

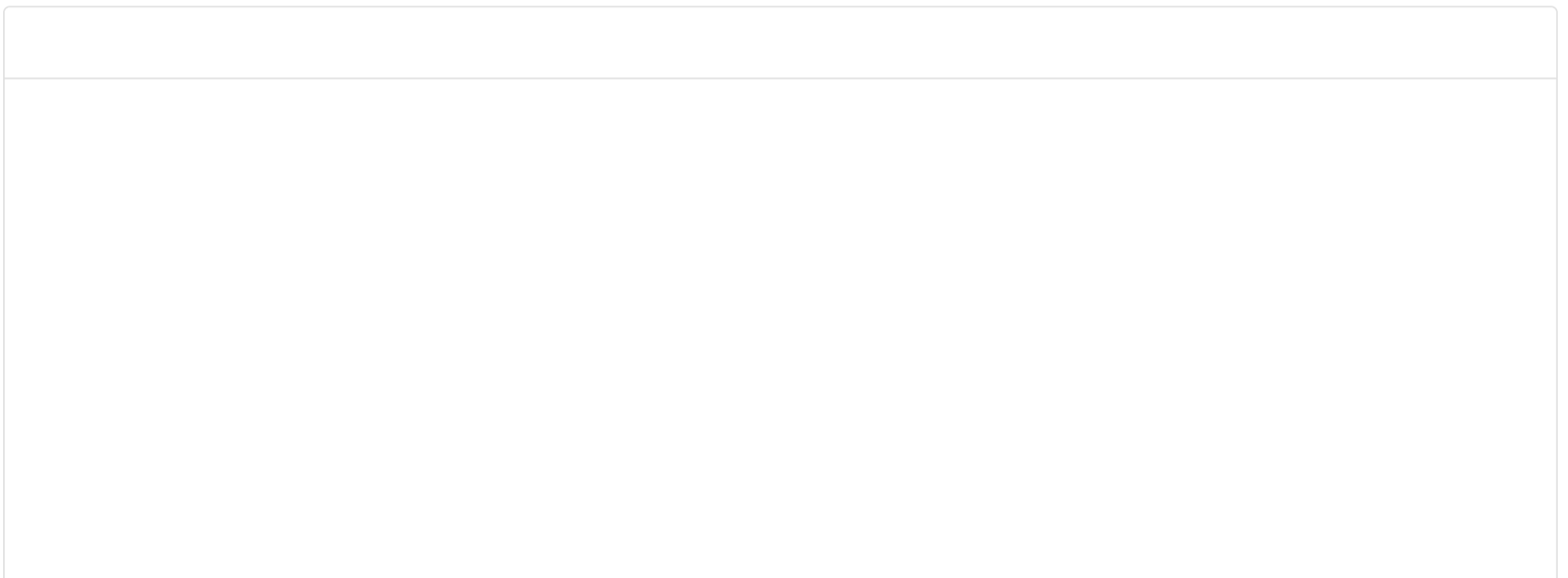


HIV

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Diagnoses of HIV Infection in the United States and Dependent Areas, 2021



Data in the *HIV Surveillance Report* may be used to monitor progress toward U.S. national goals outlined in *Healthy People 2030*, the *National HIV/AIDS Strategy*, and the *Ending the HIV Epidemic in the U.S.* (EHE) initiative. Data are presented for diagnoses of HIV infection reported to CDC through December 2022.

*

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Suggested Citation

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Confidential Information, Referrals, and Educational Material on HIV

CDC-INFO

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

Acknowledgments

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Diagnoses of HIV Infection in the United States and Dependent Areas 2021: Guide to Acronyms and Initialisms

AGI	additional gender identity
AIDS	acquired immunodeficiency syndrome
ASAB	assigned sex at birth
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
NCHHSTP	National Center for HIV, Viral Hepatitis, STD, and TB Prevention
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

SDOH	social determinants of health
STD	sexually transmitted disease
TB	tuberculosis

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Diagnoses of HIV Infection in the United States and Dependent Areas 2021: Commentary

Commentary



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Overview

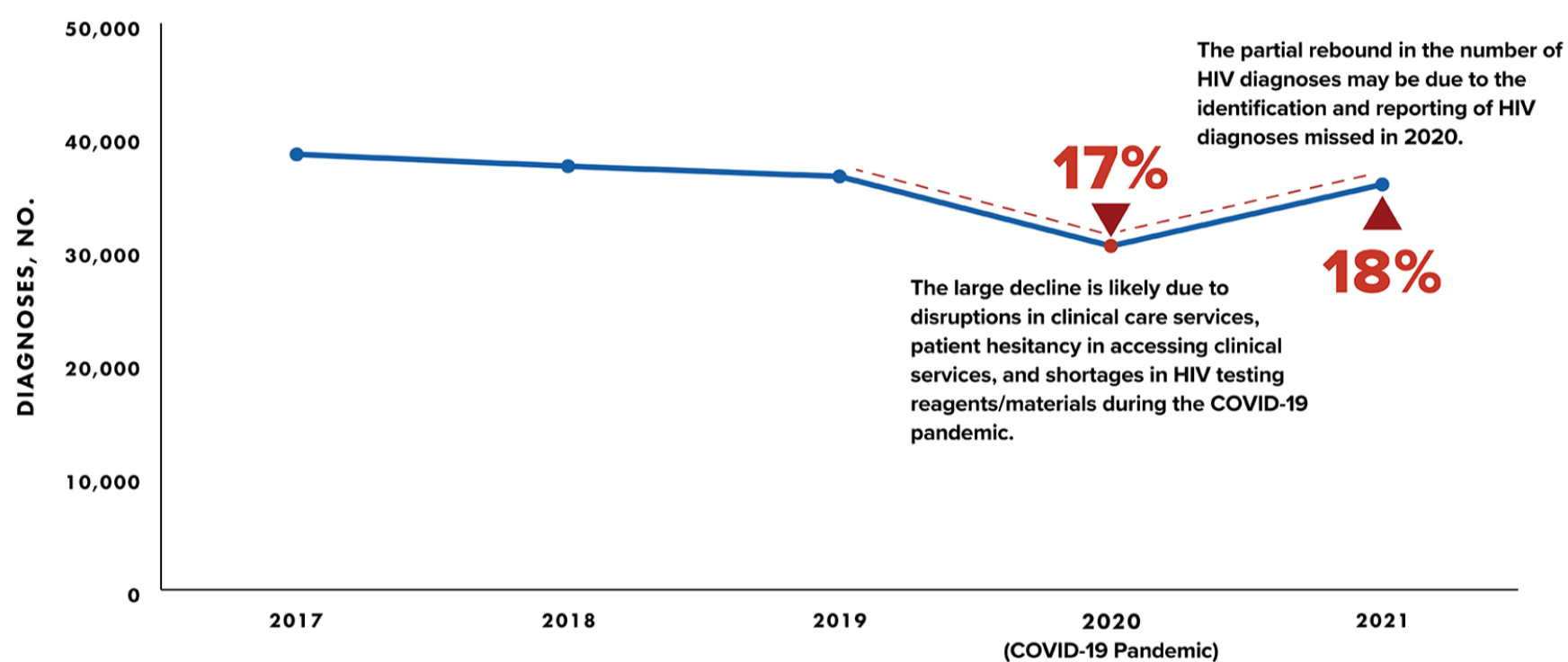
The Centers for Disease Control and Prevention (CDC) collects, analyzes, and disseminates surveillance data on HIV infection; these data are one of the nation's primary sources of information on HIV in the United States. The annual surveillance report, published by CDC, summarizes information about diagnosed HIV infection in the United States and dependent areas. 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 infection. 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], and the Ending the HIV Epidemic in the U.S. (EHE) initiative [3].

Impact of COVID-19 Pandemic

Data for the year 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. The overall number of HIV diagnoses in the United States in 2020 (30,335) was 17% lower than in 2019 (Figure A). The decline in 2020 was larger than the average yearly decline (2%–3%) observed during 2017–2019. The underdiagnosis of HIV in 2020 was due to disruptions in clinical care

services, patient hesitancy in accessing clinical services, and shortages in HIV testing reagents/materials [4–8]. To emphasize the need for caution, tables presenting data for the year 2020 include “COVID-19 pandemic” in the title, and the 2020 column is highlighted in tables that provide multiple years of data.

During 2021, the overall number of HIV diagnoses in the United States (35,769) partially rebounded and was 18% higher than in 2020 (Figure A). The partial rebound in the number of HIV diagnoses may be due to the identification and reporting of HIV diagnoses missed in 2020. The ongoing impact of the pandemic on HIV testing, diagnoses, and treatment has varied by jurisdiction, with some recovering more slowly than others. In 2021, some jurisdiction’s levels of HIV testing, diagnoses, and treatment remained below pre-COVID-19 levels [9]. Increasing testing efforts and innovative strategies to reach persons with undiagnosed HIV infection are needed to offset this diagnosis gap. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm. Assessments 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.

FIGURE A**Diagnoses of HIV infection—United States, 2017–2021**

Note. The overall number of HIV diagnoses in the United States in 2020 (30,335) was 17% lower than in 2019. The decline in 2020 was larger than the average yearly decline (2%–3%) observed during 2017–2019. During 2021, the overall number of HIV diagnoses in the United States (35,769) partially rebounded and was 18% higher than in 2020.



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Numbers, percentages, and rates of diagnoses of HIV infection during 2021 are based on data from all 50 states, the District of Columbia, and 6 U.S. dependent areas (American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the Republic of Palau, and the U.S. Virgin Islands). Data for 2021 and additional data stratifications and years are available via [NCHHSTP AtlasPlus](#). 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) and in AtlasPlus.

Report Changes

- Terminology for transmission category was updated.
- Relative percent change analyses (i.e., comparing 2017 and 2021) have been included, as editions published prior to 2020 (COVID-19 pandemic).
- Special Focus Profile section now includes “Persons residing in the Southern Region of the United States.” Trends for changes in absolute and relative disparities have been added to this section.
- Technical Notes section now includes “Limitations of Data and Findings.”

- Tables that present data by using the transmission category classification, based on a person's assigned sex at birth, include the definition for male-to-male sexual contact (MMSC) and an updated definition for injection drug use (IDU) and MMSC/IDU.

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Diagnoses of HIV Infection in the United States and Dependent Areas 2021: National Profile

National Profile

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Data presented in this report are based on case data reported to CDC through December 31, 2022, which allows for a 12-month reporting delay and assessment of diagnosis, death, and prevalence for the year 2021. 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 trends 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 2021 to data for the year 2017. The exceptions to this standard are where numbers are small (i.e., less than 12) or rates are based on small numbers.

Data for the year 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 and local jurisdictions.

Deaths of persons with diagnosed HIV infection may be due to any cause (i.e., may or may not be related to HIV infection). Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022.

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. dependencies.

Important notes

- 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.
- For disparity measures, reference groups are based on the rate of the lowest group with more than five 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 that specific notes are highlighted with the magnifying glass icon in the text. 

Diagnoses

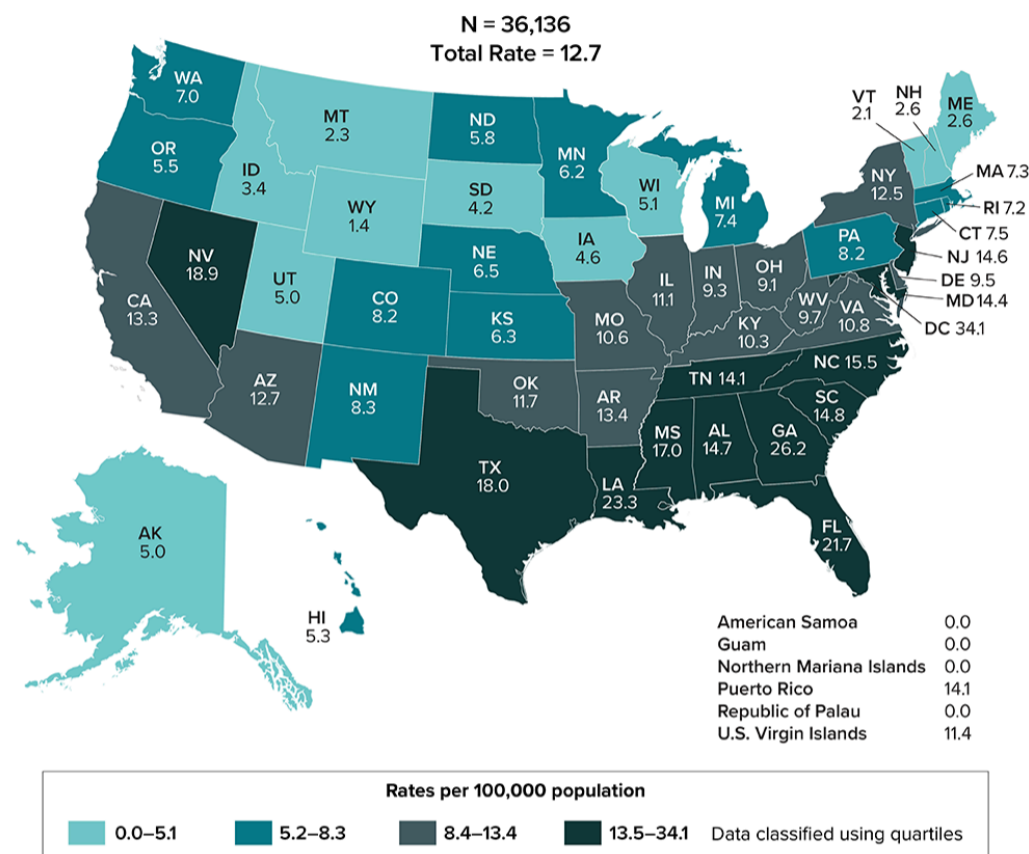
Diagnoses of HIV infection



The annual number and rate of diagnoses of HIV infection in the United States and 6 dependent areas decreased 7% and 8%, respectively, in 2021, compared with 2017 (Table 1b). In 2021, there were 36,189 diagnoses of HIV infection (persons aged ≥ 13 years: 36,136) (Tables 1b and 3b). The overall HIV diagnosis rate was 10.8 (persons aged ≥ 13 years: 12.7) (Figure 1, Tables 1b and 3b).

FIGURE 1

Rates of diagnoses of HIV infection among persons aged ≥ 13 years, 2021—United States and 6 dependent areas



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Gender

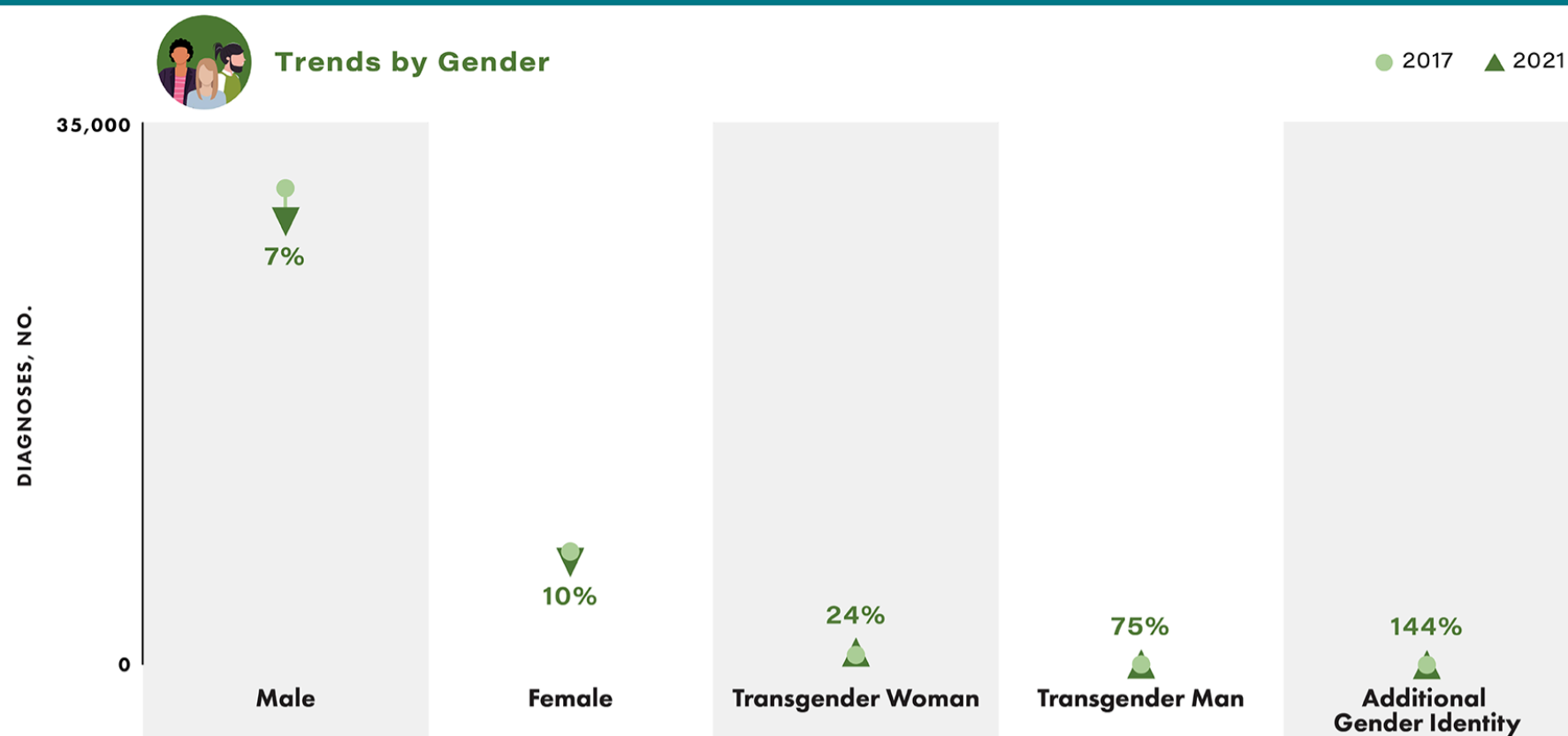
In 2021, compared with 2017, changes in the numbers of HIV diagnoses among persons aged ≥ 13 years were as follows (Figure 2):

- Increase—transgender women (24%), transgender men (75%), and AGI persons (144%)
- Decrease—males (-7%) and females (-10%)
- Stable—none

In 2021, numbers and percentages of HIV diagnoses among persons aged ≥ 13 years were as follows:

- Male—28,620 (79%)
- Female—6,604 (18%)
- Transgender woman/girl—812 (2%)
- Transgender man/boy—56 (< 1%)
- AGI—44 (< 1%)

FIGURE 2

Diagnoses of HIV infection among persons aged ≥ 13 years, by gender, 2017–2021—United States and 6 dependent areas

Note. "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender. "Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender. Additional gender identity examples include "bigender," "gender queer," and "two-spirit."



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Age group

In 2021, compared with 2017, changes in rates of HIV diagnoses among persons aged ≥ 13 years were as follows (Figure 3):

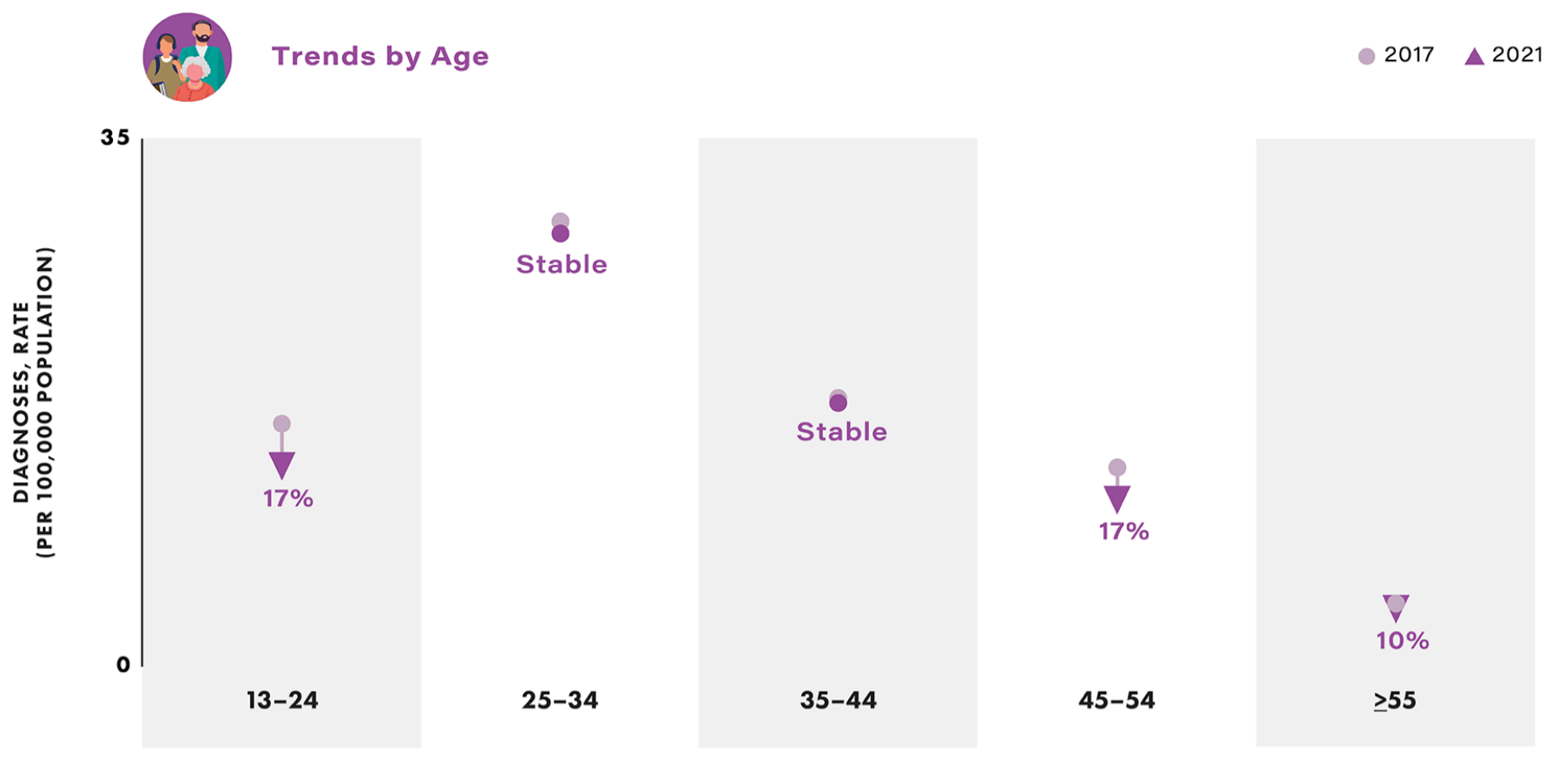
- Increase—none
- Decrease—persons aged 13–24 (-17%), 45–54 (-17%), and ≥ 55 (-10%) years
- Stable—persons aged 25–34 and 35–44 years

In 2021, numbers and percentages of HIV diagnoses among persons aged ≥ 13 years were as follows:

- 13–24 years—6,987 (19%)
- 25–34 years—13,204 (37%)
- 35–44 years—7,634 (21%)
- 45–54 years—4,519 (13%)
- ≥ 55 years—3,792 (10%)

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

FIGURE 3

Rates of diagnoses of HIV infection among persons aged ≥ 13 years, by age at diagnosis, 2017–2021—United States and 6 dependent areas

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

- Highest—persons aged 25–34 years (28.8)
- Lowest—persons aged ≥ 55 years (3.8)

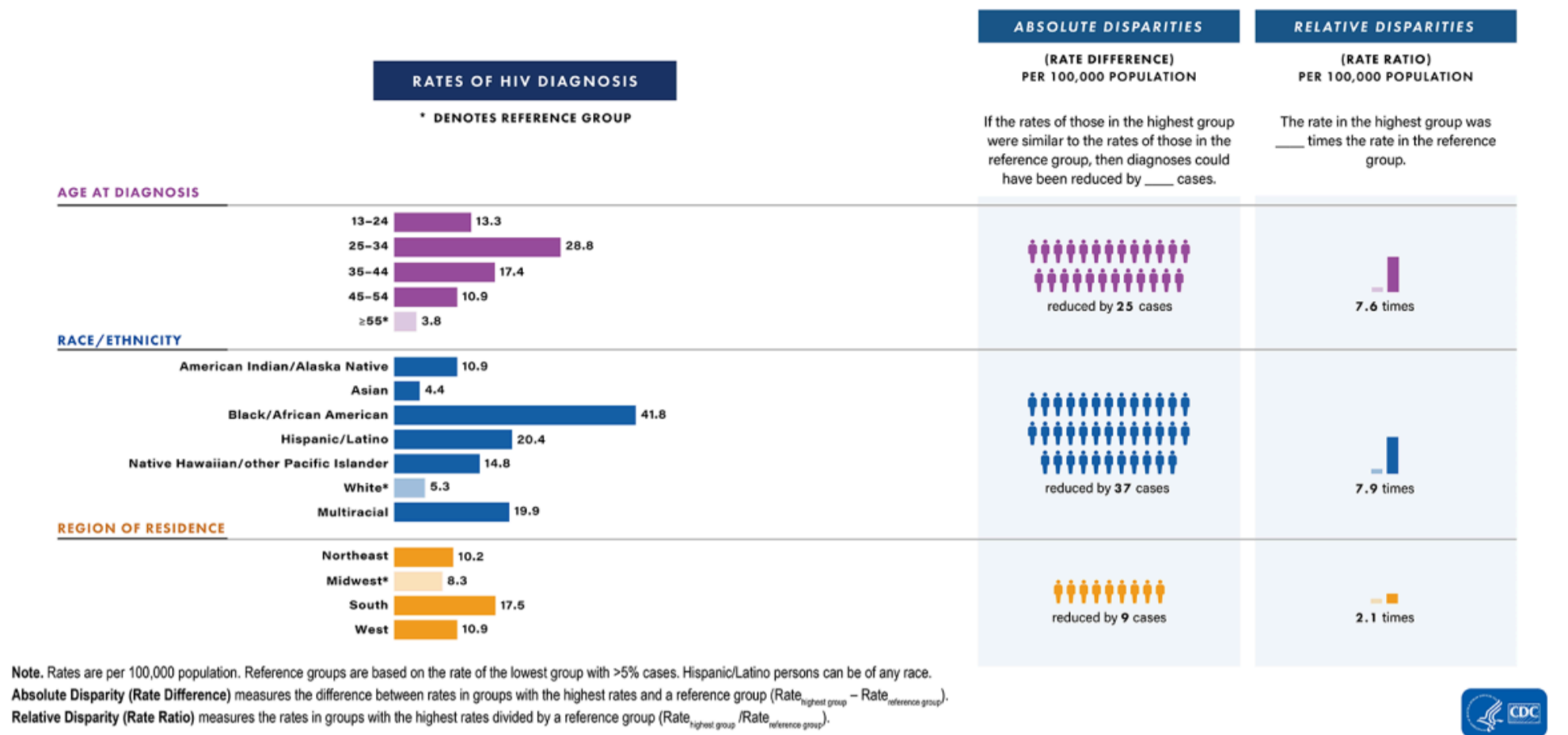
For additional data by 5-year age groups, see Table 3a.

Disparities by age group

- Absolute disparity (rate difference)—If the rate of HIV diagnoses among persons aged 25–34 years was similar to the rate among persons aged ≥ 55 years, then diagnoses could have been reduced by 25 cases per 100,000 population.
- Relative disparity (rate ratio)—The rate of diagnoses among persons aged 25–34 years was 7.6 times the rate among persons aged ≥ 55 years.

FIGURE 4

Rates and disparities of diagnoses of HIV infection among persons aged ≥13 years, by selected characteristics, 2021—United States



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Race/ethnicity

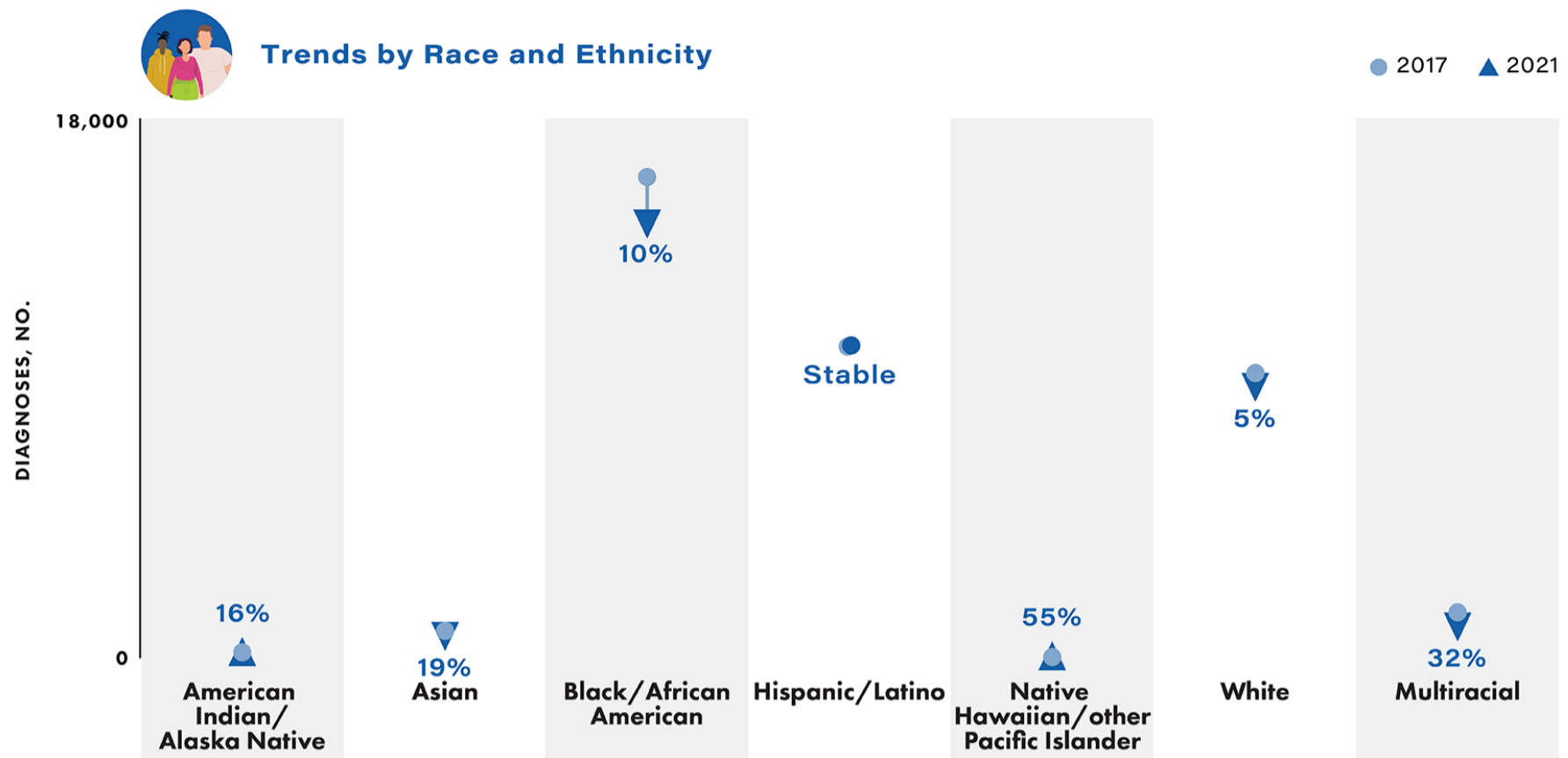
In 2021, compared with 2017, changes in numbers of HIV diagnoses among persons aged ≥ 13 years were as follows (Figure 5):

- Increase—American Indian/Alaska Native (16%) and Native Hawaiian/other Pacific Islander (55%)
- Decrease—Asian (-19%), Black/African American (-10%), White (-5%), and multiracial (-32%)
- Stable—Hispanic/Latino

In 2021, numbers and percentages of HIV diagnoses among persons aged ≥ 13 years were as follows:

- American Indian/Alaska Native—223 (< 1%)
- Asian—738 (2%)
- Black/African American—14,528 (40%)
- Hispanic/Latino—10,467 (29%)
- Native Hawaiian/other Pacific Islander—76 (< 1%)
- White—9,063 (25%)
- Multiracial—1,041 (3%)

FIGURE 5

Diagnoses of HIV infection among persons aged ≥ 13 years, by race/ethnicity, 2017–2021—United States and 6 dependent areas

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

- Highest—Black/African American (41.8)
- Lowest—Asian (4.4)

Disparities by race/ethnicity

- Absolute disparity (rate difference)—If the rate of HIV diagnoses among Black/African American persons aged ≥ 13 years was similar to the rate among White persons aged ≥ 13 years (5.3), then diagnoses could have been reduced by 37 cases per 100,000 population.
- Relative disparity (rate ratio)—The rate of diagnoses among Black/African American persons aged ≥ 13 years was 7.9 times the rate among White persons aged ≥ 13 years.

Assigned sex at birth (ASAB) and transmission category

In 2021, compared with 2017, changes in numbers of HIV diagnoses among persons aged ≥ 13 years were as follows (Table 1b):

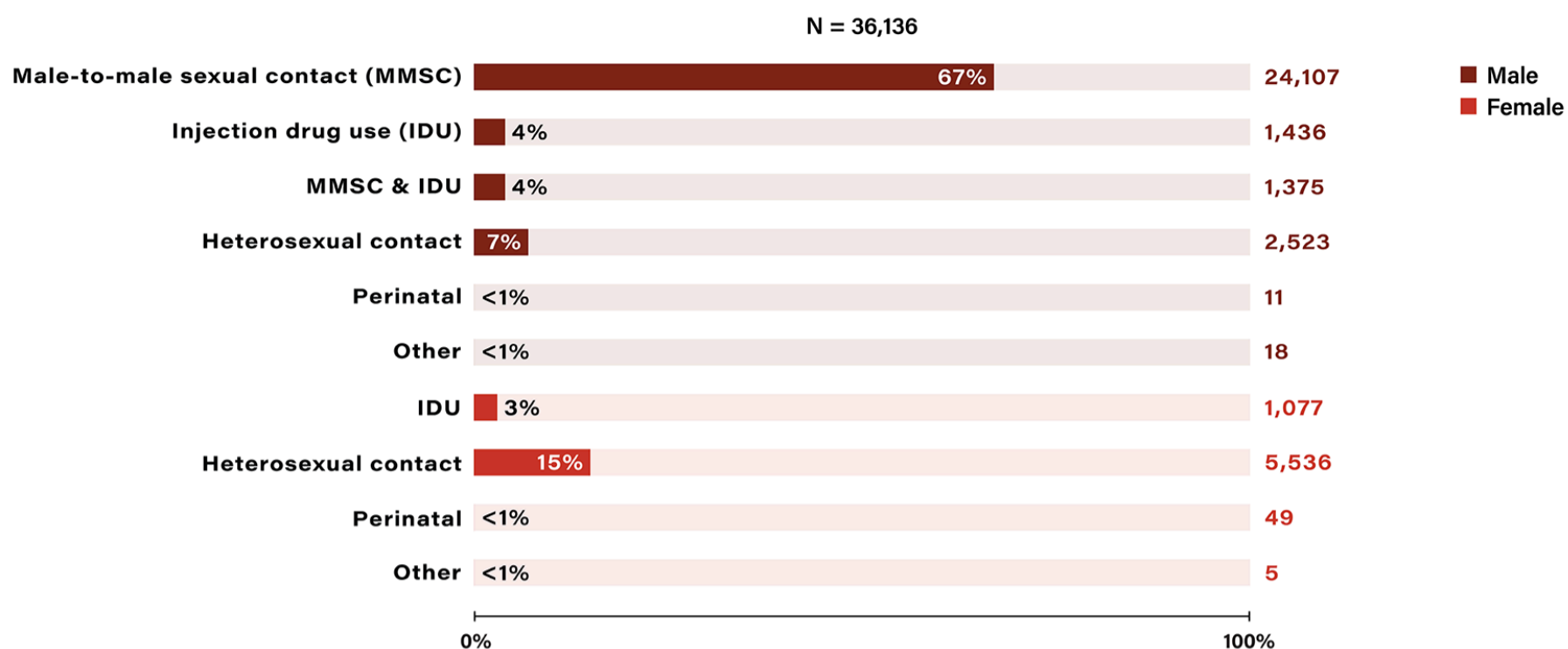
- Increase—males with infections attributed to IDU (8%)
- Decrease—males with infections attributed to MMSC (-6%), MMSC and IDU (-10%), and heterosexual contact (-15%); females with infections attributed to heterosexual contact (-11%)
- Stable—females with infections attributed to IDU

In 2021, percentages of HIV diagnoses among persons aged ≥ 13 years were as follows—highest percentages (Figure 6, Table 1b):

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

FIGURE 6

Percentages of diagnoses of HIV infection among persons aged ≥ 13 years, by assigned sex at birth and transmission category, 2021—United States and 6 dependent areas



Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male contact includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 infection. Perinatal includes individuals aged ≥ 13 years at time of diagnosis of HIV infection. Other includes other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.



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Gender and exposure category

In 2021, compared with 2017, changes in numbers of HIV diagnoses among persons aged ≥ 13 years were as follows (Table 4b):

- Increase—transgender women (21%), transgender men (74%), and AGI (138%) with infections attributed to sexual contact; and transgender women with infections attributed to sexual contact *and* IDU (40%)
- Decrease—none
- Stable—none

In 2021, percentages of HIV diagnoses among persons aged ≥ 13 years were as follows—highest percentages (Table 4b):

- Transgender women—sexual contact (88%)
- Transgender men—sexual contact (84%)
- AGI—sexual contact (86%)

Region of residence

In 2021, compared with 2017, percent changes in rates of HIV diagnoses among all persons were as follows (Table 1b):

- Increase—none
- Decrease—Northeast (-19%), Midwest (-7%), South (-8%), West (-6%), and U.S. dependent areas (-7%)
- Stable—none

In 2021, numbers and percentages of HIV diagnoses among all persons were as follows (Table 1b):

- Northeast—4,993 (14%)
- Midwest—4,824 (13%)
- South—18,728 (52%)

- West—7,224 (20%)
- U.S. dependent areas—420 (1%)

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

- Highest—South (17.5)
- Lowest—Midwest (8.3)

Disparities by region

- Absolute disparities (rate difference)—If the rate of HIV diagnoses among persons in the South was similar to the rate among persons in the Midwest, then diagnoses could have been reduced by 9 cases per 100,000 population.
- Relative disparities (rate ratio)—The rate of diagnoses among persons in the South was 2.1 times the rate among persons in the Midwest.

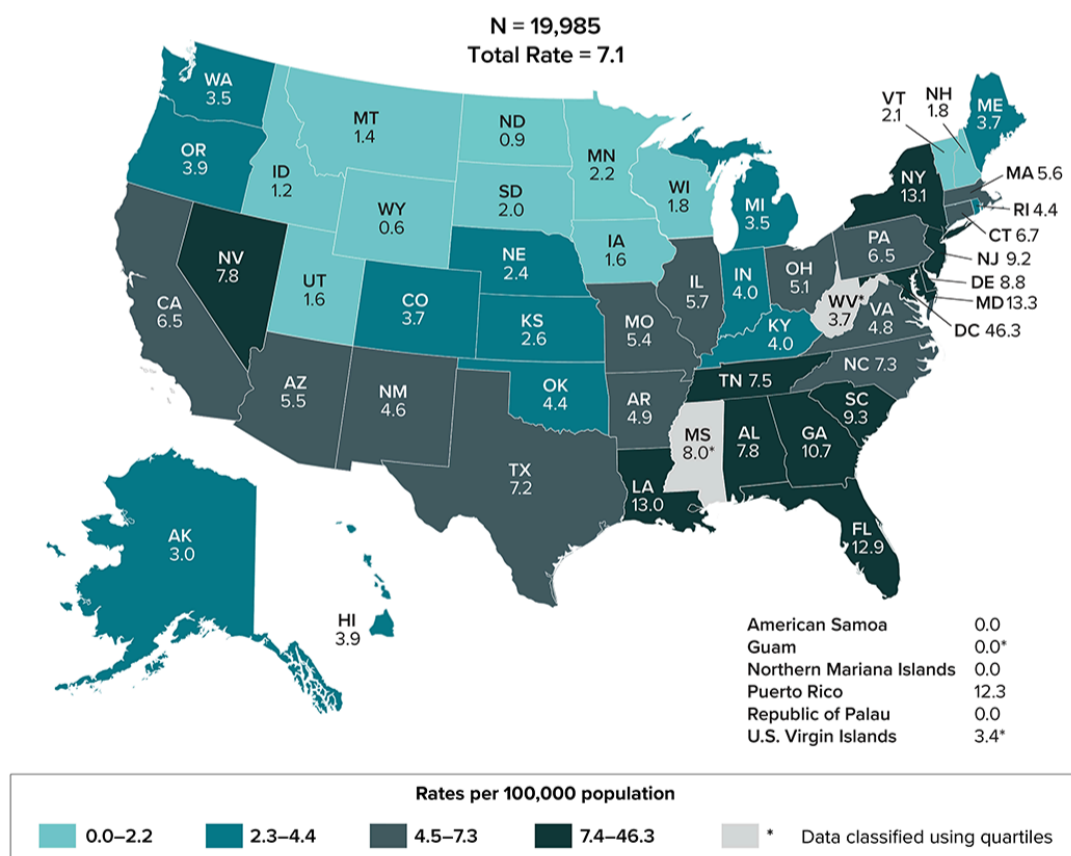
Deaths (Any Cause)

Deaths (any cause) of persons with diagnosed HIV infection



In 2021, compared with 2017, the annual number and rate of deaths increased in the United States and 6 dependent areas, (Table 11b). In 2021, the number of deaths among persons with diagnosed HIV infection was 19,986 (persons aged ≥ 13 years: 19,985) (Table 13b). The overall rate of deaths was 6.0 (persons aged ≥ 13 years: 7.1) (Figure 7, Tables 11b and 13b).

FIGURE 7
Rates of deaths (any cause) among persons aged ≥13 years with diagnosed HIV infection, 2021—United States and 6 dependent areas



Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Asterisk (*) indicates incomplete ascertainment of deaths.



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Gender

In 2021, compared with 2017, trends for the numbers of deaths among persons with diagnosed HIV infection were as follows (Table 11b):

- Increase—males (19%), females (18%), and transgender women/girls (96%)

- Decrease—none
- Stable—none

In 2021, numbers and percentages of deaths among persons with diagnosed HIV infection were as follows (Table 11b):

- Male—14,942 (75%)
- Female—4,825 (24%)
- Transgender woman/girl—216 (1%)
- Transgender man/boy—2 (< 1%)
- AGI—1 (< 1%)


Age group

In 2021, compared with 2017, trends for the rates of deaths among persons with diagnosed HIV infection were as follows (Table 11b):

- Increase—persons aged 25–29 (11%), 30–34 (39%), 35–39 (17%), 40–44 (12%), 55–59 (15%), 60–64 (24%), and ≥ 65 (48%) years
- Decrease—persons aged 20–24 (-29%), 45–49 (-8%), and 50–54 (-16%) years
- Stable—none


In 2021, numbers and percentages of deaths among persons aged ≥ 13 years with diagnosed HIV infection were as follows (Figure 8):

- 13–24 years—110 (1%)
- 25–34 years—1,373 (7%)
- 35–44 years—2,290 (11%)
- 45–54 years—3,854 (19%)
- ≥ 55 years—12,358 (62%)

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

Rates among persons aged ≥ 13 years (United States only) (Figure 9)

- Highest—persons aged ≥ 55 years (12.3)
- Lowest—persons aged 13–24 years (0.2)

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

Disparities by age group

- Absolute disparity (rate difference)—If the rate of deaths among persons aged ≥ 55 years with diagnosed of HIV infection was similar to the rate among persons aged 25–34 years (3.0), then deaths could have been reduced by 9 per 100,000 population.
- Relative disparity (rate ratio)—The rate of death among persons aged ≥ 55 years was 4.1 times the rate among persons aged 25–34 years.

Race/ethnicity

In 2021, compared with 2017, changes in numbers of deaths among persons with diagnosed HIV infection were as follows (Table 11b):

- Increase—American Indian/Alaska Native (70%), Asian (42%), Black/African American (17%), Hispanic/Latino (25%), White (15%), and multiracial (37%)

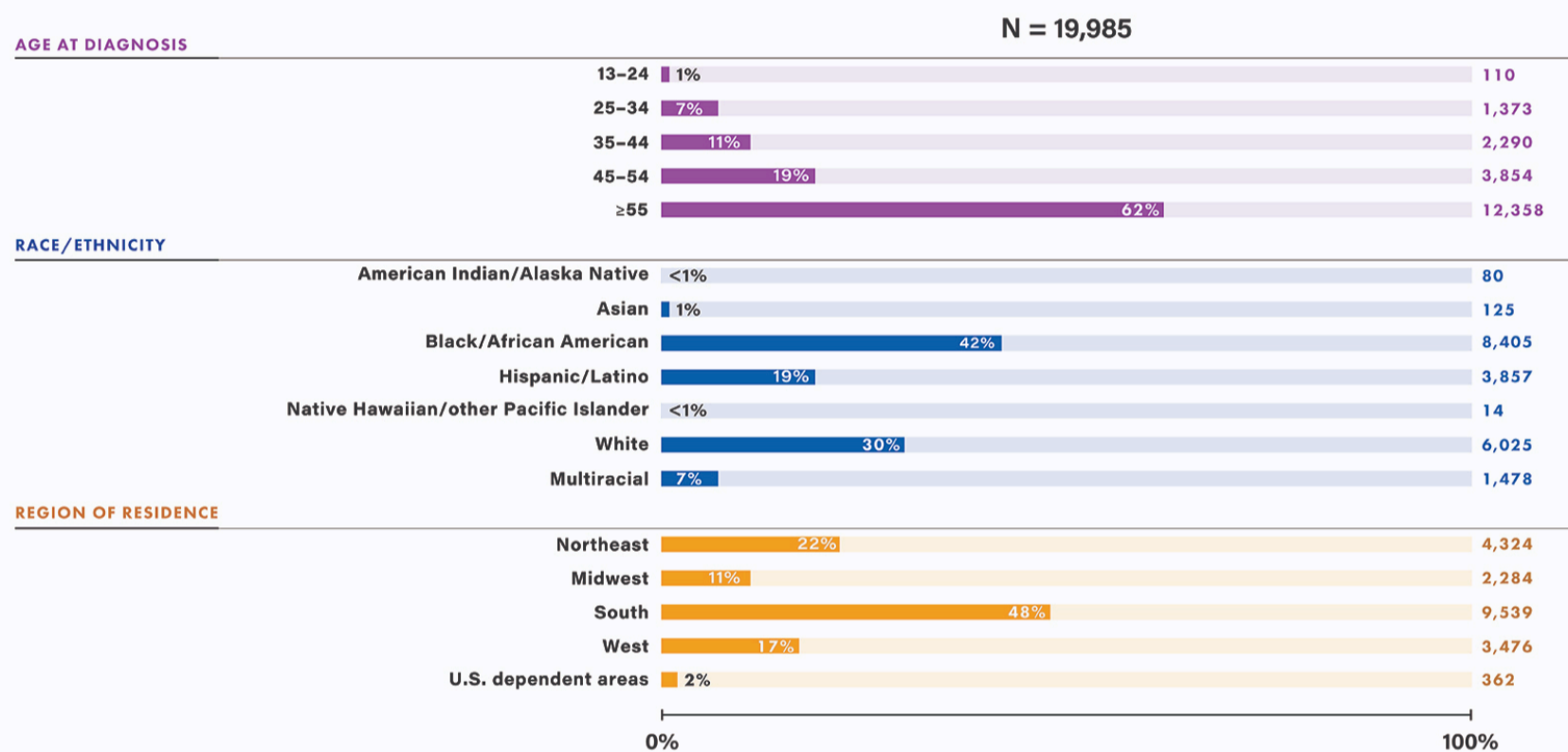
- Decrease—none
- Stable—none

In 2021, numbers and percentages of deaths among persons aged ≥ 13 years with diagnosed HIV infection were as follows (Figure 8):

- American Indian/Alaska Native—80 (< 1%)
- Asian—125 (1%)
- Black/African American—8,405 (42%)
- Hispanic/Latino—3,858 (19%)
- Native Hawaiian/other Pacific Islander—14 (< 1%)
- White—6,025 (30%)
- Multiracial—1,478 (7%)

FIGURE 8

Percentages of deaths (any cause) among persons aged ≥ 13 years with diagnosed HIV infection, by selected characteristics, 2021—United States and 6 dependent areas



Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Asian includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race.



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Rates among persons aged ≥ 13 years (United States only) (Figure 9)

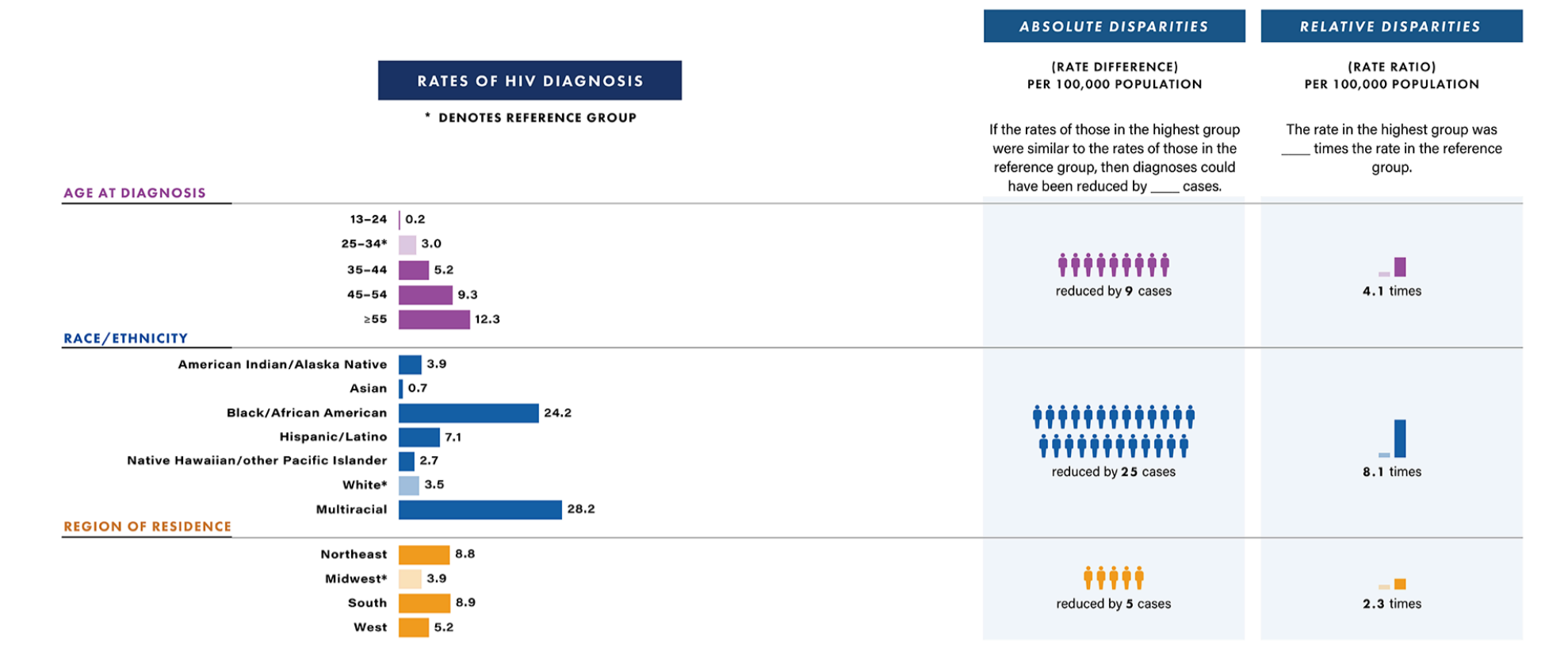
- Highest—multiracial (28.2)
- Lowest—Asian (0.7)

Disparities by race/ethnicity

- Absolute disparity (rate difference)—If the rate of deaths among multiracial persons aged ≥ 13 years with diagnosed HIV infection was similar to the rate among White persons aged ≥ 13 years (3.5), then deaths could have been reduced by 25 per 100,000 population.
- Relative disparity (rate ratio)—The rate of death among multiracial persons aged ≥ 13 years was 8.1 times the rate among White persons aged ≥ 13 years.

FIGURE 9

Rates and disparities of deaths (any cause) among persons aged ≥13 years with diagnosed HIV infection, by selected characteristics, 2021—United States



Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. 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 person can be of any race.

Absolute Disparity (Rate Difference) measures the difference between rates in groups with the highest rates and a reference group ($Rate_{highest\ group} - Rate_{reference\ group}$).

Relative Disparity (Rate Ratio) measures the rates in groups with the highest rates divided by a reference group ($Rate_{highest\ group} / Rate_{reference\ group}$).



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ASAB and transmission category

In 2021, compared with 2017, changes in numbers of deaths among persons aged ≥ 13 years with diagnosed HIV infection were as follows (Table 11b):

- Increase—MMSC (23%), heterosexual contact (male [22%]; female [24%]), MMSC and IDU (22%), and IDU (male [7%]; female [5%])
- Decrease—none
- Stable—none

In 2021, percentages of deaths among persons aged ≥ 13 years with diagnosed HIV infection were as follows—highest percentages (Table 11b):

- Overall—MMSC (44%)
- Male—MMSC (58%)
- Female—heterosexual contact (67%)

Gender and exposure category

In 2021, compared with 2017, changes in numbers of deaths among persons aged ≥ 13 years with diagnosed HIV infection were as follows (Table 14b):

- Increase—transgender women with infections attributed to sexual contact (101%) and sexual contact and IDU (79%)
- Decrease—none
- Stable—none

In 2021, percentages of deaths among persons aged ≥ 13 years with diagnosed HIV infection were as follows—highest percentages (Table 14b):

- Transgender women—sexual contact (74%)

- Transgender men—sexual contact *and* IDU (100%)
- AGI—sexual contact (100%)

Region of residence

In 2021, compared with 2017, changes in rates of deaths among persons with diagnosed HIV infection were as follows (Table 11b):

- Increase—Northeast (15%), Midwest (18%), South (15%), and West (26%)
- Decrease—U.S. dependent areas (-10%)
- Stable—none

In 2021, numbers and percentages of deaths among persons with diagnosed HIV infection were as follows (Table 11b):

- Northeast—4,324 (22%)
- Midwest—2,284 (11%)
- South—9,540 (48%)
- West—3,476 (17%)
- U.S. dependent areas—362 (2%)

Rates among persons aged \geq 13 years (United States only) (Figure 9)

- Highest—South (8.9)
- Lowest—Midwest (3.9)

Disparities by region

- Absolute disparities (rate difference)—If the rate of death among persons in the South with diagnosed of HIV infection was similar to the rate among persons in the Midwest, then deaths could have been reduced by 5 per 100,000 population.
- Relative disparities (rate ratio)—The rate of death among persons in the South was 2.3 times the rate among persons in the Midwest.

Prevalence

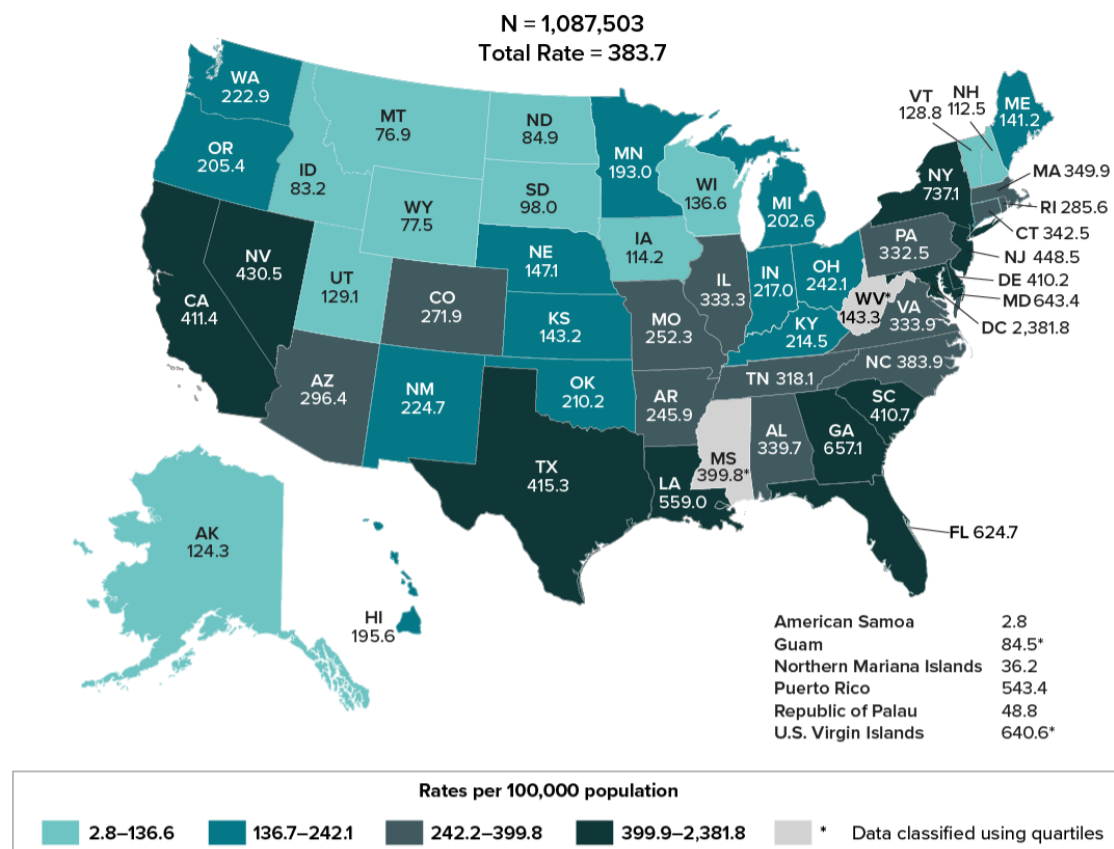
Persons living with diagnosed HIV infection



In 2021, compared with 2017, the annual number and rate of persons living with diagnosed HIV infection increased in the United States and 6 dependent areas, (Table 15b). At year-end 2021, 1,088,769 persons were living with diagnosed HIV infection (persons aged \geq 13 years: 1,087,503) (Tables 15b and 17b). The overall rate of persons living with diagnosed HIV infection was 324.5 (persons aged \geq 13 years: 383.7) (Figure 10, Table 15b).

FIGURE 10

Rates of persons aged ≥13 years living with diagnosed HIV infection, year-end 2021—United States and 6 dependent areas



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Data are based on address of residence as of December 2021 (i.e., most recent known address). Asterisk (*) indicates incomplete ascertainment of deaths.



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

Gender (Table 15b)

- Male—823,824 (76%)
- Female—250,857 (23%)
- Transgender woman/girl—13,150 (1%)
- Transgender man/boy—577 (< 1%)
- AGI—361 (< 1%)

Age group (Table 15b)

- 13–24 years—28,267 (3%)
- 25–34 years—164,936 (15%)
- 35–44 years—205,629 (19%)
- 45–54 years—247,057 (23%)
- ≥ 55 years—441,614 (41%)

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

Race/ethnicity (Table 15b)

- American Indian/Alaska Native—3,278 (< 1%)
- Asian—16,788 (2%)
- Black/African American—433,293 (40%)
- Hispanic/Latino—271,212 (25%)
- Native Hawaiian/other Pacific Islander—989 (< 1%)
- White—306,688 (28%)

- Multiracial—55,839 (5%)

Rates (United States only) (Table 15a)

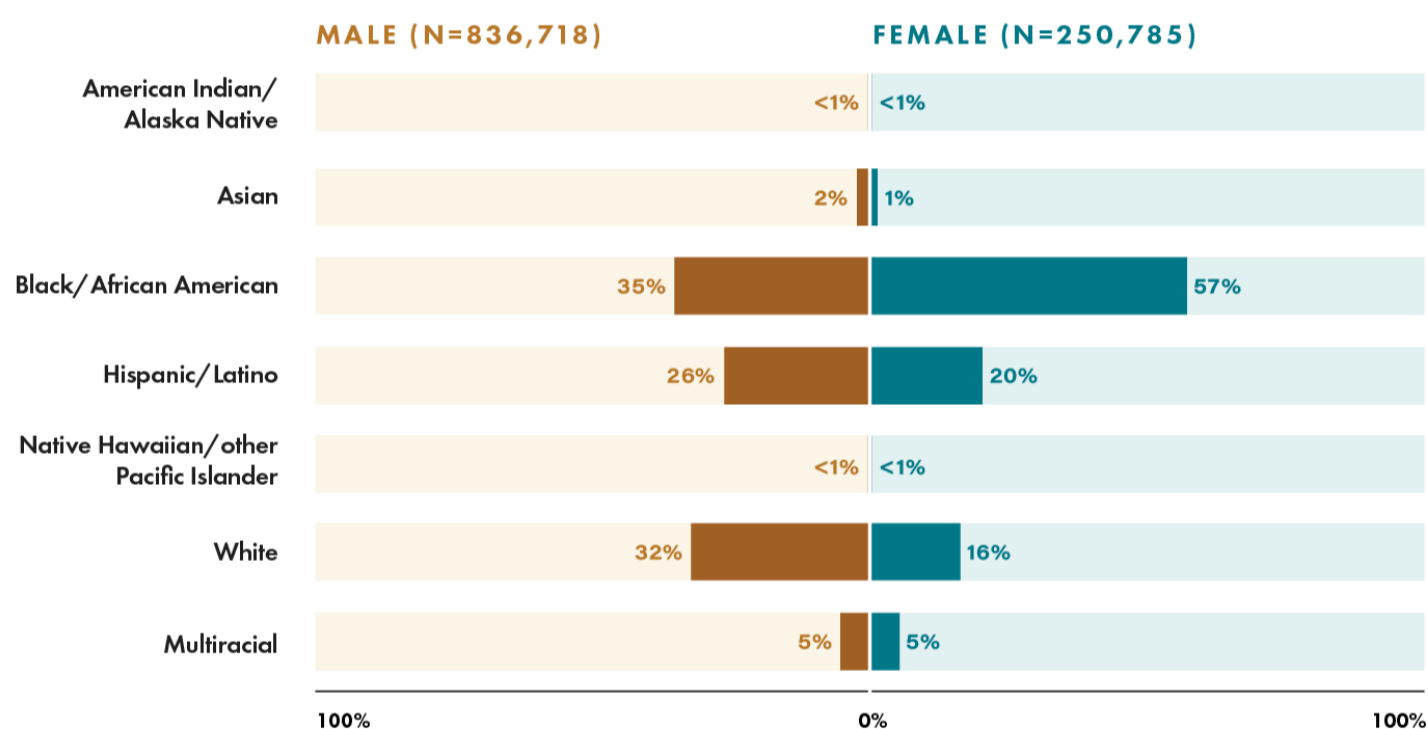
- American Indian/Alaska Native—133.6
- Asian—84.9
- Black/African American—1,034.3
- Hispanic/Latino—407.5
- Native Hawaiian/other Pacific Islander—152.5
- White—155.8
- Multiracial—716.4

ASAB and race/ethnicity—highest percentages (Figure 11)

- Male—Black/African American (35%)
- Female—Black/African American (57%)

FIGURE 11

Percentages of persons aged ≥13 years living with diagnosed HIV infection, by assigned sex at birth and race/ethnicity, year-end 2021—United States and 6 dependent areas



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Data are based on address of residence as of December 2021 (i.e., most recent known address). Asian includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race.



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

- Overall—MMSC (57%)
- Male—MMSC (74%)
- Female—heterosexual contact (77%)

Gender and exposure category (Table 18b)

- Transgender women—sexual contact (85%)
- Transgender men—sexual contact (76%)
- AGI—sexual contact (87%)

Region of residence (Table 15b)

- Northeast—235,158 (22%)
- Midwest—129,138 (12%)
- South—493,509 (45%)
- West—214,462 (20%)
- U.S. dependent areas—16,502 (2%)

Rates (United States only) (Table 15a)

- Highest—Northeast (411.4)
- Lowest—Midwest (187.6)

Last Reviewed: May 23, 2023



HIV

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Diagnoses of HIV Infection in the United States and Dependent Areas 2021: Special Focus Profiles

Special Focus Profiles



Report Contents

Other Reports

The Special Focus Profiles highlight the distribution of HIV in 7 populations of particular interest to HIV prevention programs in state and local health departments: (1) Gay, Bisexual, and Other Men Who Have Sex With Men, (2) Persons Who Inject Drugs, (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 references and additional information, including HIV risk behaviors, barriers to care, and prevention challenges for each population of particular interest.

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



Gay, bisexual, and other men (based on assigned male sex at birth) who report male-to-male sexual contact (MSM) are the population most affected by HIV in the United States. Stigma, homophobia, and discrimination make MSM of all races/ethnicities susceptible to multiple physical and mental health problems and can affect whether they seek and receive high-quality health services, including HIV testing, treatment, and other prevention services.

In 2021, infection attributed to MMSC accounted for 67% (24,107 MMSC, excluding MMSC *and* IDU) of the 36,189 HIV diagnoses in the United States and 6 dependent areas (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. 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 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.

Diagnoses of HIV infection among MSM

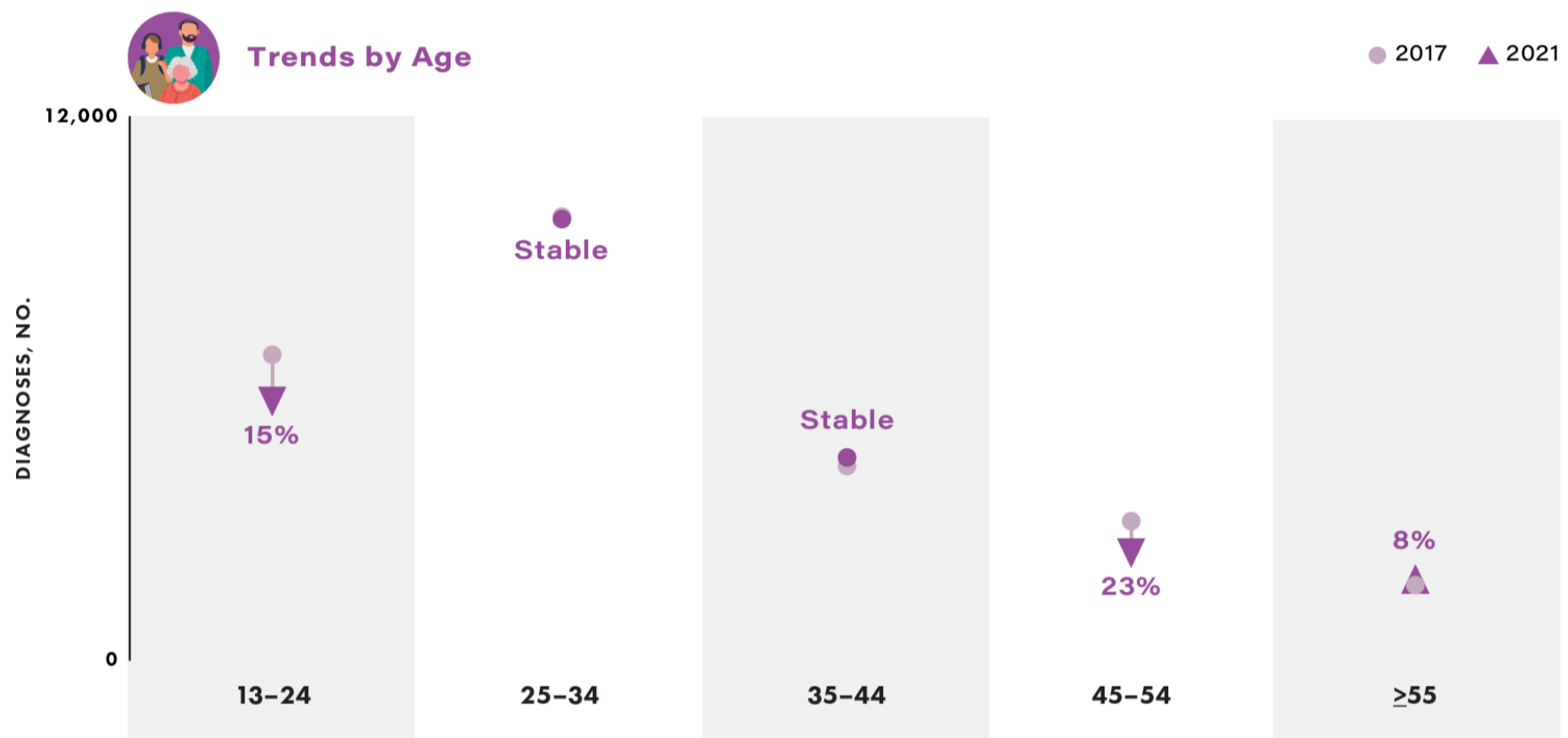
Age group

In 2021, compared with 2017, changes in numbers of diagnoses of HIV infection attributed to MMSC were as follows (Figure 12):

- Increase—persons aged ≥ 55 (8%) years
- Decrease—persons aged 13-24 (-15%) and 45-54 (-23%) years
- Stable—persons aged 25-34 and 35-44 years

FIGURE 12

Diagnoses of HIV infection among males, based on assigned sex at birth, attributed to male-to-male sexual contact, by age group, 2017–2021—United States and 6 dependent areas



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



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In 2021, numbers and percentages of diagnoses of HIV infection attributed to MMSC were as follows (Figure 13):

- 13-24 years—5,715 (24%)
- 25-34 years—9,730 (40%)
- 35-44 years—4,476 (19%)
- 45-54 years—2,375 (10%)
- ≥ 55 years—1,810 (8%)

Race/ethnicity

In 2021, compared with 2017, changes in numbers of diagnoses of HIV infection attributed to MMSC were as follows (Table 5b):

- Increase—American Indian/Alaska Native (31%) and Native Hawaiian/other Pacific Islander (79%)
- Decrease—Asian (-22%), Black/African American (-6%), White (-11%), and multiracial (-35%)
- Stable—Hispanic/Latino

In 2021, numbers and percentages of diagnoses of HIV infection attributed to MMSC were as follows (Figure 13, Table 5b):

- American Indian/Alaska Native—141 (1%)
- Asian—574 (2%)
- Black/African American—8,883 (37%)
- Hispanic/Latino—8,000 (33%)
- Native Hawaiian/other Pacific Islander—59 (< 1%)
- White—5,762 (24%)
- Multiracial—688 (3%)

Region of residence

In 2021, compared with 2017, changes in numbers of diagnoses of HIV infection attributed to MMSC were as follows (Table 5b):

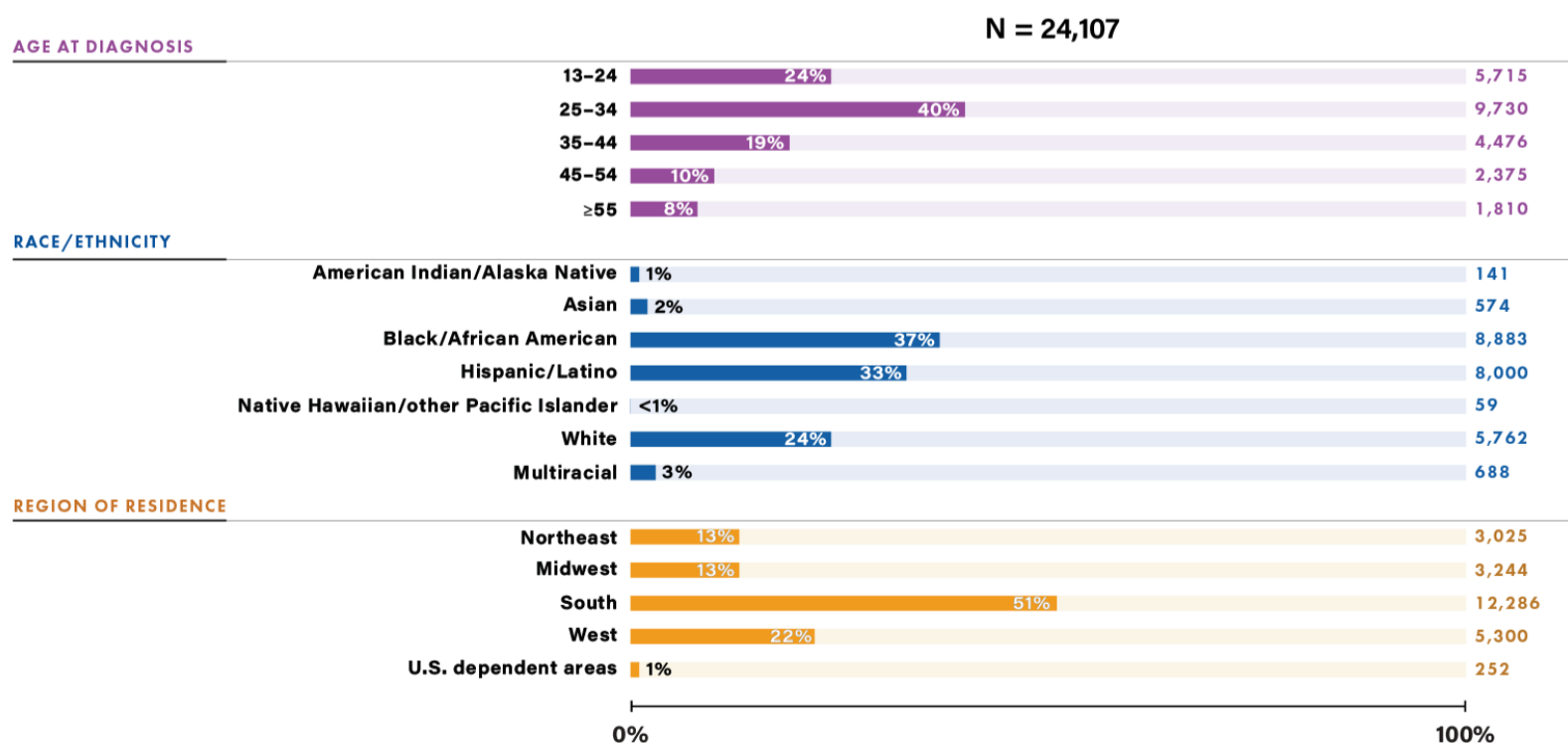
- Increase—none
- Decrease—Northeast (-15%), Midwest (-7%), and West (-6%)
- Stable—South and U.S. dependent areas

In 2021, numbers and percentages of diagnoses of HIV infection attributed to MMSC were as follows (Figure 13, Table 5b):

- Northeast—3,025 (13%)
- Midwest—3,244 (13%)
- South—12,286 (51%)
- West—5,300 (22%)
- U.S. dependent areas—252 (1%)

FIGURE 13

Percentages of diagnoses of HIV infection among males, based on assigned sex at birth, attributed to male-to-male sexual contact, by selected characteristics, 2021—United States and 6 dependent areas



Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male contact includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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.



