044	2,115	81	93	60	54	50
30–34	1,252	1,414	1,425	1,602	1,642	50	59	59	64	55
35–39	721	736	645	757	847	27	41	27	36	37
40–44	440	452	379	413	501	19	23	16	25	18
45–49	348	335	263	274	285	11	19	10	14	10
50–54	306	281	239	226	238	18	18	7	8	13
55–59	196	198	185	213	175	9	11	6	9	12
60–64	99	115	93	116	112	7	6	3	3	10
65–69	46	44	33	47	45	3	1	1	2	3
70–74	23	24	12	12	20	0	1	0	1	0
≥75	6	13	6	10	12	0	0	0	0	0
Region of residence^b										
Northeast	1,066	1,102	937	992	1,041	52	38	35	33	26
Midwest	1,439	1,396	1,290	1,366	1,288	56	49	43	48	43
South	5,756	5,795	4,963	5,556	5,742	143	182	122	138	144
West	808	767	703	820	757	42	58	45	38	51
Total	9,069	9,061	7,893	8,734	8,828	293	327	246	256	264
Hispanic/Latino^c										
Age at diagnosis (yr)										
13–14	0	2	3	4	3	0	0	1	0	0
15–19	326	370	263	317	328	15	10	9	11	6
20–24	1,413	1,436	1,094	1,316	1,511	80	73	44	49	37
25–29	1,800	1,766	1,465	1,755	2,115	120	105	87	83	78
30–34	1,307	1,297	1,223	1,559	1,882	62	73	70	78	78
35–39	905	903	742	1,019	1,199	49	61	40	49	53
40–44	551	594	515	663	830	29	38	24	33	47
45–49	476	450	341	428	501	22	23	20	18	24
50–54	322	339	284	332	351	16	21	11	17	10
55–59	188	180	182	204	266	3	13	5	10	12
60–64	85	90	82	126	100	4	2	7	5	4
65–69	43	38	35	56	45	0	2	0	2	1
70–74	21	18	14	11	19	1	1	1	0	1
≥75	5	12	4	3	8	1	0	0	0	0
Region of residence^b										
Northeast	1,188	1,199	923	1,088	1,273	59	61	38	38	29
Midwest	547	549	436	602	744	35	36	21	19	26
South	3,084	3,099	2,568	3,422	3,961	136	159	120	121	130
West	2,624	2,647	2,319	2,681	3,178	172	167	138	176	166
Total	7,443	7,493	6,246	7,793	9,156	401	422	317	355	351

Table 5a. Diagnoses of HIV infection among males, based on sex assigned at birth, attributed to male-to-male sexual contact and male-to-male sexual contact *and* injection drug use, by year of diagnosis and selected characteristics, 2018–2022—United States (cont)

	Male-to-male sexual contact					Male-to-male sexual contact <i>and</i> injection drug use				
	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a	2021 No.	2022 No.	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a	2021 No.	2022 No.
Native Hawaiian/other Pacific Islander										
Age at diagnosis (yr)										
13–14	0	0	1	0	0	0	0	0	0	0
15–19	3	1	2	4	1	0	0	1	0	0
20–24	5	6	5	4	12	2	0	0	1	0
25–29	9	16	9	13	16	2	0	1	0	0
30–34	9	9	7	9	9	1	1	1	2	1
35–39	6	6	6	10	5	0	1	0	0	0
40–44	2	4	5	7	9	0	0	0	0	0
45–49	2	0	1	3	5	0	0	1	0	0
50–54	1	3	2	4	1	0	0	0	0	1
55–59	3	1	0	1	2	0	0	0	0	0
60–64	1	1	0	2	1	0	0	0	0	0
65–69	1	0	0	1	0	0	0	0	0	0
70–74	0	0	0	0	1	0	0	0	0	0
≥75	0	0	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	2	1	4	2	3	0	0	0	0	0
Midwest	1	4	1	6	5	0	0	1	0	0
South	6	9	6	13	11	0	0	0	0	0
West	32	33	27	36	42	5	2	4	4	2
Total	41	47	37	57	60	5	2	5	4	2
White										
Age at diagnosis (yr)										
13–14	0	1	0	0	0	0	0	0	0	0
15–19	163	127	123	105	114	11	14	3	3	4
20–24	771	690	566	603	625	74	80	55	55	46
25–29	1,079	1,072	880	981	952	190	166	123	122	107
30–34	926	857	813	989	1,004	153	149	111	172	136
35–39	636	642	514	713	770	122	118	111	121	108
40–44	505	441	431	537	558	58	63	52	101	79
45–49	548	459	390	418	396	53	57	46	56	49
50–54	523	487	437	461	433	43	38	33	45	31
55–59	428	449	404	434	430	27	34	25	23	35
60–64	247	234	202	264	252	7	15	11	18	17
65–69	124	116	113	117	115	6	10	5	8	8
70–74	59	46	43	37	56	0	2	1	3	3
≥75	29	17	22	20	25	1	0	0	0	1
Region of residence^b										
Northeast	735	665	557	655	656	80	64	72	82	62
Midwest	1,066	951	906	1,065	980	134	147	101	147	121
South	2,701	2,574	2,173	2,584	2,732	309	308	227	293	264
West	1,533	1,447	1,303	1,374	1,362	220	224	176	205	176
Total	6,036	5,637	4,938	5,677	5,730	743	744	576	726	623

Table 5a. Diagnoses of HIV infection among males, based on sex assigned at birth, attributed to male-to-male sexual contact and male-to-male sexual contact *and* injection drug use, by year of diagnosis and selected characteristics, 2018–2022—United States (cont)

	Male-to-male sexual contact					Male-to-male sexual contact <i>and</i> injection drug use				
	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a	2021 No.	2022 No.	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a	2021 No.	2022 No.
	Multiracial									
Age at diagnosis (yr)										
13–14	0	0	0	0	2	0	0	0	0	0
15–19	55	56	47	60	42	2	1	1	1	1
20–24	248	208	161	179	131	14	8	13	6	5
25–29	248	235	184	170	161	32	23	17	17	10
30–34	155	147	123	156	142	14	34	11	22	9
35–39	104	93	78	84	75	16	9	7	8	10
40–44	57	59	55	53	38	2	12	8	4	5
45–49	50	41	45	36	28	5	2	7	4	3
50–54	38	26	32	38	30	5	3	3	2	3
55–59	22	41	19	27	13	0	2	0	2	3
60–64	12	13	9	8	9	0	1	0	0	3
65–69	8	5	8	7	6	0	2	0	0	0
70–74	4	2	4	4	3	0	0	0	0	0
≥75	0	2	0	1	1	0	0	0	0	0
Region of residence^b										
Northeast	158	158	119	118	103	12	12	7	9	6
Midwest	128	109	110	123	93	18	14	15	16	13
South	516	476	391	437	379	33	49	26	27	20
West	200	184	146	146	106	28	21	19	14	15
Total	1,001	927	766	823	680	91	96	67	66	53
	Total									
Age at diagnosis (yr)										
13–14	8	10	6	6	10	0	0	1	0	0
15–19	1,375	1,359	1,060	1,206	1,115	40	39	26	23	20
20–24	4,940	4,805	3,963	4,527	4,608	227	207	159	147	139
25–29	5,773	5,551	4,630	5,116	5,507	438	394	296	280	252
30–34	3,781	3,832	3,694	4,453	4,834	287	321	259	346	286
35–39	2,448	2,465	2,045	2,675	2,991	220	235	190	221	215
40–44	1,624	1,594	1,440	1,729	2,026	110	135	104	165	151
45–49	1,487	1,343	1,085	1,202	1,263	93	103	84	95	88
50–54	1,219	1,177	1,028	1,103	1,087	82	82	55	73	59
55–59	858	885	809	904	906	40	59	37	45	62
60–64	453	461	398	528	486	18	24	21	27	35
65–69	230	204	197	234	214	9	14	6	12	12
70–74	108	96	74	66	101	1	4	2	3	4
≥75	43	45	34	36	47	2	1	0	0	1
Region of residence^b										
Northeast	3,272	3,226	2,618	2,962	3,180	204	177	153	164	124
Midwest	3,256	3,068	2,803	3,234	3,197	248	248	186	238	207
South	12,246	12,123	10,231	12,197	13,014	624	704	496	581	564
West	5,572	5,410	4,810	5,392	5,802	491	488	405	453	427
Total	24,346	23,827	20,462	23,785	25,193	1,567	1,617	1,240	1,437	1,323

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

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

Persons whose transmission category is classified as male-to-male sexual contact or male-to-male sexual contact *and* injection drug use are presented based on sex assigned at birth and include transgender and additional gender identity persons.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

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

Table 5b. Diagnoses of HIV infection among males, based on sex assigned at birth, attributed to male-to-male sexual contact and male-to-male sexual contact *and* injection drug use, by year of diagnosis and selected characteristics, 2018–2022—United States and 6 territories and freely associated states

	Male-to-male sexual contact					Male-to-male sexual contact <i>and</i> injection drug use				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
American Indian/Alaska Native										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	6	6	5	9	3	0	0	0	0	0
20–24	24	25	20	16	21	2	3	3	1	3
25–29	20	25	25	31	24	7	5	4	1	5
30–34	17	14	16	25	24	5	1	3	5	3
35–39	8	15	11	20	15	2	3	4	4	4
40–44	7	4	11	10	14	1	0	3	0	1
45–49	7	6	6	5	4	2	1	0	2	0
50–54	6	7	11	7	2	0	1	0	1	1
55–59	2	2	5	3	5	1	0	0	0	1
60–64	0	2	2	5	1	0	0	0	0	0
65–69	1	0	1	2	1	0	0	0	0	0
70–74	1	0	0	0	1	0	0	0	0	0
≥75	0	0	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	4	3	5	3	6	0	0	0	0	0
Midwest	12	7	8	18	15	4	1	4	6	2
South	15	34	32	38	30	3	2	0	1	2
West	68	61	68	73	64	13	11	13	8	13
U.S. territories and freely associated states	0	0	0	0	0	0	0	0	0	0
Total	99	105	113	131	114	20	14	18	15	18
Asian										
Age at diagnosis (yr)										
13–14	1	0	0	0	0	0	0	0	0	0
15–19	22	18	17	21	17	0	0	0	0	1
20–24	108	94	57	83	86	0	2	1	2	1
25–29	164	126	121	124	123	5	5	4	2	3
30–34	117	94	86	114	130	3	4	4	4	3
35–39	68	71	49	72	80	4	1	0	4	2
40–44	63	41	44	47	76	1	0	2	2	0
45–49	56	52	39	39	45	1	1	0	1	2
50–54	22	35	24	36	33	0	0	0	0	0
55–59	20	15	14	23	17	0	0	0	1	0
60–64	9	8	10	8	12	0	0	0	0	0
65–69	6	2	7	3	2	0	0	0	0	0
70–74	2	5	1	1	2	0	0	0	0	0
≥75	3	2	1	1	1	0	0	0	0	0
Region of residence^b										
Northeast	119	98	73	104	99	2	3	0	2	2
Midwest	63	52	53	56	72	1	1	1	3	2
South	168	137	100	147	159	2	4	0	1	4
West	307	271	244	263	295	10	5	9	10	5
U.S. territories and freely associated states	4	6	0	1	0	0	1	0	0	0
Total	661	563	470	571	625	14	14	11	16	13

Table 5b. Diagnoses of HIV infection among males, based on sex assigned at birth, attributed to male-to-male sexual contact and male-to-male sexual contact *and* injection drug use, by year of diagnosis and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Male-to-male sexual contact					Male-to-male sexual contact <i>and</i> injection drug use				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
			(COVID-19 pandemic) ^a					(COVID-19 pandemic) ^a		
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Black/African American										
Age at diagnosis (yr)										
13–14	7	7	2	3	5	0	0	0	0	0
15–19	801	782	604	691	610	12	14	13	9	8
20–24	2,372	2,348	2,061	2,329	2,222	55	41	43	33	46
25–29	2,456	2,316	1,946	2,044	2,115	81	93	60	54	50
30–34	1,253	1,414	1,426	1,603	1,642	50	59	59	64	55
35–39	721	736	645	757	849	27	41	27	36	37
40–44	441	452	379	413	502	19	23	16	25	18
45–49	348	335	263	274	285	11	19	10	14	10
50–54	306	281	239	226	238	18	18	7	8	13
55–59	196	198	185	213	175	9	11	6	9	12
60–64	99	115	93	116	112	7	6	3	3	10
65–69	47	44	33	47	45	3	1	1	2	3
70–74	23	24	13	12	20	0	1	0	1	0
≥75	6	13	6	10	12	0	0	0	0	0
Region of residence^b										
Northeast	1,066	1,102	937	992	1,041	52	38	35	33	26
Midwest	1,439	1,396	1,290	1,366	1,288	56	49	43	48	43
South	5,756	5,795	4,963	5,556	5,742	143	182	122	138	144
West	808	767	703	820	757	42	58	45	38	51
U.S. territories and freely associated states	5	3	3	4	4	0	0	0	0	0
Total	9,075	9,064	7,895	8,738	8,831	293	327	246	256	264
Hispanic/Latino^c										
Age at diagnosis (yr)										
13–14	0	2	3	4	3	0	0	1	0	0
15–19	341	376	270	320	336	15	10	9	12	6
20–24	1,465	1,481	1,132	1,357	1,544	81	76	45	49	37
25–29	1,852	1,810	1,499	1,829	2,163	123	106	89	83	80
30–34	1,343	1,335	1,254	1,589	1,924	65	75	70	78	79
35–39	924	927	768	1,044	1,226	50	62	41	50	55
40–44	575	607	529	685	846	29	38	24	33	47
45–49	500	462	353	441	513	22	24	20	18	24
50–54	340	353	302	351	363	16	21	11	17	10
55–59	199	193	191	213	277	4	14	5	10	12
60–64	92	99	88	130	103	5	2	7	5	4
65–69	45	40	36	61	45	1	3	0	2	1
70–74	22	18	15	12	22	1	1	1	0	1
≥75	5	13	4	3	10	1	0	0	0	0
Region of residence^b										
Northeast	1,188	1,199	923	1,088	1,273	59	61	38	38	29
Midwest	547	549	436	602	744	35	36	21	19	26
South	3,084	3,099	2,568	3,422	3,961	136	159	120	121	130
West	2,624	2,647	2,319	2,681	3,178	172	167	138	176	166
U.S. territories and freely associated states	261	221	195	245	218	11	11	4	2	5
Total	7,704	7,714	6,442	8,038	9,374	412	433	322	357	356

Table 5b. Diagnoses of HIV infection among males, based on sex assigned at birth, attributed to male-to-male sexual contact and male-to-male sexual contact *and* injection drug use, by year of diagnosis and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Male-to-male sexual contact					Male-to-male sexual contact <i>and</i> injection drug use				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
			(COVID-19 pandemic) ^a					(COVID-19 pandemic) ^a		
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Native Hawaiian/other Pacific Islander										
Age at diagnosis (yr)										
13–14	0	0	1	0	0	0	0	0	0	0
15–19	3	1	2	4	1	0	0	1	0	0
20–24	5	6	5	4	12	2	0	0	1	0
25–29	9	16	9	13	16	2	1	1	0	0
30–34	9	9	8	9	9	1	1	1	2	1
35–39	7	6	6	10	5	0	1	0	0	0
40–44	2	5	5	7	9	0	0	0	0	0
45–49	2	0	1	3	5	0	0	1	0	0
50–54	1	4	2	4	1	0	0	0	0	1
55–59	3	1	0	1	2	0	0	0	0	0
60–64	1	1	0	2	1	0	0	0	0	0
65–69	1	0	0	1	0	0	0	0	0	0
70–74	0	0	0	0	1	0	0	0	0	0
≥75	0	0	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	2	1	4	2	3	0	0	0	0	0
Midwest	1	4	1	6	5	0	0	1	0	0
South	6	9	6	13	11	0	0	0	0	0
West	32	33	27	36	42	5	2	4	4	2
U.S. territories and freely associated states	1	2	1	0	0	0	1	0	0	0
Total	42	49	38	57	60	5	3	5	4	2
White										
Age at diagnosis (yr)										
13–14	0	1	0	0	0	0	0	0	0	0
15–19	163	127	123	105	114	11	14	3	3	4
20–24	771	690	566	603	625	74	80	55	55	46
25–29	1,079	1,072	880	983	953	190	166	123	122	107
30–34	926	859	813	990	1,007	153	149	111	172	136
35–39	637	642	514	713	772	122	118	111	121	108
40–44	506	441	431	537	559	58	63	52	101	79
45–49	548	460	390	419	396	53	57	46	56	49
50–54	525	487	438	461	433	43	38	33	45	31
55–59	429	449	404	435	430	27	34	25	23	35
60–64	247	235	202	265	252	7	15	11	18	17
65–69	124	117	113	117	116	6	10	5	8	8
70–74	59	46	43	37	56	0	2	1	3	3
≥75	29	17	22	20	25	1	0	0	0	1
Region of residence^b										
Northeast	735	665	557	655	656	80	64	72	82	62
Midwest	1,066	951	906	1,065	980	134	147	101	147	121
South	2,701	2,574	2,173	2,584	2,732	309	308	227	293	264
West	1,533	1,447	1,303	1,374	1,362	220	224	176	205	176
U.S. territories and freely associated states	5	5	1	6	7	0	0	0	0	0
Total	6,041	5,642	4,939	5,683	5,737	743	744	576	726	623

Table 5b. Diagnoses of HIV infection among males, based on sex assigned at birth, attributed to male-to-male sexual contact and male-to-male sexual contact *and* injection drug use, by year of diagnosis and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Male-to-male sexual contact					Male-to-male sexual contact <i>and</i> injection drug use				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
			(COVID-19 pandemic) ^a					(COVID-19 pandemic) ^a		
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Multiracial										
Age at diagnosis (yr)										
13–14	0	0	0	0	2	0	0	0	0	0
15–19	55	56	47	60	42	2	1	1	1	1
20–24	248	208	161	179	131	14	8	13	6	5
25–29	248	235	184	170	161	32	23	17	17	10
30–34	155	147	123	156	142	14	34	11	22	9
35–39	104	93	78	84	75	16	9	7	8	10
40–44	57	59	55	53	38	2	12	8	4	5
45–49	50	41	45	36	28	5	2	7	4	3
50–54	38	26	32	38	30	5	3	3	2	3
55–59	22	41	19	27	13	0	2	0	2	3
60–64	12	13	9	8	9	0	1	0	0	3
65–69	8	5	8	7	6	0	2	0	0	0
70–74	4	2	4	4	3	0	0	0	0	0
≥75	0	2	0	1	1	0	0	0	0	0
Region of residence^b										
Northeast	158	158	119	118	103	12	12	7	9	6
Midwest	128	109	110	123	93	18	14	15	16	13
South	516	476	391	437	379	33	49	26	27	20
West	200	184	146	146	106	28	21	19	14	15
U.S. territories and freely associated states	0	0	0	0	0	0	0	0	0	0
Total	1,001	927	766	823	680	91	96	67	66	53
Total										
Age at diagnosis (yr)										
13–14	8	10	6	6	10	0	0	1	0	0
15–19	1,390	1,365	1,069	1,209	1,123	40	39	26	24	20
20–24	4,993	4,852	4,001	4,569	4,641	228	210	160	147	139
25–29	5,827	5,599	4,664	5,193	5,556	441	397	298	280	254
30–34	3,820	3,872	3,726	4,486	4,880	290	323	260	346	287
35–39	2,469	2,490	2,071	2,700	3,022	221	236	191	222	216
40–44	1,650	1,609	1,454	1,751	2,044	110	135	105	165	151
45–49	1,512	1,356	1,097	1,216	1,275	93	104	84	95	88
50–54	1,239	1,192	1,047	1,121	1,098	82	82	55	73	59
55–59	870	899	818	915	918	41	60	37	45	62
60–64	460	471	403	534	489	19	24	21	27	35
65–69	231	207	198	238	215	10	15	6	12	12
70–74	110	96	75	67	104	1	4	2	3	4
≥75	43	46	34	36	49	2	1	0	0	1
Region of residence^b										
Northeast	3,272	3,226	2,618	2,962	3,180	204	177	153	164	124
Midwest	3,256	3,068	2,803	3,234	3,197	248	248	186	238	207
South	12,246	12,123	10,231	12,197	13,014	624	704	496	581	564
West	5,572	5,410	4,810	5,392	5,802	491	488	405	453	427
U.S. territories and freely associated states	276	237	200	256	229	11	13	4	3	5
Total	24,622	24,064	20,662	24,041	25,422	1,578	1,629	1,244	1,439	1,327

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Numbers less than 12, and trends based on these numbers, should be interpreted with caution. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total. Persons whose transmission category is classified as male-to-male sexual contact or male-to-male sexual contact *and* injection drug use are presented based on sex assigned at birth and include transgender and additional gender identity persons.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

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

Table 6a. Diagnoses of HIV infection attributed to injection drug use, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
American Indian/Alaska Native										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	1	0	0	0	0	0	1	0	1	0
20–24	0	2	1	0	0	0	2	0	1	4
25–29	1	0	0	3	1	2	1	5	5	3
30–34	3	2	4	1	2	2	1	3	4	7
35–39	0	3	1	0	5	4	5	4	3	6
40–44	0	2	0	2	3	1	2	1	0	1
45–49	1	1	0	1	0	2	0	1	1	2
50–54	2	1	2	0	1	2	2	0	3	3
55–59	0	0	0	0	2	1	0	1	1	0
60–64	0	0	0	0	1	1	0	0	0	0
65–69	0	0	0	0	0	0	1	0	0	0
70–74	0	0	0	0	0	0	0	0	0	0
≥75	0	0	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	0	0	0	0	0	0	0	0	0	0
Midwest	3	3	2	3	6	3	6	8	7	13
South	1	3	4	3	4	6	5	1	2	5
West	6	7	2	3	5	6	6	7	12	7
Total	9	13	9	9	15	15	16	17	20	26
Asian										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	0	0	0	0	0	0	0	0	0	0
20–24	1	0	0	0	0	0	0	0	0	0
25–29	0	1	1	0	3	0	1	0	3	0
30–34	3	0	3	3	1	2	2	2	1	1
35–39	0	2	1	2	4	0	1	0	1	2
40–44	3	2	2	2	5	1	1	0	0	1
45–49	2	3	2	2	1	0	1	1	0	1
50–54	1	3	3	1	1	0	0	0	1	1
55–59	1	2	1	1	1	0	0	0	0	0
60–64	0	0	2	2	2	0	0	0	0	0
65–69	0	0	0	0	0	0	1	0	0	0
70–74	0	0	0	0	0	0	0	0	0	0
≥75	1	0	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	5	2	2	2	5	1	2	1	1	2
Midwest	2	3	3	4	1	0	1	0	1	1
South	4	2	1	1	2	1	1	1	2	1
West	1	6	8	6	9	2	4	1	3	4
Total	12	13	15	13	17	5	7	4	6	7

Table 6a. Diagnoses of HIV infection attributed to injection drug use, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States (cont)

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Black/African American										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	1	0	0	0
15–19	4	4	2	2	4	8	6	8	4	6
20–24	20	22	18	24	30	27	34	19	25	26
25–29	46	48	36	34	55	30	42	33	35	40
30–34	45	57	39	54	61	42	42	35	36	50
35–39	56	42	34	49	45	35	44	29	40	32
40–44	34	39	27	43	54	34	36	18	31	34
45–49	43	29	31	31	29	33	35	26	27	26
50–54	50	36	30	32	35	39	31	24	31	34
55–59	47	39	42	44	30	37	32	31	31	19
60–64	34	42	24	36	24	26	27	18	18	24
65–69	18	14	19	19	14	9	12	7	12	12
70–74	8	8	7	7	8	4	7	1	4	5
≥75	7	6	4	4	5	2	3	1	2	2
Region of residence^b										
Northeast	118	106	90	100	104	81	93	47	66	62
Midwest	58	51	43	48	57	50	48	41	50	51
South	193	188	155	193	202	161	169	128	150	158
West	43	40	25	39	33	36	41	33	31	39
Total	412	385	312	380	396	327	350	249	298	309
Hispanic/Latino^c										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	1	0	1	0	0
15–19	2	1	2	1	2	2	6	3	5	2
20–24	25	19	16	22	20	23	23	13	12	16
25–29	32	48	40	38	44	21	26	18	27	21
30–34	64	46	36	63	64	29	23	33	31	36
35–39	49	49	43	50	57	29	36	27	30	22
40–44	35	35	41	37	43	15	14	17	16	26
45–49	35	26	26	28	38	21	18	11	15	14
50–54	35	28	24	26	27	17	18	11	15	7
55–59	27	24	14	20	16	9	10	8	12	13
60–64	15	14	14	11	14	9	6	10	7	7
65–69	4	6	7	9	7	3	3	2	4	3
70–74	3	5	4	3	2	2	2	1	2	1
≥75	1	2	3	1	2	2	0	1	0	1
Region of residence^b										
Northeast	104	88	73	74	84	58	53	36	40	36
Midwest	14	13	15	29	22	11	14	7	7	8
South	95	84	76	85	106	49	56	47	55	51
West	112	118	106	122	124	63	61	65	73	74
Total	325	302	270	310	336	182	184	155	175	169

Table 6a. Diagnoses of HIV infection attributed to injection drug use, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States (cont)

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Native Hawaiian/other Pacific Islander										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	0	0	0	0	0	0	0	0	0	0
20–24	0	0	0	0	0	0	0	0	0	1
25–29	0	1	0	0	0	0	0	0	0	1
30–34	0	0	0	1	0	0	0	0	1	2
35–39	0	0	1	0	1	0	0	0	1	1
40–44	0	0	0	0	1	0	0	0	0	0
45–49	1	0	0	0	0	0	0	2	0	0
50–54	0	0	0	0	0	0	0	0	1	0
55–59	0	0	0	0	1	0	0	0	0	0
60–64	0	0	0	0	0	0	0	0	0	0
65–69	0	0	0	1	0	0	0	0	0	0
70–74	0	0	0	0	0	0	0	0	0	0
≥75	0	0	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	0	0	0	0	0	0	0	0	0	0
Midwest	0	1	1	0	0	0	0	0	0	1
South	0	0	0	0	0	0	0	0	1	0
West	1	0	1	2	3	0	0	2	2	5
Total	1	1	2	2	3	0	0	2	3	6
White										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	4	0	3	1	2	8	7	2	7	5
20–24	33	43	17	27	26	47	45	20	34	32
25–29	91	103	81	107	79	86	88	77	81	67
30–34	106	113	120	140	146	95	108	82	111	115
35–39	109	98	112	139	130	95	97	67	108	112
40–44	61	74	63	92	73	69	76	44	61	90
45–49	49	67	51	57	66	45	58	39	52	60
50–54	52	43	32	53	51	45	39	40	51	39
55–59	33	45	36	32	37	30	35	35	25	36
60–64	20	15	14	20	26	12	15	17	17	28
65–69	5	7	4	12	10	3	3	4	10	9
70–74	4	1	2	2	6	2	1	2	1	4
≥75	1	1	3	1	3	2	1	1	2	2
Region of residence^b										
Northeast	108	94	98	112	95	91	76	56	70	82
Midwest	115	108	91	120	118	109	98	65	113	94
South	212	274	245	322	320	226	288	225	283	308
West	132	135	103	127	122	111	110	84	93	113
Total	568	610	537	682	655	537	573	430	558	597

Table 6a. Diagnoses of HIV infection attributed to injection drug use, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States (cont)

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
	Multiracial									
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	1	0	0	1	0	4	3	0	2	0
20–24	5	3	6	4	1	10	4	3	2	2
25–29	7	7	7	5	5	12	11	7	7	6
30–34	6	14	10	11	9	8	4	5	4	6
35–39	4	4	9	4	11	8	14	4	4	9
40–44	4	5	1	8	4	5	8	4	5	4
45–49	4	4	3	2	6	8	6	4	4	5
50–54	6	5	2	6	3	6	4	1	5	3
55–59	4	2	4	2	3	2	2	1	3	3
60–64	3	1	3	1	2	3	2	1	1	2
65–69	0	2	0	0	1	2	1	1	1	1
70–74	0	1	1	1	0	0	0	0	0	1
≥75	0	0	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	7	18	7	5	8	13	10	5	5	6
Midwest	6	9	10	8	6	10	12	7	5	7
South	20	14	23	21	22	30	27	13	20	23
West	13	7	7	11	8	15	10	6	7	7
Total	45	47	47	44	43	68	59	31	37	42
	Total									
Age at diagnosis (yr)										
13–14	0	0	1	0	0	1	1	1	0	1
15–19	12	5	7	6	8	23	22	12	20	13
20–24	84	89	57	78	77	107	108	55	74	81
25–29	178	208	166	187	186	150	169	141	157	138
30–34	226	232	212	273	283	178	180	159	188	217
35–39	218	197	203	245	252	171	196	132	186	184
40–44	137	156	134	183	183	124	138	85	114	157
45–49	135	129	114	120	141	110	119	83	99	107
50–54	147	116	93	117	118	109	95	77	106	85
55–59	111	113	96	99	89	78	78	76	72	72
60–64	72	73	55	70	69	52	49	46	42	61
65–69	27	28	31	42	32	17	21	13	27	25
70–74	15	16	14	14	16	8	10	4	7	10
≥75	10	9	9	6	11	6	4	4	4	5
Region of residence^b										
Northeast	342	309	270	293	295	244	234	144	181	187
Midwest	197	187	164	213	209	183	178	129	183	175
South	525	564	505	624	657	473	546	415	512	546
West	308	312	252	311	304	233	232	198	220	248
Total	1,373	1,371	1,191	1,440	1,465	1,133	1,190	886	1,096	1,156

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

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

Persons whose transmission category is classified as injection drug use include transgender and additional gender identity persons.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

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

Table 6b. Diagnoses of HIV infection attributed to injection drug use, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States and 6 territories and freely associated states

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
American Indian/Alaska Native										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	1	0	0	0	0	0	1	0	1	0
20–24	0	2	1	0	0	0	2	0	1	4
25–29	1	0	0	3	1	2	1	5	5	3
30–34	3	2	4	1	2	2	1	3	4	7
35–39	0	3	1	0	5	4	5	4	3	6
40–44	0	2	0	2	3	1	2	1	0	1
45–49	1	1	0	1	0	2	0	1	1	2
50–54	2	1	2	0	1	2	2	0	3	3
55–59	0	0	0	0	2	1	0	1	1	0
60–64	0	0	0	0	1	1	0	0	0	0
65–69	0	0	0	0	0	0	1	0	0	0
70–74	0	0	0	0	0	0	0	0	0	0
≥75	0	0	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	0	0	0	0	0	0	0	0	0	0
Midwest	3	3	2	3	6	3	6	8	7	13
South	1	3	4	3	4	6	5	1	2	5
West	6	7	2	3	5	6	6	7	12	7
U.S. territories and freely associated states	0	0	0	0	0	0	0	0	0	0
Total	9	13	9	9	15	15	16	17	20	26
Asian										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	0	0	0	0	0	0	0	0	0	0
20–24	1	0	0	0	0	0	0	0	0	0
25–29	0	1	1	0	3	0	1	0	3	0
30–34	3	0	3	3	1	2	2	2	1	1
35–39	0	2	1	2	4	0	1	0	1	2
40–44	3	2	2	2	5	1	1	0	0	1
45–49	2	3	2	2	1	0	1	1	0	1
50–54	1	3	3	1	1	0	0	0	1	1
55–59	1	2	1	1	1	0	0	0	0	0
60–64	0	0	2	2	2	0	0	0	0	0
65–69	0	0	0	0	0	0	1	0	0	0
70–74	0	0	0	0	0	0	0	0	0	0
≥75	1	0	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	5	2	2	2	5	1	2	1	1	2
Midwest	2	3	3	4	1	0	1	0	1	1
South	4	2	1	1	2	1	1	1	2	1
West	1	6	8	6	9	2	4	1	3	4
U.S. territories and freely associated states	0	0	0	0	0	0	0	0	0	0
Total	12	13	15	13	17	5	7	4	6	7

Table 6b. Diagnoses of HIV infection attributed to injection drug use, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Male sex at birth					Female sex at birth				
	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a No.	2021 No.	2022 No.	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a No.	2021 No.	2022 No.
	Black/African American									
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	1	0	0	0
15–19	4	4	2	2	4	8	6	8	4	6
20–24	20	22	18	24	30	27	34	19	25	26
25–29	46	48	36	34	55	30	42	33	35	40
30–34	45	57	40	54	61	42	42	35	36	50
35–39	56	42	34	49	45	35	44	29	40	32
40–44	34	40	27	43	54	34	36	18	31	34
45–49	44	29	31	31	29	33	35	26	27	26
50–54	50	36	30	32	35	39	31	24	31	34
55–59	47	40	42	44	31	37	32	31	31	19
60–64	34	42	24	36	24	26	27	18	18	24
65–69	18	14	19	19	14	10	12	7	12	12
70–74	8	8	7	7	8	4	7	1	4	5
≥75	7	6	4	4	5	2	3	1	2	2
Region of residence^b										
Northeast	118	106	90	100	104	81	93	47	66	62
Midwest	58	51	43	48	57	50	48	41	50	51
South	193	188	155	193	202	161	169	128	150	158
West	43	40	25	39	33	36	41	33	31	39
U.S. territories and freely associated states	2	1	1	1	1	0	0	0	0	0
Total	414	386	313	381	397	327	350	249	298	309
	Hispanic/Latino^c									
Age at diagnosis (yr)										
13–14	0	0	0	0	0	1	0	1	0	0
15–19	2	1	2	1	2	2	6	3	5	2
20–24	25	19	16	22	20	24	23	13	12	16
25–29	34	48	40	40	44	21	26	18	27	22
30–34	67	47	39	63	66	30	23	33	32	38
35–39	50	53	45	52	62	29	37	27	30	22
40–44	40	39	46	41	48	15	14	18	16	26
45–49	38	27	28	30	41	21	20	11	15	15
50–54	41	30	25	28	29	17	19	12	16	7
55–59	27	26	16	22	20	9	11	8	12	13
60–64	17	17	16	13	16	9	6	10	7	8
65–69	6	8	8	10	8	3	3	3	4	3
70–74	3	6	4	3	2	2	2	1	2	1
≥75	1	3	3	1	2	2	0	1	0	1
Region of residence^b										
Northeast	104	88	73	74	84	58	53	36	40	36
Midwest	14	13	15	29	22	11	14	7	7	8
South	95	84	76	85	106	49	56	47	55	51
West	112	118	106	122	124	63	61	65	73	74
U.S. territories and freely associated states	24	20	18	16	24	2	5	2	1	5
Total	349	322	288	326	359	184	189	157	177	174

