



## Social Determinants of Health among Adults with Diagnosed HIV Infection in the United States and Puerto Rico, 2021

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

Data are presented for diagnoses of HIV infection reported to CDC through January 2023.

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

### Suggested citation

Centers for Disease Control and Prevention. Social determinants of health among adults with diagnosed HIV infection in the United States and Puerto Rico, 2021. *HIV Surveillance Supplemental Report* 2023;28(No. 5). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published October 2023. Accessed [date].

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

CDC-INFO

1-800-232-4636 (in English, en Español)

1-888-232-6348 (TTY)

<http://wwwn.cdc.gov/dcs/ContactUs/Form>

## Acknowledgments

This report was prepared by the following staff and contractors of the Division of HIV Prevention, National Center for HIV, Viral Hepatitis, STD, and TB Prevention, CDC: Zanetta Gant Sumner, Juliet Morales, Anna D. Baker, André Dailey, Xiaohong Hu, Chan Jin, Chelsea Walker, Thanh Chau Pham, Shacara Johnson Lyons, Anna Satcher Johnson, Michael Friend (editing), Azfar Siddiqi (science review), and the Chief of the HIV Surveillance Branch, Angela L. Hernandez.

The following are acknowledged for their contributions to the report (including graphics) and report website: Prevention Communication Branch, Nitesh Parmar, Steven Kubik (Content and Infrastructure Team); the Division of Communication Services, Mikaelyn Benson, Meredith Newlove (Design Team).

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

Last Reviewed: October 17, 2023



# Social Determinants of Health among Adults with Diagnosed HIV Infection in the United States and Puerto Rico, 2021: Commentary

## Commentary



### Overview

HIV continues to disproportionately affect many populations in the United States. Data in this report may be used to accelerate action to reach disproportionately affected populations and achieve national goals, including 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]. HIV surveillance data have highlighted differences in HIV burden by assigned sex at birth, race/ethnicity, and transmission category in the United States. Factors other than these (i.e., social determinants of health) contribute to disparities, and a better understanding of the social determinants that affect the health of populations can be beneficial.

The term *social determinants of health* (SDOH) refers to the nonmedical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, and age and the wider set of forces and systems shaping the conditions of daily life [4]. These forces and systems include economic policies and systems, development agendas, social norms, social policies, and political systems that are responsible for most health inequities [5], including the disproportionate effect of HIV on certain populations. Achieving equitable health will require focusing on factors associated with disparities and directing resources to disproportionately affected populations and geographical regions. This approach will improve the health of all persons.

Stratifying public health data by key SDOH, such as income and health insurance coverage, is useful for monitoring health inequities. Addressing SDOH makes it possible to measure and identify health differences between populations or geographic areas and can provide insight for identifying populations or areas that may benefit from HIV testing, prevention, and

treatment initiatives.

For this report, the Centers for Disease Control and Prevention (CDC) uses geocoded HIV surveillance data that have been linked with SDOH indicator variables on factors that may affect HIV transmission. HIV surveillance data are geocoded to the census tract level by address of residence at the time of diagnosis, linked to census tract-level SDOH data from the U.S. Census Bureau's American Community Survey (ACS), and then reported by state and local HIV surveillance programs. Using census tract-level surveillance data increases CDC's ability to assess the geographic distribution of HIV, the social determinants associated with HIV, and the relationship of HIV to other diseases and health care resources in a defined area. Addressing SDOH that adversely affect health outcomes may advance efforts to reduce disparities in HIV diagnosis rates among populations and areas.

This surveillance supplemental report presents data on adults aged  $\geq 18$  years with HIV infection diagnosed in 2021 and reported to the National HIV Surveillance System (NHSS) through January 2023. Data were limited to adults aged  $\geq 18$  years to align with the population in the ACS from which SDOH indicator variables were collected. Numbers, percentages, and rates of diagnoses of HIV infection were based on data reported from the 50 states, the District of Columbia, and Puerto Rico after the jurisdictions geocoded cases to the census tract level, linked to ACS estimates, and transmitted SDOH information to CDC on cases (after personal identifiers were removed) diagnosed during 2021.

SDOH data presented in this report are the result of the linkage of geocoded HIV diagnosis data (at the census tract level) to SDOH indicator variables from the 2017–2021 ACS and are based on where the person was living at the time of diagnosis. The following are the measures for the 5 SDOH indicators presented in this report: **federal poverty status, education level, median household income, health insurance coverage, and Gini index.**

## Report Changes

For figures that include race/ethnicity, all racial/ethnic groups are included. Small numbers (less than 12) are represented by a striped bar.

Last Reviewed: October 17, 2023

# Social Determinants of Health among Adults with Diagnosed HIV Infection in the United States and Puerto Rico, 2021: National Profile

## National Profile



## National SDOH Profile

The statements in this section, unless otherwise indicated, are based on 12 or more diagnoses. All rates are per 100,000 population. SDOH data are estimates for the period 2017–2021, and HIV surveillance data are based on case information from 2021 diagnoses of HIV infection among adults aged  $\geq 18$  years in the 50 states, the District of Columbia, and Puerto Rico. Data on linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis are based on data from 48 jurisdictions with complete reporting of HIV-related laboratory results (including CD4+ T-lymphocyte [CD4] and viral load results) to CDC (see Technical Notes for list of jurisdictions).

Data presented in this report are a snapshot of the environment in which people lived at the time of HIV diagnosis, and some SDOH indicators and selected characteristics may be correlated. For example, lack of education is associated with both poverty and low income in the United States [6, 7]. However, correlations of indicators and characteristics were not assessed for this report.

### *Important notes:*

- All data in this report are based on assigned sex at birth. Data for gender are not provided in this report because of the absence of denominator data from the U.S. Census Bureau.

- Please use caution when interpreting data for American Indian/Alaska Native and Native Hawaiian/other Pacific Islander adults due to most rates and/or percentages being based on small numbers.
- The statements in the sections on linkage to care and viral suppression focus on SDOH extremes only (e.g., highest poverty, lowest uninsured) and not the overall values within the column unless otherwise indicated.
- For disparity measures, reference groups are determined based on the rate of the lowest group with more than 5% 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.

## Overview

In 2021 in the 50 states, the District of Columbia, and Puerto Rico, HIV infection was diagnosed for 35,349 adults (aged  $\geq 18$  years), of which 32,907 adults had residential address information that was sufficient for geocoding to the census tract (or tract) level (Table 1). These diagnoses represent approximately 93.1% of all diagnoses of HIV infection in 2021 among adults in these areas. The overall rate of diagnoses of HIV infection was 12.7. The rate was 21.2 for males and 4.6 for females based on assigned sex at birth (Table 1).

Linkage to HIV medical care and viral suppression were based on data for adults with infection diagnosed during 2021 in 48 jurisdictions that reported complete CD4 and viral load test results to CDC. Of the 30,608 adults whose infection was diagnosed during 2021 in the 48 jurisdictions, 82.5% (25,255 adults) were linked to HIV medical care within 1 month of diagnosis and 70.1% (21,447 adults) had a suppressed viral load within 6 months (Table 9).



## Federal Poverty Status

Poverty is not a single factor but rather is characterized by multiple physical and psychosocial stressors [8]. Poverty places individuals from lower income households at increased risk for HIV due to economic disadvantages that may lead to increased risk behaviors [9]. Poverty and wealth can be viewed in relation to one another as follows: poverty is defined as lacking a usual or socially acceptable amount of money or material possessions; wealth is defined as having an abundance of valuable material possessions or resources [10, 11].