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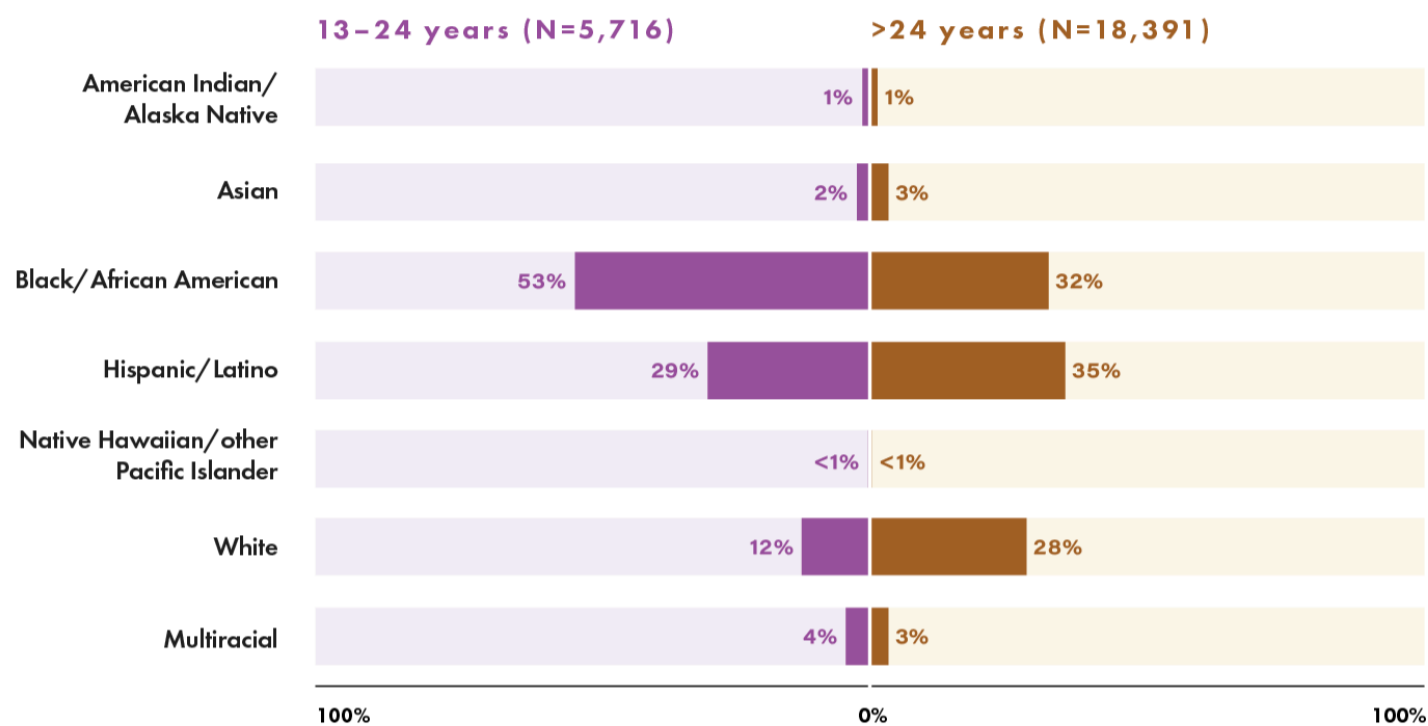
Age group and race/ethnicity

In 2021, the highest percentages by age group (Figure 14):

- Aged 13–24 years—Black/African American (53%)
- Aged > 24 years—Hispanic/Latino (35%)

FIGURE 14

Percentages of diagnoses of HIV infection among males, based on assigned sex at birth, attributed to male-to-male sexual contact, by age group and race/ethnicity, 2021—United States and 6 dependent areas



Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male contact includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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.



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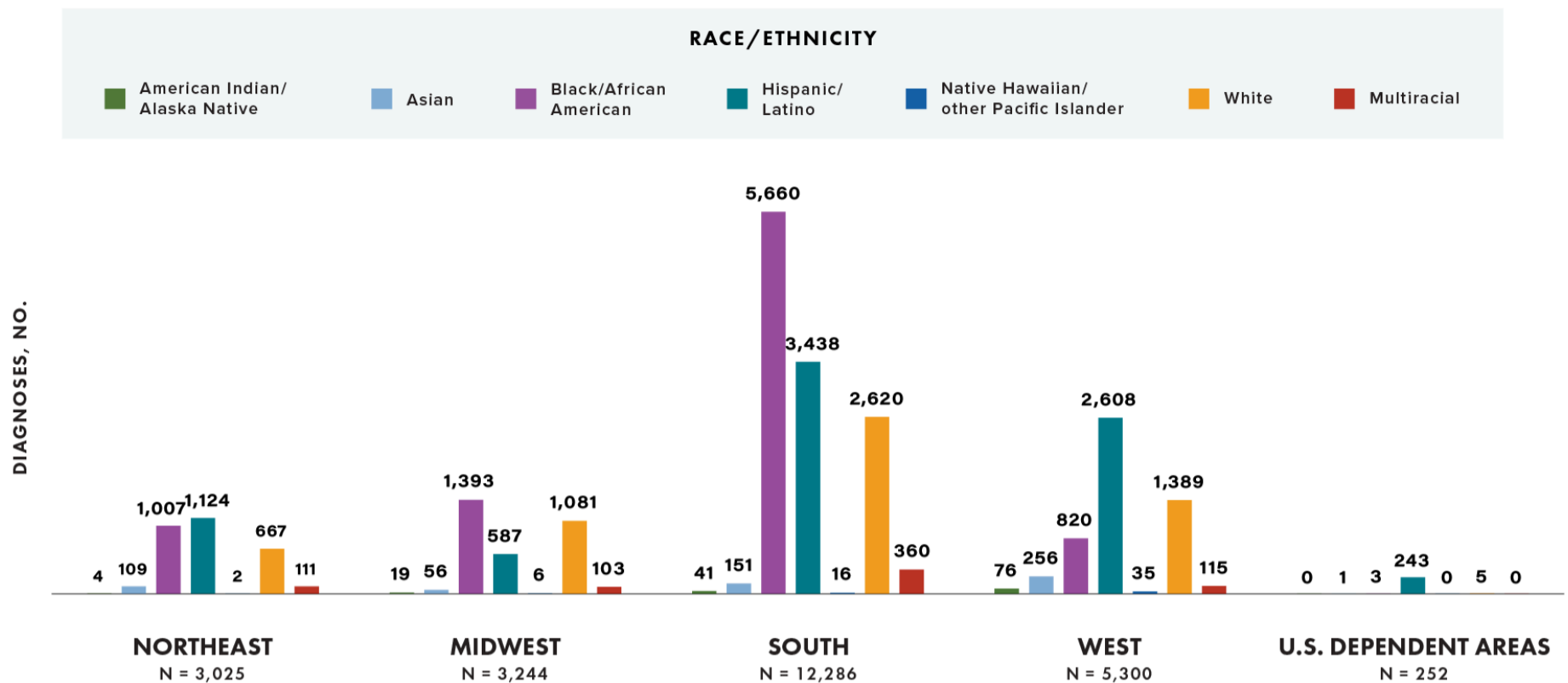
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Region of residence and race/ethnicity—highest numbers and percentages by region (Figure 15):

- Northeast—Hispanic/Latino (1,124; 37%)
- Midwest—Black/African American (1,393; 43%)
- South—Black/African American (5,660; 46%)
- West—Hispanic/Latino (2,608; 49%)
- U.S. dependent areas—Hispanic/Latino (243; 96%)

FIGURE 15

Diagnoses of HIV infection among males, based on assigned sex at birth, attributed to male-to-male sexual contact, by region and race/ethnicity, 2021—United States and 6 dependent areas



Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male contact includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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.



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Prevalence and race/ethnicity among MSM

At year-end 2021 in the United States and 6 dependent areas, 620,421 MSM (Table 16b) were living with diagnosed HIV infection attributed to MMSC.

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

- American Indian/Alaska Native—1,774 (< 1%)
- Asian—11,716 (2%)
- Black/African American—192,718 (31%)
- Hispanic/Latino—164,187 (26%)
- Native Hawaiian/other Pacific Islander—704 (< 1%)
- White—217,295 (35%)
- Multiracial—31,698 (5%)

PERSONS WHO INJECT DRUGS



Persons who inject drugs (PWID) can get HIV if they use and share needles, syringes, or other drug injection equipment (e.g., cookers) that someone with HIV has used. In 2021, infections attributed to injection drug use (IDU) accounted for about 1 in 15 HIV diagnoses in the United States. In recent years, the opioid (including prescription and synthetic opioids) and heroin crisis has led to increased numbers of PWID. HIV diagnoses among PWID have increased in the 50 states and District of Columbia. IDU in nonurban areas has created prevention challenges and brought attention to populations who would benefit from HIV prevention efforts.

Diagnoses of HIV infection among PWID

In 2021 in the United States and 6 dependent areas, 2,512 diagnoses of HIV infection were attributed to IDU (1,436 among male and 1,076 among female PWID) (Table 6b).

Age group

In 2021, compared with 2017, changes in numbers of diagnoses of HIV infection attributed to IDU were as follows (Table 6b):

- Increase—persons aged 25–34 (9%) and 35–44 (25%) years
- Decrease—persons aged 13–24 (-25%), 45–54 (-11%), and ≥ 55 (-7%) years
- Stable—none

In 2021, numbers and percentages of diagnoses of HIV infection attributed to IDU were as follows (Figure 16):

- 13–24 years—175 (7%)
- 25–34 years—789 (31%)
- 35–44 years—719 (29%)
- 45–54 years—444 (18%)
- ≥ 55 years—386 (15%)

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

Race/ethnicity

In 2021, compared with 2017, changes in numbers of diagnoses of HIV infection attributed to IDU were as follows (Table 6b):

- Increase—Asian (33%) and White (22%)
- Decrease—American Indian/Alaska Native (-18%), Black/African American (-10%), Hispanic/Latino (-13%), and multiracial (-14%)
- Stable—none

In 2021, numbers and percentages of diagnoses of HIV infection attributed to IDU were as follows (Figure 16):

- American Indian/Alaska Native—27 (1%)
- Asian—20 (1%)
- Black/African American—673 (27%)
- Hispanic/Latino—480 (19%)
- Native Hawaiian/other Pacific Islander—4 (< 1%)
- White—1,232 (49%)
- Multiracial—76 (3%)

Region of residence

In 2021, compared with 2017, changes in numbers of diagnoses of HIV infection attributed to IDU were as follows (Table 6b):

- Increase—Midwest (11%), South (15%), and West (6%)
- Decrease—Northeast (-21%) and U.S. dependent areas (-50%)
- Stable—none

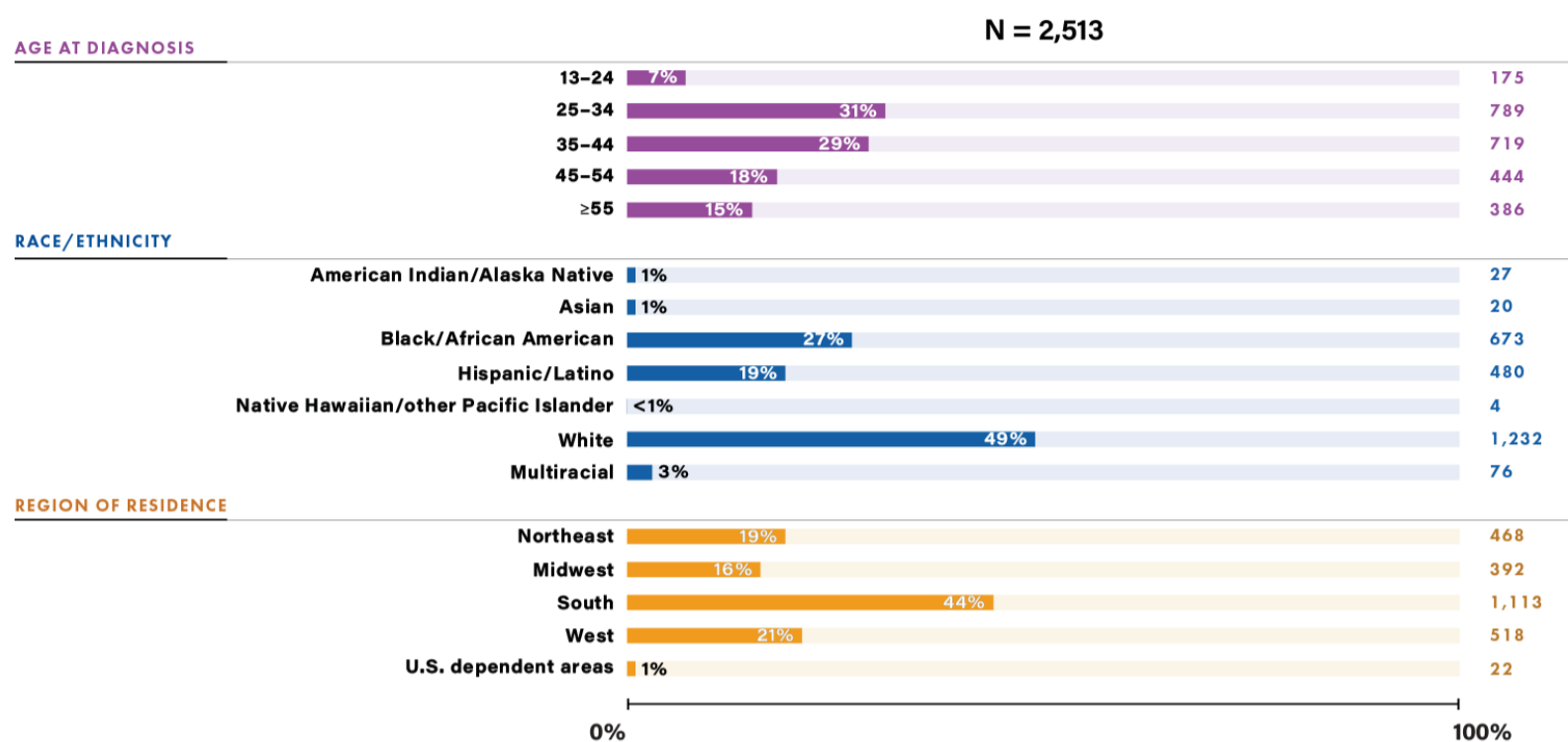
In 2021, numbers and percentages of diagnoses of HIV infection attributed to IDU were as follows (Figure 16):

- Northeast—468 (19%)
- Midwest—392 (16%)

- South—1,113 (44%)
- West—518 (21%)
- U.S. dependent areas—22 (1%)

FIGURE 16

Percentages of diagnoses of HIV infection attributed to injection drug use, by selected characteristics, 2021—United States and 6 dependent areas



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.



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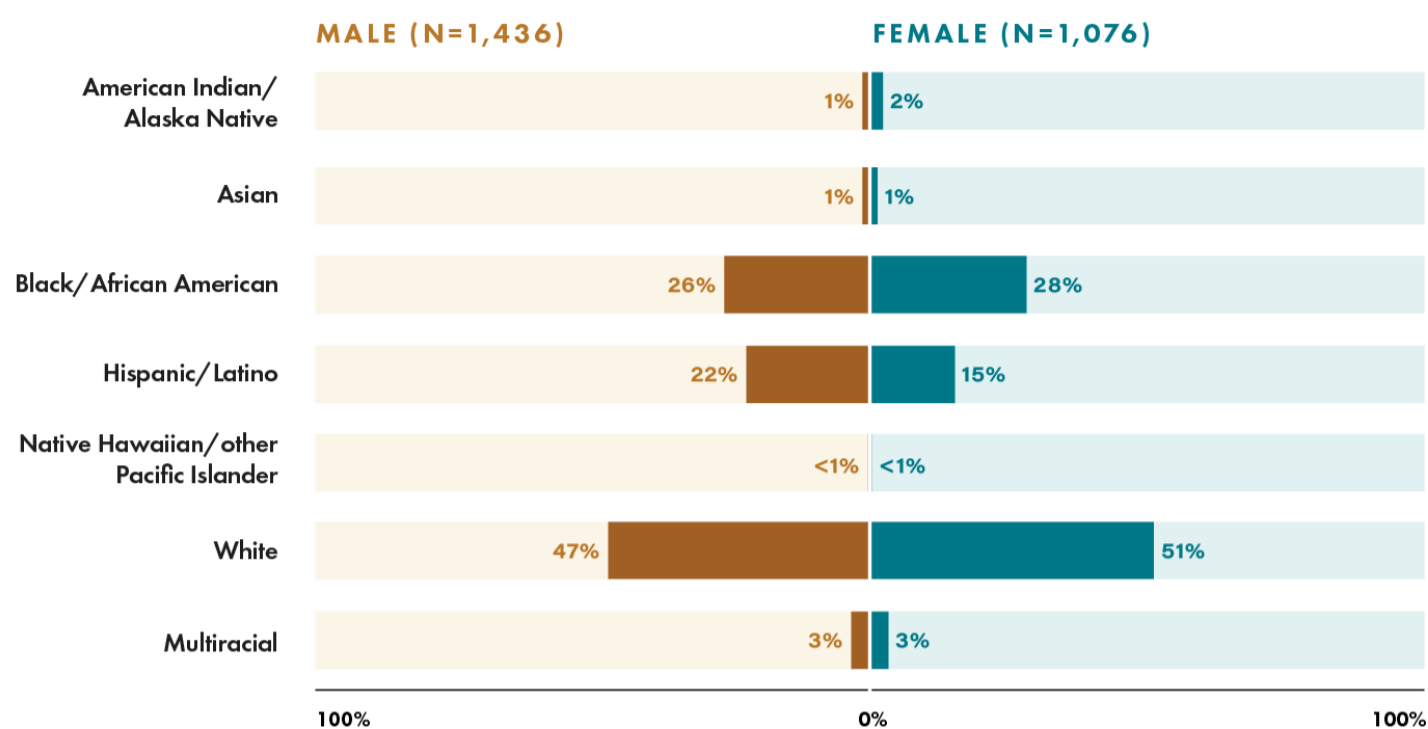
ASAB and race/ethnicity

In 2021, the highest percentages of diagnoses of HIV infection attributed to IDU were as follows (Figure 17):

- Male—White (47%)
- Female—White (51%)

FIGURE 17

Percentages of diagnoses of HIV infection attributed to injection drug use, by assigned sex at birth and race/ethnicity, 2021—United States and 6 dependent areas



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.



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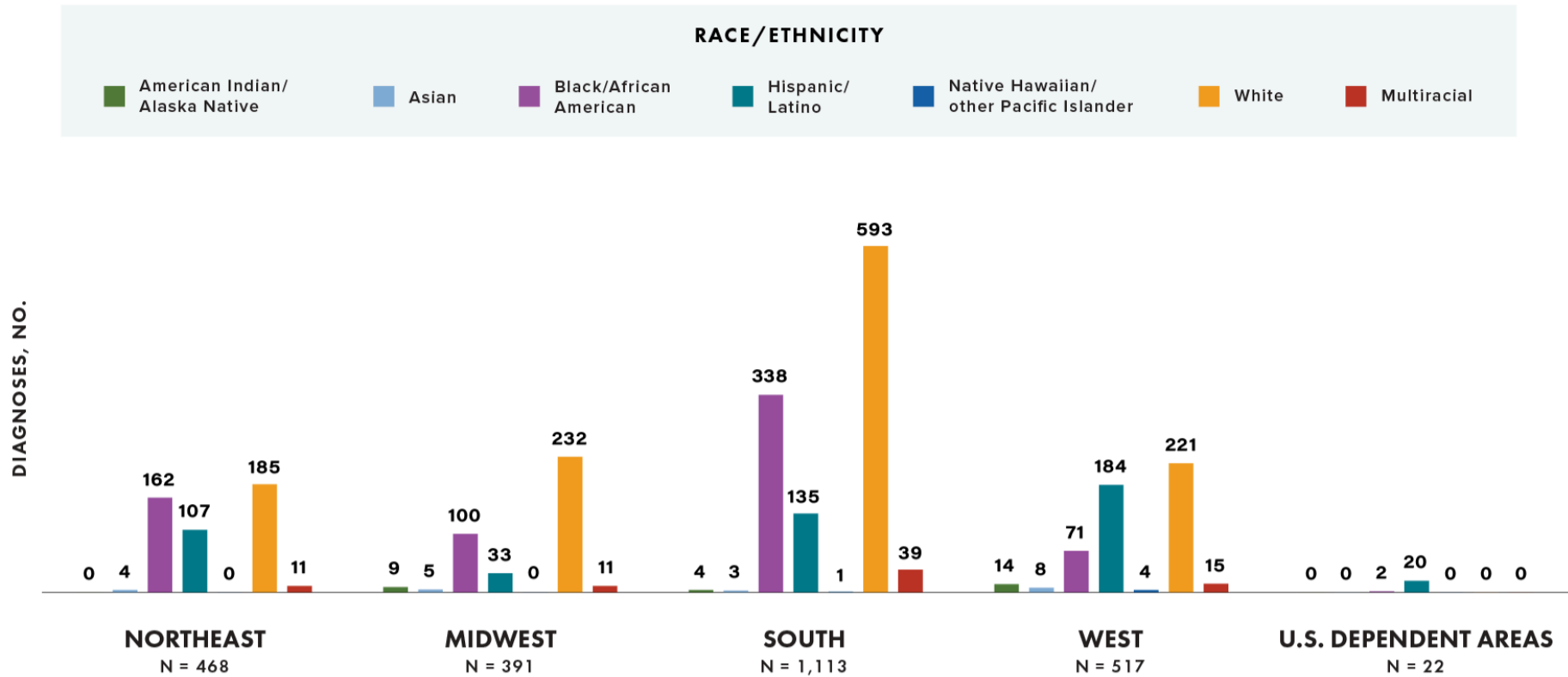
Region of residence and race/ethnicity

In 2021, the highest numbers and percentages of diagnoses of HIV infection attributed to IDU were as follows (Figure 18):

- Northeast—White (185; 40%)
- Midwest—White (232; 59%)
- South—White (593; 53%)
- West—White (221; 43%)
- U.S. dependent areas—Hispanic/Latino (20; 91%)

FIGURE 18

Diagnoses of HIV infection attributed to injection drug use, by region and race/ethnicity, 2021—United States and 6 dependent areas



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.



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Prevalence and race/ethnicity among PWID

At year-end 2021 in the United States and 6 dependent areas, 116,350 PWID were living with diagnosed HIV infection. Prevalence by race/ethnicity was as follows (Table 16b):

- American Indian/Alaska Native—495 (< 1%)
- Asian—663 (< 1%)
- Black/African American—51,368 (44%)
- Hispanic/Latino—31,657 (27%)
- Native Hawaiian/other Pacific Islander—51 (< 1%)
- White—26,233 (23%)
- Multiracial—5,748 (5%)

TRANSGENDER AND ADDITIONAL GENDER IDENTITY PERSONS



Transgender is an umbrella term that is used to identify persons whose assigned sex at birth does not match their 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. *Additional gender identity* (AGI) is a term used to identify persons assigned "male" or "female" sex at birth who does not identify as male, female, transgender woman, or transgender man (e.g., those identifying as "bigender," "gender queer," and "two-spirit"). *Gender expression* is a term used to describe people's outward presentation of their gender. Gender identity and sexual orientation are different facets of identity. 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.

Diagnoses of HIV infection among transgender and AGI persons

In 2021 in the United States and 6 dependent areas, diagnoses of HIV infection among transgender persons accounted for approximately 2% of diagnoses, while diagnoses among AGI persons accounted for < 1%. Of the 912 diagnoses of HIV infection among transgender and AGI persons in 2021 (Table 4b), transgender women accounted for the highest percentage of diagnoses (89%).

In 2021, numbers and percentages of HIV diagnoses among transgender and AGI persons aged ≥ 13 years were as follows (Figure 19):

Age group

- 13–24 years—326 (36%)
- 25–34 years—381 (42%)
- 35–44 years—140 (15%)
- 45–54 years—42 (5%)
- ≥ 55 years—23 (3%)

Race/ethnicity

- American Indian/Alaska Native—10 (1%)
- Asian—19 (2%)
- Black/African American—404 (44%)
- Hispanic/Latino—286 (31%)
- Native Hawaiian/other Pacific Islander—6 (1%)
- White—146 (16 %)
- Multiracial—41 (4%)

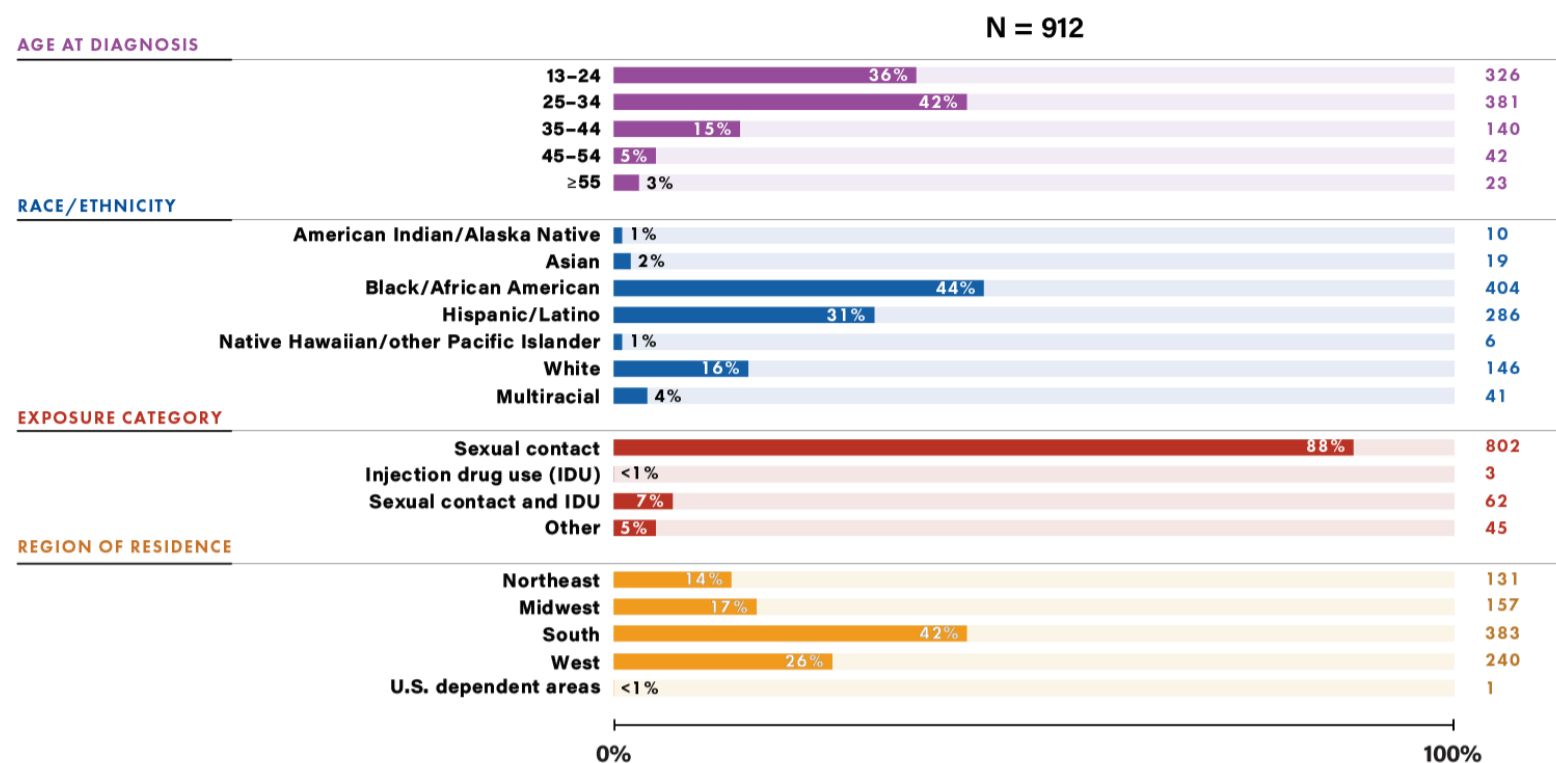
Exposure category

- Sexual contact—802 (88%)
- IDU—3 (< 1%)
- Sexual contact *and* IDU—62 (7%)
- Other—45 (5%)

Region of residence

- Northeast—131 (14%)
- Midwest—157 (17%)
- South—383 (42%)
- West—240 (26%)
- U.S. dependent areas—1 (< 1%)

FIGURE 19
Percentages of diagnoses of HIV infection among transgender and additional gender identity persons aged ≥13 years, by selected characteristics, 2021—United States and 6 dependent areas



Note. "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender. "Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender. Additional gender identity examples include "bigender," "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, 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.



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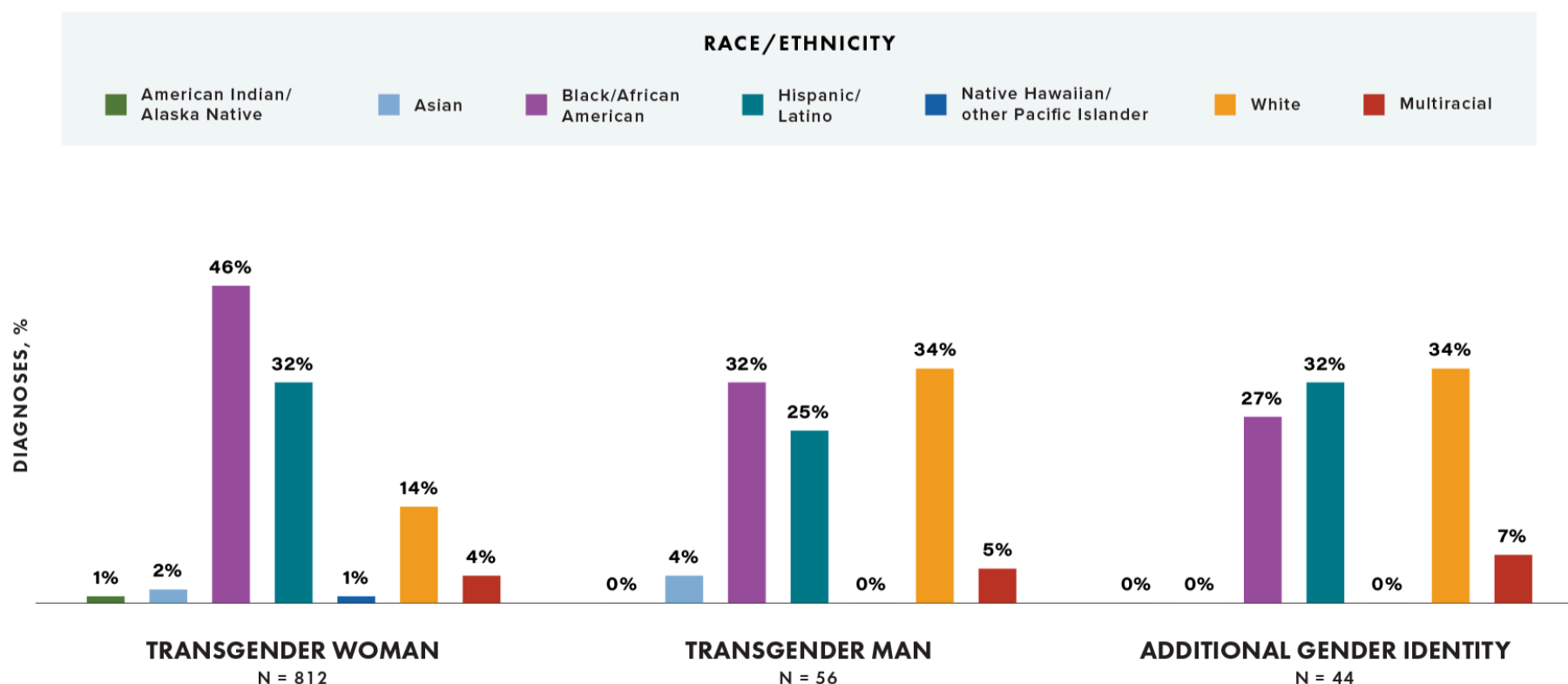
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Gender and race/ethnicity—highest percentages

In 2021, the highest percentages of HIV diagnoses among persons aged ≥ 13 years were as follows (Figure 20):

- Transgender women—Black/African American (46%)
- Transgender men—White (34%)
- AGI—White (34%)

FIGURE 20
Percentages of diagnoses of HIV infection among transgender and additional gender identity persons aged ≥13 years, by gender and race/ethnicity, 2021—United States and 6 dependent areas



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



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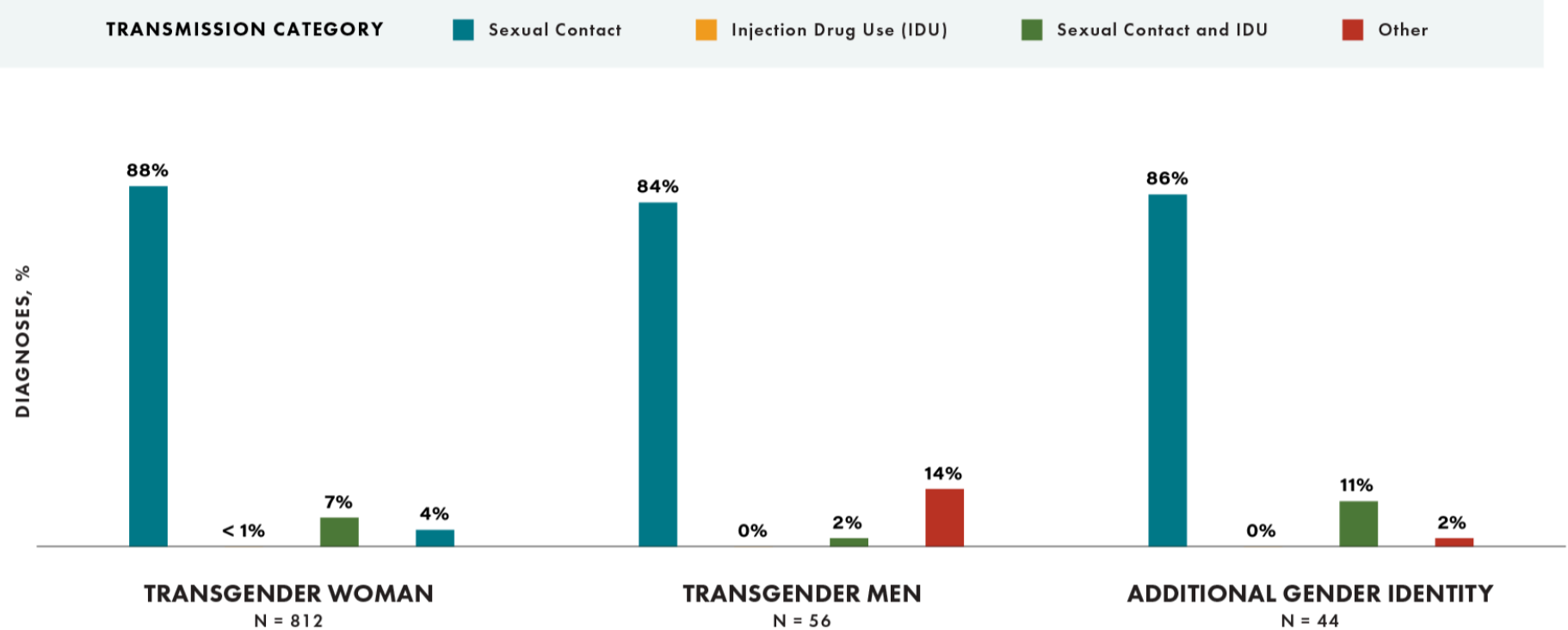
Gender and exposure category—highest percentages

In 2021, the highest percentages of HIV diagnoses among persons aged ≥ 13 years were as follows (Figure 21):

- Transgender women—sexual contact (88%)
- Transgender men—sexual contact (84%)
- AGI—sexual contact (86%)

FIGURE 21

Percentages of diagnoses of HIV infection among transgender and additional gender identity persons aged ≥ 13 years, by gender and exposure category, 2021—United States and 6 dependent areas



Note. "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender. "Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender. Additional gender identity examples include "bigender," "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, 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.



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WOMEN



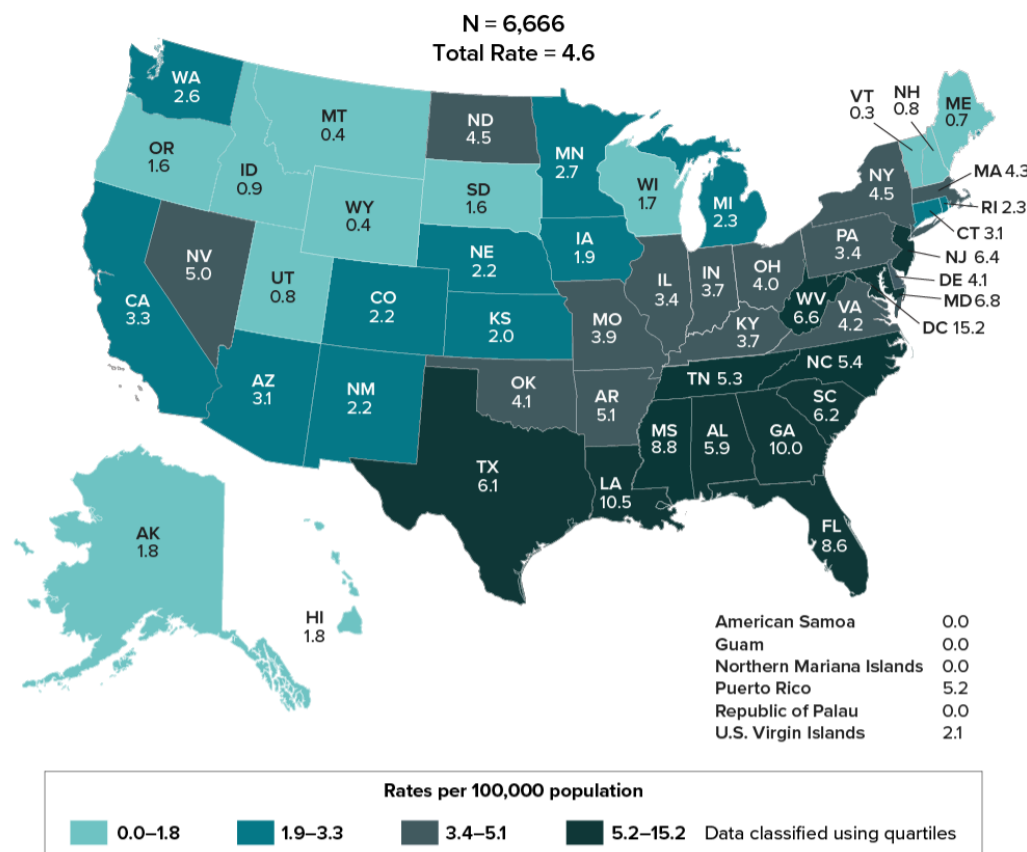
More than 6,000 women (based on assigned sex at birth) received an HIV diagnosis in the United States and 6 dependent areas in 2021. One in nine women with HIV are unaware they have it. Because some women may be unaware of their male partner's risk factors for HIV (such as injection drug use or having sex with men), they may not use condoms or medicines to prevent HIV. Additionally, PrEP is highly effective for preventing HIV, yet PrEP use among women is very low.

Diagnoses of HIV infection

In 2021 in the United States and 6 dependent areas, the rate of diagnoses of HIV infection among females (based on assigned sex at birth) aged ≥ 13 years was 4.6 (Figure 22). Rates ranged from a low of 0.0 in American Samoa, Guam, Northern Mariana Islands, and the Republic of Palau to a high of 15.2 in the District of Columbia, followed by 10.5 in Louisiana, 10.0 in Georgia, 8.8 in Mississippi, and 8.6 in Florida.

FIGURE 22

Rates of diagnoses of HIV infection among females, based on assigned sex at birth, aged ≥13 years, 2021—United States and 6 dependent areas



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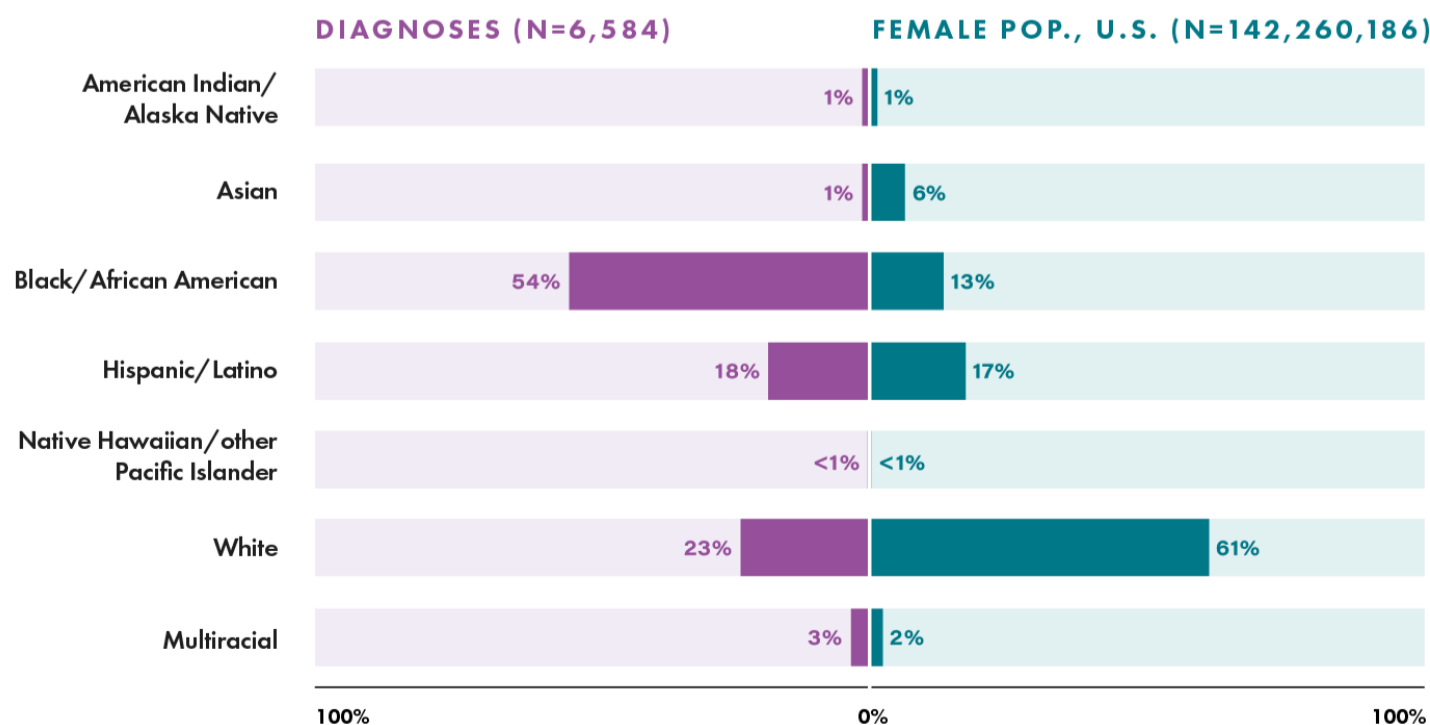
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In 2021 in the United States (Figure 23):

- Black/African American females aged ≥ 13 years made up 13% of the female population, but HIV infection among this group accounted for 54% of diagnoses.
- White females aged ≥ 13 years made up 61% of the female population, and HIV infection among this group accounted for 23% of diagnoses.
- Hispanic/Latino females aged ≥ 13 years made up 17% of the female population, and HIV infection among this group accounted for 18% of diagnoses.

FIGURE 23

Percentages of diagnoses of HIV infection and population among females, based on assigned sex at birth, aged ≥13 years, by race/ethnicity, 2021—United States



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



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Age group

In 2021, rates for HIV diagnoses among females aged ≥ 13 years were as follows (United States only) (Figure 24):

- 13–24 years—3.3
- 25–34 years—8.0
- 35–44 years—7.9
- 45–54 years—6.0
- ≥ 55 years—2.0

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

Disparities by age group (Figure 24)

- Absolute disparity (rate difference)—If the rate of HIV diagnoses among females aged 25–34 years was similar to the rate among females aged ≥ 55 years, then diagnoses could 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 4.0 times the rate among females aged ≥ 55 years.

Race/ethnicity

In 2021, rates for HIV diagnoses among females aged ≥ 13 years were as follows (United States only) (Figure 24):

- American Indian/Alaska Native—4.4
- Asian—1.1
- Black/African American—19.5
- Hispanic/Latino—4.8
- Native Hawaiian/other Pacific Islander—3.9
- White—1.8
- Multiracial—7.6

Disparities by race/ethnicity

- Absolute disparity (rate difference)—If the rate of HIV diagnoses among Black/African American females aged ≥ 13 years was similar to the rate among White females aged ≥ 13 years, then diagnoses could have been reduced by 18 per 100,000 population.
- Relative disparity (rate ratio)—The rate of diagnoses among Black/African American females aged ≥ 13 years was 10.8 times the rate among White females aged ≥ 13 years.

Region of residence

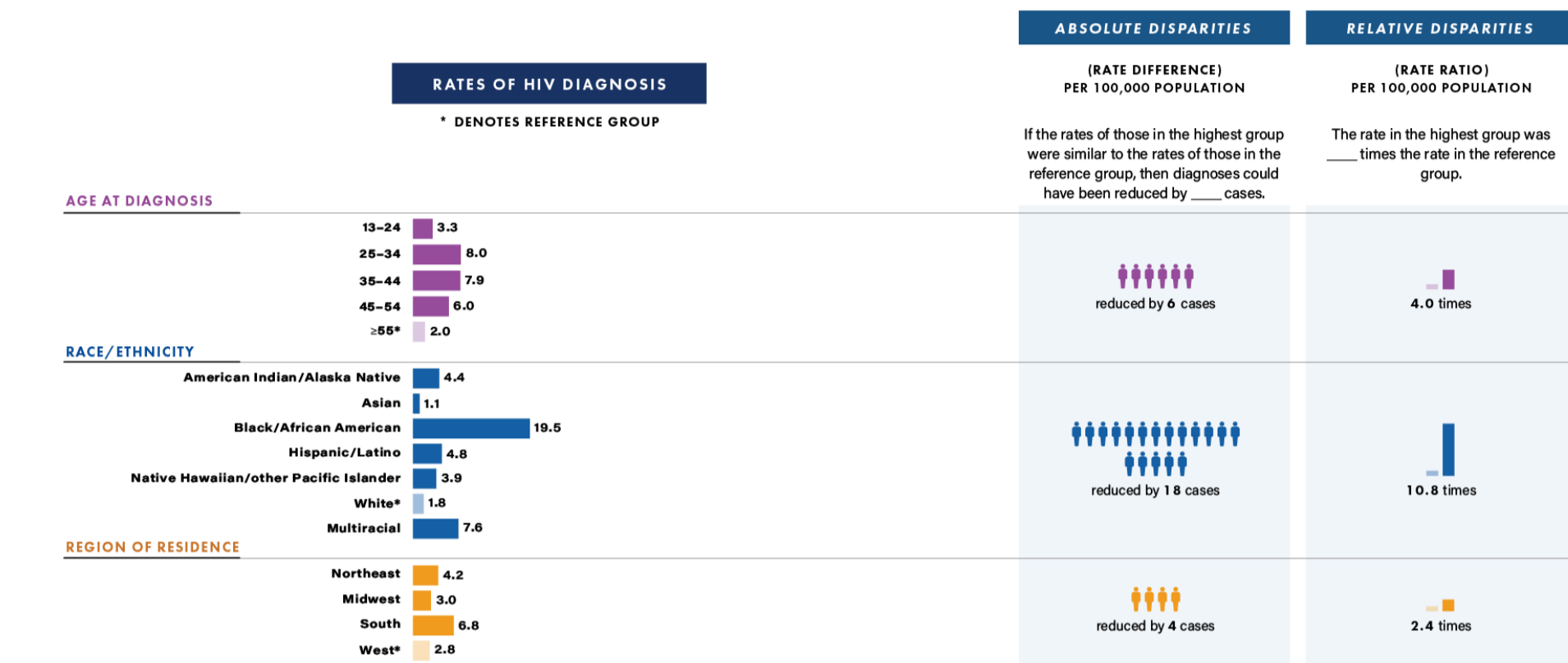
In 2021, rates for HIV diagnoses among females aged ≥ 13 years were as follows (United States only) (Figure 24):

- Northeast—4.2
- Midwest—3.0
- South—6.8
- West—2.8

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 West, then diagnoses could 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 2.4 times the rate among females aged ≥ 13 years in the West.

FIGURE 24
Rates and disparities of diagnoses of HIV infection among females, based on assigned sex at birth, aged ≥13 years, by selected characteristics, 2021—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 ($\text{Rate}_{\text{highest group}} / \text{Rate}_{\text{reference group}}$).



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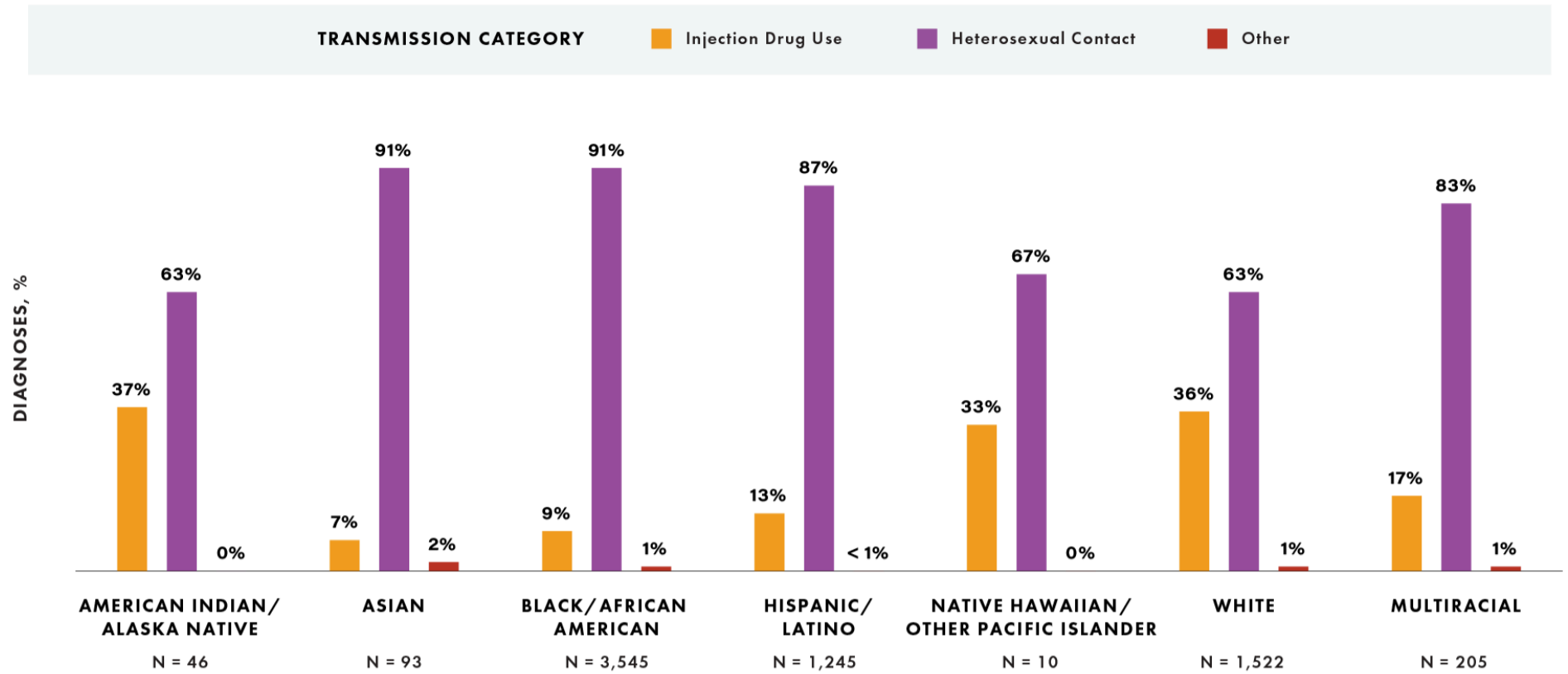
Transmission category and race/ethnicity

In 2021, the highest percentages of HIV diagnoses among females aged ≥ 13 years were as follows (Figure 25):

- IDU—American Indian/Alaska Native (37%)
- Heterosexual contact—Asian (91%)
- Other—Asian (2%)

FIGURE 25

Percentages of diagnoses of HIV infection among females, based on assigned sex at birth, aged ≥13 years, by transmission category and race/ethnicity, 2021—United States and 6 dependent areas



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 infection. 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.



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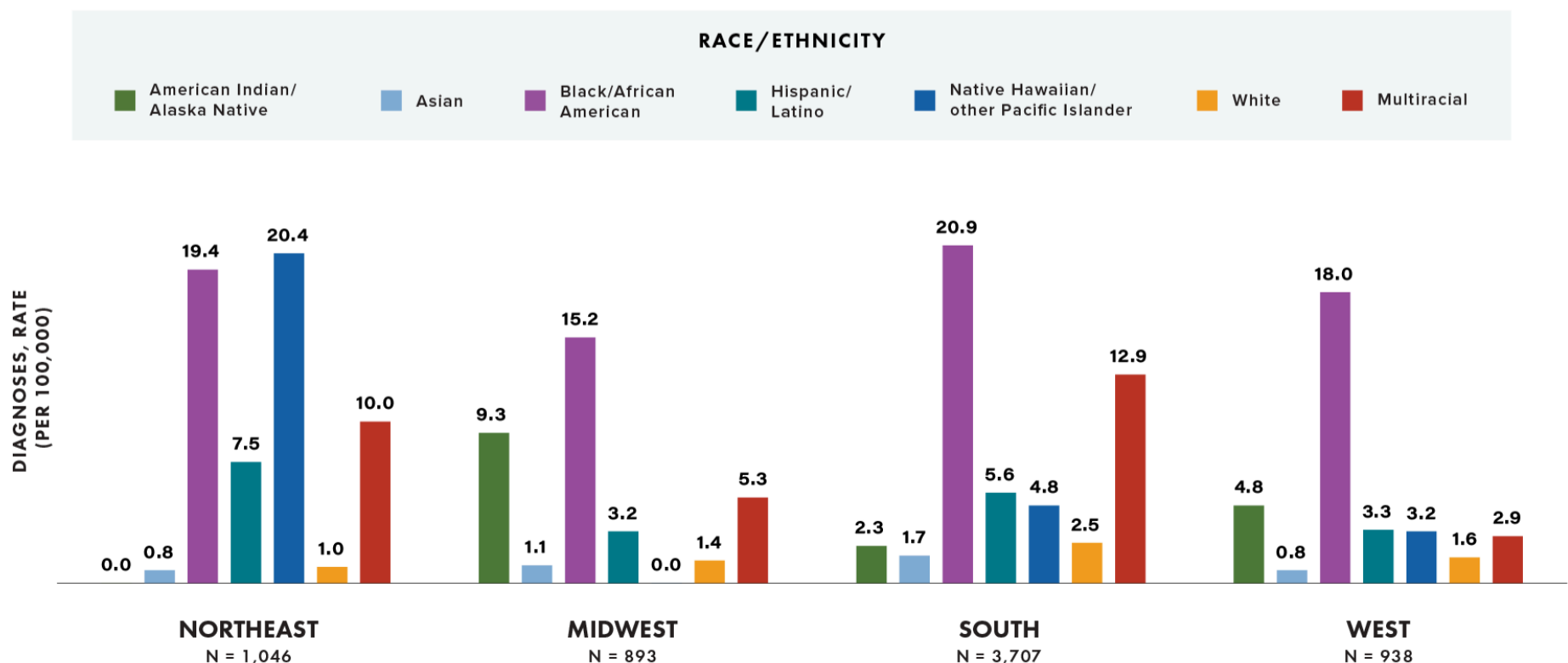
Region of residence and race/ethnicity

In 2021, the highest rates of HIV diagnoses among females aged ≥ 13 years were as follows (United States only) (Figure 26):

- Northeast—Native Hawaiian/other Pacific Islander (20.4)
- Midwest—Black/African American (15.2)
- South—Black/African American (20.9)
- West—Black/African American (18.0)

FIGURE 26

Rates of diagnoses of HIV infection among females, based on assigned sex at birth, aged ≥13 years, by race/ethnicity and region, 2021—United States



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



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Prevalence and race/ethnicity

At year-end 2021 in the United States and 6 dependent areas, 250,785 females aged ≥ 13 years were living with diagnosed HIV infection. Prevalence by race/ethnicity was as follows (Table 17b):

- American Indian/Alaska Native—796 (< 1%)
- Asian—2,863 (1%)
- Black/African American—142,511 (57%)
- Hispanic/Latino—50,639 (20%)
- Native Hawaiian/other Pacific Islander—158 (< 1%)
- White—40,649 (16%)
- Multiracial—12,975 (5%)

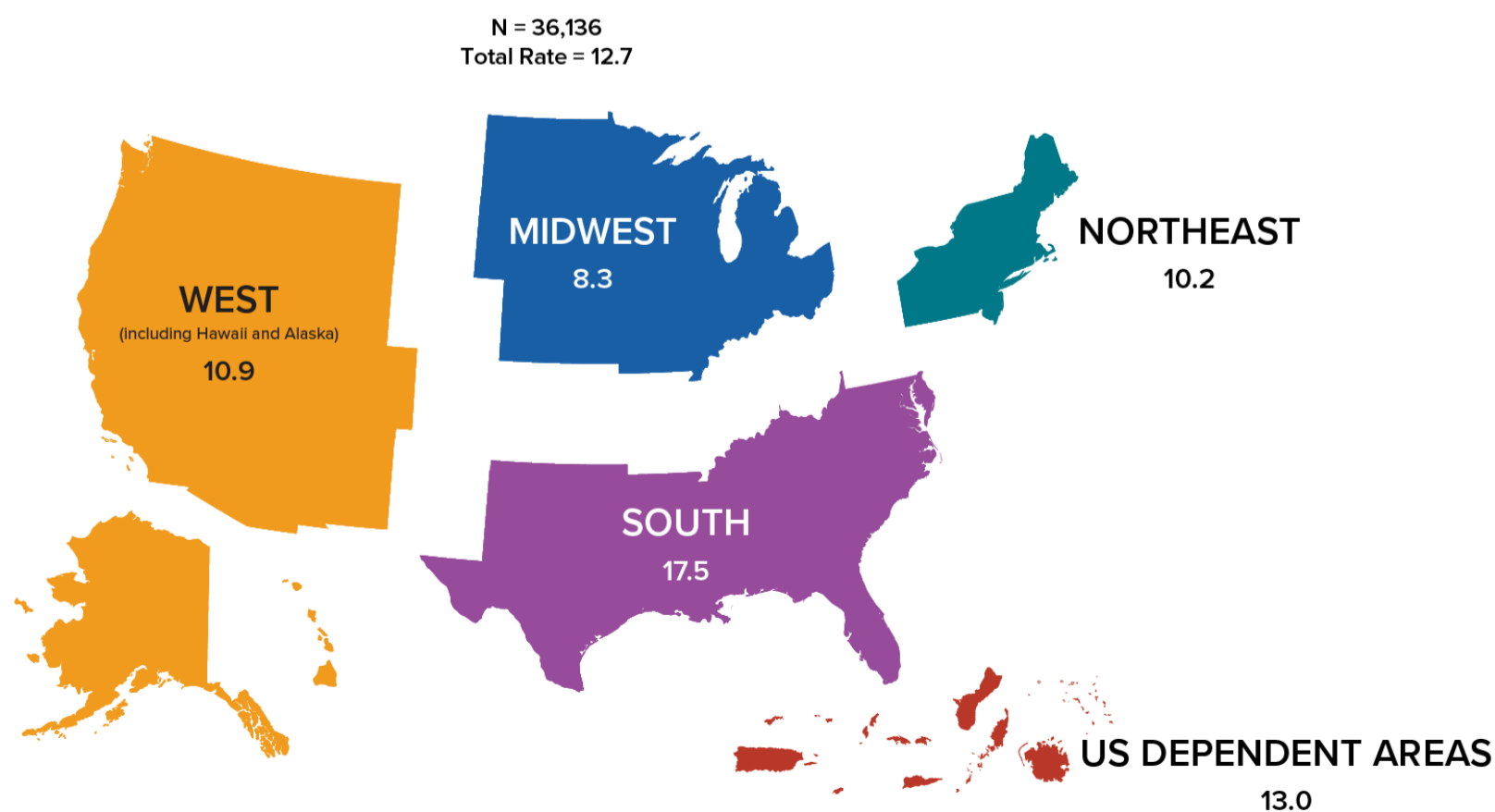
PERSONS RESIDING IN THE SOUTHERN REGION OF THE UNITED STATES



In 2021, among the four main regions in the United States (the Northeast, Midwest, South, and West) and dependent areas, 52% (18,728) of HIV diagnoses were in the South (Table 1b). The rate of HIV diagnoses among those aged ≥ 13 years was 17.5, greater than any other U.S. region (Figure 27). 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. Additionally, in 2019, for every 100 people with HIV (aged ≥ 13 years) in the South, 15 did not know their status. This gap in knowledge of status 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.

FIGURE 27

Rates of diagnoses of HIV infection among persons aged ≥ 13 years, by region, 2021—United States and 6 dependent areas

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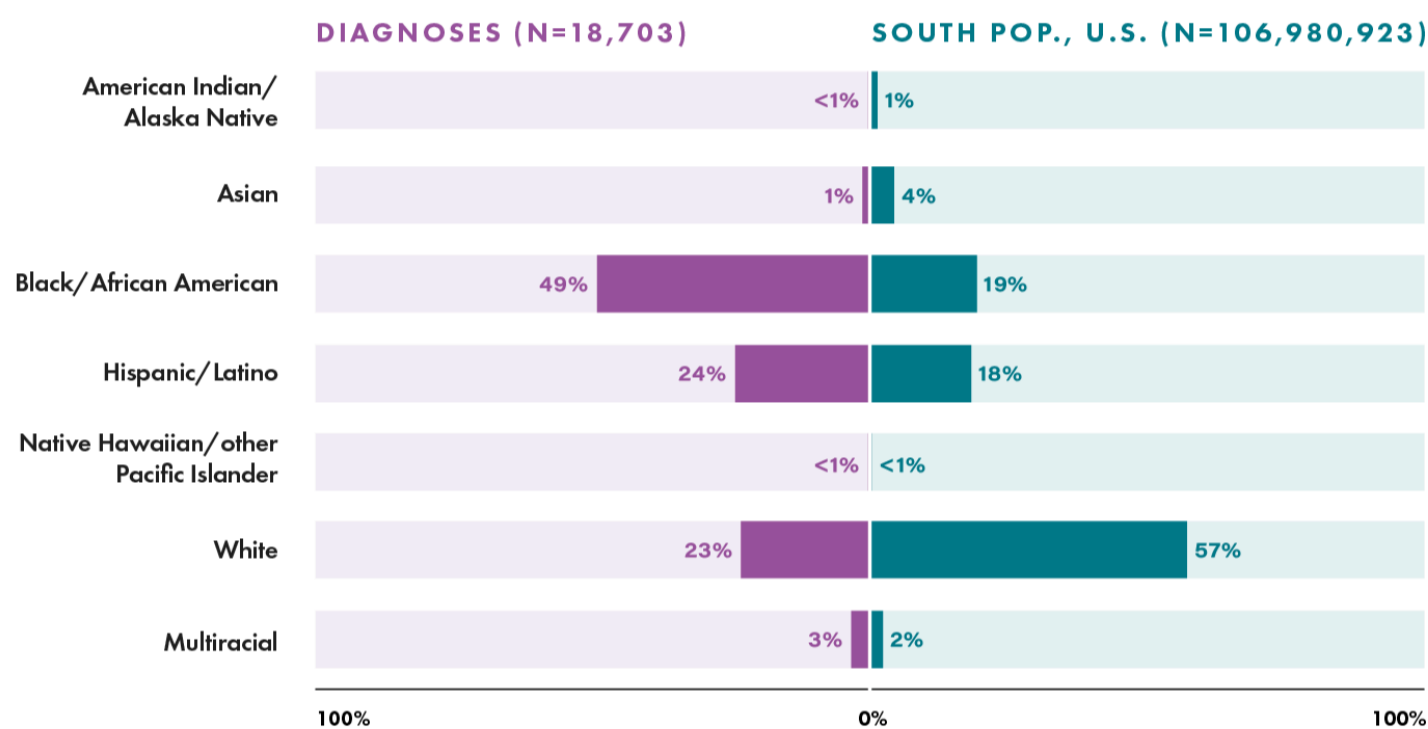
Diagnoses of HIV infection

In 2021 in the South (Figure 28):

- Black/African American persons aged ≥ 13 years made up 19% of the South population, but HIV infection among this group accounted for 49% of diagnoses.
- White persons aged ≥ 13 years made up 57% of the South population, but HIV infection among this group accounted for 23% of diagnoses.
- Hispanic/Latino persons aged ≥ 13 years made up 18% of the South population, but HIV infection among this group accounted for 24% of diagnoses.

FIGURE 28

Percentages of diagnoses of HIV infection and population among persons aged ≥ 13 years, by race/ethnicity, 2021—U.S. Southern Region



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



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Age group

In 2021, rates for HIV diagnoses among persons aged ≥ 13 years in the South were as follows (Figure 29):

- 13–24 years—19.5
- 25–34 years—39.8
- 35–44 years—23.1
- 45–54 years—13.9
- ≥ 55 years—5.1

Disparities by age group

- Absolute disparity (rate difference)—If the rate of HIV diagnoses among persons aged 25–34 years was similar to the rate among persons aged ≥ 55 years, then diagnoses could have been reduced by 35 cases per 100,000 population.
- Relative disparity (rate ratio)—The rate of HIV diagnoses among persons aged 25–34 years was 7.8 times the rate among persons aged ≥ 55 years.