Table 6b. Diagnoses of HIV infection attributed to injection drug use, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
	Native Hawaiian/other Pacific Islander									
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	0	0	0	0	0	0	0	0	0	0
20–24	0	0	0	0	0	0	0	0	0	1
25–29	0	1	0	0	0	0	0	0	0	1
30–34	0	0	0	1	0	0	0	0	1	2
35–39	0	0	1	0	1	0	0	0	1	1
40–44	0	0	0	0	1	0	0	0	0	0
45–49	1	0	0	0	0	0	0	2	0	0
50–54	0	0	0	0	0	0	0	0	1	0
55–59	1	0	0	0	1	0	0	0	0	0
60–64	0	0	0	0	0	0	0	0	0	0
65–69	0	0	0	1	0	0	0	0	0	0
70–74	0	0	0	0	0	0	0	0	0	0
≥75	0	0	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	0	0	0	0	0	0	0	0	0	0
Midwest	0	1	1	0	0	0	0	0	0	1
South	0	0	0	0	0	0	0	0	1	0
West	1	0	1	2	3	0	0	2	2	5
U.S. territories and freely associated states	1	0	0	0	0	0	0	0	0	0
Total	2	1	2	2	3	0	0	2	3	6
	White									
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	4	0	3	1	2	8	7	2	7	5
20–24	33	43	17	27	26	47	45	20	34	32
25–29	91	103	81	107	79	86	88	77	81	67
30–34	106	113	120	140	146	95	108	82	111	115
35–39	109	98	112	139	130	95	97	67	108	112
40–44	61	74	63	92	73	69	76	44	61	90
45–49	49	67	51	57	66	45	58	39	52	60
50–54	52	43	32	53	51	45	39	40	51	39
55–59	33	45	36	32	37	30	35	35	25	36
60–64	20	16	14	20	26	12	15	17	17	28
65–69	5	7	4	12	11	3	3	4	10	9
70–74	4	1	2	2	6	2	1	2	1	4
≥75	1	1	3	1	3	2	1	1	2	2
Region of residence^b										
Northeast	108	94	98	112	95	91	76	56	70	82
Midwest	115	108	91	120	118	109	98	65	113	94
South	212	274	245	322	320	226	288	225	283	308
West	132	135	103	127	122	111	110	84	93	113
U.S. territories and freely associated states	0	0	0	0	0	0	0	0	0	0
Total	568	610	537	682	656	537	573	430	558	597

Table 6b. Diagnoses of HIV infection attributed to injection drug use, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Male sex at birth					Female sex at birth				
	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a No.	2021 No.	2022 No.	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a No.	2021 No.	2022 No.
	Multiracial									
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	1	0	0	1	0	4	3	0	2	0
20–24	5	3	6	4	1	10	4	3	2	2
25–29	7	7	7	5	5	12	11	7	7	6
30–34	6	14	10	11	9	8	4	5	4	6
35–39	4	4	9	4	11	8	14	4	4	9
40–44	4	5	1	8	4	5	8	4	5	4
45–49	4	4	3	2	6	8	6	4	4	5
50–54	6	5	2	6	3	6	4	1	5	3
55–59	4	2	4	2	3	2	2	1	3	3
60–64	3	1	3	1	2	3	2	1	1	2
65–69	0	2	0	0	1	2	1	1	1	1
70–74	0	1	1	1	0	0	0	0	0	1
≥75	0	0	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	7	18	7	5	8	13	10	5	5	6
Midwest	6	9	10	8	6	10	12	7	5	7
South	20	14	23	21	22	30	27	13	20	23
West	13	7	7	11	8	15	10	6	7	7
U.S. territories and freely associated states	0	0	0	0	0	0	0	0	0	0
Total	45	47	47	44	43	68	59	31	37	42
	Total									
Age at diagnosis (yr)										
13–14	0	0	1	0	0	1	1	1	0	1
15–19	12	5	7	6	8	23	22	12	20	13
20–24	84	90	57	78	78	108	108	55	74	81
25–29	180	208	166	188	187	150	169	141	157	139
30–34	229	232	216	273	285	179	180	159	189	218
35–39	219	201	205	246	257	171	197	132	186	184
40–44	142	161	139	188	187	124	138	86	114	157
45–49	138	130	116	123	144	110	121	83	99	109
50–54	153	118	94	120	120	109	96	77	107	85
55–59	113	115	98	101	93	78	79	76	72	72
60–64	74	76	57	72	70	52	49	46	42	62
65–69	29	30	32	42	34	17	21	14	27	25
70–74	15	16	15	14	16	8	10	4	7	10
≥75	10	10	9	6	11	6	4	4	4	5
Region of residence^b										
Northeast	342	309	270	293	295	244	234	144	181	187
Midwest	197	187	164	213	209	183	178	129	183	175
South	525	564	505	624	657	473	546	415	512	546
West	308	312	252	311	304	233	232	198	220	248
U.S. territories and freely associated states	26	22	19	17	25	3	5	3	1	5
Total	1,399	1,393	1,210	1,458	1,490	1,136	1,195	889	1,098	1,160

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Numbers less than 12, and trends based on these numbers, should be interpreted with caution. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total. Persons whose transmission category is classified as injection drug use are presented based on sex assigned at birth and include transgender and additional gender identity persons.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

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

Table 7a. Diagnoses of HIV infection attributed to heterosexual contact, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
American Indian/Alaska Native										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	1	0	0	0	0	1	0	0	0	0
20–24	1	1	0	0	1	1	2	0	0	3
25–29	1	0	0	4	1	1	2	1	3	6
30–34	1	1	0	2	2	1	4	4	5	5
35–39	1	0	0	0	1	2	6	4	4	4
40–44	0	2	0	0	2	3	5	4	3	2
45–49	0	0	0	0	0	2	2	2	4	4
50–54	0	2	1	2	1	2	1	1	6	5
55–59	1	1	0	1	2	3	1	2	2	1
60–64	0	0	0	0	0	0	1	1	0	1
65–69	0	0	0	0	0	0	0	1	1	0
70–74	0	0	0	1	0	0	1	0	0	0
≥75	0	1	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	1	0	0	1	1	0	0	1	0	0
Midwest	1	2	0	2	6	1	9	3	8	8
South	2	5	2	2	3	7	4	5	6	13
West	3	1	1	5	1	7	11	10	12	11
Total	7	8	2	10	11	15	24	18	26	31
Asian										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	0	1	1	0	0	0	1	1	1	0
20–24	5	1	1	4	3	6	5	1	8	7
25–29	1	2	2	4	1	15	8	9	8	18
30–34	7	2	3	1	3	15	16	12	9	12
35–39	6	1	3	6	3	10	16	14	10	14
40–44	9	5	3	6	6	11	7	1	19	13
45–49	6	4	3	2	2	8	15	6	4	6
50–54	4	5	4	5	6	9	4	9	10	11
55–59	2	3	2	3	4	8	8	6	3	7
60–64	6	3	2	3	6	5	6	6	5	2
65–69	3	0	5	4	0	4	3	2	4	3
70–74	1	1	1	0	0	2	0	2	2	0
≥75	1	2	0	0	1	0	0	0	1	3
Region of residence^b										
Northeast	13	13	4	9	6	26	11	10	12	22
Midwest	2	1	3	3	3	5	10	9	9	7
South	21	11	12	17	14	27	28	18	32	24
West	17	6	10	8	12	35	39	31	29	42
Total	54	31	28	37	36	92	87	67	83	95

Table 7a. Diagnoses of HIV infection attributed to heterosexual contact, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States (cont)

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Black/African American										
Age at diagnosis (yr)										
13–14	1	0	0	0	0	3	3	2	5	2
15–19	28	25	18	18	23	129	96	78	97	86
20–24	105	116	85	98	104	389	373	279	328	351
25–29	217	172	145	167	158	473	438	367	406	444
30–34	225	187	152	197	215	459	450	390	446	474
35–39	211	175	142	191	204	440	409	310	409	414
40–44	166	156	138	161	181	411	367	279	357	343
45–49	168	188	115	141	157	357	326	272	316	300
50–54	195	166	105	132	139	315	311	214	254	290
55–59	162	152	126	145	130	297	272	196	240	198
60–64	98	126	86	126	110	165	186	130	149	157
65–69	49	67	51	52	51	68	84	55	81	81
70–74	31	28	25	29	26	36	43	14	25	30
≥75	27	26	12	20	21	21	24	16	11	12
Region of residence^b										
Northeast	251	247	177	245	210	540	512	402	474	417
Midwest	200	187	133	148	169	476	473	366	410	443
South	1,158	1,085	842	1,018	1,072	2,280	2,154	1,639	2,014	2,068
West	72	65	47	66	66	267	243	194	225	254
Total	1,682	1,584	1,199	1,477	1,518	3,563	3,382	2,600	3,123	3,181
Hispanic/Latino^c										
Age at diagnosis (yr)										
13–14	0	0	0	1	0	4	4	0	1	2
15–19	7	10	2	3	6	30	33	33	37	28
20–24	28	27	31	30	32	98	113	97	99	122
25–29	60	72	48	66	67	134	146	102	143	188
30–34	87	67	48	63	93	125	141	102	131	190
35–39	81	74	62	72	89	142	113	110	145	164
40–44	69	71	42	76	79	106	112	91	116	150
45–49	77	56	40	45	61	104	93	70	105	122
50–54	60	53	48	48	49	106	88	71	82	74
55–59	45	40	28	41	38	69	62	52	68	79
60–64	24	31	22	28	39	42	47	33	37	42
65–69	15	11	9	14	10	21	25	13	21	20
70–74	12	5	5	9	10	10	10	6	6	13
≥75	4	5	5	5	6	10	3	3	4	8
Region of residence^b										
Northeast	137	113	85	126	133	249	228	193	218	254
Midwest	33	34	20	28	53	57	75	51	68	85
South	310	286	218	251	309	452	438	355	451	561
West	91	87	66	96	82	243	248	184	257	303
Total	570	520	388	502	578	1,001	989	782	993	1,203

Table 7a. Diagnoses of HIV infection attributed to heterosexual contact, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States (cont)

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Native Hawaiian/other Pacific Islander										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	0	0	0	1	0	1	1	1	0	0
20–24	0	0	0	0	0	0	0	1	1	1
25–29	0	1	0	0	0	0	1	2	0	0
30–34	1	0	1	0	2	2	0	0	1	2
35–39	0	0	1	0	0	0	2	1	0	1
40–44	0	0	0	0	0	0	0	1	2	1
45–49	0	0	0	0	0	0	0	1	0	1
50–54	0	0	0	0	1	1	1	1	1	0
55–59	0	0	0	1	0	0	0	2	0	1
60–64	0	0	0	0	0	0	0	2	0	0
65–69	0	0	0	0	0	0	0	0	0	0
70–74	0	0	0	0	1	0	0	0	0	0
≥75	0	0	0	0	1	0	0	0	0	0
Region of residence^b										
Northeast	0	0	0	0	0	1	0	0	1	0
Midwest	0	0	0	0	1	0	3	0	0	2
South	1	0	0	1	2	0	1	4	1	1
West	0	1	2	1	2	3	1	7	3	3
Total	1	1	2	2	5	4	5	11	5	6
White										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	1	0	0	1	1
15–19	3	3	1	4	1	32	30	20	32	21
20–24	19	18	14	18	8	89	89	91	77	90
25–29	46	49	30	43	42	118	125	110	92	135
30–34	54	37	39	42	53	120	119	110	144	139
35–39	51	41	37	48	46	110	118	102	128	150
40–44	39	43	33	44	45	101	90	87	128	146
45–49	52	50	43	37	44	106	104	99	96	106
50–54	43	49	39	44	49	88	89	67	87	103
55–59	50	48	41	36	49	70	84	75	86	87
60–64	39	30	27	31	34	36	46	29	40	55
65–69	16	16	17	16	19	13	16	17	20	26
70–74	10	7	8	12	9	7	3	6	9	9
≥75	3	5	6	4	8	4	3	4	6	8
Region of residence^b										
Northeast	76	62	66	60	65	104	107	94	93	111
Midwest	56	60	53	49	55	162	178	141	184	219
South	231	208	176	216	245	472	468	401	499	545
West	63	66	41	54	42	157	163	178	170	201
Total	426	396	336	379	407	895	915	815	946	1,075

Table 7a. Diagnoses of HIV infection attributed to heterosexual contact, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States (cont)

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
	Multiracial									
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	1	0	0	0
15–19	2	1	1	1	0	16	11	9	6	9
20–24	5	5	4	2	9	28	28	25	23	18
25–29	11	9	2	5	3	45	43	33	29	33
30–34	14	12	7	9	6	40	31	23	33	21
35–39	7	9	5	8	5	35	29	22	33	22
40–44	5	12	6	8	8	18	25	14	19	29
45–49	7	11	9	5	1	29	27	18	14	12
50–54	11	10	5	8	4	16	23	11	17	17
55–59	6	10	4	8	6	9	6	11	14	11
60–64	3	4	2	5	4	14	11	13	9	6
65–69	2	3	1	1	3	6	6	3	5	5
70–74	1	3	1	1	2	3	2	3	1	1
≥75	1	1	0	1	0	1	0	1	0	1
Region of residence^b										
Northeast	26	24	9	11	17	47	46	28	32	29
Midwest	10	14	7	12	8	34	35	33	24	25
South	34	45	27	35	24	141	124	105	122	105
West	4	6	4	4	2	37	37	20	26	25
Total	74	89	47	63	51	260	242	186	204	184
	Total									
Age at diagnosis (yr)										
13–14	1	0	0	1	0	8	8	2	7	5
15–19	42	40	23	28	30	209	173	141	173	145
20–24	162	168	135	152	157	610	609	493	536	592
25–29	336	304	226	289	272	786	763	624	682	824
30–34	389	307	249	315	375	762	761	640	767	842
35–39	357	300	250	324	347	738	693	562	729	768
40–44	288	288	222	294	321	650	606	476	643	684
45–49	311	307	210	229	265	605	566	467	538	550
50–54	314	284	201	240	249	536	517	373	457	500
55–59	267	254	200	235	228	456	432	344	411	383
60–64	170	195	139	193	192	263	296	214	240	263
65–69	86	97	83	88	84	112	133	91	132	134
70–74	54	44	41	52	48	58	59	30	43	53
≥75	36	40	24	31	37	35	30	23	22	32
Region of residence^b										
Northeast	504	458	342	453	432	967	905	728	830	832
Midwest	302	298	215	242	297	735	782	602	703	788
South	1,758	1,640	1,277	1,541	1,669	3,378	3,217	2,526	3,125	3,316
West	249	233	170	235	206	749	741	624	721	839
Total	2,813	2,628	2,004	2,471	2,605	5,830	5,644	4,479	5,380	5,775

Note. Numbers less than 12, and trends based on these numbers, should be interpreted with caution. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total. Persons whose transmission category is classified as heterosexual contact include transgender and additional gender identity persons. Includes persons who have ever had heterosexual contact with a person known to have, or with a risk factor for, HIV infection (e.g., a person who injects drugs). Excludes men who have ever had sexual contact with both men and women.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

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

Table 7b. Diagnoses of HIV infection attributed to heterosexual contact, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States and 6 territories and freely associated states

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
	American Indian/Alaska Native									
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	1	0	0	0	0	1	0	0	0	0
20–24	1	1	0	0	1	1	2	0	0	3
25–29	1	0	0	4	1	1	2	1	3	6
30–34	1	1	0	2	2	1	4	4	5	5
35–39	1	0	0	0	1	2	6	4	4	4
40–44	0	2	0	0	2	3	5	4	3	2
45–49	0	0	0	0	0	2	2	2	4	4
50–54	0	2	1	2	1	2	1	1	6	5
55–59	1	1	0	1	2	3	1	2	2	1
60–64	0	0	0	0	0	0	1	1	0	1
65–69	0	0	0	0	0	0	0	1	1	0
70–74	0	0	0	1	0	0	1	0	0	0
≥75	0	1	0	0	0	0	0	0	0	0
Region of residence^b										
Northeast	1	0	0	1	1	0	0	1	0	0
Midwest	1	2	0	2	6	1	9	3	8	8
South	2	5	2	2	3	7	4	5	6	13
West	3	1	1	5	1	7	11	10	12	11
U.S. territories and freely associated states	0	0	0	0	0	0	0	0	0	0
Total	7	8	2	10	11	15	24	18	26	31
	Asian									
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	0	1	1	0	0	0	1	1	1	0
20–24	5	1	1	4	3	6	5	1	8	7
25–29	1	2	2	4	1	15	8	9	8	18
30–34	7	2	3	1	3	15	16	12	9	12
35–39	6	1	3	6	3	10	16	14	10	14
40–44	10	5	3	6	6	11	7	1	19	13
45–49	6	4	3	2	2	8	15	6	4	6
50–54	4	6	4	5	6	9	4	9	10	11
55–59	2	3	2	3	4	8	8	6	3	7
60–64	6	3	2	3	6	5	6	6	5	2
65–69	3	0	5	4	0	4	3	2	4	3
70–74	1	1	1	0	0	2	0	2	2	0
≥75	1	2	0	0	1	0	0	0	1	3
Region of residence^b										
Northeast	13	13	4	9	6	26	11	10	12	22
Midwest	2	1	3	3	3	5	10	9	9	7
South	21	11	12	17	14	27	28	18	32	24
West	17	6	10	8	12	35	39	31	29	42
U.S. territories and freely associated states	0	0	0	0	0	0	0	0	0	0
Total	54	32	28	37	36	92	87	67	83	95

Table 7b. Diagnoses of HIV infection attributed to heterosexual contact, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
	Black/African American									
Age at diagnosis (yr)										
13–14	1	0	0	0	0	3	3	2	5	2
15–19	28	25	18	18	23	129	96	78	97	86
20–24	105	116	85	98	104	389	373	279	328	351
25–29	218	172	145	167	158	473	438	367	406	444
30–34	225	187	153	198	215	459	450	390	446	474
35–39	211	175	142	191	204	440	410	310	409	414
40–44	166	156	138	161	181	411	367	279	357	343
45–49	169	188	115	141	157	357	326	272	316	300
50–54	195	166	105	132	139	315	312	214	254	290
55–59	164	152	126	145	130	297	272	197	240	198
60–64	98	126	86	127	110	165	186	130	149	157
65–69	49	67	51	52	51	68	84	55	81	81
70–74	31	28	26	29	26	36	44	14	25	30
≥75	27	26	12	20	21	21	24	16	11	12
Region of residence^b										
Northeast	251	247	177	245	210	540	512	402	474	417
Midwest	200	187	133	148	169	476	473	366	410	443
South	1,158	1,085	842	1,018	1,072	2,280	2,154	1,639	2,014	2,068
West	72	65	47	66	66	267	243	194	225	254
U.S. territories and freely associated states	4	0	2	1	1	1	3	1	0	1
Total	1,686	1,584	1,201	1,479	1,519	3,564	3,385	2,601	3,123	3,182
	Hispanic/Latino^c									
Age at diagnosis (yr)										
13–14	0	0	0	1	0	4	4	0	1	2
15–19	8	10	2	5	6	32	33	33	39	30
20–24	30	30	35	31	33	106	117	102	108	126
25–29	68	74	51	68	71	142	151	106	146	195
30–34	95	73	49	67	101	130	150	105	135	195
35–39	86	78	67	76	96	146	117	113	159	170
40–44	72	77	45	82	85	115	124	96	129	153
45–49	81	66	43	53	69	118	102	73	112	133
50–54	72	57	52	60	54	117	93	76	92	80
55–59	49	50	37	46	42	77	72	59	72	83
60–64	27	39	27	33	42	47	52	36	45	45
65–69	20	16	10	21	15	24	30	16	26	25
70–74	15	10	6	13	11	12	14	8	9	14
≥75	6	6	5	7	6	11	3	3	5	9
Region of residence^b										
Northeast	137	113	85	126	133	249	228	193	218	254
Midwest	33	34	20	28	53	57	75	51	68	85
South	310	286	218	251	309	452	438	355	451	561
West	91	87	66	96	82	243	248	184	257	303
U.S. territories and freely associated states	60	64	42	62	52	80	72	44	84	58
Total	630	584	430	564	630	1,081	1,061	825	1,077	1,261

Table 7b. Diagnoses of HIV infection attributed to heterosexual contact, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Native Hawaiian/other Pacific Islander										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	0	0	0	1	0	1	1	1	0	0
20–24	0	0	0	0	0	0	1	1	1	1
25–29	0	1	0	0	0	0	1	2	0	0
30–34	1	0	1	0	2	2	0	0	1	2
35–39	0	0	1	0	0	0	2	1	0	1
40–44	0	0	0	0	0	0	0	1	2	1
45–49	0	0	0	0	0	0	0	1	0	1
50–54	0	0	0	0	1	1	1	1	1	0
55–59	0	0	0	1	0	0	0	2	0	1
60–64	0	0	0	0	0	0	0	2	0	0
65–69	0	0	0	0	0	0	0	0	0	0
70–74	0	0	0	0	1	0	0	0	0	0
≥75	0	0	0	0	1	0	0	0	0	0
Region of residence^b										
Northeast	0	0	0	0	0	1	0	0	1	0
Midwest	0	0	0	0	1	0	3	0	0	2
South	1	0	0	1	2	0	1	4	1	1
West	0	1	2	1	2	3	1	7	3	3
U.S. territories and freely associated states	1	0	0	0	0	0	1	0	0	0
Total	2	1	2	2	5	4	6	11	5	6
White										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	1	0	0	1	1
15–19	3	3	1	4	1	32	30	20	32	21
20–24	19	18	14	18	8	89	89	91	77	91
25–29	46	49	30	43	43	118	125	110	92	135
30–34	54	37	39	43	53	120	119	110	144	139
35–39	51	41	37	48	46	110	118	102	128	150
40–44	39	43	33	44	45	101	90	87	128	146
45–49	52	51	43	37	44	106	104	99	96	106
50–54	43	49	39	44	49	88	89	67	87	103
55–59	50	48	41	36	49	70	84	75	86	87
60–64	39	30	27	31	34	36	46	29	40	55
65–69	16	16	17	16	20	13	16	17	20	26
70–74	10	7	8	12	9	7	3	6	9	9
≥75	3	5	6	4	8	4	3	4	6	8
Region of residence^b										
Northeast	76	62	66	60	65	104	107	94	93	111
Midwest	56	60	53	49	55	162	178	141	184	219
South	231	208	176	216	245	472	468	401	499	545
West	63	66	41	54	42	157	163	178	170	201
U.S. territories and freely associated states	0	1	0	1	1	0	0	0	0	1
Total	426	397	336	380	409	895	915	815	946	1,076

Table 7b. Diagnoses of HIV infection attributed to heterosexual contact, by year of diagnosis, sex assigned at birth, race/ethnicity, and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Male sex at birth					Female sex at birth				
	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
	Multiracial									
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	1	0	0	0
15–19	2	1	1	1	0	16	11	9	6	9
20–24	5	5	4	2	9	28	28	25	23	18
25–29	11	9	2	5	3	45	43	33	29	33
30–34	14	12	7	9	6	40	31	23	33	21
35–39	8	9	5	8	5	35	29	22	33	22
40–44	5	12	6	8	8	18	25	14	19	29
45–49	7	11	9	5	1	29	27	18	14	12
50–54	11	10	5	8	4	16	23	11	17	17
55–59	6	10	4	8	6	9	6	11	14	11
60–64	3	4	2	5	4	14	11	13	9	6
65–69	2	3	1	1	3	6	6	3	5	5
70–74	1	3	1	1	2	3	2	3	1	1
≥75	1	1	0	1	0	1	0	1	0	1
Region of residence^b										
Northeast	26	24	9	11	17	47	46	28	32	29
Midwest	10	14	7	12	8	34	35	33	24	25
South	34	45	27	35	24	141	124	105	122	105
West	4	6	4	4	2	37	37	20	26	25
U.S. territories and freely associated states	1	0	0	0	0	0	0	0	0	0
Total	75	89	47	63	51	260	242	186	204	184
	Total									
Age at diagnosis (yr)										
13–14	1	0	0	1	0	8	8	2	7	5
15–19	43	40	23	30	30	211	173	141	175	147
20–24	164	171	139	153	158	618	614	498	546	597
25–29	345	306	229	291	277	794	768	628	685	831
30–34	397	313	251	320	382	767	770	643	771	848
35–39	364	304	255	329	354	742	698	565	743	774
40–44	292	295	225	301	327	659	618	481	656	687
45–49	315	318	213	237	273	619	575	471	545	561
50–54	326	288	206	251	254	547	523	378	467	506
55–59	273	264	209	240	233	464	442	351	415	387
60–64	173	203	145	199	195	268	301	217	248	266
65–69	92	102	84	94	89	116	138	94	137	139
70–74	57	49	42	56	49	60	64	32	46	54
≥75	38	41	24	33	38	36	30	23	23	33
Region of residence^b										
Northeast	504	458	342	453	432	967	905	728	830	832
Midwest	302	298	215	242	297	735	782	602	703	788
South	1,758	1,640	1,277	1,541	1,669	3,378	3,217	2,526	3,125	3,316
West	249	233	170	235	206	749	741	624	721	839
U.S. territories and freely associated states	66	66	43	64	55	81	76	45	84	60
Total	2,879	2,694	2,047	2,535	2,660	5,910	5,720	4,523	5,464	5,835

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Numbers less than 12, and trends based on these numbers, should be interpreted with caution. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total. Persons whose transmission category is classified as heterosexual contact include transgender and additional gender identity persons. Includes persons who have ever had heterosexual contact with a person known to have, or with a risk factor for, HIV infection (e.g., a person who injects drugs). Excludes men who have ever had sexual contact with both men and women.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

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

Table 8a. Diagnoses of HIV infection among persons aged 13–24 years, by age at diagnosis, sex assigned at birth, and selected characteristics, 2022—United States

	13–14 years		15–17 years		18–19 years		20–22 years		23–24 years		Total	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Sex at birth												
Male	13	0.3	248	3.7	932	21.1	2,751	39.0	2,238	49.2	6,182	22.8
Female	9	0.2	62	1.0	108	2.6	389	5.7	299	6.9	867	3.4
Race/ethnicity												
American Indian/Alaska Native	0	0.0	1	0.9	2	2.9	12	10.6	19	25.9	34	7.8
Asian	0	0.0	6	0.9	12	2.5	46	5.9	53	10.1	117	4.0
Black/African American	11	0.9	172	9.7	579	50.2	1,620	84.5	1,173	94.4	3,555	48.7
Hispanic/Latino ^b	7	0.3	93	2.8	282	13.3	943	28.5	799	39.1	2,124	16.3
Native Hawaiian/other Pacific Islander	0	0.0	0	0.0	1	5.7	7	25.7	7	39.6	15	14.0
White	1	0.0	25	0.4	124	2.8	413	5.7	416	8.9	979	3.6
Multiracial	3	0.8	13	2.5	40	12.5	99	20.8	70	24.2	225	11.3
Transmission category^c												
Male sex at birth^d												
Male-to-male sexual contact ^e	10	—	233	—	882	—	2,556	—	2,052	—	5,732	—
Injection drug use ^f	0	—	1	—	7	—	35	—	43	—	86	—
Male-to-male sexual contact ^e and injection drug use ^f	0	—	4	—	16	—	69	—	70	—	159	—
Heterosexual contact ^g	0	—	6	—	24	—	87	—	71	—	187	—
Perinatal ^h	3	—	4	—	2	—	4	—	3	—	16	—
Other ⁱ	0	—	0	—	1	—	1	—	0	—	2	—
Subtotal	13	0.3	248	3.7	932	21.1	2,751	39.0	2,238	49.2	6,182	22.8
Female sex at birth^d												
Injection drug use ^f	1	—	5	—	8	—	46	—	34	—	95	—
Heterosexual contact ^g	5	—	50	—	95	—	332	—	260	—	742	—
Perinatal ^h	4	—	7	—	5	—	11	—	4	—	30	—
Other ⁱ	0	—	0	—	0	—	0	—	0	—	0	—
Subtotal	9	0.2	62	1.0	108	2.6	389	5.7	299	6.9	867	3.4
Region of residence^j												
Northeast	7	0.5	31	1.5	106	7.0	338	14.6	332	23.1	814	9.4
Midwest	3	0.2	53	1.9	136	7.6	417	14.3	383	20.9	992	8.9
South	8	0.2	169	3.3	643	19.4	1,835	34.3	1,348	39.1	4,003	19.4
West	4	0.2	57	1.8	155	7.7	550	17.0	474	22.0	1,240	9.9
Total	22	0.3	310	2.4	1,040	12.1	3,140	22.7	2,537	28.6	7,049	13.3

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

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

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

^c Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^d Data include transgender and additional gender identity persons.

^e Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^f Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^h Persons were aged ≥13 years at time of diagnosis of HIV infection.

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

^j Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

Table 8b. Diagnoses of HIV infection among persons aged 13–24 years, by age at diagnosis, sex assigned at birth, and selected characteristics, 2022—United States and 6 territories and freely associated states

	13–14 years	15–17 years	18–19 years	20–22 years	23–24 years	Total
	No.	No.	No.	No.	No.	No.
Sex at birth						
Male	13	251	937	2,765	2,258	6,224
Female	9	62	110	392	302	875
Race/ethnicity						
American Indian/Alaska Native	0	1	2	12	19	34
Asian	0	6	12	46	53	117
Black/African American	11	172	579	1,620	1,173	3,555
Hispanic/Latino ^a	7	96	289	960	821	2,173
Native Hawaiian/other Pacific Islander	0	0	1	7	7	15
White	1	25	124	413	417	980
Multiracial	3	13	40	99	70	225
Transmission category^b						
Male sex at birth^c						
Male-to-male sexual contact ^d	10	236	887	2,569	2,072	5,773
Injection drug use ^e	0	1	7	35	43	86
Male-to-male sexual contact ^d and injection drug use ^e	0	4	16	69	70	159
Heterosexual contact ^f	0	6	24	88	71	189
Perinatal ^g	3	4	2	4	3	16
Other ^h	0	0	1	1	0	2
Subtotal	13	251	937	2,765	2,258	6,224
Female sex at birth^c						
Injection drug use ^e	1	5	8	47	35	95
Heterosexual contact ^f	5	50	97	334	263	749
Perinatal ^g	4	7	5	11	5	31
Other ^h	0	0	0	0	0	0
Subtotal	9	62	110	392	302	875
Region of residenceⁱ						
Northeast	7	31	106	338	332	814
Midwest	3	53	136	417	383	992
South	8	169	643	1,835	1,348	4,003
West	4	57	155	550	474	1,240
U.S. territories and freely associated states	0	3	7	17	23	50
Total	22	313	1,047	3,157	2,560	7,099

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Numbers less than 12, and rates based on these numbers, should be interpreted with caution.

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

^b Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^c Data include transgender and additional gender identity persons.

^d Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^e Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^g Persons were aged ≥13 years at time of diagnosis of HIV infection.

^h Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

ⁱ Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at time of diagnosis of HIV infection.

Table 9a. Diagnoses of HIV infection among children aged <13 years, by year of diagnosis and race/ethnicity, 2018–2022—United States

Race/ethnicity	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
American Indian/Alaska Native	0	0.0	1	0.2	1	0.2	0	0.0	2	0.5
Asian	7	0.2	6	0.2	2	0.1	2	0.1	1	0.0
Black/African American	47	0.7	31	0.4	33	0.5	31	0.4	36	0.5
Hispanic/Latino ^c	10	0.1	8	0.1	9	0.1	12	0.1	10	0.1
Native Hawaiian/other Pacific Islander	0	0.0	0	0.0	1	0.9	0	0.0	0	0.0
White	15	0.1	7	0.0	12	0.0	6	0.0	8	0.0
Multiracial	6	0.2	5	0.2	0	0.0	2	0.1	5	0.2
Total	85	0.2	58	0.1	58	0.1	53	0.1	62	0.1

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

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b Rates are per 100,000 population.

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

Table 9b. Diagnoses of HIV infection among children aged <13 years, by year of diagnosis and race/ethnicity, 2018–2022—United States and 6 territories and freely associated states

Race/ethnicity	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.
American Indian/Alaska Native	0	1	1	0	2
Asian	7	6	2	2	1
Black/African American	47	31	33	31	36
Hispanic/Latino ^b	10	8	9	12	10
Native Hawaiian/other Pacific Islander	0	0	1	0	0
White	15	7	12	6	8
Multiracial	6	5	0	2	5
Total	85	58	58	53	62

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Numbers less than 12, and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

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

Table 10a. Diagnoses of HIV infection among Hispanic/Latino persons aged ≥13 years, by transmission category and place of birth, 2022—United States and 6 territories and freely associated states

Transmission category ^d	United States		South America ^b		Central America ^c		Mexico		Caribbean ^a						Other		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%	Puerto Rico		Cuba		Other		No.	%	No.	%	No. ^e	%
									No.	%	No.	%	No.	%	No.	%	No.	%		
Male sex at birth^f																				
Male-to-male sexual contact ^g	2,788	85.6	896	90.3	616	86.1	1,016	89.8	280	76.3	420	89.5	127	72.2	63	90.4	3,168	89.3	9,374	87.4
Injection drug use ^h	144	4.4	12	1.3	16	2.2	19	1.7	28	7.5	4	0.7	7	3.7	2	2.1	129	3.6	359	3.3
Male-to-male sexual contact ^g and injection drug use ^h	155	4.8	12	1.2	16	2.2	27	2.4	6	1.5	3	0.6	5	2.7	0	0.0	133	3.8	356	3.3
Heterosexual contact ⁱ	167	5.1	72	7.2	66	9.3	69	6.1	53	14.5	43	9.1	38	21.4	5	7.4	117	3.3	630	5.9
Perinatal ^j	1	0.0	0	0.0	1	0.2	0	0.0	0	0.1	0	0.0	0	0.0	0	0.0	0	0.0	3	0.0
Other ^k	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	3	0.0
Subtotal	3,255	100	992	100	715	100	1,132	100	367	100	469	100	176	100	70	100	3,549	100	10,725	100
Female sex at birth^f																				
Injection drug use ^h	77	18.0	4	3.8	5	5.3	5	4.5	9	12.6	2	3.1	3.0	4.7	0	2.4	68	13.9	174	12.1
Heterosexual contact ⁱ	351	81.7	106	94.4	81	94.5	104	94.3	63	86.4	48	96.9	68.0	94.2	17	97.1	424	86.0	1,261	87.4
Perinatal ^j	2	0.3	2	1.9	0	0.1	1	1.1	1	1.0	0	0.0	1.0	1.1	0	0.6	1	0.1	7	0.5
Other ^k	0	0.0	0	0.0	0	0.0	0	0.1	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0
Subtotal	430	100	112	100	86	100	110	100	73	100	49	100	72	100	17	100	493	100	1,442	100
Total	3,685	100	1,104	100	801	100	1,242	100	440	100	518	100	248	100	87	100	4,042	100	12,167	100

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Numbers less than 12, and percentages based on these numbers, should be interpreted with caution.

Hispanic/Latino persons can be of any race.

^a Countries include Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Cayman Islands, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, Montserrat, Puerto Rico, Saint Barthélemy, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, Turks and Caicos Islands, Virgin Islands (British), and Virgin Islands (U.S).

^b Countries include Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, and Venezuela.

^c Countries include Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

^d Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^e Total includes persons whose place of birth is not among those listed and persons whose place of birth is unknown.

^f Data include transgender and additional gender identity persons.

^g Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^j Persons were aged ≥13 years at time of diagnosis of HIV infection.