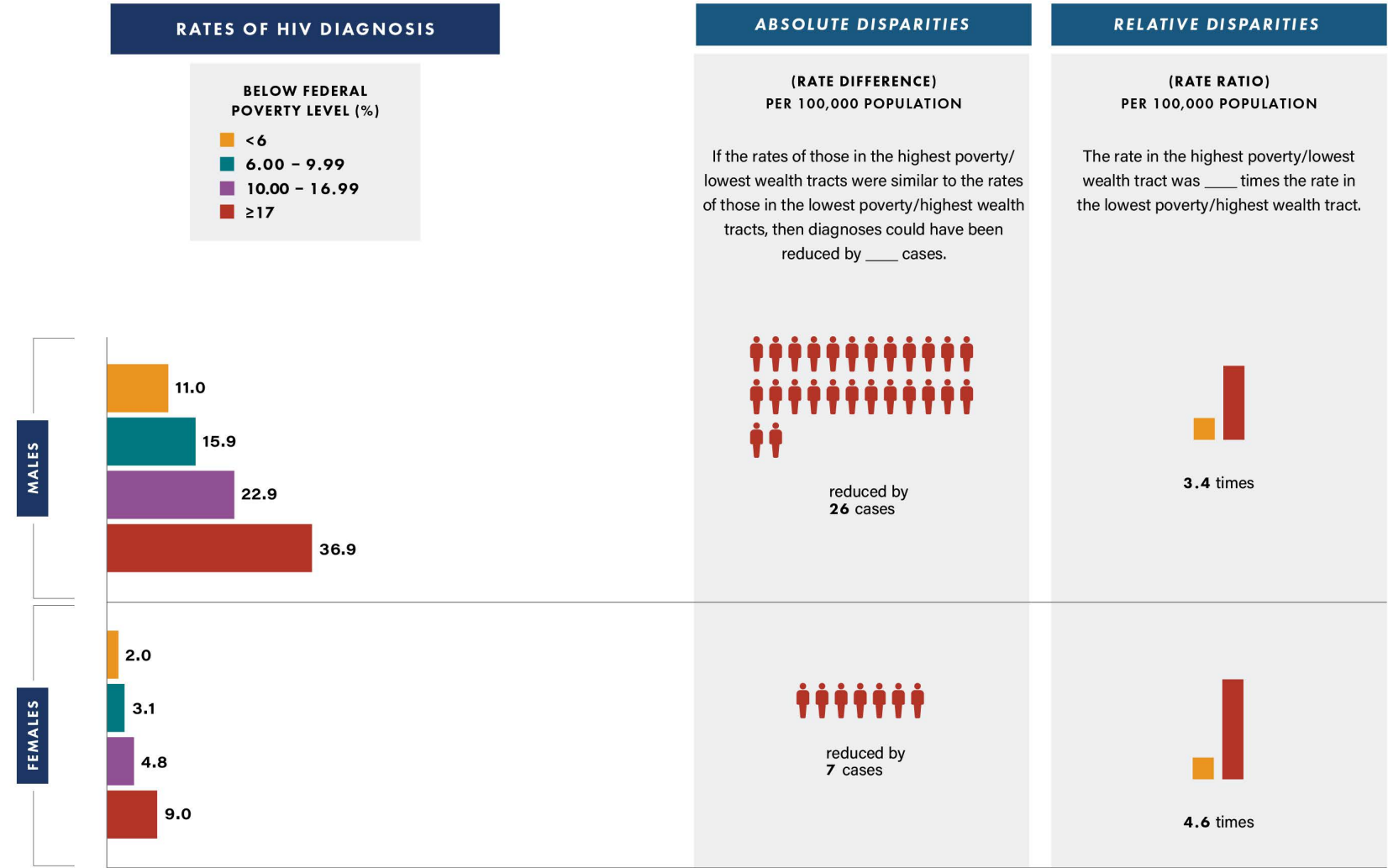
In 2021, adults who lived in tracts with the **highest level of poverty** (i.e., lowest level of wealth; where 17% or more of the residents lived below the federal poverty level) accounted for

- the highest HIV diagnosis rates or percentages (diagnoses),
- the lowest percentages of adults linked to HIV medical care within 1 month of receiving a diagnosis (linkage), and
- the lowest percentages of adults with suppressed viral load within 6 months of receiving an HIV diagnosis (viral suppression) among groups by selected characteristics:

Assigned sex at birth

- Diagnoses—rates: males, 36.9; females, 9.0 (Figure 1 and Table 1).
- Linkage—males, 80.7%; females, N/A (Figure 2 and Table 9).
- Viral suppression—males, 67.5%; females, 67.2% (Figure 2 and Table 9).

**FIGURE 1**  
Rates and disparities of diagnoses of HIV infection among adults aged ≥ 18 years, by assigned sex at birth and federal poverty status, 2021—census tract level, United States and Puerto Rico



**NOTE** Rates are per 100,000 population.

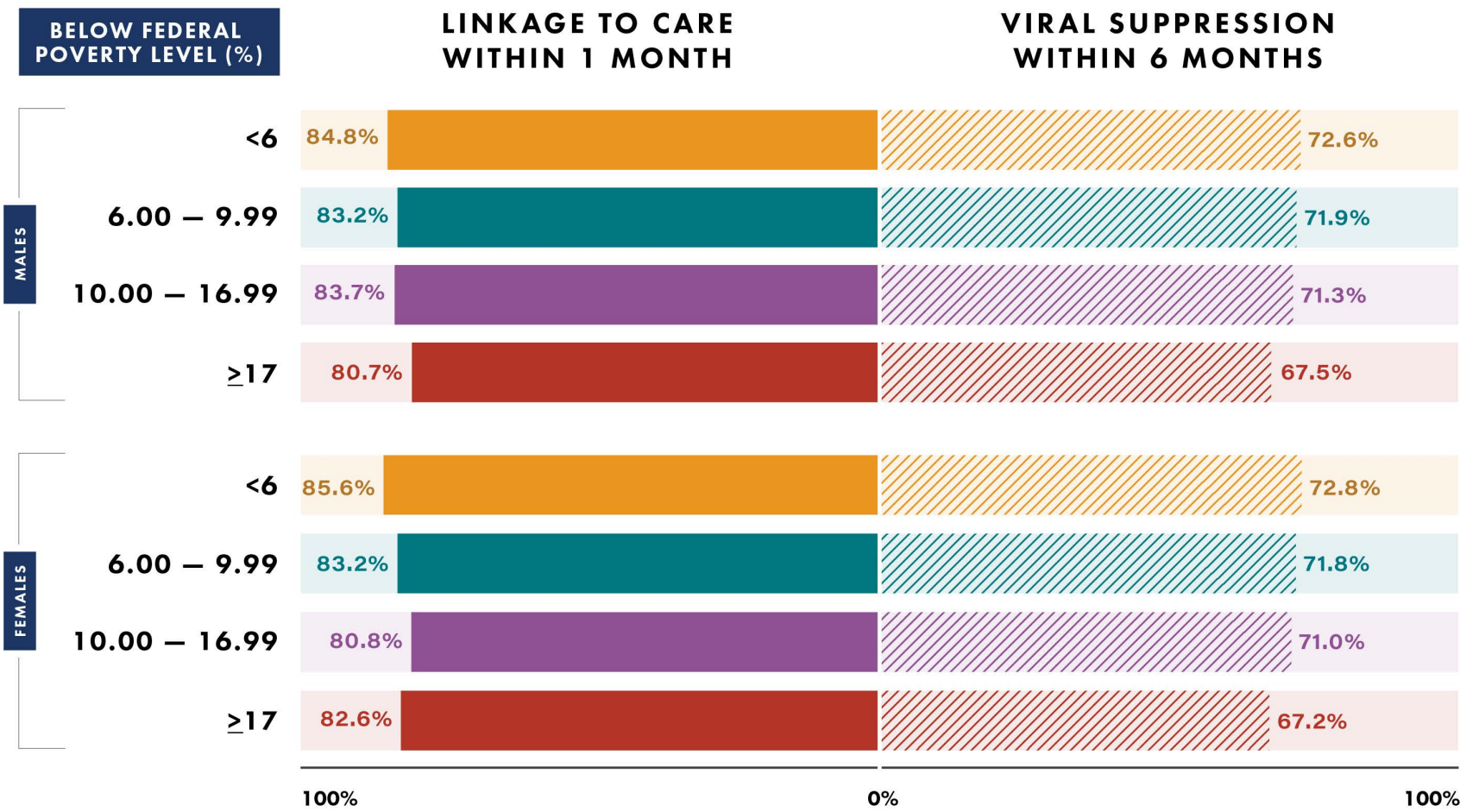
**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in highest poverty tracts and rates in lowest poverty tracts ( $\text{Rate}_{\text{highest poverty}} - \text{Rate}_{\text{lowest poverty}}$ ).

**RELATIVE DISPARITY (RATE RATIO)** measures the rates in highest poverty tracts divided by rates in lowest poverty tracts ( $\text{Rate}_{\text{highest poverty}} / \text{Rate}_{\text{lowest poverty}}$ ).