Race/ethnicity

In 2021, rates for HIV diagnoses among persons aged ≥ 13 years in the South were as follows (Figure 29):

- American Indian/Alaska Native—8.1
- Asian—5.2
- Black/African American—45.7
- Hispanic/Latino—23.5
- Native Hawaiian/other Pacific Islander—22.6
- White—6.9
- Multiracial—31.4

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:

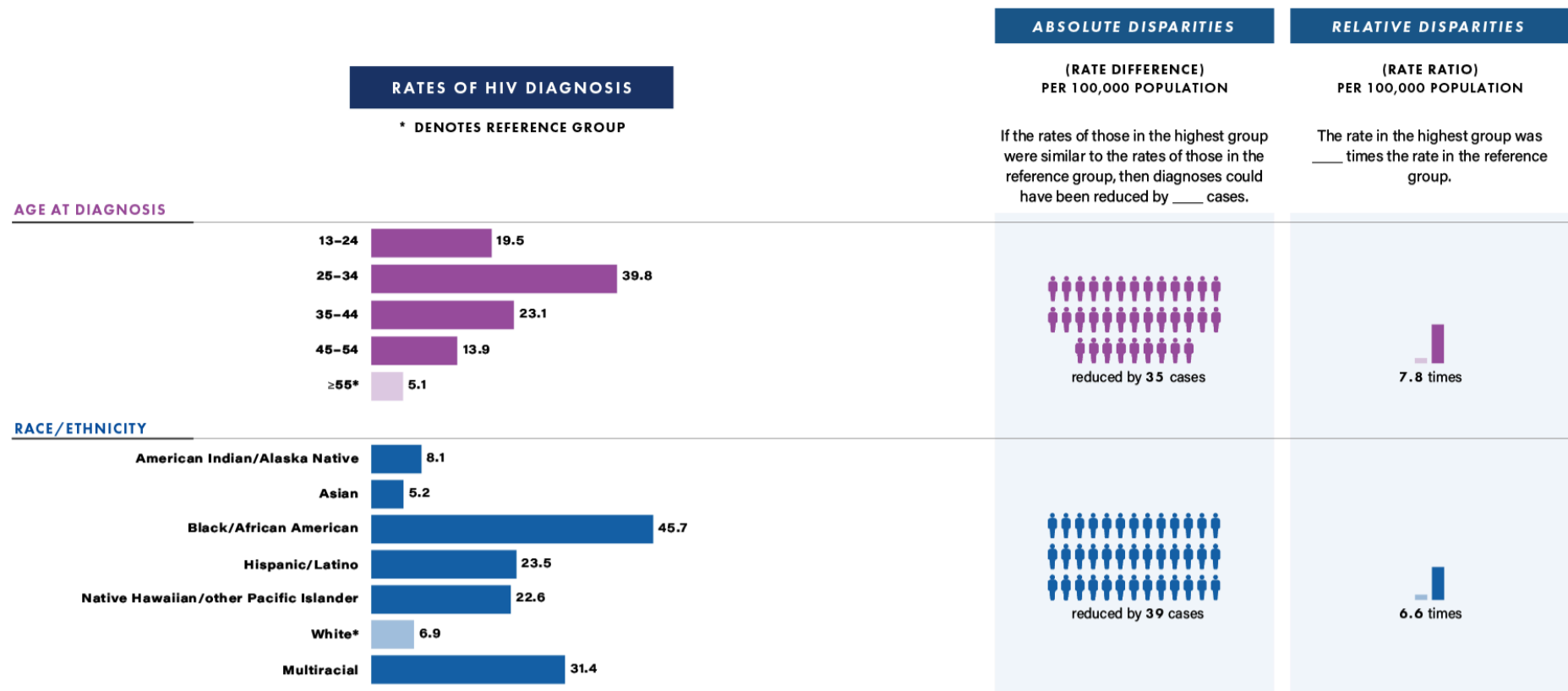
- American Indian/Alaska Native—1
- Asian—no reduction in cases
- Black/African American—39
- Hispanic/Latino—17
- Native Hawaiian/other Pacific Islander—16
- Multiracial—25

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—0.8
- Black/African American—6.6
- Hispanic/Latino—3.4
- Native Hawaiian/other Pacific Islander—3.3
- Multiracial—4.6

FIGURE 29

Rates and disparities of diagnoses of HIV infection among persons aged ≥13 years, by selected characteristics, 2021—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 (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 ($\text{Rate}_{\text{highest group}} / \text{Rate}_{\text{reference group}}$).



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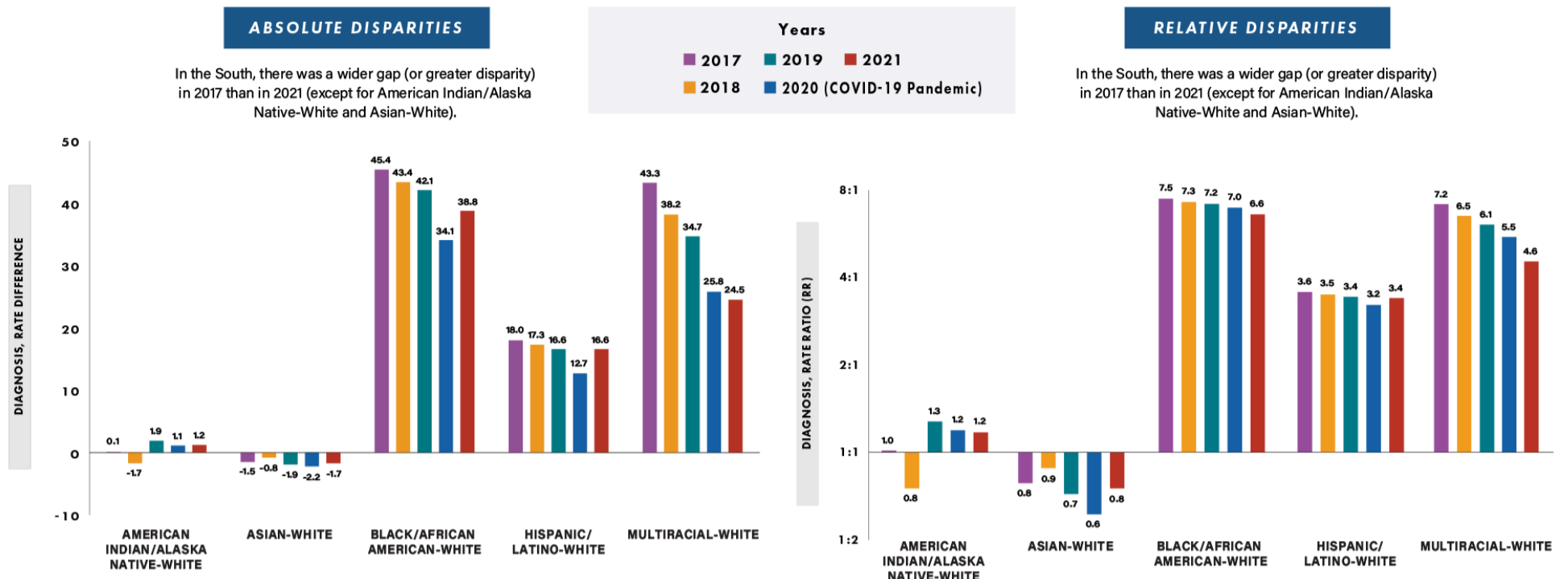
Changes in disparities by race/ethnicity

In 2021, compared with 2017, changes in rates of HIV diagnoses by race/ethnicity among persons aged ≥ 13 years were as follows (Figure 30):

- 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 wider gap (or greater disparity) in 2017 than 2021 (except for American Indian/Alaska Native–White and Asian–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 a wider gap (or greater disparity) in 2017 than in 2021 (except for American Indian/Alaska Native–White and Asian–White).

FIGURE 30

Absolute and relative disparities of diagnoses of HIV infection among persons aged ≥13 years, by race/ethnicity and year of diagnosis, 2017–2021—U.S. Southern Region



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 and local jurisdictions. Hispanic/Latino persons can be of any race. Data for Native Hawaiian/other Pacific Islander persons not displayed due to small numbers.

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 divided by rates among White persons ($\text{Rate}_{\text{select race/ethnicity}} / \text{Rate}_{\text{White persons}}$).



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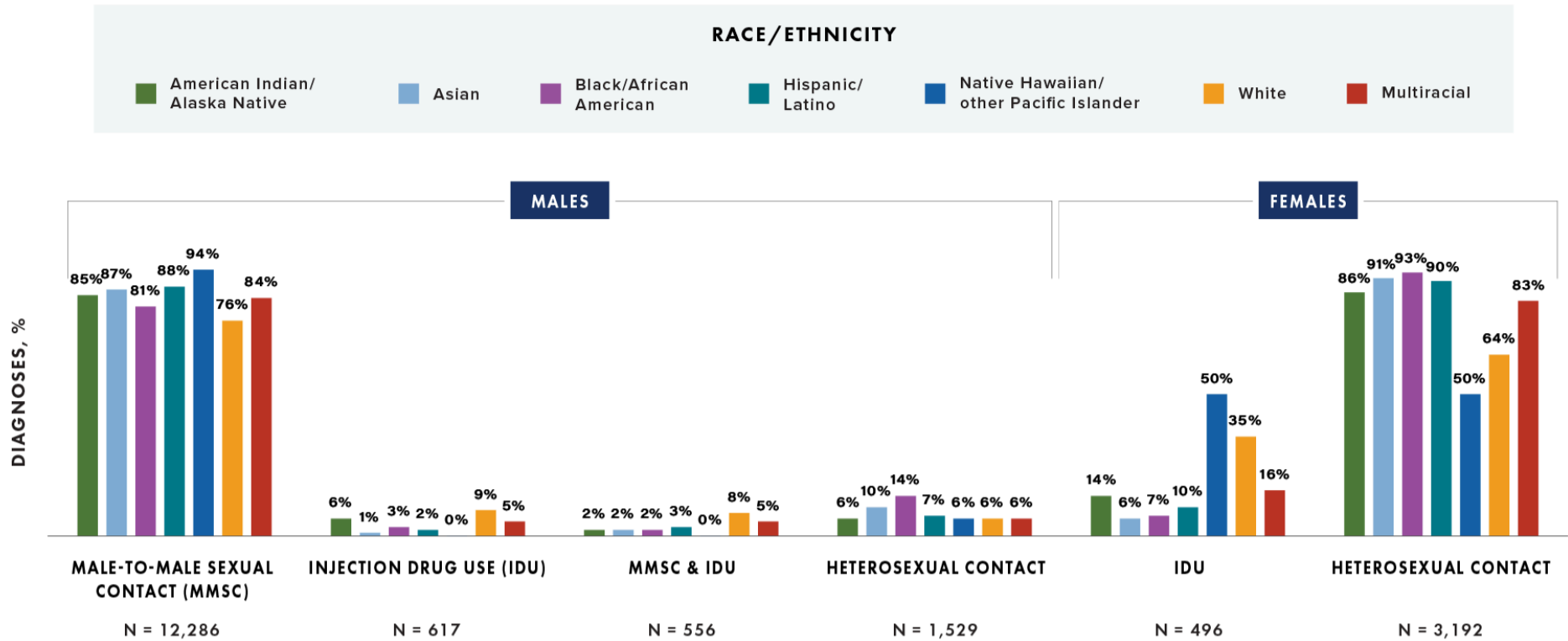
Transmission category and race/ethnicity by ASAB

In 2021, the racial/ethnic group with the highest percentages of HIV diagnoses for each transmission category among persons aged ≥ 13 years were as follows (Figure 31):

- Male
 - MMSC—Native Hawaiian/other Pacific Islander (94%)
 - IDU—White (9%)
 - MMSC/IDU—White (8%)
 - Heterosexual contact—Black/African American (14%)
- Female
 - Heterosexual contact—Native Hawaiian/other Pacific Islander (50%)
 - IDU—Black/African American (93%)

FIGURE 31

Percentages of diagnoses of HIV infection among persons aged ≥13 years, by assigned sex at birth, transmission category, and race/ethnicity, 2021—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 contact includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 infection.



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Prevalence and race/ethnicity

At year-end 2021 in the South, 493,509 persons were living with diagnosed HIV infection. Prevalence by race/ethnicity was as follows (Table 16b):

- American Indian/Alaska Native—803 (< 1%)
- Asian—3,600 (1%)
- Black/African American—255,815 (52%)
- Hispanic/Latino—89,718 (18%)
- Native Hawaiian/other Pacific Islander—167 (< 1%)
- White—119,022 (24%)
- Multiracial—24,228 (5%)

PERSONS AGED 13–24 YEARS



HIV infections among persons aged 13–24 years accounted for 19% of the 36,189 diagnoses of HIV in 2021 in the United States and 6 dependent areas. They are the least likely of any age group to be aware of their HIV infection, be retained in care, or have a suppressed viral load. 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. 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.

Diagnoses of HIV infection

In 2021 in the United States and 6 dependent areas, there were 6,987 diagnoses of HIV infection among persons aged 13–24 years. Numbers and percentages of HIV diagnoses among persons aged 13–24 years were as follows (Figure 32, Table 8b):

Gender

- Male—5,837 (84%)
- Female—824 (12%)
- Transgender woman/girl—286 (4%)
- Transgender man/boy—15 (< 1%)
- AGI—25 (< 1%)

Age group

- 13–14 years—15 (< 1%)
- 15–17 years—324 (5%)
- 18–19 years—1,136 (16%)
- 20–21 years—3,167 (45%)
- 23–24 years—2,345 (34%)

Rates (United States only) (Figure 33)

- Highest—persons aged 23–24 years (27.2)
- Lowest—persons aged 13–14 years (0.2)

Disparities by age group

- Absolute disparity (rate difference)—If the rate of HIV diagnoses among persons aged 23–24 years was similar to the rate among persons aged 18–19 years (13.2), then diagnoses could have been reduced by 14 cases per 100,000 population.
- Relative disparity (rate ratio)—The rate of diagnosis among persons aged 23–34 years was 2.1 times the rate among persons aged 18–19 years.

Race/ethnicity

In 2021, numbers and percentages of HIV diagnoses among persons aged 13–24 years were as follows (Table 8b, Figure 32):

- American Indian/Alaska Native—33 (< 1%)
- Asian—117 (2%)
- Black/African American—3,698 (53%)
- Hispanic/Latino—1,913 (27%)
- Native Hawaiian/other Pacific Islander—11 (< 1%)
- White—971 (14%)
- Multiracial—244 (3%)

Rates (United States only) (Figure 33, Table 8a)

- Highest—Black/African American (51.5)
- Lowest—White (3.6)

Disparities by race/ethnicity

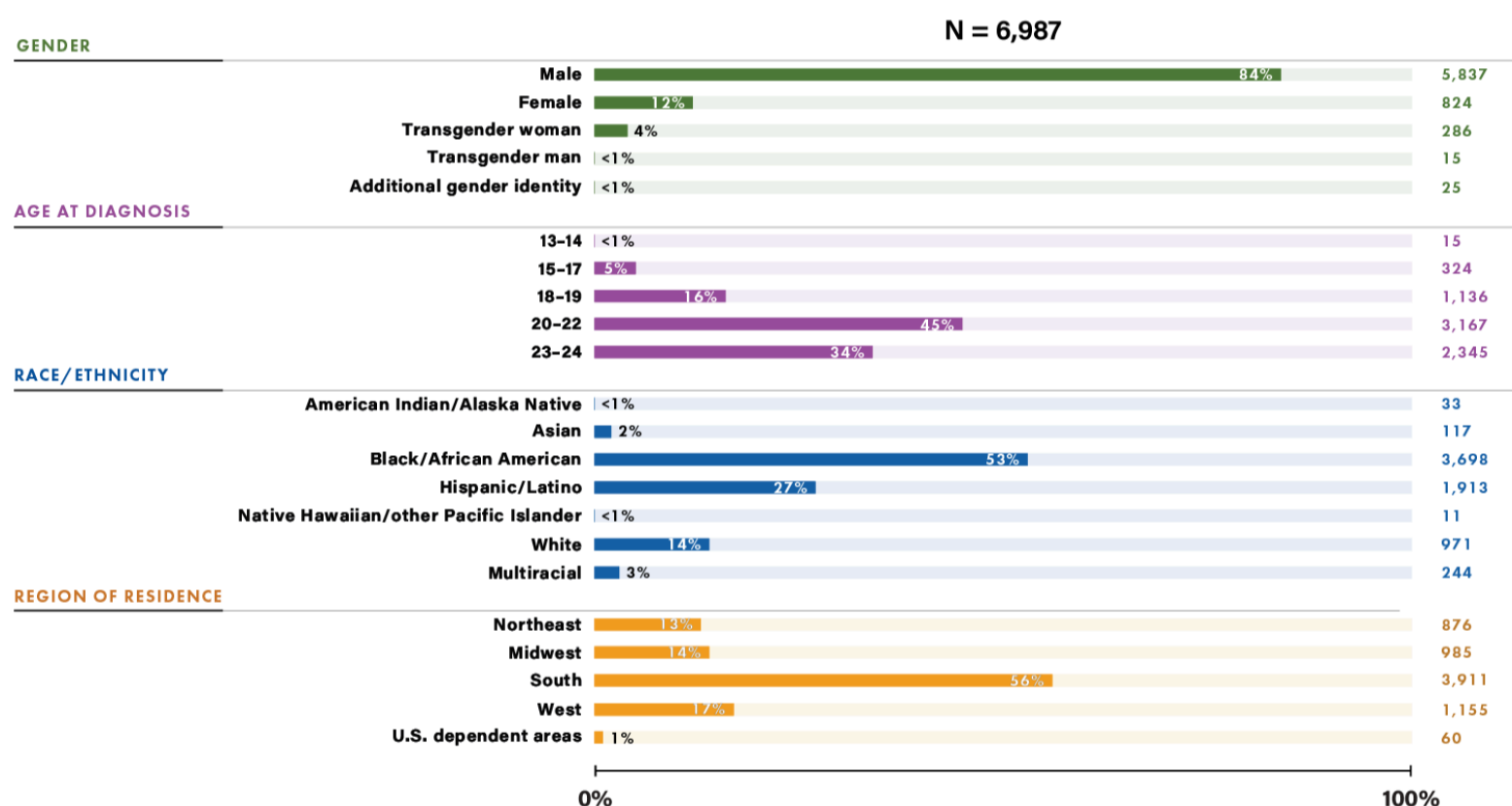
- Absolute disparity (rate difference)—If the rate of HIV diagnoses among Black/African American persons aged 13–24 years was similar to the rate among White persons aged 13–24 years, then diagnoses could have been reduced by 48 cases per 100,000 population.
- Relative disparity (rate ratio)—The rate of diagnoses among Black/African American persons aged 13–24 years was 14.3 times the rate among White persons aged 13–24 years.

Region of residence

In 2021, numbers and percentages of HIV diagnoses among persons aged 13–24 years were as follows (Figure 32):

- Northeast—876 (13%)
- Midwest—985 (14%)
- South—3,911 (56%)
- West—1,155 (17%)
- U.S. dependent areas—60 (1%)

FIGURE 32
Percentages of diagnoses of HIV infection among persons aged 13–24 years, by selected characteristics, 2021—United States and 6 dependent areas



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



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Rates (United States only) (Figure 33)

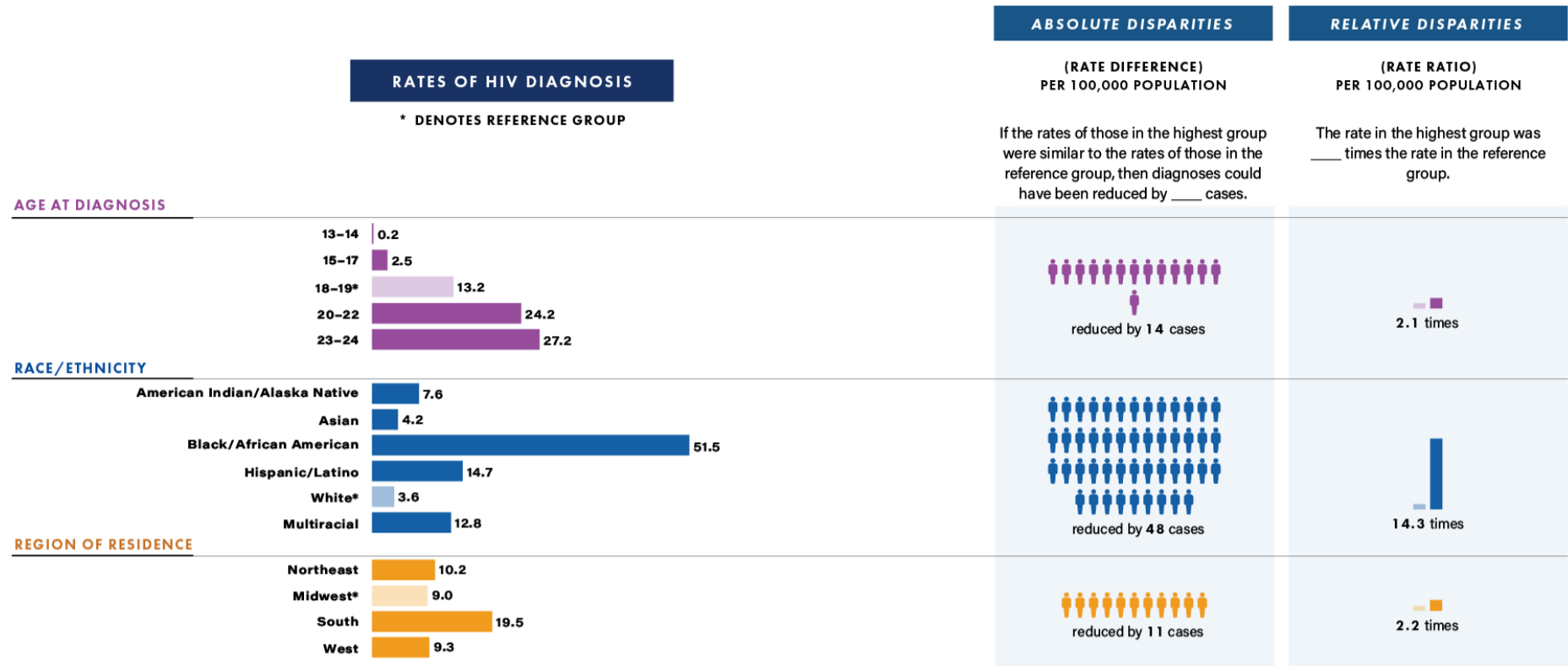
- Highest—South (19.5)
- Lowest—Midwest (9.0)

Disparities by region

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

FIGURE 33

Rates and disparities of diagnoses of HIV infection among persons aged 13–24 years, by selected characteristics, 2021—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. Data for Native Hawaiian/other Pacific Islander persons not displayed due to small numbers.

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 ($\text{Rate}_{\text{highest group}} / \text{Rate}_{\text{reference group}}$).



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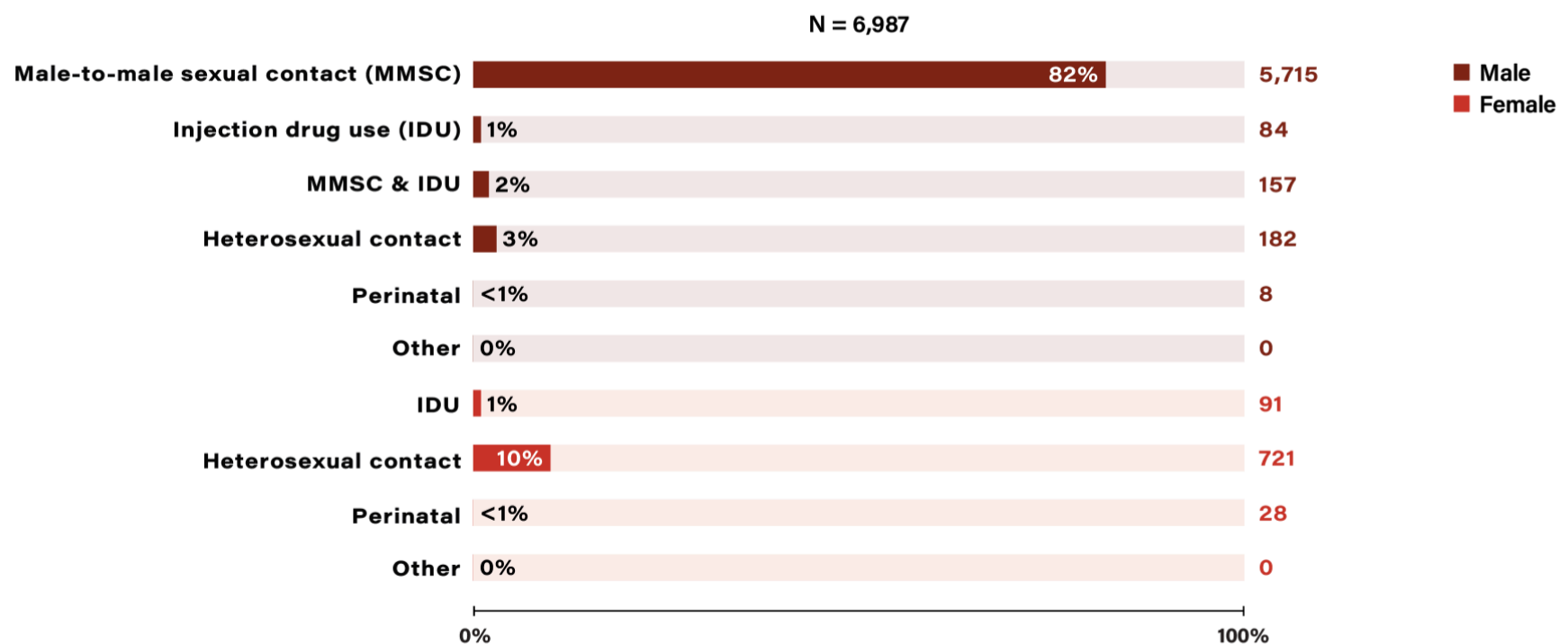
ASAB and transmission category

In 2021, the highest percentages of HIV diagnoses among persons aged 13–24 years were as follows (Figure 34):

- Male—MMSC (82%)
- Female—heterosexual contact (10%)

FIGURE 34

Percentages of diagnoses of HIV infection among persons aged 13–24 years, by assigned sex at birth and transmission category, 2021—United States and 6 dependent areas



Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male contact includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 infection. Perinatal includes individuals aged ≥13 years at time of diagnosis of HIV infection. Other includes other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.



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CHILDREN AGED < 13 YEARS



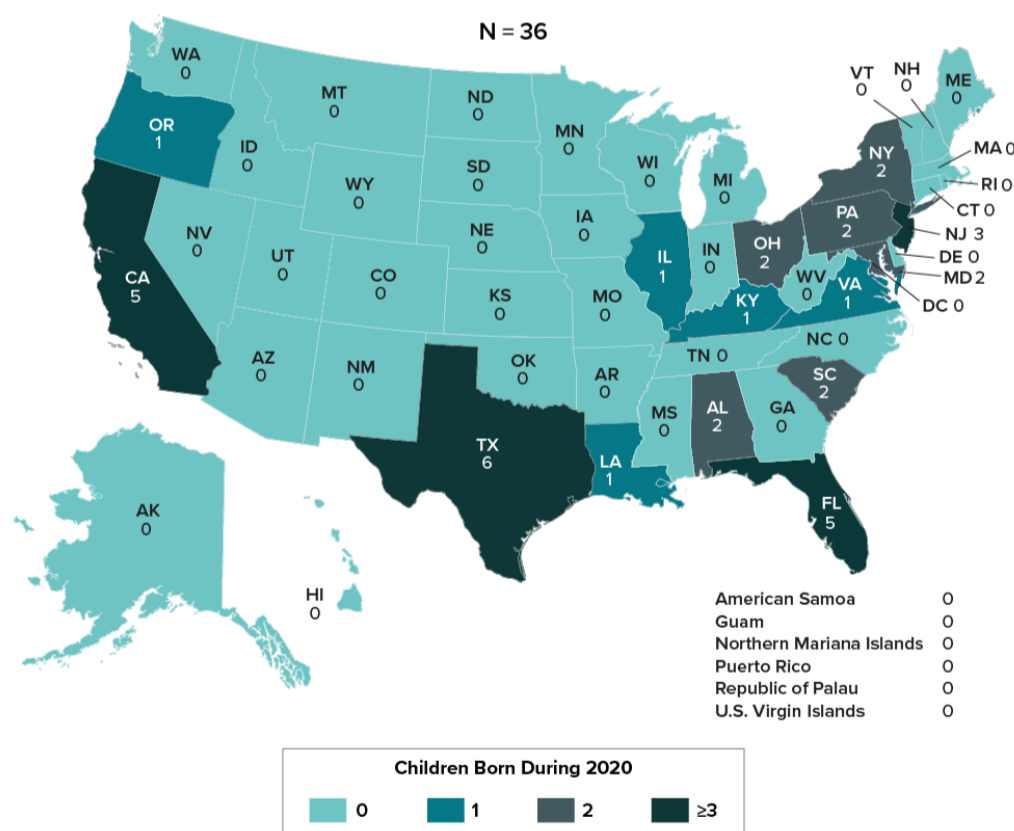
To make informed decisions about antiretroviral therapy to reduce perinatal transmission of HIV to infants, pregnant persons should know their HIV infection status. In 1995, the first recommendations for HIV counseling and voluntary testing for pregnant persons were published. In 2006, CDC released revised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

In 2020, 42 areas in the United States and 6 dependent areas reported no perinatally acquired infections among infants born (Figure 35). Because of delays in the reporting of births and diagnoses of HIV infection attributed to perinatal exposure, the exclusion of data for the most recent 2 years allowed at least 24 months for data from 2020 to be reported to CDC. Data reflect all infants with diagnosed, perinatally acquired HIV infection who were born in the United States and 6 dependent areas during 2020, regardless of year of diagnosis.

Diagnoses of HIV infection

In the United States and 6 dependent areas, a total of 36 children born during 2020 received a diagnosis of HIV infection attributed to perinatal transmission (Figure 35).

FIGURE 35
Diagnoses of perinatally acquired HIV infection among children born during 2020 (COVID-19 pandemic)—United States and 6 dependent areas



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.



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Infected infants

From 2017 through 2020 in the United States and Puerto Rico, among the 189 children born with diagnosed, perinatally acquired HIV infection, time of maternal HIV testing was as follows (Figure 36):

- 47% were born to mothers who were tested before pregnancy
- 16% were born to mothers who were tested during pregnancy
- 7% were born to mothers tested at the time of birth
- 21% were born to mothers who were tested after the child's birth
- 8% were born to mothers whose time of maternal HIV testing was unknown

Exposed but not infected

From 2017 through 2020 in the United States and Puerto Rico, among the 12,569 children born who were exposed but not perinatally infected with HIV, time of maternal HIV testing was as follows (Figure 36):

- 84% were born to mothers who were tested before pregnancy
- 14% were born to mothers who were tested during pregnancy
- 1% were born to mothers tested at the time of birth
- <1% were born to mothers tested after birth
- 1% were born to mothers whose time of maternal HIV testing was unknown


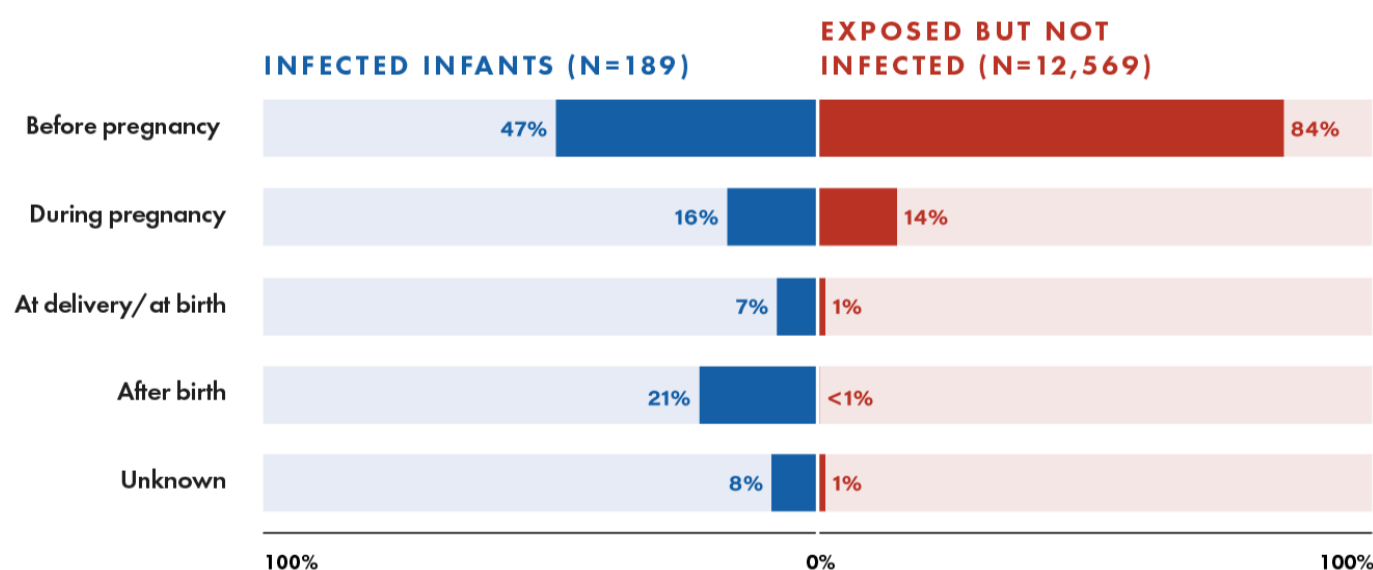
 **Note.** The number of areas contributing exposure data varied by year. Because not all jurisdictions have exposure reporting in place, the number presented is likely a minimum count of the number of exposed infants in the United States and Puerto Rico.

FIGURE 36

Time of maternal HIV testing among children with diagnosed perinatally acquired HIV infection and children exposed to HIV, birth years 2017–2020 (COVID-19 pandemic)—United States and Puerto Rico



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.



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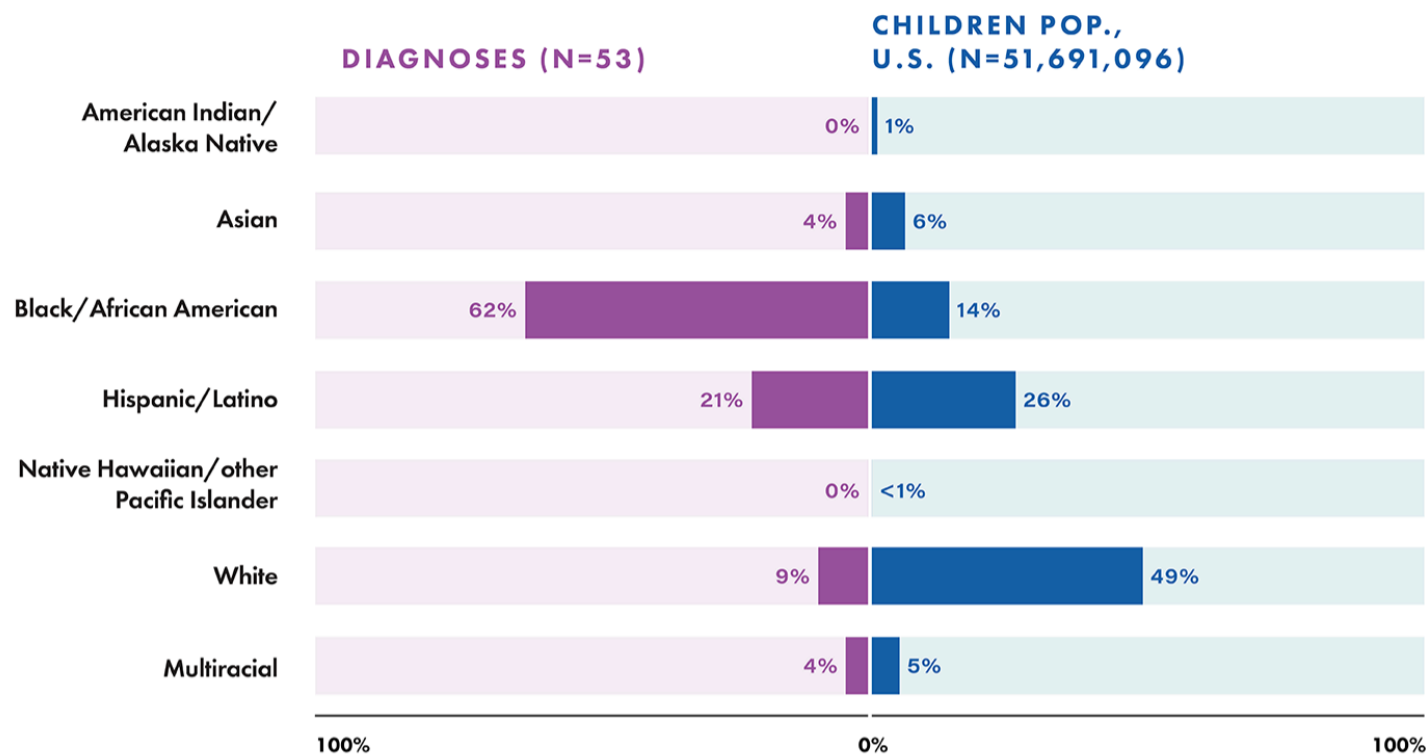
Diagnoses

In 2021, among children in the United States (Figure 37):

- Black/African American children made up approximately 14% of the population of children, but HIV infection among this group accounted for 62% of diagnoses.

- Hispanic/Latino children made up 26% of the population of children, but HIV infection among this group accounted for 21% of diagnoses.
- White children made up 49% of the population of children, but HIV infection among this group accounted for 9% of diagnoses.

FIGURE 37
Percentages of diagnoses of HIV infection and population among children aged <13 years, by race/ethnicity, 2021—United States



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



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Prevalence

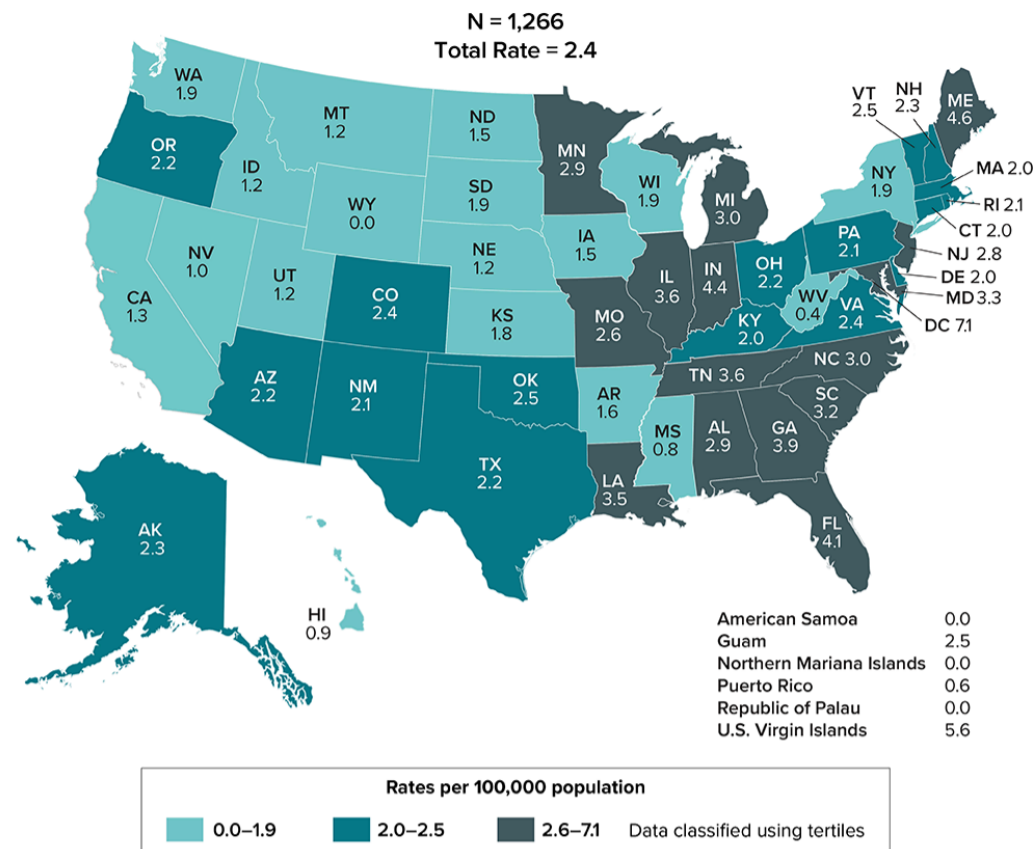
At year-end 2021 in the United States and 6 dependent areas, children living with diagnosed HIV infection were as follows:

Overall (Figure 38)

- Approximately 1,266 children were living with diagnosed HIV infection.
- The overall rate of children living with diagnosed HIV infection was 2.4.

FIGURE 38

Rates of children aged <13 living with diagnosed HIV infection, year-end 2021—United States and 6 dependent areas



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Data are based on address of residence as of December 2021 (i.e., most recent known address).



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Prevalence and race/ethnicity (Table 16b)

- American Indian/Alaska Native—<1%
- Asian—7%
- Black/African American—58%
- Hispanic/Latino—14%
- Native Hawaiian/other Pacific Islander—<1%
- White—12%
- Multiracial—8%

Prevalence, perinatally acquired HIV infection

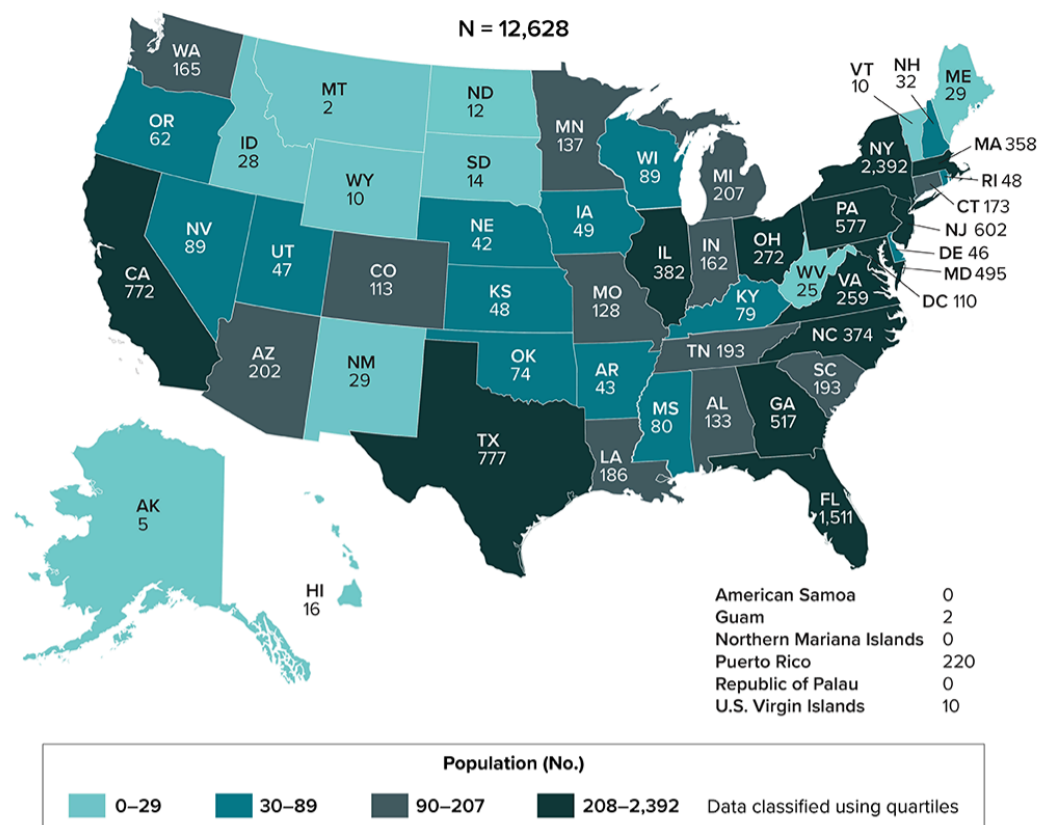
At year-end 2021, in the United States and 6 dependent areas, among those living with perinatally acquired HIV infection, percentages were as follows:

Overall (Figure 39, Table 16b)

- There were 12,628 persons living with diagnosed, perinatally acquired HIV infection.
- Data reflect all persons (i.e., children, adolescents, and adults) with diagnosed, perinatally acquired HIV infection who were alive at year-end 2021, regardless of their age at year-end 2021.

FIGURE 39

Persons living with diagnosed perinatally acquired HIV infection, year-end 2021—United States and 6 dependent areas



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Data are based on address of residence as of December 2021 (i.e., most recent known address).



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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—11%
- Multiracial—7%

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Diagnoses of HIV Infection in the United States and Dependent Areas 2021: Figures

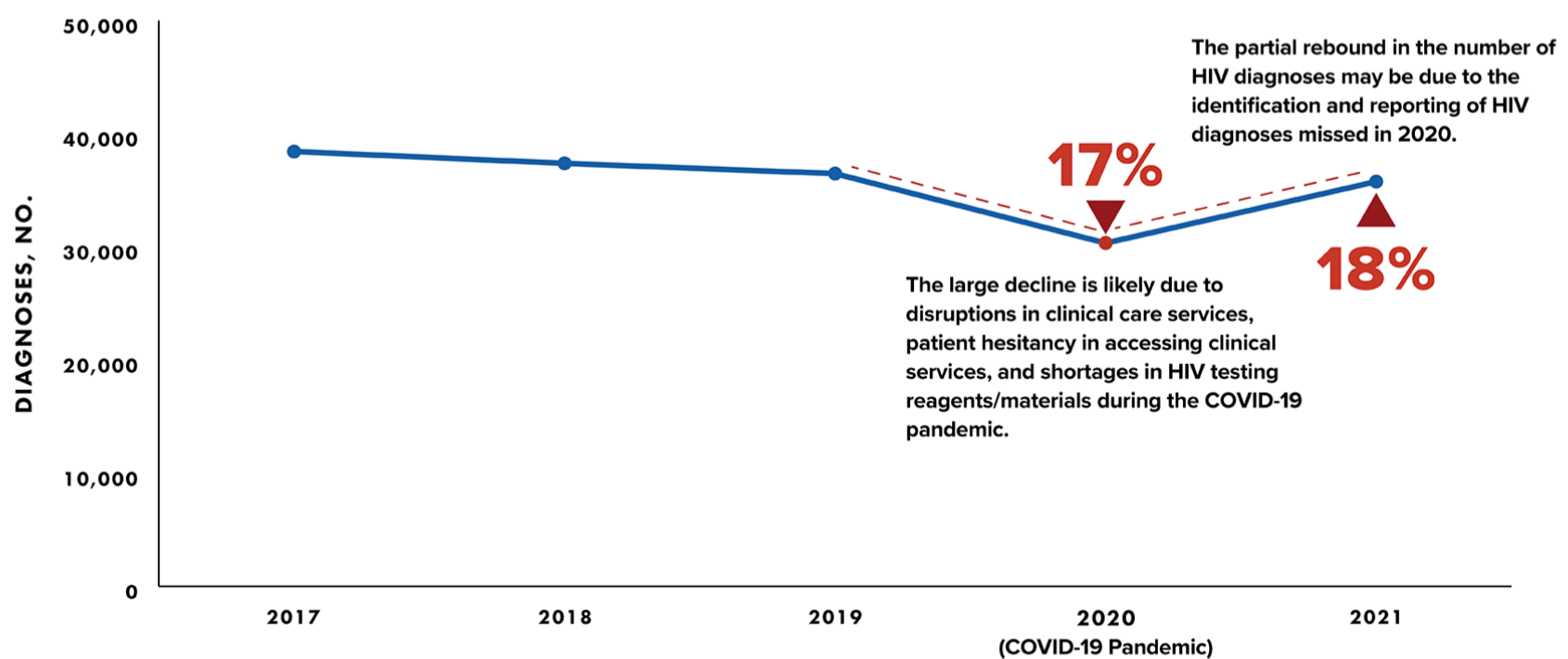


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Figure A. Diagnoses of HIV infection—United States, 2017–2021

FIGURE A
 Diagnoses of HIV infection—United States, 2017–2021



Note. The overall number of HIV diagnoses in the United States in 2020 (30,335) was 17% lower than in 2019. The decline in 2020 was larger than the average yearly decline (2%–3%) observed during 2017–2019. During 2021, the overall number of HIV diagnoses in the United States (35,769) partially rebounded and was 18% higher than in 2020.



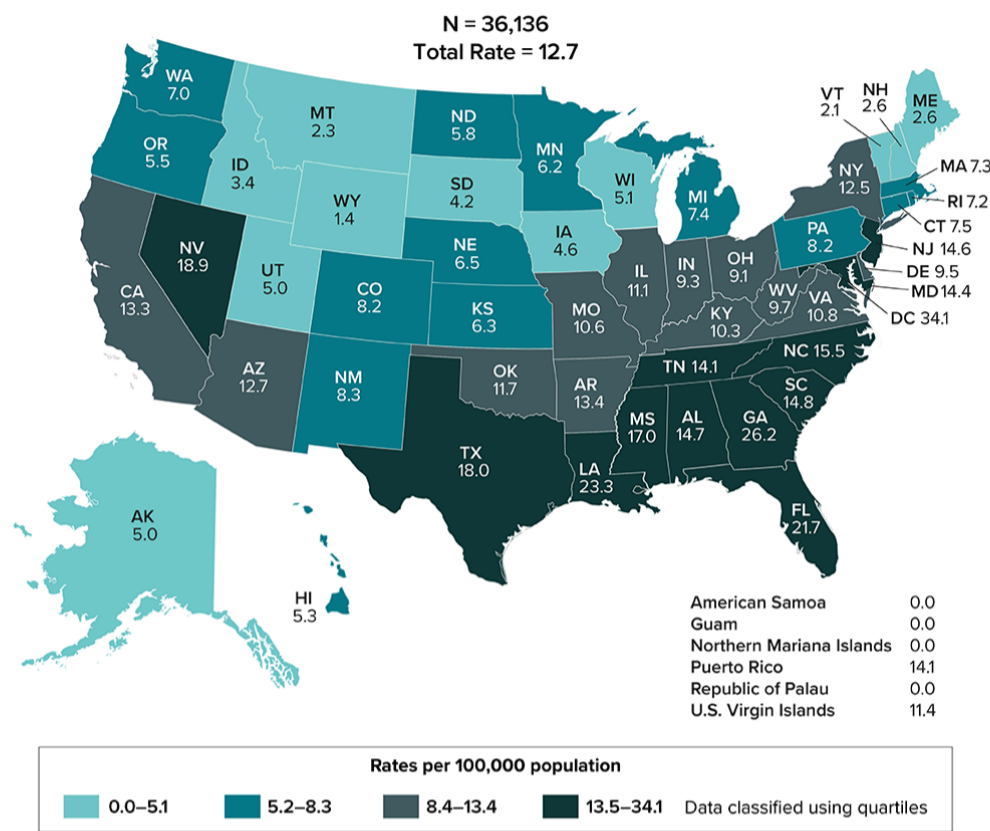
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Figure 1. Rates of diagnoses of HIV infection among persons aged ≥ 13 years, 2021—United States and 6 dependent areas



FIGURE 1
Rates of diagnoses of HIV infection among persons aged ≥ 13 years, 2021—United States and 6 dependent areas



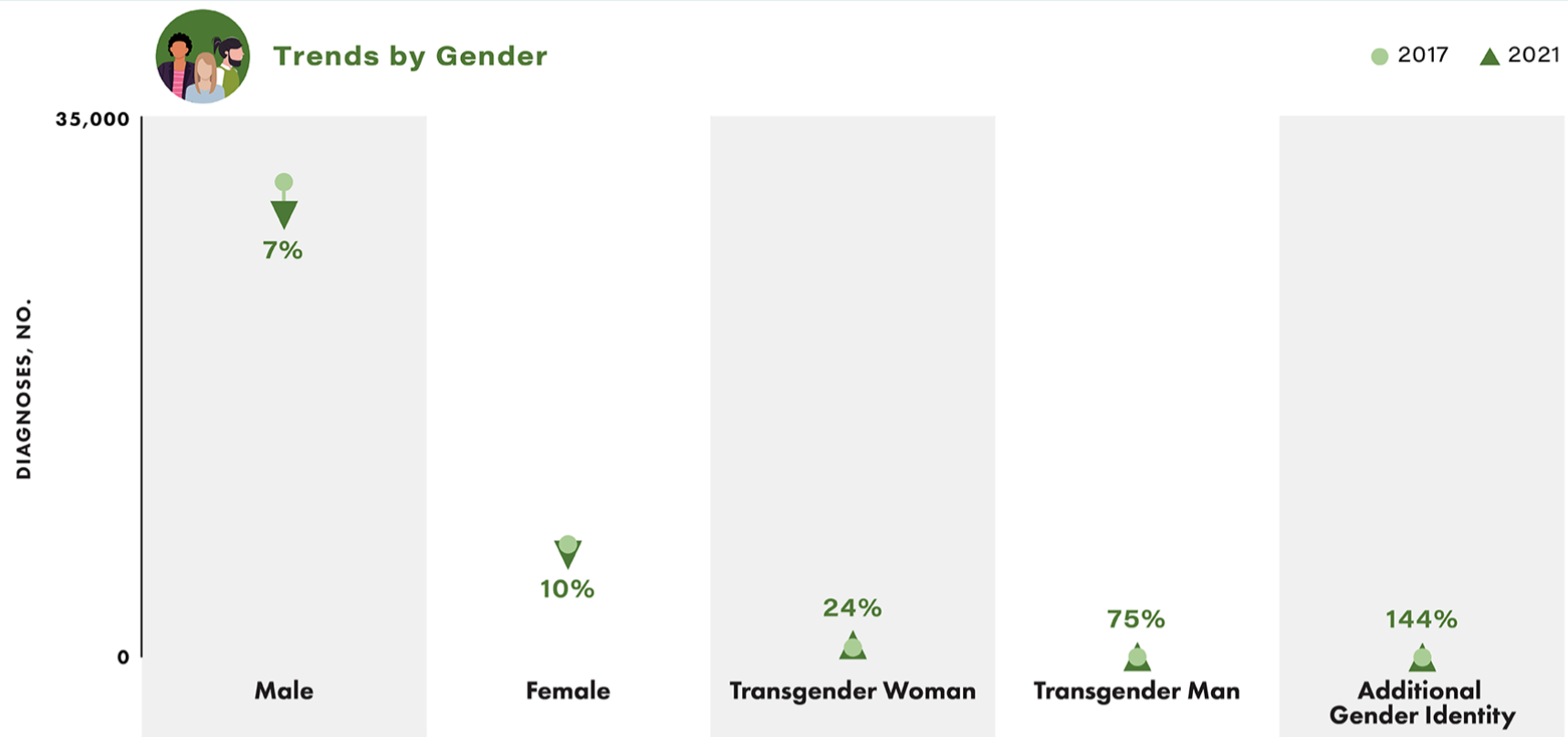
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Figure 2. Diagnoses of HIV infection among persons aged ≥ 13 years, by gender, 2017–2021—United States and 6 dependent areas



FIGURE 2
Diagnoses of HIV infection among persons aged ≥13 years, by gender, 2017–2021—United States and 6 dependent areas



Note. "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender. "Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender. Additional gender identity examples include "bigender," "gender queer," and "two-spirit."

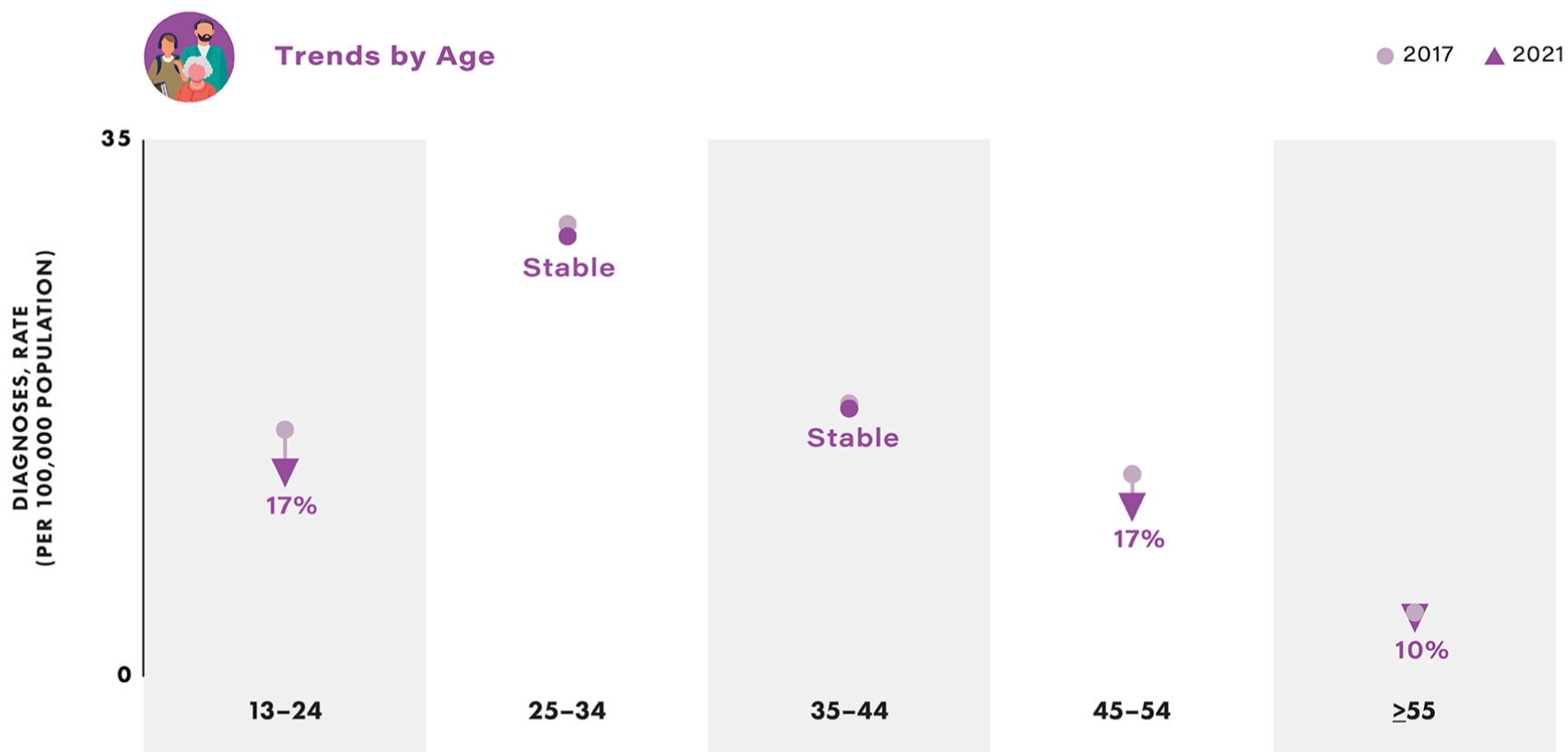


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Figure 3. Rates of diagnoses of HIV infection among persons aged ≥13 years, by age at diagnosis, 2017–2021—United States and 6 dependent areas

FIGURE 3
Rates of diagnoses of HIV infection among persons aged ≥13 years, by age at diagnosis, 2017–2021—United States and 6 dependent areas

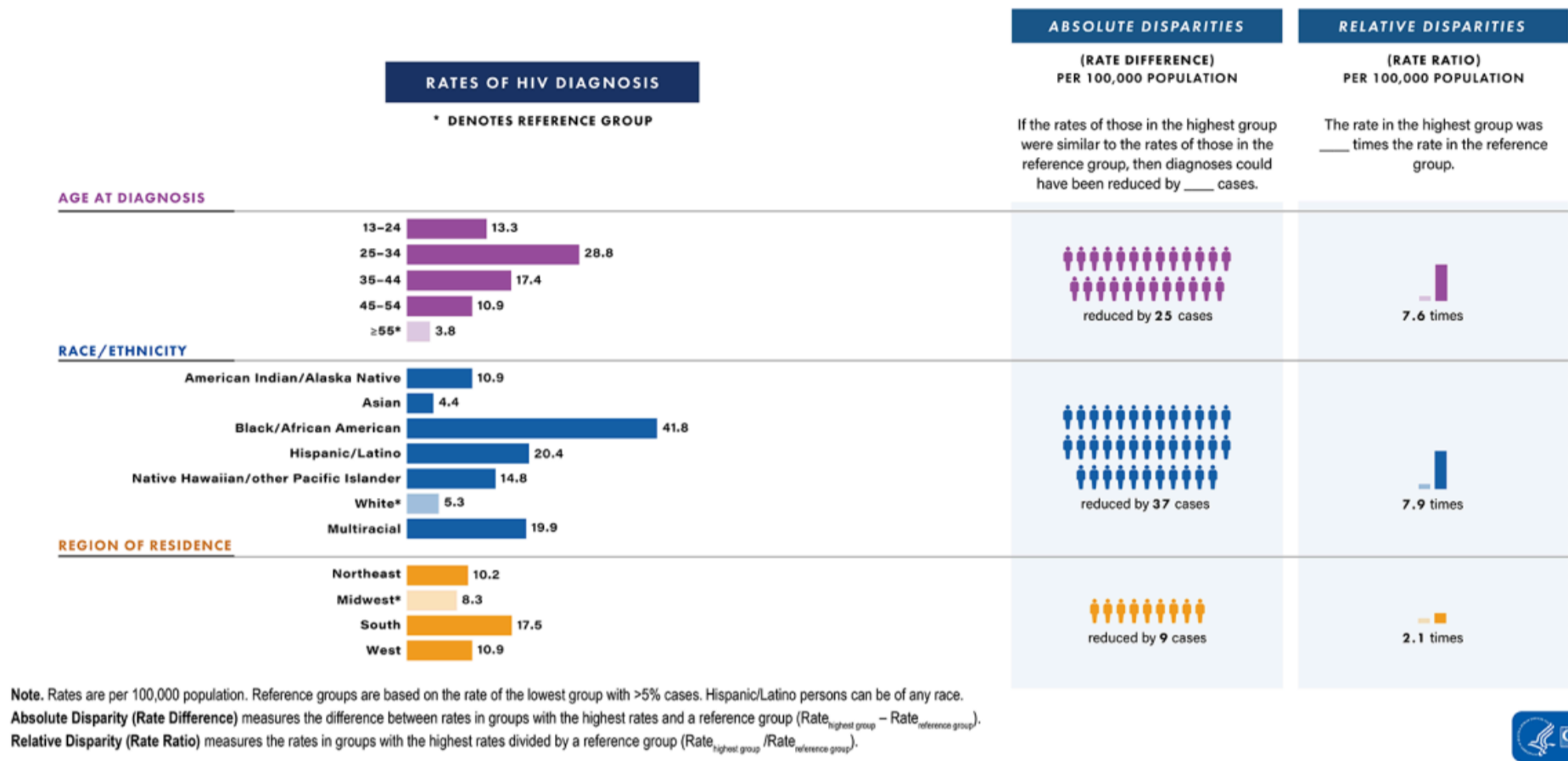


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Figure 4. Rates and disparities of diagnoses of HIV infection among persons aged ≥13 years, by selected characteristics, 2021—United States

FIGURE 4
Rates and disparities of diagnoses of HIV infection among persons aged ≥13 years, by selected characteristics, 2021—United States

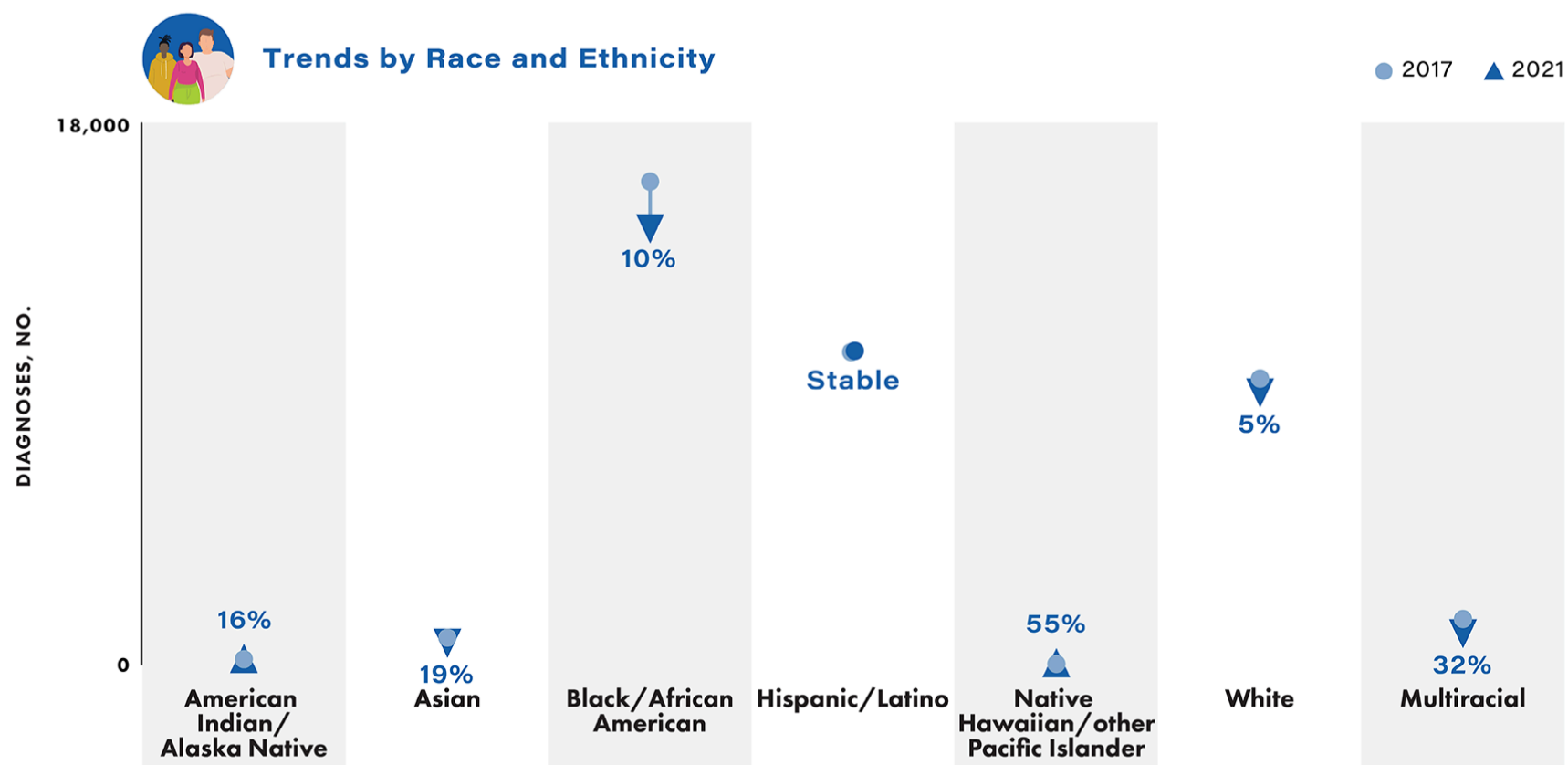


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Figure 5. Diagnoses of HIV infection among persons aged ≥13 years, by race/ethnicity, 2017–2021—United States and 6 dependent areas

FIGURE 5
Diagnoses of HIV infection among persons aged ≥13 years, by race/ethnicity, 2017–2021—United States and 6 dependent areas



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

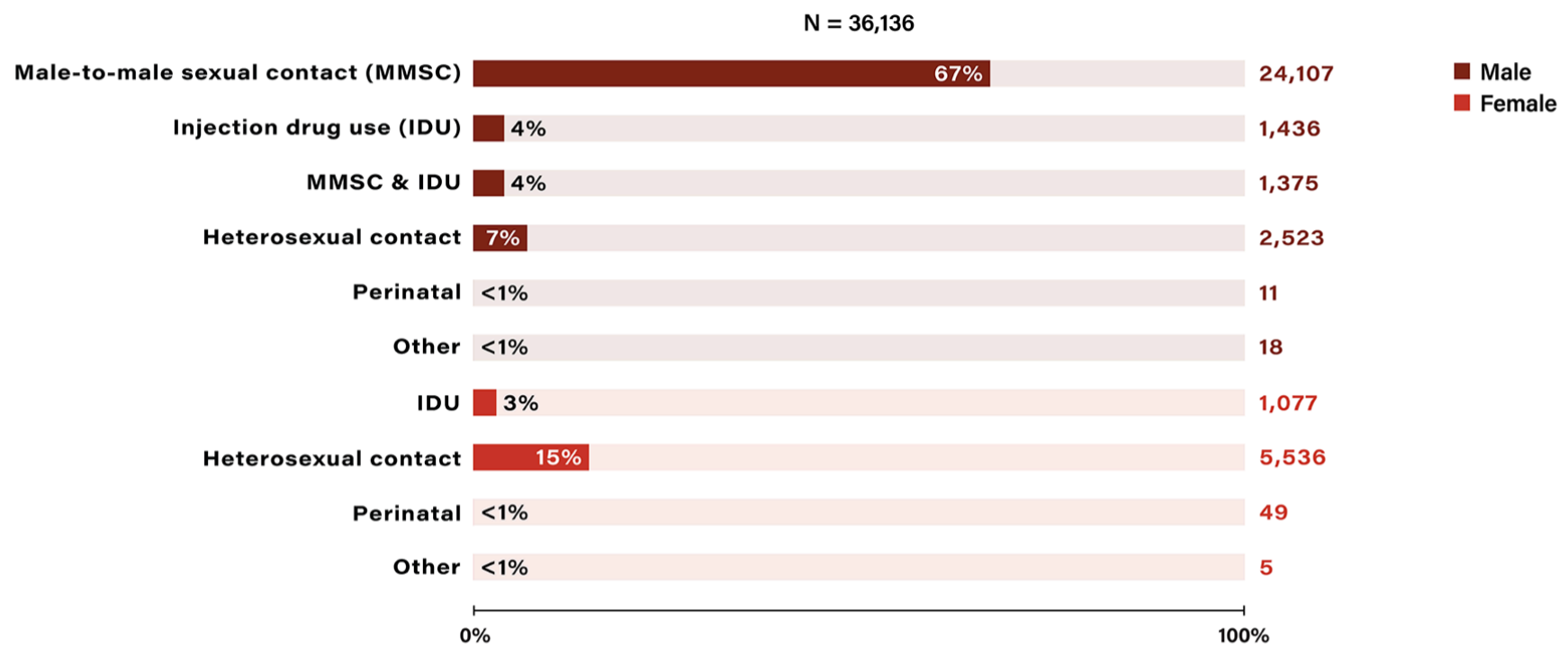
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Figure 6. Percentages of diagnoses of HIV infection among persons aged ≥ 13 years, by assigned sex at birth and transmission category, 2021—United States and 6 dependent areas

FIGURE 6

Percentages of diagnoses of HIV infection among persons aged ≥ 13 years, by assigned sex at birth and transmission category, 2021—United States and 6 dependent areas



Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male contact includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 infection. Perinatal includes individuals aged ≥13 years at time of diagnosis of HIV infection. Other includes other risk factors, including hemophilia, blood transfusion, and risk factor not reported or not identified.

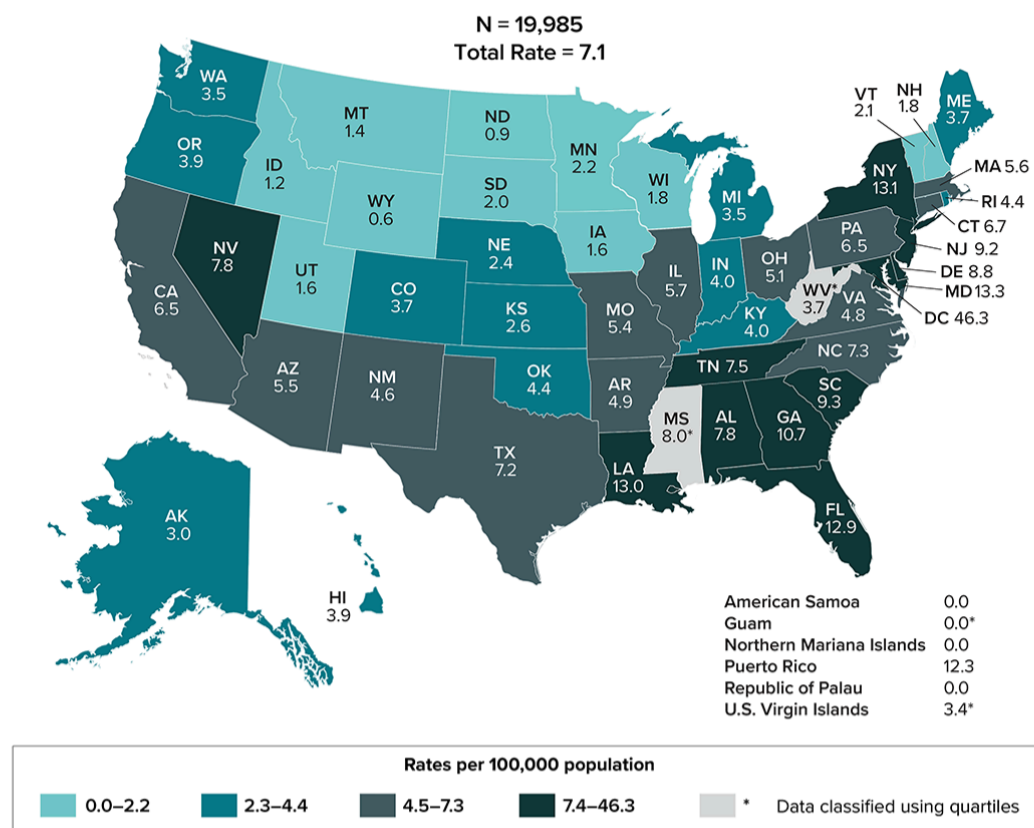


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Figure 7. Rates of deaths (any cause) of persons aged ≥ 13 years with diagnosed HIV infection, 2021—United States and 6 dependent areas

FIGURE 7
Rates of deaths (any cause) among persons aged ≥13 years with diagnosed HIV infection, 2021—United States and 6 dependent areas



Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Asterisk (*) indicates incomplete ascertainment of deaths.