^k Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

Table 10b. Diagnoses of HIV infection among transgender and additional gender identity Hispanic/Latino persons aged ≥13 years, by place of birth and exposure category, 2022—United States and 6 territories and freely associated states

Exposure category ^d	United States		South America ^b		Central America ^c		Mexico		Caribbean ^a						Other		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%	Puerto Rico		Cuba		Other		No.	%	No.	%	No. ^e	%
									No.	%	No.	%	No.	%						
Transgender woman^f																				
Sexual contact ^g	104	91.2	20	100	33	86.8	48	92.3	7	87.5	4	100	5	100	0	0.0	93	91.2	314	91.5
Injection drug use ^h	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Sexual contact ^g and injection drug use ^h	7	6.1	0	0.0	3	7.9	4	7.7	1	12.5	0	0.0	0	0.0	0	0.0	4	3.9	19	5.5
Other ⁱ	3	2.6	0	0.0	2	5.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	4.9	10	2.9
Subtotal	114	100	20	100	38	100	52	100	8	100	4	100	5	100	0	0.0	102	100	343	100
Transgender man^f																				
Sexual contact ^g	7	100	1	100	1	100	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	100	15	100
Injection drug use ^h	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Sexual contact ^g and injection drug use ^h	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other ⁱ	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Subtotal	7	100	1	100	1	100	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	100	15	100
Additional gender identity^j																				
Sexual contact ^g	11	91.7	1	100	2	100	1	100	0	0.0	0	0.0	1	100	0	0.0	4	100	20	95.2
Injection drug use ^h	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Sexual contact ^g and injection drug use ^h	1	8.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	4.8
Other ⁱ	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Subtotal	12	100	1	100	2	100	1	100	0	0.0	0	0.0	1	100	0	0.0	4	100	21	100
Total	133	100	22	100	41	100	53	100	8	100	4	100	6	100	0	0.0	112	100	379	100

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Numbers less than 12, and percentages based on these numbers, should be interpreted with caution.

Hispanic/Latino persons can be of any race.

^a Countries include Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Cayman Islands, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, Montserrat, Puerto Rico, Saint Barthélemy, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, Turks and Caicos Islands, Virgin Islands (British), and Virgin Islands (U.S).

^b Countries include Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, and Venezuela.

^c Countries include Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

^d Risk factor data for transgender and additional gender identity persons aged ≥13 years are presented using the exposure category classification, which is meant to convey all the known ways the person could have been exposed to HIV. Exposure categories are mutually exclusive and have no presumed hierarchical order of probability, except for rare circumstances where route of transmission has been confirmed through investigation. See Technical Notes for more information on exposure categories.

^e Total includes persons whose place of birth is not among those listed and persons whose place of birth is unknown.

^f “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.

^g For persons assigned male sex at birth, sexual contact with any person. For persons assigned female sex at birth, sexual contact with a person assigned male sex at birth.

^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^j Additional gender identity examples include “nonbinary,” “gender queer,” and “two-spirit.”

Table 11a. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
2018													
Gender													
Man	12,090	11,532	95.4	—	15.5	3,778	32.8	—	4.9	7,754	67.2	—	10.0
Woman	3,976	3,787	95.2	—	16.4	1,292	34.1	—	5.3	2,495	65.9	—	10.3
Transgender woman/girl ^b	121	116	95.9	—	10.1	45	38.8	—	3.7	71	61.2	—	5.9
Transgender man/boy ^b	5	5	100	—	10.5	1	20.0	—	2.1	4	80.0	—	8.4
Additional gender identity ^c	1	1	100	—	3.4	0	0.0	0.0	0.0	1	100	—	3.4
Age at diagnosis (yr)													
<13	1	1	100	0.0	0.5	1	100	0.0	0.5	0	0.0	0.0	0.0
13–14	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
15–19	9	9	100	0.0	1.4	3	33.3	0.0	0.5	6	66.7	0.0	1.0
20–24	121	116	95.9	0.6	3.5	55	47.4	0.3	1.6	61	52.6	0.3	1.8
25–29	419	402	95.9	1.8	5.4	183	45.5	0.8	2.3	219	54.5	0.9	2.8
30–34	615	585	95.1	2.8	6.9	273	46.7	1.2	3.1	312	53.3	1.4	3.5
35–39	813	781	96.1	3.8	8.5	346	44.3	1.6	3.6	435	55.7	2.0	4.5
40–44	962	905	94.1	4.9	9.8	371	41.0	1.9	3.8	534	59.0	2.7	5.4
45–49	1,598	1,523	95.3	7.7	12.1	585	38.4	2.8	4.4	938	61.6	4.5	7.1
50–54	2,580	2,463	95.5	12.4	15.7	829	33.7	4.0	5.0	1,634	66.3	7.8	10.0
55–59	2,921	2,801	95.9	13.3	20.1	877	31.3	4.0	6.0	1,924	68.7	8.8	13.3
60–64	2,523	2,408	95.4	12.4	26.2	687	28.5	3.4	7.1	1,721	71.5	8.5	17.8
65–69	1,737	1,653	95.2	10.2	33.1	447	27.0	2.6	8.5	1,206	73.0	7.1	23.0
70–74	961	911	94.8	7.2	42.0	231	25.4	1.7	10.1	680	74.6	5.1	29.7
≥75	933	883	94.6	4.3	64.2	228	25.8	1.0	15.7	655	74.2	3.0	45.0
Race/ethnicity													
American Indian/Alaska Native	49	48	98.0	2.0	17.4	18	37.5	0.7	6.4	30	62.5	1.2	10.6
Asian ^d	84	70	83.3	0.4	5.8	26	37.1	0.1	1.8	44	62.9	0.2	3.0
Black/African American	6,985	6,670	95.5	17.1	16.8	2,333	35.0	5.7	5.6	4,337	65.0	10.6	10.4
Hispanic/Latino ^e	2,830	2,672	94.4	4.8	11.9	906	33.9	1.5	3.8	1,766	66.1	3.0	7.4
Native Hawaiian/ other Pacific Islander	13	13	100	2.2	17.2	4	30.8	0.7	5.3	9	69.2	1.5	11.9
White	5,140	4,904	95.4	2.6	17.1	1,472	30.0	0.7	4.9	3,432	70.0	1.7	11.4
Multiracial	1,092	1,064	97.4	15.2	18.1	357	33.6	5.0	5.9	707	66.4	9.8	11.7
Transmission category^f													
Male sex at birth (≥13 yr at diagnosis)^g													
Male-to-male sexual contact ^h	6,872	6,525	95.0	—	12.0	2,259	34.6	—	3.9	4,266	65.4	—	7.4
Injection drug use ⁱ	2,166	2,095	96.7	—	31.5	542	25.9	—	7.9	1,553	74.1	—	22.6
Male-to-male sexual contact ^h and injection drug use ⁱ	1,449	1,399	96.5	—	24.2	453	32.4	—	7.6	946	67.6	—	15.8
Heterosexual contact ^j	1,614	1,526	94.5	—	20.3	525	34.4	—	6.6	1,001	65.6	—	12.6
Perinatal ^k	51	49	95.7	—	10.6	32	65.3	—	6.6	17	34.7	—	3.5
Other ^l	58	54	93.2	—	20.6	12	22.5	—	4.3	42	77.5	—	14.9
Subtotal	12,211	11,648	95.4	9.1	15.5	3,823	32.8	2.9	4.8	7,825	67.2	5.8	9.9

Table 11a. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
2018 (cont)													
Transmission category^f (cont)													
Female sex at birth (≥13 yr at diagnosis)^g													
Injection drug use ⁱ	1,327	1,276	96.1	—	26.5	377	29.6	—	7.5	899	70.4	—	17.9
Heterosexual contact ^j	2,590	2,454	94.7	—	14.1	890	36.3	—	4.8	1,564	63.7	—	8.5
Perinatal ^k	36	35	97.2	—	6.5	17	48.6	—	3.1	18	51.4	—	3.2
Other ^l	28	27	97.5	—	16.9	8	28.5	—	4.7	20	71.5	—	11.8
Subtotal	3,981	3,792	95.3	2.8	16.5	1,292	34.1	0.9	5.4	2,500	65.9	1.8	10.4
Child (<13 yr at diagnosis)													
Perinatal	1	1	100	—	0.5	1	100	—	0.5	0	0.0	0.0	0.0
Other ^l	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
Subtotal	1	1	100	0.0	0.5	1	100	0.0	0.5	0	0.0	0.0	0.0
Region of residence^m													
Northeast	3,518	3,439	97.8	6.3	14.9	896	26.1	1.6	3.8	2,543	73.9	4.5	10.8
Midwest	2,010	1,954	97.2	2.9	16.3	609	31.2	0.9	4.9	1,345	68.8	2.0	10.9
South	7,863	7,470	95.0	6.3	16.8	2,744	36.7	2.2	5.9	4,726	63.3	3.8	10.1
West	2,802	2,578	92.0	3.6	13.7	867	33.6	1.1	4.2	1,711	66.4	2.2	8.4
Totalⁿ	16,193	15,441	95.4	5.0	15.7	5,116	33.1	1.6	5.0	10,325	66.9	3.2	10.0
2019													
Gender													
Man	12,287	11,773	95.8	—	15.4	3,516	29.9	—	4.4	8,257	70.1	—	10.4
Woman	3,829	3,688	96.3	—	15.6	1,207	32.7	—	4.9	2,481	67.3	—	10.1
Transgender woman/girl ^b	145	138	95.2	—	11.5	46	33.3	—	3.6	92	66.7	—	7.3
Transgender man/boy ^b	5	5	100	—	9.7	2	40.0	—	3.9	3	60.0	—	5.8
Additional gender identity ^c	2	2	100	—	6.1	0	0.0	0.0	0.0	2	100	—	6.1
Age at diagnosis (yr)													
<13	2	2	100	0.0	1.0	1	50.0	0.0	0.5	1	50.0	0.0	0.5
13–14	1	1	100	0.0	1.4	1	100	0.0	1.4	0	0.0	0.0	0.0
15–19	11	11	100	0.1	1.8	4	36.4	0.0	0.7	7	63.6	0.0	1.2
20–24	123	115	93.5	0.6	3.7	42	36.5	0.2	1.3	73	63.5	0.3	2.2
25–29	436	419	96.1	1.9	5.6	188	44.9	0.8	2.4	231	55.1	1.0	2.9
30–34	664	634	95.5	3.0	7.1	272	42.9	1.2	2.9	362	57.1	1.6	3.9
35–39	850	819	96.4	3.9	8.7	311	38.0	1.4	3.2	508	62.0	2.3	5.2
40–44	933	889	95.3	4.7	9.4	348	39.1	1.7	3.5	541	60.9	2.7	5.5
45–49	1,400	1,357	96.9	6.9	11.2	507	37.4	2.5	4.0	850	62.6	4.2	6.8
50–54	2,242	2,157	96.2	11.0	14.1	671	31.1	3.3	4.2	1,486	68.9	7.3	9.4
55–59	2,915	2,808	96.3	13.3	19.0	798	28.4	3.6	5.2	2,010	71.6	9.2	13.1
60–64	2,666	2,570	96.4	13.0	25.5	659	25.6	3.2	6.3	1,911	74.4	9.3	18.3
65–69	1,859	1,782	95.9	10.7	31.9	479	26.9	2.7	8.2	1,303	73.1	7.5	22.3
70–74	1,082	1,022	94.5	7.7	40.4	253	24.8	1.8	9.5	769	75.2	5.5	28.7
≥75	1,084	1,020	94.1	4.8	64.8	237	23.2	1.1	14.2	783	76.8	3.5	46.8

Table 11a. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
2019 (cont)													
Race/ethnicity													
American Indian/Alaska Native	57	56	98.2	2.4	19.3	20	35.7	0.8	6.8	36	64.3	1.5	12.2
Asian ^d	104	92	88.5	0.5	6.8	33	35.9	0.2	2.2	59	64.1	0.3	3.9
Black/African American	7,002	6,701	95.7	17.0	16.5	2,145	32.0	5.2	5.1	4,556	68.0	11.1	10.7
Hispanic/Latino ^e	2,761	2,632	95.3	4.6	11.2	873	33.2	1.4	3.5	1,759	66.8	2.9	7.1
Native Hawaiian/ other Pacific Islander	14	14	100	2.3	17.5	7	50.0	1.2	8.7	7	50.0	1.2	8.7
White	5,255	5,062	96.3	2.7	17.3	1,356	26.8	0.7	4.5	3,706	73.2	1.9	12.2
Multiracial	1,071	1,048	97.9	14.5	17.7	336	32.1	4.6	5.5	712	67.9	9.7	11.7
Transmission category^f													
Male sex at birth (≥13 yr at diagnosis)^g													
Male-to-male sexual contact ^h	7,176	6,851	95.5	—	12.1	2,119	30.9	—	3.6	4,732	69.1	—	8.0
Injection drug use ⁱ	2,082	2,015	96.8	—	30.6	506	25.1	—	7.4	1,509	74.9	—	22.2
Male-to-male sexual contact ^h and injection drug use ⁱ	1,396	1,361	97.4	—	23.2	404	29.7	—	6.7	956	70.3	—	15.9
Heterosexual contact ^j	1,677	1,589	94.7	—	20.8	493	31.1	—	6.1	1,095	68.9	—	13.6
Perinatal ^k	41	39	94.9	—	8.4	24	61.3	—	4.9	15	38.7	—	3.1
Other ^l	58	56	95.9	—	20.9	14	25.1	—	5.0	42	74.9	—	15.0
Subtotal	12,432	11,911	95.8	9.2	15.4	3,561	29.9	2.6	4.4	8,350	70.1	6.2	10.3
Female sex at birth (≥13 yr at diagnosis)^g													
Injection drug use ⁱ	1,311	1,276	97.3	—	26.2	322	25.2	—	6.4	954	74.8	—	19.1
Heterosexual contact ^j	2,462	2,358	95.8	—	13.1	849	36.0	—	4.5	1,509	64.0	—	8.0
Perinatal ^k	37	37	100	—	6.4	31	83.2	—	5.3	6	16.8	—	1.1
Other ^l	25	23	90.4	—	14.9	7	32.7	—	4.4	15	67.3	—	9.1
Subtotal	3,834	3,693	96.3	2.7	15.7	1,209	32.7	0.9	4.9	2,484	67.3	1.8	10.1
Child (<13 yr at diagnosis)													
Perinatal	1	1	100	—	0.6	0	0.0	0.0	0.0	1	100	—	0.6
Other ^l	1	1	100	—	2.8	1	100	—	2.8	0	0.0	0.0	0.0
Subtotal	2	2	100	0.0	1.0	1	50.0	0.0	0.5	1	50.0	0.0	0.5
Region of residence^m													
Northeast	3,646	3,586	98.4	6.5	15.3	877	24.5	1.6	3.7	2,709	75.5	4.8	11.4
Midwest	1,960	1,924	98.2	2.9	15.5	484	25.2	0.7	3.8	1,440	74.8	2.1	11.4
South	7,894	7,497	95.0	6.3	16.4	2,586	34.5	2.1	5.4	4,911	65.5	3.9	10.2
West	2,768	2,599	93.9	3.5	13.2	824	31.7	1.1	3.9	1,775	68.3	2.3	8.5
Totalⁿ	16,268	15,606	95.9	5.0	15.4	4,771	30.6	1.5	4.5	10,835	69.4	3.3	10.3

Table 11a. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
	2020 (COVID-19 pandemic)^o												
Gender													
Man	14,272	13,708	96.0	—	17.6	3,577	26.1	—	4.4	10,131	73.9	—	12.5
Woman	4,648	4,470	96.2	—	18.8	1,204	26.9	—	4.9	3,266	73.1	—	13.2
Transgender woman/girl ^b	211	205	97.2	—	15.9	55	26.8	—	4.1	150	73.2	—	11.3
Transgender man/boy ^b	10	10	100	—	18.1	4	40.0	—	7.2	6	60.0	—	10.9
Additional gender identity ^c	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
Age at diagnosis (yr)													
<13*	5	4	80.0	0.0	2.9	1	25.0	0.0	0.6	3	75.0	0.0	1.7
13–14	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
15–19	13	12	92.3	0.1	2.3	1	8.3	0.0	0.2	11	91.7	0.1	2.0
20–24	139	134	96.4	0.6	4.5	46	34.3	0.2	1.5	88	65.7	0.4	2.8
25–29	465	450	96.8	2.0	6.1	174	38.7	0.8	2.3	276	61.3	1.2	3.6
30–34	800	768	96.0	3.5	8.1	268	34.9	1.2	2.7	500	65.1	2.2	5.1
35–39	950	917	96.5	4.3	9.6	343	37.4	1.5	3.5	574	62.6	2.6	5.8
40–44	1,150	1,096	95.3	5.6	11.5	392	35.8	1.9	3.9	704	64.2	3.4	7.0
45–49	1,522	1,459	95.9	7.5	12.8	470	32.2	2.3	4.0	989	67.8	4.9	8.3
50–54	2,349	2,268	96.6	11.3	15.5	625	27.6	3.0	4.1	1,643	72.4	7.9	10.8
55–59	3,317	3,205	96.6	15.1	20.7	805	25.1	3.7	5.0	2,400	74.9	11.0	15.0
60–64	3,184	3,065	96.3	15.2	28.4	676	22.1	3.2	6.0	2,389	77.9	11.4	21.3
65–69	2,360	2,260	95.8	13.2	36.1	476	21.1	2.7	7.3	1,784	78.9	10.0	27.3
70–74	1,499	1,434	95.7	10.3	48.9	303	21.1	2.1	9.9	1,131	78.9	7.8	36.9
≥75	1,388	1,321	95.2	6.2	72.1	260	19.7	1.2	13.5	1,061	80.3	4.7	55.2
Race/ethnicity													
American Indian/Alaska Native	82	80	97.6	3.4	26.6	20	25.0	0.8	6.5	60	75.0	2.5	19.5
Asian ^d	107	95	88.8	0.5	6.8	26	27.4	0.1	1.6	69	72.6	0.4	4.4
Black/African American	8,366	8,031	96.0	20.0	19.4	2,187	27.2	5.2	5.1	5,844	72.8	14.0	13.6
Hispanic/Latino ^e	3,456	3,288	95.1	5.6	13.7	859	26.1	1.4	3.4	2,429	73.9	3.9	9.6
Native Hawaiian/ other Pacific Islander	11	11	100	1.8	13.0	2	18.2	0.3	2.4	9	81.8	1.5	10.6
White	5,799	5,600	96.6	2.9	18.9	1,404	25.1	0.7	4.6	4,196	74.9	2.1	13.7
Multiracial	1,319	1,287	97.6	17.3	21.7	342	26.6	4.5	5.6	945	73.4	12.4	15.6
Transmission category^f													
Male sex at birth (≥13 yr at diagnosis)^g													
Male-to-male sexual contact ^h	8,296	7,959	95.9	—	13.7	2,207	27.7	—	3.6	5,752	72.3	—	9.5
Injection drug use ⁱ	2,424	2,338	96.4	—	36.1	475	20.3	—	7.1	1,862	79.7	—	27.7
Male-to-male sexual contact ^h and injection drug use ⁱ	1,673	1,629	97.4	—	27.9	407	25.0	—	6.8	1,223	75.0	—	20.4
Heterosexual contact ^j	1,963	1,861	94.8	—	24.2	500	26.9	—	6.2	1,361	73.1	—	16.8
Perinatal ^k	59	59	100	—	11.6	27	46.5	—	5.4	31	53.5	—	6.2
Other ^l	68	65	96.7	—	24.3	14	21.4	—	5.0	51	78.6	—	18.5
Subtotal	14,481	13,911	96.1	10.5	17.6	3,631	26.1	2.6	4.4	10,280	73.9	7.5	12.5

Table 11a. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
2020 (COVID-19 pandemic)^o (cont)													
Transmission category^f (cont)													
Female sex at birth (≥ 13 yr at diagnosis)^g													
Injection drug use ⁱ	1,507	1,464	97.2	—	30.4	332	22.7	—	6.7	1,132	77.3	—	22.8
Heterosexual contact ^j	3,067	2,937	95.8	—	16.2	836	28.5	—	4.4	2,101	71.5	—	11.1
Perinatal ^k	44	43	97.7	—	7.4	31	73.9	—	5.3	11	26.1	—	1.9
Other ^l	38	34	90.5	—	22.2	8	22.9	—	4.6	26	77.1	—	15.5
Subtotal	4,655	4,478	96.2	3.3	18.9	1,208	27.0	0.9	4.9	3,270	73.0	2.3	13.2
Child (<13 yr at diagnosis)													
Perinatal [*]	4	3	75.0	—	2.8	0	0.0	0.0	0.0	3	100	—	2.1
Other ^l	1	1	100	—	3.3	1	100	—	3.3	0	0.0	0.0	0.0
Subtotal[*]	5	4	80.0	0.0	2.9	1	25.0	0.0	0.6	3	75.0	0.0	1.7
Region of residence^m													
Northeast	4,525	4,452	98.4	7.9	19.0	794	17.8	1.4	3.3	3,658	82.2	6.4	15.4
Midwest	2,343	2,293	97.9	3.4	18.2	519	22.6	0.8	4.0	1,774	77.4	2.6	13.8
South	9,104	8,705	95.6	7.2	18.6	2,694	30.9	2.1	5.5	6,011	69.1	4.8	12.3
West	3,169	2,943	92.9	4.0	14.9	833	28.3	1.1	3.9	2,110	71.7	2.7	9.9
Totalⁿ	19,141	18,393	96.1	5.8	17.9	4,840	26.3	1.5	4.5	13,553	73.7	4.1	12.7
2021													
Gender													
Man	15,068	14,572	96.7	—	18.3	3,569	24.5	—	4.3	11,003	75.5	—	13.3
Woman	4,883	4,751	97.3	—	19.6	1,113	23.4	—	4.5	3,638	76.6	—	14.6
Transgender woman/girl ^b	227	219	96.5	—	16.2	54	24.7	—	3.9	165	75.3	—	11.8
Transgender man/boy ^b	3	3	100	—	5.0	1	33.3	—	1.7	2	66.7	—	3.3
Additional gender identity ^c	1	1	100	—	2.5	0	0.0	0.0	0.0	1	100	—	2.5
Age at diagnosis (yr)													
<13	1	1	100	0.0	0.7	1	100	0.0	0.7	0	0.0	0.0	0.0
13–14	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
15–19	5	5	100	0.0	0.9	1	20.0	0.0	0.2	4	80.0	0.0	0.7
20–24	111	107	96.4	0.5	3.7	30	28.0	0.1	1.0	77	72.0	0.3	2.6
25–29	482	464	96.3	2.2	6.6	154	33.2	0.7	2.1	310	66.8	1.4	4.3
30–34	923	889	96.3	4.0	8.9	313	35.2	1.4	3.0	576	64.8	2.5	5.5
35–39	1,102	1,073	97.4	5.0	10.9	347	32.3	1.6	3.4	726	67.7	3.3	7.2
40–44	1,213	1,179	97.2	5.8	11.7	371	31.5	1.8	3.6	808	68.5	3.8	7.8
45–49	1,573	1,525	96.9	8.0	14.1	453	29.7	2.3	4.1	1,072	70.3	5.4	9.6
50–54	2,322	2,265	97.5	11.1	15.9	545	24.1	2.6	3.7	1,720	75.9	8.3	11.7
55–59	3,455	3,357	97.2	16.1	21.1	776	23.1	3.6	4.7	2,581	76.9	12.0	15.8
60–64	3,372	3,271	97.0	16.0	28.0	698	21.3	3.3	5.8	2,573	78.7	12.2	21.4
65–69	2,561	2,465	96.3	14.0	35.7	520	21.1	2.9	7.2	1,945	78.9	10.7	27.1
70–74	1,626	1,562	96.1	10.7	45.9	291	18.6	1.9	8.2	1,271	81.4	8.4	35.9
≥75	1,436	1,383	96.3	6.3	65.6	237	17.1	1.0	10.8	1,146	82.9	5.0	52.3

Table 11a. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
2021 (cont)													
Race/ethnicity													
American Indian/Alaska Native	81	79	97.5	3.4	25.2	24	30.4	1.0	7.5	55	69.6	2.3	17.1
Asian ^d	125	110	88.0	0.6	7.5	41	37.3	0.2	2.5	69	62.7	0.3	4.2
Black/African American	8,668	8,452	97.5	20.7	19.8	2,066	24.4	4.9	4.7	6,386	75.6	15.3	14.6
Hispanic/Latino ^e	3,577	3,387	94.7	5.7	13.7	883	26.1	1.4	3.4	2,504	73.9	4.0	9.6
Native Hawaiian/ other Pacific Islander	15	13	86.7	2.4	16.4	4	30.8	0.6	4.4	9	69.2	1.4	9.8
White	6,215	6,028	97.0	3.2	20.1	1,327	22.0	0.7	4.3	4,701	78.0	2.4	15.2
Multiracial	1,499	1,475	98.4	19.2	24.7	392	26.6	5.0	6.5	1,083	73.4	13.9	17.8
Transmission category^f													
Male sex at birth (≥13 yr at diagnosis)^g													
Male-to-male sexual contact ^h	8,912	8,598	96.5	—	14.3	2,227	25.9	—	3.6	6,371	74.1	—	10.2
Injection drug use ⁱ	2,397	2,328	97.1	—	36.1	465	20.0	—	7.0	1,862	80.0	—	28.1
Male-to-male sexual contact ^h and injection drug use ⁱ	1,740	1,706	98.0	—	29.1	362	21.2	—	6.1	1,344	78.8	—	22.5
Heterosexual contact ^j	2,132	2,051	96.2	—	26.1	527	25.7	—	6.5	1,525	74.3	—	18.7
Perinatal ^k	55	52	94.6	—	10.8	25	48.1	—	4.9	27	51.9	—	5.3
Other ^l	59	57	95.8	—	21.4	17	29.5	—	6.0	40	70.5	—	14.5
Subtotal	15,296	14,792	96.7	11.0	18.2	3,623	24.5	2.6	4.3	11,169	75.5	8.1	13.3
Female sex at birth (≥13 yr at diagnosis)^g													
Injection drug use ⁱ	1,516	1,480	97.6	—	30.8	273	18.4	—	5.5	1,207	81.6	—	24.5
Heterosexual contact ^j	3,279	3,189	97.3	—	17.0	800	25.1	—	4.2	2,389	74.9	—	12.4
Perinatal ^k	54	50	92.6	—	8.9	30	60.6	—	5.0	20	39.4	—	3.3
Other ^l	36	34	96.1	—	20.8	10	28.7	—	5.7	24	71.3	—	14.2
Subtotal	4,885	4,753	97.3	3.4	19.6	1,113	23.4	0.8	4.5	3,640	76.6	2.6	14.6
Child (<13 yr at diagnosis)													
Perinatal	1	1	100	—	0.8	1	100	—	0.8	0	0.0	0.0	0.0
Other ^l	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
Subtotal	1	1	100	0.0	0.7	1	100	0.0	0.7	0	0.0	0.0	0.0
Region of residence^m													
Northeast	4,387	4,278	97.5	7.7	18.4	751	17.6	1.3	3.1	3,527	82.4	6.2	14.8
Midwest	2,398	2,344	97.7	3.5	18.3	528	22.5	0.8	4.0	1,816	77.5	2.6	13.9
South	9,828	9,584	97.5	7.7	19.6	2,609	27.2	2.0	5.2	6,975	72.8	5.5	13.9
West	3,569	3,340	93.6	4.5	16.4	849	25.4	1.1	3.9	2,491	74.6	3.2	11.4
Totalⁿ	20,182	19,546	96.8	6.1	18.5	4,737	24.2	1.4	4.3	14,809	75.8	4.5	13.6

Table 11a. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
	2022												
Gender													
Man	14,237	12,582	88.4	—	16.9	3,141	25.0	—	3.7	9,441	75.0	—	11.2
Woman	4,446	3,866	87.0	—	17.6	948	24.5	—	3.7	2,918	75.5	—	11.5
Transgender woman/girl ^b	243	207	85.2	—	16.5	54	26.1	—	3.7	153	73.9	—	10.4
Transgender man/boy ^{*b}	7	5	71.4	—	10.6	2	40.0	—	3.0	3	60.0	—	4.5
Additional gender identity ^c	6	6	100	—	12.7	0	0.0	0.0	0.0	6	100	—	12.7
Age at diagnosis (yr)													
<13	2	2	100	0.0	1.5	1	50.0	0.0	0.7	1	50.0	0.0	0.7
13–14	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
15–19*	6	5	83.3	0.0	1.2	1	20.0	0.0	0.2	4	80.0	0.0	0.8
20–24	118	105	89.0	0.5	3.9	33	31.4	0.1	1.1	72	68.6	0.3	2.4
25–29	483	421	87.2	2.2	6.8	134	31.8	0.6	1.9	287	68.2	1.3	4.0
30–34	905	788	87.1	3.9	8.3	260	33.0	1.1	2.4	528	67.0	2.3	4.9
35–39	1,085	944	87.0	4.9	10.3	299	31.7	1.3	2.8	645	68.3	2.9	6.1
40–44	1,314	1,163	88.5	6.1	12.3	370	31.8	1.7	3.5	793	68.2	3.7	7.4
45–49	1,338	1,191	89.0	6.8	12.5	368	30.9	1.9	3.4	823	69.1	4.2	7.7
50–54	2,023	1,787	88.3	9.7	14.4	454	25.4	2.2	3.2	1,333	74.6	6.4	9.5
55–59	2,975	2,643	88.8	14.2	18.2	601	22.7	2.9	3.7	2,042	77.3	9.7	12.5
60–64	3,135	2,756	87.9	14.8	24.5	580	21.0	2.7	4.5	2,176	79.0	10.3	17.0
65–69	2,505	2,194	87.6	13.4	31.7	475	21.6	2.5	6.0	1,719	78.4	9.2	21.7
70–74	1,608	1,398	86.9	10.6	40.1	289	20.7	1.9	7.2	1,109	79.3	7.3	27.6
≥75	1,442	1,269	88.0	6.0	57.4	280	22.1	1.2	11.2	989	77.9	4.1	39.4
Race/ethnicity													
American Indian/Alaska Native*	80	63	78.8	3.3	23.9	15	23.8	0.6	4.5	48	76.2	2.0	14.3
Asian ^d	108	92	85.2	0.5	6.2	25	27.2	0.1	1.4	67	72.8	0.3	3.8
Black/African American	8,062	7,159	88.8	19.2	18.2	1,838	25.7	4.4	4.1	5,321	74.3	12.6	12.0
Hispanic/Latino ^{*e}	3,308	2,744	83.0	5.2	12.1	767	28.0	1.2	2.8	1,977	72.0	3.1	7.3
Native Hawaiian/ other Pacific Islander	9	8	88.9	1.4	9.1	2	25.0	0.3	2.0	6	75.0	0.9	6.1
White	5,957	5,311	89.2	3.0	19.0	1,199	22.6	0.6	3.8	4,112	77.4	2.1	13.1
Multiracial	1,415	1,289	91.1	17.7	23.5	299	23.2	3.7	5.0	990	76.8	12.4	16.4
Transmission category^f													
Male sex at birth (≥13 yr at diagnosis)^g													
Male-to-male sexual contact ^h	8,712	7,690	88.3	—	13.6	2,058	26.8	—	3.2	5,632	73.2	—	8.8
Injection drug use ⁱ	2,196	1,876	85.4	—	33.5	383	20.4	—	5.8	1,493	79.6	—	22.8
Male-to-male sexual contact ^h and injection drug use ⁱ	1,680	1,533	91.2	—	28.3	326	21.2	—	5.5	1,207	78.8	—	20.3
Heterosexual contact ^j	1,795	1,600	89.2	—	21.8	401	25.0	—	4.9	1,199	75.0	—	14.6
Perinatal ^k	56	50	90.0	—	10.7	18	36.1	—	3.5	32	63.9	—	6.1
Other ^l	45	44	97.3	—	16.2	10	21.8	—	3.4	34	78.2	—	12.4
Subtotal	14,484	12,793	88.3	10.4	16.9	3,195	25.0	2.3	3.7	9,598	75.0	6.9	11.2

Table 11a. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
2022 (cont)													
Transmission category^f (cont)													
Female sex at birth (≥ 13 yr at diagnosis)^g													
Injection drug use ⁱ	1,443	1,228	85.1	—	29.5	258	21.0	—	5.3	971	79.0	—	19.8
Heterosexual contact ^j	2,937	2,582	87.9	—	15.0	667	25.9	—	3.4	1,914	74.1	—	9.8
Perinatal ^{*k}	45	36	79.8	—	7.3	19	53.8	—	3.1	17	46.2	—	2.7
Other ^l	28	25	92.0	—	16.0	5	17.8	—	2.6	21	82.2	—	12.1
Subtotal	4,453	3,871	86.9	3.1	17.6	949	24.5	0.7	3.8	2,922	75.5	2.0	11.6
Child (<13 yr at diagnosis)													
Perinatal	2	2	100	—	1.7	1	50.0	—	0.9	1	50.0	—	0.9
Other ^l	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
Subtotal	2	2	100	0.0	1.5	1	50.0	0.0	0.7	1	50.0	0.0	0.7
Region of residence^m													
Northeast [*]	4,178	2,977	71.3	7.3	17.4	570	19.1	1.0	2.4	2,407	80.9	4.2	10.0
Midwest [*]	2,387	1,992	83.5	3.5	17.8	430	21.6	0.6	3.2	1,562	78.4	2.3	11.7
South	8,959	8,581	95.8	7.0	17.4	2,379	27.7	1.8	4.6	6,202	72.3	4.8	12.0
West	3,415	3,116	91.2	4.3	15.4	766	24.6	1.0	3.4	2,350	75.4	3.0	10.6
Totalⁿ	18,939	16,666	88.0	5.7	17.0	4,145	24.9	1.2	3.7	12,521	75.1	3.8	11.3

Abbreviations: pop, population; PWDH, persons with diagnosed HIV infection; CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Deaths of persons with diagnosed HIV infection are based on residence at death. When information on residence at death was unavailable, state at death (where a person's death occurred) was used. When information on both residence at death and state at death (where a person's death occurred) are not available, the most recent known address on or before the date of death is used. Data for the year 2022 are preliminary and based on death data received by CDC as of December 2023. HIV-related deaths include deaths with an underlying cause with an International Classification of Diseases, Tenth Revision code of B20–B24, O98.7, or R75. Non-HIV-related deaths include all other deaths with a known underlying cause. HIV-related deaths and non-HIV-related deaths numbers and percentages exclude deaths with an unknown underlying cause. Asterisk (*) indicates cause of death data should be interpreted with caution (i.e., <85% of deaths were reported with a known underlying cause of death). Deaths in 2020 and beyond should be interpreted considering the impact of the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm.

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

^b "Transgender woman" includes persons who were assigned male sex at birth but have ever identified as a woman. "Transgender man" includes persons who were assigned female sex at birth but have ever identified as a man.

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

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

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

^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^g Data include transgender and additional gender identity persons.

^h Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

ⁱ Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^k Persons were aged ≥ 13 years at time of diagnosis of HIV infection.

^l Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^m Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used; when both residence at death and state where a person's death occurred were not available, the most recent known address on or before the date of death is used.

ⁿ Includes persons whose race/ethnicity is unknown.