**FIGURE 2**  
Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among adults aged ≥ 18 years, by assigned sex at birth and federal poverty status—census tract level, 47 states and the District of Columbia



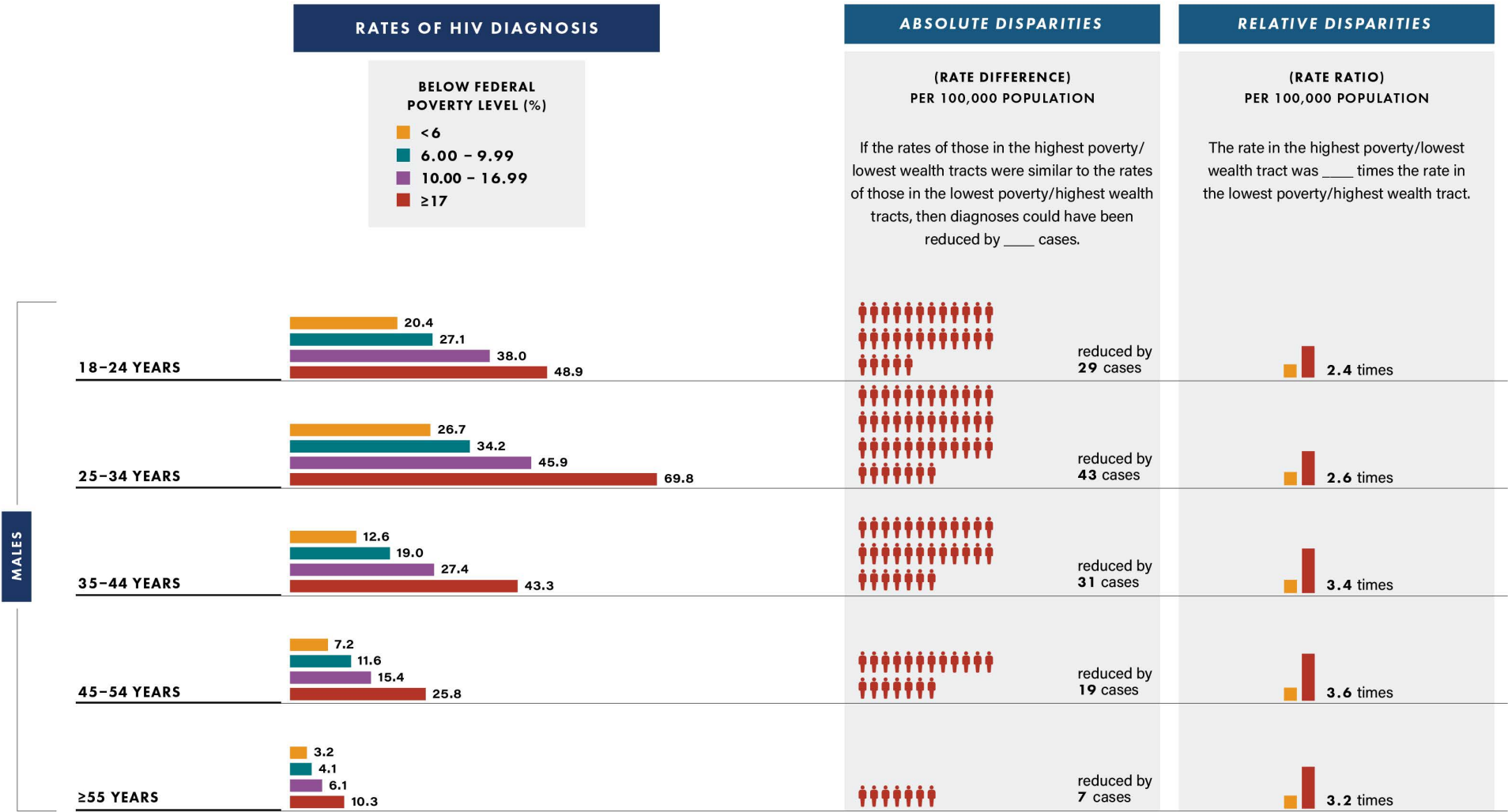
**NOTE** See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Age group

- Diagnoses—all age groups for both sexes (Figures 3a/b and Table 1).
- Linkage—all age groups for males; females aged 35–44 years (Table 9).
- Viral suppression—all age groups for both sexes (except females aged 18–24 years) (Table 9).

**FIGURE 3A**  
Rates and disparities of diagnoses of HIV infection among adult males aged ≥ 18 years, based on assigned sex at birth, by age at diagnosis and federal poverty status, 2021—census tract level, United States and Puerto Rico

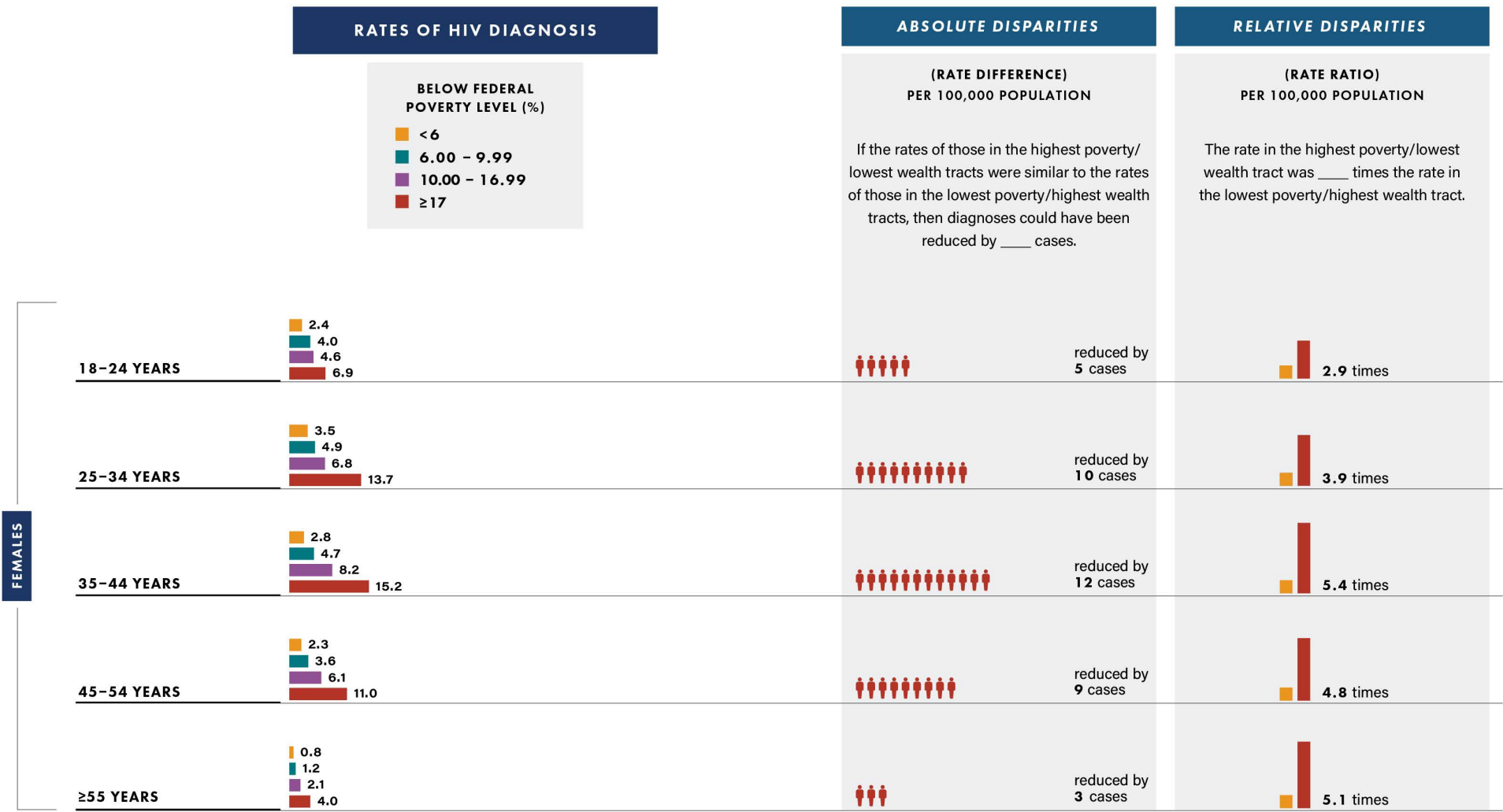


**NOTE** Rates are per 100,000 population.  
**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in highest poverty tracts and rates in lowest poverty tracts ( $\text{Rate}_{\text{highest poverty}} - \text{Rate}_{\text{lowest poverty}}$ ).  
**RELATIVE DISPARITY (RATE RATIO)** measures the rates in highest poverty tracts divided by rates in lowest poverty tracts ( $\text{Rate}_{\text{highest poverty}} / \text{Rate}_{\text{lowest poverty}}$ ).