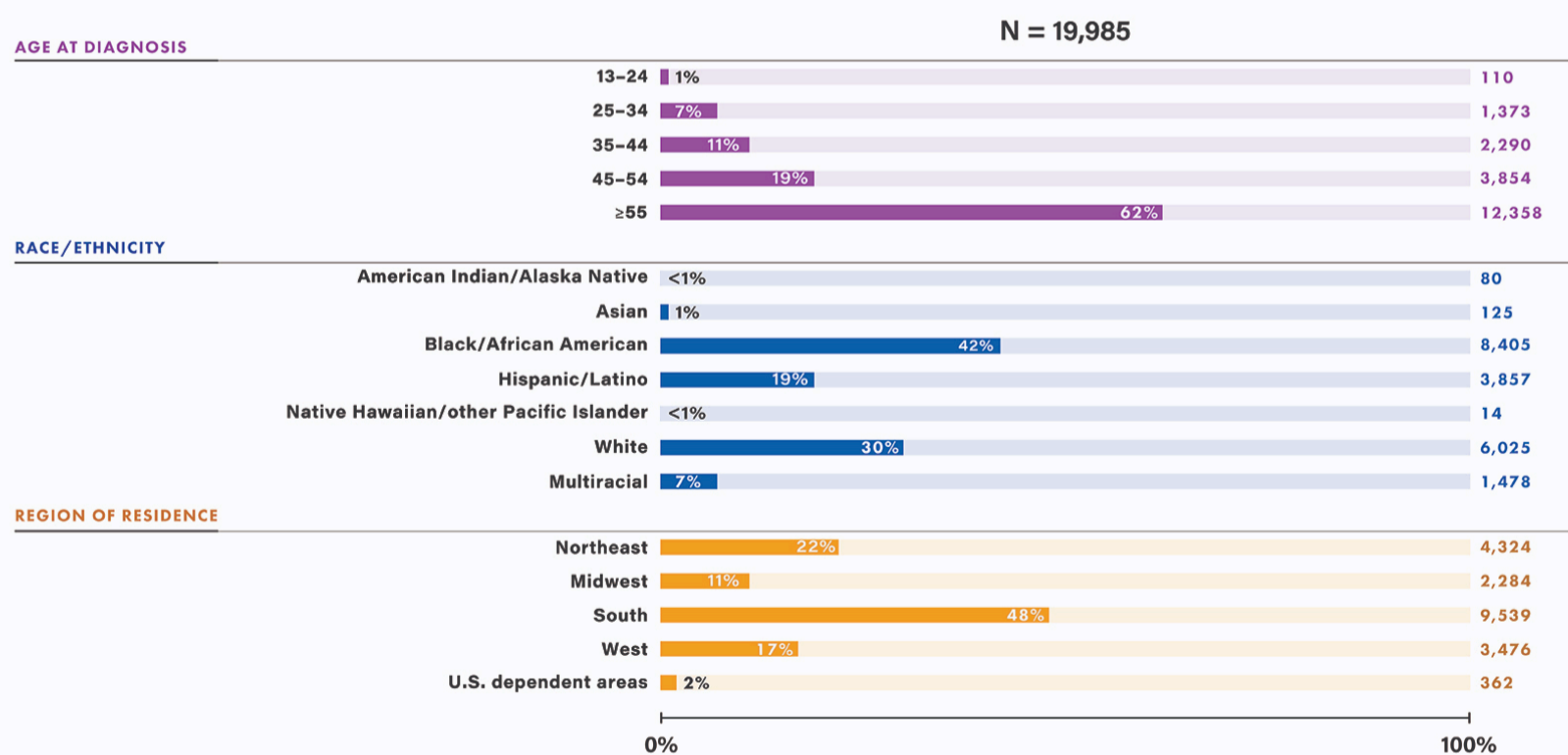


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Figure 8. Percentages of deaths (any cause) among persons aged ≥ 13 years with diagnosed HIV infection, by selected characteristics, 2021—United States and 6 dependent areas

FIGURE 8
Percentages of deaths (any cause) among persons aged ≥13 years with diagnosed HIV infection, by selected characteristics, 2021—United States and 6 dependent areas



Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Asian includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race.

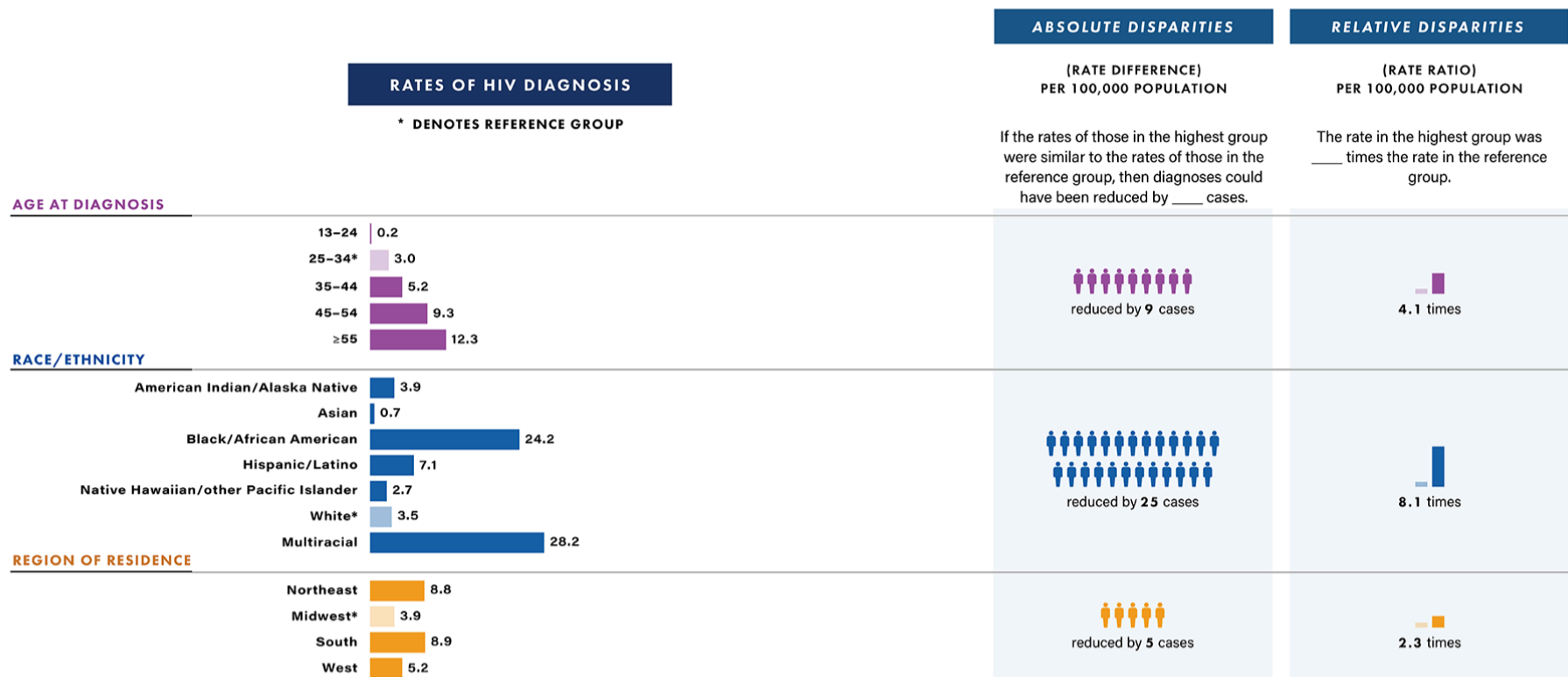


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Figure 9. Rates and disparities of deaths (any cause) among persons aged ≥ 13 years with diagnosed HIV infection, by selected characteristics, 2021—United States

FIGURE 9
Rates and disparities of deaths (any cause) among persons aged ≥13 years with diagnosed HIV infection, by selected characteristics, 2021—United States



Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. 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 person 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 ($\text{Rate}_{\text{highest group}} / \text{Rate}_{\text{reference group}}$).

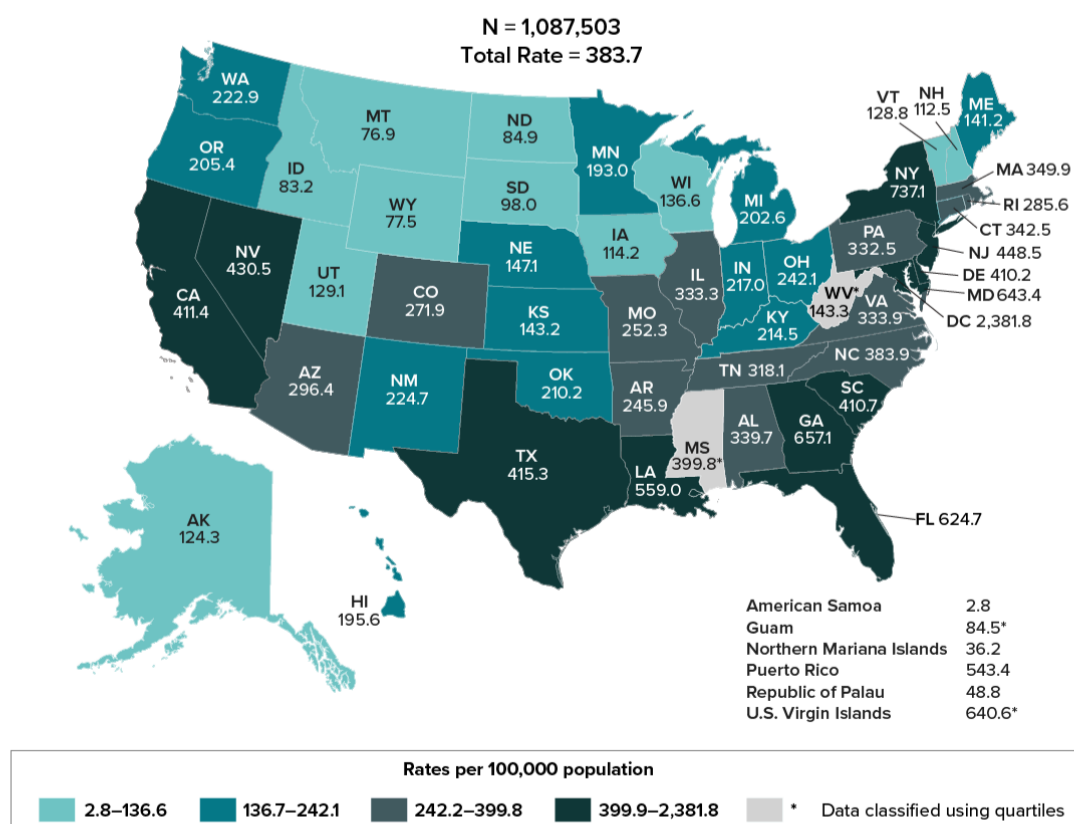


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Figure 10. Rates of persons aged ≥ 13 years living with diagnosed HIV infection, year-end 2021—United States and 6 dependent areas

FIGURE 10
Rates of persons aged ≥13 years living with diagnosed HIV infection, year-end 2021—United States and 6 dependent areas



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Data are based on address of residence as of December 2021 (i.e., most recent known address). Asterisk (*) indicates incomplete ascertainment of deaths.

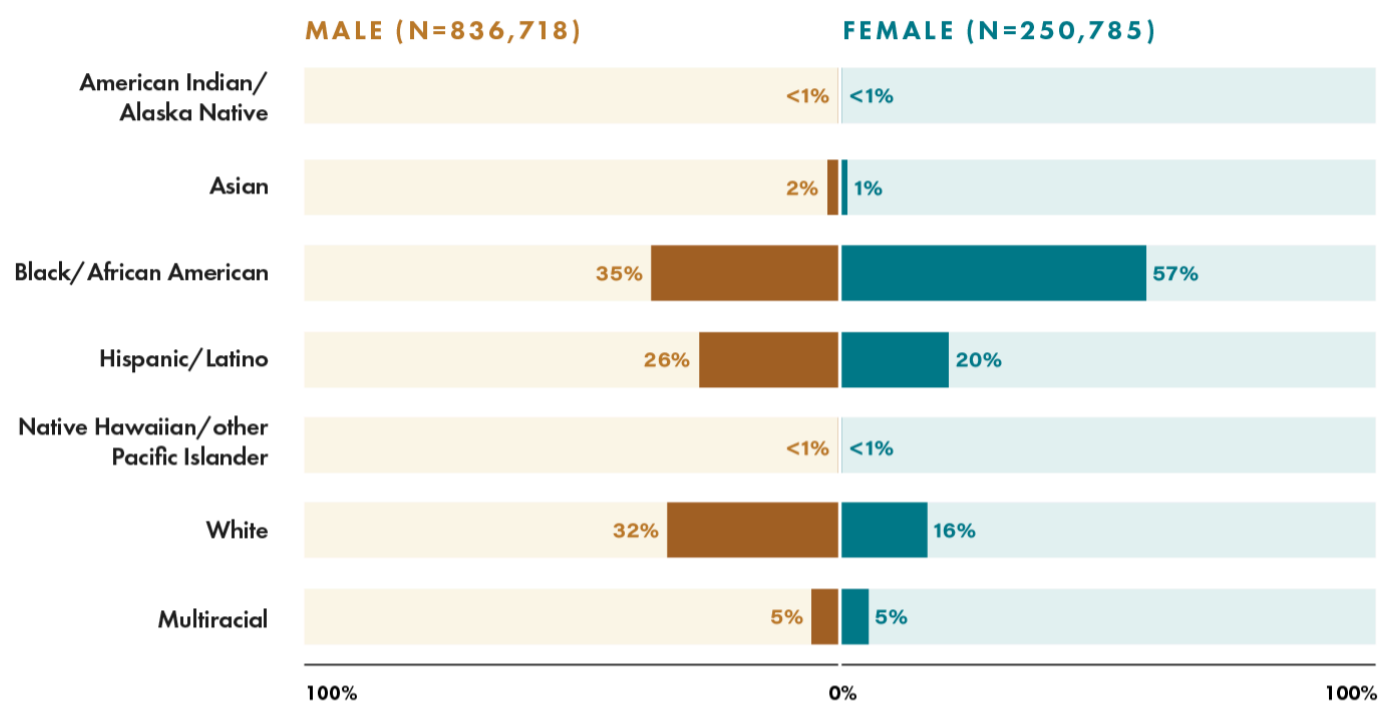


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Figure 11. Percentages of persons aged ≥ 13 years living with diagnosed HIV infection, by assigned sex at birth and race/ethnicity, year-end 2021—United States and 6 dependent areas



FIGURE 11
 Percentages of persons aged ≥13 years living with diagnosed HIV infection, by assigned sex at birth and race/ethnicity, year-end 2021—United States and 6 dependent areas



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Data are based on address of residence as of December 2021 (i.e., most recent known address). Asian includes Asian/Pacific Islander legacy cases. Hispanic/Latino persons can be of any race.

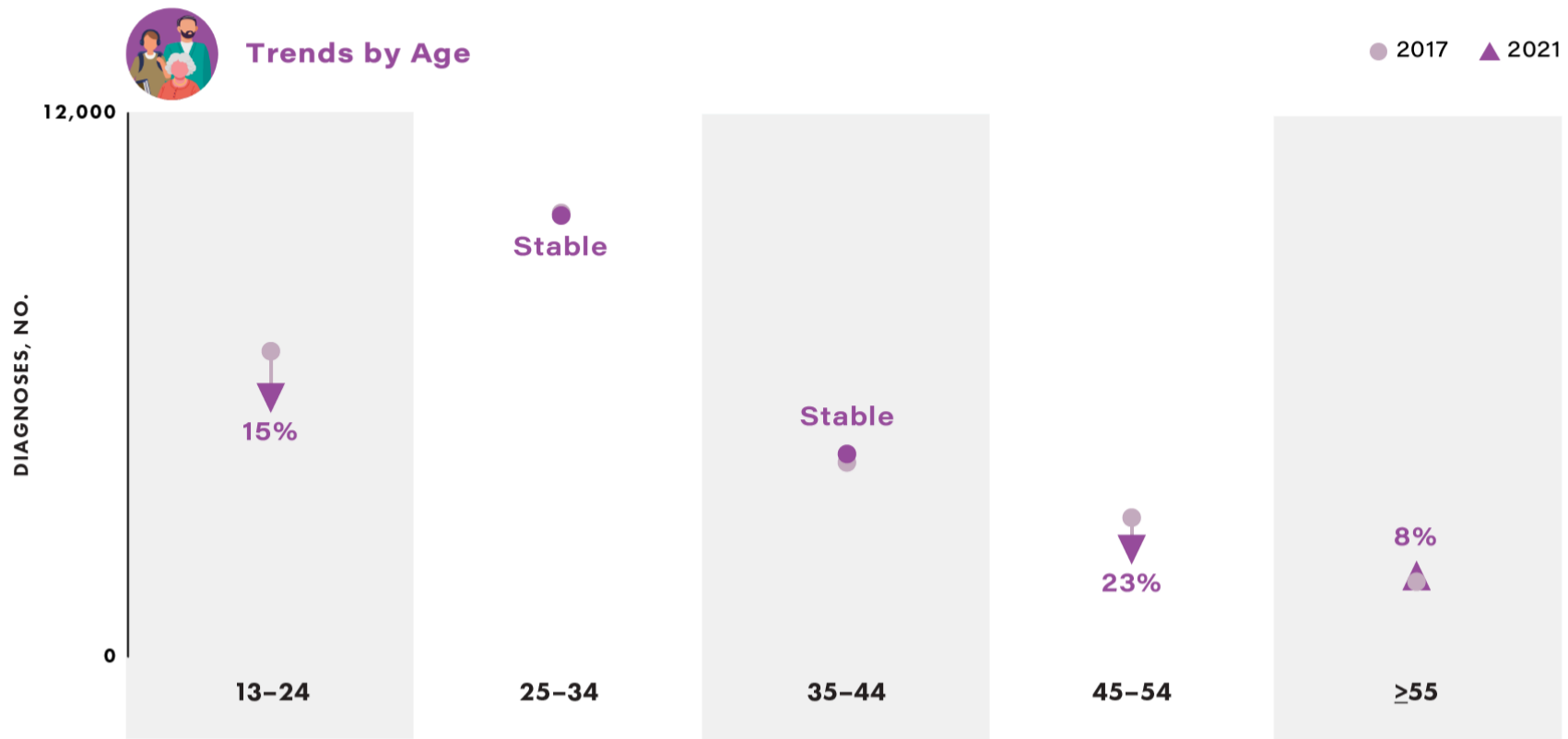


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Figure 12. Diagnoses of HIV infection among males, based on assigned sex at birth, attributed to male-to-male sexual contact, by age group, 2017–2021—United States and 6 dependent areas



FIGURE 12
Diagnoses of HIV infection among males, based on assigned sex at birth, attributed to male-to-male sexual contact, by age group, 2017–2021—United States and 6 dependent areas



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

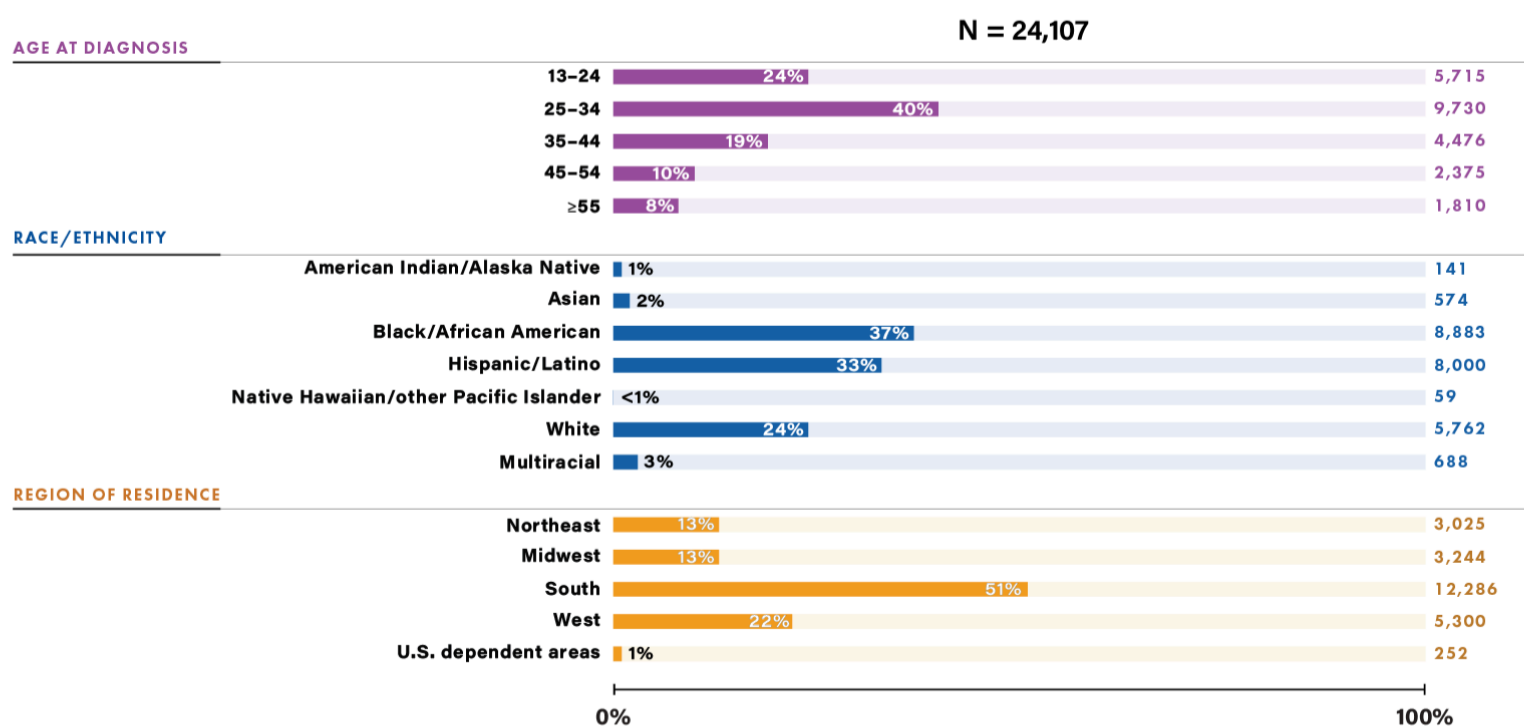


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Figure 13. Percentages of diagnoses of HIV infection among males, based on assigned sex at birth, attributed to male-to-male sexual contact, by selected characteristics, 2021—United States and 6 dependent areas

FIGURE 13
Percentages of diagnoses of HIV infection among males, based on assigned sex at birth, attributed to male-to-male sexual contact, by selected characteristics, 2021—United States and 6 dependent areas



Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male contact includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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.



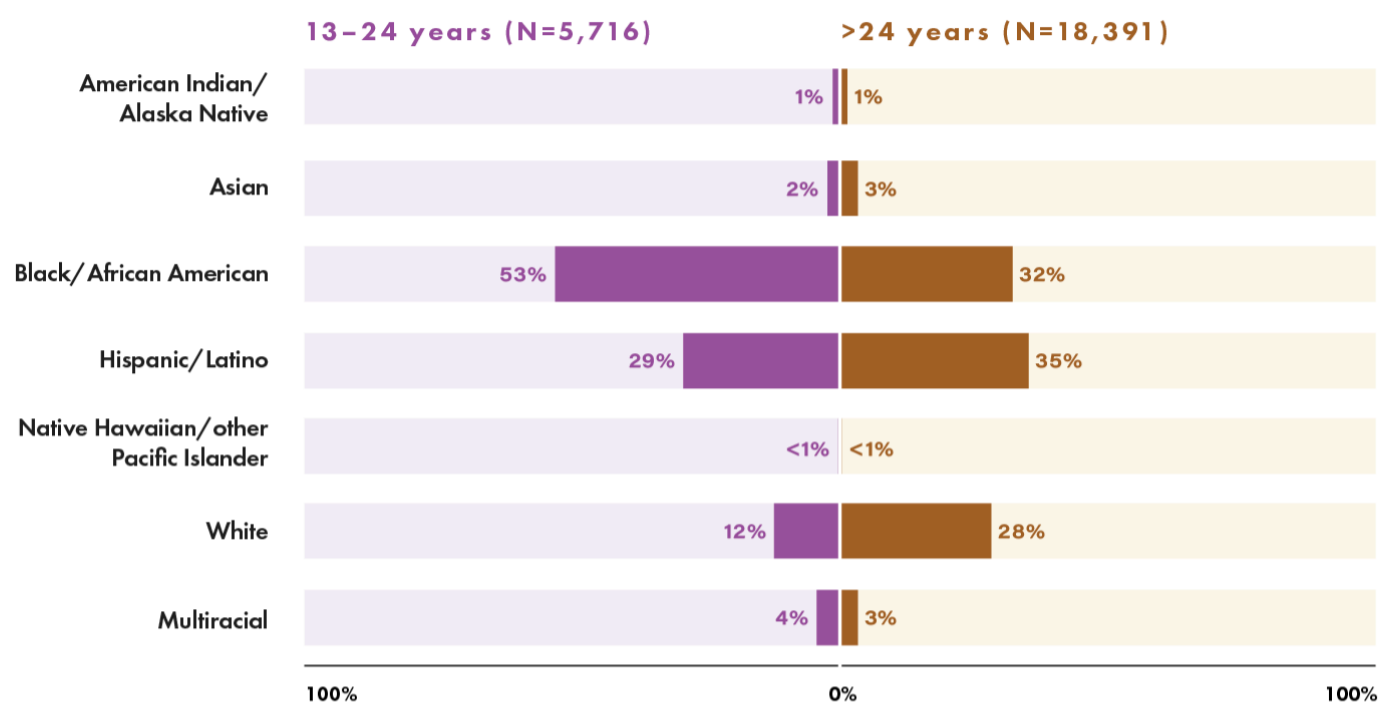
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Figure 14. Percentages of diagnoses of HIV infection among males, based on assigned sex at birth, attributed to male-to-male sexual contact, by age group and race/ethnicity, 2021—United States and 6 dependent areas



FIGURE 14
Percentages of diagnoses of HIV infection among males, based on assigned sex at birth, attributed to male-to-male sexual contact, by age group and race/ethnicity, 2021—United States and 6 dependent areas



Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male contact includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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.



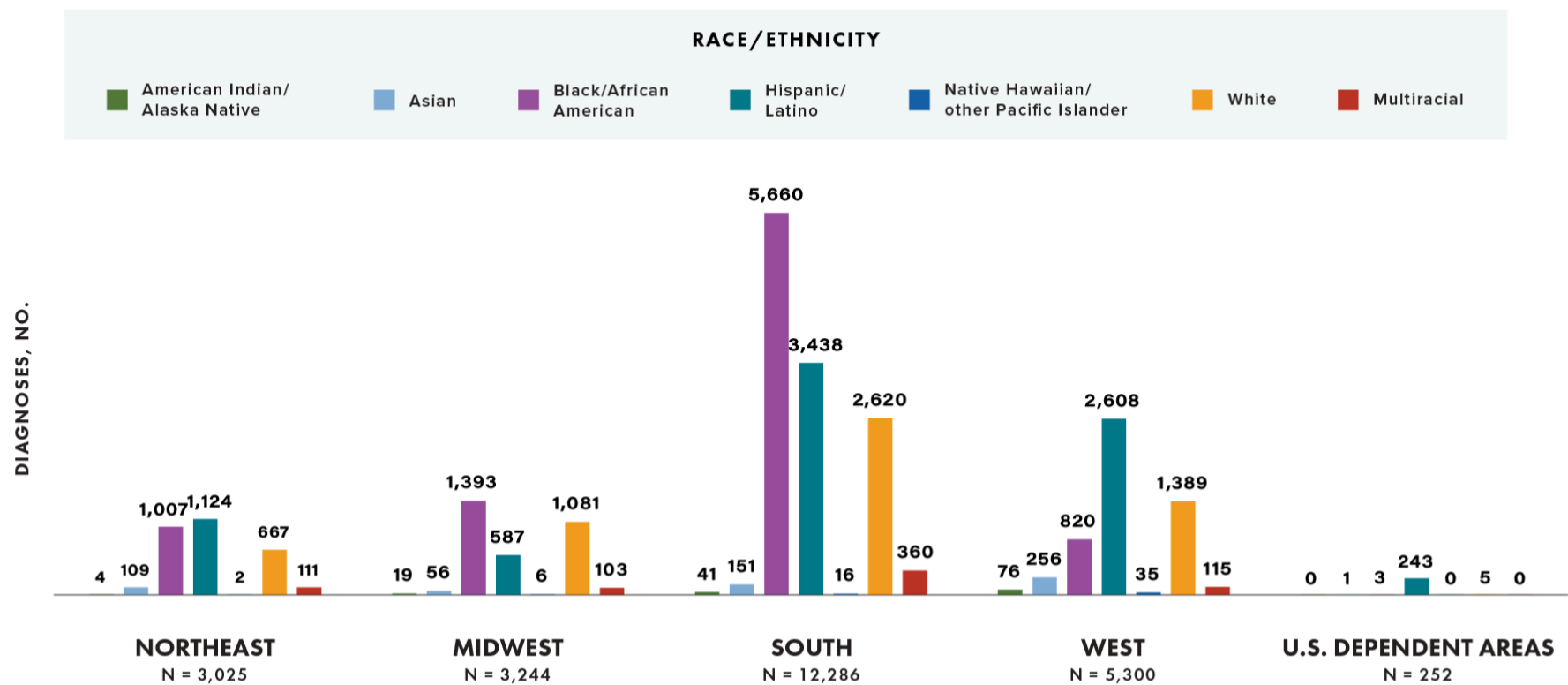
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Figure 15. Diagnoses of HIV infection among males, based on assigned sex at birth, attributed to male-to-male sexual contact, by region and race/ethnicity, 2021—United States and 6 dependent areas



FIGURE 15
Diagnoses of HIV infection among males, based on assigned sex at birth, attributed to male-to-male sexual contact, by region and race/ethnicity, 2021—United States and 6 dependent areas



Note. Data have been statistically adjusted to account for missing transmission category. Male-to-male contact includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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.

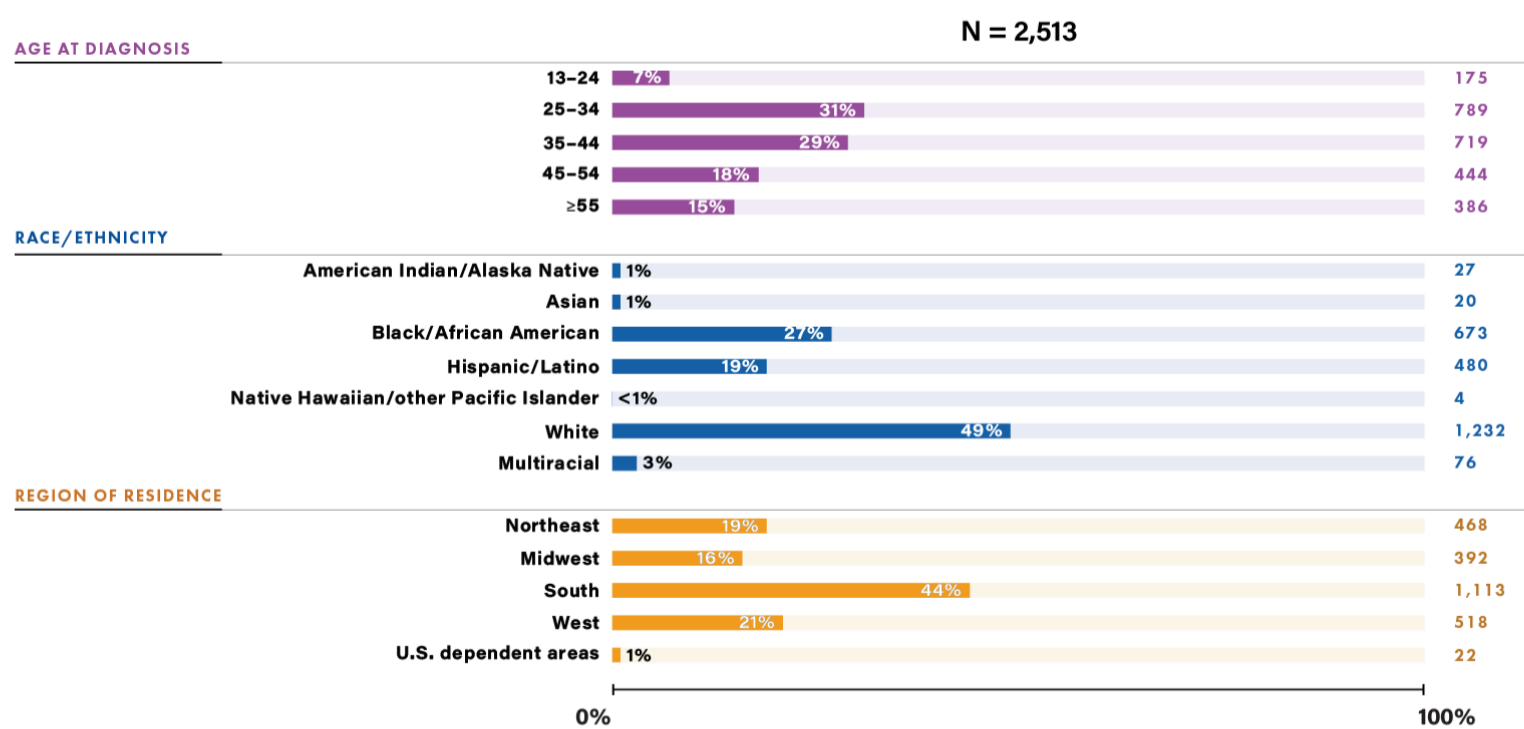


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Figure 16. Percentages of diagnoses of HIV infection attributed to injection drug use, by selected characteristics, 2021—United States and 6 dependent areas

FIGURE 16
Percentages of diagnoses of HIV infection attributed to injection drug use, by selected characteristics, 2021—United States and 6 dependent areas



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.

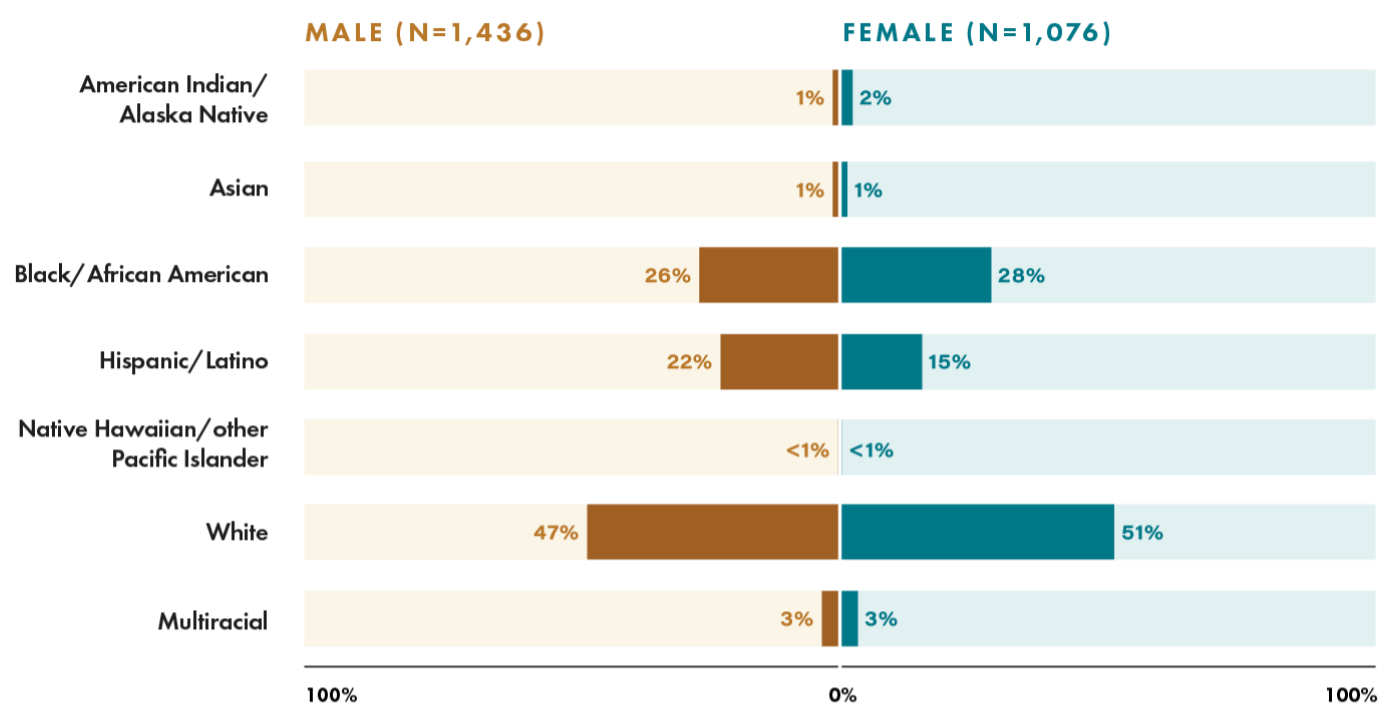


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Figure 17. Percentages of diagnoses of HIV infection attributed to injection drug use, by assigned sex at birth and race/ethnicity, 2021—United States and 6 dependent areas

FIGURE 17
Percentages of diagnoses of HIV infection attributed to injection drug use, by assigned sex at birth and race/ethnicity, 2021—United States and 6 dependent areas



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.

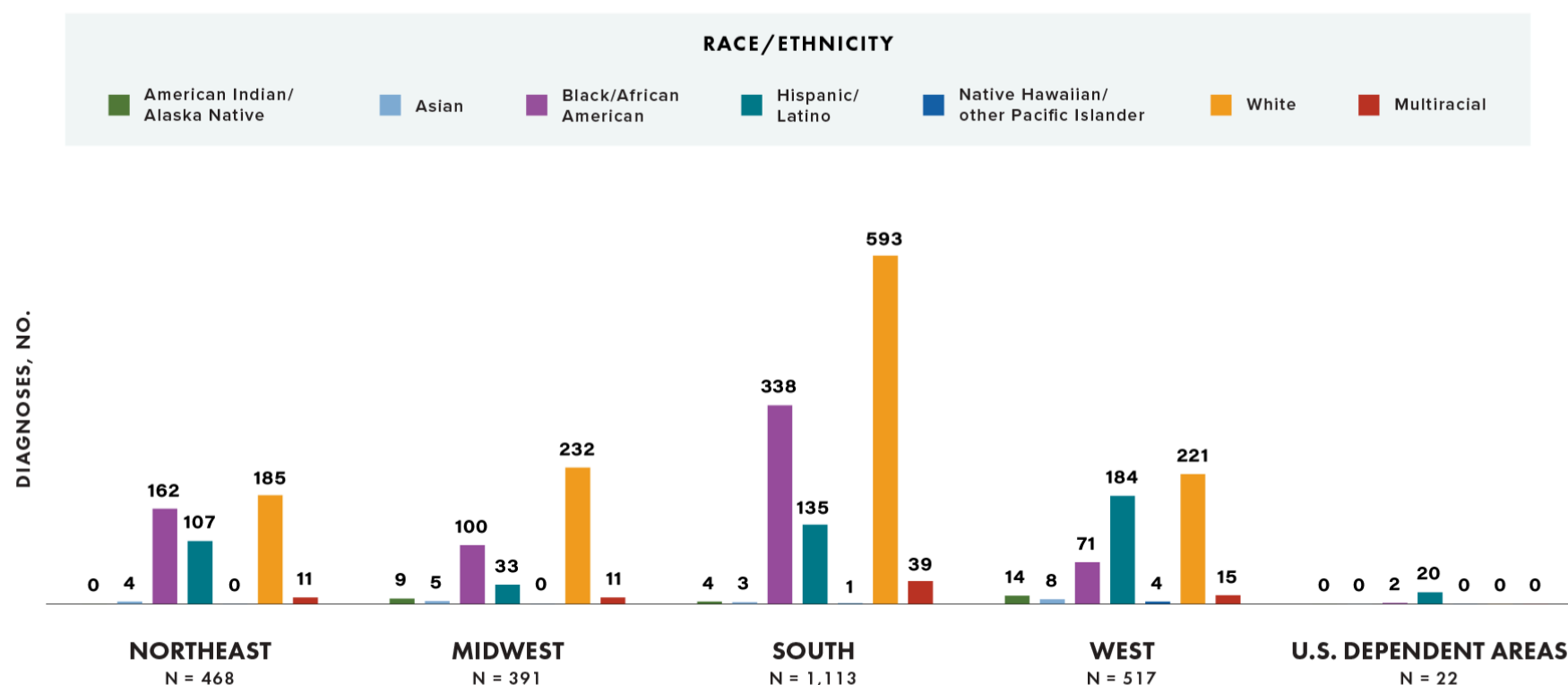


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Figure 18. Diagnoses of HIV infection attributed to injection drug use, by region and race/ethnicity, 2021—United States and 6 dependent areas

FIGURE 18
Diagnoses of HIV infection attributed to injection drug use, by region and race/ethnicity, 2021—United States and 6 dependent areas



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.

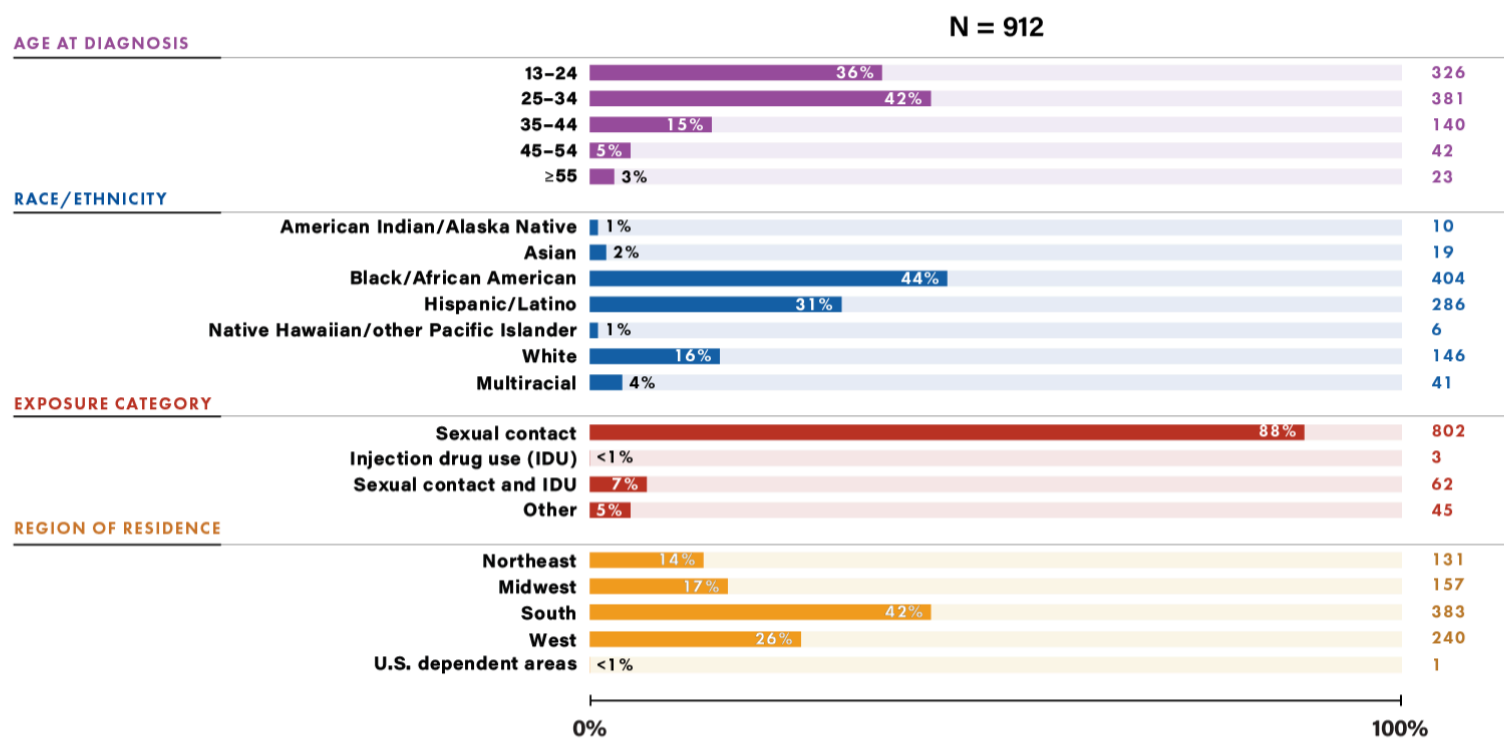


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Figure 19. Percentages of diagnoses of HIV infection among transgender and additional gender identity persons aged ≥ 13 years, by selected characteristics, 2021—United States and 6 dependent areas

FIGURE 19
Percentages of diagnoses of HIV infection among transgender and additional gender identity persons aged ≥13 years, by selected characteristics, 2021—United States and 6 dependent areas



Note. "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender. "Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender. Additional gender identity examples include "bigender," "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, 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.

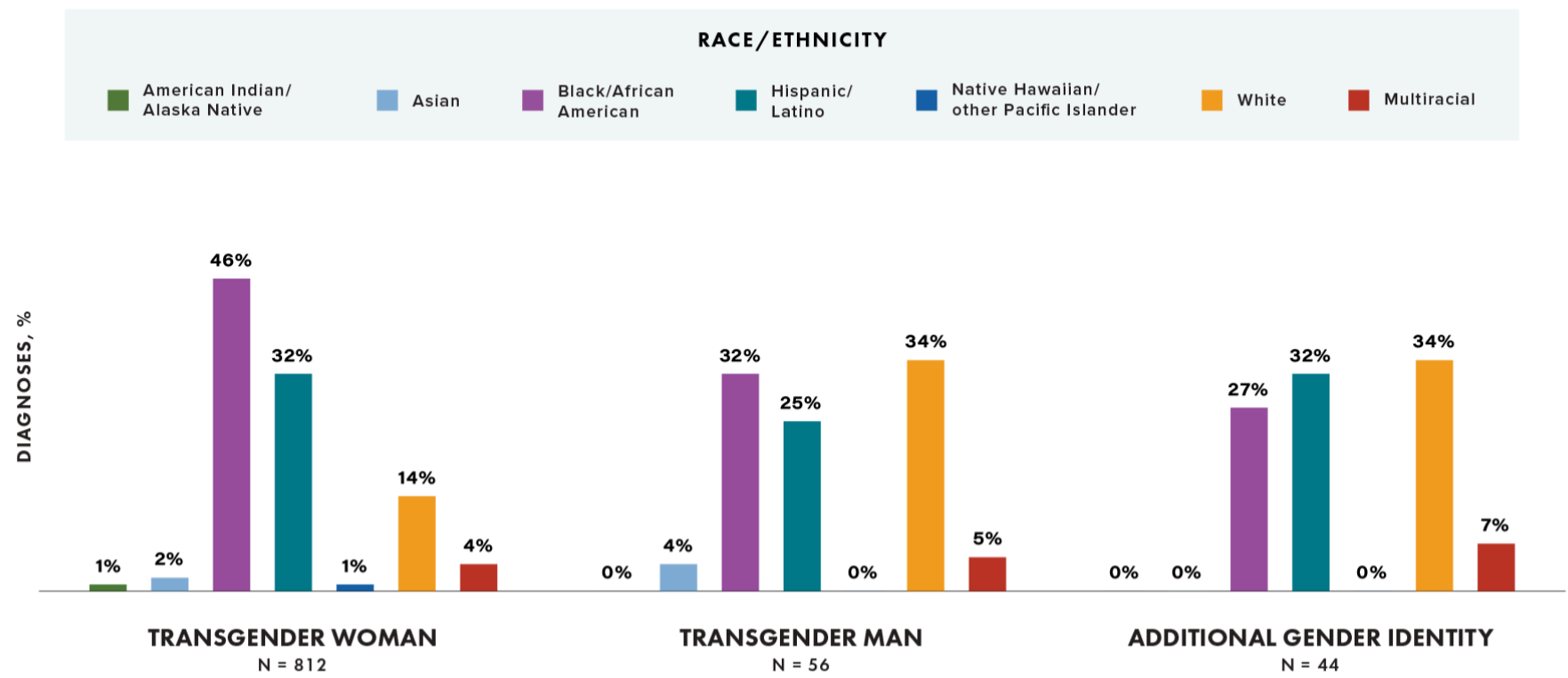


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Figure 20. Percentages of diagnoses of HIV infection among transgender and additional gender identity persons aged ≥ 13 years, by gender and race/ethnicity, 2021—United States and 6 dependent areas

FIGURE 20
Percentages of diagnoses of HIV infection among transgender and additional gender identity persons aged ≥13 years, by gender and race/ethnicity, 2021—United States and 6 dependent areas



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

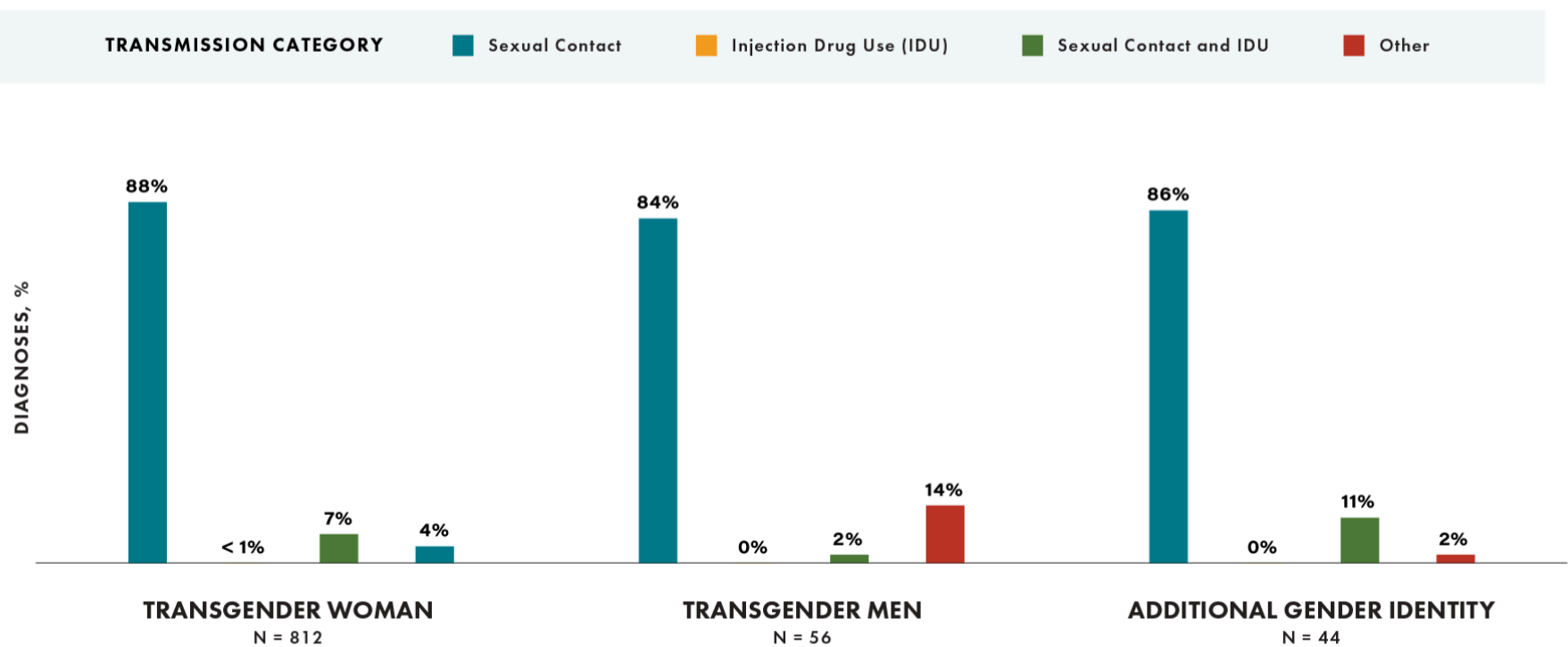


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Figure 21. Percentages of diagnoses of HIV infection among transgender and additional gender identity persons aged ≥ 13 years, by gender and exposure category, 2021—United States and 6 dependent areas

FIGURE 21
Percentages of diagnoses of HIV infection among transgender and additional gender identity persons aged ≥13 years, by gender and exposure category, 2021—United States and 6 dependent areas



Note. "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender. "Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender. Additional gender identity examples include "bigender," "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, 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.



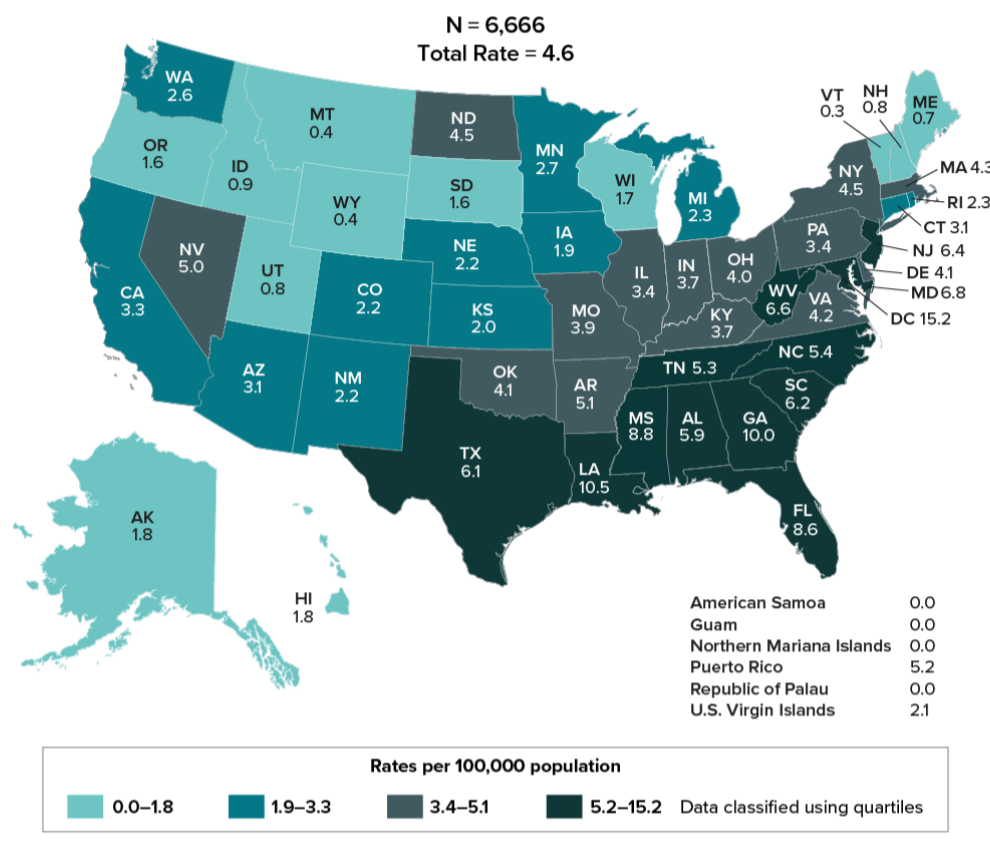
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Figure 22. Rates of diagnoses of HIV infection among females, based on assigned sex at birth, aged ≥ 13 years, 2021—United States and 6 dependent areas



FIGURE 22
Rates of diagnoses of HIV infection among females, based on assigned sex at birth, aged ≥ 13 years, 2021—United States and 6 dependent areas



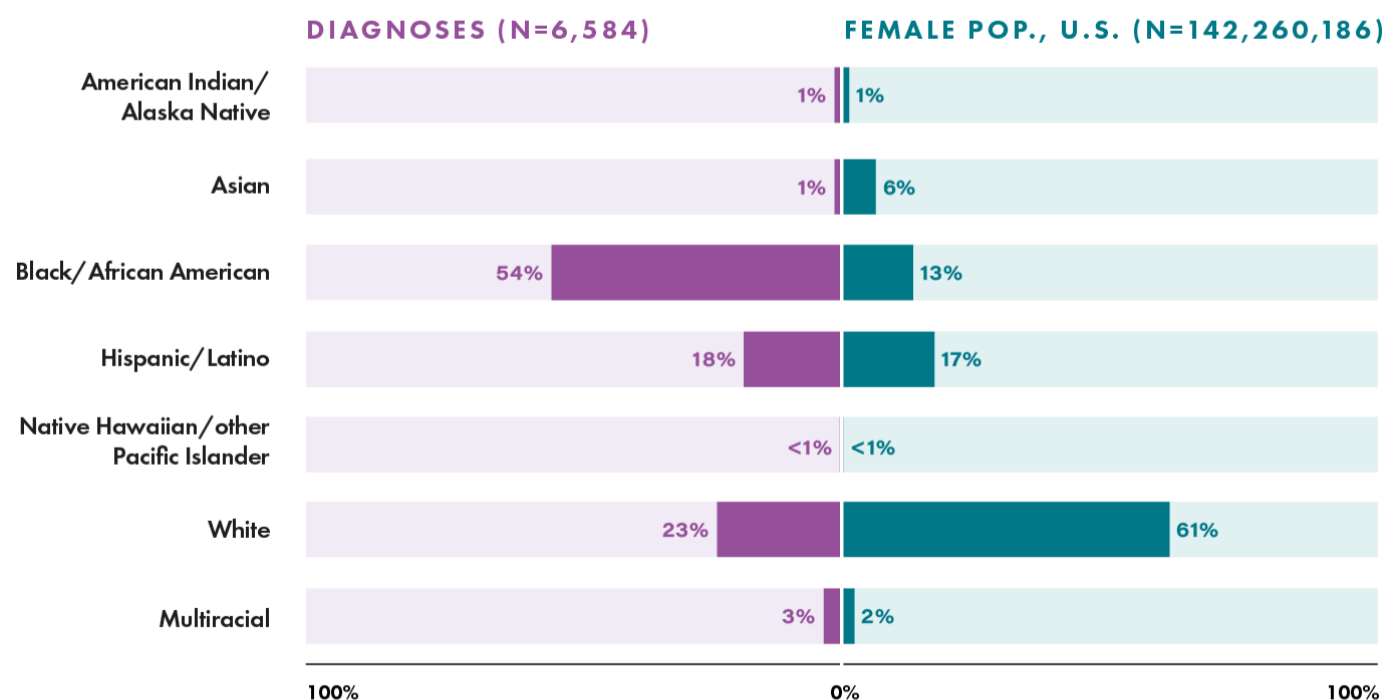
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Figure 23. Percentages of diagnoses of HIV infection and population among females, based on assigned sex at birth, aged ≥ 13 years, by race/ethnicity, 2021—United States



FIGURE 23
Percentages of diagnoses of HIV infection and population among females, based on assigned sex at birth, aged ≥ 13 years, by race/ethnicity, 2021—United States



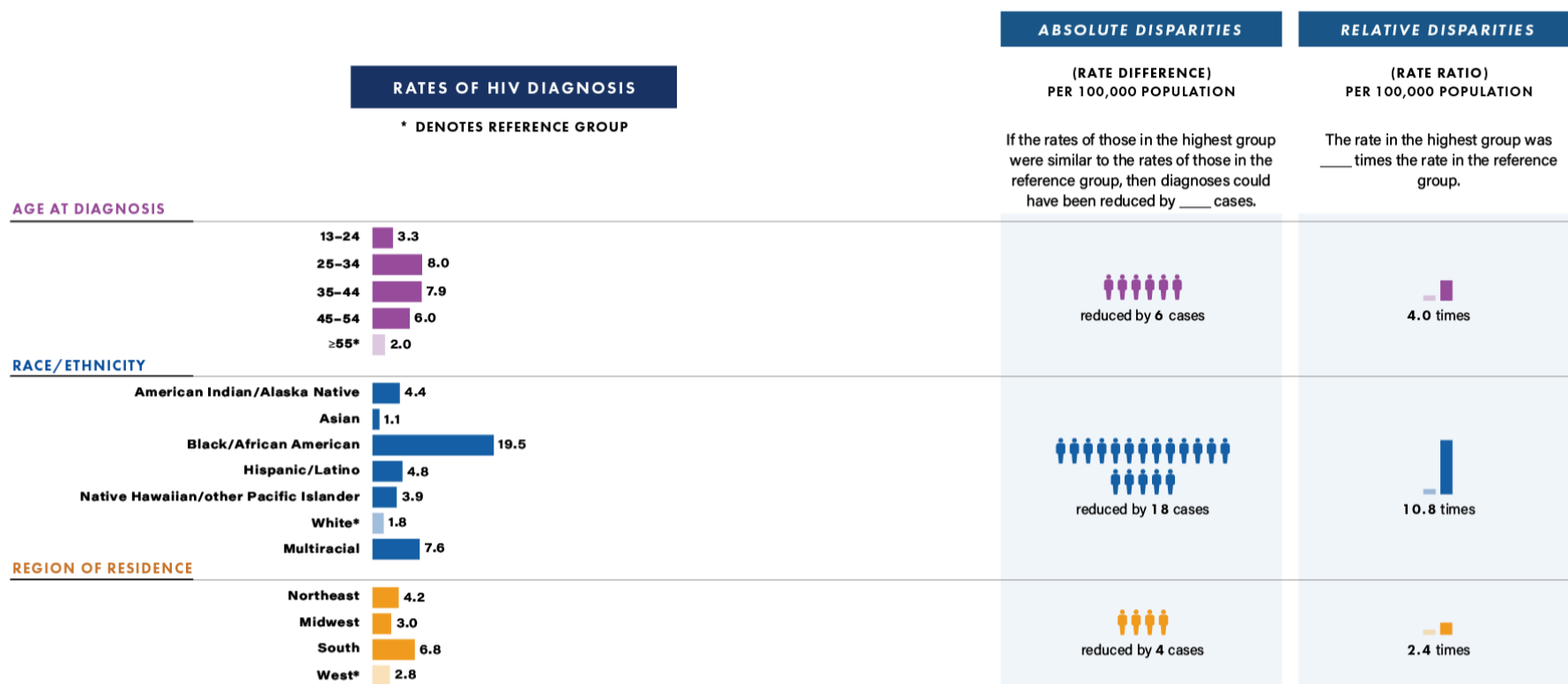
Note. Hispanic/Latino persons can be of any race.



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Figure 24. Rates and disparities of diagnoses of HIV infection among females, based on assigned sex at birth, aged ≥ 13 years, by selected characteristics, 2021—United States and 6 dependent areas

FIGURE 24
Rates and disparities of diagnoses of HIV infection among females, based on assigned sex at birth, aged ≥ 13 years, by selected characteristics, 2021—United States



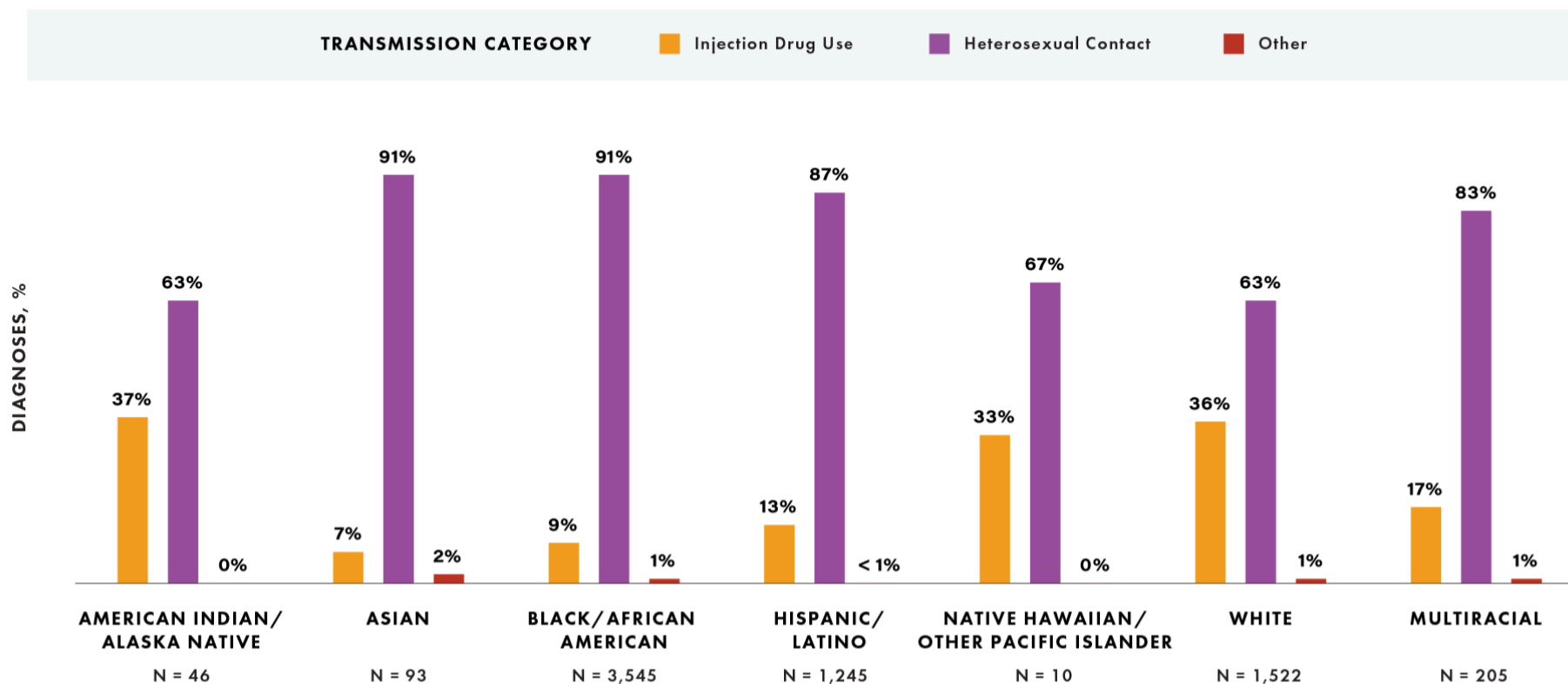
Note. Rates are per 100,000 population. Reference groups are based on the rate of the lowest group with > 5% of cases. Hispanic/Latino persons can be of any race.
Absolute Disparity (Rate Difference) measures the difference between rates in groups with the highest rates and a reference group ($Rate_{highest\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



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Figure 25. Percentages of diagnoses of HIV infection among females, based on assigned sex at birth, aged ≥ 13 years, by transmission category and race/ethnicity, 2021—United States and 6 dependent areas

FIGURE 25
Percentages of diagnoses of HIV infection among females, based on assigned sex at birth, aged ≥13 years, by transmission category and race/ethnicity, 2021—United States and 6 dependent areas



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 infection. 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.