^o Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

Table 11b. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States and 6 territories and freely associated states

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
2018													
Gender													
Man	12,379	11,812	95.4	—	15.7	3,883	32.9	—	4.9	7,929	67.1	—	10.0
Woman	4,052	3,859	95.2	—	16.4	1,328	34.4	—	5.4	2,531	65.6	—	10.3
Transgender woman/girl ^b	122	117	95.9	—	10.1	45	38.5	—	3.7	72	61.5	—	6.0
Transgender man/boy ^b	5	5	100	—	10.5	1	20.0	—	2.1	4	80.0	—	8.4
Additional gender identity ^c	1	1	100	—	3.4	0	0.0	0.0	0.0	1	100	—	3.4
Age at diagnosis (yr)													
<13	1	1	100	0.0	0.4	1	100	0.0	0.4	0	0.0	0.0	0.0
13–14	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
15–19	9	9	100	0.0	1.4	3	33.3	0.0	0.5	6	66.7	0.0	0.9
20–24	125	120	96.0	0.6	3.6	57	47.5	0.3	1.6	63	52.5	0.3	1.8
25–29	427	410	96.0	1.8	5.4	187	45.6	0.8	2.4	223	54.4	0.9	2.8
30–34	627	596	95.1	2.8	7.0	277	46.5	1.2	3.1	319	53.5	1.4	3.6
35–39	832	798	95.9	3.8	8.6	355	44.5	1.6	3.7	443	55.5	2.0	4.6
40–44	991	934	94.2	5.0	9.9	379	40.6	1.9	3.8	555	59.4	2.8	5.5
45–49	1,635	1,560	95.4	7.8	12.2	597	38.3	2.8	4.5	963	61.7	4.6	7.2
50–54	2,631	2,512	95.5	12.5	15.7	851	33.9	4.0	5.1	1,661	66.1	7.9	9.9
55–59	2,992	2,867	95.8	13.5	20.2	900	31.4	4.1	6.1	1,967	68.6	8.9	13.3
60–64	2,571	2,456	95.5	12.5	26.2	708	28.8	3.4	7.2	1,748	71.2	8.5	17.8
65–69	1,770	1,685	95.2	10.2	33.1	458	27.2	2.7	8.6	1,227	72.8	7.1	22.9
70–74	985	933	94.7	7.3	42.0	242	25.9	1.8	10.3	691	74.1	5.1	29.5
≥75	963	913	94.8	4.3	64.3	242	26.5	1.1	16.2	671	73.5	3.0	44.8
Race/ethnicity													
American Indian/Alaska Native	49	48	98.0	—	17.3	18	37.5	—	6.4	30	62.5	—	10.6
Asian ^d	84	70	83.3	—	5.8	26	37.1	—	1.8	44	62.9	—	3.0
Black/African American	6,986	6,670	95.5	—	16.8	2,333	35.0	—	5.6	4,337	65.0	—	10.4
Hispanic/Latino ^e	3,190	3,025	94.8	—	12.5	1,047	34.6	—	4.1	1,978	65.4	—	7.8
Native Hawaiian/ other Pacific Islander	16	13	81.2	—	20.2	4	30.8	—	5.1	9	69.2	—	11.4
White	5,141	4,904	95.4	—	17.1	1,472	30.0	—	4.9	3,432	70.0	—	11.4
Multiracial	1,093	1,064	97.3	—	18.2	357	33.6	—	5.9	707	66.4	—	11.7
Transmission category^f													
Male sex at birth (≥13 yr at diagnosis)^g													
Male-to-male sexual contact ^h	6,951	6,600	95.0	—	12.0	2,293	34.7	—	4.0	4,307	65.3	—	7.4
Injection drug use ⁱ	2,287	2,213	96.8	—	31.7	573	25.9	—	7.9	1,640	74.1	—	22.7
Male-to-male sexual contact ^h and injection drug use ⁱ	1,472	1,421	96.6	—	24.2	463	32.6	—	7.6	958	67.4	—	15.8
Heterosexual contact ^j	1,676	1,584	94.5	—	20.5	550	34.7	—	6.7	1,035	65.3	—	12.7
Perinatal ^k	57	55	96.2	—	11.5	36	65.5	—	7.3	19	34.5	—	3.8
Other ^l	59	55	93.4	—	20.8	13	23.9	—	4.6	42	76.1	—	14.8
Subtotal	12,501	11,929	95.4	9.2	15.6	3,928	32.9	2.9	4.9	8,001	67.1	5.9	10.0

Table 11b. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
2018 (cont)													
Transmission category^f (cont)													
Female sex at birth (≥ 13 yr at diagnosis)^g													
Injection drug use ⁱ	1,360	1,307	96.1	—	26.6	392	30.0	—	7.7	915	70.0	—	17.9
Heterosexual contact ^j	2,631	2,492	94.7	—	14.0	909	36.5	—	4.8	1,583	63.5	—	8.4
Perinatal ^k	38	37	97.1	—	6.7	19	51.4	—	3.3	18	48.6	—	3.2
Other ^l	28	27	97.5	—	16.8	8	28.5	—	4.7	20	71.5	—	11.7
Subtotal	4,057	3,864	95.2	2.9	16.5	1,328	34.4	0.9	5.4	2,536	65.6	1.8	10.3
Child (<13 yr at diagnosis)													
Perinatal	1	1	100	—	0.5	1	100	—	0.5	0	0.0	0.0	0.0
Other ^l	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
Subtotal	1	1	100	0.0	0.4	1	100	0.0	0.4	0	0.0	0.0	0.0
Region of residence^m													
Northeast	3,518	3,439	97.8	6.3	14.9	896	26.1	1.6	3.8	2,543	73.9	4.5	10.8
Midwest	2,010	1,954	97.2	2.9	16.3	609	31.2	0.9	4.9	1,345	68.8	2.0	10.9
South	7,863	7,470	95.0	6.3	16.8	2,744	36.7	2.2	5.9	4,726	63.3	3.8	10.1
West	2,802	2,578	92.0	3.6	13.7	867	33.6	1.1	4.2	1,711	66.4	2.2	8.4
U.S. territories and freely associated states	366	353	96.4	10.2	22.2	141	39.9	3.9	8.5	212	60.1	5.9	12.8
Totalⁿ	16,559	15,794	95.4	5.0	15.8	5,257	33.3	1.6	5.0	10,537	66.7	3.2	10.0
2019													
Gender													
Man	12,565	12,042	95.8	—	15.6	3,627	30.1	—	4.5	8,415	69.9	—	10.4
Woman	3,908	3,765	96.3	—	15.6	1,239	32.9	—	5.0	2,526	67.1	—	10.1
Transgender woman/girl ^b	147	140	95.2	—	11.6	47	33.6	—	3.7	93	66.4	—	7.3
Transgender man/boy ^b	5	5	100	—	9.6	2	40.0	—	3.8	3	60.0	—	5.8
Additional gender identity ^c	2	2	100	—	6.0	0	0.0	0.0	0.0	2	100	—	6.0
Age at diagnosis (yr)													
<13	2	2	100	0.0	1.0	1	50.0	0.0	0.5	1	50.0	0.0	0.5
13–14	1	1	100	0.0	1.4	1	100	0.0	1.4	0	0.0	0.0	0.0
15–19	11	11	100	0.1	1.8	4	36.4	0.0	0.7	7	63.6	0.0	1.1
20–24	125	117	93.6	0.6	3.7	44	37.6	0.2	1.3	73	62.4	0.3	2.2
25–29	442	425	96.2	1.9	5.6	191	44.9	0.8	2.4	234	55.1	1.0	3.0
30–34	675	644	95.4	3.0	7.1	276	42.9	1.2	2.9	368	57.1	1.6	3.9
35–39	867	835	96.3	3.9	8.8	320	38.3	1.5	3.2	515	61.7	2.3	5.2
40–44	972	926	95.3	4.8	9.6	359	38.8	1.8	3.6	567	61.2	2.8	5.6
45–49	1,436	1,393	97.0	7.0	11.3	521	37.4	2.5	4.1	872	62.6	4.2	6.9
50–54	2,315	2,229	96.3	11.2	14.3	699	31.4	3.4	4.3	1,530	68.6	7.4	9.5
55–59	2,968	2,859	96.3	13.4	19.0	818	28.6	3.7	5.2	2,041	71.4	9.2	13.1
60–64	2,720	2,623	96.4	13.1	25.5	680	25.9	3.3	6.4	1,943	74.1	9.3	18.2
65–69	1,885	1,806	95.8	10.7	31.7	488	27.0	2.8	8.2	1,318	73.0	7.5	22.1
70–74	1,106	1,045	94.5	7.8	40.4	264	25.3	1.9	9.6	781	74.7	5.5	28.5
≥75	1,102	1,038	94.2	4.8	64.0	249	24.0	1.1	14.5	789	76.0	3.4	45.8

Table 11b. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
2019 (cont)													
Race/ethnicity													
American Indian/Alaska Native	57	56	98.2	—	19.3	20	35.7	—	6.8	36	64.3	—	12.2
Asian ^d	104	92	88.5	—	6.8	33	35.9	—	2.2	59	64.1	—	3.9
Black/African American	7,006	6,702	95.7	—	16.5	2,145	32.0	—	5.1	4,557	68.0	—	10.7
Hispanic/Latino ^e	3,109	2,976	95.7	—	11.8	1,016	34.1	—	3.9	1,960	65.9	—	7.5
Native Hawaiian/ other Pacific Islander	16	14	87.5	—	19.2	7	50.0	—	8.4	7	50.0	—	8.4
White	5,257	5,064	96.3	—	17.3	1,357	26.8	—	4.5	3,707	73.2	—	12.2
Multiracial	1,074	1,049	97.7	—	17.7	336	32.0	—	5.5	713	68.0	—	11.8
Transmission category^f													
Male sex at birth (≥13 yr at diagnosis)^g													
Male-to-male sexual contact ^h	7,248	6,921	95.5	—	12.1	2,152	31.1	—	3.6	4,769	68.9	—	8.0
Injection drug use ⁱ	2,205	2,136	96.8	—	30.9	551	25.8	—	7.7	1,585	74.2	—	22.2
Male-to-male sexual contact ^h and injection drug use ⁱ	1,421	1,385	97.5	—	23.3	415	29.9	—	6.8	971	70.1	—	15.9
Heterosexual contact ^j	1,736	1,643	94.6	—	21.0	517	31.4	—	6.2	1,126	68.6	—	13.6
Perinatal ^k	43	41	95.2	—	8.6	25	60.8	—	5.0	16	39.2	—	3.2
Other ^l	58	56	95.9	—	20.7	14	25.1	—	5.0	42	74.9	—	14.9
Subtotal	12,712	12,182	95.8	9.3	15.5	3,673	30.2	2.7	4.5	8,509	69.8	6.2	10.4
Female sex at birth (≥13 yr at diagnosis)^g													
Injection drug use ⁱ	1,341	1,305	97.3	—	26.3	329	25.2	—	6.5	976	74.8	—	19.1
Heterosexual contact ^j	2,509	2,404	95.8	—	13.1	874	36.4	—	4.6	1,530	63.6	—	8.0
Perinatal ^k	38	38	100	—	6.5	31	81.0	—	5.2	7	19.0	—	1.2
Other ^l	26	24	90.8	—	15.4	7	31.4	—	4.4	16	68.6	—	9.6
Subtotal	3,913	3,770	96.3	2.7	15.7	1,241	32.9	0.9	5.0	2,529	67.1	1.8	10.1
Child (<13 yr at diagnosis)													
Perinatal	1	1	100	—	0.6	0	0.0	0.0	0.0	1	100	—	0.6
Other ^l	1	1	100	—	2.8	1	100	—	2.8	0	0.0	0.0	0.0
Subtotal	2	2	100	0.0	1.0	1	50.0	0.0	0.5	1	50.0	0.0	0.5
Region of residence^m													
Northeast	3,646	3,586	98.4	6.5	15.3	877	24.5	1.6	3.7	2,709	75.5	4.8	11.4
Midwest	1,960	1,924	98.2	2.9	15.5	484	25.2	0.7	3.8	1,440	74.8	2.1	11.4
South	7,894	7,497	95.0	6.3	16.4	2,586	34.5	2.1	5.4	4,911	65.5	3.9	10.2
West	2,768	2,599	93.9	3.5	13.2	824	31.7	1.1	3.9	1,775	68.3	2.3	8.5
U.S. territories and freely associated states	359	348	96.9	10.0	21.6	144	41.4	4.0	8.7	204	58.6	5.7	12.3
Totalⁿ	16,627	15,954	96.0	5.0	15.5	4,915	30.8	1.5	4.6	11,039	69.2	3.3	10.3

Table 11b. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
2020 (COVID-19 pandemic)^o													
Gender													
Man	14,546	13,977	96.1	—	17.7	3,674	26.3	—	4.5	10,303	73.7	—	12.6
Woman	4,734	4,553	96.2	—	18.8	1,234	27.1	—	4.9	3,319	72.9	—	13.2
Transgender woman/girl ^b	212	206	97.2	—	15.9	55	26.7	—	4.1	151	73.3	—	11.3
Transgender man/boy ^b	10	10	100	—	18.0	4	40.0	—	7.2	6	60.0	—	10.8
Additional gender identity ^c	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
Age at diagnosis (yr)													
<13	5	4	80.0	0.0	2.8	1	25.0	0.0	0.6	3	75.0	0.0	1.7
13–14	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
15–19	13	12	92.3	0.1	2.3	1	8.3	0.0	0.2	11	91.7	0.0	2.0
20–24	141	136	96.5	0.6	4.5	46	33.8	0.2	1.5	90	66.2	0.4	2.9
25–29	467	452	96.8	2.0	6.1	175	38.7	0.8	2.3	277	61.3	1.2	3.6
30–34	806	774	96.0	3.5	8.1	270	34.9	1.2	2.7	504	65.1	2.2	5.1
35–39	973	939	96.5	4.4	9.7	351	37.4	1.6	3.5	588	62.6	2.6	5.9
40–44	1,181	1,127	95.4	5.7	11.6	402	35.7	1.9	4.0	725	64.3	3.5	7.1
45–49	1,557	1,494	96.0	7.6	12.9	488	32.7	2.4	4.1	1,006	67.3	4.9	8.4
50–54	2,395	2,313	96.6	11.4	15.5	639	27.6	3.0	4.1	1,674	72.4	8.0	10.9
55–59	3,392	3,279	96.7	15.3	20.8	830	25.3	3.7	5.1	2,449	74.7	11.1	15.0
60–64	3,234	3,114	96.3	15.3	28.3	694	22.3	3.3	6.1	2,420	77.7	11.5	21.2
65–69	2,399	2,297	95.7	13.3	36.0	490	21.3	2.7	7.3	1,807	78.7	10.0	27.1
70–74	1,528	1,462	95.7	10.4	48.7	312	21.3	2.1	9.9	1,150	78.7	7.8	36.7
≥75	1,411	1,343	95.2	6.2	71.3	268	20.0	1.2	13.5	1,075	80.0	4.7	54.3
Race/ethnicity													
American Indian/Alaska Native	82	80	97.6	—	26.6	20	25.0	—	6.5	60	75.0	—	19.5
Asian ^d	108	96	88.9	—	6.8	26	27.1	—	1.6	70	72.9	—	4.4
Black/African American	8,369	8,032	96.0	—	19.4	2,187	27.2	—	5.1	5,845	72.8	—	13.6
Hispanic/Latino ^e	3,811	3,638	95.5	—	14.2	985	27.1	—	3.7	2,653	72.9	—	9.9
Native Hawaiian/ other Pacific Islander	11	11	100	—	12.5	2	18.2	—	2.3	9	81.8	—	10.2
White	5,801	5,601	96.6	—	18.9	1,405	25.1	—	4.6	4,196	74.9	—	13.7
Multiracial	1,319	1,287	97.6	—	21.7	342	26.6	—	5.6	945	73.4	—	15.6
Transmission category^f													
Male sex at birth (≥13 yr at diagnosis)^g													
Male-to-male sexual contact ^h	8,378	8,040	96.0	—	13.7	2,238	27.8	—	3.7	5,802	72.2	—	9.5
Injection drug use ⁱ	2,530	2,444	96.6	—	35.9	511	20.9	—	7.3	1,933	79.1	—	27.4
Male-to-male sexual contact ^h and injection drug use ⁱ	1,702	1,659	97.5	—	28.0	419	25.2	—	6.9	1,240	74.8	—	20.4
Heterosexual contact ^j	2,017	1,911	94.8	—	24.2	519	27.1	—	6.2	1,393	72.9	—	16.7
Perinatal ^k	62	62	100	—	11.9	27	44.2	—	5.3	34	55.8	—	6.6
Other ^l	68	65	96.7	—	24.1	14	21.4	—	5.0	51	78.6	—	18.3
Subtotal	14,756	14,181	96.1	10.6	17.7	3,728	26.3	2.7	4.5	10,453	73.7	7.5	12.5

Table 11b. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
2020 (COVID-19 pandemic)^o (cont)													
Transmission category^f (cont)													
Female sex at birth (≥13 yr at diagnosis)^g													
Injection drug use ⁱ	1,533	1,491	97.2	—	30.3	341	22.8	—	6.7	1,150	77.2	—	22.7
Heterosexual contact ^j	3,127	2,994	95.7	—	16.2	858	28.7	—	4.4	2,136	71.3	—	11.0
Perinatal ^k	44	43	97.7	—	7.3	31	73.9	—	5.2	11	26.1	—	1.9
Other ^l	38	34	90.5	—	22.1	8	22.9	—	4.6	26	77.1	—	15.4
Subtotal	4,741	4,561	96.2	3.3	18.8	1,238	27.1	0.9	4.9	3,323	72.9	2.3	13.2
Child (<13 yr at diagnosis)													
Perinatal	4	3	75.0	—	2.7	0	0.0	0.0	0.0	3	100	—	2.1
Other ^l	1	1	100	—	3.3	1	100	—	3.3	0	0.0	0.0	0.0
Subtotal	5	4	80.0	0.0	2.8	1	25.0	0.0	0.6	3	75.0	0.0	1.7
Region of residence^m													
Northeast	4,525	4,452	98.4	7.9	19.0	794	17.8	1.4	3.3	3,658	82.2	6.4	15.4
Midwest	2,343	2,293	97.9	3.4	18.2	519	22.6	0.8	4.0	1,774	77.4	2.6	13.8
South	9,104	8,705	95.6	7.2	18.6	2,694	30.9	2.1	5.5	6,011	69.1	4.8	12.3
West	3,169	2,943	92.9	4.0	14.9	833	28.3	1.1	3.9	2,110	71.7	2.7	9.9
U.S. territories and freely associated states	361	353	97.8	9.8	21.8	127	36.0	3.5	7.7	226	64.0	6.1	13.7
Totalⁿ	19,502	18,746	96.1	5.8	17.9	4,967	26.5	1.5	4.6	13,779	73.5	4.1	12.7
2021													
Gender													
Man	15,354	14,851	96.7	—	18.4	3,677	24.8	—	4.4	11,174	75.2	—	13.4
Woman	4,966	4,827	97.2	—	19.5	1,141	23.6	—	4.5	3,686	76.4	—	14.5
Transgender woman/girl ^b	228	220	96.5	—	16.2	54	24.5	—	3.8	166	75.5	—	11.8
Transgender man/boy ^b	3	3	100	—	4.9	1	33.3	—	1.6	2	66.7	—	3.3
Additional gender identity ^c	1	1	100	—	2.5	0	0.0	0.0	0.0	1	100	—	2.5
Age at diagnosis (yr)													
<13	1	1	100	0.0	0.6	1	100	0.0	0.6	0	0.0	0.0	0.0
13–14	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
15–19	5	5	100	0.0	0.9	1	20.0	0.0	0.2	4	80.0	0.0	0.7
20–24	112	108	96.4	0.5	3.7	30	27.8	0.1	1.0	78	72.2	0.3	2.6
25–29	490	472	96.3	2.2	6.7	156	33.1	0.7	2.1	316	66.9	1.4	4.3
30–34	929	895	96.3	4.0	8.9	315	35.2	1.4	3.0	580	64.8	2.5	5.5
35–39	1,116	1,087	97.4	5.0	10.9	353	32.5	1.6	3.5	734	67.5	3.3	7.2
40–44	1,244	1,209	97.2	5.9	11.9	385	31.8	1.8	3.7	824	68.2	3.9	7.9
45–49	1,603	1,552	96.8	8.0	14.2	464	29.9	2.3	4.1	1,088	70.1	5.4	9.6
50–54	2,365	2,307	97.5	11.2	15.9	565	24.5	2.7	3.8	1,742	75.5	8.3	11.7
55–59	3,516	3,414	97.1	16.2	21.1	802	23.5	3.7	4.8	2,612	76.5	12.0	15.7
60–64	3,430	3,329	97.1	16.1	28.0	718	21.6	3.4	5.9	2,611	78.4	12.2	21.3
65–69	2,607	2,510	96.3	14.1	35.6	537	21.4	2.9	7.3	1,973	78.6	10.7	27.0
70–74	1,657	1,592	96.1	10.8	45.8	300	18.8	2.0	8.3	1,292	81.2	8.4	35.7
≥75	1,477	1,421	96.2	6.4	65.6	246	17.3	1.1	10.9	1,175	82.7	5.1	52.2

Table 11b. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
2021 (cont)													
Race/ethnicity													
American Indian/Alaska Native	81	79	97.5	—	25.2	24	30.4	—	7.5	55	69.6	—	17.1
Asian ^d	126	111	88.1	—	7.6	41	36.9	—	2.5	70	63.1	—	4.2
Black/African American	8,671	8,455	97.5	—	19.8	2,066	24.4	—	4.7	6,389	75.6	—	14.6
Hispanic/Latino ^e	3,941	3,737	94.8	—	14.2	1,018	27.2	—	3.7	2,719	72.8	—	9.8
Native Hawaiian/ other Pacific Islander	15	13	86.7	—	15.8	4	30.8	—	4.2	9	69.2	—	9.5
White	6,216	6,029	97.0	—	20.1	1,328	22.0	—	4.3	4,701	78.0	—	15.2
Multiracial	1,500	1,476	98.4	—	24.7	392	26.6	—	6.5	1,084	73.4	—	17.9
Transmission category^f													
Male sex at birth (≥13 yr at diagnosis)^g													
Male-to-male sexual contact ^h	8,976	8,662	96.5	—	14.3	2,255	26.0	—	3.6	6,407	74.0	—	10.2
Injection drug use ⁱ	2,514	2,439	97.0	—	36.2	499	20.4	—	7.2	1,940	79.6	—	27.9
Male-to-male sexual contact ^h and injection drug use ⁱ	1,768	1,733	98.0	—	29.2	371	21.4	—	6.1	1,362	78.6	—	22.5
Heterosexual contact ^j	2,210	2,128	96.3	—	26.3	563	26.5	—	6.7	1,564	73.5	—	18.6
Perinatal ^k	56	53	94.7	—	10.7	26	49.1	—	5.0	27	50.9	—	5.2
Other ^l	59	57	95.8	—	21.2	17	29.5	—	6.0	40	70.5	—	14.3
Subtotal	15,583	15,072	96.7	11.1	18.3	3,731	24.8	2.7	4.4	11,341	75.2	8.1	13.3
Female sex at birth (≥13 yr at diagnosis)^g													
Injection drug use ⁱ	1,537	1,500	97.6	—	30.6	278	18.5	—	5.5	1,222	81.5	—	24.4
Heterosexual contact ^j	3,342	3,245	97.1	—	17.0	823	25.4	—	4.2	2,422	74.6	—	12.3
Perinatal ^k	54	50	92.6	—	8.8	30	60.6	—	4.9	20	39.4	—	3.2
Other ^l	36	34	96.1	—	20.7	10	28.7	—	5.7	24	71.3	—	14.1
Subtotal	4,968	4,829	97.2	3.4	19.5	1,141	23.6	0.8	4.5	3,688	76.4	2.6	14.5
Child (<13 yr at diagnosis)													
Perinatal	1	1	100	—	0.8	1	100	—	0.8	0	0.0	0.0	0.0
Other ^l	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
Subtotal	1	1	100	0.0	0.6	1	100	0.0	0.6	0	0.0	0.0	0.0
Region of residence^m													
Northeast	4,387	4,278	97.5	7.7	18.4	751	17.6	1.3	3.1	3,527	82.4	6.2	14.8
Midwest	2,398	2,344	97.7	3.5	18.3	528	22.5	0.8	4.0	1,816	77.5	2.6	13.9
South	9,828	9,584	97.5	7.7	19.6	2,609	27.2	2.0	5.2	6,975	72.8	5.5	13.9
West	3,569	3,340	93.6	4.5	16.4	849	25.4	1.1	3.9	2,491	74.6	3.2	11.4
U.S. territories and freely associated states	370	356	96.2	10.1	22.3	136	38.2	3.7	8.2	220	61.8	6.0	13.2
Totalⁿ	20,552	19,902	96.8	6.1	18.6	4,873	24.5	1.5	4.4	15,029	75.5	4.5	13.6

Table 11b. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
	2022												
Gender													
Man	14,532	12,837	88.3	—	17.0	3,220	25.1	—	3.8	9,617	74.9	—	11.2
Woman	4,522	3,928	86.9	—	17.5	967	24.6	—	3.8	2,961	75.4	—	11.5
Transgender woman/girl ^b	243	207	85.2	—	16.4	54	26.1	—	3.6	153	73.9	—	10.3
Transgender man/boy ^b	7	5	71.4	—	10.6	2	40.0	—	3.0	3	60.0	—	4.5
Additional gender identity ^c	6	6	100	—	12.7	0	0.0	0.0	0.0	6	100	—	12.7
Age at diagnosis (yr)													
<13	2	2	100	0.0	1.5	1	50.0	0.0	0.7	1	50.0	0.0	0.7
13–14	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
15–19	6	5	83.3	0.0	1.2	1	20.0	0.0	0.2	4	80.0	0.0	0.8
20–24	118	105	89.0	0.5	3.9	33	31.4	0.1	1.1	72	68.6	0.3	2.4
25–29	490	428	87.3	2.2	6.8	138	32.2	0.6	1.9	290	67.8	1.3	4.1
30–34	913	795	87.1	3.9	8.3	263	33.1	1.1	2.4	532	66.9	2.3	4.9
35–39	1,099	957	87.1	4.9	10.3	304	31.8	1.4	2.8	653	68.2	2.9	6.1
40–44	1,337	1,181	88.3	6.2	12.4	375	31.8	1.7	3.5	806	68.2	3.7	7.5
45–49	1,359	1,210	89.0	6.8	12.5	371	30.7	1.9	3.4	839	69.3	4.2	7.7
50–54	2,061	1,818	88.2	9.8	14.5	460	25.3	2.2	3.2	1,358	74.7	6.5	9.5
55–59	3,047	2,704	88.7	14.4	18.3	622	23.0	2.9	3.7	2,082	77.0	9.8	12.5
60–64	3,201	2,812	87.8	15.0	24.6	598	21.3	2.8	4.6	2,214	78.7	10.4	17.0
65–69	2,556	2,234	87.4	13.6	31.7	489	21.9	2.6	6.1	1,745	78.1	9.3	21.6
70–74	1,634	1,424	87.1	10.6	39.9	294	20.6	1.9	7.2	1,130	79.4	7.4	27.6
≥75	1,487	1,308	88.0	6.1	57.6	294	22.5	1.2	11.4	1,014	77.5	4.2	39.3
Race/ethnicity													
American Indian/Alaska Native	80	63	78.8	—	23.9	15	23.8	—	4.5	48	76.2	—	14.3
Asian ^d	108	92	85.2	—	6.2	25	27.2	—	1.4	67	72.8	—	3.8
Black/African American	8,062	7,159	88.8	—	18.2	1,838	25.7	—	4.1	5,321	74.3	—	12.0
Hispanic/Latino ^e	3,678	3,061	83.2	—	12.7	865	28.3	—	3.0	2,196	71.7	—	7.6
Native Hawaiian/ other Pacific Islander	9	8	88.9	—	8.8	2	25.0	—	2.0	6	75.0	—	5.9
White	5,957	5,311	89.2	—	19.0	1,199	22.6	—	3.8	4,112	77.4	—	13.1
Multiracial	1,416	1,289	91.0	—	23.5	299	23.2	—	5.0	990	76.8	—	16.4
Transmission category^f													
Male sex at birth (≥13 yr at diagnosis)^g													
Male-to-male sexual contact ^h	8,804	7,766	88.2	—	13.6	2,087	26.9	—	3.2	5,679	73.1	—	8.8
Injection drug use ⁱ	2,293	1,960	85.5	—	33.4	407	20.8	—	5.9	1,553	79.2	—	22.6
Male-to-male sexual contact ^h and injection drug use ⁱ	1,711	1,560	91.1	—	28.4	330	21.1	—	5.5	1,230	78.9	—	20.5
Heterosexual contact ^j	1,864	1,662	89.2	—	22.0	418	25.2	—	4.9	1,244	74.8	—	14.7
Perinatal ^k	60	54	90.7	—	11.2	22	40.8	—	4.1	32	59.2	—	6.0
Other ^l	47	46	97.4	—	16.8	10	20.8	—	3.4	36	79.2	—	13.0
Subtotal	14,779	13,048	88.3	10.5	17.0	3,274	25.1	2.3	3.8	9,774	74.9	6.9	11.2

Table 11b. Total deaths, HIV-related deaths, and non-HIV-related deaths of persons with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	Total					HIV-related				Non-HIV-related			
	No.	Deaths with known cause		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a	Deaths with known cause not related to HIV		Rate per 100,000 pop	Rate per 1,000 PWDH ^a
		No.	%			No.	%			No.	%		
2022 (cont)													
Transmission category^f (cont)													
Female sex at birth (≥ 13 yr at diagnosis)^g													
Injection drug use ^h	1,473	1,249	84.8	—	29.5	264	21.1	—	5.3	986	78.9	—	19.8
Heterosexual contact ⁱ	2,981	2,621	87.9	—	14.9	679	25.9	—	3.4	1,941	74.1	—	9.7
Perinatal ^k	47	38	80.6	—	7.5	20	53.6	—	3.2	18	46.4	—	2.8
Other ^l	28	25	92.0	—	15.9	5	17.8	—	2.6	21	82.2	—	12.0
Subtotal	4,529	3,933	86.8	3.1	17.6	968	24.6	0.7	3.8	2,965	75.4	2.0	11.5
Child (<13 yr at diagnosis)													
Perinatal	2	2	100	—	1.7	1	50.0	—	0.9	1	50.0	—	0.9
Other ^l	0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
Subtotal	2	2	100	0.0	1.5	1	50.0	0.0	0.7	1	50.0	0.0	0.7
Region of residence^m													
Northeast	4,178	2,977	71.3	7.3	17.4	570	19.1	1.0	2.4	2,407	80.9	4.2	10.0
Midwest	2,387	1,992	83.5	3.5	17.8	430	21.6	0.6	3.2	1,562	78.4	2.3	11.7
South	8,959	8,581	95.8	7.0	17.4	2,379	27.7	1.8	4.6	6,202	72.3	4.8	12.0
West	3,415	3,116	91.2	4.3	15.4	766	24.6	1.0	3.4	2,350	75.4	3.0	10.6
U.S. territories and freely associated states	371	317	85.4	10.3	22.3	98	30.9	2.7	5.9	219	69.1	6.1	13.2
Totalⁿ	19,310	16,983	87.9	5.7	17.1	4,243	25.0	1.3	3.8	12,740	75.0	3.8	11.3

Abbreviations: pop, population; PWDH, persons with diagnosed HIV infection; CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Deaths of persons with diagnosed HIV infection are based on residence at death. When information on residence at death was unavailable, state at death (where a person's death occurred) was used. When information on both residence at death and state at death (where a person's death occurred) are not available, the most recent known address on or before the date of death is used. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Data for the year 2022 are preliminary and based on death data received by CDC as of December 2023. HIV-related deaths include deaths with an underlying cause with an International Classification of Diseases, Tenth Revision code of B20–B24, O98.7, or R75. Non-HIV-related deaths include all other deaths with a known underlying cause. HIV-related deaths and non-HIV-related deaths numbers and percentages exclude deaths with an unknown underlying cause. Asterisk (*) indicates cause of death data should be interpreted with caution (i.e., <85% of deaths were reported with a known underlying cause of death). Deaths in 2020 and beyond should be interpreted considering the impact of the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm.

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

^b “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.

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

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

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

^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^g Data include transgender and additional gender identity persons.

^h Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

ⁱ Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^k Persons were aged ≥ 13 years at time of diagnosis of HIV infection.

^l Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^m Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used; when both residence at death and state where a person's death occurred were not available, the most recent known address on or before the date of death is used.

ⁿ Includes persons whose race/ethnicity is unknown.

^o Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

Table 12a. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death, sex assigned at birth, and selected characteristics, 2018–2022—United States

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Male sex at birth^c										
Age at death (yr)										
13–14	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
15–19	5	0.0	9	0.1	9	0.1	5	0.0	4	0.0
20–24	95	0.9	95	0.9	109	1.0	85	0.7	97	0.8
25–29	345	2.9	370	3.1	365	3.1	386	3.4	398	3.5
30–34	466	4.2	510	4.5	607	5.2	764	6.5	756	6.4
35–39	577	5.4	613	5.6	704	6.3	865	7.7	852	7.5
40–44	634	6.5	641	6.5	818	7.9	874	8.2	932	8.6
45–49	1,129	11.0	982	9.7	1,053	10.3	1,099	11.1	973	9.9
50–54	1,898	18.5	1,666	16.5	1,750	16.8	1,666	15.9	1,471	14.1
55–59	2,252	21.1	2,272	21.4	2,555	23.6	2,580	24.3	2,287	22.0
60–64	1,906	19.6	2,060	20.9	2,449	24.1	2,562	24.9	2,391	23.2
65–69	1,384	17.3	1,485	18.1	1,822	21.4	1,996	23.0	1,950	22.0
70–74	780	12.6	866	13.3	1,176	17.4	1,305	18.4	1,241	17.6
≥75	740	8.2	862	9.2	1,064	11.5	1,109	11.7	1,132	11.3
Race/ethnicity										
American Indian/Alaska Native	34	3.5	38	3.9	49	5.0	58	5.8	49	4.9
Asian ^d	73	1.0	96	1.3	91	1.1	104	1.3	96	1.2
Black/African American	4,715	29.7	4,799	29.9	5,738	34.9	5,875	35.5	5,524	33.2
Hispanic/Latino ^e	2,247	9.7	2,195	9.3	2,720	11.1	2,846	11.4	2,642	10.3
Native Hawaiian/other Pacific Islander	12	5.0	9	3.6	10	3.9	15	5.8	8	3.0
White	4,314	5.1	4,482	5.3	4,932	5.8	5,256	6.2	5,087	6.0
Multiracial	816	35.8	810	34.3	940	37.7	1,142	44.3	1,078	40.4
Transmission category^f										
Male-to-male sexual contact ^g	6,872	—	7,176	—	8,296	—	8,912	—	8,712	—
Injection drug use ^h	2,166	—	2,082	—	2,424	—	2,397	—	2,196	—
Male-to-male sexual contact ^g and injection drug use ^h	1,449	—	1,396	—	1,673	—	1,740	—	1,680	—
Heterosexual contact ⁱ	1,614	—	1,677	—	1,963	—	2,132	—	1,795	—
Perinatal ^j	51	—	41	—	59	—	55	—	56	—
Other ^k	58	—	58	—	68	—	59	—	45	—
Region of residence^l										
Northeast	2,483	10.7	2,599	11.2	3,224	13.4	3,155	13.2	2,987	12.5
Midwest	1,603	5.7	1,574	5.6	1,885	6.6	1,905	6.6	1,897	6.6
South	5,704	11.3	5,865	11.5	6,621	12.7	7,137	13.6	6,638	12.5
West	2,421	7.5	2,394	7.4	2,751	8.3	3,099	9.3	2,962	8.9
Subtotal^m	12,211	9.1	12,432	9.2	14,481	10.5	15,296	11.0	14,484	10.4
Female sex at birth^c										
Age at death (yr)										
13–14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15–19	4	0.0	2	0.0	4	0.0	0	0.0	2	0.0
20–24	26	0.2	28	0.3	30	0.3	26	0.2	21	0.2
25–29	74	0.6	66	0.6	100	0.9	96	0.9	85	0.8
30–34	149	1.4	154	1.4	193	1.7	159	1.4	149	1.3
35–39	236	2.2	237	2.2	246	2.3	237	2.2	233	2.1
40–44	328	3.3	292	2.9	332	3.3	339	3.3	382	3.6
45–49	469	4.5	418	4.1	469	4.7	474	4.8	365	3.7
50–54	682	6.4	576	5.5	599	5.8	656	6.3	552	5.3
55–59	669	5.9	643	5.7	762	6.9	875	8.1	688	6.5
60–64	617	5.8	606	5.7	735	6.9	810	7.5	744	6.9
65–69	353	3.9	374	4.0	538	5.7	565	5.9	555	5.7
70–74	181	2.5	216	2.9	323	4.2	321	4.0	367	4.5
≥75	193	1.5	222	1.7	324	2.5	327	2.4	310	2.2

Table 12a. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death, sex assigned at birth, and selected characteristics, 2018–2022—United States (cont)

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Female sex at birth^c (cont)										
Race/ethnicity										
American Indian/Alaska Native	15	1.5	19	1.9	33	3.3	23	2.2	30	2.9
Asian ^d	11	0.1	8	0.1	16	0.2	21	0.2	12	0.1
Black/African American	2,269	12.8	2,202	12.3	2,625	14.5	2,793	15.3	2,538	13.8
Hispanic/Latino ^e	583	2.6	565	2.4	736	3.1	730	3.0	666	2.7
Native Hawaiian/other Pacific Islander	1	0.4	5	2.0	1	0.4	0	0.0	1	0.4
White	826	0.9	773	0.9	865	1.0	959	1.1	869	1.0
Multiracial	276	11.4	261	10.4	379	14.5	357	13.3	337	12.1
Transmission category^f										
Injection drug use ^h	1,327	—	1,311	—	1,507	—	1,516	—	1,443	—
Heterosexual contact ⁱ	2,590	—	2,462	—	3,067	—	3,279	—	2,937	—
Perinatal ^j	36	—	37	—	44	—	54	—	45	—
Other ^k	28	—	25	—	38	—	36	—	28	—
Region of residence^l										
Northeast	1,034	4.2	1,047	4.2	1,299	5.2	1,232	4.9	1,191	4.8
Midwest	407	1.4	385	1.3	458	1.6	493	1.7	490	1.7
South	2,159	4.0	2,028	3.7	2,481	4.6	2,690	4.9	2,320	4.2
West	381	1.2	374	1.1	417	1.3	470	1.4	452	1.4
Subtotal^m	3,981	2.8	3,834	2.7	4,655	3.3	4,885	3.4	4,453	3.1
Total^m	16,192	5.9	16,266	5.9	19,136	6.8	20,181	7.2	18,937	6.7

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Deaths in 2020 and beyond should be interpreted considering the impact of the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

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

^c Data include transgender and additional gender identity persons.