**FIGURE 3B**  
Rates and disparities of diagnoses of HIV infection among adult females aged ≥ 18 years, based on assigned sex at birth, by age at diagnosis and federal poverty status, 2021—census tract level, United States and Puerto Rico



**NOTE** Rates are per 100,000 population.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in highest poverty tracts and rates in lowest poverty tracts ( $\text{Rate}_{\text{highest poverty}} - \text{Rate}_{\text{lowest poverty}}$ ).

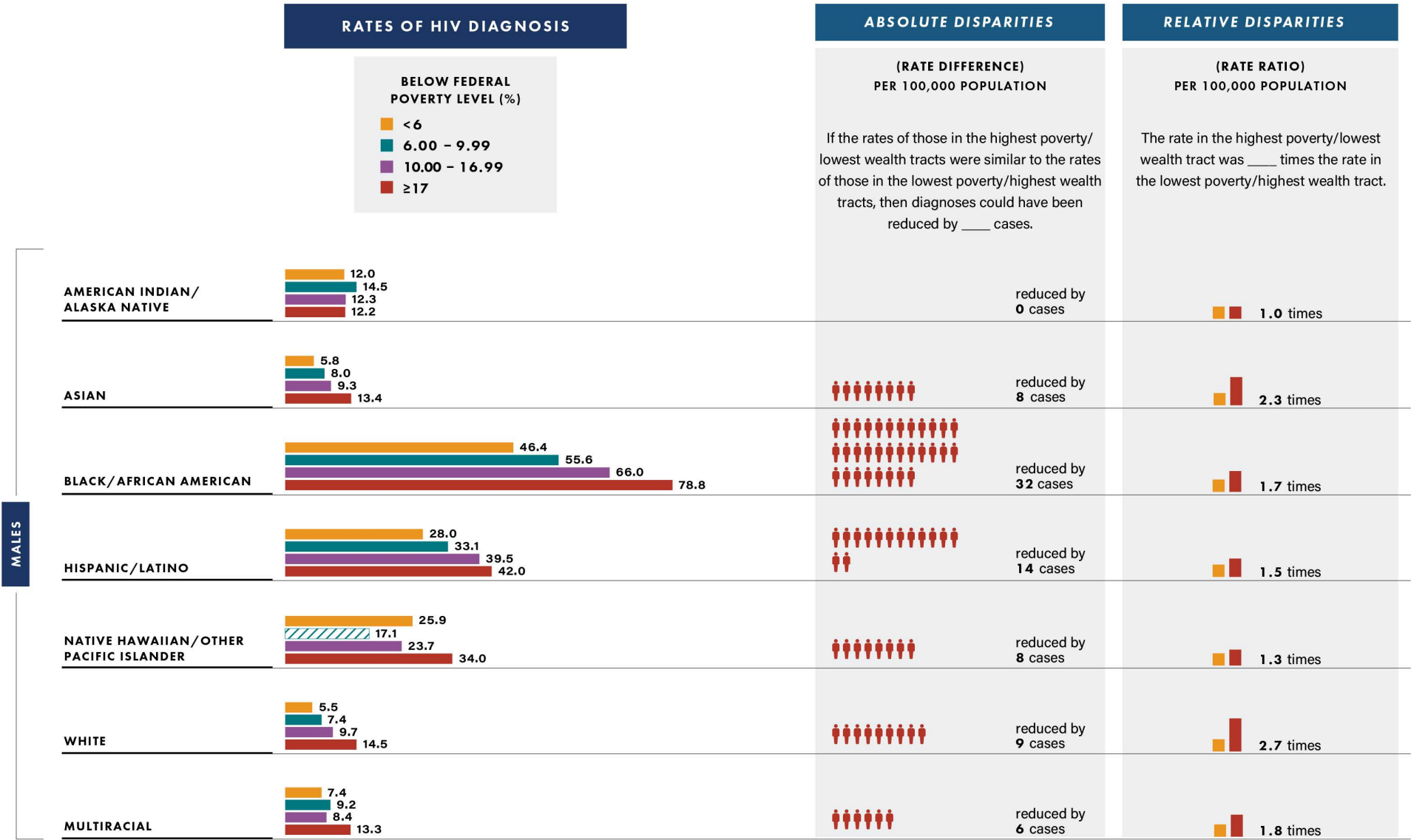
**RELATIVE DISPARITY (RATE RATIO)** measures the rates in highest poverty tracts divided by rates in lowest poverty tracts ( $\text{Rate}_{\text{highest poverty}} / \text{Rate}_{\text{lowest poverty}}$ ).



Race/ethnicity

- Diagnoses—all racial/ethnic groups for both sexes (except American Indian/Alaska Native males and females and Asian females) (Figures 4a/b and Table 2).
- Linkage—all racial/ethnic groups for males (Table 10).
- Viral suppression—all racial/ethnic groups for males (except multiracial males); Black/African American females (68.1%) and White females (57.0%) (Table 10).

**FIGURE 4A**  
Rates and disparities of diagnoses of HIV infection among adult males aged ≥ 18 years, based on assigned sex at birth, by race/ethnicity and federal poverty status, 2021—census tract level, United States and Puerto Rico



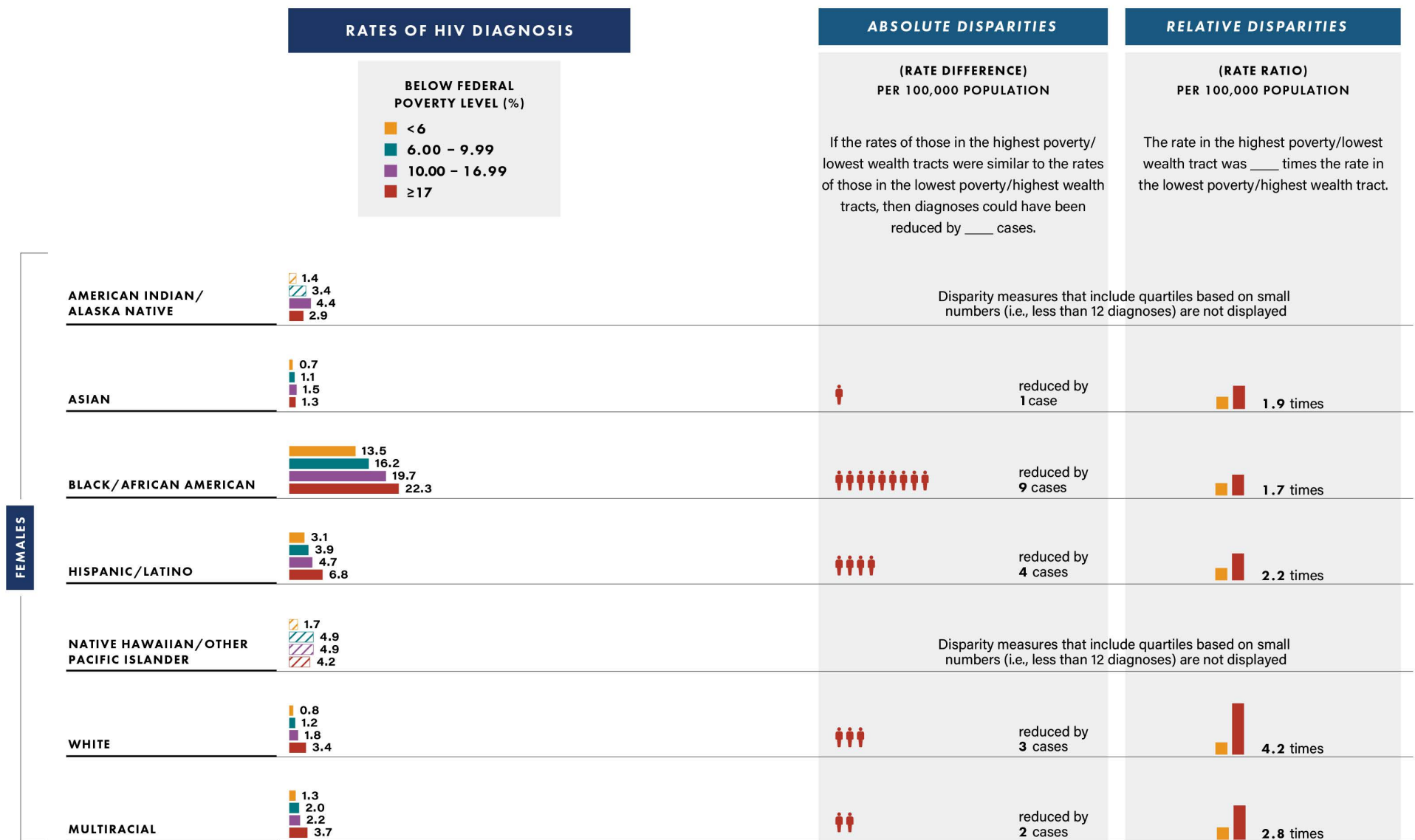
**NOTE** Rates are per 100,000 population. Hispanic/Latino persons can be of any race. Striped bars indicate rates based on small numbers (i.e., less than 12 diagnoses) and should be interpreted with caution.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in highest poverty tracts and rates in lowest poverty tracts ( $\text{Rate}_{\text{highest poverty}} - \text{Rate}_{\text{lowest poverty}}$ ).