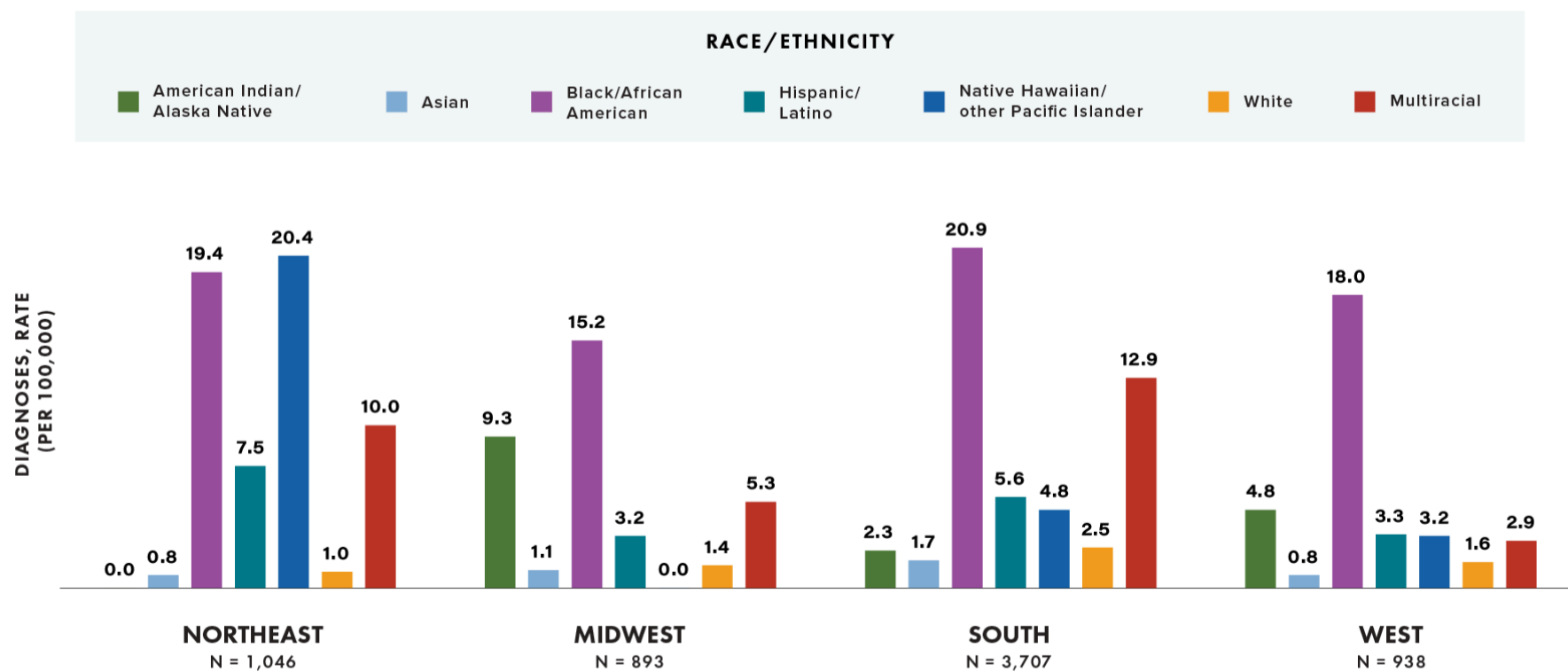


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Figure 26. Rates of diagnoses of HIV infection among females, based on assigned sex at birth, aged ≥13 years, by race/ethnicity and region, 2021—United States

FIGURE 26
Rates of diagnoses of HIV infection among females, based on assigned sex at birth, aged ≥13 years, by race/ethnicity and region, 2021—United States



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

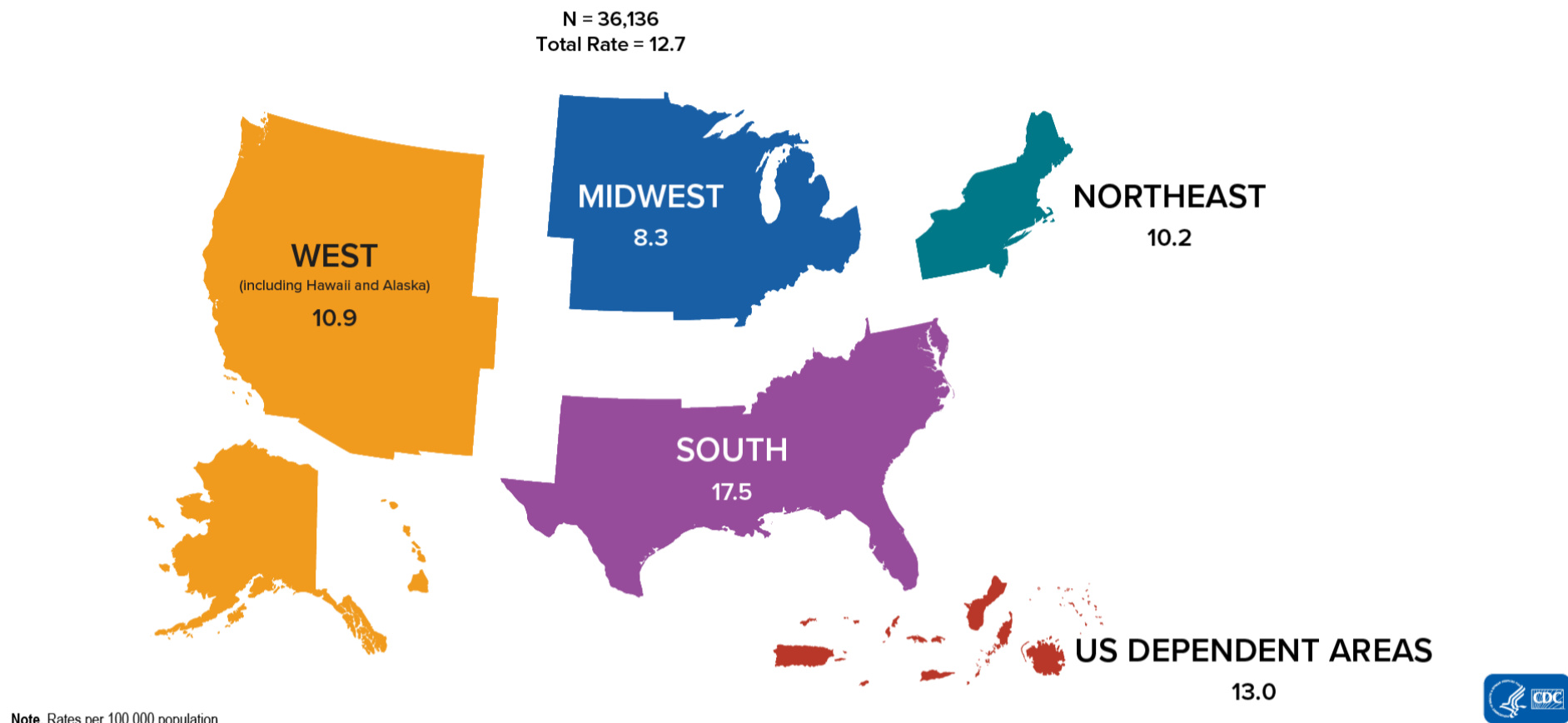


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Figure 27. Rates of diagnoses of HIV infection among persons aged ≥ 13 years by region, 2021— United States and 6 dependent areas

FIGURE 27
Rates of diagnoses of HIV infection among persons aged ≥13 years, by region, 2021—United States and 6 dependent areas

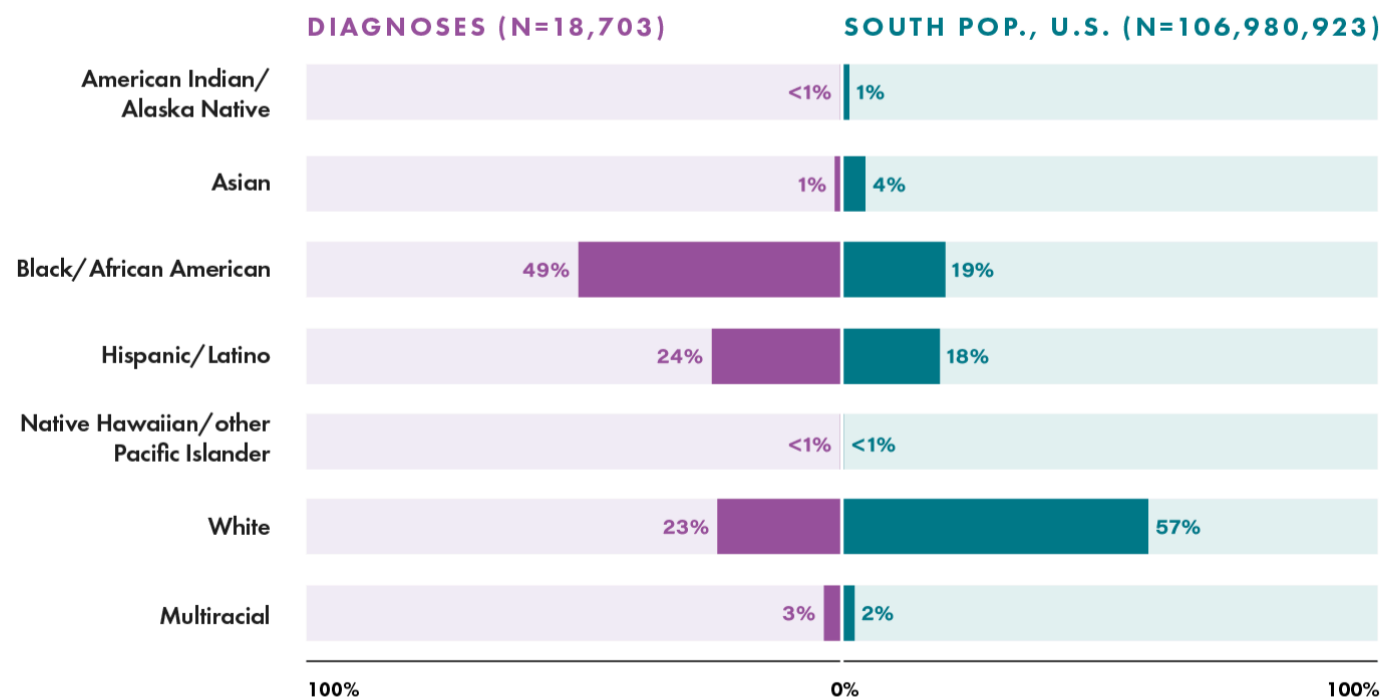


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Figure 28. Percentages of diagnoses of HIV infection and population among persons aged ≥ 13 years, by race/ethnicity, 2021—U.S. Southern Region

FIGURE 28
Percentages of diagnoses of HIV infection and population among persons aged ≥13 years, by race/ethnicity, 2021—U.S. Southern Region

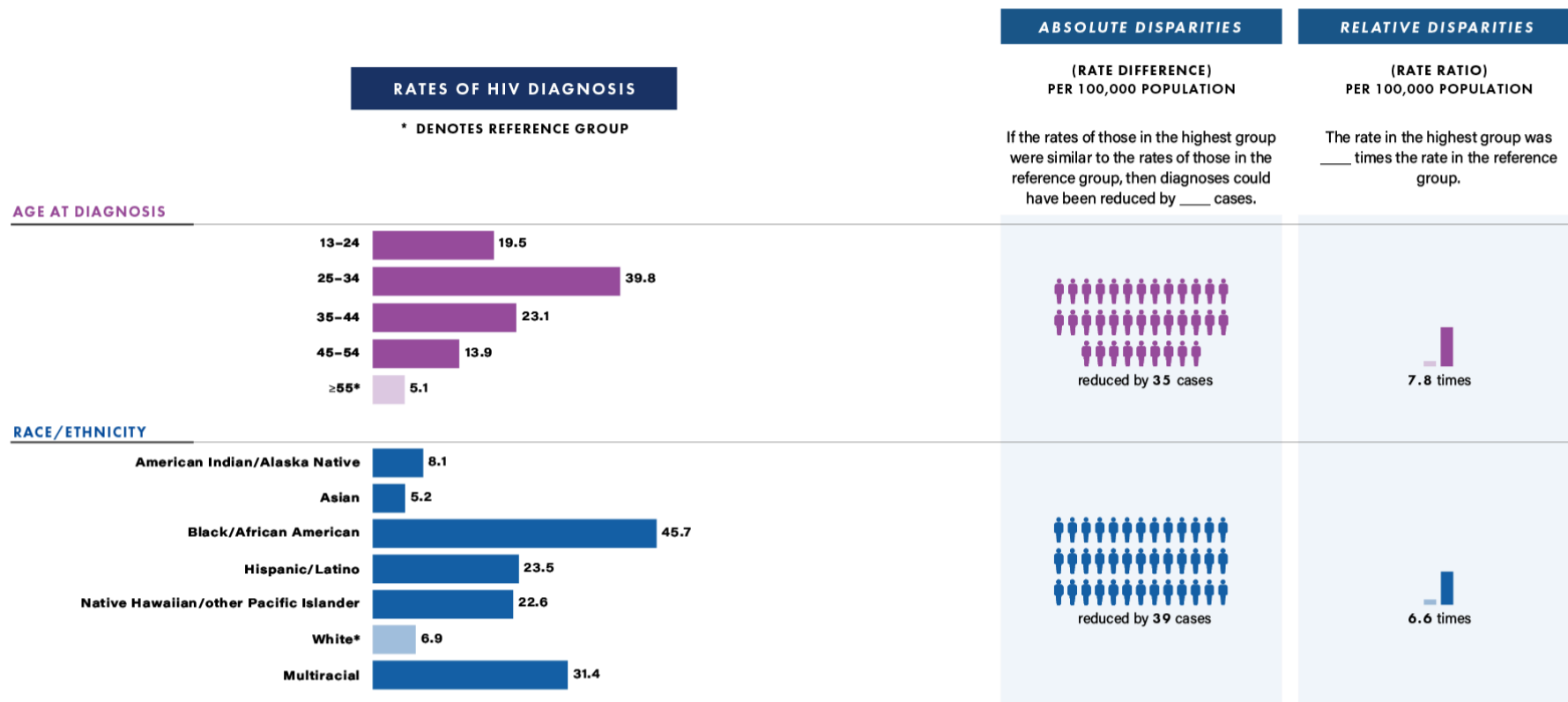


Note: Hispanic/Latino persons can be of any race.

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Figure 29. Rates and disparities of diagnoses of HIV infection among persons aged ≥ 13 years, by selected characteristics, 2021—U.S. Southern Region

FIGURE 29
Rates and disparities of diagnoses of HIV infection among persons aged ≥13 years, by selected characteristics, 2021—U.S. Southern Region



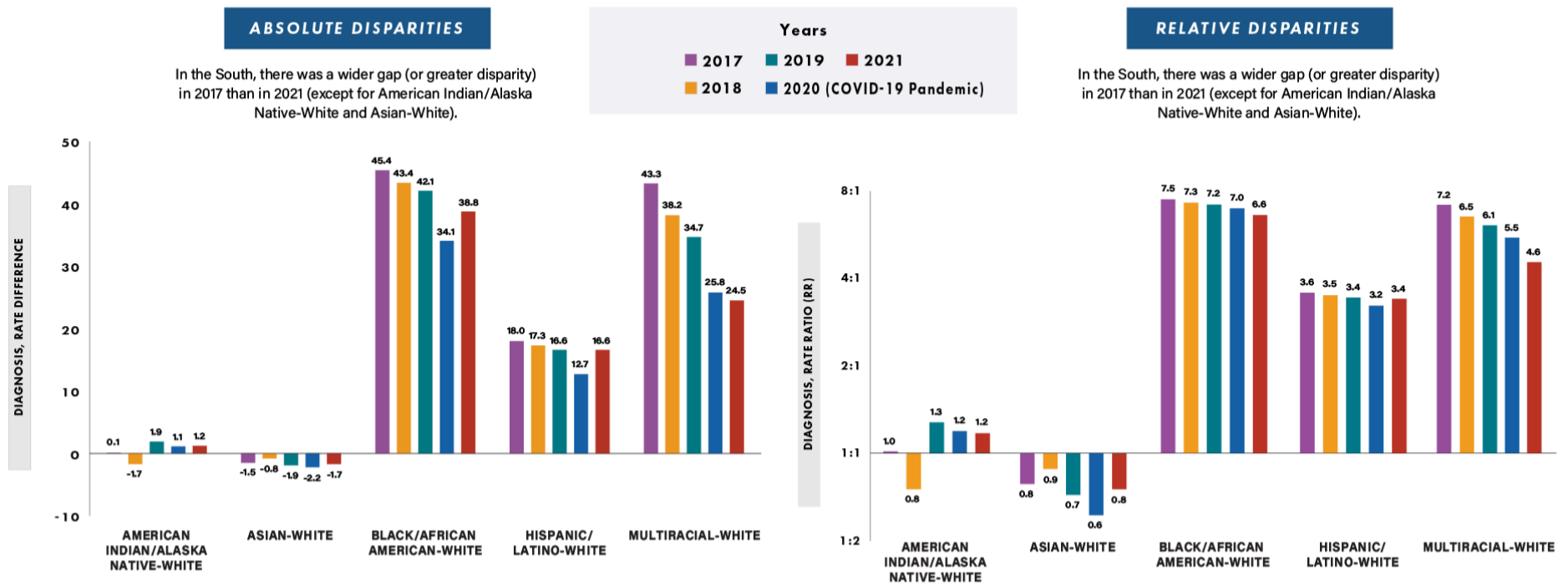
Note. Rates are per 100,000 population. Reference groups are based on the rate of the lowest group with > 5% of cases. Hispanic/Latino persons can be of any race.
Absolute Disparity (Rate Difference) measures the difference between rates in groups with the highest rates and a reference group ($Rate_{highest\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



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Figure 30. Absolute and relative disparities of diagnoses of HIV infection among persons aged ≥ 13 years, by race/ethnicity and year of diagnosis, 2017–2021—U.S. Southern Region

FIGURE 30
Absolute and relative disparities of diagnoses of HIV infection among persons aged ≥13 years, by race/ethnicity and year of diagnosis, 2017–2021—U.S. Southern Region



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 and local jurisdictions. Hispanic/Latino persons can be of any race. Data for Native Hawaiian/other Pacific Islander persons not displayed due to small numbers.

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 divided by rates among White persons ($\text{Rate}_{\text{select race/ethnicity}} / \text{Rate}_{\text{White persons}}$).

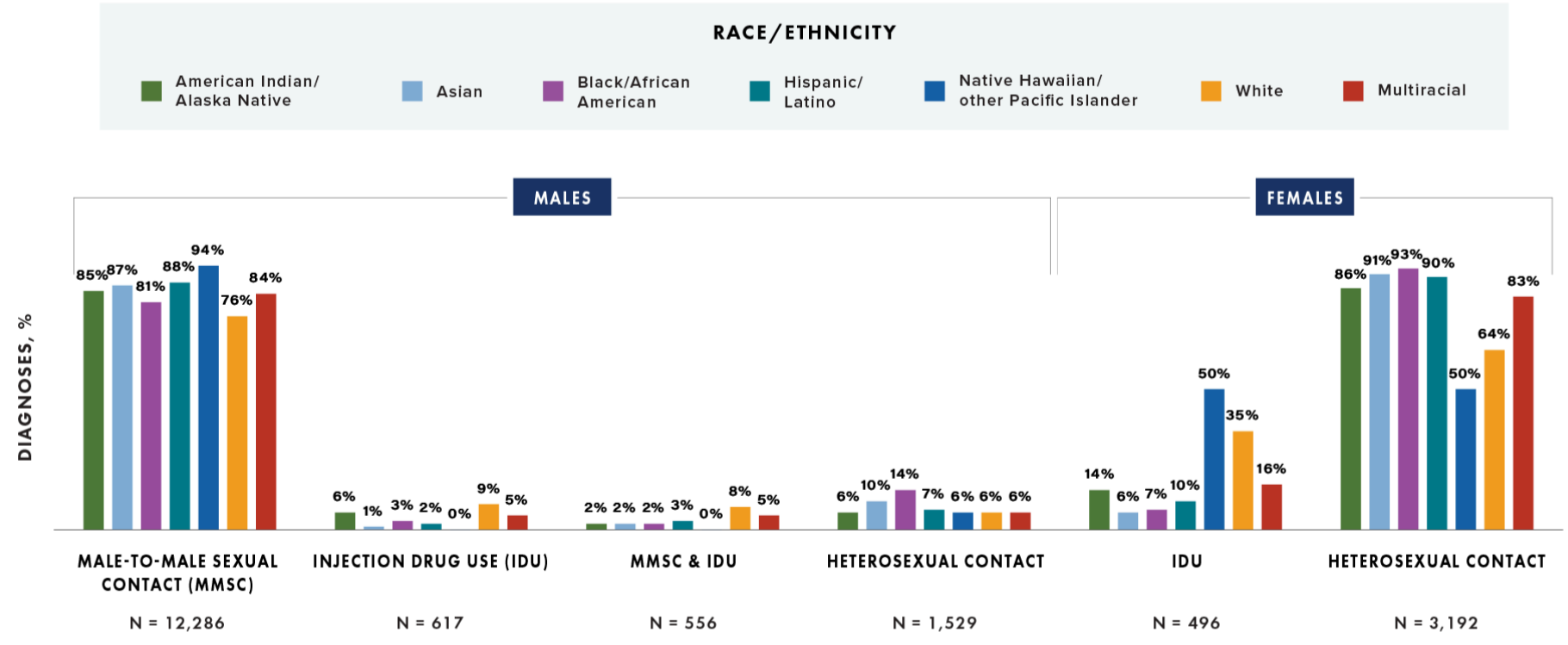


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Figure 31. Percentages of diagnoses of HIV infection among persons aged ≥ 13 years, by assigned sex at birth, transmission category, and race/ethnicity, 2021—U.S. Southern Region

FIGURE 31
Percentages of diagnoses of HIV infection among persons aged ≥13 years, by assigned sex at birth, transmission category, and race/ethnicity, 2021—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 contact includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 infection.



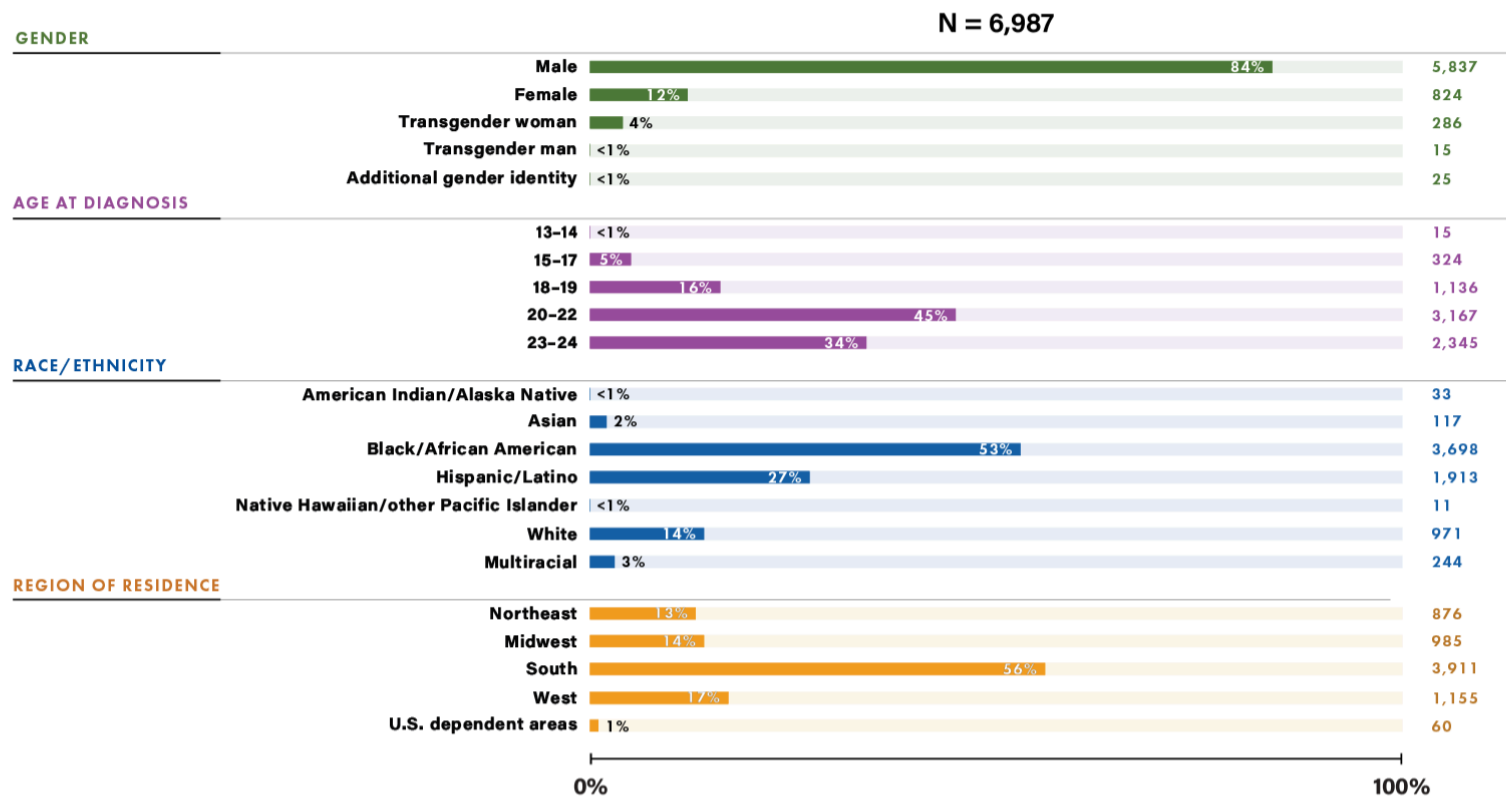
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Figure 32. Percentages of diagnoses of HIV infection among persons aged 13–24 years, by selected characteristics, 2021—United States and 6 dependent areas



FIGURE 32
Percentages of diagnoses of HIV infection among persons aged 13–24 years, by selected characteristics, 2021—United States and 6 dependent areas



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



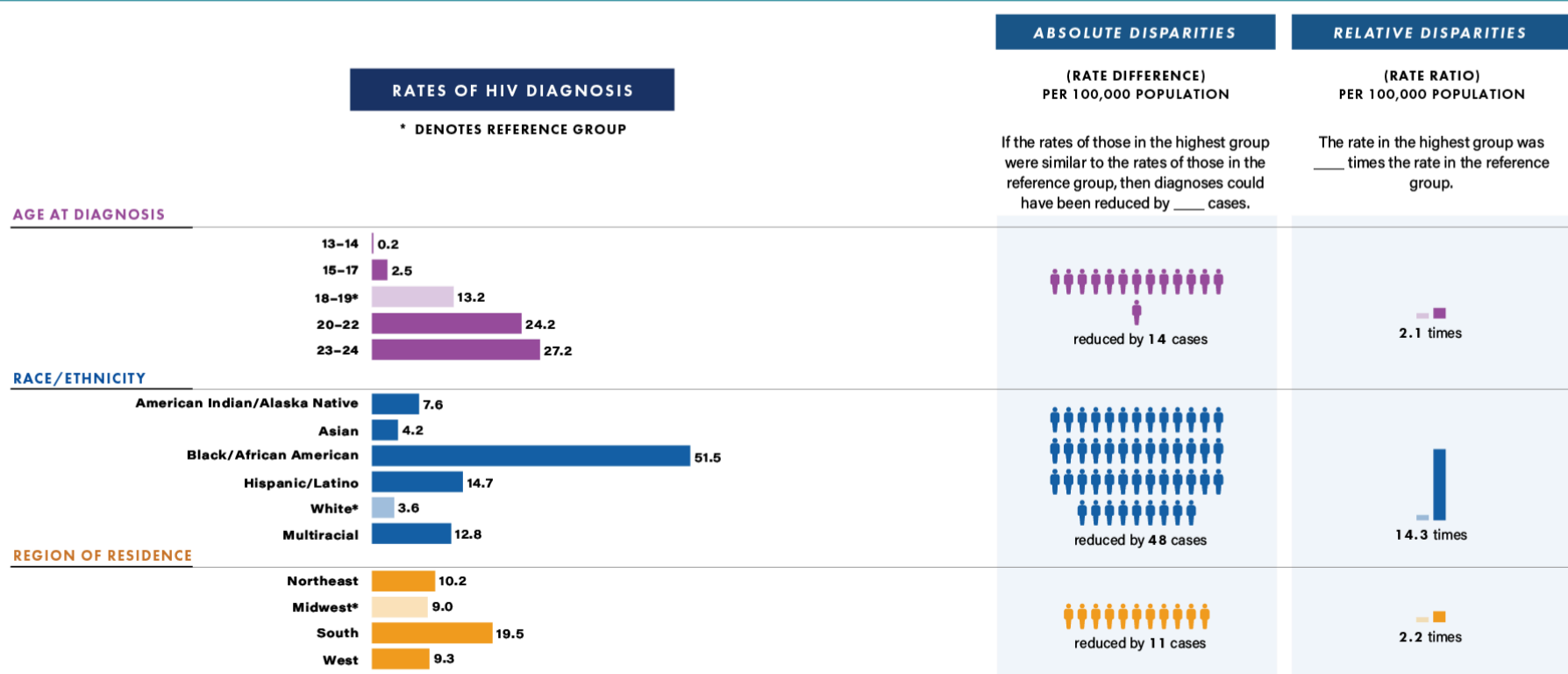
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Figure 33. Rates and disparities of diagnoses of HIV infection among persons aged 13–24 years, by selected characteristics, 2021—United States



FIGURE 33
Rates and disparities of diagnoses of HIV infection among persons aged 13–24 years, by selected characteristics, 2021—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. Data for Native Hawaiian/other Pacific Islander persons not displayed due to small numbers. **Absolute Disparity (Rate Difference)** measures the difference between rates in groups with the highest rates and a reference group ($Rate_{highest\ group} - Rate_{reference\ group}$). **Relative Disparity (Rate Ratio)** measures the rates in groups with the highest rates divided by a reference group ($Rate_{highest\ group} / Rate_{reference\ group}$).



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Figure 34. Percentages of diagnoses of HIV infection among persons aged 13–24 years, by assigned sex at birth and transmission category, 2021—United States and 6 dependent areas

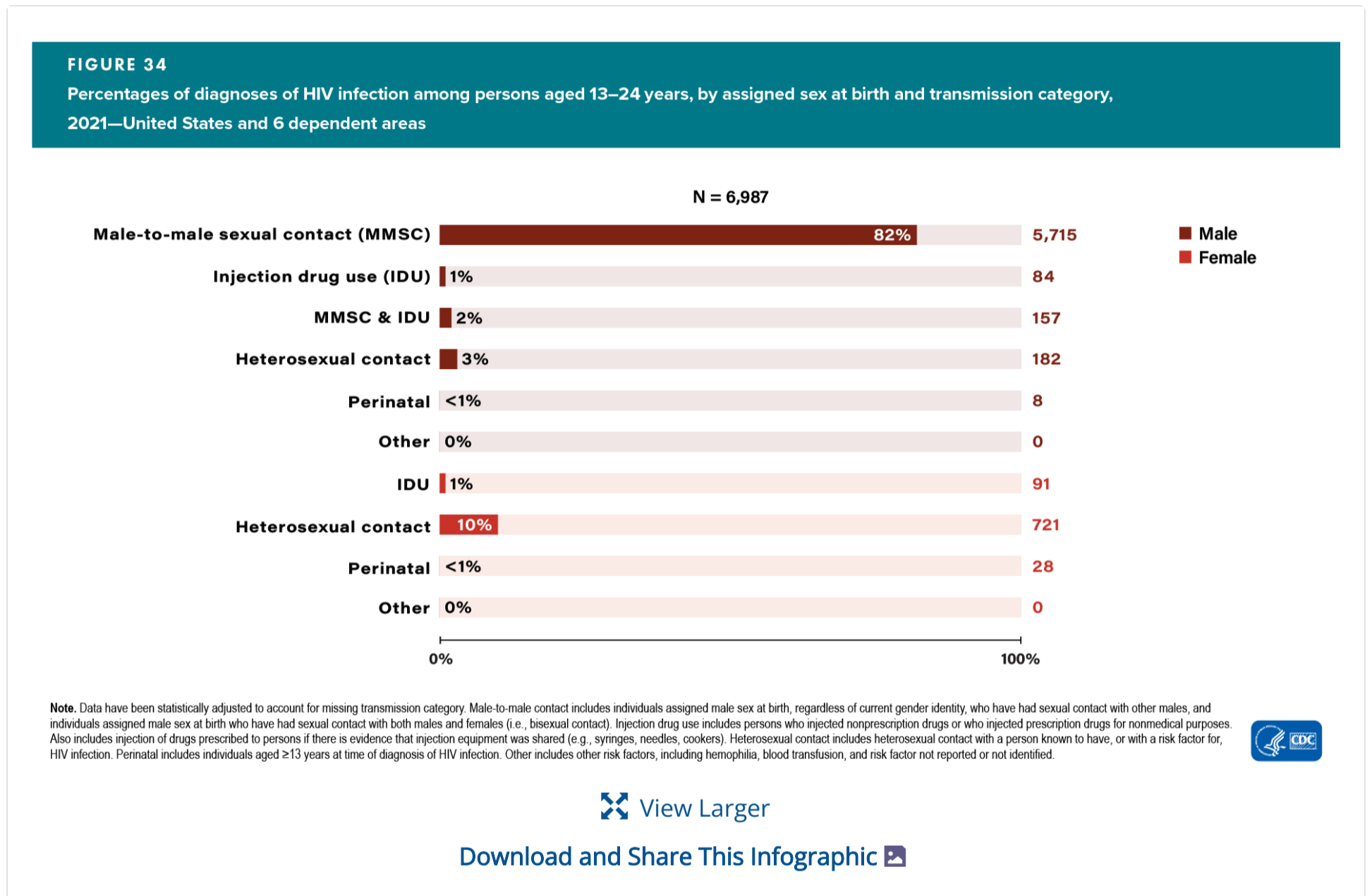
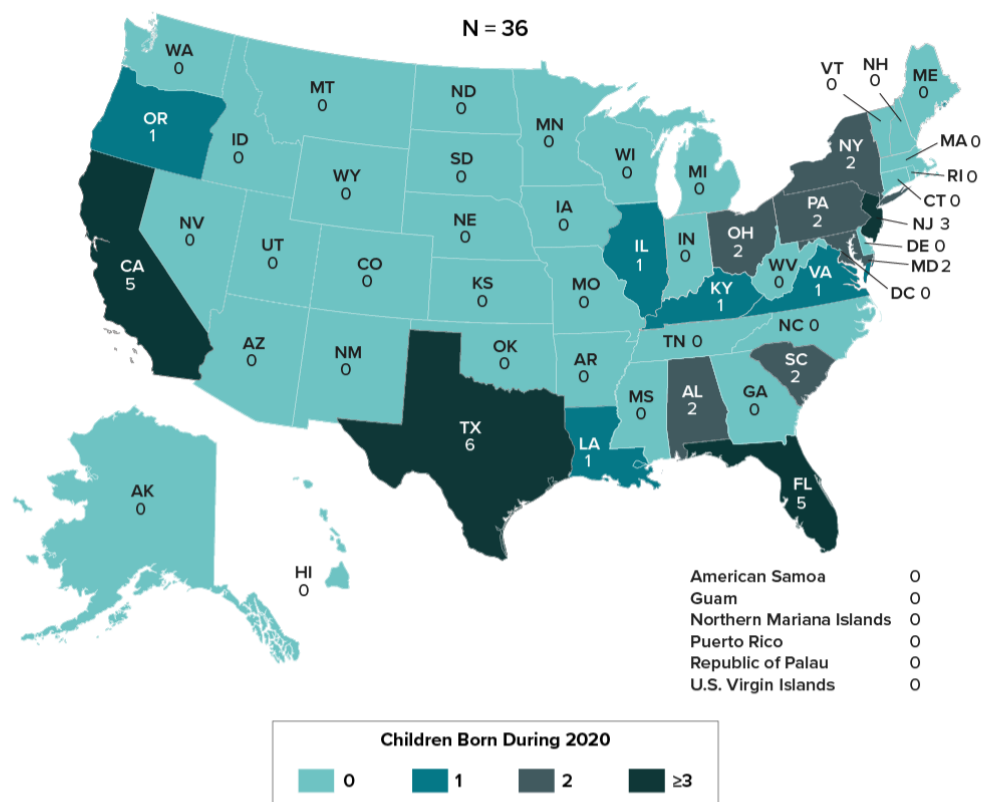


Figure 35. Diagnoses of perinatally acquired HIV infection among children born during 2020 (COVID-19 pandemic)—United States and 6 dependent areas



FIGURE 35
Diagnoses of perinatally acquired HIV infection among children born during 2020 (COVID-19 pandemic)—United States and 6 dependent areas



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.

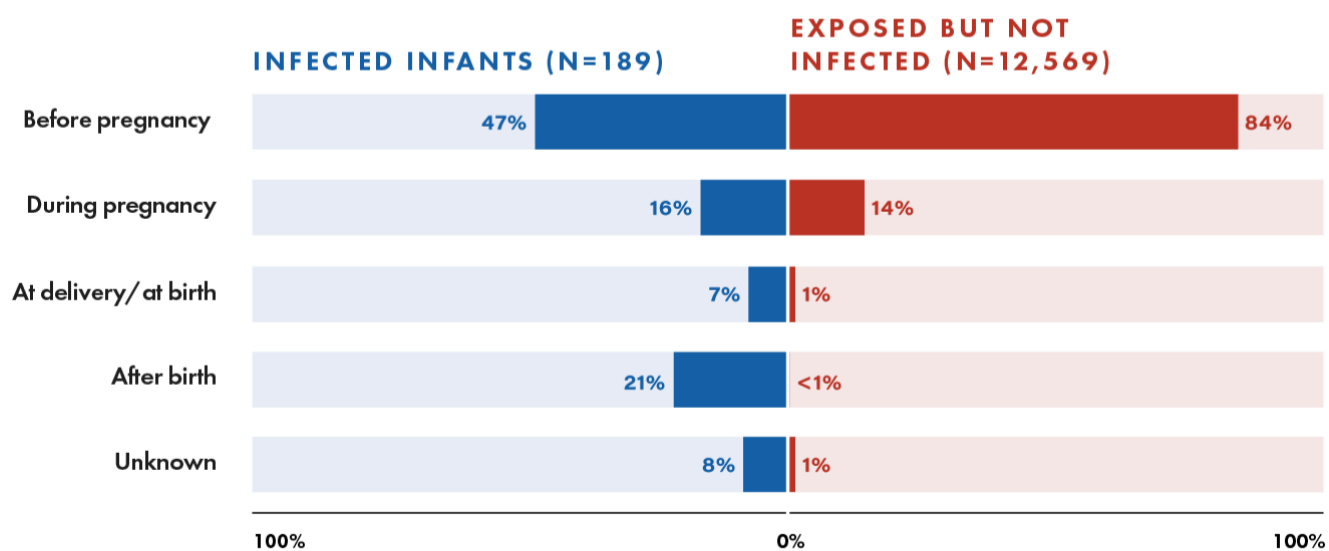


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Figure 36. Time of maternal HIV testing among children with diagnosed perinatally acquired HIV infection and children exposed to HIV, birth years 2017–2020 (COVID-19 pandemic)—United States and Puerto Rico

FIGURE 36
Time of maternal HIV testing among children with diagnosed perinatally acquired HIV infection and children exposed to HIV, birth years 2017–2020 (COVID-19 pandemic)—United States and Puerto Rico



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.

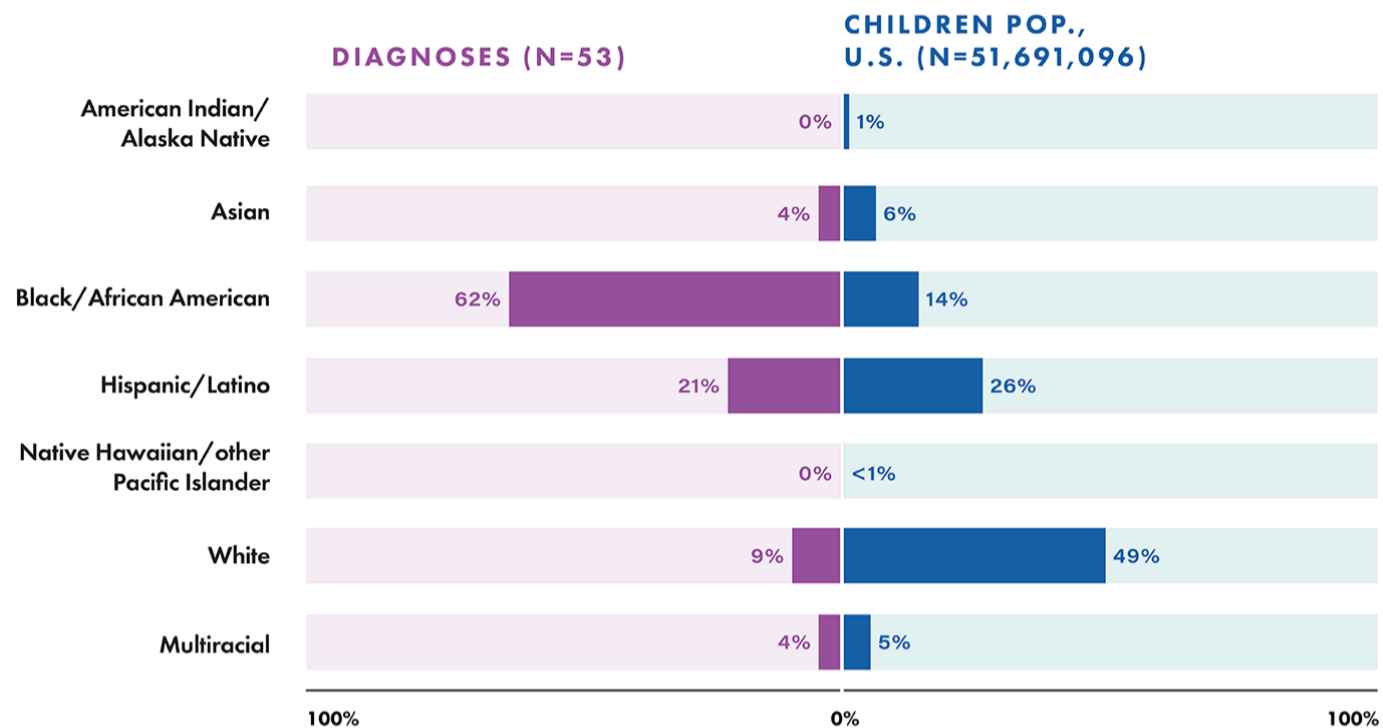


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Figure 37. Percentages of diagnoses of HIV infection and population among children aged < 13 years, by race/ethnicity, 2021—United States and 6 dependent areas

FIGURE 37
Percentages of diagnoses of HIV infection and population among children aged <13 years, by race/ethnicity, 2021—United States



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

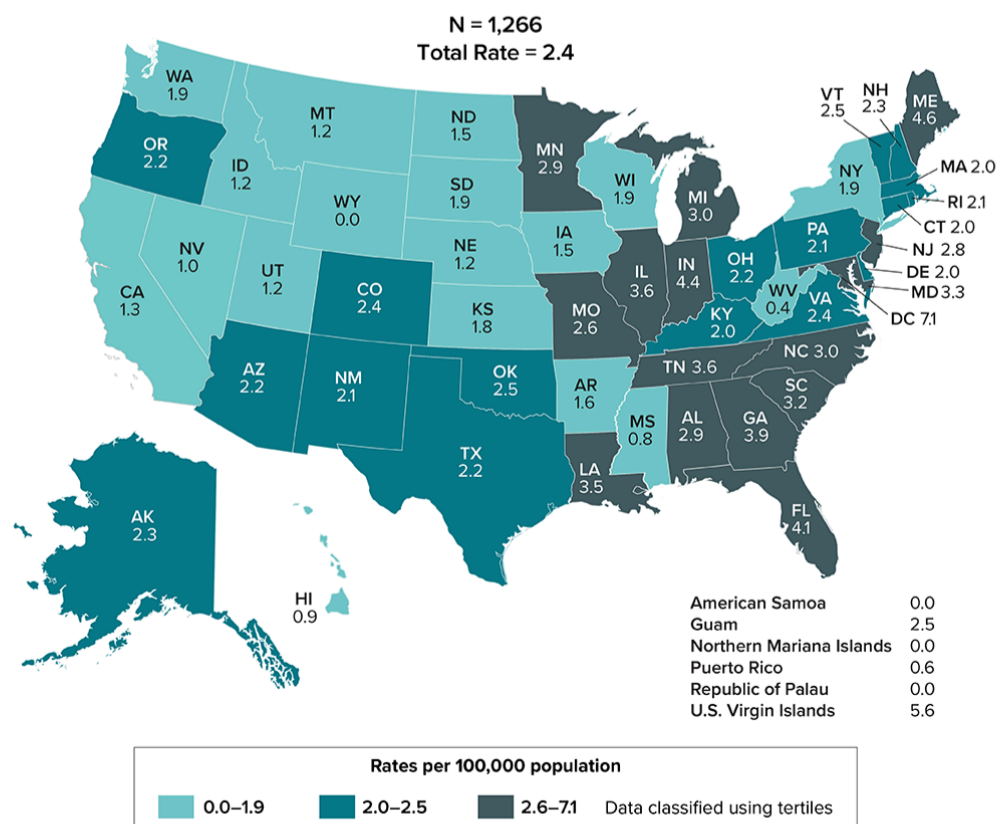


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Figure 38. Rates of children aged < 13 years living with diagnosed HIV infection, year-end 2021—United States and 6 dependent areas

FIGURE 38
Rates of children aged <13 living with diagnosed HIV infection, year-end 2021—United States and 6 dependent areas



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Data are based on address of residence as of December 2021 (i.e., most recent known address).



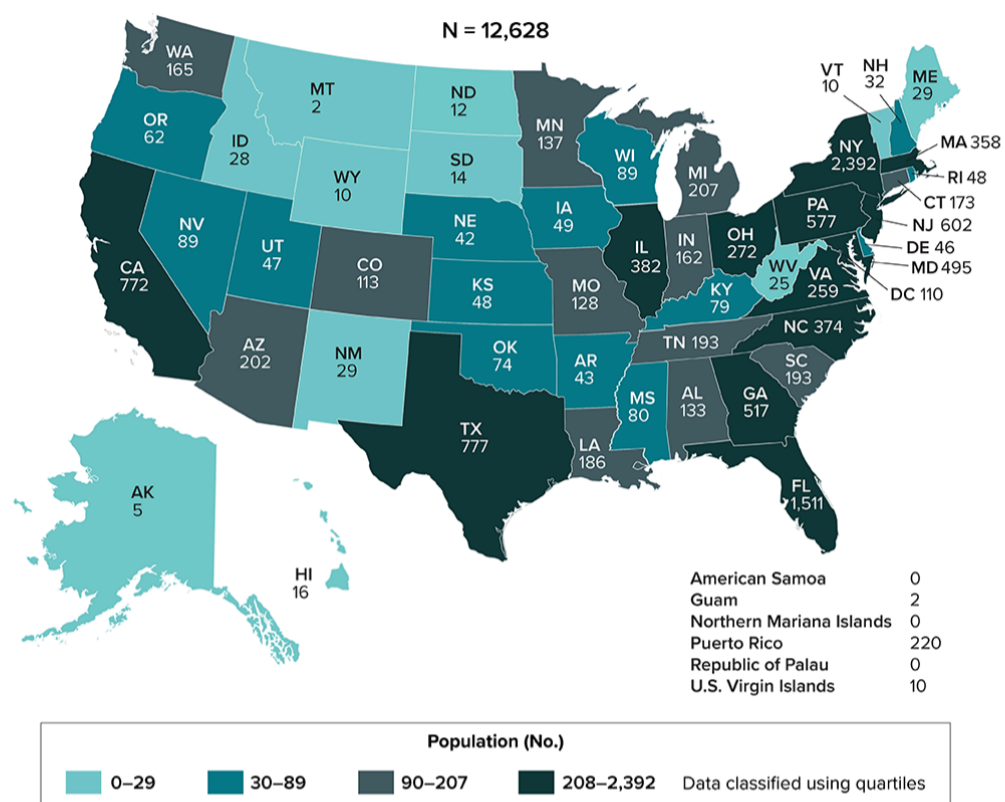
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Figure 39. Persons living with diagnosed perinatally acquired HIV infection, year-end 2021—United States and 6 dependent areas



FIGURE 39
Persons living with diagnosed perinatally acquired HIV infection, year-end 2021—United States and 6 dependent areas



Note. Data for the year 2021 are preliminary and based on deaths reported to CDC as of December 2022. Data are based on address of residence as of December 2021 (i.e., most recent known address).



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Diagnoses of HIV Infection in the United States and Dependent Areas, 2021: Tables

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Table 1a. Diagnoses of HIV infection, by year of diagnosis and selected characteristics, 2017–2021 ▼
—United States

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Gender										
Male	30,444	—	29,602	—	28,809	—	24,174	—	28,304	—
Female	7,288	—	7,055	—	6,900	—	5,421	—	6,554	—
Transgender woman/girl ^b	651	—	661	—	692	—	676	—	811	—
Transgender man/boy ^b	32	—	48	—	45	—	41	—	56	—
Additional gender identity ^c	18	—	19	—	32	—	23	—	44	—
Age at diagnosis (yr)										
< 13	105	0.2	86	0.2	57	0.1	60	0.1	53	0.1
13–14	25	0.3	20	0.2	21	0.3	12	0.1	15	0.2
15–19	1,791	8.5	1,722	8.2	1,652	7.8	1,264	5.9	1,452	6.7
20–24	6,481	29.4	6,123	28.1	5,987	27.7	4,849	22.6	5,460	25.4
25–29	7,720	33.0	7,682	32.6	7,382	31.4	6,080	26.7	6,713	30.0
30–34	5,680	25.9	5,664	25.6	5,645	25.1	5,199	22.7	6,368	27.6
35–39	4,254	20.1	4,186	19.4	4,102	18.9	3,400	15.3	4,403	19.7
40–44	2,981	15.2	2,964	15.1	2,946	14.8	2,474	12.0	3,140	14.9
45–49	2,926	14.0	2,759	13.3	2,571	12.6	2,044	10.1	2,326	11.8
50–54	2,637	12.4	2,435	11.7	2,303	11.3	1,828	8.8	2,116	10.1

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
55–59	1,869	8.5	1,824	8.3	1,837	8.4	1,558	7.1	1,786	8.3
60–64	1,082	5.4	1,042	5.1	1,106	5.4	879	4.2	1,095	5.2
≥ 65	882	1.7	878	1.7	869	1.6	688	1.3	842	1.5
Race/ethnicity										
American Indian/Alaska Native	193	8.0	170	7.1	194	8.0	190	7.8	223	9.1
Asian	919	5.0	850	4.5	728	3.8	612	3.1	739	3.8
Black/African American	16,163	39.8	15,642	38.2	15,327	37.2	12,678	30.4	14,555	34.8
Hispanic/Latino ^d	10,010	17.1	9,931	16.7	9,858	16.3	8,046	13.0	10,070	16.1
Native Hawaiian/other Pacific Islander	47	8.1	57	9.6	59	9.8	64	10.3	76	12.1
White	9,558	4.8	9,338	4.7	8,992	4.6	7,744	3.9	9,063	4.6
Multiracial	1,543	22.0	1,397	19.4	1,320	17.9	1,001	13.1	1,043	13.4
Transmission category^e										
Male sex at birth (≥ 13 yrs at diagnosis)^f										
Male-to-male sexual contact ^g	25,345	—	24,464	—	23,870	—	20,460	—	23,855	—
Injection drug use ^h	1,291	—	1,376	—	1,362	—	1,170	—	1,415	—
Male-to-male sexual contact ^g and injection drug use ^h	1,517	—	1,531	—	1,581	—	1,185	—	1,373	—
Heterosexual contact ⁱ	2,882	—	2,839	—	2,643	—	2,006	—	2,460	—
Perinatal ^j	14	—	16	—	22	—	9	—	11	—
Other ^k	18	—	17	—	20	—	16	—	18	—
Subtotal	31,067	23.3	30,242	22.6	29,498	21.9	24,846	18.1	29,132	21.1
Female sex at birth (≥ 13 yrs at diagnosis)^f										
Injection drug use ^h	1,109	—	1,117	—	1,182	—	895	—	1,075	—
Heterosexual contact ⁱ	6,106	—	5,892	—	5,695	—	4,494	—	5,456	—
Perinatal ^j	40	—	40	—	38	—	34	—	49	—
Other ^k	6	—	7	—	7	—	6	—	5	—
Subtotal	7,261	5.2	7,057	5.0	6,923	4.9	5,429	3.8	6,584	4.6
Child (< 13 yrs at diagnosis)										
Perinatal	89	—	69	—	47	—	51	—	39	—
Other ^k	16	—	17	—	10	—	9	—	14	—
Subtotal	105	0.2	86	0.2	57	0.1	60	0.1	53	0.1
Region of residence^l										
Northeast	5,998	10.7	5,560	9.9	5,323	9.5	4,252	7.4	4,993	8.7
Midwest	5,119	7.5	4,953	7.3	4,774	7.0	4,115	6.0	4,824	7.0
South	19,707	15.9	19,273	15.5	18,982	15.1	15,566	12.3	18,728	14.7
West	7,609	9.8	7,599	9.8	7,399	9.4	6,402	8.1	7,224	9.2
Total	38,433	11.8	37,385	11.4	36,478	11.1	30,335	9.2	35,769	10.8

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

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

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

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

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

^e 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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 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, 2017–2021—United States and 6 dependent areas

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Gender										
Male	30,811	—	29,980	—	29,148	—	24,435	—	28,641	—
Female	7,382	—	7,136	—	6,983	—	5,467	—	6,636	—
Transgender woman/girl ^b	653	—	665	—	694	—	679	—	812	—
Transgender man/boy ^b	32	—	48	—	45	—	41	—	56	—
Additional gender identity ^c	18	—	19	—	32	—	23	—	44	—
Age at diagnosis (yr)										
< 13	105	0.2	86	0.2	57	0.1	60	0.1	53	0.1
13–14	25	0.3	20	0.2	21	0.2	12	0.1	15	0.2
15–19	1,804	8.4	1,740	8.2	1,658	7.8	1,272	5.8	1,460	6.7
20–24	6,547	29.3	6,188	28.0	6,045	27.6	4,893	22.5	5,512	25.3
25–29	7,782	33.0	7,759	32.6	7,442	31.3	6,124	26.6	6,793	30.0
30–34	5,741	25.9	5,723	25.6	5,703	25.2	5,237	22.7	6,411	27.5
35–39	4,306	20.1	4,222	19.4	4,142	18.9	3,438	15.3	4,448	19.8
40–44	3,017	15.2	3,005	15.1	2,984	14.8	2,502	12.0	3,186	14.9
45–49	2,968	14.0	2,805	13.4	2,609	12.7	2,067	10.1	2,359	11.8
50–54	2,687	12.5	2,484	11.8	2,334	11.3	1,859	8.8	2,160	10.2
55–59	1,906	8.6	1,853	8.4	1,875	8.5	1,585	7.1	1,807	8.3
60–64	1,105	5.5	1,062	5.2	1,133	5.4	896	4.2	1,116	5.2
≥ 65	903	1.8	901	1.7	899	1.6	700	1.3	869	1.5
Race/ethnicity										
American Indian/Alaska Native	193	—	170	—	194	—	190	—	223	—
Asian	922	—	854	—	735	—	612	—	740	—
Black/African American	16,168	—	15,654	—	15,335	—	12,685	—	14,561	—
Hispanic/Latino ^d	10,456	—	10,369	—	10,257	—	8,347	—	10,478	—
Native Hawaiian/other Pacific Islander	50	—	59	—	63	—	65	—	76	—
White	9,562	—	9,344	—	8,998	—	7,745	—	9,068	—
Multiracial	1,545	—	1,398	—	1,320	—	1,001	—	1,043	—
Transmission category^e										
Male sex at birth (≥ 13 yrs at diagnosis)^f										
Male-to-male sexual contact ^g	25,587	—	24,742	—	24,110	—	20,660	—	24,107	—
Injection drug use ^h	1,325	—	1,401	—	1,385	—	1,189	—	1,436	—

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Male-to-male sexual contact ^g and injection drug use ^h	1,529	—	1,542	—	1,594	—	1,190	—	1,375	—
Heterosexual contact ⁱ	2,962	—	2,906	—	2,709	—	2,046	—	2,523	—
Perinatal ^j	14	—	16	—	22	—	9	—	11	—
Other ^k	18	—	17	—	20	—	16	—	18	—
Subtotal	31,436	23.3	30,624	22.6	29,839	21.9	25,110	18.1	29,470	21.1
Female sex at birth (≥ 13 yrs at diagnosis)^f										
Injection drug use ^h	1,118	—	1,120	—	1,188	—	898	—	1,077	—
Heterosexual contact ⁱ	6,190	—	5,970	—	5,773	—	4,536	—	5,536	—
Perinatal ^j	40	—	40	—	38	—	34	—	49	—
Other ^k	6	—	7	—	7	—	6	—	5	—
Subtotal	7,355	5.2	7,138	5.0	7,006	4.9	5,475	3.8	6,666	4.6
Child (< 13 yrs at diagnosis)										
Perinatal	89	—	69	—	47	—	51	—	39	—
Other ^k	16	—	17	—	10	—	9	—	14	—
Subtotal	105	0.2	86	0.2	57	0.1	60	0.1	53	0.1
Region of residence^l										
Northeast	5,998	10.7	5,560	9.9	5,323	9.5	4,252	7.4	4,993	8.7
Midwest	5,119	7.5	4,953	7.3	4,774	7.0	4,115	6.0	4,824	7.0
South	19,707	15.9	19,273	15.5	18,982	15.1	15,566	12.3	18,728	14.7
West	7,609	9.8	7,599	9.8	7,399	9.4	6,402	8.1	7,224	9.2
U.S. dependent areas	463	12.4	463	12.9	424	11.8	310	8.4	420	11.5
Total	38,896	11.8	37,848	11.5	36,902	11.1	30,645	9.1	36,189	10.8

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 Rates are per 100,000 population. Rates are not calculated by gender or transmission category because of the lack of denominator data. Rates by race/ethnicity are not provided because U.S. census information is limited for U.S. dependent areas.

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

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

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

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

^e 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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 Data are based on residence at time of diagnosis of HIV infection.

Table 2a. Diagnoses of HIV infection, by race/ethnicity and selected characteristics, 2021—United States ✓

	American Indian/Alaska Native		Asian		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
Gender																
Male	167	—	627	—	10,611	—	8,626	—	60	—	7,412	—	801	—	28,304	—
Female	46	—	93	—	3,540	—	1,159	—	10	—	1,505	—	201	—	6,554	—
Transgender woman/girl ^c	10	—	17	—	374	—	257	—	6	—	112	—	35	—	811	—
Transgender man/boy ^c	0	—	2	—	18	—	14	—	0	—	19	—	3	—	56	—
Additional gender identity ^d	0	—	0	—	12	—	14	—	0	—	15	—	3	—	44	—
Age at diagnosis (yr)																
< 13	0	0.0	2	0.1	33	0.5	11	0.1	0	0.0	5	0.0	2	0.1	53	0.1
13–14	0	0.0	0	0.0	8	0.7	6	0.3	0	0.0	1	0.0	0	0.0	15	0.2
15–19	12	6.7	23	2.0	825	28.2	368	6.9	6	13.9	156	1.4	62	7.6	1,452	6.7
20–24	21	11.6	94	7.7	2,864	94.8	1,480	29.8	5	11.7	814	7.1	182	25.6	5,460	25.4
25–29	49	25.9	142	9.7	2,776	84.8	2,082	42.8	15	31.7	1,447	12.1	202	32.6	6,713	30.0
30–34	42	22.4	132	7.8	2,443	74.5	1,931	40.9	13	24.2	1,617	12.8	190	38.3	6,368	27.6
35–39	33	20.1	96	5.7	1,515	52.9	1,368	29.7	12	23.1	1,263	10.1	116	29.0	4,403	19.7
40–44	16	10.6	75	4.9	1,052	38.8	929	21.2	9	19.9	976	8.2	83	24.2	3,140	14.9
45–49	15	10.8	48	3.3	823	33.0	658	16.6	3	7.8	721	6.3	58	20.6	2,326	11.8
50–54	19	13.2	59	4.5	701	27.2	523	14.7	7	19.0	746	5.7	61	23.7	2,116	10.1
55–59	6	3.9	31	2.7	707	27.0	354	11.5	2	5.6	640	4.5	46	19.5	1,786	8.3
60–64	6	4.1	19	1.8	456	18.6	206	8.4	2	6.3	389	2.6	17	7.8	1,095	5.2
≥ 65	4	1.2	18	0.7	352	6.7	154	3.0	2	3.0	288	0.7	24	5.0	842	1.5
Transmission category^e																
Male sex at birth (≥ 13 yrs at diagnosis)^f																
Male-to-male sexual contact ^g	141	—	573	—	8,879	—	7,757	—	59	—	5,758	—	688	—	23,855	—
Injection drug use ^h	10	—	14	—	371	—	299	—	1	—	679	—	41	—	1,415	—
Male-to-male sexual contact ^g and injection drug use ^h	16	—	17	—	244	—	325	—	4	—	714	—	54	—	1,373	—
Heterosexual contact ⁱ	11	—	40	—	1,470	—	506	—	3	—	379	—	52	—	2,460	—
Perinatal ^j	0	—	0	—	8	—	3	—	0	—	0	—	0	—	11	—
Other ^k	0	—	1	—	6	—	4	—	0	—	6	—	1	—	18	—
Subtotal	177	17.7	644	8.1	10,978	66.5	8,895	35.7	66	25.5	7,536	8.9	836	32.7	29,132	21.1
Female sex at birth (≥ 13 yrs at diagnosis)^f																
Injection drug use ^h	17	—	6	—	300	—	161	—	3	—	553	—	35	—	1,075	—
Heterosexual contact ⁱ	29	—	85	—	3,207	—	997	—	7	—	962	—	169	—	5,456	—
Perinatal ^j	0	—	2	—	35	—	6	—	0	—	5	—	1	—	49	—
Other ^k	0	—	1	—	2	—	0	—	0	—	2	—	0	—	5	—
Subtotal	46	4.4	93	1.1	3,544	19.5	1,164	4.8	10	3.9	1,522	1.8	205	7.6	6,584	4.6
Child (< 13 yrs at diagnosis)																

	American Indian/Alaska Native		Asian		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
Perinatal	0	—	1	—	26	—	8	—	0	—	3	—	1	—	39	—
Other ^k	0	—	1	—	7	—	3	—	0	—	2	—	1	—	14	—
Subtotal	0	0.0	2	0.1	33	0.5	11	0.1	0	0.0	5	0.0	2	0.1	53	0.1
Region of residence^l																
Northeast	5	3.8	141	3.5	1,952	30.0	1,625	18.5	4	17.2	1,094	3.0	172	16.2	4,993	8.7
Midwest	47	11.2	80	3.3	2,102	28.8	725	12.4	6	14.6	1,700	3.3	164	11.0	4,824	7.0
South	56	6.8	210	4.4	9,259	37.9	4,422	18.5	19	18.3	4,220	6.0	542	20.7	18,728	14.7
West	115	10.7	308	3.7	1,242	34.1	3,298	13.7	47	10.3	2,049	5.3	165	6.3	7,224	9.2
Total	223	9.1	739	3.8	14,555	34.8	10,070	16.1	76	12.1	9,063	4.6	1,043	13.4	35,769	10.8

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 gender or transmission category because of the lack of denominator data.

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

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

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

^e 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 assigned sex 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 presented include transgender and additional gender identity persons.

^g Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 Data are based on residence at time of diagnosis of HIV infection.

Table 2b. Diagnoses of HIV infection, by race/ethnicity and selected characteristics, 2021—United States and 6 dependent areas

	American Indian/Alaska Native	Asian	Black/African American	Hispanic/Latino ^a	Native Hawaiian/other Pacific Islander	White	Multiracial	Total
	No.	No.	No.	No.	No.	No.	No.	No.
Gender								
Male	167	628	10,616	8,952	60	7,417	801	28,641
Female	46	93	3,541	1,240	10	1,505	201	6,636
Transgender woman/girl ^b	10	17	374	258	6	112	35	812
Transgender man/boy ^b	0	2	18	14	0	19	3	56
Additional gender identity ^c	0	0	12	14	0	15	3	44
Age at diagnosis (yr)								
< 13	0	2	33	11	0	5	2	53
13–14	0	0	8	6	0	1	0	15
15–19	12	23	825	376	6	156	62	1,460
20–24	21	94	2,865	1,531	5	814	182	5,512
25–29	49	143	2,776	2,160	15	1,448	202	6,793

	American Indian/Alaska Native	Asian	Black/African American	Hispanic/Latino ^a	Native Hawaiian/other Pacific Islander	White	Multiracial	Total
	No.	No.	No.	No.	No.	No.	No.	No.
30-34	42	132	2,444	1,973	13	1,617	190	6,411
35-39	33	96	1,515	1,412	12	1,264	116	4,448
40-44	16	75	1,052	975	9	976	83	3,186
45-49	15	48	823	690	3	722	58	2,359
50-54	19	59	703	565	7	746	61	2,160
55-59	6	31	708	373	2	641	46	1,807
60-64	6	19	457	225	2	390	17	1,116
≥ 65	4	18	352	181	2	288	24	869
Transmission category^d								
Male sex at birth (≥ 13 yrs at diagnosis)^e								
Male-to-male sexual contact ^f	141	574	8,883	8,000	59	5,762	688	24,107
Injection drug use ^g	10	14	373	318	1	679	41	1,436
Male-to-male sexual contact ^f and injection drug use ^g	16	17	244	327	4	714	54	1,375
Heterosexual contact ^h	11	40	1,470	569	3	379	52	2,523
Perinatal ⁱ	0	0	8	3	0	0	0	11
Other ^j	0	1	6	4	0	6	1	18
Subtotal	177	645	10,983	9,222	66	7,541	836	29,470
Female sex at birth (≥ 13 yrs at diagnosis)^e								
Injection drug use ^g	17	6	301	162	3	553	35	1,077
Heterosexual contact ^h	29	85	3,208	1,077	7	962	169	5,536
Perinatal ⁱ	0	2	35	6	0	5	1	49
Other ^j	0	1	2	0	0	2	0	5
Subtotal	46	93	3,545	1,245	10	1,522	205	6,666
Child (< 13 yrs at diagnosis)								
Perinatal	0	1	26	8	0	3	1	39
Other ^j	0	1	7	3	0	2	1	14
Subtotal	0	2	33	11	0	5	2	53
Region of residence^k								
Northeast	5	141	1,952	1,625	4	1,094	172	4,993
Midwest	47	80	2,102	725	6	1,700	164	4,824
South	56	210	9,259	4,422	19	4,220	542	18,728
West	115	308	1,242	3,298	47	2,049	165	7,224
U.S. dependent areas	0	1	6	408	0	5	0	420
Total	223	740	14,561	10,478	76	9,068	1,043	36,189

Note: Numbers less than 12 should be interpreted with caution.

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

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

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

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

^d 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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 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, assigned sex at birth, and selected characteristics, 2017–2021—United States

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Male sex at birth^b										
Age at diagnosis (yr)										
13–14	13	0.3	11	0.3	12	0.3	6	0.1	8	0.2
15–19	1,541	14.3	1,480	13.8	1,449	13.5	1,107	10.1	1,250	11.3
20–24	5,711	50.5	5,399	48.3	5,262	47.5	4,288	39.2	4,840	44.1
25–29	6,741	56.7	6,738	56.1	6,443	53.6	5,310	45.9	5,867	51.6
30–34	4,667	42.1	4,713	42.1	4,690	41.2	4,391	37.9	5,411	46.3
35–39	3,338	31.5	3,265	30.3	3,202	29.4	2,693	24.0	3,475	30.9
40–44	2,241	23.1	2,175	22.2	2,189	22.1	1,911	18.4	2,368	22.4
45–49	2,165	20.9	2,040	19.9	1,885	18.7	1,493	14.7	1,676	17.0
50–54	1,976	18.8	1,780	17.3	1,680	16.7	1,379	13.3	1,543	14.8
55–59	1,311	12.3	1,286	12.1	1,322	12.4	1,139	10.5	1,283	12.1
60–64	751	7.9	722	7.4	758	7.7	614	6.0	809	7.8
≥ 65	612	2.7	633	2.7	606	2.5	515	2.1	602	2.4
Race/ethnicity										
American Indian/Alaska Native	150	15.7	140	14.5	150	15.4	149	15.0	177	17.7
Asian	797	10.9	742	9.9	624	8.2	527	6.7	644	8.1
Black/African American	11,861	75.4	11,621	73.1	11,476	71.5	9,744	59.5	10,978	66.5
Hispanic/Latino ^c	8,814	38.9	8,729	37.7	8,673	36.7	7,115	29.1	8,895	35.7
Native Hawaiian/other Pacific Islander	39	16.5	53	21.9	52	21.1	49	19.3	66	25.5
White	8,128	9.7	7,865	9.4	7,473	8.9	6,445	7.6	7,536	8.9
Multiracial	1,278	58.0	1,092	47.9	1,050	44.5	817	33.1	836	32.7
Region of residence^d										
Northeast	4,662	20.2	4,332	18.7	4,161	18.0	3,362	14.0	3,942	16.5
Midwest	4,155	14.9	4,016	14.3	3,798	13.5	3,366	11.8	3,922	13.7
South	15,580	31.1	15,302	30.2	15,133	29.6	12,552	24.2	14,996	28.7
West	6,670	20.9	6,592	20.4	6,406	19.7	5,566	16.9	6,272	18.9
Subtotal	31,067	23.3	30,242	22.6	29,498	21.9	24,846	18.1	29,132	21.1
Female sex at birth^b										
Age at diagnosis (yr)										
13–14	12	0.3	9	0.2	9	0.2	6	0.1	7	0.2
15–19	250	2.4	242	2.3	203	2.0	157	1.5	202	1.9
20–24	770	7.2	724	6.8	725	6.9	561	5.3	620	5.9

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
25–29	979	8.5	944	8.2	939	8.2	770	6.9	846	7.7
30–34	1,013	9.3	951	8.7	955	8.6	808	7.1	957	8.4
35–39	916	8.6	921	8.6	900	8.3	707	6.4	928	8.4
40–44	740	7.5	789	8.0	757	7.6	563	5.5	772	7.3
45–49	761	7.2	719	6.9	686	6.7	551	5.4	650	6.6
50–54	661	6.1	655	6.2	623	6.0	449	4.3	573	5.5
55–59	558	4.9	538	4.8	515	4.6	419	3.7	503	4.6
60–64	331	3.2	320	3.0	348	3.2	265	2.5	286	2.6
≥ 65	270	1.0	245	0.8	263	0.9	173	0.6	240	0.8
Race/ethnicity										
American Indian/Alaska Native	43	4.3	30	3.0	43	4.2	40	3.9	46	4.4
Asian	114	1.4	102	1.2	98	1.1	83	1.0	93	1.1
Black/African American	4,246	24.1	3,972	22.3	3,820	21.3	2,899	16.0	3,544	19.5
Hispanic/Latino ^c	1,181	5.3	1,192	5.2	1,178	5.0	922	3.9	1,164	4.8
Native Hawaiian/other Pacific Islander	7	3.0	4	1.7	7	2.9	14	5.6	10	3.9
White	1,415	1.6	1,458	1.7	1,512	1.7	1,287	1.5	1,522	1.8
Multiracial	255	10.9	299	12.3	265	10.6	184	7.1	205	7.6
Region of residence^d										
Northeast	1,326	5.4	1,220	4.9	1,156	4.7	879	3.5	1,046	4.2
Midwest	944	3.2	925	3.2	969	3.3	740	2.5	893	3.0
South	4,065	7.7	3,923	7.3	3,817	7.1	2,985	5.5	3,707	6.8
West	926	2.9	989	3.0	981	3.0	825	2.5	938	2.8
Subtotal	7,261	5.2	7,057	5.0	6,923	4.9	5,429	3.8	6,584	4.6
Total	38,328	14.1	37,299	13.6	36,421	13.2	30,275	10.9	35,716	12.7

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 Rates are per 100,000 population.

^b Data include transgender and additional gender identity persons.

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

^d 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, assigned sex at birth, and selected characteristics, 2017–2021—United States and 6 dependent areas

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Male sex at birth^b										
Age at diagnosis (yr)										
13–14	13	0.3	11	0.3	12	0.3	6	0.1	8	0.2
15–19	1,551	14.2	1,496	13.7	1,455	13.4	1,115	10.0	1,256	11.3
20–24	5,772	50.4	5,455	48.3	5,315	47.5	4,327	39.1	4,883	44.0
25–29	6,792	56.5	6,808	56.1	6,498	53.5	5,350	45.7	5,944	51.7
30–34	4,721	42.2	4,766	42.2	4,739	41.3	4,428	37.9	5,449	46.2

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
35–39	3,378	31.6	3,297	30.3	3,236	29.4	2,728	24.1	3,507	30.9
40–44	2,270	23.1	2,208	22.3	2,215	22.1	1,932	18.4	2,401	22.4
45–49	2,192	20.9	2,072	20.0	1,912	18.8	1,511	14.7	1,702	17.0
50–54	2,014	19.0	1,818	17.5	1,704	16.7	1,405	13.4	1,576	14.9
55–59	1,335	12.4	1,307	12.1	1,347	12.5	1,158	10.6	1,301	12.1
60–64	769	8.0	737	7.5	779	7.8	628	6.1	823	7.9
≥ 65	629	2.8	649	2.8	627	2.6	522	2.1	620	2.4
Race/ethnicity										
American Indian/Alaska Native	150	—	140	—	150	—	149	—	177	—
Asian	800	—	746	—	631	—	527	—	645	—
Black/African American	11,863	—	11,632	—	11,481	—	9,749	—	10,983	—
Hispanic/Latino ^c	9,171	—	9,087	—	8,993	—	7,372	—	9,222	—
Native Hawaiian/other Pacific Islander	42	—	55	—	55	—	50	—	66	—
White	8,131	—	7,871	—	7,479	—	6,446	—	7,541	—
Multiracial	1,279	—	1,093	—	1,050	—	817	—	836	—
Region of residence^d										
Northeast	4,662	20.2	4,332	18.7	4,161	18.0	3,362	14.0	3,942	16.5
Midwest	4,155	14.9	4,016	14.3	3,798	13.5	3,366	11.8	3,922	13.7
South	15,580	31.1	15,302	30.2	15,133	29.6	12,552	24.2	14,996	28.7
West	6,670	20.9	6,592	20.4	6,406	19.7	5,566	16.9	6,272	18.9
U.S. dependent areas	369	24.4	382	26.0	341	23.1	264	17.4	338	22.2
Subtotal	31,436	23.3	30,624	22.6	29,839	21.9	25,110	18.1	29,470	21.1
Female sex at birth^b										
Age at diagnosis (yr)										
13–14	12	0.3	9	0.2	9	0.2	6	0.1	7	0.2
15–19	253	2.4	244	2.3	203	1.9	157	1.5	204	1.9
20–24	775	7.1	733	6.8	730	6.8	566	5.3	629	5.9
25–29	990	8.5	951	8.2	944	8.1	774	6.8	849	7.6
30–34	1,020	9.3	957	8.7	964	8.6	809	7.1	962	8.3
35–39	928	8.7	925	8.5	906	8.3	710	6.4	941	8.4
40–44	747	7.5	797	8.0	769	7.6	570	5.5	785	7.4
45–49	776	7.3	733	6.9	697	6.7	556	5.4	657	6.6
50–54	673	6.1	666	6.2	630	6.0	454	4.3	584	5.5
55–59	571	5.0	546	4.8	528	4.6	427	3.8	506	4.6
60–64	336	3.2	325	3.0	354	3.3	268	2.5	293	2.7
≥ 65	274	1.0	252	0.9	272	0.9	178	0.6	249	0.8
Race/ethnicity										
American Indian/Alaska Native	43	—	30	—	43	—	40	—	46	—
Asian	114	—	102	—	98	—	83	—	93	—
Black/African American	4,249	—	3,973	—	3,823	—	2,901	—	3,545	—
Hispanic/Latino ^c	1,270	—	1,272	—	1,257	—	966	—	1,245	—
Native Hawaiian/other Pacific Islander	7	—	4	—	8	—	14	—	10	—
White	1,416	—	1,458	—	1,512	—	1,287	—	1,522	—
Multiracial	256	—	299	—	265	—	184	—	205	—
Region of residence^d										

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Northeast	1,326	5.4	1,220	4.9	1,156	4.7	879	3.5	1,046	4.2
Midwest	944	3.2	925	3.2	969	3.3	740	2.5	893	3.0
South	4,065	7.7	3,923	7.3	3,817	7.1	2,985	5.5	3,707	6.8
West	926	2.9	989	3.0	981	3.0	825	2.5	938	2.8
U.S. dependent areas	94	5.6	81	5.0	83	5.0	46	2.7	82	4.8
Subtotal	7,355	5.2	7,138	5.0	7,006	4.9	5,475	3.8	6,666	4.6
Total	38,791	14.1	37,762	13.6	36,845	13.2	30,585	10.8	36,136	12.7

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 Rates are per 100,000 population. Rates by race/ethnicity are not provided because U.S. census information is limited for U.S. dependent areas.