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

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

^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^g Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^j Persons were aged ≥13 years at time of diagnosis of HIV infection.

^k Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^l Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used; when both residence at death and state where a person's death occurred were not available, the most recent known address on or before the date of death is used.

^m Includes persons whose race/ethnicity is unknown.

Table 12b. Death of persons aged ≥13 years with diagnosed HIV infection, by year of death, sex assigned at birth, and selected characteristics, 2018–2022—United States and 6 territories and freely associated states

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Male sex at birth^c										
Age at death (yr)										
13–14	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
15–19	5	0.0	9	0.1	9	0.1	5	0.0	4	0.0
20–24	99	0.9	97	0.9	111	1.0	86	0.7	97	0.8
25–29	352	2.9	374	3.1	367	3.1	393	3.4	404	3.5
30–34	474	4.2	515	4.5	611	5.2	769	6.5	764	6.4
35–39	590	5.4	624	5.7	723	6.4	875	7.7	862	7.6
40–44	657	6.6	669	6.7	843	8.0	901	8.4	949	8.7
45–49	1,155	11.1	1,009	9.9	1,074	10.4	1,123	11.2	989	9.9
50–54	1,936	18.7	1,726	16.9	1,785	17.0	1,704	16.1	1,500	14.2
55–59	2,308	21.4	2,313	21.5	2,613	23.9	2,625	24.5	2,345	22.4
60–64	1,947	19.8	2,103	21.1	2,485	24.2	2,606	25.1	2,440	23.4
65–69	1,412	17.4	1,508	18.2	1,853	21.6	2,031	23.1	1,991	22.2
70–74	801	12.7	885	13.4	1,200	17.5	1,323	18.5	1,264	17.7
≥75	765	8.3	879	9.2	1,082	11.5	1,142	11.9	1,170	11.5
Race/ethnicity										
American Indian/Alaska Native	34	—	38	—	49	—	58	—	49	—
Asian ^d	73	—	96	—	92	—	105	—	96	—
Black/African American	4,716	—	4,803	—	5,739	—	5,877	—	5,524	—
Hispanic/Latino ^e	2,533	—	2,465	—	2,991	—	3,129	—	2,936	—
Native Hawaiian/other Pacific Islander	13	—	11	—	10	—	15	—	8	—
White	4,315	—	4,484	—	4,934	—	5,257	—	5,087	—
Multiracial	817	—	812	—	940	—	1,142	—	1,079	—
Transmission category^f										
Male-to-male sexual contact ^g	6,951	—	7,248	—	8,378	—	8,976	—	8,804	—
Injection drug use ^h	2,287	—	2,205	—	2,530	—	2,514	—	2,293	—
Male-to-male sexual contact ^g and injection drug use ^h	1,472	—	1,421	—	1,702	—	1,768	—	1,711	—
Heterosexual contact ⁱ	1,676	—	1,736	—	2,017	—	2,210	—	1,864	—
Perinatal ^j	57	—	43	—	62	—	56	—	60	—
Other ^k	59	—	58	—	68	—	59	—	47	—
Region of residence^l										
Northeast	2,483	10.7	2,599	11.2	3,224	13.4	3,155	13.2	2,987	12.5
Midwest	1,603	5.7	1,574	5.6	1,885	6.6	1,905	6.6	1,897	6.6
South	5,704	11.3	5,865	11.5	6,621	12.7	7,137	13.6	6,638	12.5
West	2,421	7.5	2,394	7.4	2,751	8.3	3,099	9.3	2,962	8.9
U.S. territories and freely associated states	290	19.7	280	18.9	275	18.1	287	18.9	295	19.6
Subtotal^m	12,501	9.2	12,712	9.3	14,756	10.6	15,583	11.1	14,779	10.5
Female sex at birth^b										
Age at death (yr)										
13–14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15–19	4	0.0	2	0.0	4	0.0	0	0.0	2	0.0
20–24	26	0.2	28	0.3	30	0.3	26	0.2	21	0.2
25–29	75	0.6	68	0.6	100	0.9	97	0.9	86	0.8
30–34	153	1.4	160	1.4	195	1.7	160	1.4	149	1.3
35–39	242	2.2	243	2.2	250	2.3	241	2.2	237	2.1
40–44	334	3.3	303	3.0	338	3.3	343	3.3	388	3.6
45–49	480	4.5	427	4.1	483	4.7	480	4.8	370	3.7
50–54	695	6.5	589	5.6	610	5.8	661	6.3	561	5.3
55–59	684	6.0	655	5.8	779	6.9	891	8.1	702	6.5
60–64	624	5.8	617	5.7	749	6.9	824	7.5	761	6.9
65–69	358	3.9	377	4.0	546	5.8	576	6.0	565	5.7
70–74	184	2.5	221	2.9	328	4.2	334	4.1	370	4.5
≥75	198	1.5	223	1.7	329	2.5	335	2.5	317	2.2

Table 12b. Death of persons aged ≥13 years with diagnosed HIV infection, by year of death, sex assigned at birth, and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Female sex at birth^b (cont)										
Race/ethnicity										
American Indian/Alaska Native	15	—	19	—	33	—	23	—	30	—
Asian ^d	11	—	8	—	16	—	21	—	12	—
Black/African American	2,269	—	2,202	—	2,627	—	2,794	—	2,538	—
Hispanic/Latino ^e	657	—	643	—	820	—	811	—	742	—
Native Hawaiian/other Pacific Islander	3	—	5	—	1	—	0	—	1	—
White	826	—	773	—	865	—	959	—	869	—
Multiracial	276	—	262	—	379	—	358	—	337	—
Transmission category^f										
Injection drug use ^h	1,360	—	1,341	—	1,533	—	1,537	—	1,473	—
Heterosexual contact ⁱ	2,631	—	2,509	—	3,127	—	3,342	—	2,981	—
Perinatal ^j	38	—	38	—	44	—	54	—	47	—
Other ^k	28	—	26	—	38	—	36	—	28	—
Region of residence^l										
Northeast	1,034	4.2	1,047	4.2	1,299	5.2	1,232	4.9	1,191	4.8
Midwest	407	1.4	385	1.3	458	1.6	493	1.7	490	1.7
South	2,159	4.0	2,028	3.7	2,481	4.6	2,690	4.9	2,320	4.2
West	381	1.2	374	1.1	417	1.3	470	1.4	452	1.4
U.S. territories and freely associated states	76	4.6	79	4.8	86	5.1	83	4.9	76	4.5
Subtotal^m	4,057	2.9	3,913	2.7	4,741	3.3	4,968	3.4	4,529	3.1
Total^m	16,558	6.0	16,625	6.0	19,497	6.9	20,551	7.2	19,308	6.8

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Deaths in 2020 and beyond should be interpreted considering the impact of the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

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

^c Data include transgender and additional gender identity persons.

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

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

^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^g Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^j Persons were aged ≥13 years at time of diagnosis of HIV infection.

^k Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^l Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used; when both residence at death and state where a person's death occurred were not available, the most recent known address on or before the date of death is used.

^m Includes persons whose race/ethnicity is unknown.

Table 13a. Deaths of persons with diagnosed HIV infection, by race/ethnicity and selected characteristics, 2022—United States

	American Indian/ Alaska Native		Asian ^a		Black/African American		Hispanic/Latino ^b		Native Hawaiian/ other Pacific Islander		White		Multiracial		Total ^c	
	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d
	Gender															
Man	48	—	95	—	5,411	—	2,574	—	7	—	5,046	—	1,056	—	14,237	—
Woman	31	—	12	—	2,534	—	664	—	1	—	868	—	336	—	4,446	—
Transgender woman/girl ^e	1	—	1	—	110	—	68	—	1	—	41	—	21	—	243	—
Transgender man/boy ^e	0	—	0	—	4	—	1	—	0	—	1	—	1	—	7	—
Additional gender identity ^f	0	—	0	—	3	—	1	—	0	—	1	—	1	—	6	—
Age at death (yr)																
<13	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	2	0.0
13–14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15–19	0	0.0	0	0.0	5	0.2	0	0.0	0	0.0	1	0.0	0	0.0	6	0.0
20–24	0	0.0	1	0.1	63	2.0	29	0.5	0	0.0	17	0.1	8	1.0	118	0.5
25–29	7	3.9	4	0.3	228	7.1	123	2.5	0	0.0	95	0.8	26	4.1	483	2.2
30–34	6	3.2	7	0.4	455	13.5	177	3.7	1	1.9	202	1.6	57	10.8	905	3.9
35–39	12	7.3	6	0.3	462	16.0	252	5.5	1	1.9	273	2.2	79	19.2	1,085	4.9
40–44	10	6.7	3	0.2	571	20.8	260	5.8	0	0.0	358	3.0	112	31.4	1,314	6.1
45–49	4	2.9	18	1.2	562	22.7	299	7.4	1	2.5	357	3.2	97	33.7	1,338	6.8
50–54	6	4.3	10	0.7	872	33.9	381	10.5	0	0.0	579	4.5	175	66.0	2,023	9.7
55–59	8	5.5	11	0.9	1,220	47.7	498	16.0	3	8.5	989	7.2	246	105.1	2,975	14.2
60–64	9	6.2	17	1.6	1,357	55.6	470	18.5	0	0.0	1,030	7.0	252	113.2	3,135	14.8
65–69	11	9.0	12	1.3	1,088	54.5	371	19.4	1	3.9	846	6.3	176	97.2	2,505	13.4
70–74	3	3.2	10	1.3	670	45.4	227	16.7	0	0.0	597	5.3	101	75.6	1,608	10.6
≥75	3	2.3	9	0.8	509	25.6	221	11.0	2	7.5	612	3.3	86	43.5	1,442	6.0
Transmission category^g																
Male sex at birth (≥13 yr at death)^h																
Male-to-male sexual contact ⁱ	25	—	72	—	2,817	—	1,557	—	7	—	3,648	—	587	—	8,712	—
Injection drug use ^j	9	—	9	—	994	—	491	—	0	—	518	—	175	—	2,196	—
Male-to-male sexual contact ⁱ and injection drug use ^j	9	—	5	—	479	—	339	—	0	—	654	—	194	—	1,680	—
Heterosexual contact ^k	7	—	10	—	1,194	—	230	—	1	—	240	—	114	—	1,795	—
Perinatal ^l	0	—	0	—	27	—	14	—	0	—	9	—	6	—	56	—
Other ^m	0	—	0	—	13	—	10	—	0	—	19	—	2	—	45	—
Subtotal	49	4.9	96	1.2	5,524	33.2	2,642	10.3	8	3.0	5,087	6.0	1,078	40.4	14,484	10.4
Female sex at birth (≥13 yr at death)^h																
Injection drug use ^j	10	—	3	—	687	—	231	—	0	—	389	—	124	—	1,443	—
Heterosexual contact ^k	19	—	9	—	1,811	—	425	—	1	—	465	—	207	—	2,937	—
Perinatal ^l	0	—	0	—	30	—	8	—	0	—	3	—	4	—	45	—
Other ^m	1	—	0	—	11	—	2	—	0	—	12	—	2	—	28	—
Subtotal	30	2.9	12	0.1	2,538	13.8	666	2.7	1	0.4	869	1.0	337	12.1	4,453	3.1
Child (<13 yr at death)																
Perinatal	1	—	0	—	0	—	0	—	0	—	1	—	0	—	2	—
Other ^m	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—
Subtotal	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	2	0.0

Table 13a. Deaths of persons with diagnosed HIV infection, by race/ethnicity and selected characteristics, 2022—United States (cont)

	American Indian/ Alaska Native		Asian ^a		Black/African American		Hispanic/Latino ^b		Native Hawaiian/ other Pacific Islander		White		Multiracial		Total ^c	
	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d
Region of residenceⁿ																
Northeast	0	0.0	15	0.4	1,635	25.2	1,175	13.2	0	0.0	947	2.6	406	37.6	4,178	7.3
Midwest	9	2.2	15	0.6	1,039	14.2	163	2.7	0	0.0	975	1.9	186	12.1	2,387	3.5
South	25	3.1	21	0.4	4,800	19.5	999	4.1	2	1.8	2,537	3.6	575	21.1	8,959	7.0
West	46	4.3	57	0.7	588	16.1	971	4.0	7	1.5	1,498	3.9	248	9.3	3,415	4.3
Total	80	3.3	108	0.5	8,062	19.2	3,308	5.2	9	1.4	5,957	3.0	1,415	17.7	18,939	5.7

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Numbers less than 12, and rates based on these numbers, should be interpreted with caution.

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

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

^c Includes persons whose race/ethnicity is unknown.

^d Rates are per 100,000 population. Rates are not calculated by gender or transmission category because of the lack of denominator data.

^e "Transgender woman" includes persons who were assigned male sex at birth but have ever identified as a woman. "Transgender man" includes persons who were assigned female sex at birth but have ever identified as a man.

^f Additional gender identity examples include "nonbinary," "gender queer," and "two-spirit."

^g Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^h Data include transgender and additional gender identity persons.

ⁱ Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^j Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^l Persons were aged ≥ 13 years at time of diagnosis of HIV infection.

^m Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

ⁿ Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used; when both residence at death and state where a person's death occurred were not available, the most recent known address on or before the date of death is used.

Table 13b. Deaths of persons with diagnosed HIV infection, by race/ethnicity and selected characteristics, 2022—United States and 6 territories and freely associated states

	American Indian/ Alaska Native	Asian ^a	Black/African American	Hispanic/Latino ^b	Native Hawaiian/ other Pacific Islander	White	Multiracial	Total ^c
	No.	No.	No.	No.	No.	No.	No.	No.
Gender								
Man	48	95	5,411	2,868	7	5,046	1,057	14,532
Woman	31	12	2,534	740	1	868	336	4,522
Transgender woman/girl ^d	1	1	110	68	1	41	21	243
Transgender man/boy ^d	0	0	4	1	0	1	1	7
Additional gender identity ^e	0	0	3	1	0	1	1	6
Age at death (yr)								
<13	1	0	0	0	0	1	0	2
13–14	0	0	0	0	0	0	0	0
15–19	0	0	5	0	0	1	0	6
20–24	0	1	63	29	0	17	8	118
25–29	7	4	228	130	0	95	26	490
30–34	6	7	455	185	1	202	57	913
35–39	12	6	462	266	1	273	79	1,099
40–44	10	3	571	283	0	358	112	1,337
45–49	4	18	562	320	1	357	97	1,359
50–54	6	10	872	419	0	579	175	2,061
55–59	8	11	1,220	570	3	989	246	3,047
60–64	9	17	1,357	536	0	1,030	252	3,201
65–69	11	12	1,088	421	1	846	177	2,556
70–74	3	10	670	253	0	597	101	1,634
≥75	3	9	509	266	2	612	86	1,487
Transmission category^f								
Male sex at birth (≥13 yr at death)^g								
Male-to-male sexual contact ^h	25	72	2,817	1,649	7	3,648	587	8,804
Injection drug use ⁱ	9	9	994	588	0	518	175	2,293
Male-to-male sexual contact ^h and injection drug use ⁱ	9	5	479	370	0	654	195	1,711
Heterosexual contact ^j	7	10	1,194	299	1	240	114	1,864
Perinatal ^k	0	0	27	18	0	9	6	60
Other ^l	0	0	13	12	0	19	2	47
Subtotal	49	96	5,524	2,936	8	5,087	1,079	14,779
Female sex at birth (≥13 yr at death)^g								
Injection drug use ⁱ	10	3	687	261	0	389	124	1,473
Heterosexual contact ^j	19	9	1,811	469	1	465	207	2,981
Perinatal ^k	0	0	30	10	0	3	4	47
Other ^l	1	0	11	2	0	12	2	28
Subtotal	30	12	2,538	742	1	869	337	4,529
Child (<13 yr at death)								
Perinatal	1	0	0	0	0	1	0	2
Other ^l	0	0	0	0	0	0	0	0
Subtotal	1	0	0	0	0	1	0	2

Table 13b. Deaths of persons with diagnosed HIV infection, by race/ethnicity and selected characteristics, 2022—United States and 6 territories and freely associated states (cont)

	American Indian/ Alaska Native	Asian ^a	Black/African American	Hispanic/Latino ^b	Native Hawaiian/ other Pacific Islander	White	Multiracial	Total ^c
	No.	No.	No.	No.	No.	No.	No.	No.
Region of residence^m								
Northeast	0	15	1,635	1,175	0	947	406	4,178
Midwest	9	15	1,039	163	0	975	186	2,387
South	25	21	4,800	999	2	2,537	575	8,959
West	46	57	588	971	7	1,498	248	3,415
U.S. territories and freely associated states	0	0	0	370	0	0	1	371
Total	80	108	8,062	3,678	9	5,957	1,416	19,310

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Data reported for freely associated states do not include the Marshall Islands or Federated States of Micronesia who do not report HIV surveillance data to CDC. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Numbers less than 12 should be interpreted with caution.

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

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

^c Includes persons whose race/ethnicity is unknown.

^d "Transgender woman" includes persons who were assigned male sex at birth but have ever identified as a woman. "Transgender man" includes persons who were assigned female sex at birth but have ever identified as a man.

^e Additional gender identity examples include "nonbinary," "gender queer," and "two-spirit."

^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^g Data include transgender and additional gender identity persons.

^h Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

ⁱ Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^k Persons were aged ≥ 13 years at time of diagnosis of HIV infection.

^l Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^m Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used; when both residence at death and state where a person's death occurred were not available, the most recent known address on or before the date of death is used.

Table 14a. Deaths of transgender and additional gender identity persons aged ≥13 years with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States

	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a No.	2021 No.	2022 No.
Transgender woman^b					
Age at death (yr)					
13–14	0	0	0	0	0
15–19	0	0	0	0	0
20–24	1	5	7	5	4
25–29	12	17	18	12	17
30–34	10	19	30	44	50
35–39	14	17	29	33	41
40–44	12	17	24	29	21
45–49	12	17	27	16	22
50–54	20	17	21	20	35
55–59	18	17	25	30	23
60–64	11	12	14	20	16
65–69	7	4	12	9	10
70–74	4	3	4	6	2
≥75	0	0	0	3	2
Race/ethnicity					
American Indian/Alaska Native	2	1	4	5	1
Asian ^c	2	1	3	2	1
Black/African American	47	69	107	104	110
Hispanic/Latino ^d	36	33	54	66	68
Native Hawaiian/other Pacific Islander	0	0	1	0	1
White	21	24	23	25	41
Multiracial	13	17	19	25	21
Exposure category^e					
Sexual contact ^f	80	99	146	169	178
Injection drug use ^g	0	1	2	0	0
Sexual contact ^f and injection drug use ^g	39	39	58	51	54
Other ^h	2	6	5	7	11
Region of residenceⁱ					
Northeast	33	39	61	57	55
Midwest	11	22	22	27	32
South	43	55	73	82	95
West	34	29	55	61	61
Subtotal	121	145	211	227	243
Transgender man^b					
Age at death (yr)					
13–14	0	0	0	0	0
15–19	0	0	0	0	1
20–24	0	0	1	0	0
25–29	0	1	1	0	0
30–34	0	0	1	0	1
35–39	0	0	1	0	2
40–44	0	0	2	0	1
45–49	2	0	1	0	1
50–54	1	1	0	0	0
55–59	1	1	1	1	0
60–64	0	2	1	2	0
65–69	0	0	0	0	1
70–74	1	0	0	0	0
≥75	0	0	1	0	0
Race/ethnicity					
American Indian/Alaska Native	0	0	0	0	0
Asian ^c	0	0	0	0	0
Black/African American	0	1	3	2	4
Hispanic/Latino ^d	2	2	2	1	1
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	2	1	2	0	1
Multiracial	1	1	3	0	1
Exposure category^e					
Sexual contact ^f	0	3	6	1	4
Injection drug use ^g	0	0	0	0	0
Sexual contact ^f and injection drug use ^g	5	1	4	2	2
Other ^h	0	1	0	0	1
Region of residenceⁱ					
Northeast	0	1	2	1	3
Midwest	1	1	1	1	1
South	3	3	4	1	1
West	1	0	3	0	2
Subtotal	5	5	10	3	7

Table 14a. Deaths of transgender and additional gender identity persons aged ≥13 years with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States (cont)

	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a No.	2021 No.	2022 No.
Additional gender identity^j					
Age at death (yr)					
13–14	0	0	0	0	0
15–19	0	0	0	0	0
20–24	0	0	0	0	1
25–29	0	0	0	0	2
30–34	0	0	0	0	0
35–39	0	0	0	0	1
40–44	0	1	0	0	0
45–49	0	0	0	0	0
50–54	0	0	0	0	0
55–59	1	0	0	0	0
60–64	0	0	0	1	0
65–69	0	0	0	0	1
70–74	0	1	0	0	1
≥75	0	0	0	0	0
Race/ethnicity					
American Indian/Alaska Native	0	0	0	0	0
Asian ^c	0	0	0	0	0
Black/African American	0	2	0	0	3
Hispanic/Latino ^d	1	0	0	0	1
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	0	0	0	0	1
Multiracial	0	0	0	1	1
Exposure category^e					
Sexual contact ^f	0	1	0	1	6
Injection drug use ^g	0	0	0	0	0
Sexual contact ^f and injection drug use ^g	1	1	0	0	0
Other ^h	0	0	0	0	0
Region of residenceⁱ					
Northeast	0	1	0	1	2
Midwest	0	1	0	0	1
South	0	0	0	0	1
West	1	0	0	0	2
Subtotal	1	2	0	1	6
Total	127	152	221	231	256

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Deaths in 2020 and beyond should be interpreted considering the impact of the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm. Numbers less than 12, and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.

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

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

^e Risk factor data for transgender and additional gender identity persons aged ≥13 years are presented using the exposure category classification, which is meant to convey all the known ways the person could have been exposed to HIV. Exposure categories are mutually exclusive and have no presumed hierarchical order of probability, except for rare circumstances where route of transmission has been confirmed through investigation. See Technical Notes for more information on exposure categories.

^f For persons assigned “male” sex at birth, sexual contact with any person. For persons assigned “female” sex at birth, sexual contact with a person assigned “male” sex at birth.

^g Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^h Other risk factors, including perinatal transmission, hemophilia, blood transfusion, and risk factor not reported or not identified. Data were not statistically adjusted to account for missing exposure category; therefore, case counts for “Other” might be high.

ⁱ Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at death. When information on residence at death was not available, state at death (where a person’s death occurred) was used; when both residence at death and state where a person’s death occurred were not available, the most recent known address on or before the date of death is used.

^j Additional gender identity examples include “nonbinary,” “gender queer,” and “two-spirit.”

Table 14b. Deaths of transgender and additional gender identity persons aged ≥13 years with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States and 6 territories and freely associated states

	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a No.	2021 No.	2022 No.
Transgender woman^b					
Age at death (yr)					
13–14	0	0	0	0	0
15–19	0	0	0	0	0
20–24	1	5	7	5	4
25–29	12	17	18	12	17
30–34	10	19	30	44	50
35–39	14	17	29	34	41
40–44	12	17	24	29	21
45–49	12	18	27	16	22
50–54	20	17	22	20	35
55–59	18	17	25	30	23
60–64	11	12	14	20	16
65–69	7	5	12	9	10
70–74	5	3	4	6	2
≥75	0	0	0	3	2
Race/ethnicity					
American Indian/Alaska Native	2	1	4	5	1
Asian ^c	2	1	3	2	1
Black/African American	47	69	107	104	110
Hispanic/Latino ^d	37	35	55	67	68
Native Hawaiian/other Pacific Islander	0	0	1	0	1
White	21	24	23	25	41
Multiracial	13	17	19	25	21
Exposure category^e					
Sexual contact ^f	81	99	147	169	178
Injection drug use ^g	0	1	2	0	0
Sexual contact ^f and injection drug use ^g	39	41	58	52	54
Other ^h	2	6	5	7	11
Region of residenceⁱ					
Northeast	33	39	61	57	55
Midwest	11	22	22	27	32
South	43	55	73	82	95
West	34	29	55	61	61
U.S. territories and freely associated states	1	2	1	1	0
Subtotal	122	147	212	228	243
Transgender man^b					
Age at death (yr)					
13–14	0	0	0	0	0
15–19	0	0	0	0	1
20–24	0	0	1	0	0
25–29	0	1	1	0	0
30–34	0	0	1	0	1
35–39	0	0	1	0	2
40–44	0	0	2	0	1
45–49	2	0	1	0	1
50–54	1	1	0	0	0
55–59	1	1	1	1	0
60–64	0	2	1	2	0
65–69	0	0	0	0	1
70–74	1	0	0	0	0
≥75	0	0	1	0	0
Race/ethnicity					
American Indian/Alaska Native	0	0	0	0	0
Asian ^c	0	0	0	0	0
Black/African American	0	1	3	2	4
Hispanic/Latino ^d	2	2	2	1	1
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	2	1	2	0	1
Multiracial	1	1	3	0	1
Exposure category^e					
Sexual contact ^f	0	3	6	1	4
Injection drug use ^g	0	0	0	0	0
Sexual contact ^f and injection drug use ^g	5	1	4	2	2
Other ^h	0	1	0	0	1
Region of residenceⁱ					
Northeast	0	1	2	1	3
Midwest	1	1	1	1	1
South	3	3	4	1	1
West	1	0	3	0	2
U.S. territories and freely associated states	0	0	0	0	0
Subtotal	5	5	10	3	7

Table 14b. Deaths of transgender and additional gender identity persons aged ≥13 years with diagnosed HIV infection, by year of death and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a No.	2021 No.	2022 No.
Additional gender identity^j					
Age at death (yr)					
13–14	0	0	0	0	0
15–19	0	0	0	0	0
20–24	0	0	0	0	1
25–29	0	0	0	0	2
30–34	0	0	0	0	0
35–39	0	0	0	0	1
40–44	0	1	0	0	0
45–49	0	0	0	0	0
50–54	0	0	0	0	0
55–59	1	0	0	0	0
60–64	0	0	0	1	0
65–69	0	0	0	0	1
70–74	0	1	0	0	1
≥75	0	0	0	0	0
Race/ethnicity					
American Indian/Alaska Native	0	0	0	0	0
Asian ^c	0	0	0	0	0
Black/African American	0	2	0	0	3
Hispanic/Latino ^d	1	0	0	0	1
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	0	0	0	0	1
Multiracial	0	0	0	1	1
Exposure category^e					
Sexual contact ^f	0	1	0	1	6
Injection drug use ^g	0	0	0	0	0
Sexual contact ^f and injection drug use ^g	1	1	0	0	0
Other ^h	0	0	0	0	0
Region of residenceⁱ					
Northeast	0	1	0	1	2
Midwest	0	1	0	0	1
South	0	0	0	0	1
West	1	0	0	0	2
U.S. territories and freely associated states	0	0	0	0	0
Subtotal	1	2	0	1	6
Total	128	154	222	232	256

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Deaths in 2020 and beyond should be interpreted considering the impact of the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm. Numbers less than 12, and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.

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

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

^e Risk factor data for transgender and additional gender identity persons aged ≥13 years are presented using the exposure category classification, which is meant to convey all the known ways the person could have been exposed to HIV. Exposure categories are mutually exclusive and have no presumed hierarchical order of probability, except for rare circumstances where route of transmission has been confirmed through investigation. See Technical Notes for more information on exposure categories.

^f For persons assigned “male” sex at birth, sexual contact with any person. For persons assigned “female” sex at birth, sexual contact with a person assigned “male” sex at birth.

^g Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^h Other risk factors, including perinatal transmission, hemophilia, blood transfusion, and risk factor not reported or not identified. Data were not statistically adjusted to account for missing exposure category; therefore, case counts for “Other” might be high.

ⁱ Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at death. When information on residence at death was not available, state at death (where a person’s death occurred) was used; when both residence at death and state where a person’s death occurred were not available, the most recent known address on or before the date of death is used.

^j Additional gender identity examples include “nonbinary,” “gender queer,” and “two-spirit.”

Table 15a. Persons living with diagnosed HIV infection, by year and selected characteristics, 2018–2022—United States

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Gender										
Man	765,818	—	783,618	—	794,561	—	809,730	—	829,121	—
Woman	237,910	—	241,503	—	242,637	—	244,876	—	248,381	—
Transgender woman/girl ^c	11,883	—	12,506	—	13,054	—	13,772	—	14,524	—
Transgender man/boy ^c	469	—	512	—	542	—	600	—	653	—
Additional gender identity ^d	294	—	328	—	355	—	404	—	466	—
Age at end of year (yr)										
<13	1,895	3.6	1,668	3.2	1,442	2.8	1,265	2.5	1,124	2.2
13–14	669	8.0	657	7.9	642	7.4	596	6.8	525	6.1
15–19	4,363	20.7	4,251	20.2	3,818	17.4	3,718	17.2	3,626	16.8
20–24	27,033	123.9	26,103	120.6	24,328	110.2	23,890	106.2	23,741	104.6
25–29	70,814	300.7	69,360	294.7	65,618	288.3	62,742	280.2	61,131	275.4
30–34	87,541	395.5	92,966	413.8	96,979	425.6	100,681	437.1	103,964	446.0
35–39	93,229	432.6	95,210	437.7	96,467	435.8	100,027	450.4	104,858	470.9
40–44	96,102	488.2	97,644	490.2	99,959	485.1	102,673	488.0	105,495	492.3
45–49	122,445	591.1	116,353	570.6	108,672	536.0	104,384	528.6	103,428	527.0
50–54	156,379	749.8	149,552	730.6	144,246	696.3	137,937	661.6	132,259	635.6
55–59	151,547	691.5	158,852	726.3	161,550	737.4	161,351	751.9	157,958	753.4
60–64	103,416	509.4	111,219	540.9	119,221	570.8	126,767	601.3	134,859	638.6
65–69	57,834	338.9	64,983	372.5	71,229	398.6	78,525	430.5	86,021	461.7
70–74	26,519	198.2	30,518	217.6	35,196	242.7	39,868	262.6	44,844	295.9
≥75	16,590	75.7	19,133	84.8	21,784	97.0	24,960	109.4	29,314	122.1
Race/ethnicity										
American Indian/Alaska Native	2,775	115.1	2,900	119.7	2,997	124.6	3,130	129.7	3,272	135.2
Asian ^e	14,405	76.9	15,141	79.4	15,729	80.3	16,457	83.1	17,338	85.5
Black/African American	408,505	998.8	417,326	1,013.1	421,963	1,011.0	428,293	1,023.2	435,699	1,035.6
Hispanic/Latino ^f	235,577	396.1	243,702	403.5	249,104	402.8	257,341	410.9	269,308	423.0
Native Hawaiian/other Pacific Islander	743	125.2	787	130.3	836	135.5	899	143.9	976	153.5
White	294,622	149.1	298,425	151.3	300,462	152.0	303,423	154.1	307,013	156.5
Multiracial	59,093	821.6	59,536	807.1	59,409	778.7	59,193	758.5	58,892	736.7
Transmission category^g										
Male sex at birth (≥13 yr at end of year)^h										
Male-to-male sexual contact ⁱ	566,603	—	584,334	—	597,308	—	613,879	—	633,765	—
Injection drug use ^j	66,578	—	65,959	—	64,806	—	63,947	—	63,409	—
Male-to-male sexual contact ⁱ and injection drug use ^j	58,514	—	58,752	—	58,333	—	58,038	—	57,732	—
Heterosexual contact ^k	77,713	—	78,811	—	78,977	—	79,504	—	80,635	—
Perinatal ^l	4,895	—	5,020	—	5,102	—	5,191	—	5,274	—
Other ^m	2,760	—	2,759	—	2,737	—	2,731	—	2,739	—
Subtotal	777,063	579.4	795,634	589.4	807,263	585.1	823,290	594.2	843,554	605.6
Female sex at birth (≥13 yr at end of year)^h										
Injection drug use ^j	48,778	—	48,690	—	48,108	—	47,739	—	47,539	—
Heterosexual contact ^k	181,306	—	184,962	—	186,693	—	189,314	—	192,991	—
Perinatal ^l	5,670	—	5,830	—	5,951	—	6,075	—	6,229	—
Other ^m	1,664	—	1,685	—	1,694	—	1,701	—	1,710	—
Subtotal	237,418	169.4	241,167	170.9	242,446	171.2	244,829	172.0	248,469	173.5
Child (<13 yr at end of year)										
Perinatal	1,564	—	1,383	—	1,207	—	1,066	—	956	—
Other ^m	331	—	285	—	235	—	199	—	168	—
Subtotal	1,895	3.6	1,668	3.2	1,442	2.8	1,265	2.5	1,124	2.2

Table 15a. Persons living with diagnosed HIV infection, by year and selected characteristics, 2018–2022—United States (cont)

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Region of residenceⁿ										
Northeast	232,535	414.6	233,982	417.8	233,477	406.4	234,065	408.8	236,341	414.3
Midwest	121,533	178.0	124,253	181.8	126,159	182.9	128,618	186.8	131,602	191.3
South	460,724	369.6	473,420	376.7	481,441	380.7	492,500	386.7	506,546	393.5
West	201,584	259.0	206,814	264.1	210,074	267.1	214,201	272.6	218,658	277.7
Total^o	1,016,376	311.0	1,038,469	316.3	1,051,151	317.1	1,069,384	322.1	1,093,147	328.0

Note. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

- ^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.
- ^b Rates are per 100,000 population. Rates are not calculated by gender or transmission category because of the lack of denominator data.
- ^c “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.
- ^d Additional gender identity examples include “nonbinary,” “gender queer,” and “two-spirit.”
- ^e Includes Asian/Pacific Islander legacy cases (see Technical Notes).
- ^f Hispanic/Latino persons can be of any race.
- ^g Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.
- ^h Data include transgender and additional gender identity persons.
- ⁱ Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).
- ^j Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).
- ^k Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.
- ^l Persons were aged ≥ 13 years at time of diagnosis of HIV infection.
- ^m Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.
- ⁿ Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at the end of the specified year (i.e., most recent known address).
- ^o Includes persons of unknown gender and persons whose race/ethnicity is unknown.