**RELATIVE DISPARITY (RATE RATIO)** measures the rates in highest poverty tracts divided by rates in lowest poverty tracts ( $\text{Rate}_{\text{highest poverty}} / \text{Rate}_{\text{lowest poverty}}$ ).



**FIGURE 4B**  
Rates and disparities of diagnoses of HIV infection among adult females aged  $\geq 18$  years, based on assigned sex at birth, by race/ethnicity and federal poverty status, 2021—census tract level, United States and Puerto Rico



**NOTE** Rates are per 100,000 population. Hispanic/Latino persons can be of any race. Striped bars indicate rates based on small numbers (i.e., less than 12 diagnoses) and should be interpreted with caution.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in highest poverty tracts and rates in lowest poverty tracts ( $\text{Rate}_{\text{highest poverty}} - \text{Rate}_{\text{lowest poverty}}$ ).

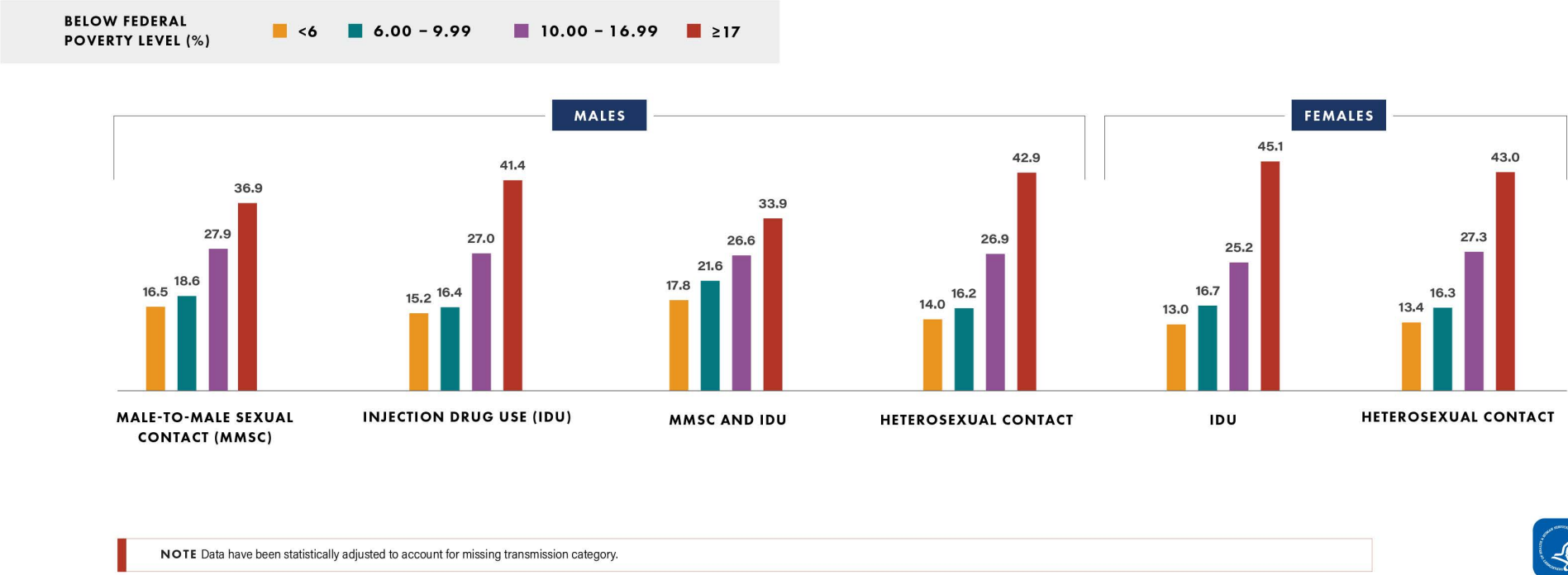
**RELATIVE DISPARITY (RATE RATIO)** measures the rates in highest poverty tracts divided by rates in lowest poverty tracts ( $\text{Rate}_{\text{highest poverty}} / \text{Rate}_{\text{lowest poverty}}$ ).



### Transmission category

- Diagnoses—all transmission categories for both sexes (Figure 5 and Table 3).
- Linkage—all transmission categories for males (except males with infection attributed to injection drug use [IDU]) (Table 11).
- Viral suppression—all transmission categories for both sexes (Table 11).
- Among males with infection attributed to male-to-male sexual contact (MMSC) (Table 12):
  - Linkage—all racial/ethnic groups (except for White and multiracial), and
  - Viral suppression—all racial/ethnic groups (except for multiracial).

**FIGURE 5**  
Diagnoses of HIV infection among adults aged ≥ 18 years, by transmission category, assigned sex at birth, and federal poverty status, 2021—census tract level, United States and Puerto Rico



Area of residence and region

Diagnoses rates (Table 4)

- Males—Area: Florida (65.7), followed by Georgia (63.0); Region: South (44.2).
- Females—Area: District of Columbia (20.1), followed by Florida (17.9); Region: South (11.5).
- Total—Area: Florida (41.2), followed by Georgia (38.8); Region: South (27.3).

Use caution when comparing the rates of diagnoses for the District of Columbia to the rates for states.

A look at disparities in diagnoses of HIV infection by poverty

In 2021, the disparities in HIV diagnosis by poverty for adults were as follows:

- **Absolute disparities (rate difference)**—If the rates of diagnoses of HIV infection among males or females in the highest poverty/lowest wealth tracts were similar to the rates among those in the lowest poverty/highest wealth tracts, then diagnoses could have been reduced by 26 cases and 7 cases per 100,000 population, respectively (Figure 1 and Table 1).
- **Relative disparities (rate ratio)**—Among males, the rate of diagnoses in the highest poverty/lowest wealth tracts was 3.4 times the rate in the lowest poverty/highest wealth tracts, and among females, the rate in the highest poverty/lowest wealth tracts was 4.6 times the rate in the lowest poverty/highest wealth tracts (Figure 1 and Table 1).

For absolute and relative disparities for assigned sex at birth stratified by age group and race/ethnicity, see Figures 3a/b and 4a/b. See [Technical Notes](#) for additional information on disparity measures.





## Education Level

Education plays an important role in preventing HIV; increased education reduces the social and economic circumstances that may put someone at increased risk for HIV [12]. Persons with higher levels of education typically have better health outcomes due to higher levels of income and occupational status (i.e., social position) [13].