^b Data include transgender and additional gender identity persons.

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

^d 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 aged ≥ 13 years, by year of diagnosis and selected characteristics, 2017–2021—United States

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Transgender woman^a					
Age at diagnosis (yr)					
13–14	0	0	0	0	1
15–19	67	48	44	34	58
20–24	164	175	180	156	227
25–29	174	195	177	212	172
30–34	114	98	138	127	167
35–39	59	72	63	49	77
40–44	31	33	42	35	51
45–49	22	22	19	32	25
50–54	8	6	16	19	12
55–59	7	6	8	6	12
60–64	5	4	4	5	8
≥ 65	0	2	1	1	1
Race/ethnicity					
American Indian/Alaska Native	2	9	5	8	10
Asian	19	11	11	14	17
Black/African American	324	317	341	327	374
Hispanic/Latino ^b	196	219	226	220	257
Native Hawaiian/other Pacific Islander	4	3	5	3	6
White	80	69	79	73	112
Multiracial	26	33	25	31	35
Exposure category^c					
Sexual contact ^d	592	596	616	611	716

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Injection drug use ^e	4	4	2	1	3
Sexual contact ^d and injection drug use ^e	40	53	58	44	56
Other ^f	15	8	16	20	36
Region of residence^g					
Northeast	104	117	105	111	110
Midwest	108	108	96	102	139
South	294	290	310	298	352
West	145	146	181	165	210
Subtotal	651	661	692	676	811
Transgender man^a					
Age at diagnosis (yr)					
13–14	0	0	0	0	1
15–19	3	2	0	1	6
20–24	7	9	11	12	8
25–29	16	18	18	10	17
30–34	1	9	13	8	13
35–39	2	4	1	6	6
40–44	0	4	0	2	2
45–49	2	1	2	1	0
50–54	0	1	0	1	1
55–59	1	0	0	0	1
60–64	0	0	0	0	0
≥ 65	0	0	0	0	1
Race/ethnicity					
American Indian/Alaska Native	0	0	0	0	0
Asian	2	0	1	0	2
Black/African American	11	17	17	10	18
Hispanic/Latino ^b	6	11	13	11	14
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	10	18	9	15	19
Multiracial	3	2	5	5	3
Exposure category^c					
Sexual contact ^d	27	40	35	30	47
Injection drug use ^e	1	2	1	1	0
Sexual contact ^d and injection drug use ^e	1	3	3	5	1
Other ^f	3	3	6	5	8
Region of residence^g					
Northeast	5	7	6	9	9
Midwest	8	7	6	2	10
South	12	16	18	24	22
West	7	18	15	6	15
Subtotal	32	48	45	41	56
Additional gender identity^h					

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Age at diagnosis (yr)					
13–14	0	0	0	0	0
15–19	1	4	5	3	3
20–24	4	7	13	7	22
25–29	3	4	7	8	7
30–34	3	2	4	1	5
35–39	5	1	2	2	2
40–44	0	0	0	1	1
45–49	2	1	0	1	2
50–54	0	0	1	0	2
55–59	0	0	0	0	0
60–64	0	0	0	0	0
≥ 65	0	0	0	0	0
Race/ethnicity					
American Indian/Alaska Native	0	1	0	0	0
Asian	1	2	0	1	0
Black/African American	7	7	11	10	12
Hispanic/Latino ^b	7	4	7	5	14
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	3	3	9	6	15
Multiracial	0	2	5	1	3
Exposure category^c					
Sexual contact ^d	16	19	29	20	38
Injection drug use ^e	0	0	0	0	0
Sexual contact ^d and injection drug use ^e	1	0	2	1	5
Other ^f	1	0	1	2	1
Region of residence^g					
Northeast	9	8	9	2	12
Midwest	3	4	10	6	8
South	6	5	9	7	9
West	0	2	4	8	15
Subtotal	18	19	32	23	44
Total	701	728	769	740	911

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 trends based on these numbers, should be interpreted with caution.

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

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

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

^c 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.

^d 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.

^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 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.

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

^h Additional gender identity examples include “bigender,” “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, 2017–2021—United States and 6 dependent areas

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Transgender woman^a					
Age at diagnosis (yr)					
13–14	0	0	0	0	1
15–19	67	48	44	34	58
20–24	165	176	181	158	227
25–29	175	196	178	212	172
30–34	114	99	138	128	167
35–39	59	73	63	49	77
40–44	31	33	42	35	52
45–49	22	22	19	32	25
50–54	8	6	16	19	12
55–59	7	6	8	6	12
60–64	5	4	4	5	8
≥ 65	0	2	1	1	1
Race/ethnicity					
American Indian/Alaska Native	2	9	5	8	10
Asian	19	11	11	14	17
Black/African American	324	317	341	327	374
Hispanic/Latino ^b	198	223	228	223	258
Native Hawaiian/other Pacific Islander	4	3	5	3	6
White	80	69	79	73	112
Multiracial	26	33	25	31	35
Exposure category^c					
Sexual contact ^d	594	600	618	614	717
Injection drug use ^e	4	4	2	1	3
Sexual contact ^d and injection drug use ^e	40	53	58	44	56
Other ^f	15	8	16	20	36
Region of residence^g					
Northeast	104	117	105	111	110
Midwest	108	108	96	102	139
South	294	290	310	298	352
West	145	146	181	165	210
US dependent areas	2	4	2	3	1
Subtotal	653	665	694	679	812
Transgender man^a					
Age at diagnosis (yr)					

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
13–14	0	0	0	0	1
15–19	3	2	0	1	6
20–24	7	9	11	12	8
25–29	16	18	18	10	17
30–34	1	9	13	8	13
35–39	2	4	1	6	6
40–44	0	4	0	2	2
45–49	2	1	2	1	0
50–54	0	1	0	1	1
55–59	1	0	0	0	1
60–64	0	0	0	0	0
≥ 65	0	0	0	0	1
Race/ethnicity					
American Indian/Alaska Native	0	0	0	0	0
Asian	2	0	1	0	2
Black/African American	11	17	17	10	18
Hispanic/Latino ^b	6	11	13	11	14
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	10	18	9	15	19
Multiracial	3	2	5	5	3
Exposure category^c					
Sexual contact ^d	27	40	35	30	47
Injection drug use ^e	1	2	1	1	0
Sexual contact ^d and injection drug use ^e	1	3	3	5	1
Other ^f	3	3	6	5	8
Region of residence^g					
Northeast	5	7	6	9	9
Midwest	8	7	6	2	10
South	12	16	18	24	22
West	7	18	15	6	15
US dependent areas	0	0	0	0	0
Subtotal	32	48	45	41	56
Additional gender identity^h					
Age at diagnosis (yr)					
13–14	0	0	0	0	0
15–19	1	4	5	3	3
20–24	4	7	13	7	22
25–29	3	4	7	8	7
30–34	3	2	4	1	5
35–39	5	1	2	2	2
40–44	0	0	0	1	1
45–49	2	1	0	1	2
50–54	0	0	1	0	2
55–59	0	0	0	0	0

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
60–64	0	0	0	0	0
≥ 65	0	0	0	0	0
Race/ethnicity					
American Indian/Alaska Native	0	1	0	0	0
Asian	1	2	0	1	0
Black/African American	7	7	11	10	12
Hispanic/Latino ^b	7	4	7	5	14
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	3	3	9	6	15
Multiracial	0	2	5	1	3
Exposure category^c					
Sexual contact ^d	16	19	29	20	38
Injection drug use ^e	0	0	0	0	0
Sexual contact ^d and injection drug use ^e	1	0	2	1	5
Other ^f	1	0	1	2	1
Region of residence^g					
Northeast	9	8	9	2	12
Midwest	3	4	10	6	8
South	6	5	9	7	9
West	0	2	4	8	15
US dependent areas	0	0	0	0	0
Subtotal	18	19	32	23	44
Total	703	732	771	743	912

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 trends based on these numbers, should be interpreted with caution.

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

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

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

^c 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.

^d 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.

^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 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.

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

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

Table 5a. Diagnoses of HIV infection among males, based on assigned sex 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, 2017–2021—United States ✓

	Male-to-male sexual contact					Male-to-male sexual contact and injection drug use				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	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	2	7	6	5	10	0	0	0	0	0
20-24	19	24	25	19	19	3	2	3	5	1
25-29	29	21	25	25	32	5	7	5	5	1
30-34	15	19	15	18	26	6	4	1	3	6
35-39	15	8	18	13	21	0	2	3	5	4
40-44	10	7	6	12	10	2	1	0	2	1
45-49	6	7	7	6	6	1	2	1	0	1
50-54	8	6	7	10	8	0	0	1	1	2
55-59	2	3	3	5	3	0	0	0	0	0
60-64	2	0	1	1	5	1	0	0	0	0
≥ 65	1	3	0	2	2	1	0	0	0	0
Region of residence^a										
Northeast	2	4	3	5	4	0	0	0	0	0
Midwest	10	13	8	9	19	3	4	1	5	6
South	23	16	37	33	41	9	2	3	0	1
West	73	71	65	70	76	6	13	10	15	8
Total	108	103	113	117	141	18	19	14	21	16
Asian										
Age at diagnosis (yr)										
13-14	0	1	0	0	0	0	0	0	0	0
15-19	25	23	19	17	21	0	0	0	0	0
20-24	147	105	94	58	82	2	0	2	1	1
25-29	151	163	126	120	122	4	5	3	4	4
30-34	111	117	93	89	113	6	2	6	3	4
35-39	88	71	73	49	72	1	3	1	0	4
40-44	74	62	41	45	47	0	1	1	2	1
45-49	64	57	51	40	39	2	0	1	0	1
50-54	34	22	34	22	39	0	0	0	0	0
55-59	21	21	16	13	23	0	0	0	0	1
60-64	10	11	8	11	8	0	0	0	0	0
≥ 65	7	10	8	9	6	0	0	0	0	0
Region of residence^a										
Northeast	127	121	99	71	109	2	1	2	0	2
Midwest	73	65	53	53	56	0	0	1	1	3
South	153	169	140	100	151	1	2	4	1	4
West	380	307	270	247	256	12	9	7	10	8
Total	733	661	563	472	573	15	12	14	12	17
Black/African American										
Age at diagnosis (yr)										
13-14	4	7	7	2	2	0	1	0	0	0

	Male-to-male sexual contact					Male-to-male sexual contact and injection drug use				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
15-19	853	808	793	604	685	12	10	10	12	9
20-24	2,512	2,409	2,378	2,072	2,343	45	52	41	41	30
25-29	2,459	2,486	2,335	1,967	2,067	75	84	87	58	50
30-34	1,334	1,266	1,424	1,447	1,636	51	50	65	53	62
35-39	752	742	741	655	778	37	29	39	26	37
40-44	434	447	456	384	423	21	18	21	16	24
45-49	351	352	333	266	288	14	12	17	8	14
50-54	324	311	283	236	232	25	17	18	6	6
55-59	205	203	204	194	228	11	9	9	7	6
60-64	111	99	111	93	122	5	6	6	3	3
≥ 65	66	76	81	54	75	5	4	2	2	2
Region of residence^a										
Northeast	1,140	1,073	1,112	923	1,007	38	53	38	34	36
Midwest	1,500	1,458	1,408	1,304	1,393	50	54	44	37	41
South	5,955	5,853	5,835	5,033	5,659	161	142	178	119	131
West	811	820	790	714	820	54	43	55	41	36
Total	9,405	9,205	9,145	7,973	8,879	303	292	314	232	244
Hispanic/Latino^b										
Age at diagnosis (yr)										
13-14	5	0	2	3	3	0	0	0	0	0
15-19	339	324	363	259	312	11	12	8	7	7
20-24	1,402	1,385	1,407	1,067	1,275	68	75	70	38	46
25-29	1,770	1,788	1,744	1,440	1,741	99	114	101	88	79
30-34	1,345	1,317	1,299	1,201	1,577	74	61	71	61	71
35-39	925	904	899	736	1,031	53	48	63	36	46
40-44	593	554	588	521	655	24	28	38	21	31
45-49	517	493	449	340	440	20	20	25	20	15
50-54	343	329	351	285	330	17	17	22	11	16
55-59	172	189	179	185	204	8	3	11	5	8
60-64	71	88	91	82	118	4	5	3	7	5
≥ 65	76	68	70	54	73	2	3	3	2	2
Region of residence^a										
Northeast	1,300	1,177	1,172	939	1,124	44	59	62	31	34
Midwest	519	523	532	413	587	30	33	34	19	16
South	3,224	3,151	3,135	2,560	3,438	132	121	156	112	116
West	2,514	2,587	2,601	2,258	2,608	174	172	162	133	160
Total	7,556	7,438	7,441	6,170	7,757	379	385	414	295	325
Native Hawaiian/other Pacific Islander										
Age at diagnosis (yr)										
13-14	0	0	0	0	0	0	0	0	0	0
15-19	1	3	1	2	5	0	0	0	1	0
20-24	7	5	6	6	3	0	2	0	0	1
25-29	7	9	16	10	15	1	2	0	1	0
30-34	7	10	9	7	9	0	1	1	1	2

	Male-to-male sexual contact					Male-to-male sexual contact and injection drug use				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
35-39	2	8	7	6	10	1	0	1	1	0
40-44	5	2	4	6	7	0	0	0	0	0
45-49	1	2	0	1	3	0	0	0	1	0
50-54	1	1	3	2	4	0	0	0	0	0
55-59	0	4	1	1	1	0	0	0	0	0
60-64	0	1	1	0	2	0	0	0	0	0
≥ 65	0	1	0	0	1	0	0	0	0	0
Region of residence^a										
Northeast	2	2	1	3	2	0	0	0	0	0
Midwest	3	1	4	3	6	0	0	0	1	0
South	6	8	10	6	16	0	0	0	0	0
West	21	34	33	28	35	2	5	2	4	3
Total	31	45	48	41	59	2	5	2	5	4
White										
Age at diagnosis (yr)										
13-14	1	0	1	0	0	0	0	0	0	0
15-19	160	166	129	119	106	12	11	13	3	3
20-24	905	782	707	583	603	91	71	81	54	52
25-29	1,181	1,099	1,076	896	1,006	175	188	167	126	119
30-34	865	942	863	826	1,009	128	147	147	112	173
35-39	718	650	648	525	718	100	122	116	108	120
40-44	489	509	448	434	547	64	59	67	52	100
45-49	606	546	461	395	426	62	51	55	46	55
50-54	669	530	499	435	465	38	44	38	32	42
55-59	436	429	459	404	434	24	27	33	24	21
60-64	243	248	236	202	263	17	6	14	10	19
≥ 65	181	213	184	181	180	11	7	10	4	11
Region of residence^a										
Northeast	825	745	687	560	668	79	80	65	72	82
Midwest	1,202	1,082	959	923	1,081	107	136	150	100	142
South	2,795	2,741	2,605	2,201	2,620	319	302	309	225	284
West	1,632	1,545	1,459	1,318	1,389	217	217	220	174	207
Total	6,454	6,113	5,710	5,002	5,758	721	734	742	570	714
Multiracial										
Age at diagnosis (yr)										
13-14	0	0	0	0	0	0	0	0	0	0
15-19	64	48	51	44	54	3	2	2	0	0
20-24	245	221	189	138	149	13	12	6	9	6
25-29	272	218	218	168	145	15	30	22	13	14
30-34	162	138	136	102	125	14	14	27	6	16
35-39	94	95	83	74	65	14	13	8	7	8
40-44	59	55	58	51	46	5	2	11	8	1
45-49	59	47	40	43	31	5	5	1	5	4
50-54	59	36	20	31	32	6	4	2	2	1

	Male-to-male sexual contact					Male-to-male sexual contact and injection drug use				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
55–59	24	18	39	16	23	4	0	1	0	2
60–64	13	12	11	8	6	0	0	1	1	0
≥ 65	7	11	8	11	13	0	1	1	0	1
Region of residence^a										
Northeast	177	151	150	108	111	12	11	8	5	6
Midwest	167	124	101	100	103	11	16	14	11	16
South	504	452	436	354	360	40	30	43	23	20
West	209	172	164	124	115	17	28	16	12	12
Total	1,057	898	852	685	688	79	84	81	51	54
Total										
Age at diagnosis (yr)										
13–14	10	8	10	4	5	0	1	0	0	1
15–19	1,444	1,377	1,362	1,049	1,193	39	37	34	23	19
20–24	5,237	4,931	4,805	3,944	4,473	222	214	203	147	137
25–29	5,870	5,784	5,540	4,623	5,128	372	430	384	295	268
30–34	3,838	3,807	3,838	3,689	4,496	278	280	318	240	334
35–39	2,592	2,479	2,468	2,059	2,694	206	217	231	182	218
40–44	1,665	1,635	1,600	1,453	1,735	116	109	138	102	159
45–49	1,605	1,505	1,341	1,090	1,232	105	91	99	80	91
50–54	1,438	1,235	1,197	1,023	1,109	85	82	80	53	67
55–59	860	865	900	818	914	47	40	54	36	38
60–64	450	458	459	397	525	28	18	25	20	28
≥ 65	338	380	350	311	350	19	14	17	8	16
Region of residence^a										
Northeast	3,572	3,273	3,225	2,609	3,025	175	204	175	142	160
Midwest	3,474	3,266	3,064	2,805	3,244	201	243	244	176	225
South	12,660	12,389	12,199	10,288	12,286	661	598	691	480	555
West	5,639	5,536	5,382	4,758	5,300	480	487	472	387	434
Total	25,345	24,464	23,870	20,460	23,855	1,517	1,531	1,581	1,185	1,373

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 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 at birth and include transgender and additional gender identity persons.

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

^bHispanic/Latino persons can be of any race.

Table 5b. Diagnoses of HIV infection among males, based on assigned sex 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, 2017–2021—United States and 6 dependent areas ✓

	Male-to-male sexual contact					Male-to-male sexual contact and injection drug use				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	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	2	7	6	5	10	0	0	0	0	0
20-24	19	24	25	19	19	3	2	3	5	1
25-29	29	21	25	25	32	5	7	5	5	1
30-34	15	19	15	18	26	6	4	1	3	6
35-39	15	8	18	13	21	0	2	3	5	4
40-44	10	7	6	12	10	2	1	0	2	1
45-49	6	7	7	6	6	1	2	1	0	1
50-54	8	6	7	10	8	0	0	1	1	2
55-59	2	3	3	5	3	0	0	0	0	0
60-64	2	0	1	1	5	1	0	0	0	0
≥ 65	1	3	0	2	2	1	0	0	0	0
Region of residence^a										
Northeast	2	4	3	5	4	0	0	0	0	0
Midwest	10	13	8	9	19	3	4	1	5	6
South	23	16	37	33	41	9	2	3	0	1
West	73	71	65	70	76	6	13	10	15	8
U.S. dependent areas	0	0	0	0	0	0	0	0	0	0
Total	108	103	113	117	141	18	19	14	21	16
Asian										
Age at diagnosis (yr)										
13-14	0	1	0	0	0	0	0	0	0	0
15-19	25	23	19	17	21	0	0	0	0	0
20-24	147	105	94	58	82	2	0	2	1	1
25-29	151	164	129	120	123	4	5	4	4	4
30-34	113	119	94	89	113	6	2	6	3	4
35-39	89	71	74	49	72	1	3	1	0	4
40-44	74	62	41	45	47	0	1	1	2	1
45-49	64	57	51	40	39	2	0	1	0	1
50-54	34	22	35	22	39	0	0	0	0	0
55-59	21	21	16	13	23	0	0	0	0	1
60-64	10	11	8	11	8	0	0	0	0	0
≥ 65	7	10	8	9	6	0	0	0	0	0
Region of residence^a										
Northeast	127	121	99	71	109	2	1	2	0	2
Midwest	73	65	53	53	56	0	0	1	1	3
South	153	169	140	100	151	1	2	4	1	4
West	380	307	270	247	256	12	9	7	10	8
U.S. dependent areas	3	4	5	0	1	0	0	1	0	0
Total	736	665	568	472	574	15	12	15	12	17
Black/African American										

	Male-to-male sexual contact					Male-to-male sexual contact and injection drug use				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Age at diagnosis (yr)										
13–14	4	7	7	2	2	0	1	0	0	0
15–19	853	808	793	606	685	12	10	10	12	9
20–24	2,512	2,410	2,379	2,072	2,344	45	52	41	41	30
25–29	2,459	2,488	2,336	1,967	2,067	75	84	87	58	50
30–34	1,334	1,267	1,424	1,447	1,637	51	50	65	53	62
35–39	752	742	741	655	778	37	29	39	26	37
40–44	435	447	456	384	423	21	18	21	16	24
45–49	351	352	333	266	288	14	12	17	8	14
50–54	324	311	283	237	232	25	17	18	6	6
55–59	205	203	204	194	229	11	9	9	7	6
60–64	111	99	111	93	122	5	6	6	3	3
≥ 65	66	76	81	54	75	5	4	2	2	2
Region of residence^a										
Northeast	1,140	1,073	1,112	923	1,007	38	53	38	34	36
Midwest	1,500	1,458	1,408	1,304	1,393	50	54	44	37	41
South	5,955	5,853	5,835	5,033	5,659	161	142	178	119	131
West	811	820	790	714	820	54	43	55	41	36
U.S. dependent areas	2	4	2	3	3	0	0	0	0	0
Total	9,407	9,209	9,147	7,976	8,883	303	292	314	232	244
Hispanic/Latino^b										
Age at diagnosis (yr)										
13–14	5	0	2	3	3	0	0	0	0	0
15–19	347	339	369	265	314	11	12	8	7	8
20–24	1,451	1,437	1,453	1,103	1,316	70	76	73	39	46
25–29	1,811	1,841	1,790	1,474	1,812	103	117	102	90	79
30–34	1,382	1,353	1,336	1,231	1,609	75	64	73	61	71
35–39	948	926	923	763	1,055	55	49	64	37	46
40–44	609	578	601	533	677	24	28	38	21	32
45–49	534	516	462	352	453	22	20	26	20	15
50–54	365	346	366	304	349	17	17	22	11	16
55–59	183	199	191	193	213	8	4	12	5	8
60–64	75	96	100	88	123	4	6	4	7	5
≥ 65	80	71	74	56	77	2	4	4	2	2
Region of residence^a										
Northeast	1,300	1,177	1,172	939	1,124	44	59	62	31	34
Midwest	519	523	532	413	587	30	33	34	19	16
South	3,224	3,151	3,135	2,560	3,438	132	121	156	112	116
West	2,514	2,587	2,601	2,258	2,608	174	172	162	133	160
U.S. dependent areas	232	263	226	195	243	12	11	11	5	2
Total	7,788	7,701	7,666	6,366	8,000	391	397	425	299	327
Native Hawaiian/other Pacific Islander										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0

	Male-to-male sexual contact					Male-to-male sexual contact and injection drug use				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
15-19	1	3	1	2	5	0	0	0	1	0
20-24	7	5	6	6	3	0	2	0	0	1
25-29	7	9	16	10	15	1	2	1	1	0
30-34	7	10	9	8	9	0	1	1	1	2
35-39	2	9	7	6	10	1	0	1	1	0
40-44	5	2	5	6	7	0	0	0	0	0
45-49	1	2	0	1	3	0	0	0	1	0
50-54	2	1	4	2	4	0	0	0	0	0
55-59	1	4	1	1	1	0	0	0	0	0
60-64	0	1	1	0	2	0	0	0	0	0
≥ 65	0	1	0	0	1	0	0	0	0	0
Region of residence^a										
Northeast	2	2	1	3	2	0	0	0	0	0
Midwest	3	1	4	3	6	0	0	0	1	0
South	6	8	10	6	16	0	0	0	0	0
West	21	34	33	28	35	2	5	2	4	3
U.S. dependent areas	2	2	2	1	0	0	0	1	0	0
Total	33	46	50	42	59	2	5	3	5	4
White										
Age at diagnosis (yr)										
13-14	1	0	1	0	0	0	0	0	0	0
15-19	160	166	129	119	106	12	11	13	3	3
20-24	905	782	707	583	603	91	71	81	54	52
25-29	1,181	1,099	1,076	896	1,007	175	188	167	126	119
30-34	865	942	865	826	1,009	128	147	147	112	173
35-39	720	651	648	525	719	100	122	116	108	120
40-44	489	510	448	434	547	64	59	67	52	100
45-49	606	547	461	396	427	62	51	55	46	55
50-54	670	532	500	435	465	38	44	38	32	42
55-59	436	430	459	404	435	24	27	33	24	21
60-64	243	248	237	202	264	17	6	14	10	19
≥ 65	181	213	185	181	180	11	7	10	4	11
Region of residence^a										
Northeast	825	745	687	560	668	79	80	65	72	82
Midwest	1,202	1,082	959	923	1,081	107	136	150	100	142
South	2,795	2,741	2,605	2,201	2,620	319	302	309	225	284
West	1,632	1,545	1,459	1,318	1,389	217	217	220	174	207
U.S. dependent areas	3	6	4	1	5	0	0	0	0	0
Total	6,457	6,119	5,714	5,002	5,762	721	734	742	570	714
Multiracial										
Age at diagnosis (yr)										
13-14	0	0	0	0	0	0	0	0	0	0
15-19	64	48	51	44	54	3	2	2	0	0
20-24	245	221	189	138	149	13	12	6	9	6

	Male-to-male sexual contact					Male-to-male sexual contact and injection drug use				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
25–29	272	218	218	168	145	15	30	22	13	14
30–34	162	138	136	102	125	14	14	27	6	16
35–39	94	95	83	74	65	14	13	8	7	8
40–44	59	55	58	51	46	5	2	11	8	1
45–49	59	47	40	43	31	5	5	1	5	4
50–54	59	36	20	31	32	6	4	2	2	1
55–59	24	18	39	16	23	4	0	1	0	2
60–64	13	12	11	8	6	0	0	1	1	0
≥ 65	7	11	8	11	13	0	1	1	0	1
Region of residence^a										
Northeast	177	151	150	108	111	12	11	8	5	6
Midwest	167	124	101	100	103	11	16	14	11	16
South	504	452	436	354	360	40	30	43	23	20
West	209	172	164	124	115	17	28	16	12	12
U.S. dependent areas	1	0	0	0	0	0	0	0	0	0
Total	1,058	898	852	685	688	79	84	81	51	54
Total										
Age at diagnosis (yr)										
13–14	10	8	10	4	5	0	1	0	0	1
15–19	1,452	1,392	1,368	1,057	1,195	39	37	34	23	20
20–24	5,286	4,983	4,852	3,980	4,515	224	215	206	148	137
25–29	5,910	5,840	5,590	4,658	5,201	376	433	387	297	268
30–34	3,877	3,846	3,878	3,721	4,529	279	283	320	240	334
35–39	2,619	2,503	2,493	2,086	2,719	208	218	232	183	218
40–44	1,682	1,661	1,615	1,466	1,757	116	109	138	102	159
45–49	1,622	1,529	1,354	1,103	1,246	107	91	100	81	91
50–54	1,461	1,255	1,214	1,042	1,129	85	82	80	53	67
55–59	872	878	913	827	925	47	41	55	36	38
60–64	454	466	469	403	530	28	19	25	20	28
≥ 65	343	383	356	313	355	19	15	18	8	16
Region of residence^a										
Northeast	3,572	3,273	3,225	2,609	3,025	175	204	175	142	160
Midwest	3,474	3,266	3,064	2,805	3,244	201	243	244	176	225
South	12,660	12,389	12,199	10,288	12,286	661	598	691	480	555
West	5,639	5,536	5,382	4,758	5,300	480	487	472	387	434
U.S. dependent areas	242	278	240	200	252	12	11	13	5	2
Total	25,587	24,742	24,110	20,660	24,107	1,529	1,542	1,594	1,190	1,375

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 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 at birth and include transgender and additional gender identity persons.

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

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

Table 6a. Diagnoses of HIV infection attributed to injection drug use, by year of diagnosis, assigned sex at birth, race/ethnicity, and selected characteristics, 2017–2021—United States



	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	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	0	1	0	0	0	0	0	0	0	1
20–24	0	0	2	1	0	1	0	2	0	1
25–29	6	1	0	0	3	2	3	1	5	5
30–34	3	3	2	4	1	2	2	2	4	4
35–39	0	0	3	1	0	2	4	6	4	2
40–44	1	0	3	0	2	2	1	2	1	0
45–49	0	1	1	0	2	2	2	1	2	2
50–54	3	2	1	2	0	3	2	2	0	3
55–59	0	0	0	0	0	0	1	0	1	1
60–64	1	0	0	0	0	1	1	0	0	0
≥ 65	1	0	0	0	0	1	0	1	0	0
Region of residence^a										
Northeast	1	0	0	0	0	1	0	0	0	0
Midwest	2	3	3	2	3	1	3	5	8	6
South	2	1	3	4	3	4	6	6	1	1
West	11	6	8	2	4	9	6	7	8	10
Total	17	9	14	9	10	16	15	18	17	17
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	0	1	0	0	0	0	0	0	0	0
25–29	1	0	1	1	0	2	0	0	0	2
30–34	1	3	0	2	2	0	2	2	2	0
35–39	1	0	3	1	2	1	1	1	1	0
40–44	3	2	2	2	2	0	0	1	0	1
45–49	2	2	2	2	2	0	0	1	0	0
50–54	1	1	3	2	2	1	0	0	1	1
55–59	0	1	1	0	1	0	1	0	0	0
60–64	0	1	1	1	2	1	1	0	0	0
≥ 65	0	1	0	1	0	0	0	0	0	0
Region of residence^a										
Northeast	4	5	3	2	2	1	2	2	1	1
Midwest	0	1	3	2	4	0	0	0	0	1
South	2	4	2	1	1	1	2	1	2	2

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
West	4	1	6	8	6	3	2	3	2	2
Total	10	11	14	13	14	5	5	6	5	6
Black/African American										
Age at diagnosis (yr)										
13-14	0	0	0	0	0	0	0	0	0	0
15-19	5	4	3	2	2	12	9	7	8	5
20-24	19	22	20	18	25	35	23	32	18	24
25-29	34	45	50	33	33	36	30	45	37	36
30-34	49	43	58	42	50	39	42	42	36	38
35-39	44	53	42	33	48	39	36	42	31	37
40-44	30	35	39	28	43	42	29	39	20	33
45-49	42	41	31	30	30	41	32	37	29	29
50-54	42	49	37	29	33	40	40	34	25	29
55-59	55	50	39	37	43	33	38	33	30	31
60-64	32	36	41	23	34	25	24	27	18	19
≥ 65	33	35	32	28	31	19	16	20	10	19
Region of residence^a										
Northeast	120	118	107	85	94	95	76	97	52	68
Midwest	61	57	52	43	47	60	48	50	43	53
South	173	195	190	149	191	172	158	171	132	147
West	30	43	41	24	39	35	35	40	34	32
Total	385	413	389	301	371	361	318	358	260	300
Hispanic/Latino^b										
Age at diagnosis (yr)										
13-14	0	0	0	0	0	0	0	0	1	0
15-19	4	3	1	2	1	5	2	6	3	3
20-24	22	24	17	14	21	20	24	19	11	12
25-29	40	30	46	39	38	21	21	23	19	25
30-34	59	64	46	34	60	35	27	22	30	26
35-39	45	49	48	39	46	24	29	34	26	26
40-44	42	35	35	40	33	18	16	13	14	18
45-49	38	35	23	26	30	15	20	17	11	13
50-54	40	38	28	24	26	13	15	18	9	14
55-59	23	26	25	14	20	9	10	10	10	12
60-64	12	15	13	14	12	7	9	7	9	6
≥ 65	12	8	13	13	11	4	5	5	4	6
Region of residence^a										
Northeast	115	103	89	69	69	50	57	47	38	38
Midwest	16	14	11	14	26	10	10	14	7	7
South	95	96	82	77	86	53	52	53	38	50
West	112	114	112	99	119	58	58	60	62	65
Total	338	327	294	260	299	171	177	173	146	161
Native Hawaiian/other Pacific Islander										
Age at diagnosis (yr)										

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
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	0
25-29	0	0	1	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	1
35-39	0	0	0	1	0	0	0	0	0	1
40-44	0	0	0	0	0	0	0	0	0	0
45-49	0	1	0	0	0	0	0	0	1	0
50-54	1	0	0	0	0	0	0	0	0	1
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	1	0
≥ 65	0	0	0	0	1	0	0	0	0	0
Region of residence^a										
Northeast	0	0	0	0	0	0	0	0	0	0
Midwest	0	0	1	1	0	0	0	0	0	0
South	0	0	0	0	0	0	0	0	0	1
West	1	1	0	0	1	0	0	0	1	2
Total	1	1	1	1	1	0	0	0	2	3
White										
Age at diagnosis (yr)										
13-14	0	0	0	0	0	0	0	0	0	0
15-19	3	4	0	3	2	10	8	6	2	7
20-24	35	34	42	19	28	49	48	44	18	32
25-29	82	96	104	80	103	90	85	90	76	81
30-34	90	106	112	119	139	100	98	107	86	112
35-39	75	109	99	115	139	81	96	98	71	109
40-44	46	63	71	66	91	52	73	78	46	59
45-49	57	50	69	51	56	39	46	56	39	50
50-54	37	50	43	33	54	44	44	41	38	49
55-59	37	32	45	34	31	32	28	36	34	27
60-64	18	22	16	14	20	10	11	14	16	17
≥ 65	18	8	9	10	15	6	7	6	8	10
Region of residence^a										
Northeast	94	110	93	102	113	90	92	82	56	72
Midwest	93	117	106	91	122	93	111	100	64	110
South	195	214	272	247	316	236	228	282	230	277
West	115	132	138	104	128	93	113	110	85	93
Total	497	574	610	543	679	513	543	574	434	553
Multiracial										
Age at diagnosis (yr)										
13-14	0	0	0	0	0	0	0	0	0	0
15-19	0	0	0	0	1	2	3	1	0	2
20-24	2	5	4	6	3	6	10	3	2	3
25-29	8	5	4	5	5	8	11	11	6	5

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
30–34	6	5	13	10	11	4	7	5	4	5
35–39	4	3	3	10	5	6	6	12	4	5
40–44	5	4	3	1	7	5	5	7	5	4
45–49	7	3	3	4	1	4	8	6	5	3
50–54	5	7	5	2	4	4	5	4	1	4
55–59	3	4	2	3	4	3	2	2	1	2
60–64	3	3	1	2	1	1	3	1	1	1
≥ 65	2	1	3	0	0	0	2	2	1	0
Region of residence^a										
Northeast	13	7	17	5	6	12	11	10	4	5
Midwest	11	7	8	9	6	6	9	11	7	5
South	12	16	12	22	20	18	28	25	14	18
West	8	11	5	8	9	7	13	8	5	6
Total	44	41	42	43	41	44	60	54	30	35
Total										
Age at diagnosis (yr)										
13–14	1	0	0	0	0	0	0	0	1	1
15–19	13	12	4	7	7	29	21	20	13	17
20–24	77	87	84	58	77	112	104	100	50	73
25–29	171	177	207	159	183	159	150	170	143	155
30–34	208	224	231	211	264	179	178	180	162	185
35–39	170	215	198	201	240	153	171	193	136	180
40–44	126	139	153	137	178	119	124	139	86	115
45–49	146	132	129	113	121	102	107	117	87	97
50–54	128	147	117	92	119	105	106	99	73	101
55–59	118	113	111	87	98	77	78	82	75	74
60–64	67	76	72	54	69	44	47	49	45	43
≥ 65	65	54	57	52	60	30	30	34	22	35
Region of residence^a										
Northeast	346	343	308	263	283	249	238	237	151	185
Midwest	184	199	184	162	209	170	180	180	129	183
South	479	527	560	499	617	485	473	538	417	496
West	282	307	310	245	307	205	226	228	197	211
Total	1,291	1,376	1,362	1,169	1,415	1,109	1,117	1,182	895	1,075

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 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.

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

^bHispanic/Latino persons can be of any race.

Table 6b. Diagnoses of HIV infection attributed to injection drug use, by year of diagnosis, assigned sex at birth, race/ethnicity, and selected characteristics, 2017–2021—United States and 6 dependent areas

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	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	0	1	0	0	0	0	0	0	0	1
20–24	0	0	2	1	0	1	0	2	0	1
25–29	6	1	0	0	3	2	3	1	5	5
30–34	3	3	2	4	1	2	2	2	4	4
35–39	0	0	3	1	0	2	4	6	4	2
40–44	1	0	3	0	2	2	1	2	1	0
45–49	0	1	1	0	2	2	2	1	2	2
50–54	3	2	1	2	0	3	2	2	0	3
55–59	0	0	0	0	0	0	1	0	1	1
60–64	1	0	0	0	0	1	1	0	0	0
≥ 65	1	0	0	0	0	1	0	1	0	0
Region of residence^a										
Northeast	1	0	0	0	0	1	0	0	0	0
Midwest	2	3	3	2	3	1	3	5	8	6
South	2	1	3	4	3	4	6	6	1	1
West	11	6	8	2	4	9	6	7	8	10
U.S. dependent areas	0	0	0	0	0	0	0	0	0	0
Total	17	9	14	9	10	16	15	18	17	17
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	0	1	0	0	0	0	0	0	0	0
25–29	1	0	1	1	0	2	0	0	0	2
30–34	1	3	0	2	2	0	2	2	2	0
35–39	1	0	3	1	2	1	1	1	1	0
40–44	3	2	2	2	2	0	0	1	0	1
45–49	2	2	2	2	2	0	0	1	0	0
50–54	1	1	3	2	2	1	0	0	1	1
55–59	0	1	1	0	1	0	1	0	0	0
60–64	0	1	1	1	2	1	1	0	0	0
≥ 65	0	1	0	1	0	0	0	0	0	0
Region of residence^a										
Northeast	4	5	3	2	2	1	2	2	1	1
Midwest	0	1	3	2	4	0	0	0	0	1
South	2	4	2	1	1	1	2	1	2	2

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
West	4	1	6	8	6	3	2	3	2	2
U.S. dependent areas	0	0	0	0	0	0	0	0	0	0
Total	10	11	14	13	14	5	5	6	5	6
Black/African American										
Age at diagnosis (yr)										
13-14	0	0	0	0	0	0	0	0	0	0
15-19	5	4	3	2	2	12	9	7	8	5
20-24	19	22	20	18	25	35	23	32	18	24
25-29	34	45	50	33	33	36	30	45	37	36
30-34	49	43	58	42	50	39	42	42	36	38
35-39	44	53	42	33	48	39	36	42	31	37
40-44	30	35	39	28	43	42	29	39	21	33
45-49	42	41	31	30	30	41	32	37	29	29
50-54	42	49	37	29	33	40	40	34	25	29
55-59	55	51	40	37	43	33	38	33	30	31
60-64	32	36	42	23	34	25	24	27	18	19
≥ 65	33	36	32	28	31	19	16	20	10	19
Region of residence^a										
Northeast	120	118	107	85	94	95	76	97	52	68
Midwest	61	57	52	43	47	60	48	50	43	53
South	173	195	190	149	191	172	158	171	132	147
West	30	43	41	24	39	35	35	40	34	32
U.S. dependent areas	0	2	3	1	1	0	0	0	1	0
Total	385	415	391	301	373	362	318	358	261	300
Hispanic/Latino^b										
Age at diagnosis (yr)										
13-14	0	0	0	0	0	0	0	0	1	0
15-19	5	3	1	2	1	5	2	6	3	3
20-24	23	24	17	14	21	20	25	19	11	12
25-29	43	32	46	39	40	21	21	23	19	25
30-34	64	67	47	37	61	35	28	22	30	27
35-39	46	50	52	42	49	26	29	35	26	26
40-44	44	39	39	45	38	18	16	13	15	18
45-49	41	38	24	28	32	18	20	19	11	13
50-54	48	43	30	26	28	14	15	19	10	14
55-59	27	27	26	16	21	10	10	11	10	12
60-64	16	17	15	15	15	8	9	7	9	6
≥ 65	15	10	17	14	13	4	5	5	5	6
Region of residence^a										
Northeast	115	103	89	69	69	50	57	47	38	38
Midwest	16	14	11	14	26	10	10	14	7	7
South	95	96	82	77	86	53	52	53	38	50
West	112	114	112	99	119	58	58	60	62	65
U.S. dependent areas	35	23	19	19	19	9	3	5	3	2

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Total	372	350	313	278	318	179	179	178	149	162
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	0
25-29	0	0	1	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	1
35-39	0	0	0	1	0	0	0	0	0	1
40-44	0	0	0	0	0	0	0	0	0	0
45-49	0	1	0	0	0	0	0	0	1	0
50-54	1	0	0	0	0	0	0	0	0	1
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	1	0
≥ 65	0	0	0	0	1	0	0	0	0	0
Region of residence^a										
Northeast	0	0	0	0	0	0	0	0	0	0
Midwest	0	0	1	1	0	0	0	0	0	0
South	0	0	0	0	0	0	0	0	0	1
West	1	1	0	0	1	0	0	0	1	2
U.S. dependent areas	0	0	0	0	0	0	0	0	0	0
Total	1	2	1	1	1	0	0	0	2	3
White										
Age at diagnosis (yr)										
13-14	0	0	0	0	0	0	0	0	0	0
15-19	3	4	0	3	2	10	8	6	2	7
20-24	35	34	42	19	28	49	48	44	18	32
25-29	82	96	104	80	103	90	85	90	76	81
30-34	90	106	112	119	139	100	98	107	86	112
35-39	75	109	99	115	139	81	96	98	71	109
40-44	46	63	71	66	91	52	73	78	46	59
45-49	57	50	69	52	57	39	46	56	39	50
50-54	37	50	43	33	54	44	44	41	38	49
55-59	37	32	45	34	31	32	28	36	34	27
60-64	18	22	16	14	20	10	11	14	16	17
≥ 65	18	8	9	10	15	6	7	6	8	10
Region of residence^a										
Northeast	94	110	93	102	113	90	92	82	56	72
Midwest	93	117	106	91	122	93	111	100	64	110
South	195	214	272	247	316	236	228	282	230	277
West	115	132	138	104	128	93	113	110	85	93
U.S. dependent areas	0	0	0	0	0	0	0	0	0	0
Total	497	574	610	543	679	513	543	574	434	553
Multiracial										

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Age at diagnosis (yr)										
13-14	0	0	0	0	0	0	0	0	0	0
15-19	0	0	0	0	1	2	3	1	0	2
20-24	2	5	4	6	3	6	10	3	2	3
25-29	8	5	4	5	5	8	11	11	6	5
30-34	6	5	13	10	11	4	7	5	4	5
35-39	5	3	3	10	5	6	6	12	4	5
40-44	5	4	3	1	7	5	5	7	5	4
45-49	7	3	3	4	1	4	8	6	5	3
50-54	5	7	5	2	4	4	5	4	1	4
55-59	3	4	2	3	4	3	2	2	1	2
60-64	3	3	1	2	1	1	3	1	1	1
≥ 65	2	1	3	0	0	0	2	2	1	0
Region of residence^a										
Northeast	13	7	17	5	6	12	11	10	4	5
Midwest	11	7	8	9	6	6	9	11	7	5
South	12	16	12	22	20	18	28	25	14	18
West	8	11	5	8	9	7	13	8	5	6
U.S. dependent areas	0	0	0	0	0	0	0	0	0	0
Total	44	41	42	43	41	44	60	54	30	35
Total										
Age at diagnosis (yr)										
13-14	1	0	0	0	0	0	0	0	1	1
15-19	14	12	4	7	7	29	21	20	13	17
20-24	78	87	84	58	77	112	105	100	50	73
25-29	173	179	207	159	184	159	150	170	143	155
30-34	213	227	232	214	264	180	179	180	162	186
35-39	171	216	202	203	242	155	171	194	136	180
40-44	129	143	157	142	182	119	124	139	87	115
45-49	149	135	130	115	123	106	108	119	88	97
50-54	137	152	119	93	122	106	106	100	74	102
55-59	123	115	113	90	100	78	78	83	76	74
60-64	71	78	75	56	72	45	48	50	45	43
≥ 65	69	56	61	53	61	30	30	34	23	36
Region of residence^a										
Northeast	346	343	308	263	283	249	238	237	151	185
Midwest	184	199	184	162	209	170	180	180	129	183
South	479	527	560	499	617	485	473	538	417	496
West	282	307	310	245	307	205	226	228	197	211
U.S. dependent areas	35	25	22	20	20	9	3	5	4	2
Total	1,325	1,401	1,385	1,189	1,436	1,118	1,120	1,188	898	1,076

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 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.

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

^bHispanic/Latino persons can be of any race.

Table 7a. Diagnoses of HIV infection attributed to heterosexual contact, by year of diagnosis, assigned sex at birth, race/ethnicity, and selected characteristics, 2017–2021—United States

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	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	0	1	0	0	0	0	1	1	0	1
20–24	0	1	2	0	0	3	1	2	0	0
25–29	0	1	0	0	4	5	1	2	1	5
30–34	2	1	1	0	1	2	1	3	5	5
35–39	3	1	1	0	1	4	2	6	6	5
40–44	0	0	2	0	1	3	3	5	5	2
45–49	0	0	0	0	0	5	2	3	1	5
50–54	0	0	1	2	2	4	2	2	1	6
55–59	1	2	1	0	1	1	3	1	2	1
60–64	0	0	0	0	0	2	0	1	1	0
≥ 65	0	0	0	0	0	0	0	1	1	1
Region of residence^a										
Northeast	0	1	0	0	1	0	0	0	1	0
Midwest	0	2	2	0	2	3	1	9	4	10
South	3	3	6	1	3	5	7	5	7	7
West	4	3	1	1	5	20	7	11	11	12
Total	7	8	9	3	11	27	15	25	23	29
Asian										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	0	0	1	1	0	2	0	1	1	1
20–24	2	5	0	1	3	5	7	6	2	8
25–29	3	2	3	1	4	17	15	10	12	9
30–34	4	7	2	2	2	8	16	16	13	11
35–39	10	7	2	4	7	23	10	16	14	12
40–44	3	10	5	3	6	11	13	7	3	18
45–49	5	6	4	3	3	12	8	15	8	3
50–54	2	6	6	4	6	12	8	4	8	11
55–59	2	3	3	4	4	8	8	8	6	3
60–64	4	5	3	2	3	6	5	7	7	5
≥ 65	3	6	3	6	4	4	7	3	3	6
Region of residence^a										

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Northeast	8	13	13	4	12	15	26	13	11	14
Midwest	6	2	1	3	3	19	5	11	10	11
South	11	22	11	13	18	30	27	29	21	32
West	13	18	7	9	7	45	38	38	35	28
Total	38	55	32	29	40	108	96	92	77	85
Black/African American										
Age at diagnosis (yr)										
13-14	0	0	0	0	0	3	3	4	3	5
15-19	23	32	26	18	18	137	131	95	75	97
20-24	123	108	112	85	95	401	391	375	281	333
25-29	197	225	170	151	167	516	473	440	364	413
30-34	197	229	184	156	201	533	461	458	390	451
35-39	219	207	180	142	185	469	452	424	317	428
40-44	185	165	164	139	162	405	424	374	278	366
45-49	187	169	193	120	138	393	360	328	268	323
50-54	199	196	169	110	135	345	325	318	215	267
55-59	187	159	158	126	144	293	300	272	196	254
60-64	124	100	131	88	123	196	172	190	137	154
≥ 65	112	106	119	88	102	165	129	155	88	118
Region of residence^a										
Northeast	310	251	243	185	249	633	555	521	391	486
Midwest	191	202	187	135	141	499	478	475	362	409
South	1,186	1,164	1,108	852	1,012	2,485	2,317	2,187	1,666	2,085
West	65	79	68	52	68	237	271	250	193	228
Total	1,752	1,695	1,606	1,225	1,470	3,853	3,621	3,433	2,612	3,207
Hispanic/Latino^b										
Age at diagnosis (yr)										
13-14	0	0	0	0	1	1	5	4	0	1
15-19	8	6	10	2	4	38	32	33	30	36
20-24	27	29	25	30	30	114	94	112	97	95
25-29	68	58	75	49	61	141	131	142	98	137
30-34	74	91	65	44	64	128	129	147	100	131
35-39	78	83	72	63	74	127	143	113	109	145
40-44	80	70	70	41	73	104	106	113	91	119
45-49	54	75	57	38	49	119	107	96	70	111
50-54	53	59	51	52	54	84	107	89	71	83
55-59	37	46	39	27	40	71	68	63	51	71
60-64	31	22	33	23	28	40	46	46	33	36
≥ 65	27	33	21	19	28	38	44	39	22	33
Region of residence^a										
Northeast	140	139	106	83	133	262	246	228	195	223
Midwest	31	33	33	18	27	63	55	70	45	60
South	272	314	293	221	257	454	469	455	353	468

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
West	93	86	83	65	89	226	240	245	178	246
Total	536	572	516	387	506	1,005	1,010	997	771	997
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	1	0	1	1	1	0
20-24	0	0	0	0	0	0	0	0	1	1
25-29	1	0	1	0	0	2	0	1	2	0
30-34	1	1	0	1	0	3	2	1	1	1
35-39	0	0	0	1	0	2	0	2	1	1
40-44	1	0	0	0	0	0	0	1	1	2
45-49	1	0	0	0	0	0	0	0	1	0
50-54	0	0	0	0	0	0	1	1	1	2
55-59	0	0	0	0	1	0	0	0	2	0
60-64	0	0	0	0	0	0	0	0	1	0
≥ 65	1	0	0	0	0	0	0	0	0	0
Region of residence^a										
Northeast	1	0	0	0	0	1	1	0	1	2
Midwest	0	0	0	0	0	0	0	4	0	0
South	1	1	0	0	1	2	0	1	4	1
West	2	0	1	2	1	4	3	2	8	4
Total	5	2	1	2	3	7	4	7	12	7
White										
Age at diagnosis (yr)										
13-14	0	0	0	0	0	1	1	0	0	1
15-19	5	3	3	1	3	26	30	31	21	33
20-24	15	19	20	15	20	93	89	90	96	78
25-29	48	47	50	31	44	110	121	127	115	92
30-34	50	58	39	40	41	124	123	123	113	142
35-39	45	51	43	37	49	105	111	120	105	128
40-44	51	42	46	31	45	83	102	95	89	133
45-49	52	54	53	41	35	106	106	105	103	98
50-54	63	44	49	38	45	95	92	91	69	90
55-59	49	51	45	35	38	93	71	81	77	89
60-64	37	38	30	27	27	38	37	47	30	42
≥ 65	34	31	25	27	32	25	25	22	30	37
Region of residence^a										
Northeast	82	79	62	65	63	115	104	107	98	95
Midwest	49	54	60	52	51	147	160	177	147	189
South	240	240	214	167	213	485	486	481	421	503
West	76	65	67	40	53	151	160	167	181	174
Total	447	438	404	324	379	898	909	932	847	962
Multiracial										

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Age at diagnosis (yr)										
13–14	0	0	0	0	0	1	0	0	0	0
15–19	1	1	1	1	1	9	13	12	10	3
20–24	5	5	4	4	2	29	26	27	23	18
25–29	12	11	8	1	5	24	44	38	29	27
30–34	14	14	11	5	7	31	38	25	20	26
35–39	13	5	7	4	7	32	30	23	16	27
40–44	14	5	10	5	8	15	17	22	11	17
45–49	10	8	8	6	6	25	28	22	12	13
50–54	6	10	8	5	6	16	14	19	10	14
55–59	8	4	8	3	4	15	9	7	9	11
60–64	9	3	3	2	3	4	12	8	10	6
≥ 65	6	4	8	1	3	7	8	7	3	7
Region of residence^a										
Northeast	22	24	23	8	11	43	43	41	24	31
Midwest	12	9	14	5	12	31	34	33	30	21
South	56	34	34	20	26	106	127	108	86	96
West	8	3	5	3	2	27	33	29	13	21
Total	97	69	76	36	52	207	237	210	153	169
Total										
Age at diagnosis (yr)										
13–14	0	0	0	0	1	6	8	8	3	6
15–19	38	44	41	24	27	211	208	174	137	171
20–24	171	167	163	136	150	646	607	611	499	532
25–29	327	344	307	233	285	815	784	760	620	682
30–34	342	401	302	249	316	828	770	773	643	766
35–39	368	354	304	251	321	761	749	704	569	745
40–44	333	292	296	219	294	621	665	617	477	656
45–49	308	312	315	208	231	658	611	569	463	552
50–54	323	314	284	210	247	555	548	523	375	472
55–59	284	264	254	195	232	480	459	432	343	428
60–64	205	168	200	141	185	287	271	297	219	243
≥ 65	183	179	176	140	170	238	213	227	148	202
Region of residence^a										
Northeast	564	506	448	344	469	1,068	974	910	721	851
Midwest	289	301	297	214	237	761	733	778	598	700
South	1,768	1,778	1,666	1,275	1,529	3,567	3,433	3,266	2,556	3,192
West	261	253	232	173	224	710	751	742	619	713
Total	2,882	2,839	2,643	2,006	2,460	6,106	5,892	5,695	4,494	5,456

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 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 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.

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

^bHispanic/Latino persons can be of any race.

Table 7b. Diagnoses of HIV infection attributed to heterosexual contact, by year of diagnosis, assigned sex at birth, race/ethnicity and selected characteristics, 2017–2021—United States and 6 dependent areas

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	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	0	1	0	0	0	0	1	1	0	1
20–24	0	1	2	0	0	3	1	2	0	0
25–29	0	1	0	0	4	5	1	2	1	5
30–34	2	1	1	0	1	2	1	3	5	5
35–39	3	1	1	0	1	4	2	6	6	5
40–44	0	0	2	0	1	3	3	5	5	2
45–49	0	0	0	0	0	5	2	3	1	5
50–54	0	0	1	2	2	4	2	2	1	6
55–59	1	2	1	0	1	1	3	1	2	1
60–64	0	0	0	0	0	2	0	1	1	0
≥ 65	0	0	0	0	0	0	0	1	1	1
Region of residence^a										
Northeast	0	1	0	0	1	0	0	0	1	0
Midwest	0	2	2	0	2	3	1	9	4	10
South	3	3	6	1	3	5	7	5	7	7
West	4	3	1	1	5	20	7	11	11	12
U.S. dependent areas	0	0	0	0	0	0	0	0	0	0
Total	7	8	9	3	11	27	15	25	23	29
Asian										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	0	0	0	0	0
15–19	0	0	1	1	0	2	0	1	1	1
20–24	2	5	0	1	3	5	7	6	2	8
25–29	3	2	3	1	4	17	15	10	12	9
30–34	4	7	2	2	2	8	16	16	13	11
35–39	10	7	2	4	7	23	10	16	14	12
40–44	3	10	5	3	6	11	13	7	3	18
45–49	5	6	4	3	3	12	8	15	8	3
50–54	2	6	6	4	6	12	8	4	8	11
55–59	2	3	3	4	4	8	8	8	6	3

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
60–64	4	5	3	2	3	6	5	7	7	5
≥ 65	3	6	3	6	4	4	7	3	3	6
Region of residence^a										
Northeast	8	13	13	4	12	15	26	13	11	14
Midwest	6	2	1	3	3	19	5	11	10	11
South	11	22	11	13	18	30	27	29	21	32
West	13	18	7	9	7	45	38	38	35	28
U.S. dependent areas	0	0	0	0	0	0	0	0	0	0
Total	38	55	32	29	40	108	96	92	77	85
Black/African American										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	3	3	4	3	5
15–19	23	32	26	18	18	137	131	95	75	97
20–24	123	108	112	85	95	401	391	375	281	333
25–29	197	226	170	151	167	516	473	440	364	413
30–34	197	229	184	157	201	534	461	458	390	451
35–39	219	207	180	142	185	469	452	425	317	428
40–44	185	165	164	139	162	405	424	374	278	366
45–49	187	170	193	120	138	393	360	328	268	323
50–54	199	196	169	110	135	345	325	319	215	268
55–59	187	161	158	126	144	294	300	272	197	254
60–64	124	100	131	88	124	196	172	191	137	154
≥ 65	112	107	119	89	102	165	130	155	88	118
Region of residence^a										
Northeast	310	251	243	185	249	633	555	521	391	486
Midwest	191	202	187	135	141	499	478	475	362	409
South	1,186	1,164	1,108	852	1,012	2,485	2,317	2,187	1,666	2,085
West	65	79	68	52	68	237	271	250	193	228
U.S. dependent areas	0	5	0	2	0	3	1	3	2	1
Total	1,753	1,700	1,607	1,226	1,470	3,856	3,622	3,436	2,613	3,208
Hispanic/Latino^b										
Age at diagnosis (yr)										
13–14	0	0	0	0	1	1	5	4	0	1
15–19	9	7	10	2	7	40	34	33	30	38
20–24	35	31	28	32	31	119	102	116	102	104
25–29	72	66	77	52	63	152	138	147	102	140
30–34	82	99	71	45	69	134	134	156	101	135
35–39	88	88	76	67	78	137	147	117	112	158
40–44	89	72	77	45	80	111	114	125	96	132
45–49	59	79	68	41	59	130	120	105	74	118
50–54	59	72	55	57	65	94	118	94	75	93
55–59	45	50	49	35	44	82	76	75	58	74
60–64	41	27	40	28	33	44	50	51	36	43

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
≥ 65	36	42	32	22	40	42	50	48	26	42
Region of residence^a										
Northeast	140	139	106	83	133	262	246	228	195	223
Midwest	31	33	33	18	27	63	55	70	45	60
South	272	314	293	221	257	454	469	455	353	468
West	93	86	83	65	89	226	240	245	178	246
U.S. dependent areas	79	61	64	38	63	80	77	74	41	80
Total	615	633	580	426	569	1,085	1,088	1,071	812	1,077
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	1	0	1	1	1	0
20-24	1	0	0	0	0	0	0	1	1	1
25-29	1	0	1	0	0	2	0	1	2	0
30-34	1	1	0	1	0	3	2	1	1	1
35-39	0	0	0	1	0	2	0	2	1	1
40-44	1	0	0	0	0	0	0	1	1	2
45-49	1	0	0	0	0	0	0	0	1	0
50-54	0	0	0	0	0	0	1	1	1	2
55-59	0	0	0	0	1	0	0	0	2	0
60-64	0	0	0	0	0	0	0	0	1	0
≥ 65	1	0	0	0	0	0	0	0	0	0
Region of residence^a										
Northeast	1	0	0	0	0	1	1	0	1	2
Midwest	0	0	0	0	0	0	0	4	0	0
South	1	1	0	0	1	2	0	1	4	1
West	2	0	1	2	1	4	3	2	8	4
U.S. dependent areas	1	0	0	0	0	0	0	1	0	0
Total	6	2	1	2	3	7	4	8	12	7
White										
Age at diagnosis (yr)										
13-14	0	0	0	0	0	1	1	0	0	1
15-19	5	3	3	1	3	26	30	31	21	33
20-24	15	19	20	15	20	93	89	90	96	78
25-29	48	47	50	31	44	110	121	127	115	92
30-34	50	58	39	40	41	124	123	123	113	142
35-39	45	51	43	37	49	105	111	120	105	128
40-44	51	42	46	31	45	83	102	95	89	133
45-49	52	55	54	41	35	106	106	105	103	98
50-54	63	44	49	38	45	96	92	91	69	90
55-59	49	51	45	35	38	93	71	81	77	89
60-64	37	38	30	27	27	38	37	47	30	42
≥ 65	34	31	25	27	32	25	25	22	30	37

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Region of residence^a										
Northeast	82	79	62	65	63	115	104	107	98	95
Midwest	49	54	60	52	51	147	160	177	147	189
South	240	240	214	167	213	485	486	481	421	503
West	76	65	67	40	53	151	160	167	181	174
U.S. dependent areas	0	0	1	0	0	1	0	0	0	0
Total	447	438	405	324	379	899	909	932	847	962
Multiracial										
Age at diagnosis (yr)										
13–14	0	0	0	0	0	1	0	0	0	0
15–19	1	1	1	1	1	9	13	12	10	3
20–24	5	5	4	4	2	29	26	27	23	18
25–29	12	11	8	1	5	24	44	38	29	27
30–34	14	14	11	5	7	31	38	25	20	26
35–39	13	6	7	4	7	32	30	23	16	27
40–44	14	5	10	5	8	15	17	22	11	17
45–49	10	8	8	6	6	25	28	22	12	13
50–54	6	10	8	5	6	16	14	19	10	14
55–59	8	4	8	3	4	15	9	7	9	11
60–64	9	3	3	2	3	4	12	8	10	6
≥ 65	6	4	8	1	3	7	8	7	3	7
Region of residence^a										
Northeast	22	24	23	8	11	43	43	41	24	31
Midwest	12	9	14	5	12	31	34	33	30	21
South	56	34	34	20	26	106	127	108	86	96
West	8	3	5	3	2	27	33	29	13	21
U.S. dependent areas	0	1	0	0	0	1	0	0	0	0
Total	97	70	76	36	52	208	237	210	153	169
Total										
Age at diagnosis (yr)										
13–14	0	0	0	0	1	6	8	8	3	6
15–19	39	45	41	24	30	214	210	174	137	173
20–24	180	169	166	138	151	651	615	616	504	541
25–29	331	353	309	236	288	826	791	765	624	685
30–34	351	409	308	251	321	834	775	782	644	770
35–39	378	360	308	255	326	771	753	709	572	758
40–44	342	295	303	222	301	628	673	629	482	669
45–49	313	317	327	211	241	670	625	578	467	559
50–54	329	328	289	215	258	566	559	529	379	482
55–59	292	270	264	203	236	492	467	444	350	431
60–64	215	173	207	147	190	291	276	303	222	250
≥ 65	192	188	187	144	181	242	220	236	152	211
Region of residence^a										

	Male sex at birth					Female sex at birth				
	2017	2018	2019	2020 (COVID-19 Pandemic)	2021	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Northeast	564	506	448	344	469	1,068	974	910	721	851
Midwest	289	301	297	214	237	761	733	778	598	700
South	1,768	1,778	1,666	1,275	1,529	3,567	3,433	3,266	2,556	3,192
West	261	253	232	173	224	710	751	742	619	713
U.S. dependent areas	81	68	66	40	63	84	78	78	42	80
Total	2,962	2,906	2,709	2,046	2,523	6,190	5,970	5,773	4,536	5,536

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 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 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.

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

^bHispanic/Latino persons can be of any race.

Table 8a. Diagnoses of HIV infection among persons aged 13–24 years, by age at diagnosis, assigned sex at birth, and selected characteristics, 2021—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	8	0.2	260	3.9	990	22.6	2,788	42.1	2,052	47.1	6,098	23.0
Female	7	0.2	63	1.0	139	3.3	349	5.5	271	6.5	829	3.3
Race/Ethnicity												
American Indian/Alaska Native	0	0.0	2	1.8	10	14.1	14	12.8	7	9.8	33	7.6
Asian	0	0.0	2	0.3	21	4.6	43	6.0	51	10.1	117	4.2
Black/African American	8	0.7	194	11.0	631	54.1	1,720	94.6	1,144	95.0	3,697	51.5
Hispanic/Latino ^b	6	0.3	81	2.5	287	13.8	783	25.8	697	36.1	1,854	14.7
Native Hawaiian/Other Pacific Islander	0	0.0	2	7.6	4	23.5	3	11.8	2	11.6	11	10.6
White	1	0.0	28	0.4	128	2.9	468	6.8	346	7.6	971	3.6
Multiracial	0	0.0	14	2.7	48	15.6	106	24.1	76	28.0	244	12.8
Transmission category^c												
Male sex at birth^d												
Male-to-male sexual contact ^e	5	—	246	—	947	—	2,599	—	1,874	—	5,671	—
Injection drug use ^f	0	—	1	—	5	—	36	—	41	—	84	—
Male-to-male sexual contact ^e and injection drug use ^f	1	—	3	—	16	—	67	—	70	—	156	—
Heterosexual contact ^g	1	—	6	—	21	—	84	—	66	—	178	—
Perinatal ^h	1	—	3	—	1	—	2	—	1	—	8	—
Other ⁱ	0	—	0	—	0	—	0	—	0	—	0	—
Subtotal	8	0.2	260	3.9	990	22.6	2,788	42.1	2,052	47.1	6,098	23.0
Female sex at birth^d												
Injection drug use ^f	1	—	4	—	13	—	36	—	37	—	91	—
Heterosexual contact ^g	6	—	51	—	121	—	304	—	229	—	710	—

	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
Perinatal ^h	0	—	8	—	5	—	10	—	5	—	28	—
Other ⁱ	0	—	0	—	0	—	0	—	0	—	0	—
Subtotal	7	0.2	63	1.0	139	3.3	349	5.5	271	6.5	829	3.3
Region of residence^l												
Northeast	2	0.1	54	2.6	120	8.1	378	17.3	322	23.0	876	10.2
Midwest	5	0.3	45	1.6	156	8.7	475	17.1	304	17.1	985	9.0
South	5	0.1	163	3.2	675	20.6	1,793	36.0	1,275	38.9	3,911	19.5
West	3	0.1	61	2.0	178	8.9	491	16.2	422	20.2	1,155	9.3
Total	15	0.2	323	2.5	1,129	13.2	3,137	24.2	2,323	27.2	6,927	13.3

Note: Numbers less than 12 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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 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, assigned sex at birth, and selected characteristics, 2021—United States and 6 dependent areas

	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	8	260	996	2,814	2,069	6,147
Female	7	64	140	353	276	840
Race/Ethnicity						
American Indian/Alaska Native	0	2	10	14	7	33
Asian	0	2	21	43	51	117
Black/African American	8	194	631	1,721	1,144	3,698
Hispanic/Latino ^a	6	82	294	812	719	1,913
Native Hawaiian/Other Pacific Islander	0	2	4	3	2	11
White	1	28	128	468	346	971
Multiracial	0	14	48	106	76	244
Transmission category^b						
Male sex at birth^c						
Male-to-male sexual contact ^d	5	246	949	2,625	1,890	5,715
Injection drug use ^e	0	1	5	36	41	84
Male-to-male sexual contact ^d and injection drug use ^e	1	3	17	67	70	157
Heterosexual contact ^f	1	6	24	84	67	182
Perinatal ^g	1	3	1	2	1	8

	13–14 years	15–17 years	18–19 years	20–22 years	23–24 years	Total
	No.	No.	No.	No.	No.	No.
Other ^h	0	0	0	0	0	0
Subtotal	8	260	996	2,814	2,069	6,147
Female sex at birth^c						
Injection drug use ^e	1	4	13	36	37	91
Heterosexual contact ^f	6	52	122	308	234	721
Perinatal ^g	0	8	5	10	5	28
Other ^h	0	0	0	0	0	0
Subtotal	7	64	140	353	276	840
Region of residenceⁱ						
Northeast	2	54	120	378	322	876
Midwest	5	45	156	475	304	985
South	5	163	675	1,793	1,275	3,911
West	3	61	178	491	422	1,155
U.S. dependent areas	0	1	7	30	22	60
Total	15	324	1,136	3,167	2,345	6,987

Note: Numbers less than 12 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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 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, 2017–2021—United States

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
American Indian/Alaska Native	0	0.0	0	0.0	1	0.2	1	0.2	0	0.0
Asian	8	0.3	6	0.2	6	0.2	2	0.1	2	0.1
Black/African American	56	0.8	49	0.7	31	0.4	35	0.5	33	0.5
Hispanic/Latino ^b	15	0.1	10	0.1	7	0.1	9	0.1	11	0.1
Native Hawaiian/other Pacific Islander	1	0.9	0	0.0	0	0.0	1	0.9	0	0.0
White	15	0.1	15	0.1	7	0.0	12	0.0	5	0.0
Multiracial	10	0.4	6	0.2	5	0.2	0	0.0	2	0.1
Total	105	0.2	86	0.2	57	0.1	60	0.1	53	0.1

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 Rates are per 100,000 population.

^b 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, 2017–2021—United States and 6 dependent areas

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
American Indian/Alaska Native	0	0	1	1	0
Asian	8	6	6	2	2
Black/African American	56	49	31	35	33
Hispanic/Latino ^a	15	10	7	9	11
Native Hawaiian/other Pacific Islander	1	0	0	1	0
White	15	15	7	12	5
Multiracial	10	6	5	0	2
Total	105	86	57	60	53

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 trends based on these numbers, should be interpreted with caution.