Table 15b. Persons living with diagnosed HIV infection, by year and selected characteristics, 2018–2022—United States and 6 territories and freely associated states

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Gender										
Man	777,102	—	794,983	—	805,905	—	821,160	—	840,579	—
Woman	242,735	—	246,324	—	247,412	—	249,640	—	253,150	—
Transgender woman/girl ^c	11,919	—	12,545	—	13,095	—	13,808	—	14,565	—
Transgender man/boy ^c	473	—	516	—	546	—	604	—	656	—
Additional gender identity ^d	296	—	329	—	356	—	405	—	466	—
Age at end of year (yr)										
<13	1,904	3.6	1,674	3.2	1,445	2.8	1,268	2.5	1,126	2.2
13–14	677	8.0	663	7.9	648	7.4	599	6.8	526	6.0
15–19	4,405	20.7	4,276	20.1	3,841	17.3	3,738	17.1	3,652	16.7
20–24	27,299	123.7	26,353	120.4	24,546	109.9	24,081	105.9	23,909	104.2
25–29	71,500	300.5	70,038	294.4	66,222	287.7	63,331	279.7	61,688	274.9
30–34	88,391	395.8	93,842	413.9	97,870	425.3	101,569	436.5	104,866	445.4
35–39	94,378	433.6	96,265	438.3	97,464	436.2	101,027	450.8	105,859	471.1
40–44	97,596	490.3	99,078	491.9	101,357	486.6	104,056	489.4	106,793	493.3
45–49	124,389	593.8	118,179	573.1	110,322	537.9	105,939	530.4	104,955	528.8
50–54	159,156	754.3	152,129	734.6	146,717	700.0	140,228	665.0	134,381	638.6
55–59	154,255	696.1	161,715	731.2	164,385	741.8	164,168	756.2	160,708	757.6
60–64	105,412	513.4	113,338	545.2	121,492	575.1	129,130	605.6	137,329	643.0
65–69	58,965	341.4	66,272	375.5	72,621	401.6	80,084	433.9	87,691	465.2
70–74	27,138	200.0	31,194	219.4	35,986	244.8	40,742	264.9	45,822	298.5
≥75	17,062	76.8	19,683	86.0	22,400	98.2	25,659	110.7	30,113	123.4
Race/ethnicity										
American Indian/Alaska Native	2,777	—	2,902	—	2,999	—	3,132	—	3,274	—
Asian ^e	14,465	—	15,208	—	15,796	—	16,525	—	17,406	—
Black/African American	408,815	—	417,639	—	422,282	—	428,620	—	436,028	—
Hispanic/Latino ^f	251,216	—	259,399	—	264,725	—	273,015	—	285,014	—
Native Hawaiian/other Pacific Islander	775	—	819	—	869	—	932	—	1,010	—
White	294,703	—	298,515	—	300,554	—	303,523	—	307,118	—
Multiracial	59,117	—	59,562	—	59,437	—	59,220	—	58,916	—
Transmission category^g										
Male sex at birth (≥13 yr at end of year)^h										
Male-to-male sexual contact ⁱ	571,430	—	589,335	—	602,436	—	619,204	—	639,235	—
Injection drug use ^j	69,861	—	69,143	—	67,887	—	66,941	—	66,335	—
Male-to-male sexual contact ⁱ and injection drug use ^j	59,275	—	59,507	—	59,067	—	58,763	—	58,439	—
Heterosexual contact ^k	80,009	—	81,121	—	81,269	—	81,782	—	82,897	—
Perinatal ^l	5,019	—	5,145	—	5,224	—	5,308	—	5,383	—
Other ^m	2,786	—	2,785	—	2,764	—	2,756	—	2,764	—
Subtotal	788,380	581.5	807,036	591.4	818,647	586.9	834,755	595.9	855,052	607.2
Female sex at birth (≥13 yr at end of year)^h										
Injection drug use ^j	49,729	—	49,629	—	49,020	—	48,626	—	48,407	—
Heterosexual contact ^k	185,055	—	188,727	—	190,437	—	193,073	—	196,775	—
Perinatal ^l	5,786	—	5,939	—	6,063	—	6,185	—	6,339	—
Other ^m	1,674	—	1,694	—	1,704	—	1,712	—	1,719	—
Subtotal	242,243	170.8	245,989	172.4	247,224	172.5	249,596	173.3	253,240	174.8
Child (<13 yr at end of year)										
Perinatal	1,573	—	1,389	—	1,210	—	1,069	—	958	—
Other ^m	331	—	285	—	235	—	199	—	168	—
Subtotal	1,904	3.6	1,674	3.2	1,445	2.8	1,268	2.5	1,126	2.2

Table 15b. Persons living with diagnosed HIV infection, by year and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Region of residenceⁿ										
Northeast	232,535	414.6	233,982	417.8	233,477	406.4	234,065	408.8	236,341	414.3
Midwest	121,533	178.0	124,253	181.8	126,159	182.9	128,618	186.8	131,602	191.3
South	460,724	369.6	473,420	376.7	481,441	380.7	492,500	386.7	506,546	393.5
West	201,584	259.0	206,814	264.1	210,074	267.1	214,201	272.6	218,658	277.7
U.S. territories and freely associated states	16,151	449.7	16,230	452.0	16,165	439.6	16,235	443.9	16,271	450.1
Total^o	1,032,527	312.5	1,054,699	317.8	1,067,316	318.4	1,085,619	323.4	1,109,418	329.3

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b Rates are per 100,000 population. Rates are not calculated by gender or transmission category because of the lack of denominator data.

^c “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.

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

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

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

^g Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person’s sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^h Data include transgender and additional gender identity persons.

ⁱ Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^j Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^l Persons were aged ≥ 13 years at time of diagnosis of HIV infection.

^m Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

ⁿ Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at the end of the specified year (i.e., most recent known address).

^o Includes persons of unknown gender and persons whose race/ethnicity is unknown.

Table 16a. Persons living with diagnosed HIV infection, by race/ethnicity and selected characteristics, year-end 2022—United States

	American Indian/ Alaska Native		Asian ^a		Black/ African American		Hispanic/Latino ^b		Native Hawaiian/ other Pacific Islander		White		Multiracial		Total ^c	
	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d
Gender																
Man	2,405	—	14,121	—	286,213	—	216,719	—	782	—	264,402	—	44,010	—	829,121	—
Woman	797	—	2,951	—	142,475	—	47,307	—	153	—	40,858	—	13,660	—	248,381	—
Transgender woman/girl ^e	65	—	244	—	6,578	—	4,996	—	41	—	1,488	—	1,112	—	14,524	—
Transgender man/boy ^e	3	—	12	—	257	—	156	—	0	—	163	—	62	—	653	—
Additional gender identity ^f	2	—	10	—	175	—	130	—	0	—	101	—	48	—	466	—
Age at end of year (yr)																
<13	6	1.5	84	2.9	629	8.9	170	1.3	3	2.7	138	0.6	94	3.7	1,124	2.2
13–14	1	1.4	34	7.6	304	25.3	70	3.1	0	0.0	71	1.7	45	11.8	525	6.1
15–19	6	3.4	113	9.8	2,105	71.8	786	14.4	5	11.3	412	3.7	199	23.4	3,626	16.8
20–24	102	54.7	384	29.3	12,849	406.5	6,313	118.0	38	84.5	3,014	25.3	1,039	136.0	23,741	104.6
25–29	239	131.7	1,149	77.6	29,262	916.8	17,708	362.1	71	152.8	9,635	81.9	3,060	479.4	61,131	275.4
30–34	430	227.6	1,899	109.7	48,020	1,425.2	28,467	591.0	131	244.7	19,025	150.7	5,986	1,137.4	103,964	446.0
35–39	377	230.7	2,049	119.2	44,179	1,530.0	29,848	647.8	128	245.5	22,230	178.9	6,042	1,470.5	104,858	470.9
40–44	383	255.5	2,118	133.8	41,662	1,518.5	30,588	686.0	126	267.8	24,518	202.8	6,089	1,706.7	105,495	492.3
45–49	320	234.7	2,283	155.1	40,233	1,627.7	29,573	733.2	109	277.4	25,168	225.0	5,718	1,984.9	103,428	527.0
50–54	426	302.4	2,399	174.7	49,152	1,913.4	33,835	929.5	107	287.9	38,878	304.2	7,390	2,785.1	132,259	635.6
55–59	404	275.7	1,852	156.3	57,054	2,231.3	35,714	1,144.2	102	288.4	54,026	394.7	8,671	3,703.0	157,958	753.4
60–64	303	207.1	1,253	117.7	49,768	2,039.2	26,685	1,051.9	67	206.2	49,664	338.4	6,979	3,134.4	134,859	638.6
65–69	156	127.9	849	90.6	33,075	1,657.6	15,951	835.8	47	181.6	31,509	234.1	4,320	2,386.4	86,021	461.7
70–74	76	82.3	495	65.5	16,938	1,148.7	7,894	580.2	26	132.4	17,277	152.6	2,063	1,544.6	44,844	295.9
≥75	43	32.8	377	32.4	10,469	527.2	5,706	283.0	16	59.7	11,448	61.9	1,197	604.8	29,314	122.1
Transmission category^g																
Male sex at birth (≥ 13 yr at end of year)^h																
Male-to-male sexual contact ⁱ	1,774	—	12,204	—	196,790	—	170,880	—	701	—	217,304	—	33,797	—	633,765	—
Injection drug use ^j	221	—	466	—	28,141	—	18,291	—	27	—	13,490	—	2,705	—	63,409	—
Male-to-male sexual contact ⁱ and injection drug use ^j	296	—	434	—	14,990	—	13,916	—	50	—	23,323	—	4,681	—	57,732	—
Heterosexual contact ^k	158	—	1,095	—	48,942	—	16,971	—	38	—	9,978	—	3,424	—	80,635	—
Perinatal ^l	6	—	70	—	2,995	—	1,263	—	3	—	567	—	361	—	5,274	—
Other ^m	15	—	69	—	797	—	442	—	2	—	1,260	—	149	—	2,739	—
Subtotal	2,469	247.0	14,337	173.2	292,655	1,759.7	221,763	868.4	821	311.6	265,923	313.1	45,117	1,689.4	843,554	605.6
Female sex at birth (≥ 13 yr at end of year)^h																
Injection drug use ^j	276	—	193	—	21,533	—	9,404	—	29	—	12,932	—	3,115	—	47,539	—
Heterosexual contact ^k	504	—	2,556	—	116,476	—	36,295	—	122	—	26,909	—	10,019	—	192,991	—
Perinatal ^l	10	—	90	—	3,623	—	1,405	—	0	—	641	—	454	—	6,229	—
Other ^m	7	—	78	—	783	—	271	—	1	—	471	—	94	—	1,710	—
Subtotal	797	77.1	2,917	32.0	142,415	776.2	47,375	190.3	152	58.6	40,952	47.2	13,681	492.2	248,469	173.5
Child (<13 yr at end of year)																
Perinatal	5	—	53	—	545	—	156	—	3	—	112	—	82	—	956	—
Other ^m	1	—	31	—	84	—	14	—	0	—	26	—	12	—	168	—
Subtotal	6	1.5	84	2.9	629	8.9	170	1.3	3	2.7	138	0.6	94	3.7	1,124	2.2

Table 16a. Persons living with diagnosed HIV infection, by race/ethnicity and selected characteristics, year-end 2022—United States (cont)

	American Indian/ Alaska Native		Asian ^a		Black/ African American		Hispanic/Latino ^b		Native Hawaiian/ other Pacific Islander		White		Multiracial		Total ^c	
	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d
Region of residenceⁿ																
Northeast	151	114.8	3,694	88.9	88,473	1,363.8	75,375	848.4	70	298.0	53,004	146.1	15,249	1,411.2	236,341	414.3
Midwest	435	105.7	1,668	66.2	54,839	751.3	18,510	310.6	56	127.5	48,602	95.3	7,420	484.4	131,602	191.3
South	789	96.6	3,792	75.6	258,639	1,050.0	96,462	392.8	162	149.8	120,350	169.8	26,205	962.2	506,546	393.5
West	1,897	178.7	8,184	95.3	33,748	924.5	78,961	325.4	688	149.4	85,057	223.4	10,018	376.9	218,658	277.7
Total^o	3,272	135.2	17,338	85.5	435,699	1,035.6	269,308	423.0	976	153.5	307,013	156.5	58,892	736.7	1,093,147	328.0

Note. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Numbers less than 12, and rates based on these numbers, should be interpreted with caution.

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

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

^c Includes persons whose race/ethnicity is unknown.

^d Rates are per 100,000 population. Rates are not calculated by gender or transmission category because of the lack of denominator data.

^e "Transgender woman" includes persons who were assigned male sex at birth but have ever identified as a woman. "Transgender man" includes persons who were assigned female sex at birth but have ever identified as a man.

^f Additional gender identity examples include "nonbinary," "gender queer," and "two-spirit."

^g Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^h Data include transgender and additional gender identity persons.

ⁱ Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^j Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^l Persons were aged ≥ 13 years at time of diagnosis of HIV infection.

^m Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

ⁿ Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at the end of the specified year (i.e., most recent known address).

^o Includes persons of unknown gender.

Table 16b. Persons living with diagnosed HIV infection, by race/ethnicity and selected characteristics, year-end 2022—United States and 6 territories and freely associated states

	American Indian/ Alaska Native No.	Asian ^a No.	Black/ African American No.	Hispanic/Latino ^b No.	Native Hawaiian/ other Pacific Islander No.	White No.	Multiracial No.	Total ^c No.
Gender								
Man	2,407	14,178	286,413	227,784	809	264,489	44,028	840,579
Woman	797	2,962	142,604	51,905	160	40,876	13,665	253,150
Transgender woman/girl ^d	65	244	6,578	5,036	41	1,488	1,113	14,565
Transgender man/boy ^d	3	12	257	159	0	163	62	656
Additional gender identity ^e	2	10	175	130	0	101	48	466
Age at end of year (yr)								
<13	6	84	630	171	3	138	94	1,126
13–14	1	34	304	70	1	71	45	526
15–19	6	113	2,107	809	5	412	200	3,652
20–24	102	384	12,853	6,475	39	3,014	1,040	23,909
25–29	239	1,149	29,267	18,253	72	9,639	3,062	61,688
30–34	430	1,905	48,034	29,335	138	19,032	5,986	104,866
35–39	377	2,057	44,193	30,812	133	22,240	6,042	105,859
40–44	383	2,125	41,691	31,834	130	24,526	6,093	106,793
45–49	320	2,288	40,266	31,051	110	25,176	5,720	104,955
50–54	426	2,408	49,199	35,880	110	38,891	7,393	134,381
55–59	405	1,862	57,116	38,365	107	54,042	8,676	160,708
60–64	304	1,268	49,805	29,078	71	49,682	6,981	137,329
65–69	156	851	33,104	17,575	47	31,520	4,323	87,691
70–74	76	497	16,962	8,839	28	17,281	2,064	45,822
≥75	43	381	10,497	6,467	16	11,454	1,197	30,113
Transmission category^f								
Male sex at birth (≥ 13 yr at end of year)^g								
Male-to-male sexual contact ^h	1,775	12,251	196,884	176,094	722	217,377	33,814	639,235
Injection drug use ⁱ	221	471	28,173	21,176	28	13,493	2,706	66,335
Male-to-male sexual contact ^h and injection drug use ⁱ	296	436	14,996	14,607	52	23,328	4,682	58,439
Heterosexual contact ^j	159	1,098	49,007	19,154	41	9,984	3,424	82,897
Perinatal ^k	6	70	2,997	1,371	3	567	361	5,383
Other ^l	15	70	797	466	2	1,260	149	2,764
Subtotal	2,471	14,394	292,854	232,868	848	266,010	45,136	855,052
Female sex at birth (≥ 13 yr at end of year)^h								
Injection drug use ⁱ	276	195	21,544	10,252	29	12,938	3,115	48,407
Heterosexual contact ^j	504	2,565	116,586	39,938	128	26,920	10,022	196,775
Perinatal ^k	10	90	3,628	1,508	1	641	455	6,339
Other ^l	7	79	785	278	1	471	94	1,719
Subtotal	797	2,928	142,544	51,975	159	40,970	13,686	253,240
Child (<13 yr at end of year)								
Perinatal	5	53	546	157	3	112	82	958
Other ^l	1	31	84	14	0	26	12	168
Subtotal	6	84	630	171	3	138	94	1,126

Table 16b. Persons living with diagnosed HIV infection, by race/ethnicity and selected characteristics, year-end 2022—United States and 6 territories and freely associated states (cont)

	American Indian/ Alaska Native	Asian ^a	Black/ African American	Hispanic/Latino ^b	Native Hawaiian/ other Pacific Islander	White	Multiracial	Total ^c
	No.	No.	No.	No.	No.	No.	No.	No.
Region of residence^m								
Northeast	151	3,694	88,473	75,375	70	53,004	15,249	236,341
Midwest	435	1,668	54,839	18,510	56	48,602	7,420	131,602
South	789	3,792	258,639	96,462	162	120,350	26,205	506,546
West	1,897	8,184	33,748	78,961	688	85,057	10,018	218,658
U.S. territories and freely associated states	2	68	329	15,706	34	105	24	16,271
Totalⁿ	3,274	17,406	436,028	285,014	1,010	307,118	58,916	1,109,418

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Numbers less than 12 should be interpreted with caution.

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

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

^c Includes persons whose race/ethnicity is unknown.

^d "Transgender woman" includes persons who were assigned male sex at birth but have ever identified as a woman. "Transgender man" includes persons who were assigned female sex at birth but have ever identified as a man.

^e Additional gender identity examples include "nonbinary," "gender queer," and "two-spirit."

^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^g Data include transgender and additional gender identity persons.

^h Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

ⁱ Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^k Persons were aged ≥ 13 years at time of diagnosis of HIV infection.

^l Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^m Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at the end of the specified year (i.e., most recent known address).

ⁿ Includes persons of unknown gender.

Table 17a. Persons aged ≥13 years living with diagnosed HIV infection, by year, sex assigned at birth, and selected characteristics, 2018–2022—United States

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Male sex at birth^c										
Age at end of year										
13–14	299	7.0	311	7.3	315	7.1	299	6.7	264	6.0
15–19	2,882	26.8	2,861	26.6	2,514	22.4	2,439	22.1	2,371	21.4
20–24	22,143	198.2	21,472	194.0	20,172	178.0	19,986	173.5	19,929	171.8
25–29	59,645	496.6	58,694	488.3	55,628	478.2	53,247	464.9	51,983	457.9
30–34	71,384	638.1	76,717	674.7	80,887	697.9	84,745	724.0	88,073	744.1
35–39	70,288	651.9	72,933	669.6	75,318	670.7	79,330	703.8	84,381	746.6
40–44	68,211	697.3	70,138	708.0	72,730	699.9	75,701	713.1	78,922	729.6
45–49	89,159	869.9	83,753	830.7	77,485	760.0	74,026	746.5	73,565	747.2
50–54	119,286	1,162.3	113,172	1,122.5	108,180	1,041.4	102,606	981.0	97,183	931.3
55–59	116,795	1,095.8	122,486	1,151.3	124,521	1,149.8	124,069	1,169.0	121,088	1,167.2
60–64	79,101	814.0	84,912	861.9	91,058	894.9	97,017	943.9	103,258	1,002.7
65–69	44,672	556.8	50,013	610.5	54,621	642.6	60,009	691.4	65,674	740.1
70–74	20,646	333.0	23,669	364.2	27,279	402.8	30,826	435.8	34,506	490.4
≥75	12,552	138.7	14,503	154.8	16,555	178.6	18,990	201.1	22,357	223.2
Race/ethnicity										
American Indian/Alaska Native	2,054	212.6	2,157	221.2	2,250	229.0	2,359	237.9	2,469	247.0
Asian ^d	11,812	157.7	12,436	162.6	12,945	162.7	13,579	168.2	14,337	173.2
Black/African American	270,096	1,699.6	277,065	1,727.0	281,283	1,711.0	286,670	1,734.6	292,655	1,759.7
Hispanic/Latino ^e	190,828	824.3	198,194	839.0	203,312	827.3	210,875	842.6	221,763	868.4
Native Hawaiian/other Pacific Islander	622	257.0	666	269.8	701	275.5	755	292.1	821	311.6
White	256,170	304.7	259,244	308.3	260,870	305.9	263,254	309.4	265,923	313.1
Multiracial	45,008	1,973.1	45,402	1,922.7	45,433	1,822.9	45,330	1,757.1	45,117	1,689.4
Transmission category^f										
Male-to-male sexual contact ^g	566,603	—	584,334	—	597,308	—	613,879	—	633,765	—
Injection drug use ^h	66,578	—	65,959	—	64,806	—	63,947	—	63,409	—
Male-to-male sexual contact ^g and injection drug use ^h	58,514	—	58,752	—	58,333	—	58,038	—	57,732	—
Heterosexual contact ⁱ	77,713	—	78,811	—	78,977	—	79,504	—	80,635	—
Perinatal ^j	4,895	—	5,020	—	5,102	—	5,191	—	5,274	—
Other ^k	2,760	—	2,759	—	2,737	—	2,731	—	2,739	—
Region of residence^l										
Northeast	164,612	711.7	166,138	718.5	166,145	693.0	167,032	697.1	169,223	708.0
Midwest	96,014	342.1	98,108	348.6	99,677	346.7	101,703	353.5	104,110	361.5
South	340,750	672.9	351,116	686.4	358,318	688.0	367,874	699.7	379,762	713.9
West	175,687	544.3	180,272	553.6	183,123	552.2	186,681	561.5	190,459	570.1
Subtotal	777,063	579.4	795,634	589.4	807,263	585.1	823,290	594.2	843,554	605.6
Female sex at birth^c										
Age at end of year										
13–14	370	9.1	346	8.5	327	7.7	297	6.9	261	6.2
15–19	1,481	14.4	1,390	13.5	1,304	12.2	1,279	12.1	1,255	11.9
20–24	4,890	45.9	4,631	43.8	4,156	38.7	3,904	35.6	3,812	34.3
25–29	11,169	96.8	10,666	92.6	9,990	89.7	9,495	86.8	9,148	84.4
30–34	16,157	147.6	16,249	146.5	16,092	143.7	15,936	140.6	15,891	138.5
35–39	22,941	213.1	22,277	205.1	21,149	194.0	20,697	189.3	20,477	186.7
40–44	27,891	281.7	27,506	274.7	27,229	266.6	26,972	258.8	26,573	250.5
45–49	33,286	318.0	32,600	316.3	31,187	309.4	30,358	308.8	29,863	305.4
50–54	37,093	350.2	36,380	350.2	36,066	349.2	35,331	340.1	35,076	338.2
55–59	34,752	308.7	36,366	323.8	37,029	334.2	37,282	343.7	36,870	348.1
60–64	24,315	229.7	26,307	245.7	28,163	262.9	29,750	275.3	31,601	292.0
65–69	13,162	145.6	14,970	161.8	16,608	177.2	18,516	193.7	20,347	208.5
70–74	5,873	81.8	6,849	91.0	7,917	102.4	9,042	111.5	10,338	127.3
≥75	4,038	31.4	4,630	35.1	5,229	39.7	5,970	44.7	6,957	49.7

Table 17a. Persons aged ≥13 years living with diagnosed HIV infection, by year, sex assigned at birth, and selected characteristics, 2018–2022—United States (cont)

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Female sex at birth^c (cont)										
Race/ethnicity										
American Indian/Alaska Native	716	70.8	738	72.2	741	73.1	766	74.8	797	77.1
Asian ^d	2,486	29.5	2,598	30.3	2,686	30.7	2,789	31.4	2,917	32.0
Black/African American	137,304	772.4	139,296	776.5	139,850	772.2	140,898	773.3	142,415	776.2
Hispanic/Latino ^e	44,492	194.8	45,281	194.1	45,596	190.9	46,282	190.0	47,375	190.3
Native Hawaiian/other Pacific Islander	119	49.6	119	48.7	132	53.0	141	55.6	152	58.6
White	38,212	43.7	38,972	44.6	39,411	45.3	40,013	46.0	40,952	47.2
Multiracial	13,906	573.8	13,981	558.9	13,848	531.6	13,760	511.4	13,681	492.2
Transmission category^f										
Injection drug use ^h	48,778	—	48,690	—	48,108	—	47,739	—	47,539	—
Heterosexual contact ⁱ	181,306	—	184,962	—	186,693	—	189,314	—	192,991	—
Perinatal ^j	5,670	—	5,830	—	5,951	—	6,075	—	6,229	—
Other ^k	1,664	—	1,685	—	1,694	—	1,701	—	1,710	—
Region of residence^l										
Northeast	67,648	273.8	67,597	273.8	67,126	267.0	66,848	266.1	66,953	267.1
Midwest	25,058	85.9	25,746	88.0	26,133	89.1	26,616	90.7	27,250	92.8
South	119,116	222.5	121,549	224.7	122,460	226.1	124,037	226.7	126,237	227.8
West	25,596	78.1	26,275	79.5	26,727	80.9	27,328	82.5	28,029	84.1
Subtotal^m	237,418	169.4	241,167	170.9	242,446	171.2	244,829	172.0	248,469	173.5
Total^m	1,014,481	369.9	1,036,801	375.6	1,049,709	375.4	1,068,119	380.3	1,092,023	386.6

Note. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

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

^c Data include transgender and additional gender identity persons.

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

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

^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^g Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^j Persons were aged ≥13 years at time of diagnosis of HIV infection.

^k Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^l Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at the end of the specified year (i.e., most recent known address).

^m Includes persons whose race/ethnicity is unknown.

Table 17b. Persons aged ≥13 years living with diagnosed HIV infection, by year, sex assigned at birth, and selected characteristics, 2018–2022—United States and 6 territories and freely associated states

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Male sex at birth^c										
Age at end of year										
13–14	303	7.1	315	7.3	318	7.1	300	6.6	264	5.9
15–19	2,909	26.7	2,877	26.5	2,529	22.3	2,451	22.0	2,387	21.3
20–24	22,344	197.8	21,672	193.7	20,353	177.6	20,138	173.0	20,056	171.1
25–29	60,197	496.2	59,243	487.8	56,114	477.2	53,737	464.0	52,449	457.0
30–34	72,033	638.4	77,398	674.7	81,593	697.4	85,462	723.1	88,816	743.0
35–39	71,097	653.2	73,701	670.4	76,068	671.4	80,093	704.5	85,157	747.1
40–44	69,246	700.3	71,147	710.6	73,709	702.0	76,673	715.1	79,851	731.1
45–49	90,459	873.1	84,960	833.5	78,591	762.6	75,076	748.9	74,594	749.6
50–54	121,271	1,168.6	115,008	1,128.1	109,933	1,046.7	104,205	985.6	98,653	935.4
55–59	118,666	1,101.7	124,474	1,157.7	126,496	1,155.6	126,066	1,175.0	123,024	1,173.0
60–64	80,464	819.1	86,343	867.1	92,587	900.2	98,598	949.1	104,936	1,008.2
65–69	45,452	560.0	50,906	614.4	55,590	646.6	61,098	696.1	66,830	744.8
70–74	21,060	335.2	24,108	366.1	27,789	405.0	31,410	438.6	35,160	493.6
≥75	12,879	140.3	14,884	156.6	16,977	180.2	19,448	202.6	22,875	224.7
Race/ethnicity										
American Indian/Alaska Native	2,056	—	2,159	—	2,252	—	2,361	—	2,471	—
Asian ^d	11,861	—	12,492	—	13,001	—	13,636	—	14,394	—
Black/African American	270,281	—	277,248	—	281,471	—	286,866	—	292,854	—
Hispanic/Latino ^e	201,798	—	209,234	—	214,324	—	221,953	—	232,868	—
Native Hawaiian/other Pacific Islander	648	—	691	—	727	—	781	—	848	—
White	256,235	—	259,317	—	260,946	—	263,336	—	266,010	—
Multiracial	45,026	—	45,423	—	45,455	—	45,351	—	45,136	—
Transmission category^f										
Male-to-male sexual contact ^g	571,430	—	589,335	—	602,436	—	619,204	—	639,235	—
Injection drug use ^h	69,861	—	69,143	—	67,887	—	66,941	—	66,335	—
Male-to-male sexual contact ^g and injection drug use ^h	59,275	—	59,507	—	59,067	—	58,763	—	58,439	—
Heterosexual contact ⁱ	80,010	—	81,121	—	81,269	—	81,782	—	82,897	—
Perinatal ^j	5,019	—	5,145	—	5,224	—	5,308	—	5,383	—
Other ^k	2,786	—	2,785	—	2,764	—	2,756	—	2,764	—
Region of residence^l										
Northeast	164,612	711.7	166,138	718.5	166,145	693.0	167,032	697.1	169,223	708.0
Midwest	96,014	342.1	98,108	348.6	99,677	346.7	101,703	353.5	104,110	361.5
South	340,750	672.9	351,116	686.4	358,318	688.0	367,874	699.7	379,762	713.9
West	175,687	544.3	180,272	553.6	183,123	552.2	186,681	561.5	190,459	570.1
U.S. territories and freely associated states	11,317	769.2	11,402	771.6	11,384	748.3	11,465	754.3	11,498	762.0
Subtotal	788,380	581.5	807,036	591.4	818,647	586.9	834,755	595.9	855,052	607.2
Female sex at birth^c										
Age at end of year										
13–14	374	9.1	348	8.4	330	7.7	299	6.9	262	6.2
15–19	1,496	14.3	1,399	13.4	1,312	12.1	1,287	12.1	1,265	11.9
20–24	4,955	46.0	4,681	43.8	4,193	38.6	3,943	35.5	3,853	34.3
25–29	11,303	97.0	10,795	92.7	10,108	89.8	9,594	86.7	9,239	84.3
30–34	16,358	148.0	16,444	146.8	16,277	143.9	16,107	140.7	16,050	138.5
35–39	23,281	214.0	22,564	205.6	21,396	194.3	20,934	189.6	20,702	187.0
40–44	28,350	283.0	27,931	275.7	27,648	267.6	27,383	259.8	26,942	251.2
45–49	33,930	320.5	33,219	318.5	31,731	311.0	30,863	310.2	30,361	306.8
50–54	37,885	353.3	37,121	353.1	36,784	351.8	36,023	342.6	35,728	340.4
55–59	35,589	312.5	37,241	327.7	37,889	337.9	38,102	347.0	37,684	351.3
60–64	24,948	233.0	26,995	249.2	28,905	266.6	30,532	279.2	32,393	295.8
65–69	13,513	147.6	15,366	164.1	17,031	179.5	18,986	196.2	20,861	211.2
70–74	6,078	83.5	7,086	92.8	8,197	104.6	9,332	113.5	10,662	129.6
≥75	4,183	32.1	4,799	35.9	5,423	40.5	6,211	45.7	7,238	50.9
Race/ethnicity										
American Indian/Alaska Native	716	—	738	—	741	—	766	—	797	—
Asian ^d	2,497	—	2,609	—	2,697	—	2,800	—	2,928	—
Black/African American	137,428	—	139,425	—	139,980	—	141,028	—	142,544	—
Hispanic/Latino ^e	49,154	—	49,934	—	50,204	—	50,877	—	51,975	—
Native Hawaiian/other Pacific Islander	124	—	125	—	138	—	147	—	159	—
White	38,228	—	38,989	—	39,427	—	40,031	—	40,970	—
Multiracial	13,912	—	13,986	—	13,854	—	13,766	—	13,686	—

Table 17b. Persons aged ≥13 years living with diagnosed HIV infection, by year, sex assigned at birth, and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	2018		2019		2020 (COVID-19 pandemic) ^a		2021		2022	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Female sex at birth^c (cont)										
Transmission category^f										
Injection drug use ^h	49,729	—	49,629	—	49,020	—	48,626	—	48,407	—
Heterosexual contact ⁱ	185,055	—	188,727	—	190,437	—	193,073	—	196,775	—
Perinatal ^l	5,786	—	5,939	—	6,063	—	6,185	—	6,339	—
Other ^k	1,674	—	1,694	—	1,704	—	1,712	—	1,719	—
Region of residence^l										
Northeast	67,648	273.8	67,597	273.8	67,126	267.0	66,848	266.1	66,953	267.1
Midwest	25,058	85.9	25,746	88.0	26,133	89.1	26,616	90.7	27,250	92.8
South	119,116	222.5	121,549	224.7	122,460	226.1	124,037	226.7	126,237	227.8
West	25,596	78.1	26,275	79.5	26,727	80.9	27,328	82.5	28,029	84.1
U.S. territories and freely associated states	4,825	294.9	4,822	293.1	4,778	281.4	4,767	280.5	4,771	282.1
Subtotal^m	242,243	170.8	245,989	172.4	247,224	172.5	249,596	173.3	253,240	174.8
Total^m	1,030,623	371.5	1,053,025	377.2	1,065,871	376.9	1,084,351	381.7	1,108,292	387.9

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Numbers less than 12, and rates and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

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

^c Data include transgender and additional gender identity persons.

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

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

^f Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^g Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^h Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^j Persons were aged ≥13 years at time of diagnosis of HIV infection.

^k Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^l Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on residence at the end of the specified year (i.e., most recent known address).

^m Includes persons whose race/ethnicity is unknown.