In 2021, adults who lived in tracts with the **lowest level of education** (where 16% or more of the residents had less than a high school diploma) accounted for

- the highest HIV diagnosis rates or percentages (diagnoses),
- the lowest percentages of adults linked to HIV medical care within 1 month of receiving a diagnosis (linkage), and
- the lowest percentages of adults with suppressed viral load within 6 months of receiving an HIV diagnosis (viral suppression) among:

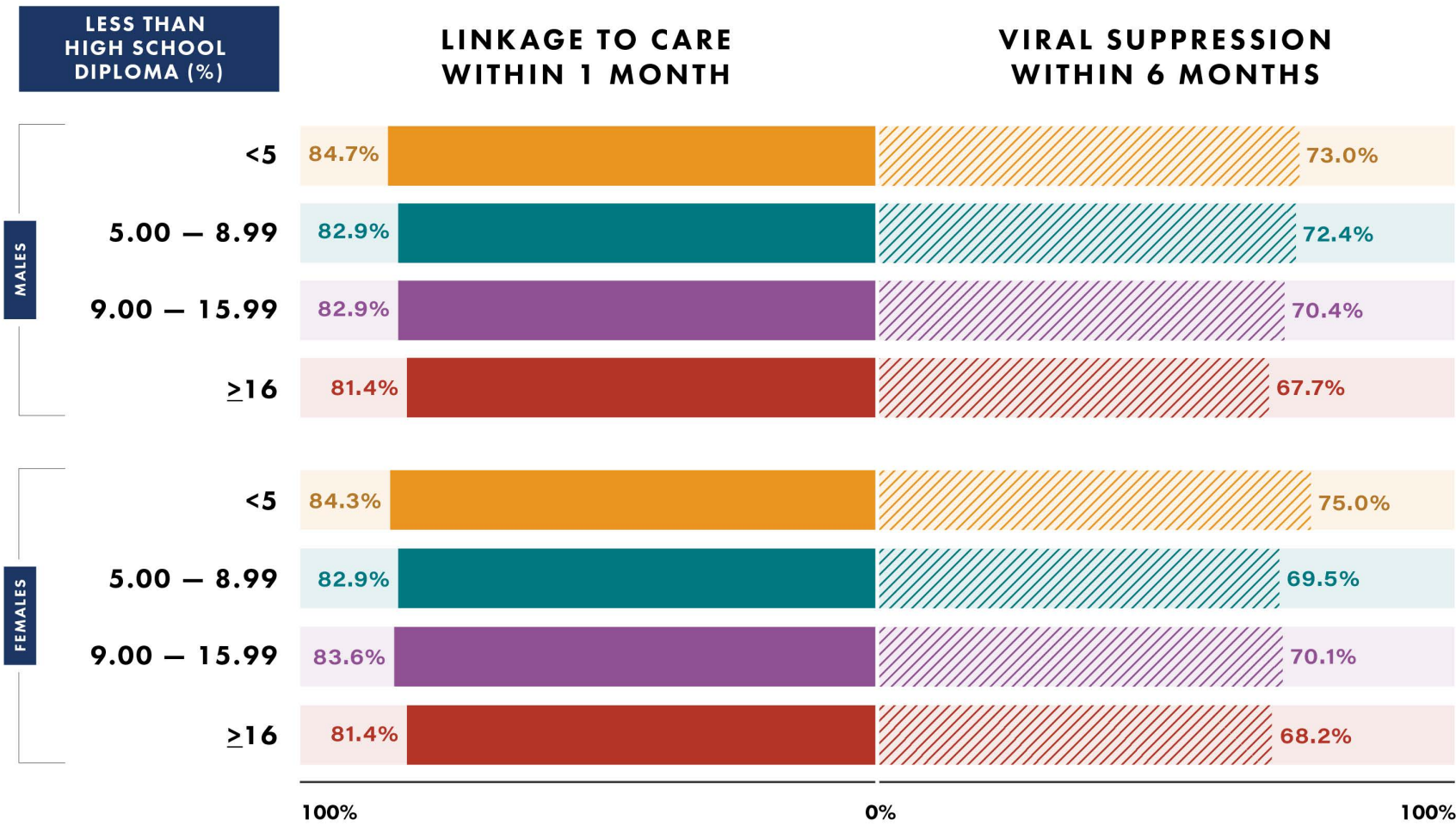
## Assigned sex at birth

- Diagnoses—rates: males, 33.4; females, 8.4 (Figure 6 and Table 1).
- Linkage—males, 81.4%; females, 81.4% (Figure 7 and Table 9).
- Viral suppression—males, 67.7%; females, 68.2% (Figure 7 and Table 9).

**FIGURE 6**  
Rates and disparities of diagnoses of HIV infection among adults aged ≥ 18 years, by assigned sex at birth and education level, 2021—census tract level, United States and Puerto Rico



**FIGURE 7**  
Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among adults aged ≥ 18 years, by assigned sex at birth and education level—census tract level, 47 states and the District of Columbia



**NOTE** See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.

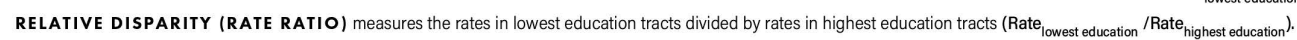


Age group

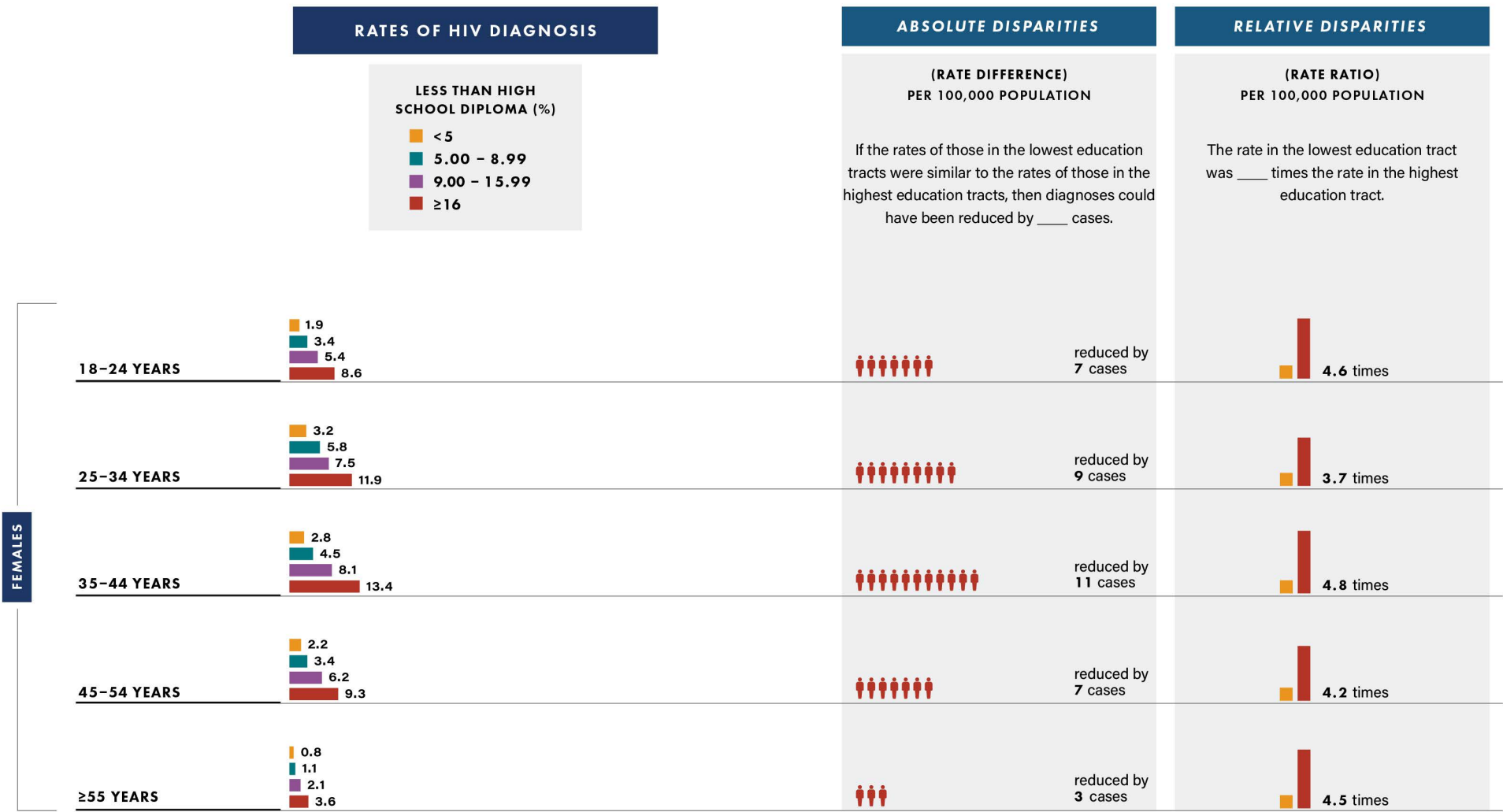
- Diagnoses—all age groups for both sexes (Figures 8a/b and Table 1).
- Linkage—all age groups for males (except age groups 18–24 and 35–44 years); females aged 25–34 and 35–44 years (Table 9).
- Viral suppression—all age groups for males; females aged ≥ 55 years) (Table 9).