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

Table 10a. Diagnoses of HIV infection among Hispanic/Latino persons aged ≥ 13 years, by place of birth and transmission category, 2021—United States and 6 dependent areas

	Caribbean ^a															
	United States		South America ^b		Central America ^c		Mexico		Puerto Rico		Cuba		Other		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No. ^d	%
Transmission category^e																
Male sex at birth^f																
Male-to-male sexual contact ^g	2,472	85.4	646	92.2	442	90.1	827	86.8	325	77.7	302	90.6	117.0	72.9	8,000	86.8
Injection drug use ^h	105	3.6	8	1.1	8	1.6	24	2.5	26	6.1	2	0.5	5.0	3.3	318	3.4
Male-to-male sexual contact ^g and injection drug use ^h	159	5.5	7	1	6	1.1	25	2.6	7	1.6	2	0.5	3.0	2.0	327	3.5
Heterosexual contact ⁱ	157	5.4	39	5.6	33	6.7	77	8.0	61	14.5	28	8.4	35.0	21.7	569	6.2
Perinatal ^j	0	0.0	1	0.2	2	0.4	0	0.0	0	0.0	0	0.0	0.0	0.0	3	0.0
Other ^k	1	0.0	0	0.0	0	0	1	0.1	0	0.0	0	0.0	0.0	0.1	4	0.0
Subtotal	2,894	100	701	100	491	100	953	100	418	100	333	100	161	100	9,222	100
Female sex at birth^f																
Injection drug use ^h	71	18.3	3	4	5	4.3	6	9.1	6	6.0	1	1.1	5.0	6.8	162	13.0
Heterosexual contact ⁱ	315	81.5	69	94.7	99	92.9	62	90.3	93	94.0	46	98.5	64.0	93.0	1,077	86.5
Perinatal ^j	1	0.2	1	1.4	3	2.7	0	0.6	0	0.0	0	0.4	0.0	0.1	6	0.5
Other ^k	0	0.0	0	0	0	0.1	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0
Subtotal	387	100	73	100	107	100	69	100	99	100	47	100	69	100	1,245	100
Total	3,281	100	774	100	598	100	1,022	100	517	100	380	100	230	100	10,467	100

Note. 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 Barthelemy, 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 Total includes persons whose place of birth is not among those listed and persons whose place of birth is unknown.
- ^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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 ≥ 13 years, by place of birth and exposure category, 2021—United States and 6 dependent areas

Exposure category ^e	Caribbean ^a															
	United States		South America ^b		Central America ^c		Mexico		Puerto Rico		Cuba		Other		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No. ^d	%
Transgender woman^f																
Sexual contact ^g	74	88.1	8	100	23	100	33	97.1	6	85.7	7	100	5	100	237	91.9
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	1	0.4
Sexual contact ^g and injection drug use ^h	8	9.5	0	0.0	0	0.0	0	0.0	1	14.3	0	0.0	0	0.0	13	5.0
Other ⁱ	2	2.4	0	0.0	0	0.0	1	2.9	0	0.0	0	0.0	0	0.0	7	2.7
Subtotal	84	100	8	100	23	100	34	100	7	100	7	100	5	100	258	100
Transgender man^f																
Sexual contact ^g	9	90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	12	85.7
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
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
Other ⁱ	1	10.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	14.3
Subtotal	10	100	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	14	100
Additional gender identity^j																
Sexual contact ^g	7	77.8	0	0.0	1	100	0	0.0	0	0.0	0	0.0	1	100	11	78.6
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
Sexual contact ^g and injection drug use ^h	1	11.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	14.3
Other ⁱ	1	11.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	7.1
Subtotal	9	100	0	0.0	1	100	0	0.0	0	0.0	0	0.0	1	100	14	100
Total	103	100	8	100	24	100	34	100	7	100	7	100	6	100	286	100

Note. 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 Barthelemy, 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 Total includes persons whose place of birth is not among those listed and persons whose place of birth is unknown.

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

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

^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 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.

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

Table 11a. Deaths (any cause) of persons with diagnosed HIV infection, by year of death and selected characteristics, 2017–2021—United States

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Gender										
Male	12,240	—	12,102	—	12,309	—	14,210	—	14,663	—
Female	3,989	—	3,986	—	3,841	—	4,630	—	4,743	—
Transgender woman/girl ^b	108	—	118	—	145	—	207	—	215	—
Transgender man/boy ^b	5	—	5	—	5	—	10	—	2	—
Additional gender identity ^c	3	—	1	—	2	—	0	—	1	—
Age at death (yr)										
< 13	2	0.0	1	0.0	2	0.0	5	0.0	1	0.0
13–14	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
15–19	7	0.0	9	0.0	11	0.1	13	0.1	4	0.0
20–24	145	0.7	121	0.6	123	0.6	140	0.7	105	0.5
25–29	445	1.9	420	1.8	436	1.9	461	2.0	459	2.0
30–34	602	2.7	614	2.8	664	3.0	797	3.5	901	3.9
35–39	863	4.1	814	3.8	858	3.9	940	4.2	1,070	4.8
40–44	970	5.0	960	4.9	937	4.7	1,134	5.5	1,177	5.6
45–49	1,742	8.3	1,603	7.7	1,402	6.9	1,511	7.4	1,522	7.7
50–54	2,727	12.8	2,580	12.4	2,246	11.0	2,347	11.3	2,261	10.8
55–59	2,967	13.5	2,930	13.4	2,921	13.4	3,299	15.0	3,370	15.6
60–64	2,487	12.5	2,525	12.4	2,669	13.0	3,177	15.1	3,269	15.4
≥ 65	3,388	6.7	3,635	6.9	4,032	7.5	5,233	9.6	5,485	9.8
Race/ethnicity										
American Indian/Alaska Native	47	2.0	49	2.0	57	2.4	82	3.4	80	3.3
Asian ^d	88	0.5	83	0.4	100	0.5	103	0.5	125	0.6
Black/African American	7,194	17.7	6,982	17.1	7,009	17.0	8,330	20.0	8,402	20.1
Hispanic/Latino ^e	2,693	4.6	2,838	4.8	2,771	4.6	3,452	5.6	3,499	5.6
Native Hawaiian/other Pacific Islander	9	1.5	13	2.2	14	2.3	11	1.8	14	2.2
White	5,235	2.6	5,150	2.6	5,256	2.7	5,756	2.9	6,025	3.1

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Multiracial	1,077	15.4	1,097	15.3	1,091	14.8	1,322	17.3	1,478	19.0
Transmission category^f										
Male sex at birth (≥ 13 yrs at death)^g										
Male-to-male sexual contact ^h	7,010	—	6,888	—	7,184	—	8,237	—	8,672	—
Injection drug use ⁱ	2,154	—	2,169	—	2,087	—	2,427	—	2,335	—
Male-to-male sexual contact ^h and injection drug use ⁱ	1,383	—	1,453	—	1,395	—	1,665	—	1,687	—
Heterosexual contact ^j	1,694	—	1,600	—	1,688	—	1,961	—	2,071	—
Perinatal ^k	41	—	51	—	41	—	57	—	54	—
Other ^l	67	—	58	—	59	—	67	—	60	—
Subtotal	12,350	9.3	12,220	9.1	12,454	9.2	14,415	10.5	14,879	10.8
Female sex at birth (≥ 13 yrs at death)^g										
Injection drug use ⁱ	1,373	—	1,335	—	1,316	—	1,494	—	1,466	—
Heterosexual contact ^j	2,548	—	2,594	—	2,470	—	3,060	—	3,191	—
Perinatal ^k	43	—	37	—	37	—	45	—	52	—
Other ^l	29	—	26	—	24	—	38	—	36	—
Subtotal	3,993	2.9	3,991	2.8	3,846	2.7	4,637	3.3	4,744	3.3
Child (< 13 yrs at death)										
Perinatal	2	—	1	—	1	—	4	—	1	—
Other ^l	0	—	0	—	1	—	1	—	0	—
Subtotal	2	0.0	1	0.0	2	0.0	5	0.0	1	0.0
Region of residence^m										
Northeast	3,693	6.6	3,523	6.3	3,653	6.5	4,524	7.9	4,324	7.6
Midwest	1,915	2.8	2,003	2.9	1,961	2.9	2,316	3.4	2,284	3.3
South	7,997	6.5	7,880	6.3	7,917	6.3	9,078	7.2	9,540	7.5
West	2,740	3.5	2,806	3.6	2,771	3.5	3,139	4.0	3,476	4.4
Totalⁿ	16,345	5.0	16,212	5.0	16,302	5.0	19,057	5.7	19,624	5.9

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to 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 Rates are per 100,000 population. Rates are not calculated by gender or transmission category because of the lack of denominator data.

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

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

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

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

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

^f 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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 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.

Table 11b. Deaths (any cause) of persons with diagnosed HIV infection, by year of death and selected characteristics, 2017–2021—United States and 6 dependent areas

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Gender										
Male	12,541	—	12,392	—	12,585	—	14,484	—	14,942	—
Female	4,097	—	4,062	—	3,920	—	4,716	—	4,825	—
Transgender woman/girl ^b	110	—	119	—	147	—	208	—	216	—
Transgender man/boy ^b	5	—	5	—	5	—	10	—	2	—
Additional gender identity ^c	3	—	1	—	2	—	0	—	1	—
Age at death (yr)										
< 13	2	0.0	1	0.0	2	0.0	5	0.0	1	0.0
13–14	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
15–19	7	0.0	9	0.0	11	0.1	13	0.1	4	0.0
20–24	147	0.7	125	0.6	125	0.6	142	0.7	106	0.5
25–29	451	1.9	428	1.8	442	1.9	463	2.0	467	2.1
30–34	617	2.8	626	2.8	676	3.0	803	3.5	906	3.9
35–39	878	4.1	833	3.8	875	4.0	963	4.3	1,084	4.8
40–44	1,005	5.1	989	5.0	976	4.8	1,165	5.6	1,206	5.7
45–49	1,794	8.5	1,641	7.8	1,438	7.0	1,546	7.5	1,552	7.8
50–54	2,804	13.0	2,631	12.5	2,319	11.2	2,393	11.4	2,302	10.9
55–59	3,049	13.7	3,000	13.5	2,973	13.4	3,374	15.1	3,429	15.7
60–64	2,529	12.5	2,574	12.5	2,722	13.1	3,227	15.2	3,325	15.5
≥ 65	3,473	6.7	3,722	7.0	4,099	7.5	5,324	9.6	5,604	9.9
Race/ethnicity										
American Indian/Alaska Native	47	—	49	—	57	—	82	—	80	—
Asian ^d	88	—	83	—	100	—	104	—	125	—
Black/African American	7,199	—	6,982	—	7,010	—	8,333	—	8,405	—
Hispanic/Latino ^e	3,098	—	3,200	—	3,120	—	3,807	—	3,858	—
Native Hawaiian/other Pacific Islander	9	—	16	—	16	—	11	—	14	—
White	5,236	—	5,151	—	5,258	—	5,758	—	6,025	—
Multiracial	1,077	—	1,098	—	1,094	—	1,322	—	1,478	—
Transmission category^f										
Male sex at birth (≥ 13 yrs at death)^g										
Male-to-male sexual contact ^h	7,081	—	6,967	—	7,257	—	8,319	—	8,730	—
Injection drug use ⁱ	2,286	—	2,290	—	2,209	—	2,534	—	2,451	—
Male-to-male sexual contact ^h and injection drug use ⁱ	1,408	—	1,475	—	1,420	—	1,695	—	1,714	—
Heterosexual contact ^j	1,768	—	1,663	—	1,744	—	2,015	—	2,149	—
Perinatal ^k	42	—	57	—	43	—	60	—	55	—
Other ^l	67	—	59	—	59	—	67	—	60	—
Subtotal	12,653	9.4	12,511	9.2	12,732	9.3	14,690	10.6	15,159	10.9

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Female sex at birth (≥ 13 yrs at death)^g										
Injection drug use ⁱ	1,409	—	1,368	—	1,345	—	1,521	—	1,486	—
Heterosexual contact ^j	2,620	—	2,635	—	2,517	—	3,119	—	3,253	—
Perinatal ^k	44	—	39	—	38	—	45	—	52	—
Other ^l	29	—	26	—	25	—	38	—	36	—
Subtotal	4,101	2.9	4,067	2.9	3,925	2.8	4,723	3.3	4,826	3.4
Child (< 13 yrs at death)										
Perinatal	2	—	1	—	1	—	4	—	1	—
Other ^l	0	—	0	—	1	—	1	—	0	—
Subtotal	2	0.0	1	0.0	2	0.0	5	0.0	1	0.0
Region of residence^m										
Northeast	3,693	6.6	3,523	6.3	3,653	6.5	4,524	7.9	4,324	7.6
Midwest	1,915	2.8	2,003	2.9	1,961	2.9	2,316	3.4	2,284	3.3
South	7,997	6.5	7,880	6.3	7,917	6.3	9,078	7.2	9,540	7.5
West	2,740	3.5	2,806	3.6	2,771	3.5	3,139	4.0	3,476	4.4
U.S. dependent areas	411	11.0	367	10.2	357	9.9	361	9.8	362	9.9
Totalⁿ	16,756	5.1	16,579	5.0	16,659	5.0	19,418	5.8	19,986	6.0

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to 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 Rates are per 100,000 population. Rates are not calculated by gender or transmission category because of the lack of denominator data. Rates by race/ethnicity are not provided because U.S. census information is limited for U.S. dependent areas.

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

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

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

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

^f 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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 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.

Table 12a. Deaths (any cause) of persons with diagnosed HIV infection, by race/ethnicity and selected characteristics, 2021—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																
Male	53	—	100	—	5,599	—	2,720	—	14	—	5,076	—	1,101	—	14,663	—
Female	22	—	23	—	2,703	—	720	—	0	—	923	—	351	—	4,743	—
Transgender woman/girl ^e	5	—	2	—	99	—	58	—	0	—	26	—	25	—	215	—
Transgender man/boy ^e	0	—	0	—	1	—	1	—	0	—	0	—	0	—	2	—
Additional gender identity ^f	0	—	0	—	0	—	0	—	0	—	0	—	1	—	1	—
Age at death (yr)																
< 13	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	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	3	0.1	1	0.0	0	0.0	0	0.0	0	0.0	4	0.0
20–24	0	0.0	0	0.0	50	1.7	29	0.6	0	0.0	18	0.2	8	1.1	105	0.5
25–29	2	1.1	4	0.3	239	7.3	95	2.0	0	0.0	85	0.7	34	5.5	459	2.0
30–34	10	5.3	8	0.5	423	12.9	202	4.3	0	0.0	193	1.5	65	13.1	901	3.9
35–39	8	4.9	9	0.5	491	17.1	233	5.1	1	1.9	259	2.1	69	17.3	1,070	4.8
40–44	12	8.0	8	0.5	499	18.4	255	5.8	2	4.4	307	2.6	94	27.4	1,177	5.6
45–49	11	7.9	16	1.1	647	25.9	304	7.7	1	2.6	436	3.8	107	38.1	1,522	7.7
50–54	4	2.8	19	1.5	931	36.2	442	12.4	4	10.9	680	5.2	181	70.4	2,261	10.8
55–59	9	5.9	19	1.6	1,351	51.6	591	19.2	3	8.4	1,114	7.8	283	119.9	3,370	15.6
60–64	10	6.8	14	1.3	1,412	57.7	511	20.8	2	6.3	1,078	7.2	242	110.9	3,269	15.4
≥ 65	14	4.3	28	1.0	2,356	44.6	835	16.5	1	1.5	1,855	4.4	395	83.1	5,485	9.8
Transmission category^g																
Male sex at birth (≥ 13 yrs at death)^h																
Male-to-male sexual contact ⁱ	34	—	82	—	2,746	—	1,561	—	12	—	3,603	—	634	—	8,672	—
Injection drug use ^j	8	—	4	—	1,085	—	544	—	0	—	521	—	173	—	2,335	—
Male-to-male sexual contact ⁱ and injection drug use ^j	11	—	3	—	483	—	354	—	1	—	653	—	184	—	1,687	—
Heterosexual contact ^k	5	—	12	—	1,344	—	291	—	1	—	295	—	123	—	2,071	—
Perinatal ^l	0	—	0	—	28	—	15	—	0	—	5	—	5	—	54	—
Other ^m	0	—	1	—	13	—	13	—	0	—	25	—	8	—	60	—
Subtotal	58	5.8	102	1.3	5,698	34.5	2,778	11.2	14	5.4	5,102	6.0	1,127	44.1	14,879	10.8
Female sex at birth (≥ 13 yrs at death)^h																
Injection drug use ^j	10	—	5	—	687	—	256	—	0	—	383	—	125	—	1,466	—
Heterosexual contact ^k	13	—	18	—	1,976	—	447	—	0	—	521	—	217	—	3,191	—

	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
Perinatal ^l	0	—	0	—	31	—	12	—	0	—	6	—	2	—	52	—
Other ^m	0	—	0	—	10	—	6	—	0	—	12	—	7	—	36	—
Subtotal	22	2.1	23	0.3	2,704	14.8	720	3.0	0	0.0	923	1.1	351	13.1	4,744	3.3
Child (< 13 yrs at death)																
Perinatal	0	—	0	—	0	—	1	—	0	—	0	—	0	—	1	—
Other ^m	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—
Subtotal	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Region of residenceⁿ																
Northeast	1	0.8	23	0.6	1,653	25.4	1,225	14.0	0	0.0	993	2.7	429	40.5	4,324	7.6
Midwest	6	1.4	12	0.5	944	12.9	188	3.2	2	4.9	930	1.8	202	13.5	2,284	3.3
South	9	1.1	28	0.6	5,208	21.3	1,155	4.8	1	1.0	2,554	3.6	585	22.4	9,540	7.5
West	64	6.0	62	0.7	597	16.4	931	3.9	11	2.4	1,548	4.0	262	10.0	3,476	4.4
Total	80	3.3	125	0.6	8,402	20.1	3,499	5.6	14	2.2	6,025	3.1	1,478	19.0	19,624	5.9

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. Death data for the year 2021 should be interpreted with caution due to excess deaths in the United States population attributed to the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm. 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 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 individuals who were assigned “male” sex at birth but have ever identified as “female” gender.

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

^f Additional gender identity examples include “bigender,” “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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 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 12b. Deaths (any cause) of persons with diagnosed HIV infection, by race/ethnicity and selected characteristics, 2021—United States and 6 dependent areas

	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								
Male	53	100	5,601	2,997	14	5,076	1,101	14,942
Female	22	23	2,704	801	0	923	351	4,825

	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.
Transgender woman/girl ^d	5	2	99	59	0	26	25	216
Transgender man/boy ^d	0	0	1	1	0	0	0	2
Additional gender identity ^e	0	0	0	0	0	0	1	1
Age at death (yr)								
< 13	0	0	0	1	0	0	0	1
13-14	0	0	0	0	0	0	0	0
15-19	0	0	3	1	0	0	0	4
20-24	0	0	50	30	0	18	8	106
25-29	2	4	240	102	0	85	34	467
30-34	10	8	423	207	0	193	65	906
35-39	8	9	491	247	1	259	69	1,084
40-44	12	8	499	284	2	307	94	1,206
45-49	11	16	647	334	1	436	107	1,552
50-54	4	19	931	483	4	680	181	2,302
55-59	9	19	1,351	650	3	1,114	283	3,429
60-64	10	14	1,412	567	2	1,078	242	3,325
≥ 65	14	28	2,358	952	1	1,855	395	5,604
Transmission category^f								
Male sex at birth (≥ 13 yrs at death)^g								
Male-to-male sexual contact ^h	34	82	2,748	1,617	12	3,603	634	8,730
Injection drug use ⁱ	8	4	1,085	660	0	521	173	2,451
Male-to-male sexual contact ^h and injection drug use ⁱ	11	3	483	380	1	653	184	1,714
Heterosexual contact ^j	5	12	1,344	370	1	295	123	2,149
Perinatal ^k	0	0	28	16	0	5	5	55
Other ^l	0	1	13	13	0	25	8	60
Subtotal	58	102	5,700	3,056	14	5,102	1,127	15,159
Female sex at birth (≥ 13 yrs at death)^g								
Injection drug use ⁱ	10	5	687	276	0	383	125	1,486
Heterosexual contact ^j	13	18	1,977	507	0	521	217	3,253
Perinatal ^k	0	0	31	12	0	6	2	52
Other ^l	0	0	10	6	0	12	7	36
Subtotal	22	23	2,705	801	0	923	351	4,826
Child (< 13 yrs at death)								
Perinatal	0	0	0	1	0	0	0	1
Other ^l	0	0	0	0	0	0	0	0
Subtotal	0	0	0	1	0	0	0	1
Region of residence^m								
Northeast	1	23	1,653	1,225	0	993	429	4,324
Midwest	6	12	944	188	2	930	202	2,284

	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.
South	9	28	5,208	1,155	1	2,554	585	9,540
West	64	62	597	931	11	1,548	262	3,476
U.S. dependent areas	0	0	3	359	0	0	0	362
Total	80	125	8,405	3,858	14	6,025	1,478	19,986

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. Death data for the year 2021 should be interpreted with caution due to excess deaths in the United States population attributed to the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm. 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 individuals who were assigned "male" sex at birth but have ever identified as "female" gender.

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

^e Additional gender identity examples include "bigender," "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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 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 13a. Deaths (any cause) of persons aged ≥ 13 years with diagnosed HIV infection, by year of death, assigned sex at birth, and selected characteristics, 2017–2021—United States

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Male sex at birth^b										
Age at death (yr)										
13–14	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
15–19	5	0.0	5	0.0	9	0.1	9	0.1	4	0.0
20–24	113	1.0	95	0.9	95	0.9	110	1.0	81	0.7
25–29	347	2.9	346	2.9	370	3.1	361	3.1	366	3.2
30–34	447	4.0	464	4.1	510	4.5	603	5.2	746	6.4
35–39	624	5.9	577	5.4	618	5.7	696	6.2	837	7.4
40–44	659	6.8	633	6.5	643	6.5	806	7.8	842	7.9
45–49	1,226	11.8	1,130	11.0	983	9.7	1,046	10.3	1,067	10.8
50–54	2,035	19.4	1,901	18.5	1,668	16.5	1,749	16.9	1,628	15.6
55–59	2,246	21.0	2,255	21.2	2,277	21.4	2,544	23.4	2,526	23.8
60–64	1,934	20.3	1,908	19.6	2,062	20.9	2,445	23.9	2,479	24.0
≥ 65	2,714	12.1	2,906	12.5	3,218	13.4	4,046	16.5	4,303	17.1

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Race/ethnicity										
American Indian/Alaska Native	33	3.4	33	3.4	38	3.9	49	4.9	58	5.8
Asian ^c	73	1.0	72	1.0	92	1.2	88	1.1	102	1.3
Black/African American	4,910	31.2	4,707	29.6	4,800	29.9	5,714	34.9	5,698	34.5
Hispanic/Latino ^d	2,109	9.3	2,254	9.7	2,201	9.3	2,715	11.1	2,778	11.2
Native Hawaiian/other Pacific Islander	5	2.1	12	5.0	9	3.6	10	3.9	14	5.4
White	4,409	5.2	4,319	5.1	4,486	5.3	4,895	5.8	5,102	6.0
Multiracial	810	36.8	823	36.1	825	34.9	943	38.2	1,127	44.1
Transmission category^e										
Male-to-male sexual contact ^f	7,010	—	6,888	—	7,184	—	8,237	—	8,672	—
Injection drug use ^g	2,154	—	2,169	—	2,087	—	2,427	—	2,335	—
Male-to-male sexual contact ^f and injection drug use ^g	1,383	—	1,453	—	1,395	—	1,665	—	1,687	—
Heterosexual contact ^h	1,694	—	1,600	—	1,688	—	1,961	—	2,071	—
Perinatal ⁱ	41	—	51	—	41	—	57	—	54	—
Other ^j	67	—	58	—	59	—	67	—	60	—
Region of residence^k										
Northeast	2,620	11.3	2,486	10.7	2,604	11.3	3,224	13.5	3,103	13.0
Midwest	1,513	5.4	1,597	5.7	1,574	5.6	1,866	6.5	1,819	6.3
South	5,822	11.6	5,713	11.3	5,880	11.5	6,600	12.7	6,936	13.3
West	2,395	7.5	2,424	7.5	2,396	7.4	2,725	8.3	3,021	9.1
Subtotal	12,350	9.3	12,220	9.1	12,454	9.2	14,415	10.5	14,879	10.8
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	2	0.0	4	0.0	2	0.0	4	0.0	0	0.0
20–24	32	0.3	26	0.2	28	0.3	30	0.3	24	0.2
25–29	98	0.9	74	0.6	66	0.6	100	0.9	93	0.8
30–34	155	1.4	150	1.4	154	1.4	194	1.7	155	1.4
35–39	239	2.3	237	2.2	240	2.2	244	2.2	233	2.1
40–44	311	3.2	327	3.3	294	2.9	328	3.2	335	3.2
45–49	516	4.9	473	4.5	419	4.1	465	4.6	455	4.6
50–54	692	6.4	679	6.4	578	5.6	598	5.7	633	6.0
55–59	721	6.4	675	6.0	644	5.7	755	6.8	844	7.7
60–64	553	5.3	617	5.8	607	5.7	732	6.8	790	7.2
≥ 65	674	2.4	729	2.5	814	2.7	1,187	4.0	1,182	3.9
Race/ethnicity										
American Indian/Alaska Native	14	1.4	16	1.6	19	1.9	33	3.2	22	2.1
Asian ^c	15	0.2	11	0.1	8	0.1	15	0.2	23	0.3
Black/African American	2,283	13.0	2,274	12.8	2,208	12.3	2,613	14.4	2,704	14.8
Hispanic/Latino ^d	584	2.6	584	2.6	569	2.4	737	3.1	720	3.0
Native Hawaiian/other Pacific Islander	4	1.7	1	0.4	5	2.0	1	0.4	0	0.0
White	825	0.9	831	1.0	770	0.9	859	1.0	923	1.1
Multiracial	267	11.4	274	11.3	266	10.6	379	14.6	351	13.1
Transmission category^e										

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Injection drug use ^g	1,373	—	1,335	—	1,316	—	1,494	—	1,466	—
Heterosexual contact ^h	2,548	—	2,593	—	2,470	—	3,060	—	3,191	—
Perinatal ⁱ	43	—	37	—	37	—	45	—	52	—
Other ^j	29	—	26	—	24	—	38	—	36	—
Region of residence^k										
Northeast	1,073	4.3	1,036	4.2	1,049	4.2	1,298	5.2	1,221	4.9
Midwest	401	1.4	406	1.4	386	1.3	450	1.5	465	1.6
South	2,174	4.1	2,167	4.0	2,036	3.8	2,476	4.6	2,603	4.8
West	345	1.1	382	1.2	375	1.1	413	1.3	455	1.4
Subtotal	3,993	2.9	3,991	2.8	3,846	2.7	4,637	3.3	4,744	3.3
Total	16,343	6.0	16,211	5.9	16,300	5.9	19,052	6.8	19,623	7.0

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to 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 Rates are per 100,000 population. Rates are not calculated by transmission category because of the lack of denominator data.

^b Data include transgender and additional gender identity persons.

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

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

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

^f Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 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 (any cause) of persons aged ≥ 13 years with diagnosed HIV infection, by year of death, assigned sex at birth, and selected characteristics, 2017–2021—United States and 6 dependent areas ▼

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Male sex at birth^b										
Age at death (yr)										
13–14	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
15–19	5	0.0	5	0.0	9	0.1	9	0.1	4	0.0
20–24	114	1.0	99	0.9	97	0.9	112	1.0	82	0.7
25–29	351	2.9	353	2.9	374	3.1	363	3.1	373	3.2
30–34	457	4.1	472	4.2	516	4.5	607	5.2	750	6.4
35–39	635	5.9	590	5.4	629	5.7	715	6.3	847	7.5
40–44	687	7.0	656	6.6	671	6.7	831	7.9	867	8.1

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
45–49	1,267	12.1	1,157	11.2	1,010	9.9	1,067	10.4	1,091	10.9
50–54	2,094	19.7	1,939	18.7	1,728	16.9	1,784	17.0	1,664	15.8
55–59	2,304	21.4	2,310	21.4	2,317	21.5	2,602	23.7	2,569	23.9
60–64	1,963	20.4	1,950	19.9	2,104	21.1	2,481	24.0	2,522	24.1
≥ 65	2,776	12.2	2,980	12.6	3,276	13.4	4,119	16.6	4,390	17.2
Race/ethnicity										
American Indian/Alaska Native	33	—	33	—	38	—	49	—	58	—
Asian ^c	73	—	72	—	92	—	89	—	102	—
Black/African American	4,914	—	4,707	—	4,801	—	5,715	—	5,700	—
Hispanic/Latino ^d	2,407	—	2,542	—	2,472	—	2,986	—	3,056	—
Native Hawaiian/other Pacific Islander	5	—	13	—	11	—	10	—	14	—
White	4,410	—	4,320	—	4,488	—	4,897	—	5,102	—
Multiracial	810	—	824	—	827	—	943	—	1,127	—
Transmission category^e										
Male-to-male sexual contact ^f	7,082	—	6,967	—	7,257	—	8,320	—	8,730	—
Injection drug use ^g	2,286	—	2,290	—	2,209	—	2,534	—	2,451	—
Male-to-male sexual contact ^f and injection drug use ^g	1,408	—	1,475	—	1,420	—	1,695	—	1,714	—
Heterosexual contact ^h	1,768	—	1,663	—	1,744	—	2,015	—	2,149	—
Perinatal ⁱ	42	—	57	—	43	—	60	—	55	—
Other ^j	67	—	59	—	59	—	67	—	60	—
Region of residence^k										
Northeast	2,620	11.3	2,486	10.7	2,604	11.3	3,224	13.5	3,103	13.0
Midwest	1,513	5.4	1,597	5.7	1,574	5.6	1,866	6.5	1,819	6.3
South	5,822	11.6	5,713	11.3	5,880	11.5	6,600	12.7	6,936	13.3
West	2,395	7.5	2,424	7.5	2,396	7.4	2,725	8.3	3,021	9.1
US dependent areas	303	20.0	291	19.8	278	18.8	275	18.1	280	18.4
Subtotal	12,653	9.4	12,511	9.2	12,732	9.3	14,690	10.6	15,159	10.9
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	2	0.0	4	0.0	2	0.0	4	0.0	0	0.0
20–24	33	0.3	26	0.2	28	0.3	30	0.3	24	0.2
25–29	100	0.9	75	0.6	68	0.6	100	0.9	94	0.8
30–34	160	1.5	154	1.4	160	1.4	196	1.7	156	1.4
35–39	243	2.3	243	2.2	246	2.2	248	2.2	237	2.1
40–44	318	3.2	333	3.3	305	3.0	334	3.2	339	3.2
45–49	527	4.9	484	4.6	428	4.1	479	4.7	461	4.6
50–54	710	6.5	692	6.5	591	5.6	609	5.8	638	6.0
55–59	745	6.5	690	6.1	656	5.8	772	6.8	860	7.8
60–64	566	5.4	624	5.8	618	5.7	746	6.8	803	7.3
≥ 65	697	2.4	742	2.5	823	2.7	1,205	4.0	1,214	3.9
Race/ethnicity										
American Indian/Alaska Native	14	—	16	—	19	—	33	—	22	—
Asian ^c	15	—	11	—	8	—	15	—	23	—

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Black/African American	2,284	—	2,274	—	2,208	—	2,615	—	2,705	—
Hispanic/Latino ^d	691	—	658	—	647	—	821	—	801	—
Native Hawaiian/other Pacific Islander	4	—	3	—	5	—	1	—	0	—
White	825	—	831	—	770	—	859	—	923	—
Multiracial	267	—	274	—	267	—	379	—	351	—
Transmission category^e										
Injection drug use ^g	1,408	—	1,368	—	1,346	—	1,521	—	1,486	—
Heterosexual contact ^h	2,620	—	2,634	—	2,517	—	3,119	—	3,253	—
Perinatal ⁱ	44	—	39	—	38	—	45	—	52	—
Other ^j	29	—	26	—	25	—	38	—	36	—
Region of residence^k										
Northeast	1,073	4.3	1,036	4.2	1,049	4.2	1,298	5.2	1,221	4.9
Midwest	401	1.4	406	1.4	386	1.3	450	1.5	465	1.6
South	2,174	4.1	2,167	4.0	2,036	3.8	2,476	4.6	2,603	4.8
West	345	1.1	382	1.2	375	1.1	413	1.3	455	1.4
US dependent areas	108	6.4	76	4.6	79	4.8	86	5.1	82	4.8
Subtotal	4,101	2.9	4,067	2.9	3,925	2.8	4,723	3.3	4,826	3.4
Total	16,754	6.1	16,578	6.0	16,657	6.0	19,413	6.9	19,985	7.1

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to 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 Rates are per 100,000 population. Rates are not calculated by transmission category because of the lack of denominator data.

^b Data include transgender and additional gender identity persons.

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

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

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

^f Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 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 (any cause) of transgender and additional gender identity persons aged ≥ 13 years with diagnosed HIV infection, by year of death and selected characteristics, 2017–2021—United States

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Transgender woman^a					
Age at death (yr)					

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
13-14	0	0	0	0	0
15-19	0	0	0	0	0
20-24	2	1	5	7	5
25-29	8	12	17	17	12
30-34	9	9	19	30	41
35-39	15	13	17	29	29
40-44	12	12	17	23	27
45-49	19	12	17	26	15
50-54	11	19	17	21	20
55-59	19	18	17	25	30
60-64	7	11	12	14	20
≥ 65	6	11	7	15	16
Race/ethnicity					
American Indian/Alaska Native	0	2	1	4	5
Asian ^b	0	2	1	3	2
Black/African American	45	46	69	106	99
Hispanic/Latino ^c	36	34	33	52	58
Native Hawaiian/other Pacific Islander	1	0	0	1	0
White	18	21	24	23	26
Multiracial	8	13	17	18	25
Exposure category^d					
Sexual contact ^e	79	78	99	144	159
Injection drug use ^f	0	0	1	2	0
Sexual contact ^e and injection drug use ^f	26	38	39	56	49
Other ^g	3	2	6	5	7
Region of residence^h					
Northeast	26	32	39	61	56
Midwest	11	11	22	22	27
South	41	43	55	72	75
West	30	32	29	52	57
Subtotal	108	118	145	207	215
Transgender man^a					
Age at death (yr)					
13-14	0	0	0	0	0
15-19	0	0	0	0	0
20-24	0	0	0	1	0
25-29	0	0	1	1	0
30-34	1	0	0	1	0
35-39	0	0	0	1	0
40-44	0	0	0	2	0
45-49	1	2	0	1	0
50-54	0	1	1	0	0
55-59	2	1	1	1	1
60-64	0	0	2	1	1

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
≥ 65	1	1	0	1	0
Race/ethnicity					
American Indian/Alaska Native	0	0	0	0	0
Asian ^b	0	0	0	0	0
Black/African American	3	0	1	3	1
Hispanic/Latino ^c	1	2	2	2	1
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	0	2	1	2	0
Multiracial	1	1	1	3	0
Exposure category^d					
Sexual contact ^e	3	0	3	6	0
Injection drug use ^f	0	0	0	0	0
Sexual contact ^e and injection drug use ^f	2	5	1	4	2
Other ^g	0	0	1	0	0
Region of residence^h					
Northeast	1	0	1	2	1
Midwest	0	1	1	1	0
South	3	3	3	4	1
West	1	1	0	3	0
Subtotal	5	5	5	10	2
Additional gender identityⁱ					
Age at death (yr)					
13–14	0	0	0	0	0
15–19	0	0	0	0	0
20–24	0	0	0	0	0
25–29	0	0	0	0	0
30–34	2	0	0	0	0
35–39	0	0	0	0	0
40–44	0	0	1	0	0
45–49	0	0	0	0	0
50–54	0	0	0	0	0
55–59	1	1	0	0	0
60–64	0	0	0	0	1
≥ 65	0	0	1	0	0
Race/ethnicity					
American Indian/Alaska Native	0	0	0	0	0
Asian ^b	0	0	0	0	0
Black/African American	1	0	2	0	0
Hispanic/Latino ^c	1	1	0	0	0
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	1	0	0	0	0
Multiracial	0	0	0	0	1
Exposure category^d					
Sexual contact ^e	2	0	1	0	1

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Injection drug use ^f	0	0	0	0	0
Sexual contact ^e and injection drug use ^f	1	1	1	0	0
Other ^g	0	0	0	0	0
Region of residence^h					
Northeast	1	0	1	0	1
Midwest	1	0	1	0	0
South	1	0	0	0	0
West	0	1	0	0	0
Subtotal	3	1	2	0	1
Total	116	124	152	217	218

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to 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 “Transgender woman” includes individuals who were assigned “male” sex at birth but have ever identified as “female” gender.

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

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

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

^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 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 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.

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

Table 14b. Deaths (any cause) of transgender and additional gender identity persons aged ≥ 13 years with diagnosed HIV infection, by year of death and selected characteristics, 2017–2021—United States and 6 dependent areas ✓

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Transgender woman^a					
Age at death (yr)					
13–14	0	0	0	0	0
15–19	0	0	0	0	0
20–24	2	1	5	7	5
25–29	8	12	17	17	12
30–34	9	9	19	30	41
35–39	16	13	17	29	30
40–44	12	12	17	23	27

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
45–49	19	12	18	26	15
50–54	12	19	17	22	20
55–59	19	18	17	25	30
60–64	7	11	12	14	20
≥ 65	6	12	8	15	16
Race/ethnicity					
American Indian/Alaska Native	0	2	1	4	5
Asian ^b	0	2	1	3	2
Black/African American	45	46	69	106	99
Hispanic/Latino ^c	38	35	35	53	59
Native Hawaiian/other Pacific Islander	1	0	0	1	0
White	18	21	24	23	26
Multiracial	8	13	17	18	25
Exposure category^d					
Sexual contact ^e	79	79	99	145	159
Injection drug use ^f	0	0	1	2	0
Sexual contact ^e and injection drug use ^f	28	38	41	56	50
Other ^g	3	2	6	5	7
Region of residence^h					
Northeast	26	32	39	61	56
Midwest	11	11	22	22	27
South	41	43	55	72	75
West	30	32	29	52	57
US dependent areas	2	1	2	1	1
Subtotal	110	119	147	208	216
Transgender man^a					
Age at death (yr)					
13–14	0	0	0	0	0
15–19	0	0	0	0	0
20–24	0	0	0	1	0
25–29	0	0	1	1	0
30–34	1	0	0	1	0
35–39	0	0	0	1	0
40–44	0	0	0	2	0
45–49	1	2	0	1	0
50–54	0	1	1	0	0
55–59	2	1	1	1	1
60–64	0	0	2	1	1
≥ 65	1	1	0	1	0
Race/ethnicity					
American Indian/Alaska Native	0	0	0	0	0
Asian ^b	0	0	0	0	0
Black/African American	3	0	1	3	1
Hispanic/Latino ^c	1	2	2	2	1

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	0	2	1	2	0
Multiracial	1	1	1	3	0
Exposure category^d					
Sexual contact ^e	3	0	3	6	0
Injection drug use ^f	0	0	0	0	0
Sexual contact ^e and injection drug use ^f	2	5	1	4	2
Other ^g	0	0	1	0	0
Region of residence^h					
Northeast	1	0	1	2	1
Midwest	0	1	1	1	0
South	3	3	3	4	1
West	1	1	0	3	0
US dependent areas	0	0	0	0	0
Subtotal	5	5	5	10	2
Additional gender identityⁱ					
Age at death (yr)					
13–14	0	0	0	0	0
15–19	0	0	0	0	0
20–24	0	0	0	0	0
25–29	0	0	0	0	0
30–34	2	0	0	0	0
35–39	0	0	0	0	0
40–44	0	0	1	0	0
45–49	0	0	0	0	0
50–54	0	0	0	0	0
55–59	1	1	0	0	0
60–64	0	0	0	0	1
≥ 65	0	0	1	0	0
Race/ethnicity					
American Indian/Alaska Native	0	0	0	0	0
Asian ^b	0	0	0	0	0
Black/African American	1	0	2	0	0
Hispanic/Latino ^c	1	1	0	0	0
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	1	0	0	0	0
Multiracial	0	0	0	0	1
Exposure category^d					
Sexual contact ^e	2	0	1	0	1
Injection drug use ^f	0	0	0	0	0
Sexual contact ^e and injection drug use ^f	1	1	1	0	0
Other ^g	0	0	0	0	0
Region of residence^h					

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Northeast	1	0	1	0	1
Midwest	1	0	1	0	0
South	1	0	0	0	0
West	0	1	0	0	0
US dependent areas	0	0	0	0	0
Subtotal	3	1	2	0	1
Total	118	125	154	218	219

Note. Deaths of persons with a diagnosis of HIV infection may be due to any cause. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to 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 "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.

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

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

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

^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 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 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.

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

Table 15a. Persons living with diagnosed HIV infection, by year and selected characteristics, 2017–2021—United States

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Gender										
Male	749,255	—	767,894	—	785,712	—	796,670	—	812,192	—
Female	235,211	—	238,870	—	242,488	—	243,646	—	246,029	—
Transgender woman/girl ^b	10,775	—	11,347	—	11,937	—	12,447	—	13,111	—
Transgender man/boy ^b	401	—	448	—	490	—	520	—	574	—
Additional gender identity ^c	239	—	260	—	292	—	315	—	361	—
Age at end of year										
< 13	2,058	3.9	1,897	3.6	1,670	3.2	1,445	2.8	1,262	2.4
13–14	670	8.1	667	8.0	652	7.8	639	7.3	599	6.7
15–19	4,548	21.5	4,367	20.7	4,251	20.2	3,800	17.6	3,689	17.1
20–24	28,433	128.9	27,005	123.7	26,064	120.4	24,267	113.0	23,768	110.4
25–29	70,343	301.1	70,846	300.9	69,328	294.5	65,558	287.5	62,673	279.9
30–34	82,697	376.6	87,652	396.0	93,088	414.4	97,085	424.4	100,758	436.1

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
35-39	91,538	432.0	93,448	433.7	95,421	438.6	96,667	434.8	100,231	449.5
40-44	95,663	488.7	96,353	489.5	97,899	491.4	100,213	484.8	102,963	487.9
45-49	129,431	619.4	122,787	592.7	116,648	572.1	108,962	536.3	104,701	529.3
50-54	162,116	760.0	156,876	752.2	150,087	733.2	144,716	696.3	138,428	662.1
55-59	143,636	654.5	152,013	693.6	159,310	728.4	162,057	735.4	162,000	751.1
60-64	95,574	479.6	103,683	510.7	111,536	542.5	119,583	568.4	127,237	599.2
≥ 65	89,174	175.7	101,225	193.3	114,965	212.8	128,606	236.2	143,958	257.8
Race/ethnicity										
American Indian/Alaska Native	2,759	115.1	2,882	119.6	3,020	124.7	3,130	128.0	3,276	133.6
Asian ^d	13,730	74.8	14,605	78.0	15,360	80.5	15,974	81.9	16,720	84.9
Black/African American	403,102	993.1	412,368	1008.3	421,362	1022.9	426,145	1,021.3	432,958	1,034.3
Hispanic/Latino ^e	226,093	387.1	234,034	393.5	242,008	400.6	247,235	399.5	255,281	407.5
Native Hawaiian/other Pacific Islander	745	127.9	790	133.1	836	138.4	889	143.7	955	152.5
White	292,874	148.1	297,228	150.5	301,145	152.7	303,326	153.4	306,583	155.8
Multiracial	55,893	798.0	56,227	781.8	56,507	766.1	56,219	737.5	55,816	716.4
Transmission category^f										
Male sex at birth (≥ 13 yrs at end of year)^g										
Male-to-male sexual contact ^h	549,064	—	567,472	—	585,215	—	598,237	—	615,019	—
Injection drug use ⁱ	67,773	—	67,101	—	66,494	—	65,327	—	64,530	—
Male-to-male sexual contact ^h and injection drug use ⁱ	58,001	—	58,116	—	58,324	—	57,858	—	57,559	—
Heterosexual contact ^j	76,847	—	78,210	—	79,292	—	79,440	—	79,991	—
Perinatal ^k	4,814	—	4,912	—	5,037	—	5,120	—	5,217	—
Other ^l	2,767	—	2,753	—	2,755	—	2,737	—	2,733	—
Subtotal	759,266	570.1	778,564	580.6	797,117	590.5	808,719	588.8	825,049	598.1
Female sex at birth (≥ 13 yrs at end of year)^g										
Injection drug use ⁱ	49,011	—	48,850	—	48,759	—	48,197	—	47,864	—
Heterosexual contact ^j	178,387	—	182,152	—	185,832	—	187,561	—	190,265	—
Perinatal ^k	5,518	—	5,697	—	5,858	—	5,979	—	6,120	—
Other ^l	1,641	—	1,659	—	1,684	—	1,697	—	1,707	—
Subtotal	234,557	168.5	238,358	170.0	242,132	171.6	243,434	171.9	245,956	172.9
Child (< 13 yrs at end of year)										
Perinatal	1,713	—	1,562	—	1,382	—	1,209	—	1,060	—
Other ^l	345	—	335	—	288	—	236	—	202	—
Subtotal	2,058	3.9	1,897	3.6	1,670	3.2	1,445	2.8	1,262	2.4
Region of residence^m										
Northeast	231,318	412.5	233,355	416.1	234,829	419.3	234,339	407.4	235,158	411.4
Midwest	118,715	174.2	121,808	178.4	124,536	182.2	126,494	183.5	129,138	187.6
South	449,380	363.5	461,770	370.5	474,428	377.5	482,397	381.6	493,509	387.9
West	196,468	254.3	201,886	259.4	207,126	264.5	210,368	267.5	214,462	272.6
Totalⁿ	995,881	306.3	1,018,819	311.7	1,040,919	317.0	1,053,598	317.8	1,072,267	323.1

Note. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. 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 Rates are per 100,000 population. Rates are not calculated by gender or transmission category because of the lack of denominator data.
- ^b "Transgender woman" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender. "Transgender man" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.
- ^c Additional gender identity examples include "bigender," "gender queer," and "two-spirit."
- ^d Includes Asian/Pacific Islander legacy cases (see Technical Notes).
- ^e Hispanic/Latino persons can be of any race.
- ^f 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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 Data are based on residence at the end of the specified year (i.e., most recent known address).
- ⁿ Includes persons whose race/ethnicity is unknown.

Table 15b. Persons living with diagnosed HIV infection, by year and selected characteristics, 2017–2021—United States and 6 dependent areas

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Gender										
Male	760,803	—	779,369	—	797,263	—	808,207	—	823,824	—
Female	240,162	—	243,758	—	247,371	—	248,484	—	250,857	—
Transgender woman/girl ^b	10,814	—	11,385	—	11,978	—	12,491	—	13,150	—
Transgender man/boy ^b	404	—	451	—	493	—	523	—	577	—
Additional gender identity ^c	239	—	261	—	292	—	315	—	361	—
Age at end of year										
< 13	2,067	3.9	1,903	3.6	1,675	3.2	1,448	2.7	1,266	2.4
13–14	676	8.1	675	8.0	656	7.8	642	7.2	601	6.7
15–19	4,594	21.5	4,410	20.7	4,277	20.1	3,822	17.6	3,707	17.0
20–24	28,729	128.7	27,275	123.6	26,319	120.2	24,487	112.8	23,959	110.0
25–29	71,050	300.9	71,544	300.7	70,016	294.3	66,172	287.0	63,270	279.4
30–34	83,610	377.1	88,530	396.4	93,994	414.6	97,999	424.2	101,666	435.7
35–39	92,825	433.4	94,626	434.8	96,498	439.3	97,690	435.3	101,254	449.9
40–44	97,251	491.0	97,870	491.7	99,356	493.3	101,638	486.4	104,375	489.3
45–49	131,618	622.6	124,765	595.6	118,507	574.7	110,642	538.4	106,287	531.2
50–54	165,046	764.7	159,691	756.8	152,693	737.3	147,229	700.3	140,770	665.7
55–59	146,286	659.2	154,756	698.4	162,214	733.5	164,931	740.0	164,852	755.6
60–64	97,425	483.3	105,704	514.8	113,673	546.8	121,871	572.7	129,622	603.6
≥ 65	91,245	177.3	103,475	195.0	117,519	214.6	131,449	238.1	147,140	259.8
Race/ethnicity										
American Indian/Alaska Native	2,761	—	2,884	—	3,022	—	3,132	—	3,278	—
Asian ^d	13,786	—	14,665	—	15,427	—	16,041	—	16,788	—
Black/African American	403,402	—	412,682	—	421,683	—	426,472	—	433,293	—
Hispanic/Latino ^e	242,128	—	249,919	—	257,943	—	263,102	—	271,212	—
Native Hawaiian/other Pacific Islander	778	—	822	—	869	—	923	—	989	—
White	292,960	—	297,313	—	301,240	—	303,423	—	306,688	—

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Multiracial	55,919	—	56,251	—	56,529	—	56,244	—	55,839	—
Transmission category^f										
Male sex at birth (≥ 13 yrs at end of year)^g										
Male-to-male sexual contact ^h	553,853	—	572,368	—	590,283	—	603,437	—	620,421	—
Injection drug use ⁱ	71,241	—	70,441	—	69,734	—	68,468	—	67,586	—
Male-to-male sexual contact ^h and injection drug use ⁱ	58,804	—	58,890	—	59,089	—	58,604	—	58,297	—
Heterosexual contact ^j	79,212	—	80,556	—	81,654	—	81,781	—	82,317	—
Perinatal ^k	4,943	—	5,040	—	5,166	—	5,245	—	5,337	—
Other ^l	2,795	—	2,780	—	2,782	—	2,763	—	2,759	—
Subtotal	770,848	572.3	790,075	582.7	808,707	592.6	820,299	590.7	836,718	600.0
Female sex at birth (≥ 13 yrs at end of year)^g										
Injection drug use ⁱ	50,003	—	49,809	—	49,704	—	49,119	—	48,764	—
Heterosexual contact ^j	182,209	—	185,953	—	189,650	—	191,356	—	194,074	—
Perinatal ^k	5,641	—	5,813	—	5,966	—	6,090	—	6,227	—
Other ^l	1,654	—	1,671	—	1,694	—	1,708	—	1,720	—
Subtotal	239,507	170.0	243,246	171.5	247,015	173.1	248,273	173.2	250,785	174.2
Child (< 13 yrs at end of year)										
Perinatal	1,722	—	1,568	—	1,387	—	1,212	—	1,064	—
Other ^l	345	—	335	—	288	—	236	—	202	—
Subtotal	2,067	3.9	1,903	3.6	1,675	3.2	1,448	2.7	1,266	2.4
Region of residence^m										
Northeast	231,318	412.5	233,355	416.1	234,829	419.3	234,339	407.4	235,158	411.4
Midwest	118,715	174.2	121,808	178.4	124,536	182.2	126,494	183.5	129,138	187.6
South	449,380	363.5	461,770	370.5	474,428	377.5	482,397	381.6	493,509	387.9
West	196,468	254.3	201,886	259.4	207,126	264.5	210,368	267.5	214,462	272.6
U.S. dependent areas	16,541	444.2	16,405	456.8	16,478	459.0	16,422	446.6	16,502	451.1
Totalⁿ	1,012,422	307.9	1,035,224	313.3	1,057,397	318.6	1,070,020	319.2	1,088,769	324.5

Note. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. 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 Rates are per 100,000 population. Rates are not calculated by gender or transmission category because of the lack of denominator data.

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

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

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

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

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

^f 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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 Data are based on residence at the end of the specified year (i.e., most recent known address).

ⁿ Includes persons whose race/ethnicity is unknown.

Table 16a. Persons living with diagnosed HIV infection, by race/ethnicity and selected characteristics, year-end 2021—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																
Male	2,411	—	13,594	—	283,953	—	204,798	—	763	—	264,430	—	41,758	—	812,192	—
Female	796	—	2,890	—	142,524	—	45,945	—	153	—	40,562	—	12,966	—	246,029	—
Transgender woman/girl ^e	64	—	219	—	6,106	—	4,311	—	39	—	1,370	—	1,002	—	13,111	—
Transgender man/boy ^e	4	—	11	—	234	—	130	—	0	—	142	—	53	—	574	—
Additional gender identity ^f	1	—	6	—	141	—	97	—	0	—	79	—	37	—	361	—
Age at end of year																
< 13	6	1.5	88	3.1	731	10.2	180	1.3	3	2.6	155	0.6	99	3.9	1,262	2.2
13–14	1	1.3	39	8.7	338	27.5	81	3.5	0	0.0	88	2.0	52	13.7	599	6.0
15–19	19	10.5	108	9.5	2,171	74.2	766	14.3	8	18.5	417	3.7	200	24.4	3,689	17.0
20–24	88	48.7	376	30.9	13,224	437.5	5,909	119.1	27	63.2	3,118	27.4	1,021	143.8	23,768	110.0
25–29	270	142.5	1,160	79.5	30,983	946.5	16,750	344.7	71	150.0	10,225	85.6	3,208	518.2	62,673	279.0
30–34	394	210.5	1,860	110.0	47,548	1450.8	25,990	549.9	126	234.5	19,220	151.7	5,614	1131.0	100,758	436.0
35–39	391	237.9	1,953	116.1	42,427	1480.5	27,860	604.2	124	239.0	21,900	174.9	5,569	1393.7	100,231	449.0
40–44	380	252.1	2,038	134.2	41,304	1525.0	29,189	665.9	129	284.9	24,185	202.3	5,723	1667.4	102,963	487.0
45–49	318	229.1	2,348	161.6	41,266	1652.8	29,001	730.0	101	262.6	26,078	228.7	5,562	1979.5	104,701	529.0
50–54	458	317.7	2,290	175.1	51,427	1998.0	34,138	960.3	110	298.8	42,454	325.8	7,465	2901.8	138,428	662.0
55–59	397	258.3	1,771	151.8	58,932	2251.4	34,884	1135.0	100	280.9	57,324	401.3	8,440	3574.7	162,000	751.0
60–64	281	190.0	1,133	108.5	48,019	1961.2	24,471	995.8	73	231.2	46,754	314.0	6,359	2914.3	127,237	599.0
≥ 65	273	83.2	1,556	57.7	54,588	1034.4	26,062	516.2	83	122.6	54,665	130.3	6,504	1368.1	143,958	257.0
Transmission category^g																
Male sex at birth (≥ 13 yrs at end of year)^h																
Male-to-male sexual contact ⁱ	1,773	—	11,670	—	192,625	—	159,035	—	683	—	217,222	—	31,683	—	615,019	—
Injection drug use ^j	225	—	463	—	29,182	—	18,423	—	24	—	13,440	—	2,699	—	64,530	—
Male-to-male sexual contact ⁱ and injection drug use ^j	293	—	436	—	15,249	—	13,539	—	52	—	23,373	—	4,573	—	57,559	—
Heterosexual contact ^k	164	—	1,078	—	49,028	—	16,450	—	37	—	9,915	—	3,292	—	79,991	—
Perinatal ^l	6	—	66	—	2,969	—	1,241	—	3	—	574	—	350	—	5,217	—
Other ^m	14	—	67	—	793	—	430	—	1	—	1,274	—	150	—	2,733	—
Subtotal	2,474	247.3	13,780	172.7	289,847	1756.8	209,118	839.6	800	309.7	265,798	313.6	42,747	1673.0	825,049	598.0

	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
Female sex at birth (≥ 13 yrs at end of year)^h																
Injection drug use ⁱ	270	—	192	—	22,134	—	9,349	—	27	—	12,783	—	3,047	—	47,864	—
Heterosexual contact ^k	509	—	2,511	—	115,867	—	34,984	—	125	—	26,736	—	9,416	—	190,265	—
Perinatal ^l	9	—	77	—	3,584	—	1,384	—	0	—	638	—	419	—	6,120	—
Other ^m	8	—	71	—	795	—	267	—	1	—	473	—	87	—	1,707	—
Subtotal	796	76.5	2,852	32.3	142,380	781.6	45,983	188.6	152	59.9	40,630	46.8	12,970	483.6	245,956	172.2
Child (< 13 yrs at end of year)																
Perinatal	5	—	51	—	621	—	165	—	3	—	124	—	91	—	1,060	—
Other ^m	1	—	37	—	110	—	15	—	0	—	31	—	8	—	202	—
Subtotal	6	1.5	88	3.1	731	10.2	180	1.3	3	2.6	155	0.6	99	3.9	1,262	2.2
Region of residenceⁿ																
Northeast	145	109.0	3,571	88.2	88,954	1,366.9	73,702	840.5	66	284.4	53,270	145.5	15,118	1,428.2	235,158	411.1
Midwest	417	99.4	1,618	65.8	54,575	747.9	16,755	287.0	52	126.7	48,522	94.6	7,116	476.1	129,138	187.1
South	803	97.3	3,600	75.3	255,815	1,047.8	89,718	375.2	167	161.2	119,022	168.7	24,228	926.4	493,509	387.1
West	1,911	177.9	7,931	94.5	33,614	923.7	75,106	311.3	670	146.2	85,769	223.6	9,354	356.7	214,462	272.1
Total	3,276	133.6	16,720	84.9	432,958	1034.3	255,281	407.5	955	152.5	306,583	155.8	55,816	716.4	1,072,267	323.1

Note: Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. 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 individuals who were assigned “male” sex at birth but have ever identified as “female” gender. “Transgender man” includes individuals who were assigned “female” sex at birth but have ever identified as “male” gender.
- ^f Additional gender identity examples include “bigender,” “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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 Data are based on residence at the end of the specified year (i.e., most recent known address).

Table 16b. Persons living with diagnosed HIV infection, by race/ethnicity and selected characteristics, year-end 2021—United States and 6 dependent areas

	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								
Male	2,413	13,651	284,157	216,034	789	264,516	41,776	823,824
Female	796	2,901	142,655	50,599	160	40,581	12,971	250,857

	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.
Transgender woman/girl ^d	64	219	6,106	4,349	40	1,370	1,002	13,150
Transgender man/boy ^d	4	11	234	133	0	142	53	577
Additional gender identity ^e	1	6	141	97	0	79	37	361
Age at end of year								
< 13	6	88	732	182	4	155	99	1,266
13-14	1	39	338	83	0	88	52	601
15-19	19	108	2,173	781	8	417	201	3,707
20-24	88	376	13,230	6,092	28	3,118	1,022	23,959
25-29	270	1,160	30,988	17,338	73	10,226	3,209	63,270
30-34	394	1,867	47,563	26,864	132	19,226	5,614	101,666
35-39	391	1,960	42,444	28,844	128	21,911	5,569	101,254
40-44	380	2,046	41,326	30,555	135	24,191	5,727	104,375
45-49	318	2,356	41,303	30,531	102	26,086	5,563	106,287
50-54	459	2,296	51,485	36,388	114	42,471	7,470	140,770
55-59	397	1,781	58,982	37,651	103	57,343	8,443	164,852
60-64	282	1,147	48,064	26,772	77	46,773	6,360	129,622
≥ 65	273	1,564	54,665	29,131	85	54,683	6,510	147,140
Transmission category^f								
Male sex at birth (≥ 13 yrs at end of year)^g								
Male-to-male sexual contact ^h	1,774	11,716	192,718	164,187	704	217,295	31,698	620,421
Injection drug use ⁱ	225	469	29,219	21,432	24	13,444	2,700	67,586
Male-to-male sexual contact ^h and injection drug use ⁱ	293	438	15,255	14,260	54	23,379	4,575	58,297
Heterosexual contact ^j	165	1,082	49,093	18,700	40	9,919	3,293	82,317
Perinatal ^k	6	66	2,971	1,358	3	574	350	5,337
Other ^l	14	67	793	455	1	1,274	150	2,759
Subtotal	2,476	13,837	290,050	220,391	827	265,884	42,765	836,718
Female sex at birth (≥ 13 yrs at end of year)^g								
Injection drug use ⁱ	270	194	22,149	10,225	27	12,789	3,048	48,764
Heterosexual contact ^j	509	2,520	115,977	38,653	130	26,748	9,419	194,074
Perinatal ^k	9	77	3,589	1,485	1	638	421	6,227
Other ^l	8	71	797	277	1	473	87	1,720
Subtotal	796	2,863	142,511	50,639	158	40,649	12,975	250,785
Child (< 13 yrs at end of year)								
Perinatal	5	51	622	167	4	124	91	1,064
Other ^l	1	37	110	15	0	31	8	202
Subtotal	6	88	732	182	4	155	99	1,266
Region of residence^m								
Northeast	145	3,571	88,954	73,702	66	53,270	15,118	235,158

	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.
Midwest	417	1,618	54,575	16,755	52	48,522	7,116	129,138
South	803	3,600	255,815	89,718	167	119,022	24,228	493,509
West	1,911	7,931	33,614	75,106	670	85,769	9,354	214,462
U.S. dependent areas	2	68	335	15,931	34	105	23	16,502
Total	3,278	16,788	433,293	271,212	989	306,688	55,839	1,088,769

Note: Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. 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 individuals who were assigned "male" sex at birth but have ever identified as "female" gender.

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

^e Additional gender identity examples include "bigender," "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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 Data are based on residence at the end of the specified year (i.e., most recent known address).

Table 17a. Persons aged ≥ 13 years living with diagnosed HIV infection, by year, assigned sex at birth, and selected characteristics, 2017–2021—United States ▼

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Male sex at birth^b										
Age at end of year										
13–14	301	7.1	298	7.0	308	7.2	311	6.9	300	6.6
15–19	2,983	27.7	2,883	26.8	2,858	26.6	2,500	22.7	2,415	21.9
20–24	23,174	204.8	22,111	197.9	21,436	193.7	20,106	183.7	19,861	181.0
25–29	58,974	495.7	59,659	496.7	58,647	487.9	55,563	479.8	53,173	467.3
30–34	66,180	597.2	71,477	639.0	76,816	675.6	80,964	699.6	84,810	726.5
35–39	67,930	641.0	70,429	653.2	73,075	670.9	75,449	672.1	79,475	705.6
40–44	67,581	695.4	68,345	698.7	70,274	709.4	72,880	702.9	75,872	716.2
45–49	94,975	917.6	89,349	871.8	83,910	832.2	77,639	764.4	74,209	751.4
50–54	124,484	1,187.2	119,594	1,165.3	113,494	1,125.7	108,467	1,046.0	102,890	985.9
55–59	110,421	1,034.8	117,086	1,098.5	122,778	1,154.0	124,826	1,149.7	124,456	1,170.8
60–64	73,334	769.6	79,273	815.8	85,115	864.0	91,286	892.2	97,331	941.9
≥ 65	68,929	306.1	78,060	335.4	88,406	367.4	98,728	402.4	110,257	437.3
Race/ethnicity										
American Indian/Alaska Native	2,031	212.1	2,139	221.4	2,252	231.0	2,353	237.2	2,474	247.3
Asian ^c	11,210	153.0	11,965	159.7	12,605	164.8	13,127	166.7	13,780	172.7

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Black/African American	265,465	1,686.5	272,692	1,715.9	279,785	1,743.9	284,122	1,734.2	289,847	1,756.8
Hispanic/Latino ^d	182,348	805.4	189,522	818.7	196,749	832.8	201,717	825.6	209,118	839.6
Native Hawaiian/other Pacific Islander	619	261.2	662	273.6	706	286.0	744	292.6	800	309.7
White	254,576	302.8	258,273	307.2	261,441	310.9	263,168	309.8	265,798	313.6
Multiracial	42,527	1,929.5	42,821	1,877.2	43,092	1,824.8	43,002	1,742.0	42,747	1,673.0
Transmission category^e										
Male-to-male sexual contact ^f	549,064	—	567,472	—	585,215	—	598,237	—	615,019	—
Injection drug use ^g	67,773	—	67,101	—	66,494	—	65,327	—	64,530	—
Male-to-male sexual contact ^f and injection drug use ^g	58,001	—	58,116	—	58,324	—	57,858	—	57,559	—
Heterosexual contact ^h	76,847	—	78,210	—	79,292	—	79,440	—	79,991	—
Perinatal ⁱ	4,814	—	4,912	—	5,037	—	5,120	—	5,217	—
Other ^j	2,767	—	2,753	—	2,755	—	2,737	—	2,733	—
Region of residence^k										
Northeast	163,299	707.0	165,156	714.1	166,690	720.8	166,706	696.6	167,785	703.6
Midwest	93,749	335.1	96,200	342.8	98,302	349.3	99,911	349.3	102,097	356.3
South	330,995	660.0	341,278	673.9	351,614	687.4	358,763	692.2	368,312	704.1
West	171,223	536.0	175,930	545.1	180,511	554.3	183,339	556.0	186,855	564.0
Subtotal	759,266	570.1	778,564	580.6	797,117	590.5	808,719	588.8	825,049	598.1
Female sex at birth^b										
Age at end of year										
13–14	369	9.1	369	9.1	344	8.4	328	7.7	299	6.9
15–19	1,565	15.2	1,484	14.4	1,393	13.5	1,300	12.3	1,274	12.1
20–24	5,259	48.9	4,894	45.9	4,628	43.8	4,161	39.5	3,907	37.0
25–29	11,369	99.2	11,187	97.0	10,681	92.7	9,995	89.0	9,500	86.3
30–34	16,517	151.9	16,175	147.8	16,272	146.7	16,121	142.6	15,948	139.5
35–39	23,608	222.8	23,019	213.8	22,346	205.7	21,218	192.8	20,756	188.1
40–44	28,082	284.9	28,008	282.9	27,625	275.9	27,333	265.3	27,091	257.7
45–49	34,456	326.7	33,438	319.5	32,738	317.6	31,323	308.3	30,492	307.8
50–54	37,632	347.0	37,282	351.9	36,593	352.3	36,249	348.1	35,538	339.4
55–59	33,215	294.6	34,927	310.2	36,532	325.2	37,231	333.1	37,544	343.3
60–64	22,240	213.9	24,410	230.6	26,421	246.7	28,297	261.8	29,906	274.3
≥ 65	20,245	71.7	23,165	79.7	26,559	88.6	29,878	99.9	33,701	110.0
Race/ethnicity										
American Indian/Alaska Native	722	72.1	737	72.9	762	74.6	770	74.7	796	76.5
Asian ^c	2,406	29.2	2,531	30.0	2,646	30.8	2,747	31.5	2,852	32.3
Black/African American	136,404	774.3	138,566	779.5	140,606	783.8	141,187	780.4	142,380	781.6
Hispanic/Latino ^d	43,472	194.8	44,258	193.7	45,035	193.0	45,323	189.6	45,983	188.6
Native Hawaiian/other Pacific Islander	123	52.4	126	52.6	128	52.4	142	56.9	152	59.9
White	38,048	43.5	38,714	44.3	39,494	45.2	39,976	45.9	40,630	46.8
Multiracial	13,187	561.8	13,231	546.0	13,267	530.3	13,095	504.2	12,970	483.6
Transmission category^e										
Injection drug use ^g	49,011	—	48,850	—	48,759	—	48,198	—	47,864	—
Heterosexual contact ^h	178,387	—	182,152	—	185,832	—	187,561	—	190,265	—
Perinatal ⁱ	5,518	—	5,697	—	5,858	—	5,979	—	6,120	—

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Other ⁱ	1,641	—	1,659	—	1,684	—	1,697	—	1,707	—
Region of residence^k										
Northeast	67,699	274.2	67,927	275.0	67,894	275.0	67,428	267.8	67,192	268.0
Midwest	24,497	84.2	25,146	86.2	25,835	88.3	26,233	89.5	26,742	91.1
South	117,446	221.6	119,631	223.4	122,055	225.6	122,969	227.2	124,610	227.9
West	24,915	76.8	25,654	78.3	26,348	79.7	26,804	81.2	27,412	82.6
Subtotal	234,557	168.5	238,358	170.0	242,132	171.6	243,434	171.9	245,956	172.9
Total	993,823	364.8	1,016,922	370.8	1,039,249	376.5	1,052,153	377.1	1,071,005	382.2

Note. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. 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 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 Data include transgender and additional gender identity persons.

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

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

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

^f Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 Data are based on residence at the end of the specified year (i.e., most recent known address).

Table 17b. Persons aged ≥ 13 years living with diagnosed HIV infection, by year, assigned sex at birth, and selected characteristics, 2017–2021—United States and 6 dependent areas ▼

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Male sex at birth^b										
Age at end of year										
13–14	303	7.1	302	7.0	311	7.2	313	6.9	301	6.6
15–19	3,007	27.6	2,911	26.7	2,875	26.4	2,514	22.6	2,426	21.8
20–24	23,402	204.4	22,314	197.5	21,639	193.4	20,287	183.2	20,013	180.3
25–29	59,536	495.2	60,224	496.4	59,207	487.5	56,059	478.8	53,671	466.5
30–34	66,862	597.8	72,149	639.4	77,522	675.7	81,692	699.3	85,548	725.7
35–39	68,831	642.9	71,261	654.7	73,861	671.9	76,221	673.0	80,259	706.4
40–44	68,666	698.6	69,398	701.9	71,300	712.2	73,877	705.2	76,866	718.3
45–49	96,474	921.8	90,669	875.1	85,137	835.3	78,767	767.1	75,282	754.0
50–54	126,550	1,193.5	121,608	1,171.9	115,351	1,131.4	110,249	1,051.6	104,521	990.7
55–59	112,232	1,040.7	118,983	1,104.6	124,796	1,160.7	126,831	1,155.8	126,481	1,177.0
60–64	74,637	774.7	80,658	821.1	86,562	869.3	92,826	897.6	98,927	947.3
≥ 65	70,348	308.2	79,598	337.5	90,146	369.8	100,663	404.8	112,423	439.9
Race/ethnicity										

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
American Indian/Alaska Native	2,033	—	2,141	—	2,254	—	2,355	—	2,476	—
Asian ^c	11,255	—	12,014	—	12,661	—	13,183	—	13,837	—
Black/African American	265,638	—	272,879	—	279,975	—	284,317	—	290,050	—
Hispanic/Latino ^d	193,594	—	200,681	—	207,968	—	212,915	—	220,391	—
Native Hawaiian/other Pacific Islander	644	—	688	—	732	—	771	—	827	—
White	254,644	—	258,341	—	261,518	—	263,248	—	265,884	—
Multiracial	42,548	—	42,839	—	43,110	—	43,022	—	42,765	—
Transmission category^e										
Male-to-male sexual contact ^f	553,853	—	572,368	—	590,282	—	603,437	—	620,421	—
Injection drug use ^g	71,241	—	70,441	—	69,734	—	68,468	—	67,586	—
Male-to-male sexual contact ^f and injection drug use ^g	58,805	—	58,890	—	59,089	—	58,605	—	58,297	—
Heterosexual contact ^h	79,212	—	80,556	—	81,654	—	81,781	—	82,317	—
Perinatal ⁱ	4,943	—	5,040	—	5,166	—	5,245	—	5,337	—
Other ^j	2,795	—	2,780	—	2,782	—	2,763	—	2,759	—
Region of residence^k										
Northeast	163,299	707.0	165,156	714.1	166,690	720.8	166,706	696.6	167,785	703.6
Midwest	93,749	335.1	96,200	342.8	98,302	349.3	99,911	349.3	102,097	356.3
South	330,995	660.0	341,278	673.9	351,614	687.4	358,763	692.2	368,312	704.1
West	171,223	536.0	175,930	545.1	180,511	554.3	183,339	556.0	186,855	564.0
U.S. dependent areas	11,582	765.7	11,511	782.4	11,590	784.3	11,580	761.2	11,669	767.5
Subtotal	770,848	572.3	790,075	582.7	808,707	592.6	820,299	590.7	836,718	600.0
Female sex at birth^b										
Age at end of year										
13–14	373	9.1	373	9.1	345	8.4	329	7.6	300	6.9
15–19	1,587	15.2	1,499	14.4	1,402	13.4	1,308	12.3	1,281	12.0
20–24	5,327	49.0	4,961	46.0	4,680	43.7	4,200	39.5	3,946	37.0
25–29	11,514	99.3	11,320	97.1	10,809	92.8	10,113	89.1	9,599	86.2
30–34	16,748	152.4	16,381	148.2	16,472	147.1	16,307	142.8	16,118	139.6
35–39	23,994	223.9	23,365	214.7	22,637	206.3	21,469	193.1	20,995	188.4
40–44	28,585	286.5	28,472	284.2	28,056	277.0	27,761	266.4	27,509	258.8
45–49	35,144	329.3	34,096	322.0	33,370	320.0	31,875	310.0	31,005	309.3
50–54	38,496	350.6	38,083	355.2	37,342	355.2	36,980	350.8	36,249	342.1
55–59	34,054	298.6	35,773	314.1	37,418	329.3	38,100	336.7	38,371	346.6
60–64	22,788	216.5	25,046	233.9	27,111	250.3	29,045	265.5	30,695	278.2
≥ 65	20,897	73.0	23,877	81.0	27,373	90.1	30,786	101.5	34,717	111.7
Race/ethnicity										
American Indian/Alaska Native	722	—	737	—	762	—	770	—	796	—
Asian ^c	2,417	—	2,542	—	2,657	—	2,758	—	2,863	—
Black/African American	136,530	—	138,692	—	140,736	—	141,318	—	142,511	—
Hispanic/Latino ^d	48,254	—	48,980	—	49,748	—	49,991	—	50,639	—
Native Hawaiian/other Pacific Islander	130	—	131	—	134	—	148	—	158	—
White	38,066	—	38,731	—	39,512	—	39,993	—	40,649	—

	2017		2018		2019		2020 (COVID-19 Pandemic)		2021	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Multiracial	13,192	—	13,237	—	13,271	—	13,100	—	12,975	—
Transmission category^e										
Injection drug use ^g	50,003	—	49,809	—	49,704	—	49,119	—	48,764	—
Heterosexual contact ^h	182,209	—	185,953	—	189,650	—	191,356	—	194,074	—
Perinatal ⁱ	5,641	—	5,813	—	5,966	—	6,090	—	6,227	—
Other ^j	1,654	—	1,671	—	1,694	—	1,708	—	1,720	—
Region of residence^k										
Northeast	67,699	274.2	67,927	275.0	67,894	275.0	67,428	267.8	67,192	268.0
Midwest	24,497	84.2	25,146	86.2	25,835	88.3	26,233	89.5	26,742	91.1
South	117,446	221.6	119,631	223.4	122,055	225.6	122,969	227.2	124,610	227.9
West	24,915	76.8	25,654	78.3	26,348	79.7	26,804	81.2	27,412	82.6
U.S. dependent areas	4,950	294.0	4,888	298.7	4,883	296.8	4,839	285.1	4,829	284.1
Subtotal	239,507	170.0	243,246	171.5	247,015	173.1	248,273	173.2	250,785	174.2
Total	1,010,355	366.6	1,033,321	372.5	1,055,722	378.1	1,068,572	378.7	1,087,503	383.7

Note. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. 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 based on these numbers, should be interpreted with caution. Rates by race/ethnicity are not provided because U.S. census information is limited for U.S. dependent areas.