Table 18a. Transgender and additional gender identity persons aged ≥13 years living with diagnosed HIV infection, by year and selected characteristics, 2018–2022—United States

	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.
Transgender woman^b					
Age at end of year					
13–14	0	1	2	2	0
15–19	90	88	62	73	82
20–24	912	869	848	866	847
25–29	2,126	2,054	1,969	1,972	1,991
30–34	2,216	2,491	2,753	2,890	2,983
35–39	1,687	1,822	1,904	2,095	2,379
40–44	1,275	1,367	1,518	1,664	1,770
45–49	1,188	1,233	1,216	1,242	1,300
50–54	1,087	1,097	1,153	1,178	1,162
55–59	731	820	856	903	1,002
60–64	357	397	468	542	594
65–69	146	184	206	235	273
70–74	50	62	76	80	104
≥75	15	19	22	29	36
Race/ethnicity					
American Indian/Alaska Native	47	51	55	60	65
Asian ^c	184	196	209	230	244
Black/African American	5,489	5,773	6,019	6,320	6,578
Hispanic/Latino ^d	3,880	4,133	4,343	4,616	4,996
Native Hawaiian/other Pacific Islander	25	30	32	38	41
White	1,211	1,266	1,322	1,414	1,488
Multiracial	1,044	1,055	1,073	1,093	1,111
Exposure category^e					
Sexual contact ^f	9,932	10,518	11,054	11,724	12,436
Injection drug use ^g	28	29	29	33	36
Sexual contact ^f and injection drug use ^g	1,733	1,757	1,750	1,764	1,765
Perinatal ^h	24	24	24	23	23
Other ⁱ	163	176	196	227	263
Region of residence^j					
Northeast	3,050	3,168	3,262	3,393	3,550
Midwest	1,654	1,708	1,792	1,929	2,027
South	4,264	4,506	4,759	5,031	5,327
West	2,912	3,122	3,240	3,418	3,619
Subtotal	11,880	12,504	13,053	13,771	14,523
Transgender man^b					
Age at end of year					
13–14	0	0	1	2	0
15–19	7	5	3	6	7
20–24	25	32	42	43	47
25–29	78	78	73	76	87
30–34	71	94	104	129	148
35–39	67	71	80	88	86
40–44	52	56	57	65	77
45–49	52	53	49	48	46
50–54	48	46	48	47	52
55–59	27	36	40	46	49
60–64	27	23	26	23	23
65–69	8	8	11	16	19
70–74	3	6	6	8	7
≥75	3	3	2	3	5
Race/ethnicity					
American Indian/Alaska Native	3	3	3	3	3
Asian ^c	8	9	9	11	12
Black/African American	198	215	222	238	257
Hispanic/Latino ^d	102	115	124	141	156
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	104	113	125	145	163
Multiracial	53	56	59	62	62
Exposure category^e					
Sexual contact ^f	347	381	406	457	507
Injection drug use ^g	8	10	11	11	11
Sexual contact ^f and injection drug use ^g	68	70	71	70	69
Perinatal ^h	21	20	21	21	21
Other ⁱ	24	30	33	41	45
Region of residence^j					
Northeast	88	100	103	110	124
Midwest	124	129	131	137	141
South	146	161	185	208	229
West	110	121	123	145	159
Subtotal	468	511	542	600	653

Table 18a. Transgender and additional gender identity persons aged ≥13 years living with diagnosed HIV infection, by year and selected characteristics, 2018–2022—United States (cont)

	2018	2019	2020 (COVID-19 pandemic) ^a	2021	2022
	No.	No.	No.	No.	No.
Additional gender identity^k					
Age at end of year					
13–14	0	0	0	0	0
15–19	6	6	4	5	5
20–24	37	49	43	57	65
25–29	55	53	64	75	96
30–34	54	71	81	83	89
35–39	43	46	46	50	60
40–44	20	19	25	35	48
45–49	28	28	32	33	23
50–54	17	20	21	24	35
55–59	17	18	13	15	19
60–64	10	8	15	14	14
65–69	4	8	8	9	9
70–74	2	1	2	3	2
≥75	1	1	1	1	1
Race/ethnicity					
American Indian/Alaska Native	1	1	1	1	2
Asian ^c	5	5	5	5	10
Black/African American	120	131	144	159	175
Hispanic/Latino ^d	75	84	90	108	130
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	55	64	71	85	101
Multiracial	38	43	44	46	48
Exposure category^e					
Sexual contact ^f	254	284	307	349	404
Injection drug use ^g	1	1	1	1	1
Sexual contact ^f and injection drug use ^g	32	34	35	40	46
Perinatal ^h	4	4	4	4	4
Other ⁱ	3	5	8	10	11
Region of residence^j					
Northeast	146	156	164	176	190
Midwest	48	60	67	77	83
South	80	88	92	98	122
West	20	24	32	53	71
Subtotal	294	328	355	404	466
Total	12,642	13,343	13,950	14,775	15,642

Note. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Numbers less than 12, and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.

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

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

^e Risk factor data for transgender and additional gender identity persons aged ≥13 years are presented using the exposure category classification, which is meant to convey all the known ways the person could have been exposed to HIV. Exposure categories are mutually exclusive and have no presumed hierarchical order of probability, except for rare circumstances where route of transmission has been confirmed through investigation. See Technical Notes for more information on exposure categories.

^f For persons assigned “male” sex at birth, sexual contact with any person. For persons assigned “female” sex at birth, sexual contact with a person assigned “male” sex at birth.

^g Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^h Persons were aged ≥13 years at time of diagnosis of HIV infection.

ⁱ Other risk factors, including perinatal transmission, hemophilia, blood transfusion, and risk factor not reported or not identified. Data were not statistically adjusted to account for missing exposure category; therefore, case counts for “Other” might be high.

^j Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on address of residence at end of the specified year (i.e., most recent known address).

^k Additional gender identity examples include “nonbinary,” “gender queer,” and “two-spirit.”

Table 18b. Transgender and additional gender identity persons aged ≥ 13 years living with diagnosed HIV infection, by year and selected characteristics, 2018–2022—United States and 6 territories and freely associated states

	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a No.	2021 No.	2022 No.
Transgender woman^b					
Age at end of year					
13–14	0	1	2	2	0
15–19	90	88	62	73	82
20–24	917	875	855	870	850
25–29	2,129	2,057	1,971	1,977	1,998
30–34	2,224	2,498	2,759	2,894	2,987
35–39	1,690	1,825	1,909	2,097	2,383
40–44	1,281	1,374	1,526	1,672	1,778
45–49	1,188	1,234	1,218	1,244	1,302
50–54	1,089	1,101	1,155	1,179	1,164
55–59	737	825	861	908	1,006
60–64	358	399	471	545	598
65–69	147	184	206	236	274
70–74	51	63	77	81	105
≥ 75	15	19	22	29	37
Race/ethnicity					
American Indian/Alaska Native	47	51	55	60	65
Asian ^c	184	196	209	230	244
Black/African American	5,490	5,774	6,020	6,320	6,578
Hispanic/Latino ^d	3,915	4,169	4,382	4,651	5,036
Native Hawaiian/other Pacific Islander	25	30	32	38	41
White	1,211	1,267	1,322	1,414	1,488
Multiracial	1,044	1,056	1,074	1,094	1,112
Exposure category^e					
Sexual contact ^f	9,961	10,551	11,089	11,755	12,472
Injection drug use ^g	28	29	29	33	36
Sexual contact ^f and injection drug use ^g	1,740	1,763	1,756	1,769	1,770
Perinatal ^h	24	24	24	23	23
Other ⁱ	163	176	196	227	263
Region of residence^j					
Northeast	3,050	3,168	3,262	3,393	3,550
Midwest	1,654	1,708	1,792	1,929	2,027
South	4,264	4,506	4,759	5,031	5,327
West	2,912	3,122	3,240	3,418	3,619
U.S. territories and freely associated states	36	39	41	36	41
Subtotal	11,916	12,543	13,094	13,807	14,564
Transgender man^b					
Age at end of year					
13–14	0	0	1	2	0
15–19	8	5	3	6	7
20–24	25	33	43	44	48
25–29	79	79	73	76	87
30–34	71	94	105	130	148
35–39	67	71	80	88	86
40–44	52	56	57	65	77
45–49	52	53	49	48	46
50–54	48	46	48	47	52
55–59	27	36	40	46	49
60–64	28	24	27	24	23
65–69	9	9	11	16	20
70–74	3	6	6	8	7
≥ 75	3	3	3	4	6
Race/ethnicity					
American Indian/Alaska Native	3	3	3	3	3
Asian ^c	8	9	9	11	12
Black/African American	198	215	222	238	257
Hispanic/Latino ^d	106	119	128	145	159
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	104	113	125	145	163
Multiracial	53	56	59	62	62
Exposure category^e					
Sexual contact ^f	349	383	408	459	508
Injection drug use ^g	8	10	11	11	11
Sexual contact ^f and injection drug use ^g	69	71	72	71	70
Perinatal ^h	22	21	22	22	22
Other ⁱ	24	30	33	41	45
Region of residence^j					
Northeast	88	100	103	110	124
Midwest	124	129	131	137	141
South	146	161	185	208	229
West	110	121	123	145	159
U.S. territories and freely associated states	4	4	4	4	3
Subtotal	472	515	546	604	656

Table 18b. Transgender and additional gender identity persons aged ≥13 years living with diagnosed HIV infection, by year and selected characteristics, 2018–2022—United States and 6 territories and freely associated states (cont)

	2018 No.	2019 No.	2020 (COVID-19 pandemic) ^a No.	2021 No.	2022 No.
Additional gender identity^k					
Age at end of year					
13–14	0	0	0	0	0
15–19	6	6	4	5	5
20–24	37	49	43	57	65
25–29	55	53	64	75	96
30–34	55	71	81	83	89
35–39	43	46	46	50	60
40–44	20	19	25	35	48
45–49	28	28	32	33	23
50–54	18	21	22	25	35
55–59	17	18	13	15	19
60–64	10	8	15	14	14
65–69	4	8	8	9	9
70–74	2	1	2	3	2
≥75	1	1	1	1	1
Race/ethnicity					
American Indian/Alaska Native	1	1	1	1	2
Asian ^c	5	5	5	5	10
Black/African American	120	131	144	159	175
Hispanic/Latino ^d	77	85	91	109	130
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	55	64	71	85	101
Multiracial	38	43	44	46	48
Exposure category^e					
Sexual contact ^f	256	285	308	350	404
Injection drug use ^g	1	1	1	1	1
Sexual contact ^f and injection drug use ^g	32	34	35	40	46
Perinatal ^h	4	4	4	4	4
Other ⁱ	3	5	8	10	11
Region of residence^j					
Northeast	146	156	164	176	190
Midwest	48	60	67	77	83
South	80	88	92	98	122
West	20	24	32	53	71
U.S. territories and freely associated states	2	1	1	1	0
Subtotal	296	329	356	405	466
Total	12,684	13,387	13,996	14,816	15,686

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Numbers less than 12, and trends based on these numbers, should be interpreted with caution.

^a Data for 2020, which coincided with the onset of the COVID-19 pandemic, should be interpreted with caution. The pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. As the COVID-19 pandemic lasted beyond 2020, readers should also consider the potential influence of these pandemic effects on U.S. public health systems when interpreting HIV data for 2021–2022.

^b “Transgender woman” includes persons who were assigned male sex at birth but have ever identified as a woman. “Transgender man” includes persons who were assigned female sex at birth but have ever identified as a man.

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

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

^e Risk factor data for transgender and additional gender identity persons aged ≥13 years are presented using the exposure category classification, which is meant to convey all the known ways the person could have been exposed to HIV. Exposure categories are mutually exclusive and have no presumed hierarchical order of probability, except for rare circumstances where route of transmission has been confirmed through investigation. See Technical Notes for more information on exposure categories.

^f For persons assigned “male” sex at birth, sexual contact with any person. For persons assigned “female” sex at birth, sexual contact with a person assigned “male” sex at birth.

^g Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

^h Persons were aged ≥13 years at time of diagnosis of HIV infection.

ⁱ Other risk factors, including perinatal transmission, hemophilia, blood transfusion, and risk factor not reported or not identified. Data were not statistically adjusted to account for missing exposure category; therefore, case counts for “Other” might be high.

^j Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on address of residence at end of the specified year (i.e., most recent known address).

^k Additional gender identity examples include “nonbinary,” “gender queer,” and “two-spirit.”

Table 19a. Persons aged 13–24 years living with diagnosed HIV infection, by age at end of year, sex assigned at birth, and selected characteristics, year-end 2022—United States

	13–14 years		15–17 years		18–19 years		20–22 years		23–24 years		Total	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Sex at birth												
Male	264	6.0	724	10.9	1,647	37.3	8,601	122.0	11,328	248.8	22,564	83.2
Female	261	6.2	619	9.8	636	15.1	1,757	25.9	2,055	47.5	5,328	20.6
Race/ethnicity												
American Indian/Alaska Native	1	1.4	2	1.9	4	5.8	43	38.0	59	80.4	109	25.1
Asian ^b	34	7.6	57	8.4	56	11.7	164	21.0	220	41.7	531	18.2
Black/African American	304	25.3	801	45.1	1,304	113.1	5,740	299.3	7,109	572.1	15,258	209.2
Hispanic/Latino ^c	70	3.1	233	7.0	553	26.1	2,715	82.1	3,598	176.1	7,169	55.0
Native Hawaiian/other Pacific Islander	0	0.0	3	11.3	2	11.4	22	80.6	16	90.4	43	40.2
White	71	1.7	156	2.4	256	5.7	1,238	17.2	1,776	37.9	3,497	12.9
Multiracial	45	11.8	91	17.2	108	33.6	435	91.6	604	209.2	1,283	64.3
Transmission category^d												
Male sex at birth^e												
Male-to-male sexual contact ^f	5	—	242	—	1,261	—	7,573	—	10,117	—	19,199	—
Injection drug use ^g	0	—	3	—	8	—	75	—	125	—	210	—
Male-to-male sexual contact ^f and injection drug use ^g	0	—	5	—	27	—	170	—	320	—	521	—
Heterosexual contact ^h	0	—	12	—	31	—	215	—	313	—	571	—
Perinatal ⁱ	206	—	379	—	254	—	475	—	406	—	1,719	—
Other ^j	53	—	84	—	67	—	92	—	48	—	344	—
Subtotal	264	6.0	724	10.9	1,647	37.3	8,601	122.0	11,328	248.8	22,564	83.2
Female sex at birth^e												
Injection drug use ^g	0	—	10	—	20	—	122	—	161	—	313	—
Heterosexual contact ^h	5	—	82	—	216	—	974	—	1,361	—	2,637	—
Perinatal ⁱ	207	—	427	—	322	—	564	—	495	—	2,014	—
Other ^j	49	—	101	—	78	—	97	—	39	—	364	—
Subtotal	261	6.2	619	9.8	636	15.1	1,757	25.9	2,055	47.5	5,328	20.6
Region of residence^k												
Northeast	76	5.6	224	10.8	357	23.7	1,445	62.5	1,968	136.7	4,070	46.9
Midwest	138	7.6	271	9.9	313	17.6	1,488	50.9	1,960	106.8	4,170	37.6
South	226	6.6	626	12.3	1,228	37.0	5,855	109.4	7,299	211.8	15,234	73.8
West	85	4.1	222	7.2	385	19.1	1,570	48.5	2,156	99.9	4,418	35.1
Total^l	525	6.1	1,343	10.3	2,283	26.5	10,358	74.9	13,383	150.7	27,892	52.6

Note. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Numbers less than 12, and rates based on these numbers, should be interpreted with caution.

^a Rates are per 100,000 population. Rates are not calculated by gender or transmission category because of the lack of denominator data.

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

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

^d Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^e Data include transgender and additional gender identity persons.

^f Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^g Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

ⁱ Persons were aged ≥13 years at time of diagnosis of HIV infection.

^j Other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

^k Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on address of residence at the end of the specified year (i.e., most recent known address).

^l Includes persons whose race/ethnicity is unknown.

Table 19b. Persons aged 13–24 years living with diagnosed HIV infection, by age at end of year, sex assigned at birth, and selected characteristics, year-end 2022—United States and 6 territories and freely associated states

	13–14 years	15–17 years	18–19 years	20–22 years	23–24 years	Total
	No.	No.	No.	No.	No.	No.
Sex at birth						
Male	264	731	1,656	8,649	11,407	22,707
Female	262	623	642	1,770	2,083	5,380
Race/ethnicity						
American Indian/Alaska Native	1	2	4	43	59	109
Asian ^a	34	57	56	164	220	531
Black/African American	304	801	1,306	5,741	7,112	15,264
Hispanic/Latino ^b	70	244	565	2,775	3,700	7,354
Native Hawaiian/other Pacific Islander	1	3	2	22	17	45
White	71	156	256	1,238	1,776	3,497
Multiracial	45	91	109	435	605	1,285
Transmission category^c						
Male sex at birth^d						
Male-to-male sexual contact ^e	5	244	1,268	7,612	10,184	19,313
Injection drug use ^f	0	3	8	75	126	212
Male-to-male sexual contact ^e and injection drug use ^f	0	5	27	170	323	524
Heterosexual contact ^g	0	12	31	219	314	576
Perinatal ^h	206	384	256	480	412	1,737
Other ⁱ	53	84	67	92	49	345
Subtotal	264	731	1,656	8,649	11,407	22,707
Female sex at birth^d						
Injection drug use ^f	0	10	20	122	161	313
Heterosexual contact ^g	5	82	218	981	1,379	2,665
Perinatal ^h	208	431	326	570	502	2,036
Other ⁱ	49	101	78	97	41	366
Subtotal	262	623	642	1,770	2,083	5,380
Region of residence^j						
Northeast	76	224	357	1,445	1,968	4,070
Midwest	138	271	313	1,488	1,960	4,170
South	226	626	1,228	5,855	7,299	15,234
West	85	222	385	1,570	2,156	4,418
U.S. territories and freely associated states	1	11	15	61	107	195
Total^k	526	1,354	2,298	10,419	13,490	28,087

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention through December 2023. Numbers less than 12, and rates based on these numbers, should be interpreted with caution.

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

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

^c Transmission category is classified based on a hierarchy of the risk factors most likely responsible for HIV transmission; classification is determined based on the person's sex assigned at birth. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

^d Data include transgender and additional gender identity persons.

^e Includes persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and persons assigned male sex at birth who have had sexual contact with both males and females (i.e., bisexual contact).

^f Includes persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes. Also includes injection of drugs prescribed to persons if there is evidence that injection equipment was shared (e.g., syringes, needles, cookers).

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

^h Persons were aged ≥ 13 years at time of diagnosis of HIV infection.

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

^j Region of residence defined by the U.S. Census Bureau. For more information, see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>. Data are based on address of residence at the end of the specified year (i.e., most recent known address).

^k Includes persons whose race/ethnicity is unknown.

Table 20. Diagnoses of HIV infection, 2022, and persons living with diagnosed HIV infection (prevalence), year-end 2022, by area of residence—United States and 6 territories and freely associated states

Area of residence	Diagnoses, 2022 ^a						Prevalence of diagnosed HIV infection, year-end 2022					
	Persons aged ≥13 yr		Children (<13 yr)		Total		Persons aged ≥13 yr		Children (<13 yr)		Total	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Alabama	701	16.3	1	0.1	702	13.8	14,761	343.8	24	3.1	14,785	291.4
Alaska	38	6.3	0	0.0	38	5.2	768	126.7	2	1.6	770	105.0
Arizona	860	13.7	1	0.1	861	11.7	18,693	298.8	18	1.6	18,711	254.3
Arkansas	305	11.9	0	0.0	305	10.0	6,362	248.9	6	1.2	6,368	209.1
California	4,856	14.7	5	0.1	4,861	12.5	138,531	418.7	83	1.4	138,614	355.2
Colorado	433	8.7	0	0.0	433	7.4	13,713	274.7	13	1.5	13,726	235.0
Connecticut	220	7.0	0	0.0	220	6.1	10,638	340.5	8	1.6	10,646	293.6
Delaware	128	14.7	0	0.0	128	12.6	3,641	417.5	3	2.1	3,644	357.8
District of Columbia	211	36.6	0	0.0	211	31.4	13,560	2,355.3	6	6.2	13,566	2,019.3
Florida	4,290	22.3	12	0.4	4,302	19.3	120,385	626.0	118	3.9	120,503	541.7
Georgia	2,511	27.4	3	0.2	2,514	23.0	60,902	664.1	69	4.0	60,971	558.7
Hawaii	78	6.4	0	0.0	78	5.4	2,435	199.1	1	0.5	2,436	169.1
Idaho	41	2.5	0	0.0	41	2.1	1,365	84.4	4	1.2	1,369	70.6
Illinois	1,306	12.2	3	0.2	1,309	10.4	36,225	338.8	52	2.8	36,277	288.3
Indiana	612	10.7	4	0.4	616	9.0	12,781	223.0	49	4.4	12,830	187.8
Iowa	123	4.6	0	0.0	123	3.8	3,216	119.4	8	1.6	3,224	100.7
Kansas	133	5.4	0	0.0	133	4.5	3,616	147.4	5	1.0	3,621	123.3
Kentucky	405	10.6	0	0.0	405	9.0	8,464	222.5	16	2.3	8,480	187.9
Louisiana	856	22.3	0	0.0	856	18.6	21,816	568.3	23	3.1	21,839	475.8
Maine	41	3.4	1	0.6	42	3.0	1,774	146.1	8	4.7	1,782	128.6
Maryland	748	14.3	6	0.6	754	12.2	33,580	643.8	32	3.4	33,612	545.2
Massachusetts	438	7.2	1	0.1	439	6.3	21,336	352.7	20	2.1	21,356	305.9
Michigan	629	7.3	2	0.1	631	6.3	17,596	205.5	32	2.2	17,628	175.7
Minnesota	261	5.4	1	0.1	262	4.6	9,467	196.9	23	2.5	9,490	166.0
Mississippi	448	18.1	1	0.2	449	15.3	9,915	401.2	4	0.9	9,919	337.4
Missouri	512	9.8	0	0.0	512	8.3	13,271	254.3	19	2.0	13,290	215.1
Montana	11	1.1	0	0.0	11	1.0	722	75.3	2	1.2	724	64.5
Nebraska	91	5.6	0	0.0	91	4.6	2,429	148.9	2	0.6	2,431	123.5
Nevada	528	19.6	2	0.4	530	16.7	11,750	436.0	7	1.4	11,757	370.0
New Hampshire	28	2.3	0	0.0	28	2.0	1,385	113.4	3	1.7	1,388	99.5
New Jersey	1,090	13.9	3	0.2	1,093	11.8	35,360	449.7	39	2.8	35,399	382.2
New Mexico	94	5.2	0	0.0	94	4.4	4,032	224.3	5	1.6	4,037	191.0
New York	2,226	13.2	4	0.1	2,230	11.3	124,940	741.9	50	1.8	124,990	635.2
North Carolina	1,353	14.9	2	0.1	1,355	12.7	35,016	385.0	38	2.4	35,054	327.6
North Dakota	38	5.9	0	0.0	38	4.9	545	84.3	2	1.5	547	70.2
Ohio	855	8.6	1	0.1	856	7.3	24,501	246.1	36	2.0	24,537	208.7
Oklahoma	394	11.8	0	0.0	394	9.8	7,264	217.0	11	1.6	7,275	181.0
Oregon	250	6.8	1	0.2	251	5.9	7,553	206.5	9	1.5	7,562	178.3
Pennsylvania	954	8.6	1	0.1	955	7.4	37,233	334.4	33	1.8	37,266	287.3
Rhode Island	68	7.1	1	0.7	69	6.3	2,753	289.4	3	2.1	2,756	252.0
South Carolina	717	15.9	1	0.1	718	13.6	18,442	409.6	27	3.5	18,469	349.6
South Dakota	40	5.3	1	0.6	41	4.5	770	102.2	2	1.3	772	84.9
Tennessee	860	14.4	0	0.0	860	12.2	19,351	324.2	37	3.4	19,388	275.0
Texas	4,896	19.8	2	0.0	4,898	16.3	105,365	425.2	100	1.9	105,465	351.2
Utah	155	5.7	0	0.0	155	4.6	3,619	132.5	6	0.9	3,625	107.2
Vermont	4	0.7	0	0.0	4	0.6	757	133.2	1	1.3	758	117.1
Virginia	834	11.3	1	0.1	835	9.6	24,886	337.8	31	2.4	24,917	286.9
Washington	491	7.4	1	0.1	492	6.3	14,928	225.6	20	1.7	14,948	192.0
West Virginia	136	8.9	0	0.0	136	7.7	2,289	149.6	2	0.8	2,291	129.1
Wisconsin	291	5.8	0	0.0	291	4.9	6,943	138.1	12	1.4	6,955	118.0
Wyoming	13	2.6	0	0.0	13	2.2	379	77.1	0	0.0	379	65.2
Subtotal	37,601	13.3	62	0.1	37,663	11.3	1,092,023	386.6	1,124	2.2	1,093,147	328.0
U.S. territories and freely associated states												
American Samoa	0	0.0	0	0.0	0	0.0	1	2.9	0	0.0	1	2.2
Guam	0	0.0	0	0.0	0	0.0	109	84.2	0	0.0	109	64.5
Northern Mariana Islands	0	0.0	0	0.0	0	0.0	15	36.1	0	0.0	15	29.1
Puerto Rico	365	12.6	0	0.0	365	11.3	15,574	539.4	1	0.3	15,575	483.4
Republic of Palau	0	0.0	0	0.0	0	0.0	9	48.7	0	0.0	9	41.5
U.S. Virgin Islands	15	17.1	0	0.0	15	14.2	561	638.6	1	5.7	562	533.1
Subtotal	380	11.9	0	0.0	380	10.5	16,269	508.4	2	0.5	16,271	450.1
Total	37,981	13.3	62	0.1	38,043	11.3	1,108,292	387.9	1,126	2.2	1,109,418	329.3

Abbreviations: yr, years; CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Prevalence data for the year 2022 are preliminary and based on deaths reported to CDC as of December 2023. Numbers less than 12, and rates based on these numbers, should be interpreted with caution.

^a Data are based on residence at HIV diagnosis.

^b Rates are per 100,000 population.

Table 21. Persons aged ≥13 years living with diagnosed HIV infection, by race/ethnicity and area of residence, year-end 2022—United States and 6 territories and freely associated states

Area of residence	American Indian/ Alaska Native		Asian ^a		Black/African American		Hispanic/Latino ^b		Native Hawaiian/ other Pacific Islander		White		Multiracial		Total ^c	
	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d
Alabama	10	39.0	45	67.3	9,173	823.1	598	331.8	3	135.6	3,921	137.8	973	1,682.6	14,761	343.8
Alaska	195	226.2	31	76.0	102	510.7	98	232.9	5	59.1	296	79.3	41	116.6	768	126.7
Arizona	730	322.5	255	109.4	2,592	893.9	6,284	332.2	30	243.0	8,095	232.2	664	567.7	18,693	298.8
Arkansas	7	33.8	29	65.2	2,675	705.1	547	280.1	4	42.6	2,674	143.5	422	965.2	6,362	248.9
California	269	195.3	6,037	114.0	21,875	1,162.5	57,674	454.6	250	201.2	46,059	379.7	6,358	762.6	138,531	418.7
Colorado	83	256.7	183	104.4	2,100	1,041.4	3,562	344.1	20	272.6	7,387	215.0	333	315.9	13,713	274.7
Connecticut	12	180.0	119	76.9	3,465	1,052.4	3,788	732.1	7	639.3	2,972	143.8	274	560.2	10,638	340.5
Delaware	4	145.7	20	54.6	1,999	1,046.2	375	476.0	1	361.0	1,075	197.2	166	958.7	3,641	417.5
District of Columbia	14	1,099.8	83	298.8	9,452	3,876.1	1,298	2,103.5	6	1,714.3	1,906	835.6	797	6,291.4	13,560	2,355.3
Florida	80	157.9	758	130.3	51,067	1,801.4	33,756	666.7	51	394.6	31,581	303.5	3,087	1,098.8	120,385	626.0
Georgia	17	77.0	313	72.9	41,394	1,421.5	5,467	627.0	17	282.5	9,941	207.9	3,747	2,524.1	60,902	664.1
Hawaii	2	73.0	404	85.2	121	499.8	331	289.5	217	190.8	1,040	376.9	320	146.7	2,435	199.1
Idaho	10	58.9	13	51.4	119	958.5	276	139.7	0	0.0	890	66.8	57	185.9	1,365	84.4
Illinois	27	157.9	522	79.3	15,648	1,059.1	8,129	440.3	18	570.9	9,031	138.1	2,849	1,858.2	36,225	338.8
Indiana	11	78.1	233	150.3	4,851	891.7	1,457	355.9	5	211.6	5,657	125.3	567	614.4	12,781	223.0
Iowa	9	109.8	67	92.6	728	707.7	412	250.4	6	130.0	1,795	78.0	199	516.3	3,216	119.4
Kansas	18	89.4	58	74.8	894	643.2	691	239.3	2	75.8	1,772	94.8	179	324.0	3,616	147.4
Kentucky	4	46.1	67	105.9	2,490	798.0	838	585.4	1	32.8	4,502	140.0	561	943.3	8,464	222.5
Louisiana	35	134.9	88	121.1	14,534	1,202.5	1,383	693.5	3	198.9	5,251	230.1	519	1,057.9	21,816	568.3
Maine	8	106.7	13	79.0	325	1,650.4	138	599.3	0	0.0	1,226	108.6	63	349.6	1,774	146.1
Maryland	19	147.4	274	75.3	23,894	1,506.3	2,776	522.0	4	151.5	4,001	153.4	2,612	2,359.0	33,580	643.8
Massachusetts	26	236.1	486	107.3	6,455	1,475.3	5,984	835.1	8	307.3	7,900	182.4	475	490.0	21,336	352.7
Michigan	26	52.7	152	51.5	9,384	827.6	1,390	314.1	4	158.6	5,908	91.3	729	429.7	17,596	205.5
Minnesota	115	242.3	203	82.4	3,489	1,095.5	1,167	456.6	5	192.1	3,966	103.2	517	558.3	9,467	196.9
Mississippi	12	97.1	20	70.4	7,228	796.9	363	463.5	3	289.6	1,870	131.8	384	1,524.1	9,915	401.2
Missouri	12	50.0	104	87.5	5,651	976.5	940	418.2	8	104.8	5,954	142.9	601	615.5	13,271	254.3
Montana	25	48.5	6	59.3	24	464.4	67	177.4	1	127.7	564	67.8	35	161.0	722	75.3
Nebraska	29	227.3	56	129.2	651	841.5	459	261.9	3	272.2	1,141	88.2	90	334.8	2,429	148.9
Nevada	45	195.5	383	151.6	3,059	1,212.3	3,430	451.0	49	267.3	4,254	326.4	528	625.9	11,750	436.0
New Hampshire	1	37.5	25	67.3	177	951.5	207	413.9	1	286.5	923	84.3	50	295.9	1,385	113.4
New Jersey	13	110.5	360	44.5	14,497	1,427.6	11,523	712.8	6	222.4	6,236	145.0	2,678	2,525.0	35,360	449.7
New Mexico	321	206.3	17	54.0	184	517.3	2,069	239.5	2	161.9	1,245	182.0	194	757.0	4,032	224.3
New York	46	90.4	2,278	143.6	45,950	1,896.5	45,639	1,452.4	31	391.1	21,383	228.3	9,343	3,534.7	124,940	741.9
North Carolina	164	174.3	237	77.5	20,534	1,074.9	3,562	428.1	15	240.3	8,307	143.5	2,190	1,409.7	35,016	385.0
North Dakota	32	111.1	8	75.7	219	1,104.8	39	155.5	0	0.0	227	41.2	20	178.3	545	84.3
Ohio	7	34.5	137	51.9	10,763	874.3	1,963	497.2	2	43.1	10,236	130.3	1,334	725.4	24,501	246.1
Oklahoma	348	128.6	115	137.0	1,733	699.7	945	267.0	11	180.0	3,562	160.7	550	326.7	7,264	217.0
Oregon	52	128.7	167	91.3	590	813.7	1,299	275.7	22	145.3	5,145	186.0	278	252.4	7,553	206.5
Pennsylvania	39	235.8	338	77.2	16,839	1,442.6	7,153	843.8	15	442.9	10,625	125.0	2,221	1,373.1	37,233	334.4
Rhode Island	6	153.5	43	130.6	601	1,027.8	830	560.2	2	351.5	1,175	170.4	96	541.6	2,753	289.4
South Carolina	12	69.8	66	76.1	11,318	997.6	1,279	488.4	4	145.1	4,324	147.4	1,431	2164.8	18,442	409.6

Table 21. Persons aged ≥13 years living with diagnosed HIV infection, by race/ethnicity and area of residence, year-end 2022—United States and 6 territories and freely associated states (cont)

Area of residence	American Indian/ Alaska Native		Asian ^a		Black/African American		Hispanic/Latino ^b		Native Hawaiian/ other Pacific Islander		White		Multiracial		Total ^c	
	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d
South Dakota	124	236.8	6	46.8	163	991.0	81	267.5	0	0.0	357	56.9	39	279.4	770	102.2
Tennessee	8	43.8	98	82.3	10,192	1,070.8	1,409	432.6	3	87.1	6,660	149.4	979	1062.1	19,351	324.2
Texas	38	44.1	1,154	83.2	36,446	1184.5	38,865	408.8	24	101.9	22,488	217.0	6,343	1,893.8	105,365	425.2
Utah	38	151.5	91	121.4	329	994.2	1,063	277.5	23	81.8	1,970	92.2	102	197.2	3,619	132.5
Vermont	0	0.0	18	158.6	81	1,075.1	75	611.7	0	0.0	544	103.6	39	408.5	757	133.2
Virginia	16	77.5	388	72.6	13,789	983.4	2,808	398.3	11	195.4	6,615	146.2	1,234	712.5	24,886	337.8
Washington	112	138.1	577	83.9	2,573	949.0	2,694	328.4	67	137.6	7,824	175.1	1,078	447.2	14,928	225.6
West Virginia	0	0.0	13	94.0	376	686.9	130	447.6	0	0.0	1,614	114.9	155	647.6	2,289	149.6
Wisconsin	24	55.1	93	61.8	2,257	777.1	1,756	524.6	3	156.5	2,529	61.2	280	384.8	6,943	138.1
Wyoming	11	114.7	3	57.8	20	392.1	71	149.7	0	0.0	257	61.8	17	213.9	379	77.1
Subtotal	3,266	160.6	17,254	99.3	435,070	1,243.8	269,138	533.6	973	186.1	306,875	178.7	58,798	1,078.8	1,092,023	386.6
U.S. territories and freely associated states^e																
American Samoa	0	—	0	—	0	—	0	—	0	—	0	—	1	—	1	2.9
Guam	0	—	56	—	4	—	7	—	23	—	11	—	8	—	109	84.2
Northern Mariana Islands	1	—	5	—	0	—	0	—	4	—	2	—	3	—	15	36.1
Puerto Rico	1	—	2	—	23	—	15,492	—	1	—	50	—	5	—	15,574	539.4
Republic of Palau	0	—	2	—	0	—	1	—	6	—	0	—	0	—	9	48.7
U.S. Virgin Islands	0	—	3	—	301	—	205	—	0	—	42	—	7	—	561	638.6
Subtotal	2	—	68	—	328	—	15,705	—	34	—	105	—	24	—	16,269	508.4
Total	3,268	—	17,322	—	435,398	—	284,843	—	1,007	—	306,980	—	58,822	—	1,108,292	387.9

Abbreviation: CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. U.S. territories and freely associated states include American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Republic of Palau. Data for the year 2022 are preliminary and based on deaths reported to CDC as of December 2023. Numbers less than 12, and rates based on these numbers, should be interpreted with caution. Data are based on address of residence at the end of the specified year (i.e., most recent known address).

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

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

^c Includes persons whose race/ethnicity is unknown.

^d Rates are per 100,000 population.

^e Rates by race/ethnicity are not provided because U.S. census information is limited for U.S. territories and freely associated states.