**Rates and disparities of diagnoses of HIV infection among adult males aged  $\geq 18$  years, based on assigned sex at birth, by age at diagnosis and education level, 2021—census tract level, United States and Puerto Rico**



**FIGURE 8B**  
Rates and disparities of diagnoses of HIV infection among adult females aged ≥ 18 years, based on assigned sex at birth, by age at diagnosis and education level, 2021—census tract level, United States and Puerto Rico



**NOTE** Rates are per 100,000 population.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in lowest education tracts and rates in highest education tracts ( $\text{Rate}_{\text{lowest education}} - \text{Rate}_{\text{highest education}}$ ).

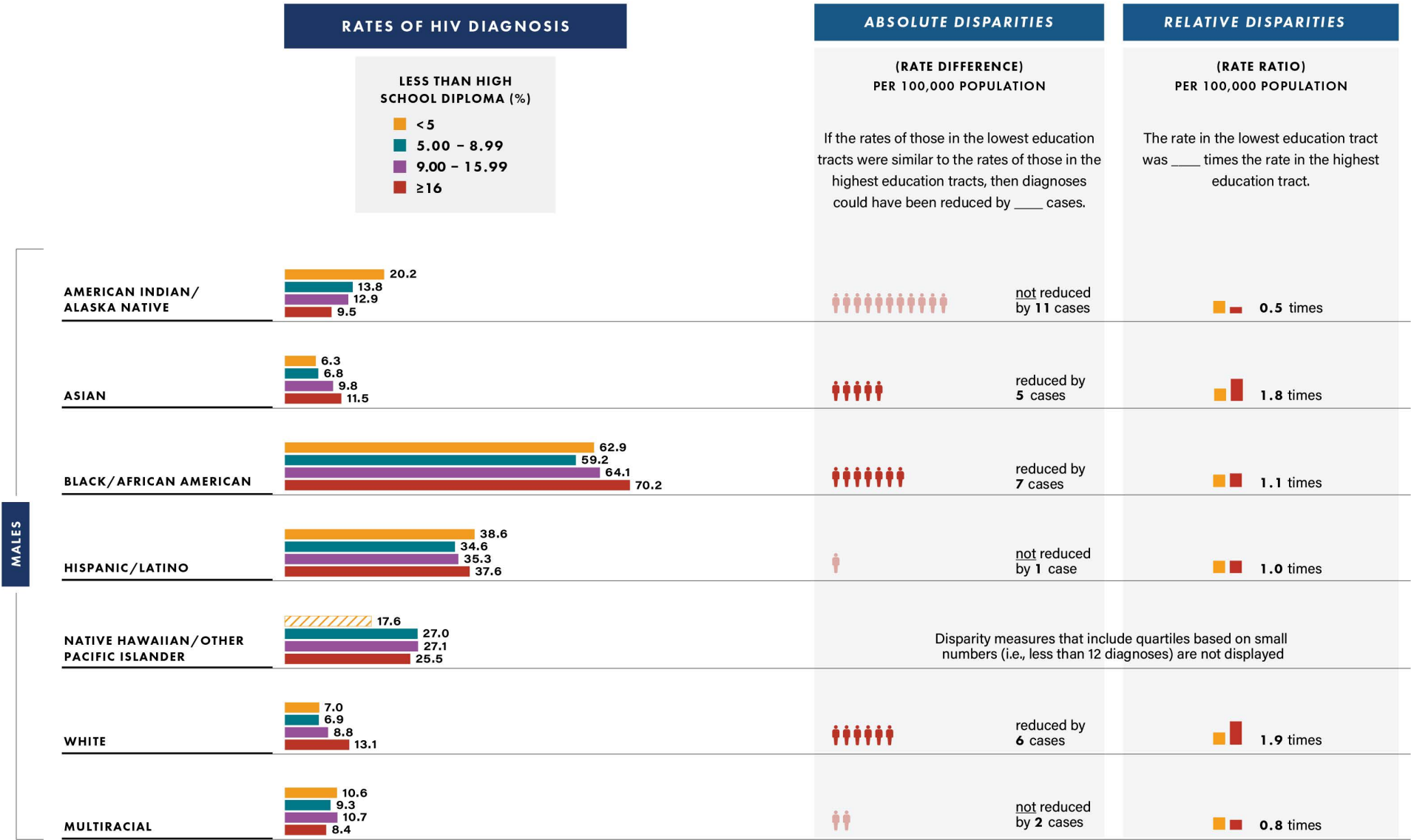
**RELATIVE DISPARITY (RATE RATIO)** measures the rates in lowest education tracts divided by rates in highest education tracts ( $\text{Rate}_{\text{lowest education}} / \text{Rate}_{\text{highest education}}$ ).



Race/ethnicity

- Diagnoses—all racial/ethnic groups for both sexes (except American Indian/Alaska Native males and females, and Hispanic/Latino males) (Figures 9a/b and Table 2).
- Linkage—all racial/ethnic groups for both sexes (except for multiracial males and females) (Table 10).
- Viral suppression—all racial/ethnic groups for both sexes (except Hispanic/Latino and multiracial females) (Table 10).

**FIGURE 9A**  
Rates and disparities of diagnoses of HIV infection among adult males aged ≥ 18 years, based on assigned sex at birth, by race/ethnicity and education level, 2021—census tract level, United States and Puerto Rico