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

^b Data include transgender and additional gender identity persons.

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

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

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

^f Includes individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 Data are based on residence at the end of the specified year (i.e., most recent known address).

Table 18a. Transgender and additional gender identity persons aged ≥ 13 years living with diagnosed HIV infection, by year and selected characteristics, 2017–2021—United States

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Transgender woman^a					
Age at end of year					
13–14	0	0	0	1	2
15–19	106	78	76	53	64
20–24	864	837	802	774	786
25–29	2,002	2,005	1,928	1,846	1,833
30–34	1,891	2,115	2,380	2,620	2,749
35–39	1,519	1,628	1,758	1,840	2,015

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
40–44	1,150	1,227	1,314	1,451	1,605
45–49	1,117	1,132	1,173	1,168	1,191
50–54	1,010	1,056	1,055	1,105	1,123
55–59	625	703	795	830	876
60–64	314	355	392	455	521
≥ 65	175	209	262	303	345
Race/ethnicity					
American Indian/Alaska Native	44	51	55	59	64
Asian ^b	166	176	188	201	219
Black/African American	5,029	5,305	5,581	5,816	6,106
Hispanic/Latino ^c	3,436	3,642	3,870	4,062	4,311
Native Hawaiian/other Pacific Islander	24	27	31	33	39
White	1,124	1,174	1,232	1,284	1,370
Multiracial	950	970	978	991	1,001
Exposure category^d					
Sexual contact ^e	8,923	9,467	10,027	10,529	11,151
Injection drug use ^f	22	26	27	27	30
Sexual contact ^e and injection drug use ^f	1,646	1,663	1,682	1,670	1,679
Perinatal ^g	24	24	23	23	22
Other ^h	158	165	176	197	228
Region of residenceⁱ					
Northeast	2,786	2,928	3,039	3,126	3,256
Midwest	1,497	1,601	1,655	1,741	1,862
South	3,937	4,114	4,339	4,577	4,830
West	2,553	2,702	2,902	3,002	3,162
Subtotal	10,773	11,345	11,935	12,446	13,110
Transgender man^a					
Age at end of year					
13–14	1	0	0	1	2
15–19	7	7	5	3	6
20–24	20	22	29	39	40
25–29	63	75	75	69	70
30–34	45	63	88	99	123
35–39	66	66	67	76	83
40–44	41	51	55	56	62
45–49	49	52	53	48	48
50–54	48	47	45	48	47
55–59	28	25	34	39	45
60–64	21	27	23	25	23
≥ 65	11	12	15	17	25
Race/ethnicity					
American Indian/Alaska Native	4	4	4	4	4
Asian ^b	6	8	9	9	11
Black/African American	175	194	210	217	234

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Hispanic/Latino ^c	87	96	109	117	130
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	86	102	110	123	142
Multiracial	42	43	47	50	53
Exposure category^d					
Sexual contact ^e	291	334	367	390	437
Injection drug use ^f	6	8	9	10	10
Sexual contact ^e and injection drug use ^f	65	63	65	66	65
Perinatal ^g	18	18	17	19	19
Other ^h	20	24	31	35	43
Region of residenceⁱ					
Northeast	77	80	89	94	101
Midwest	112	122	127	129	136
South	119	136	153	176	198
West	92	109	120	121	139
Subtotal	400	447	489	520	574
Additional gender identity^j					
Age at end of year					
13–14	0	0	0	0	0
15–19	3	5	6	4	4
20–24	26	30	39	36	49
25–29	46	47	46	53	65
30–34	34	41	58	69	73
35–39	34	38	41	38	39
40–44	21	20	18	24	33
45–49	27	26	26	32	33
50–54	17	18	21	19	22
55–59	16	17	18	14	16
60–64	9	10	8	14	14
≥ 65	6	8	11	12	13
Race/ethnicity					
American Indian/Alaska Native	0	1	1	1	1
Asian ^b	2	5	5	6	6
Black/African American	102	109	118	128	141
Hispanic/Latino ^c	63	67	76	81	97
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	45	49	58	64	79
Multiracial	27	29	34	35	37
Exposure category^d					
Sexual contact ^e	203	225	255	275	314
Injection drug use ^f	1	1	1	1	1
Sexual contact ^e and injection drug use ^f	28	27	28	29	34
Perinatal ^g	3	3	3	3	3

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Other ^h	4	4	5	7	9
Region of residenceⁱ					
Northeast	110	129	138	143	155
Midwest	37	40	52	59	67
South	72	72	79	81	90
West	20	19	23	32	49
Subtotal	239	260	292	315	361
Total	11,412	12,052	12,716	13,281	14,045

Note. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. 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 trends based on these numbers, should be interpreted with caution.

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

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

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

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

^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 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 Individuals 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. Data were not statistically adjusted to account for missing exposure category; therefore, case counts for “Other” might be high.

ⁱ Data are based on address of residence at the end of the specified year (i.e., most recent known address).

^j Additional gender identity examples include “bigender,” “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, 2017–2021—United States and 6 dependent areas

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Transgender woman^a					
Age at end of year					
13–14	0	0	0	1	2
15–19	106	78	76	53	64
20–24	867	841	807	780	789
25–29	2,005	2,008	1,931	1,848	1,838
30–34	1,900	2,124	2,388	2,627	2,754
35–39	1,524	1,631	1,761	1,846	2,018
40–44	1,153	1,234	1,322	1,460	1,614
45–49	1,120	1,132	1,174	1,170	1,193
50–54	1,014	1,058	1,059	1,107	1,124
55–59	631	710	801	836	881
60–64	315	356	394	458	525

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
≥ 65	177	211	263	304	347
Race/ethnicity					
American Indian/Alaska Native	44	51	55	59	64
Asian ^b	166	176	188	201	219
Black/African American	5,030	5,306	5,582	5,817	6,106
Hispanic/Latino ^c	3,474	3,679	3,908	4,104	4,349
Native Hawaiian/other Pacific Islander	24	27	32	34	40
White	1,124	1,174	1,233	1,284	1,370
Multiracial	950	970	978	991	1,001
Exposure category^d					
Sexual contact ^e	8,954	9,498	10,062	10,567	11,185
Injection drug use ^f	22	26	27	27	30
Sexual contact ^e and injection drug use ^f	1,654	1,670	1,688	1,676	1,684
Perinatal ^g	24	24	23	23	22
Other ^h	158	165	176	197	228
Region of residenceⁱ					
Northeast	2,786	2,928	3,039	3,126	3,256
Midwest	1,497	1,601	1,655	1,741	1,862
South	3,937	4,114	4,339	4,577	4,830
West	2,553	2,702	2,902	3,002	3,162
US dependent areas	39	38	41	44	39
Subtotal	10,812	11,383	11,976	12,490	13,149
Transgender man^a					
Age at end of year					
13–14	1	0	0	1	2
15–19	8	8	5	3	6
20–24	20	22	30	40	41
25–29	64	76	76	69	70
30–34	45	63	88	100	124
35–39	66	66	67	76	83
40–44	41	51	55	56	62
45–49	49	52	53	48	48
50–54	48	47	45	48	47
55–59	28	25	34	39	45
60–64	21	27	23	25	23
≥ 65	12	13	16	18	26
Race/ethnicity					
American Indian/Alaska Native	4	4	4	4	4
Asian ^b	6	8	9	9	11
Black/African American	175	194	210	217	234
Hispanic/Latino ^c	90	99	112	120	133
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	86	102	110	123	142
Multiracial	42	43	47	50	53

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Exposure category^d					
Sexual contact ^e	292	335	368	391	438
Injection drug use ^f	6	8	9	10	10
Sexual contact ^e and injection drug use ^f	66	64	66	67	66
Perinatal ^g	19	19	18	20	20
Other ^h	20	24	31	35	43
Region of residenceⁱ					
Northeast	77	80	89	94	101
Midwest	112	122	127	129	136
South	119	136	153	176	198
West	92	109	120	121	139
US dependent areas	3	3	3	3	3
Subtotal	403	450	492	523	577
Additional gender identity^j					
Age at end of year					
13–14	0	0	0	0	0
15–19	3	5	6	4	4
20–24	26	30	39	36	49
25–29	46	47	46	53	65
30–34	34	42	58	69	73
35–39	34	38	41	38	39
40–44	21	20	18	24	33
45–49	27	26	26	32	33
50–54	17	18	21	19	22
55–59	16	17	18	14	16
60–64	9	10	8	14	14
≥ 65	6	8	11	12	13
Race/ethnicity					
American Indian/Alaska Native	0	1	1	1	1
Asian ^b	2	5	5	6	6
Black/African American	102	109	118	128	141
Hispanic/Latino ^c	63	68	76	81	97
Native Hawaiian/other Pacific Islander	0	0	0	0	0
White	45	49	58	64	79
Multiracial	27	29	34	35	37
Exposure category^d					
Sexual contact ^e	203	226	255	275	314
Injection drug use ^f	1	1	1	1	1
Sexual contact ^e and injection drug use ^f	28	27	28	29	34
Perinatal ^g	3	3	3	3	3
Other ^h	4	4	5	7	9
Region of residenceⁱ					
Northeast	110	129	138	143	155

	2017	2018	2019	2020 (COVID-19 Pandemic)	2021
	No.	No.	No.	No.	No.
Midwest	37	40	52	59	67
South	72	72	79	81	90
West	20	19	23	32	49
US dependent areas	0	1	0	0	0
Subtotal	239	261	292	315	361
Total	11,454	12,094	12,760	13,328	14,087

Note. Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. 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 trends based on these numbers, should be interpreted with caution.

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

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

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

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

^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 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 Individuals 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. Data were not statistically adjusted to account for missing exposure category; therefore, case counts for “Other” might be high.

ⁱ Data are based on address of residence at the end of the specified year (i.e., most recent known address).

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

Table 19a. Persons aged 13–24 years living with diagnosed HIV infection, by age at end of year, assigned sex at birth, and selected characteristics, year-end 2021—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	300	6.6	726	10.9	1,689	38.6	8,732	131.9	11,129	255.6	22,576	85.1
Female	299	6.9	630	9.9	644	15.4	1,842	29.0	2,065	49.2	5,480	21.6
Race/Ethnicity												
American Indian/Alaska Native	1	1.3	3	2.7	16	22.5	42	38.5	46	64.3	108	24.8
Asian ^b	39	8.7	56	8.3	52	11.3	166	23.3	210	41.5	523	18.7
Black/African American	338	27.5	833	47.4	1,338	114.8	6,064	333.5	7,160	594.7	15,733	219.2
Hispanic/Latino ^c	81	3.5	229	7.0	537	25.9	2,549	84.1	3,360	174.1	6,756	53.6
Native Hawaiian/Other Pacific Islander	0	0.0	3	11.4	5	29.4	14	54.8	13	75.7	35	33.7
White	88	2.0	148	2.2	269	6.0	1,307	19.1	1,811	39.8	3,623	13.5
Multiracial	52	13.7	84	16.4	116	37.6	431	98.1	590	217.7	1,273	66.6
Transmission Category^d												
Male sex at birth^e												
Male-to-male sexual contact ^f	5	—	248	—	1,290	—	7,698	—	9,848	—	19,089	—
Injection drug use ^g	0	—	2	—	5	—	71	—	126	—	204	—

	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
Male-to-male sexual contact ^f and injection drug use ^g	1	—	4	—	21	—	174	—	341	—	541	—
Heterosexual contact ^h	1	—	11	—	28	—	219	—	308	—	566	—
Perinatal ⁱ	236	—	364	—	278	—	500	—	457	—	1,834	—
Other ^j	57	—	97	—	67	—	72	—	50	—	343	—
Subtotal	300	6.6	726	10.9	1,689	38.6	8,732	131.9	11,129	255.6	22,576	85.1
Female sex at birth^e												
Injection drug use ^g	1	—	6	—	27	—	108	—	156	—	296	—
Heterosexual contact ^h	6	—	75	—	221	—	1,027	—	1,320	—	2,648	—
Perinatal ⁱ	224	—	456	—	304	—	633	—	552	—	2,169	—
Other ^j	69	—	93	—	92	—	74	—	38	—	366	—
Subtotal	299	6.9	630	9.9	644	15.4	1,842	29.0	2,065	49.2	5,480	21.6
Region of residence^k												
Northeast	94	6.7	242	11.5	345	23.1	1,557	71.1	1,980	141.1	4,218	49.2
Midwest	140	7.5	236	8.6	356	19.8	1,569	56.5	1,936	108.9	4,237	38.6
South	261	7.5	638	12.6	1,249	38.1	5,874	118.1	7,115	216.8	15,137	75.5
West	104	4.9	240	7.7	383	19.2	1,574	51.9	2,163	103.5	4,464	36.1
Total^l	599	6.7	1,356	10.4	2,333	27.2	10,574	81.5	13,194	154.3	28,056	54.0

Note: Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. 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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 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, assigned sex at birth, and selected characteristics, year-end 2021—United States and 6 dependent areas

	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	301	731	1,695	8,795	11,218	22,740
Female	300	635	646	1,859	2,087	5,527
Race/Ethnicity						
American Indian/Alaska Native	1	3	16	42	46	108

	13–14 years	15–17 years	18–19 years	20–22 years	23–24 years	Total
	No.	No.	No.	No.	No.	No.
Asian ^a	39	56	52	166	210	523
Black/African American	338	834	1,339	6,066	7,164	15,741
Hispanic/Latino ^b	83	237	544	2,627	3,465	6,956
Native Hawaiian/Other Pacific Islander	0	3	5	14	14	36
White	88	148	269	1,307	1,811	3,623
Multiracial	52	85	116	431	591	1,275
Transmission Category^c						
Male sex at birth^d						
Male-to-male sexual contact ^e	5	248	1,294	7,745	9,921	19,213
Injection drug use ^f	0	2	5	71	127	205
Male-to-male sexual contact ^e and injection drug use ^f	1	4	21	177	343	546
Heterosexual contact ^g	1	11	29	222	312	574
Perinatal ^h	237	369	279	509	465	1,858
Other ⁱ	57	97	67	73	50	344
Subtotal	301	731	1,695	8,795	11,218	22,740
Female sex at birth^d						
Injection drug use ^f	1	6	27	108	156	296
Heterosexual contact ^g	6	76	222	1,036	1,335	2,675
Perinatal ^h	225	460	305	641	556	2,187
Other ⁱ	69	93	92	74	40	368
Subtotal	300	635	646	1,859	2,087	5,527
Region of residence^j						
Northeast	94	242	345	1,557	1,980	4,218
Midwest	140	236	356	1,569	1,936	4,237
South	261	638	1,249	5,874	7,115	15,137
West	104	240	383	1,574	2,163	4,464
U.S. dependent areas	2	10	8	80	111	211
Total^k	601	1,366	2,341	10,654	13,305	28,267

Note: Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. 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 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 assigned sex 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 Individuals 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 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, 2021, and persons living with diagnosed HIV infection (prevalence), year-end 2021, by area of residence—United States and 6 dependent areas



Area of residence	Diagnosis, 2021 ^a						Prevalence of diagnosed HIV infection, year-end 2021					
	Persons aged ≥13 years		Children (<13 years)		Total		Persons aged ≥13 years		Children (<13 years)		Total	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Alabama	625	14.7	2	0.3	627	12.4	14,436	339.7	23	2.9	14,459	286.9
Alaska	30	5.0	0	0.0	30	4.1	749	124.3	3	2.3	752	102.6
Arizona	781	12.7	4	0.4	785	10.8	18,230	296.4	25	2.2	18,255	250.9
Arkansas	338	13.4	0	0.0	338	11.2	6,225	245.9	8	1.6	6,233	206.0
California	4,399	13.3	6	0.1	4,405	11.2	136,091	411.4	82	1.3	136,173	347.0
Colorado	406	8.2	0	0.0	406	7.0	13,442	271.9	21	2.4	13,463	231.6
Connecticut	233	7.5	0	0.0	233	6.5	10,638	342.5	10	2.0	10,648	295.3
Delaware	81	9.5	0	0.0	81	8.1	3,515	410.2	3	2.0	3,518	350.6
District of Columbia	195	34.1	0	0.0	195	29.1	13,622	2,381.8	7	7.1	13,629	2,034.0
Florida	4,072	21.7	5	0.2	4,077	18.7	117,244	624.7	123	4.1	117,367	538.8
Georgia	2,371	26.2	3	0.2	2,374	22.0	59,422	657.1	68	3.9	59,490	550.9
Hawaii	65	5.3	0	0.0	65	4.5	2,384	195.6	2	0.9	2,386	165.5
Idaho	54	3.4	0	0.0	54	2.8	1,311	83.2	4	1.2	1,315	69.2
Illinois	1,195	11.1	4	0.2	1,199	9.5	35,731	333.3	70	3.6	35,801	282.5
Indiana	528	9.3	1	0.1	529	7.8	12,347	217.0	49	4.4	12,396	182.1
Iowa	124	4.6	0	0.0	124	3.9	3,055	114.2	8	1.5	3,063	95.9
Kansas	154	6.3	0	0.0	154	5.2	3,493	143.2	9	1.8	3,502	119.3
Kentucky	390	10.3	0	0.0	390	8.6	8,137	214.5	14	2.0	8,151	180.8
Louisiana	899	23.3	1	0.1	900	19.5	21,552	559.0	27	3.5	21,579	466.7
Maine	31	2.6	0	0.0	31	2.3	1,693	141.2	8	4.6	1,701	124.0
Maryland	749	14.4	2	0.2	751	12.2	33,467	643.4	32	3.3	33,499	543.4
Massachusetts	440	7.3	1	0.1	441	6.3	21,122	349.9	19	2.0	21,141	302.7
Michigan	633	7.4	0	0.0	633	6.3	17,313	202.6	45	3.0	17,358	172.7
Minnesota	297	6.2	0	0.0	297	5.2	9,223	193.0	27	2.9	9,250	162.1
Mississippi	419	17.0	0	0.0	419	14.2	9,873	399.8	4	0.8	9,877	334.8
Missouri	549	10.6	1	0.1	550	8.9	13,103	252.3	25	2.6	13,128	212.8
Montana	22	2.3	0	0.0	22	2.0	722	76.9	2	1.2	724	65.6
Nebraska	105	6.5	0	0.0	105	5.3	2,384	147.1	4	1.2	2,388	121.6
Nevada	501	18.9	0	0.0	501	15.9	11,416	430.5	5	1.0	11,421	363.3
New Hampshire	32	2.6	0	0.0	32	2.3	1,365	112.5	4	2.3	1,369	98.6
New Jersey	1,143	14.6	0	0.0	1,143	12.3	35,207	448.5	39	2.8	35,246	380.3
New Mexico	149	8.3	0	0.0	149	7.0	4,017	224.7	7	2.1	4,024	190.2
New York	2,116	12.5	2	0.1	2,118	10.7	124,630	737.1	57	1.9	124,687	628.6
North Carolina	1,390	15.5	1	0.1	1,391	13.2	34,327	383.9	49	3.0	34,376	325.8
North Dakota	37	5.8	1	0.7	38	4.9	543	84.9	2	1.5	545	70.3
Ohio	909	9.1	1	0.1	910	7.7	24,084	242.1	40	2.2	24,124	204.8
Oklahoma	387	11.7	1	0.1	388	9.7	6,948	210.2	17	2.5	6,965	174.7
Oregon	202	5.5	0	0.0	202	4.8	7,484	205.4	13	2.2	7,497	176.6
Pennsylvania	913	8.2	2	0.1	915	7.1	36,881	332.5	39	2.1	36,920	284.8

Area of residence	Diagnosis, 2021 ^a						Prevalence of diagnosed HIV infection, year-end 2021					
	Persons aged ≥13 years		Children (<13 years)		Total		Persons aged ≥13 years		Children (<13 years)		Total	
	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b	No.	Rate ^b
Rhode Island	68	7.2	0	0.0	68	6.2	2,713	285.6	3	2.1	2,716	247.9
South Carolina	652	14.8	3	0.4	655	12.6	18,109	410.7	25	3.2	18,134	349.4
South Dakota	31	4.2	0	0.0	31	3.5	723	98.0	3	1.9	726	81.1
Tennessee	831	14.1	1	0.1	832	11.9	18,738	318.1	39	3.6	18,777	269.2
Texas	4,363	18.0	3	0.1	4,366	14.8	100,700	415.3	115	2.2	100,815	341.4
Utah	133	5.0	0	0.0	133	4.0	3,453	129.1	8	1.2	3,461	103.7
Vermont	12	2.1	0	0.0	12	1.9	728	128.8	2	2.5	730	113.1
Virginia	792	10.8	3	0.2	795	9.2	24,411	333.9	32	2.4	24,443	282.8
Washington	461	7.0	4	0.3	465	6.0	14,591	222.9	23	1.9	14,614	188.8
West Virginia	149	9.7	0	0.0	149	8.4	2,196	143.3	1	0.4	2,197	123.2
Wisconsin	253	5.1	1	0.1	254	4.3	6,840	136.6	17	1.9	6,857	116.3
Wyoming	7	1.4	0	0.0	7	1.2	377	77.5	0	0.0	377	65.1
Subtotal	35,716	12.7	53	0.1	35,769	10.8	1,071,005	382.2	1,262	2.4	1,072,267	323.1
U.S. dependent areas												
American Samoa	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	2.2
Guam	0	0.0	0	0.0	0	0.0	109	84.5	1	2.5	110	65.2
Northern Mariana Islands	0	0.0	0	0.0	0	0.0	15	36.2	0	0.0	15	29.0
Puerto Rico	410	14.1	0	0.0	410	12.6	15,801	543.4	2	0.6	15,803	484.2
Republic of Palau	0	0.0	0	0.0	0	0.0	9	48.8	0	0.0	9	41.6
U.S. Virgin Islands	10	11.4	0	0.0	10	9.4	563	640.6	1	5.6	564	532.7
Subtotal	420	13.0	0	0.0	420	11.5	16,498	512.4	4	0.9	16,502	451.1
Total	36,136	12.7	53	0.1	36,189	10.8	1,087,503	383.7	1,266	2.4	1,088,769	324.5

Note: Numbers less than 12, and rates based on these numbers, should be interpreted with caution. Prevalence data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022.

^aData are based on residence at HIV diagnosis.

^bRates 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 2021—United States and 6 dependent areas

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	6	23.5	48	74.6	8,988	812.5	554	322.0	3	142.9	3,867	136.9	928	1,697.2	14,436	...
Alaska	192	226.1	30	74.9	97	486.5	96	236.0	5	60.2	285	76.2	44	127.3	749	...
Arizona	710	311.2	236	106.6	2,521	901.2	5,979	324.6	29	241.4	8,063	233.3	649	577.4	18,230	...
Arkansas	6	29.4	27	62.9	2,653	702.2	504	270.2	4	45.1	2,654	143.2	373	897.3	6,225	...
California	280	202.1	5,898	113.7	21,953	1,158.7	55,062	437.2	247	198.8	46,801	379.8	5,841	714.0	136,091	...
Colorado	87	267.8	167	98.8	2,049	1,029.0	3,382	332.9	17	237.5	7,373	215.6	322	319.3	13,442	...
Connecticut	10	152.2	110	73.4	3,486	1,075.0	3,721	742.5	7	653.6	3,034	146.1	269	576.3	10,638	...
Delaware	3	110.6	15	43.0	1,957	1,048.1	354	470.1	1	348.4	1,034	191.3	150	918.0	3,515	...

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
District of Columbia	15	1,214.6	77	289.9	9,516	3,848.4	1,242	2,075.0	7	2,564.1	1,962	872.6	799	6,731.3	13,622	2,111.1
Florida	83	167.0	719	130.1	50,647	1,819.8	31,452	643.9	50	404.3	31,311	306.3	2,977	1,127.4	117,244	1,004.7
Georgia	20	91.4	293	72.2	40,676	1,422.8	5,000	598.7	18	308.4	9,951	208.4	3,457	2,465.9	59,422	500.0
Hawaii	3	107.6	393	83.9	116	488.1	326	289.4	215	188.7	1,029	371.4	302	137.2	2,384	202.3
Idaho	12	70.7	13	53.6	121	1,026.7	245	129.3	1	35.3	867	66.6	52	182.0	1,311	110.7
Illinois	33	193.0	487	76.1	15,657	1,052.3	7,713	426.4	18	570.2	9,046	136.8	2,776	1,872.0	35,731	303.1
Indiana	11	78.4	234	157.6	4,646	865.1	1,319	336.8	4	175.7	5,581	123.8	552	627.9	12,347	1,057.0
Iowa	10	123.8	71	99.2	694	688.0	335	212.3	5	121.9	1,759	76.6	181	493.4	3,055	260.0
Kansas	14	69.2	58	75.5	881	638.6	630	225.7	1	41.3	1,738	93.0	168	312.6	3,493	296.7
Kentucky	4	47.3	63	102.9	2,466	793.0	696	508.0	1	36.0	4,400	136.8	506	897.4	8,137	690.0
Louisiana	34	130.6	82	115.4	14,468	1,183.3	1,295	670.9	4	266.5	5,196	226.5	470	999.6	21,552	1,833.0
Maine	7	92.8	13	80.7	292	1,606.6	129	606.8	0	0.0	1,194	106.8	57	331.8	1,693	1,430.0
Maryland	21	161.4	264	74.2	23,876	1,520.4	2,609	508.3	6	229.7	4,054	153.5	2,637	2,481.6	33,467	2,843.0
Massachusetts	26	235.6	479	108.5	6,349	1,454.0	5,821	827.5	8	311.8	7,971	183.3	466	497.6	21,122	1,811.0
Michigan	28	56.6	145	50.5	9,357	825.2	1,287	300.2	3	123.7	5,820	89.8	670	409.4	17,313	1,463.0
Minnesota	114	239.1	195	81.0	3,394	1,102.4	1,104	446.2	5	200.9	3,926	102.1	480	538.7	9,223	787.0
Mississippi	10	80.7	22	79.2	7,223	793.9	353	461.1	3	304.3	1,850	130.5	377	1,593.5	9,873	833.0
Missouri	12	50.6	97	84.7	5,617	969.2	906	422.6	6	84.9	5,907	142.0	556	596.5	13,103	1,108.0
Montana	26	51.0	5	53.9	21	414.3	64	178.8	1	143.1	562	68.8	43	206.7	722	602.0
Nebraska	26	202.3	57	133.6	645	840.3	428	253.3	3	276.2	1,134	87.7	91	354.7	2,384	200.0
Nevada	46	201.1	373	154.1	3,013	1,223.6	3,183	430.7	51	288.4	4,267	327.2	481	601.0	11,416	957.0
New Hampshire	0	0.0	23	64.0	167	929.4	205	429.3	0	0.0	914	83.7	55	337.8	1,365	1,140.0
New Jersey	13	110.8	395	49.9	14,840	1,460.1	11,016	695.9	9	339.6	6,398	147.3	2,488	2,424.9	35,207	2,937.0
New Mexico	331	213.0	21	69.5	223	638.0	1,995	233.4	2	162.5	1,296	188.8	149	605.4	4,017	335.0
New York	46	89.6	2,166	140.9	46,128	1,895.6	45,007	1,438.2	25	320.3	21,482	226.3	9,501	3,716.7	124,630	10,437.0
North Carolina	172	175.6	219	76.7	20,378	1,078.6	3,317	419.1	14	230.8	8,205	143.3	2,015	1,377.1	34,327	2,883.0
North Dakota	24	79.1	6	58.9	227	1,169.0	34	142.0	0	0.0	233	42.8	19	179.2	543	453.0
Ohio	9	44.4	134	52.6	10,629	867.4	1,826	481.3	4	92.0	10,149	128.7	1,265	720.5	24,084	2,007.0
Oklahoma	350	128.3	103	129.8	1,657	679.0	867	257.2	13	217.2	3,465	157.3	493	300.9	6,948	580.0
Oregon	54	132.9	154	86.6	592	840.6	1,229	268.2	22	148.4	5,160	186.0	273	254.3	7,484	624.0
Pennsylvania	37	224.7	317	75.6	16,915	1,439.0	6,892	841.5	15	454.8	10,557	124.1	2,144	1,392.4	36,881	3,073.0
Rhode Island	6	152.3	39	118.2	609	1,057.8	803	555.2	2	355.9	1,161	167.5	93	543.1	2,713	2,277.0
South Carolina	13	76.0	62	75.6	11,204	993.0	1,177	477.6	4	153.0	4,258	148.3	1,383	2,225.3	18,109	1,505.0
South Dakota	109	201.5	6	49.4	159	1,018.3	74	265.2	0	0.0	340	55.3	35	266.2	723	599.0
Tennessee	9	50.7	90	78.9	10,019	1,051.1	1,253	409.4	3	92.0	6,487	147.1	875	1,013.1	18,738	1,562.0
Texas	37	43.8	1,103	85.0	35,728	1,197.1	36,249	391.2	25	111.4	22,165	215.6	5,385	1,718.1	100,700	8,391.0
Utah	34	133.7	78	108.3	331	1,041.1	931	252.4	16	59.2	1,959	93.2	101	206.1	3,453	2,881.0
Vermont	0	0.0	16	145.5	76	1,049.4	67	565.4	0	0.0	535	102.1	34	376.3	728	607.0
Virginia	18	88.2	378	73.0	13,596	975.6	2,613	384.2	10	179.9	6,552	144.7	1,219	738.4	24,411	2,034.0
Washington	120	147.2	539	82.5	2,479	937.9	2,499	316.7	62	131.9	7,819	174.6	1,068	458.5	14,591	1,214.0
West Virginia	1	28.3	14	104.6	384	701.4	116	442.1	0	0.0	1,548	109.6	129	590.0	2,196	1,836.0
Wisconsin	27	62.1	95	64.8	2,489	836.2	1,068	327.2	3	158.8	2,853	69.2	304	437.6	6,840	571.0

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
Wyoming	11	113.3	3	59.3	18	352.3	74	160.5	0	0.0	256	62.0	15	197.9	377	
Subtotal	3,270	160.3	16,632	98.9	432,227	1,245.1	255,101	517.6	952	185.9	306,428	178.6	55,717	1,063.9	1,071,005	
U.S. dependent areas^e																
American Samoa	0	—	0	—	0	—	0	—	0	—	0	—	1	—	1	
Guam	0	—	56	—	5	—	8	—	21	—	11	—	8	—	109	
Northern Mariana Islands	1	—	5	—	0	—	0	—	5	—	2	—	2	—	15	
Puerto Rico	1	—	2	—	22	—	15,722	—	1	—	46	—	6	—	15,801	
Republic of Palau	0	—	2	—	0	—	1	—	6	—	0	—	0	—	9	
U.S. Virgin Islands	0	—	3	—	307	—	198	—	0	—	46	—	6	—	563	
Subtotal	2	—	68	—	334	—	15,929	—	33	—	105	—	23	—	16,498	
Total	3,272	—	16,700	—	432,561	—	271,030	—	985	—	306,533	—	55,740	—	1,087,503	

Note: Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. 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. dependent areas.

Table 22. Diagnoses of HIV infection, 2021, and persons living with diagnosed HIV infection (prevalence), year-end 2021, by metropolitan statistical area of residence—United States and Puerto Rico

Metropolitan statistical area of residence	Diagnosis, 2021 ^a			Prevalence of diagnosed HIV infection, year-end 2021 ^b	
	No.	Rate ^c	Rank ^d	No.	Rate ^c
Akron, OH	49	7.0	80	1,127	161.0
Albany-Schenectady-Troy, NY	44	4.9	103	2,183	242.7
Albuquerque, NM	78	8.5	73	2,061	224.4
Allentown-Bethlehem-Easton, PA-NJ	47	5.4	100	1,737	200.7
Atlanta-Sandy Springs-Alpharetta, GA	1,562	25.4	3	40,931	666.2
Augusta-Richmond County, GA-SC	112	18.2	14	2,598	421.8
Austin-Round Rock-Georgetown, TX	282	12.0	40	6,967	296.2
Bakersfield, CA	182	19.8	8	2,112	230.1
Baltimore-Columbia-Towson, MD	343	12.1	38	16,677	587.6
Baton Rouge, LA	192	22.0	5	5,592	641.4
Birmingham-Hoover, AL	180	16.2	20	4,429	397.5
Boise City, ID	34	4.3	109	213	26.8
Boston-Cambridge-Newton, MA-NH ^e	335	6.8	83	14,507	296.1
Boston, MA	192	9.5	—	8,266	407.4

Metropolitan statistical area of residence	Diagnosis, 2021 ^a			Prevalence of diagnosed HIV infection, year-end 2021 ^b	
	No.	Rate ^c	Rank ^d	No.	Rate ^c
Cambridge-Newton-Framingham, MA	133	5.5	—	6,016	248.4
Bridgeport-Stamford-Norwalk, CT	66	6.9	82	2,687	280.0
Buffalo-Cheektowaga, NY	74	6.4	87	2,633	226.5
Cape Coral-Fort Myers, FL	79	10.0	62	2,339	296.8
Charleston-North Charleston, SC	97	11.9	42	2,699	332.0
Charlotte-Concord-Gastonia, NC-SC	416	15.4	22	9,418	348.7
Chattanooga, TN-GA	57	10.0	61	1,337	235.5
Chicago-Naperville-Elgin, IL-IN-WI	1,068	11.2	51	30,281	318.4
Chicago-Naperville-Evanston, IL	930	13.0	—	27,397	382.7
Elgin, IL	41	5.5	—	506	67.4
Gary, IN	53	7.4	—	1,294	179.8
Lake County-Kenosha County, IL-WI	44	5.0	—	1,084	123.2
Cincinnati, OH-KY-IN	220	9.7	63	4,789	211.9
Cleveland-Elyria, OH	198	9.5	65	5,808	279.8
Colorado Springs, CO	53	6.9	81	1,054	138.2
Columbia, SC	151	18.0	15	4,325	516.0
Columbus, OH	225	10.5	55	6,176	287.1
Dallas-Fort Worth-Arlington, TX	1,359	17.5	16	31,525	406.3
Dallas-Plano-Irving, TX	1,033	19.8	—	24,574	471.0
Fort Worth-Arlington, TX	326	12.8	—	6,951	273.4
Dayton-Kettering, OH	68	8.4	74	1,837	225.8
Deltona-Daytona Beach-Ormond Beach, FL	81	11.8	43	2,181	318.2
Denver-Aurora-Lakewood, CO	269	9.0	69	9,520	320.3
Des Moines-West Des Moines, IA	40	5.6	98	1,033	143.6
Detroit-Warren-Dearborn, MI	403	9.2	67	11,003	252.1
Detroit-Dearborn-Livonia, MI	256	14.4	—	7,241	408.0
Warren-Troy-Farmington Hills, MI	147	5.7	—	3,762	145.2
Durham-Chapel Hill, NC	89	13.6	28	2,629	402.0
El Paso, TX	119	13.7	27	2,521	289.4
Fayetteville, NC	103	19.6	9	2,019	384.9
Fayetteville-Springdale-Rogers, AR	49	8.7	71	704	125.6
Fresno, CA	143	14.1	24	2,199	217.0
Grand Rapids-Wyoming, MI	48	4.4	105	1,375	126.0
Greensboro-High Point, NC	144	18.5	13	2,929	376.1
Greenville-Anderson, SC	104	11.1	53	2,360	250.9
Harrisburg-Carlisle, PA	55	9.2	68	1,416	237.5
Hartford-East Hartford-Middletown, CT	79	6.5	86	3,535	291.7
Honolulu (Urban), HI	43	4.3	108	1,491	149.0
Houston-The Woodlands-Sugar Land, TX	1,389	19.3	11	33,246	461.3
Huntsville, AL	52	10.3	57	997	198.3
Indianapolis-Carmel-Anderson, IN	276	13.0	32	6,145	288.9
Jackson, MS	119	20.3	7	3,235	550.9
Jacksonville, FL	309	18.9	12	7,598	464.0
Kansas City, MO-KS	199	9.0	70	5,095	231.6
Knoxville, TN	99	11.1	52	1,429	159.9

Metropolitan statistical area of residence	Diagnosis, 2021 ^a			Prevalence of diagnosed HIV infection, year-end 2021 ^b	
	No.	Rate ^c	Rank ^d	No.	Rate ^c
Lakeland-Winter Haven, FL	123	16.3	19	2,786	369.7
Lancaster, PA	14	2.5	113	805	145.4
Lansing-East Lansing, MI	32	5.9	93	681	126.0
Las Vegas-Henderson-Paradise, NV	445	19.4	10	9,699	423.1
Lexington-Fayette, KY	61	11.8	44	1,301	251.2
Little Rock-North Little Rock-Conway, AR	125	16.6	18	2,444	325.5
Los Angeles-Long Beach-Anaheim, CA	1,753	13.5	30	57,717	444.1
Anaheim-Santa Ana-Irvine, CA	266	8.4	—	7,231	228.3
Los Angeles-Long Beach-Glendale, CA	1,487	15.1	—	50,486	513.6
Louisville/Jefferson County, KY-IN	215	16.7	17	3,981	309.9
Madison, WI	39	5.7	97	888	130.0
McAllen-Edinburg-Mission, TX	100	11.4	48	1,645	186.9
Memphis, TN-MS-AR	353	26.4	2	7,567	566.3
Miami-Fort Lauderdale-Pompano Beach, FL	1,783	29.3	1	55,691	914.2
Fort Lauderdale-Pompano Beach-Sunrise, FL	572	29.6	—	20,364	1,054.6
Miami-Miami Beach-Kendall, FL	937	35.2	—	27,167	1,020.3
West Palm Beach-Boca Raton-Boynton Beach, FL	274	18.3	—	8,160	544.7
Milwaukee-Waukesha, WI	122	7.8	77	3,421	218.4
Minneapolis-St. Paul-Bloomington, MN-WI	230	6.2	90	7,761	210.3
Modesto, CA	45	8.1	75	853	154.2
Myrtle Beach-Conway-North Myrtle Beach, SC-NC	49	9.6	64	1,305	256.0
Nashville-Davidson-Murfreesboro-Franklin, TN	204	10.1	59	5,766	286.5
New Haven-Milford, CT	67	7.8	78	3,349	387.8
New Orleans-Metairie, LA	275	21.8	6	8,219	651.4
New York-Newark-Jersey City, NY-NJ-PA ^e	2,647	13.4	31	135,633	686.1
Nassau County-Suffolk County, NY	148	5.1	—	5,937	203.5
Newark, NJ-PA	405	17.8	—	13,020	572.7
New Brunswick-Lakewood, NJ	174	7.0	—	5,377	215.0
New York-Jersey City-White Plains, NY-NJ	1,920	15.9	—	111,299	921.6
North Port-Sarasota-Bradenton, FL	91	10.6	54	2,264	263.3
Ogden-Clearfield, UT	16	2.3	114	469	66.4
Oklahoma City, OK	202	14.0	26	3,182	220.7
Omaha-Council Bluffs, NE-IA	52	5.4	101	576	59.3
Orlando-Kissimmee-Sanford, FL	612	22.7	4	13,348	495.9
Oxnard-Thousand Oaks-Ventura, CA	49	5.8	95	1,201	143.0
Palm Bay-Melbourne-Titusville, FL	64	10.4	56	1,762	285.7
Pensacola-Ferry Pass-Brent, FL	48	9.3	66	1,552	300.5
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	702	11.3	50	26,162	420.0
Camden, NJ	160	12.4	—	3,214	248.7
Montgomery County-Bucks County-Chester County, PA	64	3.1	—	2,251	110.1
Philadelphia, PA	417	19.4	—	18,222	847.5
Wilmington, DE-MD-NJ	61	8.2	—	2,475	334.2
Phoenix-Mesa-Scottsdale, AZ	577	11.7	45	13,530	273.5
Pittsburgh, PA	112	4.8	104	3,476	147.7
Portland-South Portland, ME	18	3.2	112	915	164.3

Metropolitan statistical area of residence	Diagnosis, 2021 ^a			Prevalence of diagnosed HIV infection, year-end 2021 ^b	
	No.	Rate ^c	Rank ^d	No.	Rate ^c
Portland-Vancouver-Hillsboro, OR-WA	149	5.9	92	5,866	233.6
Port St. Lucie, FL	51	10.1	60	2,149	426.8
Poughkeepsie-Newburgh-Middletown, NY	41	5.8	94	1,881	268.1
Providence-Warwick, RI-MA	93	5.5	99	2,256	134.6
Provo-Orem, UT	24	3.4	111	282	40.5
Raleigh-Cary, NC	182	12.6	36	4,180	288.6
Richmond, VA	167	12.6	35	4,549	343.6
Riverside-San Bernardino-Ontario, CA	560	12.0	39	15,178	326.2
Rochester, NY	66	6.1	91	2,834	261.2
Sacramento-Roseville-Folsom, CA	208	8.6	72	5,594	232.0
St. Louis, MO-IL	322	11.5	47	7,377	262.6
Salt Lake City, UT	83	6.6	85	2,292	181.5
San Antonio-New Braunfels, TX	352	13.5	29	7,631	293.3
San Diego-Chula Vista-Carlsbad, CA	372	11.3	49	13,542	412.1
San Francisco-Oakland-Berkeley, CA ^e	538	11.6	46	22,782	492.8
Oakland-Berkeley-Livermore, CA	293	10.4	—	8,729	310.6
San Francisco-San Mateo-Redwood City, CA	232	14.9	—	13,280	855.1
San Jose-Sunnyvale-Santa Clara, CA	124	6.4	89	3,575	183.1
San Juan-Carolina-Caguas, PR	324	15.7	21	10,497	507.5
Scranton-Wilkes-Barre, PA	41	7.2	79	929	163.6
Seattle-Tacoma-Bellevue, WA	320	8.0	76	10,096	251.7
Seattle-Bellevue-Kent, WA	252	8.2	—	8,427	273.1
Tacoma-Lakewood, WA	68	7.3	—	1,669	180.3
Spokane-Spokane Valley, WA	26	4.4	107	789	132.9
Springfield, MA	36	5.2	102	2,224	319.9
Stockton, CA	100	12.7	33	1,508	191.0
Syracuse, NY	26	3.9	110	1,266	192.3
Tampa-St. Petersburg-Clearwater, FL	482	15.0	23	14,180	440.4
Toledo, OH	41	6.4	88	1,159	179.9
Tucson, AZ	129	12.3	37	2,815	267.6
Tulsa, OK	105	10.3	58	2,093	204.4
Virginia Beach-Norfolk-Newport News, VA-NC	254	14.1	25	6,681	370.5
Washington-Arlington-Alexandria, DC-VA-MD-WV	759	11.9	41	34,833	548.0
Frederick-Gaithersburg-Rockville, MD	107	8.0	—	4,468	334.8
Washington-Arlington-Alexandria, DC-VA-MD-WV	652	13.0	—	30,365	604.7
Wichita, KS	37	5.7	96	1,008	155.6
Winston-Salem, NC	86	12.6	34	2,150	315.5
Worcester, MA-CT	43	4.4	106	2,225	227.4
Youngstown-Warren-Boardman, OH-PA	36	6.7	84	875	162.6
Subtotal for MSAs (population ≥ 500,000)	29,185	12.6	—	889,947	384.0
Metropolitan areas (population of 50,000–499,999)	4,567	7.9	—	109,153	188.6
Nonmetropolitan areas	2,298	5.0	—	59,983	131.7
Total^f	36,179	10.8	—	1,088,070	324.6

Note: Data on persons living with diagnosed HIV infection in 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. Numbers less than 12, and trends based on these numbers, should be interpreted with caution. Because of the lack of U.S. census information for all U.S. dependent areas, table includes data for only the 50 states, the District of Columbia, and Puerto Rico.

MSA, metropolitan statistical area.

MSA definitions for this report can be found at <https://www.census.gov/programs-surveys/metro-micro.html> 

^a Data are based on residence at HIV diagnosis.

^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.

Table A1. Diagnoses of HIV infection among persons aged ≥ 13 years, by area of residence, 2020 and 2021—Ending the HIV Epidemic Phase 1 jurisdictions 

Area of residence	2020 (COVID-19 Pandemic)				2021			
	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	471	12.7	472	10.6	518	13.7	519	11.5
California								
Alameda County	159	11.1	159	9.5	185	13.1	185	11.2
Los Angeles County	1,403	16.6	1,406	14.1	1,486	17.7	1,487	15.1
Orange County	264	9.8	264	8.3	266	9.9	266	8.4
Riverside County	237	11.8	239	9.9	258	12.7	258	10.5
Sacramento County	154	11.7	154	9.7	175	13.2	175	11.0
San Bernardino County	265	14.9	265	12.1	301	16.8	302	13.8
San Diego County	328	11.8	328	9.9	369	13.2	372	11.3
San Francisco County	154	19.7	154	17.7	185	25.3	185	22.7
District of Columbia	194	32.9	194	28.1	195	34.1	195	29.1
Florida								
Broward County	424	25.7	425	21.9	570	34.6	572	29.6
Duval County	231	27.8	232	23.3	280	33.5	281	28.1
Hillsborough County	237	19.2	237	16.2	294	23.6	295	20.0
Miami-Dade County	736	32.0	736	27.3	937	41.1	937	35.2
Orange County	358	29.7	359	25.1	416	34.5	416	29.2
Palm Beach County	201	15.6	201	13.5	273	21.0	274	18.3
Pinellas County	149	17.5	150	15.6	122	14.3	122	12.8
Georgia								
Cobb County	135	21.0	135	17.6	152	23.5	154	20.1
DeKalb County	264	41.5	265	34.7	342	54.0	342	45.1
Fulton County	474	52.1	474	44.3	525	57.8	526	49.4
Gwinnett County	144	18.4	144	15.0	165	20.8	165	17.1
Illinois								
Cook County	759	17.1	760	14.4	843	19.2	845	16.3
Indiana								
Marion County	169	21.1	170	17.4	216	27.1	216	22.2

Area of residence	2020 (COVID-19 Pandemic)				2021			
	Persons aged ≥13 years		Total		Persons aged ≥13 years		Total	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Louisiana								
East Baton Rouge Parish	124	32.6	124	27.2	141	37.2	141	31.1
Orleans Parish	102	31.1	102	26.6	145	44.8	145	38.5
Maryland								
Baltimore City	173	34.9	174	29.8	156	31.8	156	27.1
Montgomery County	79	8.9	79	7.4	96	10.8	97	9.2
Prince George's County	218	27.0	218	22.6	229	28.5	229	24.0
Massachusetts								
Suffolk County	131	18.7	131	16.5	132	19.4	132	17.1
Michigan								
Wayne County	227	15.3	227	12.7	256	17.3	256	14.4
Nevada								
Clark County	346	18.2	346	15.2	445	23.1	445	19.4
New Jersey								
Essex County	200	28.0	200	23.2	266	37.5	266	31.1
Hudson County	127	20.8	128	17.7	149	25.0	149	21.2
New York								
Bronx County	345	28.7	346	23.6	416	35.5	416	29.2
Kings County	443	19.6	445	16.3	441	20.1	441	16.7
New York County	298	19.8	298	17.7	317	22.5	317	20.1
Queens County	322	15.8	322	13.4	333	16.7	334	14.3
North Carolina								
Mecklenburg County	208	22.3	208	18.6	278	29.6	279	24.9
Ohio								
Cuyahoga County	183	17.0	183	14.5	164	15.4	164	13.1
Franklin County	206	18.8	207	15.6	187	17.0	187	14.2
Hamilton County	132	19.1	132	15.9	122	17.7	123	14.9
Pennsylvania								
Philadelphia County	305	22.7	306	19.1	360	27.1	362	23.0
Tennessee								
Shelby County	234	30.8	234	25.2	294	38.8	295	31.9
Texas								
Bexar County	285	17.3	285	14.2	328	19.7	328	16.2
Dallas County	663	31.2	664	25.4	798	37.7	798	30.9
Harris County	934	24.4	938	19.8	1,161	30.2	1,161	24.6
Tarrant County	294	17.0	294	13.9	302	17.3	302	14.2
Travis County	164	14.9	164	12.7	225	20.2	225	17.2
Washington								
King County	199	10.2	199	8.8	218	11.3	219	9.7
Puerto Rico								
San Juan Municipio	77	25.3	77	22.6	99	32.8	99	29.4

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

^aRates 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 2021—Ending the HIV Epidemic Phase 1 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	335	529.6	186	107.7	1,973	924.1	3,853	345.5	18	236.4	5,552	260.7	454	621.1	12,402	328.
California																
Alameda County	12	346.8	416	88.5	2,209	1,551.6	1,408	470.4	20	174.1	1,632	375.3	288	571.1	5,986	423.
Los Angeles County	53	325.3	1,850	143.0	9,598	1,414.0	24,020	605.6	49	259.5	12,308	549.3	2,585	1,597.5	50,466	602.
Orange County	7	127.3	559	92.7	368	775.5	3,653	417.9	12	159.9	2,404	220.2	226	350.6	7,229	268.
Riverside County	23	238.5	168	115.7	863	652.4	2,862	284.8	8	129.3	5,835	833.5	358	870.4	10,117	496.
Sacramento County	20	296.2	192	84.3	1,131	870.2	1,091	360.5	18	112.7	1,991	338.3	201	359.0	4,644	349.
San Bernardino County	13	186.2	119	81.5	1,019	698.4	2,567	265.0	6	108.7	1,148	234.9	179	549.9	5,051	281.
San Diego County	27	224.8	427	121.4	1,591	1,193.6	5,670	618.5	20	169.2	5,328	416.6	461	561.2	13,524	485.
San Francisco County	32	2,231.6	801	294.0	1,477	3,952.0	2,886	2,665.8	29	1052.2	5,842	2,039.5	553	2,485.0	11,620	1,589.
District of Columbia	15	1,214.6	77	289.9	9,516	3,848.4	1,242	2,075.0	7	2,564.1	1,962	872.6	799	6,731.3	13,622	2,381.
Florida																
Broward County	13	400.5	143	229.1	9,241	2,034.2	4,379	834.2	5	449.9	5,961	1033.0	608	2,639.8	20,350	1,236.
Duval County	5	184.8	60	142.3	4,312	1,793.6	501	561.5	2	294.6	1,389	313.5	226	1,315.9	6,495	777.
Hillsborough County	4	138.2	63	113.0	3,267	1,663.6	1,802	490.6	3	338.5	2,136	354.5	189	882.1	7,464	598.
Miami-Dade County	10	491.3	85	236.3	10,512	3,184.3	13,609	847.5	6	1,193.0	2,535	864.0	389	2,675.4	27,147	1,189.
Orange County	6	224.2	68	97.7	3,946	1,667.4	2,717	698.4	12	871.6	2,369	487.2	235	1,197.9	9,353	776.
Palm Beach County	5	235.8	38	99.7	4,707	2,039.2	1,454	491.1	2	306.9	1,757	245.3	190	1,268.2	8,153	627.
Pinellas County	2	96.6	64	211.9	1,452	1,776.9	594	709.6	0	0.0	2,644	413.2	171	1,269.0	4,927	578.
Georgia																
Cobb County	1	84.3	17	46.9	2,213	1,227.0	459	575.2	2	769.3	728	216.1	233	1,939.0	3,653	564.
DeKalb County	4	412.5	72	181.7	6,679	1,963.2	751	1,624.4	4	1,213.3	1,126	574.7	503	4,965.6	9,140	1,442.
Fulton County	7	557.9	50	70.5	11,757	3,010.7	1,102	1,792.0	6	4,966.7	2,513	680.2	948	6,195.6	16,384	1,802.

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
Gwinnett County	1	75.7	61	57.1	1,922	843.9	665	407.9	1	316.0	510	183.8	187	1,231.4	3,347	422.
Illinois																
Cook County	24	453.5	352	100.1	12,199	1,228.9	5,910	544.9	12	1,505.4	5,132	270.7	2,098	3,584.7	25,728	586.
Indiana																
Marion County	3	194.1	138	450.3	2,484	1,114.6	551	699.6	3	1,857.5	1,565	350.7	240	1,407.4	4,984	625.
Louisiana																
East Baton Rouge Parish	4	462.5	10	76.0	3,517	2,035.7	100	675.8	0	0.0	436	251.3	60	1,422.9	4,127	1,087.
Orleans Parish	6	751.4	24	245.8	3,250	1,741.1	304	1,810.0	0	0.0	1,139	1,079.9	135	3,485.9	4,860	1,502.
Maryland																
Baltimore City	9	653.3	24	169.6	8,441	2,816.6	426	1,733.9	1	626.6	769	537.3	582	7,294.5	10,252	2,087.
Montgomery County	4	260.0	80	56.0	2,351	1,425.1	667	404.5	2	508.4	547	140.1	292	1,420.7	3,943	445.
Prince George's County	3	150.2	41	116.5	6,116	1,211.0	702	485.2	0	0.0	359	353.3	857	6,068.2	8,078	1,006.
Massachusetts																
Suffolk County	6	491.0	126	191.4	2,117	1,598.1	1,521	1013.6	1	252.7	1,771	558.1	117	919.5	5,659	832.
Michigan																
Wayne County	7	133.8	29	54.8	5,545	1012.4	372	427.4	0	0.0	1,038	138.1	244	791.4	7,235	490.
Nevada																
Clark County	31	342.5	346	163.6	2,814	1,222.1	2,790	477.8	51	355.2	3,262	400.7	400	637.9	9,694	503.
New Jersey																
Essex County	0	0.0	27	62.6	5,882	2,168.3	1,824	1,116.0	2	687.2	506	228.7	625	6,821.1	8,883	1,250.
Hudson County	2	214.0	103	104.7	1,334	2,059.3	2,340	940.9	1	335.0	828	472.3	322	4480.3	4,936	828.
New York																
Bronx County	6	177.1	101	203.2	11,455	3,300.7	13,565	2,084.9	1	174.0	837	753.1	1,308	12,643.8	27,313	2,328.
Kings County	5	115.9	382	135.4	14,223	2,150.3	7,111	1,749.1	6	1028.0	2,668	330.4	1,670	4,599.7	26,096	1,186.
New York County	8	387.7	587	325.1	7,246	4,074.3	8,801	2,460.8	7	1,182.0	7,718	1,165.2	1,654	6,622.3	26,131	1,858.
Queens County	13	175.9	812	150.8	4,998	1,388.0	7,133	1,314.7	9	366.7	1,917	379.2	1,268	3,553.9	16,180	812.
North Carolina																
Mecklenburg County	8	273.0	42	71.6	4,227	1,422.9	626	531.5	1	256.0	987	221.2	381	2,324.7	6,275	667.
Ohio																
Cuyahoga County	1	59.9	19	52.5	2,877	944.0	568	873.8	0	0.0	1,243	193.6	246	1,379.0	4,971	465.

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
Franklin County	4	189.4	34	53.1	2,373	961.9	363	619.5	1	236.4	2,154	308.6	311	1,142.2	5,256	479.
Hamilton County	0	0.0	18	90.6	1,838	1,056.6	136	621.6	0	0.0	990	215.4	172	1,320.9	3,159	457.
Pennsylvania																
Philadelphia County	32	1119.1	167	157.9	10,650	2017.8	2,784	1,469.6	5	1,900.4	2,561	535.8	573	2,454.9	16,773	1263.
Tennessee																
Shelby County	1	79.6	8	36.4	5,344	1,320.0	249	576.0	0	0.0	620	223.0	327	3,629.6	6,550	863.
Texas																
Bexar County	3	72.8	47	89.9	946	742.0	4,549	455.8	1	46.3	1,047	227.0	320	1,463.1	6,913	414.
Dallas County	6	94.6	221	150.8	8,357	1,717.5	5,420	658.1	8	821.7	4,454	711.4	1,131	4,401.0	19,597	926.
Harris County	5	65.8	375	129.6	13,134	1,784.0	8,940	547.0	3	154.4	4,150	367.0	1,218	2,692.1	27,828	723.
Tarrant County	1	15.1	89	85.7	2,554	847.7	1,637	331.0	3	87.9	1,533	190.5	590	2,019.0	6,407	367.
Travis County	3	106.9	72	83.6	1,156	1,277.2	2,005	573.1	2	241.1	1,782	317.1	242	1,225.6	5,262	473.
Washington																
King County	38	333.2	330	82.2	1,441	1,130.6	1,183	661.6	29	195.8	3,600	320.2	561	758.5	7,182	371.
Puerto Rico^e																
San Juan Municipio	0	—	0	—	5	—	3,639	—	0	—	18	—	0	—	3,662	1,212.

Note: Data for the year 2021 are preliminary and based on deaths reported to the Centers for Disease Control and Prevention as of December 2022. 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.

Web Addresses for Reports of State and Local HIV Surveillance

State	Web Address
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/city/en/depts/cdph/provdrs/health_data_and_reports/svcs/chicago-sti-hiv-data.html 
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 

State	Web Address
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.houstontx.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	http://www.in.gov/isdh/23266.htm
Iowa	http://idph.iowa.gov/hivstdhep/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/
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.ndhealth.gov/hiv/Data/
Ohio	https://odh.ohio.gov/know-our-programs/hiv-aids-surveillance-program/data-and-statistics
Oklahoma	https://oklahoma.gov/health/services/personal-health/sexual-health-and-harm-reduction-service/sexually-transmitted-infections-sti-hiv.html
Oregon	http://public.health.oregon.gov/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	http://doh.sd.gov/diseases/infectious/HIV-AIDS/Prevention.aspx
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

State	Web Address
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-and-statistical-reports/diseases-and-chronic-conditions/hiv-data 
West Virginia	https://oeps.wv.gov/hiv-aids/pages/default.aspx 
Wisconsin	https://dhs.wisconsin.gov/hiv/data.htm 
Wyoming	https://health.wyo.gov/publichealth/communicable-disease-unit/hiv-aids-surveillance-program/ 

Note. Electronic reports are not available for the following areas: American Samoa, the Northern Mariana Islands, and the Republic of Palau.

Last Reviewed: May 23, 2023



HIV

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Diagnoses of HIV Infection in the United States and Dependent Areas 2021: Technical Notes

Technical Notes



Report Contents

Other Reports

A. Surveillance of HIV Infection Overview

This report includes HIV surveillance data through 2021 and reported to CDC's National HIV Surveillance System (NHSS) through December 31, 2022. The data are from 50 states, the District of Columbia, and 6 U.S. dependent areas (American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the Republic of Palau, and the U.S. Virgin Islands) 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 diagnoses of HIV infection. After the removal of personally identifiable information, data from these reports were submitted 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. dependent areas 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 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 diagnoses of HIV infection. HIV surveillance reports may not be representative of all persons with HIV because not all infected persons have been (1) tested or (2) tested at a time when the infection could be detected and diagnosed. Also, some states offer anonymous HIV testing, 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 [10, 11]. Therefore, reports of confidential test results may not represent all persons who tested positive for HIV infection. In addition, testing patterns are influenced by many factors, including the extent to which testing is routinely offered to specific groups and the availability of, and access to, medical care and testing services. The data presented in this report provide minimum counts of persons for whom HIV infection 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 [12], the completeness of reporting of HIV infection, as of December 2022, 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 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. Death data for years 2020 and 2021 should be interpreted with caution due to excess deaths in the United States population attributed to the COVID-19 pandemic. For additional information, see https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm.

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

B1. 2008 Case Definition

The 2008 case definition was used to classify cases diagnosed through 2013. For 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/ μ L 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/ μ L 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
3. changes in the cutoffs for CD4 percentage of total lymphocytes used for classification of stages 1 and 2 in persons aged 6 years and older [3]

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

- **HIV infection, stage 0:** First positive HIV test result within 6 months after a negative HIV test result. The stage remains stage 0 until 6 months after the first positive test result. After 6 months, the stage may be classified as 1, 2, 3, or unknown if based on a CD4 test result or the diagnosis of an OI. The diagnosis of an AIDS-defining condition or a low CD4 test result before the 6 months have elapsed does not change the stage from stage 0 to stage 3.
- **HIV infection, stages 1, 2, and 3:** Documentation of an AIDS-defining OI (excluding stage 0 as described above) is stage 3. Otherwise, the stage is determined by the lowest CD4 lymphocyte test result:
 - Stage 1—CD4 lymphocyte count of ≥ 500 or a CD4 percentage of total lymphocytes of ≥ 26
 - Stage 2—CD4 lymphocyte count of 200–499 or a CD4 percentage of total lymphocytes of 14–25
 - Stage 3—CD4 lymphocyte count of <200 or a CD4 percentage of total lymphocytes of <14 or documentation of an AIDS-defining condition.
- **HIV infection, stage unknown:** No reported information on AIDS-defining OIs and no information available on CD4 lymphocyte count or percentage.

C. Tabulation and Presentation of Data

The data in this report include information received by CDC through December 31, 2022. 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 dependent areas (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 dependent areas.

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

The data on diagnoses of HIV infection reflect the date of diagnosis (diagnosed by December 31, 2021; reported to NHSS as of December 31, 2022), not the date of report to NHSS. In addition,

- data from all areas are included in figures and tables displaying numbers and rates of diagnoses of HIV infection, by selected characteristics, area of residence, and metropolitan statistical area (MSA) (Figures A, 1–6, 12–37; 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 infection.

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 (2016–2020 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)

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

- data for the year 2021 are preliminary and based on death data received by CDC as of December 31, 2022.
- deaths of persons with diagnosed HIV infection (Figures 7–9; Tables 11a/b–14a/b) are included regardless of the cause of death, which may not be due to HIV.
- 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 2021, death data for Guam, Mississippi, U.S. Virgin Islands, and West Virginia should be interpreted with caution.

C1.3 Prevalence

Prevalence data reflect persons living with diagnosed HIV infection, regardless of stage of disease, at year-end 2021 (Figures 10, 11, 38, and 39; Tables 15a/b–22 and A2). In addition,

- data for the year 2021 are preliminary and based on death data received by CDC as of December 31, 2022.
- 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 2021, prevalence data for Guam, Mississippi, U.S. Virgin Islands, and West Virginia should be interpreted with caution.

C2. Rates

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

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 2021 postcensal estimates file from the U.S. Census Bureau [15].

- 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 [16].
- Each rate was calculated by dividing the total number of diagnoses (or deaths or prevalence) for the calendar year by the population for that calendar year and then multiplying the result by 100,000.
- The denominators used for calculating the rates specific to age, sex at birth, and race/ethnicity were computed by applying the appropriate vintage estimates for age, sex at birth, and race/ethnicity for the 50 states and the District of Columbia [15]. 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. dependent areas, estimates from the U.S. Census Bureau's International Data Base were used for age- and sex-specific population denominators [16].

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

- Race/ethnicity for the 6 U.S. dependent areas because the U.S. Census Bureau does not collect information from all dependent areas.
- 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 [17]. The absolute rate difference and the relative rate ratio disparity measures were chosen because they are used by federal initiatives—Healthy People 2030, NHAS, and EHE—to measure progress in HIV indicators. In addition,

- absolute disparity measures the simple difference between two 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 could be improved if the difference between the two rates were eliminated or reduced (i.e., preventable cases) [18].
- relative disparity measure is the rate ratio between two 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 Assigned Sex at Birth (ASAB)

Sex designations in this report are based on a person's assigned sex 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: assigned sex at birth and 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 assigned sex at birth and current gender identity are the same (i.e., a person assigned male at birth and who currently identifies as a man is a cisgender male).

Categories

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

D3. Race and Ethnicity

In the *Federal Register* [19] 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 infection that were diagnosed and reported to CDC before 2003 but that were

classified as stage 3 [AIDS] after 2003) and a small percentage of cases that were reported after 2003 but that were reported according to the old race category (Asian/Pacific Islander). In tables of diagnoses of HIV infection during 2017–2021, 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 [19].

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 [20, 21]. Racial and ethnic differences in health are more likely to reflect profound differences in people's experience based on the relatively advantaged or disadvantaged position in society into which they are born [21, 22]. 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 [22].

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 infection is counted only once in the hierarchy of transmission categories [23]. Persons aged ≥ 13 years with more than 1 reported risk factor for HIV infection 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 individuals assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males, and individuals 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 individuals 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 infection.
- **Perinatal:** includes persons who acquired HIV through mother-to-child transmission.
- **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 infection reported without a risk factor listed in the hierarchy of transmission categories are classified as "no identified risk (NIR)." Cases classified as NIR include cases that are being followed up by local health department staff; cases in persons whose risk-factor information is missing because they died, declined to be interviewed, or were lost to follow-up; and cases in persons who were interviewed or for whom other follow-up information was available but for whom no risk factor was identified.

Because a substantial proportion of cases of HIV infection are reported to CDC without an identified risk factor, multiple imputation is used to assign a transmission category to these cases [23]. 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 [24]. 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 results. In tables displaying transmission categories, multiple imputation was used for adults and adolescents, but not for children (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 mother-to-child transmission.
- **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 infection 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 infection (Figures 4, 8, 9, 13, 15, 16, 18, 19, 24, 26, 27, 32, 33; 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 (Figure 8; Tables 11a/b–14a/b).

The 4 regions of residence and 6 dependent areas 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. dependent areas: American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the Republic of Palau, and the U.S. Virgin Islands

E2. Metropolitan Statistical Areas

On March 6, 2020, OMB announced new MSA delineations based on the new standards and Census 2010 data [25]. Table 22 (data on diagnosed HIV infection and prevalence of diagnosed HIV infection) present 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 most recent update (March 2020) of statistical areas [25]. In the *Federal Register* for July 16, 2021, OMB published revised standards for defining MSAs in federal statistical activities [26]. These standards, which provided for the identification of MSAs in the United States and Puerto Rico, will replace the 2010 standards. OMB plans to publish delineations of areas based on the 2020 standards and 2020 Census data in 2023 [26].














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.** Although all jurisdictions use a uniform case report form, reporting and surveillance practices in data collection and case record updates may vary among jurisdictions. Not all persons who received a positive HIV test result may be registered in the confidential, name-based HIV registries of state/local jurisdictions due to the use of anonymous HIV testing and private HIV self-testing. The data presented in this report provide minimum counts of persons for whom HIV infection has been diagnosed and reported to the surveillance system. An evaluation of surveillance data (2016-2020 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 identified risk factor.** A significant proportion of cases in NHSS are reported without HIV risk factor information. Multiple imputation is used to assign a transmission category to cases reported without HIV risk information [24]; thus, data on transmission category presented in this report do not directly reflect collected case data. Multiple imputation is not used for pediatric cases.
- **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 infection may be due to any cause (i.e., may or may not be related to HIV infection). Deaths for the most recent report year (2021) are considered preliminary and 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. dependent areas 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]: <http://www.cdc.gov/nchhstp/atlas/>
- *MMWR* articles (selected): <http://www.cdc.gov/hiv/library/reports/mmwr.html>
- Other surveillance reports: <http://cdc.gov/hiv/library/reports/hiv-surveillance.html>
- Public-use slides updated annually: <http://www.cdc.gov/hiv/library/slidesets/>

Suggested Readings

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COVID-19 Suggested Readings

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Web Addresses for Reports of State and Local HIV Surveillance

State	Web Address
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/city/en/depts/cdph/provdrs/health_data_and_reports.html
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/#:~:text=Hawaii%20HIV%20Surveillance%20Reports%20The%20surveillance%20program%20releases,who%20are%20receiving%20HIV%20medical%20care%20%28where%20appropriate
Houston	http://www.houstontx.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	http://www.in.gov/isdh/23266.htm
Iowa	http://idph.iowa.gov/hivstdhiv/hiv/data
Kansas	https://www.kdhe.ks.gov/464/HIV-Surveillance-Program#:~:text=The%20mission%20of%20this%20program%20is%20to%20monitor,and%20cases%20are%20sent%20to%20CDC%20without%20name
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/agency-3-example/hiv/hiv-reports.shtml
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
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://dpbh.nv.gov/Programs/HIV-OPHIE/dta/Publications/HIV/AIDS_Surveillance_Program_(HIV-OPHIE)-_Publications/
New Hampshire	http://www.dhhs.nh.gov/data/index.htm

State	Web Address
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/
New York City	http://www1.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.ndhealth.gov/hiv/Data/
Ohio	https://odh.ohio.gov/know-our-programs/hiv-aids-surveillance-program/data-and-statistics/#:~:text=The%20reporting%20lags%20for%20Ohio%E2%80%99s%20HIV%20FAIDS%20surveillance%20data,the%20CDC%20national%20quality%20standards%20for%20HIV%20FAIDS%20repor
Oklahoma	https://oklahoma.gov/health/prevention-and-preparedness/sexual-health-and-harm-reduction-service/fact-sheets-ok-data.html
Oregon	http://public.health.oregon.gov/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	http://doh.sd.gov/diseases/infectious/HIV-AIDS/Prevention.aspx
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	http://health.utah.gov/epi/diseases/hiv aids/surveillance/index.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://oeeps.wv.gov/hiv-aids/pages/default.aspx#box
Wisconsin	http://dhs.wisconsin.gov/aids-hiv/Stats/index.htm
Wyoming	https://health.wyo.gov/publichealth/communicable-disease-unit/hiv aids-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: A Plan for America 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 new HIV infections in the United States. The Ending the HIV Epidemic: A Plan for America (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.

Last Reviewed: May 23, 2023