Table 22. Diagnoses of HIV infection, 2022, and persons living with diagnosed HIV infection (prevalence), year-end 2022, by metropolitan statistical area of residence—United States and Puerto Rico

MSA of residence	Diagnoses, 2022 ^a			Prevalence of diagnosed HIV infection, year-end 2022 ^b	
	No.	Rate ^c	Rank ^d	No.	Rate ^c
Akron, OH	40	5.7	95	1,162	166.6
Albany–Schenectady–Troy, NY	55	6.1	89	2,197	242.9
Albuquerque, NM	46	5.0	99	2,054	223.4
Allentown–Bethlehem–Easton, PA–NJ	42	4.8	100	1,805	207.2
Atlanta–Sandy Springs–Alpharetta, GA	1,719	27.6	3	41,799	671.8
Augusta–Richmond County, GA–SC	107	17.1	15	2,670	427.8
Austin–Round Rock–Georgetown, TX	337	13.9	29	7,312	302.0
Bakersfield, CA	203	22.2	4	2,263	247.0
Baltimore–Columbia–Towson, MD	309	10.9	56	16,846	594.1
Baton Rouge, LA	192	22.0	5	5,340	611.6
Birmingham–Hoover, AL	166	14.9	22	4,462	399.5
Boise City, ID	27	3.3	109	226	27.9
Boston–Cambridge–Newton, MA–NH ^e	321	6.6	86	14,578	297.5
Boston Division	187	9.2	—	8,252	407.5
Cambridge Division	126	5.2	—	6,091	251.3
Buffalo–Cheektowaga, NY	71	6.1	88	2,653	228.5
Cape Coral–Fort Myers, FL	84	10.2	61	2,402	292.1
Charleston–North Charleston, SC	135	16.3	17	2,741	330.0
Charlotte–Concord–Gastonia, NC–SC	436	15.8	18	10,041	364.3
Chattanooga, TN–GA	59	10.3	60	1,368	238.1
Chicago–Naperville–Elgin, IL–IN–WI	1,137	12.0	47	30,745	325.6
Chicago Division	977	13.8	—	27,703	390.6
Elgin Division	49	6.5	—	534	71.0
Gary Division	63	8.7	—	1,375	190.6
Lake County Division	48	5.5	—	1,133	129.2
Cincinnati, OH–KY–IN	162	7.2	79	4,874	215.2
Cleveland–Elyria, OH	164	7.9	77	5,850	283.5
Colorado Springs, CO	66	8.6	72	1,119	146.2
Columbia, SC	128	15.1	20	4,313	508.8
Columbus, OH	244	11.3	52	6,304	291.6
Dallas–Fort Worth–Arlington, TX	1,475	18.6	13	32,778	412.6
Dallas Division	1,122	21.0	—	25,489	476.2
Fort Worth Division	353	13.6	—	7,289	281.3
Dayton–Kettering, OH	74	9.1	66	1,899	233.7
Deltona–Daytona Beach–Ormond Beach, FL	82	11.6	50	2,234	316.5
Denver–Aurora–Lakewood, CO	270	9.0	69	9,895	331.4
Des Moines–West Des Moines, IA	43	5.9	93	1,112	152.5
Detroit–Warren–Dearborn, MI	395	9.1	68	11,102	255.5
Detroit Division	249	14.2	—	7,254	412.9
Warren Division	146	5.6	—	3,848	148.6
Durham–Chapel Hill, NC	87	13.1	38	2,647	398.5
El Paso, TX	132	15.1	19	2,667	305.8
Fayetteville, NC	103	19.5	10	2,078	392.6
Fayetteville–Springdale–Rogers, AR–MO	39	6.8	84	715	124.0
Fresno, CA	170	16.7	16	2,327	229.2
Grand Rapids–Wyoming, MI	52	4.8	102	1,389	126.9
Greensboro–High Point, NC	107	13.6	33	2,937	374.6
Greenville–Anderson, SC	108	11.3	53	2,421	252.5
Harrisburg–Carlisle, PA	39	6.5	87	1,518	251.5
Honolulu (Urban), HI	53	5.3	97	1,527	153.4
Houston–The Woodlands–Sugar Land, TX	1,532	20.9	8	34,629	471.8
Huntsville, AL	59	11.5	51	1,028	199.8
Indianapolis–Carmel–Anderson, IN	322	15.0	21	6,347	296.3
Jackson, MS	114	19.5	9	3,289	564.0

Table 22. Diagnoses of HIV infection, 2022, and persons living with diagnosed HIV infection (prevalence), year-end 2022, by metropolitan statistical area of residence—United States and Puerto Rico (cont)

MSA of residence	Diagnoses, 2022 ^a			Prevalence of diagnosed HIV infection, year-end 2022 ^b	
	No.	Rate ^c	Rank ^d	No.	Rate ^c
Jacksonville, FL	318	19.0	12	7,707	459.9
Kansas City, MO–KS	195	8.8	70	4,816	218.0
Knoxville, TN	96	10.6	57	1,495	164.7
Lakeland–Winter Haven, FL	114	14.5	26	2,953	375.0
Lancaster, PA	17	3.1	110	829	148.9
Lansing–East Lansing, MI	25	4.6	104	676	125.0
Las Vegas–Henderson–Paradise, NV	485	20.9	7	10,055	432.8
Lexington–Fayette, KY	61	11.8	48	1,387	267.8
Little Rock–North Little Rock–Conway, AR	112	14.8	24	2,397	316.4
Los Angeles–Long Beach–Anaheim, CA	1,859	14.4	27	58,340	453.2
Anaheim Division	257	8.2	—	7,328	232.5
Los Angeles Division	1,602	16.5	—	51,012	524.8
Louisville/Jefferson County, KY–IN	222	17.3	14	4,213	328.0
Madison, WI	41	6.0	91	910	132.4
McAllen–Edinburg–Mission, TX	107	12.0	46	1,764	198.6
Memphis, TN–MS–AR	397	29.8	2	7,816	586.7
Miami–Fort Lauderdale–Pompano Beach, FL	1,890	30.8	1	57,139	930.7
Fort Lauderdale Division	581	29.8	—	20,747	1,065.6
Miami Division	1,023	38.3	—	27,987	1046.7
West Palm Beach Division	286	18.8	—	8,405	553.5
Milwaukee–Waukesha, WI	142	9.1	67	3,442	220.7
Minneapolis–St. Paul–Bloomington, MN–WI	220	6.0	92	7,953	215.3
Modesto, CA	56	10.2	63	894	162.2
Myrtle Beach–Conway–North Myrtle Beach, SC–NC	56	10.4	58	1,307	243.8
Nashville–Davidson–Murfreesboro–Franklin, TN	209	10.2	62	5,894	288.0
New Orleans–Metairie, LA	240	19.3	11	8,148	653.8
New York–Newark–Jersey City, NY–NJ–PA	2,685	13.7	31	135,932	692.9
Nassau County Division	164	5.6	—	6,096	209.5
New Brunswick Division	160	6.4	—	5,486	218.7
New York Division	2,002	16.8	—	111,390	933.4
Newark Division	359	15.8	—	12,960	571.7
North Port–Sarasota–Bradenton, FL	75	8.4	73	2,315	259.7
Ogden–Clearfield, UT	17	2.4	111	478	67.0
Oklahoma City, OK	202	13.8	30	3,319	227.4
Omaha–Council Bluffs, NE–IA	59	6.0	90	680	69.6
Orlando–Kissimmee–Sanford, FL	581	21.0	6	13,736	496.9
Oxnard–Thousand Oaks–Ventura, CA	55	6.6	85	1,247	149.8
Palm Bay–Melbourne–Titusville, FL	70	11.1	55	1,809	286.8
Pensacola–Ferry Pass–Brent, FL	70	13.4	36	1,635	312.5
Philadelphia–Camden–Wilmington, PA–NJ–DE–MD	733	11.7	49	26,615	426.4
Camden Division	135	10.4	—	3,328	256.5
Montgomery County Division	80	3.9	—	2,400	116.8
Philadelphia Division	436	20.4	—	18,379	857.9
Wilmington Division	82	11.0	—	2,508	336.4
Phoenix–Mesa–Scottsdale, AZ	644	12.8	41	13,851	276.2
Pittsburgh, PA	92	3.9	108	3,820	162.6
Port St. Lucie, FL	68	13.1	40	2,236	429.4
Portland–South Portland, ME	27	4.8	101	965	171.8
Portland–Vancouver–Hillsboro, OR–WA	170	6.8	83	5,924	236.1
Poughkeepsie–Newburgh–Middletown, NY	29	4.1	107	1,898	269.8
Providence–Warwick, RI–MA	98	5.9	94	2,132	127.4
Provo–Orem, UT	15	2.1	112	306	42.8
Raleigh–Cary, NC	179	12.1	45	4,261	287.1

Table 22. Diagnoses of HIV infection, 2022, and persons living with diagnosed HIV infection (prevalence), year-end 2022, by metropolitan statistical area of residence—United States and Puerto Rico (cont)

MSA of residence	Diagnoses, 2022 ^a			Prevalence of diagnosed HIV infection, year-end 2022 ^b	
	No.	Rate ^c	Rank ^d	No.	Rate ^c
Reno, NV	37	7.4	78	1,130	225.6
Richmond, VA	180	13.4	35	4,608	344.1
Riverside–San Bernardino–Ontario, CA	610	13.1	39	15,822	339.0
Rochester, NY	75	6.9	80	2,869	265.4
Sacramento–Roseville–Folsom, CA	221	9.1	65	5,658	234.1
St. Louis, MO–IL	292	10.4	59	7,211	257.4
Salt Lake City, UT	105	8.3	75	2,399	189.5
San Antonio–New Braunfels, TX	387	14.6	25	7,894	297.3
San Diego–Chula Vista–Carlsbad, CA	402	12.3	44	13,783	420.7
San Francisco–Oakland–Berkeley, CA ^e	622	13.6	34	22,780	497.4
Oakland Division	326	11.7	—	8,773	314.9
San Francisco Division	278	18.1	—	13,246	861.5
San Jose–Sunnyvale–Santa Clara, CA	162	8.4	74	3,795	195.8
San Juan–Carolina–Caguas, PR	269	13.2	37	10,977	537.1
Scranton–Wilkes-Barre, PA	39	6.9	82	1,017	179.0
Seattle–Tacoma–Bellevue, WA	350	8.7	71	10,276	254.7
Seattle Division	289	9.3	—	8,553	275.3
Tacoma Division	61	6.6	—	1,723	185.8
Spokane–Spokane Valley, WA	31	5.2	98	813	136.0
Springfield, MA	37	5.3	96	2,232	321.4
Stockton, CA	100	12.6	43	1,605	202.3
Syracuse, NY	31	4.7	103	1,298	198.6
Tampa–St. Petersburg–Clearwater, FL	488	14.8	23	14,516	441.1
Toledo, OH	44	6.9	81	1,180	184.3
Tucson, AZ	119	11.3	54	2,857	270.1
Tulsa, OK	104	10.1	64	2,231	215.7
Virginia Beach–Norfolk–Newport News, VA–NC	258	14.3	28	6,167	341.3
Washington–Arlington–Alexandria, DC–VA–MD–WV	817	12.8	42	35,141	551.3
Frederick Division	117	8.7	—	4,556	340.1
Washington Division	700	13.9	—	30,585	607.5
Wichita, KS	30	4.6	105	1,013	155.8
Winston-Salem, NC	94	13.7	32	2,193	318.5
Worcester, MA–CT	38	4.4	106	2,083	241.4
Youngstown–Warren–Boardman, OH–PA	43	8.0	76	924	172.5
Subtotal for MSAs (population of ≥500,000)	30,222	13.1	—	897,429	389.9
Metropolitan areas (population of 50,000–499,999)	4,916	8.6	—	111,250	193.9
Nonmetropolitan areas	2,527	5.6	—	61,860	136.4
Total^f	38,028	11.3	—	1,108,722	329.5

Abbreviations: MSA, metropolitan statistical area; CDC, the Centers for Disease Control and Prevention [footnotes only].

Note. Data on persons living with diagnosed HIV infection in 2022 are preliminary and based on deaths reported to CDC as of December 2023. Numbers less than 12, and rates based on these numbers, should be interpreted with caution. Because of the lack of U.S. census information for all U.S. territories and freely associated states, table includes data for only the 50 states, the District of Columbia, and Puerto Rico. Data reported for Connecticut cases were excluded due to governmental and administrative changes that transitioned counties to planning regions. Connecticut population data from the U.S. Census were also excluded from denominator data. However, data for Connecticut cases are included in the total.

MSA definitions for this report can be found at <http://www.census.gov/programs-surveys/metro-micro.html>.

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

^b Data are based on address of residence at the end of the specified year (i.e., most recent known address).

^c Rates are per 100,000 population.

^d Based on rate.

^e Counts of diagnoses of HIV infection for the metropolitan divisions do not sum to the MSA total. MSA total includes data from 2 metropolitan divisions with population of <500,000.

^f Includes persons whose county of residence is unknown.

Web Addresses for Reports of State and Local HIV Surveillance

Alabama.....	http://www.alabamapublichealth.gov/hiv/publications.html
Alaska.....	https://dhss.alaska.gov/dph/Epi/hivstd/Pages/hivdata.aspx
Arizona.....	http://www.azdhs.gov/phs/edc/odis/hiv-epidemiology/reports/index.php?pg=annual
Arkansas.....	https://www.healthy.arkansas.gov/programs-services/topics/hiv-aids-sti-surveillance
California.....	https://www.cdph.ca.gov/Programs/CID/DOA/Pages/OAsre.aspx
Chicago.....	https://www.chicago.gov/content/dam/city/depts/cdph/HIV_STI/CDPH-039_HIVSyphilis_DataBrief_DIGITAL_r3a.pdf
Colorado.....	https://cdphe.colorado.gov/sti-hiv-data-reporting
Connecticut.....	https://portal.ct.gov/DPH/AIDS--Chronic-Diseases/Surveillance/Connecticut-HIV-Statistics
Delaware.....	http://www.dhss.delaware.gov/dhss/dph/epi/disstatshiv.html
District of Columbia.....	https://dchealth.dc.gov/service/hiv-reports-and-publications
Florida.....	http://www.floridahealth.gov/diseases-and-conditions/aids/surveillance/index.html
Georgia.....	https://dph.georgia.gov/data-fact-sheet-summaries#SurveillanceSummaries
Guam.....	http://dphss.guam.gov/content/hiv-surveillance-program
Hawaii.....	https://health.hawaii.gov/harmreduction/hiv-aids-surveillance/
Houston.....	http://www.houstonx.gov/health/HIV-STD/
Idaho.....	http://healthandwelfare.idaho.gov/Health/FamilyPlanningSTDHIV/STDStatistics/tabid/393/Default.aspx
Illinois.....	http://dph.illinois.gov/topics-services/diseases-and-conditions/hiv-aids/hiv-surveillance/update-reports
Indiana.....	https://www.in.gov/health/hiv-std-viral-hepatitis/reports-and-statistics-hivstdviral-hepatitis/
Iowa.....	http://idph.iowa.gov/hivstdhiv/hiv/data
Kansas.....	https://www.kdhe.ks.gov/464/HIV-Surveillance-Program
Kentucky.....	https://chfs.ky.gov/agencies/dph/dehp/hab/Pages/reportsstats.aspx
Los Angeles.....	http://publichealth.lacounty.gov/dhsp/Reports.htm
Louisiana.....	http://new.dhh.louisiana.gov/index.cfm/newsroom/category/63
Maine.....	https://www.maine.gov/dhhs/mecdc/infectious-disease/hiv-std/
Maryland.....	https://health.maryland.gov/phpa/OIDEOR/CHSE/Pages/statistics.aspx
Massachusetts.....	https://www.mass.gov/lists/hivaids-epidemiologic-profiles
Michigan.....	https://www.michigan.gov/mdhhs/keep-mi-healthy/chronicdiseases/hivsti/data-and-statistics
Minnesota.....	https://www.health.state.mn.us/diseases/hiv/stats/index.html
Mississippi.....	https://msdh.ms.gov/msdhsite/_static/14,0,150.html
Missouri.....	http://health.mo.gov/data/hivstdaids/data.php
Montana.....	https://dphhs.mt.gov/publichealth/cdepi/surveillance
Nebraska.....	https://dhhs.ne.gov/Pages/HIV-Prevention.aspx
Nevada.....	http://dph.nv.gov/Programs/HIV-OPHIE/dta/Publications/HIV/AIDS_Surveillance_Program_(HIV-OPHIE)_-Publications/
New Hampshire.....	https://www.dhhs.nh.gov/programs-services/disease-prevention/infectious-disease-control/hiv-prevention
New Jersey.....	http://www.nj.gov/health/hivstdtb/hiv-aids/statmap.shtml
New Mexico.....	http://nmhealth.org/data/infectious/20/
New York.....	https://www.health.ny.gov/diseases/aids/general/statistics/index.htm
New York City.....	https://www.nyc.gov/site/doh/data/data-sets/hiv-aids-surveillance-and-epidemiology-reports.page
North Carolina.....	http://epi.publichealth.nc.gov/cd/stds/figures.html
North Dakota.....	https://www.hhs.nd.gov/sites/www/files/documents/DOH%20Legacy/EpiProfile.pdf
Ohio.....	https://odh.ohio.gov/know-our-programs/hiv-aids-surveillance-program/data-and-statistics/
Oklahoma.....	https://oklahoma.gov/health/health-education/acute-disease-service/publications-and-statistics.html
Oregon.....	https://www.oregon.gov/oha/ph/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/HIVData/Pages/index.aspx
Pennsylvania.....	https://www.health.pa.gov/topics/programs/HIV/Pages/Annual-Summary.aspx
Philadelphia.....	https://www.phila.gov/documents/hiv-aids-data-and-research/
Puerto Rico.....	https://www.salud.gov.pr/CMS/471
Rhode Island.....	http://health.ri.gov/publications/bytopic.php?parm=HIV
San Francisco.....	http://www.sfdph.org/dph/files/reports/default.asp
South Carolina.....	http://www.dhec.sc.gov/Health/DiseasesandConditions/InfectiousDiseases/HIVandSTDs/DataandReports/
South Dakota.....	https://doh.sd.gov/health-data-reports/sexually-transmitted-infections-data-reports/
Tennessee.....	https://www.tn.gov/health/health-program-areas/statistics/health-data/hiv-data.html
Texas.....	http://www.dshs.state.tx.us/hivstd/reports/default.shtm
U.S. Virgin Islands.....	https://doh.vi.gov/programs/communicable-diseases
Utah.....	https://ibis.health.utah.gov/ibisph-view/indicator/view/HIV_AIDS.NewYr.html
Vermont.....	http://www.healthvermont.gov/immunizations-infectious-disease/hiv/surveillance
Virginia.....	http://www.vdh.virginia.gov/disease-prevention/disease-prevention/hiv-aids-sexually-transmitted-disease-std-hepatitis-reports/
Washington.....	https://doh.wa.gov/data-statistical-reports/diseases-and-chronic-conditions/hiv-data
West Virginia.....	https://oeps.wv.gov/hiv-aids/pages/default.aspx
Wisconsin.....	https://www.dhs.wisconsin.gov/hiv/data.htm
Wyoming.....	https://health.wyo.gov/publichealth/communicable-disease-unit/hivaids-surveillance-program/

Note. Electronic reports are not available for the following areas: American Samoa, the Northern Mariana Islands, and the Republic of Palau.

ENDING THE HIV EPIDEMIC IN THE U.S. INITIATIVE, PHASE I AREAS

To accelerate action to end the HIV epidemic, the U.S. Department of Health and Human Services (HHS) has proposed a plan to reduce HIV infections in the United States. The Ending the HIV Epidemic in the U.S. (EHE) initiative, Phase I, implements high-impact HIV prevention, care, treatment, and outbreak response strategies in 48 counties; the District of Columbia; San Juan, Puerto Rico; and 7 states with a substantial rural HIV burden. The goal of the initiative is to reduce new HIV infections by 75% in 5 years, and by 90% in 10 years.

The EHE Phase I jurisdictions include the District of Columbia; San Juan, Puerto Rico; and 48 counties: Arizona—Maricopa County; California—Alameda County, Los Angeles County, Orange County, Riverside County, Sacramento County, San Bernardino County, San Diego County, San Francisco County; Florida—Broward County, Duval County, Hillsborough County, Miami-Dade County, Orange County, Palm Beach County, Pinellas County; Georgia—Cobb County, DeKalb County, Fulton County, Gwinnett County; Illinois—Cook County; Indiana—Marion County; Louisiana—East Baton Rouge Parish, Orleans Parish; Maryland—Baltimore City, Montgomery County, Prince George’s County; Massachusetts—Suffolk County; Michigan—Wayne County; Nevada—Clark County; New Jersey—Essex County, Hudson County; New York—Bronx County, Kings County, New York County, Queens County; North Carolina—Mecklenburg County; Ohio—Cuyahoga County, Franklin County, Hamilton County; Pennsylvania—Philadelphia County; Tennessee—Shelby County; Texas—Bexar County, Dallas County, Harris County, Tarrant County, Travis County; Washington—King County.

EHE Phase I jurisdictions also include the following 7 states with substantial rural HIV burden: Alabama, Arkansas, Kentucky, Mississippi, Missouri, Oklahoma, and South Carolina.

Table A1. Diagnoses of HIV infection among persons aged ≥13 years, by area of residence, 2021 and 2022—Ending the HIV Epidemic Phase I jurisdictions

Area of residence	2021				2022			
	Persons aged ≥13 years		Total		Persons aged ≥13 years		Total	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Arizona								
Maricopa County	510	13.5	511	11.4	579	15.1	579	12.7
California								
Alameda County	188	13.3	188	11.4	206	14.7	206	12.6
Los Angeles County	1,526	18.2	1,527	15.6	1,600	19.2	1,602	16.5
Orange County	267	9.9	267	8.4	257	9.5	257	8.2
Riverside County	272	13.3	272	11.1	320	15.5	321	13.0
Sacramento County	184	13.8	184	11.6	194	14.6	194	12.2
San Bernardino County	299	16.6	300	13.7	288	16.0	289	13.2
San Diego County	391	14.1	394	12.0	402	14.4	402	12.3
San Francisco County	191	26.2	191	23.5	214	29.4	214	26.5
District of Columbia	198	34.6	198	29.6	211	36.6	211	31.4
Florida								
Broward County	537	32.5	539	27.8	579	34.8	581	29.8
Duval County	271	32.3	272	27.1	280	32.8	280	27.5
Hillsborough County	279	22.2	280	18.9	287	22.4	289	19.1
Miami-Dade County	865	37.7	865	32.4	1,021	44.4	1,023	38.3
Orange County	389	32.1	389	27.2	417	33.7	420	28.9
Palm Beach County	271	20.7	272	18.1	285	21.6	286	18.8
Pinellas County	117	13.7	117	12.2	112	13.0	113	11.7
Georgia								
Cobb County	145	22.4	146	19.0	171	26.2	171	22.2
DeKalb County	333	52.4	333	43.9	361	56.4	362	47.5
Fulton County	513	56.5	515	48.5	509	55.3	511	47.6
Gwinnett County	159	20.0	159	16.5	209	26.0	209	21.4
Illinois								
Cook County	833	18.9	835	16.1	868	19.9	870	17.0
Indiana								
Marion County	222	27.8	222	22.8	251	31.4	252	26.0
Louisiana								
East Baton Rouge Parish	141	37.0	141	31.1	131	34.5	131	29.1
Orleans Parish	144	44.4	144	38.2	125	39.2	125	33.8
Maryland								
Baltimore City	155	31.5	155	26.9	160	32.9	163	28.6
Montgomery County	94	10.6	95	9.0	105	11.8	106	10.1
Prince George's County	221	27.4	221	23.1	254	31.8	254	26.8
Massachusetts								
Suffolk County	128	18.8	128	16.6	115	17.0	115	15.0
Michigan								
Wayne County	255	17.3	255	14.4	248	16.9	249	14.2
Nevada								
Clark County	446	23.1	446	19.4	483	24.6	485	20.9
New Jersey								
Essex County	233	32.8	233	27.3	229	32.3	230	27.1
Hudson County	133	22.3	133	18.9	165	27.5	165	23.5
New York								
Bronx County	419	35.8	419	29.5	397	34.8	398	28.8
Kings County	450	20.4	450	17.1	491	22.6	493	19.0
New York County	320	22.7	320	20.3	332	23.2	333	20.9
Queens County	325	16.3	326	14.0	357	18.2	357	15.7

Table A1. Diagnoses of HIV infection among persons aged ≥13 years, by area of residence, 2021 and 2022—Ending the HIV Epidemic Phase I jurisdictions (cont)

Area of residence	2021				2022			
	Persons aged ≥13 years		Total		Persons aged ≥13 years		Total	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
North Carolina								
Mecklenburg County	278	29.4	279	24.8	276	28.7	277	24.2
Ohio								
Cuyahoga County	166	15.5	166	13.3	118	11.1	118	9.5
Franklin County	191	17.4	191	14.5	192	17.4	193	14.6
Hamilton County	122	17.6	123	14.9	93	13.4	93	11.3
Pennsylvania								
Philadelphia County	369	27.5	371	23.3	385	29.0	386	24.6
Puerto Rico								
San Juan Municipio	98	32.3	98	28.9	108	35.8	108	32.3
Tennessee								
Shelby County	292	38.5	293	31.7	338	44.9	338	36.9
Texas								
Bexar County	331	19.8	331	16.3	357	21.0	357	17.3
Dallas County	791	37.3	791	30.6	896	41.9	896	34.5
Harris County	1,182	30.6	1,182	25.0	1,260	32.2	1,261	26.4
Tarrant County	309	17.7	309	14.5	329	18.5	330	15.3
Travis County	229	20.5	229	17.5	236	20.7	236	17.8
Washington								
King County	215	11.1	216	9.6	250	12.8	250	11.0

Note. Information on Ending the HIV Epidemic in the U.S. can be found at <https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview>. Data should be interpreted with caution. The COVID-19 pandemic had a significant impact on access to HIV testing, care, and related services, and case surveillance activities in state and local jurisdictions. Therefore, readers should also consider the potential influence of the pandemic on HIV data for subsequent years. Data are based on residence at time of diagnosis of HIV infection.

^a Rates are per 100,000 population.

Table A2. Persons aged ≥13 years living with diagnosed HIV infection, by race/ethnicity and area of residence, year-end 2022—Ending the HIV Epidemic Phase I jurisdictions

Area of residence	American Indian/ Alaska Native		Asian ^a		Black/African American		Hispanic/Latino ^b		Native Hawaiian/ other Pacific Islander		White		Multiracial		Total ^c	
	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d
Arizona																
Maricopa County	338	532.0	198	108.8	2,053	925.8	4,069	354.5	18	228.3	5,518	257.2	468	613.9	12,693	330.1
California																
Alameda County	11	317.9	412	86.5	2,188	1,537.7	1,465	494.9	21	187.4	1,595	376.6	290	573.4	5,983	426.3
Los Angeles County	48	296.4	1,835	141.1	9,511	1,409.8	24,816	627.8	54	286.9	11,867	536.4	2,857	1,738.6	50,991	611.5
Orange County	7	128.1	584	94.3	372	770.4	3,762	430.0	11	147.5	2,326	216.3	263	396.2	7,325	271.6
Riverside County	23	239.4	193	126.5	895	671.2	3,046	295.4	9	143.4	5,978	867.5	426	1,012.5	10,570	512.1
Sacramento County	17	253.8	202	86.1	1,130	870.8	1,166	380.4	17	104.7	1,942	335.0	204	353.9	4,678	351.4
San Bernardino County	13	186.1	126	82.3	1,010	695.9	2,754	279.5	7	126.5	1,125	236.6	205	620.2	5,240	290.4
San Diego County	27	227.2	432	120.0	1,577	1,191.7	5,960	644.7	16	137.1	5,239	413.2	515	616.6	13,766	493.1
San Francisco County	35	2,250.9	825	303.4	1,482	3,948.4	2,941	2,698.7	30	1,122.6	5,691	2,018.4	556	2,445.5	11,560	1,589.3
District of Columbia	14	1,099.8	83	298.8	9,452	3,876.1	1,298	2,103.5	6	1,714.3	1,906	835.6	797	6,291.4	13,560	2,355.3
Florida																
Broward County	12	364.5	146	226.4	9,279	2,019.2	4,674	865.1	5	439.2	5,973	1,042.5	644	2,669.6	20,733	1,244.6
Duval County	4	145.9	63	144.3	4,350	1,777.5	561	593.1	3	424.6	1,404	313.5	229	1,256.2	6,614	775.8
Hillsborough County	4	135.7	65	109.7	3,297	1,627.2	1,947	511.8	3	317.3	2,142	349.1	201	877.4	7,659	597.1
Miami-Dade County	7	344.1	86	227.2	10,419	3,187.9	14,553	899.4	6	1,141.1	2,505	837.0	390	2,585.4	27,967	1,216.2
Orange County	6	225.0	73	102.1	4,043	1,679.1	2,892	718.7	13	909.5	2,326	468.8	251	1,209.3	9,604	777.2
Palm Beach County	4	186.1	42	105.7	4,786	2,033.6	1,578	517.8	2	300.4	1,779	246.2	206	1,300.0	8,397	635.6
Pinellas County	2	94.7	67	216.2	1,424	1,737.1	643	739.8	0	0.0	2,636	410.1	182	1,277.1	4,954	576.2
Georgia																
Cobb County	0	0.0	16	42.4	2,250	1,222.9	522	633.9	1	362.7	729	217.1	261	2,074.3	3,779	577.9
DeKalb County	2	217.7	74	181.3	6,679	1,944.4	803	1,685.1	4	1,111.3	1,109	564.8	514	4,805.3	9,186	1,434.6
Fulton County	8	646.7	55	74.1	11,721	2,944.1	1,138	1,788.6	6	4,405.6	2,439	664.8	1,028	6,386.4	16,396	1,781.6
Gwinnett County	1	76.2	73	64.4	1,953	829.3	785	468.0	1	330.3	506	187.0	207	1,302.8	3,526	438.2
Illinois																
Cook County	19	369.5	378	105.4	12,167	1,243.0	6,158	561.9	11	1,444.5	5,115	274.9	2,131	3,539.3	25,980	595.8
Indiana																
Marion County	3	205.3	129	401.6	2,601	1,155.1	613	751.3	3	2,160.2	1,543	350.5	237	1,331.4	5,129	642.3
Louisiana																
East Baton Rouge Parish	5	595.5	11	81.1	3,391	1,973.4	119	763.7	0	0.0	416	240.7	56	1,255.5	3,998	1,054.3
Orleans Parish	7	916.7	23	228.8	3,217	1,775.9	306	1,788.5	0	0.0	1,103	1,046.4	138	3,437.0	4,796	1,505.4
Maryland																
Baltimore City	7	506.0	30	211.4	8,407	2,837.0	445	1,748.0	0	0.0	770	550.6	593	7,024.4	10,252	2,110.3
Montgomery County	3	202.7	78	53.9	2,408	1,430.8	699	417.3	2	552.8	555	144.9	292	1,362.9	4,037	455.2
Prince George's County	4	205.3	44	126.9	6,216	1,236.4	755	508.4	0	0.0	348	359.6	825	5,729.1	8,192	1,024.8
Massachusetts																
Suffolk County	6	491.7	125	186.6	2,097	1,622.2	1,563	1036.8	1	257.1	1,704	540.1	123	945.6	5,619	829.8
Michigan																
Wayne County	4	77.4	26	48.3	5,500	1,015.8	403	452.3	0	0.0	1,057	142.4	260	811.8	7,250	495.2
Nevada																
Clark County	28	303.0	356	161.1	2,875	1,217.7	3,009	500.0	49	329.4	3,292	405.0	439	663.6	10,048	512.1

Table A2. Persons aged ≥13 years living with diagnosed HIV infection, by race/ethnicity and area of residence, year-end 2022—Ending the HIV Epidemic Phase I jurisdictions (cont)

Area of residence	American Indian/ Alaska Native		Asian ^a		Black/African American		Hispanic/Latino ^b		Native Hawaiian/ other Pacific Islander		White		Multiracial		Total ^c	
	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d	No.	Rate ^d
New Jersey																
Essex County	0	0.0	23	50.8	5,696	2,123.9	1,898	1,149.4	1	358.9	484	221.3	627	6,638.9	8,746	1,234.5
Hudson County	3	320.8	100	99.2	1,308	1,989.1	2,410	966.7	1	326.0	793	452.7	354	4,712.2	4,975	829.5
New York																
Bronx County	7	215.3	103	208.1	11,305	3,355.9	13,567	2,137.2	2	355.9	824	791.7	1,292	12,461.6	27,139	2,381.8
Kings County	5	119.9	387	135.7	14,118	2,163.6	7,198	1,784.4	6	1,044.4	2,681	340.7	1,669	4,451.9	26,095	1,202.4
New York County	8	373.4	611	322.4	7,216	3,960.1	8,887	2,450.1	9	1,386.2	7,523	1,125.7	1,638	6,119.5	25,998	1,815.1
Queens County	12	167.2	864	159.6	5,062	1,428.3	7,390	1,383.5	12	501.0	1,897	393.5	1,210	3,407.6	16,477	842.0
North Carolina																
Mecklenburg County	7	251.1	47	76.4	4,483	1,479.0	710	573.2	1	252.6	1,001	220.9	412	2,353.3	6,664	692.5
Ohio																
Cuyahoga County	1	61.6	22	60.1	2,848	944.2	596	894.1	0	0.0	1,245	196.4	258	1,385.2	4,985	470.6
Franklin County	4	196.0	36	55.4	2,435	965.9	417	676.6	0	0.0	2,120	306.3	325	1,141.9	5,351	485.7
Hamilton County	0	0.0	16	79.7	1,860	1,065.5	131	567.2	1	136.6	985	214.6	178	1,296.1	3,174	458.6
Pennsylvania																
Philadelphia County	34	1,219.4	178	161.8	10,608	2,049.7	2,845	1,483.3	5	1,853.7	2,554	532.2	601	2,460.7	16,825	1,268.1
Puerto Rico^e																
San Juan Municipio	0	—	0	—	5	—	3,754	—	0	—	21	—	0	—	3,780	1,254.3
Tennessee																
Shelby County	1	83.6	11	48.7	5,475	1,362.6	285	638.2	2	3,154.8	655	239.4	355	3,779.7	6,785	900.6
Texas																
Bexar County	4	94.3	47	85.6	908	690.2	4,753	465.8	1	44.5	1,077	232.1	337	1,441.9	7,127	419.0
Dallas County	7	110.5	225	145.9	8,538	1,731.2	5,779	688.9	10	977.8	4,376	706.0	1,257	4,631.4	20,192	943.3
Harris County	6	78.9	391	130.9	13,393	1,772.9	9,567	571.5	3	153.5	4,153	369.5	1,375	2,899.4	28,890	739.1
Tarrant County	2	29.6	83	76.2	2,326	742.0	1,754	343.2	3	85.4	1,534	191.5	1,013	3,305.7	6,715	378.2
Travis County	2	68.6	79	84.7	1,197	1,258.5	2,110	593.2	2	222.6	1,786	314.0	263	1,245.3	5,439	478.0
Washington																
King County	41	361.2	365	86.5	1,500	1,145.0	1,288	694.6	29	192.0	3,518	315.8	542	708.6	7,283	372.5

Note. Information on Ending the HIV Epidemic in the U.S. can be found at <https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview>. Data for the year 2022 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2023. Numbers less than 12, and trends based on these numbers, should be interpreted with caution. Data are based on residence at the end of the specified year (i.e., most recent known address).

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

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

^c Includes persons whose race/ethnicity is unknown.

^d Rates are per 100,000 population.

^e Rates by race/ethnicity are not provided because U.S. census information is limited for Puerto Rico.