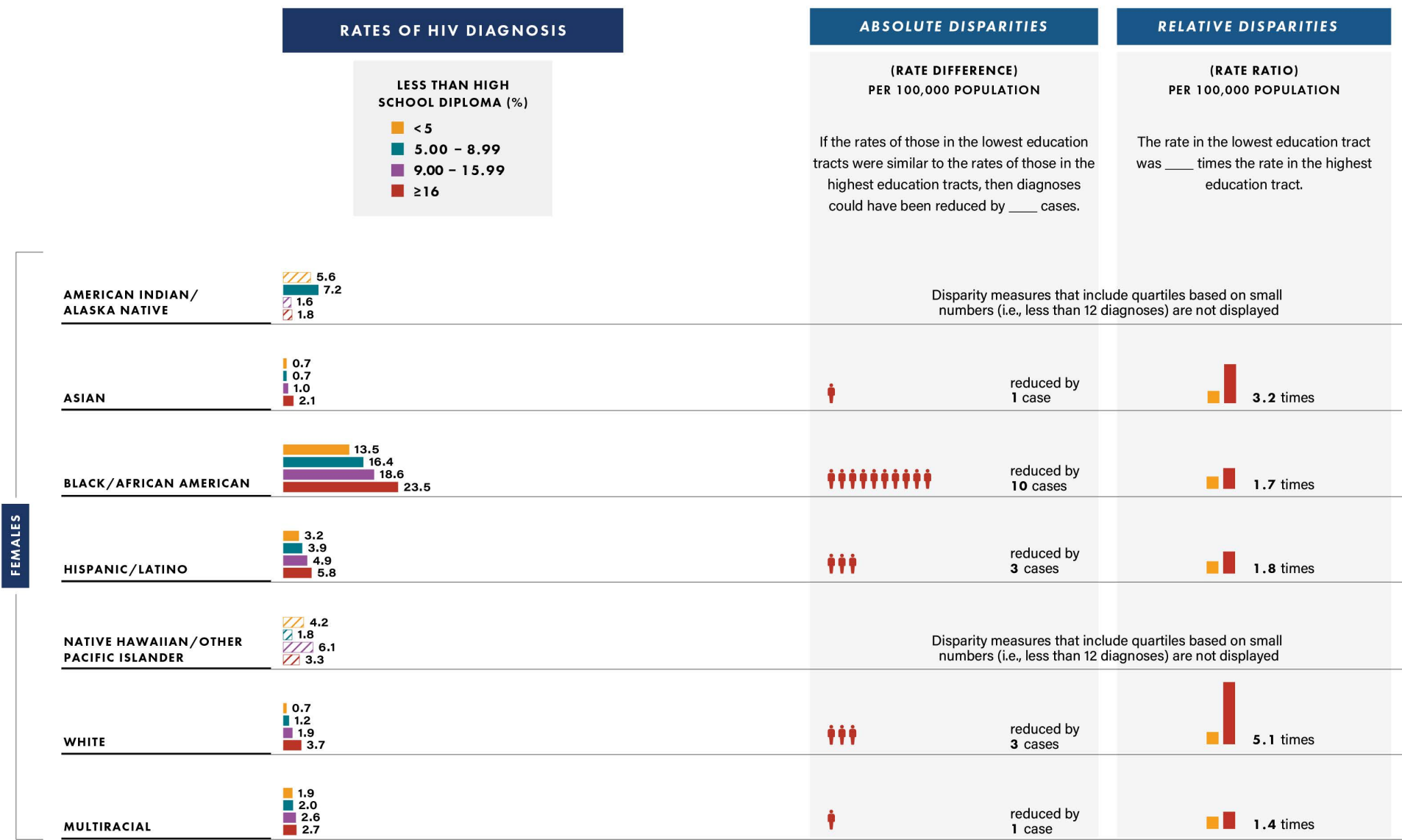
**NOTE** Rates are per 100,000 population. Hispanic/Latino persons can be of any race. Striped bars indicate rates based on small numbers (i.e., less than 12 diagnoses) and should be interpreted with caution.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in lowest education tracts and rates in highest education tracts ( $\text{Rate}_{\text{lowest education}} - \text{Rate}_{\text{highest education}}$ ).

**RELATIVE DISPARITY (RATE RATIO)** measures the rates in lowest education tracts divided by rates in highest education tracts ( $\text{Rate}_{\text{lowest education}} / \text{Rate}_{\text{highest education}}$ ).



**FIGURE 9B**  
Rates and disparities of diagnoses of HIV infection among adult females aged ≥ 18 years, based on assigned sex at birth, by race/ethnicity and education level, 2021—census tract level, United States and Puerto Rico



**NOTE** Rates are per 100,000 population. Hispanic/Latino persons can be of any race. Striped bars indicate rates based on small numbers (i.e., less than 12 diagnoses) and should be interpreted with caution.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in lowest education tracts and rates in highest education tracts ( $\text{Rate}_{\text{lowest education}} - \text{Rate}_{\text{highest education}}$ ).

**RELATIVE DISPARITY (RATE RATIO)** measures the rates in lowest education tracts divided by rates in highest education tracts ( $\text{Rate}_{\text{lowest education}} / \text{Rate}_{\text{highest education}}$ ).

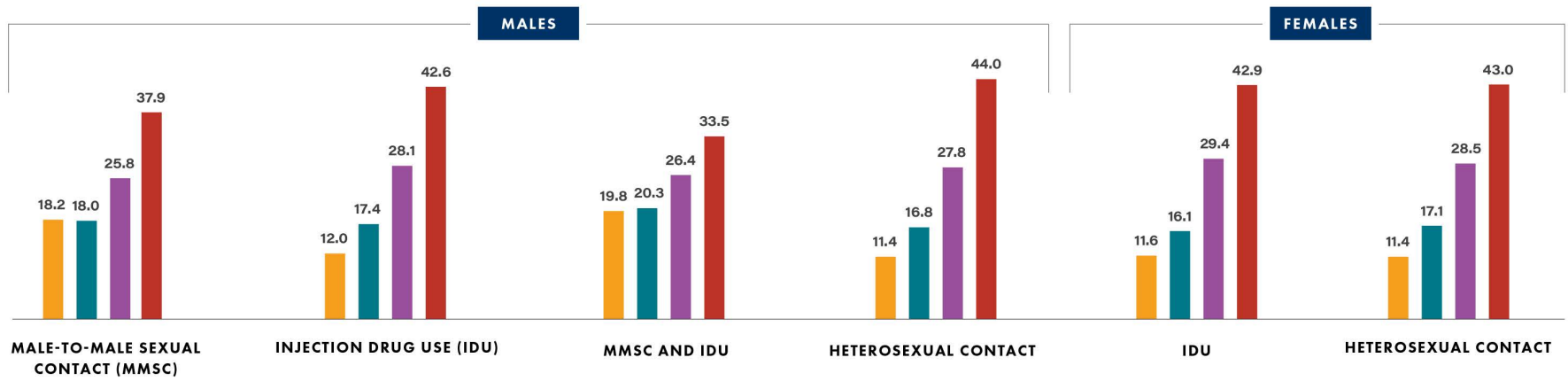


Transmission category

- Diagnoses—all transmission categories for both sexes (Figure 10 and Table 3).
- Linkage—all transmission categories for both sexes (Table 11).
- Viral suppression—all transmission categories for both sexes (except females with infection attributed to IDU) (Table 11).
- Among males with infection attributed to MMSC (Table 12):
  - Linkage—all racial/ethnic groups (except for multiracial), and
  - Viral suppression—all racial/ethnic groups (except for multiracial).

**FIGURE 10**  
Diagnoses of HIV infection among adults aged ≥ 18 years, by transmission category, assigned sex at birth, and education level, 2021—census tract level, United States and Puerto Rico

LESS THAN HIGH SCHOOL DIPLOMA (%)    ■ <5    ■ 5.00 – 8.99    ■ 9.00 – 15.99    ■ ≥16



NOTE Data have been statistically adjusted to account for missing transmission category.



## Area of residence and region

### Diagnoses rates (Table 5)

- Males—Area: District of Columbia (80.6), followed by Florida (59.5); Region: South (37.7).
- Females—Area: Florida (17.9), followed by Maryland (16.1); Region: South (10.7).
- Total—Area: District of Columbia (50.0), followed by Florida (38.8); Region: South (24.1).

Use caution when comparing the rates of diagnoses for the District of Columbia to the rates for states.

## A look at disparities in diagnoses of HIV infection by education

In 2021, the disparities in HIV diagnosis by education for adults were as follows:

- **Absolute disparities (rate difference)**—If the rates of diagnoses of HIV infection among males or females in the lowest education tracts were similar to the rates among those in the highest education tracts, then diagnoses could have been reduced by 20 cases and 6 cases per 100,000 population, respectively (Figure 6 and Table 1).
- **Relative disparities (rate ratio)**—Among males, the rate of diagnoses in the lowest education tracts was 2.5 times the rate in the highest education tracts, and among females, the rate in the lowest education tracts was 4.5 times the rate in the highest education tracts (Figure 6 and Table 1).

For absolute and relative disparities for assigned sex at birth stratified by age group and race/ethnicity, see Figures 8a/b and 9a/b.

See Technical Notes for additional information on disparity measures.





## Median Household Income

HIV has a direct and indirect cost on household income. Lower income households, when compared to higher income households, may require a greater proportion of expenditures for essential household items. HIV, like other chronic diseases, leads to economic hardship when resources (particularly, limited resources) are shifted from household necessities to costs incurred related to HIV morbidity and mortality [14]. Additionally, decreased median household income is related to a lower probability of survival after an HIV diagnosis [15].

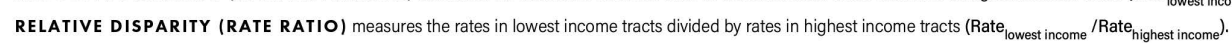
In 2021, adults who lived in tracts with the **lowest median household** income (where the median household income was less than \$49,000 a year) accounted for

- the highest HIV diagnosis rates or percentages (diagnoses),
- the lowest percentages of adults linked to HIV medical care within 1 month of receiving a diagnosis (linkage), and
- the lowest percentages of adults with suppressed viral load within 6 months of receiving an HIV diagnosis (viral suppression) among:

## Assigned sex at birth

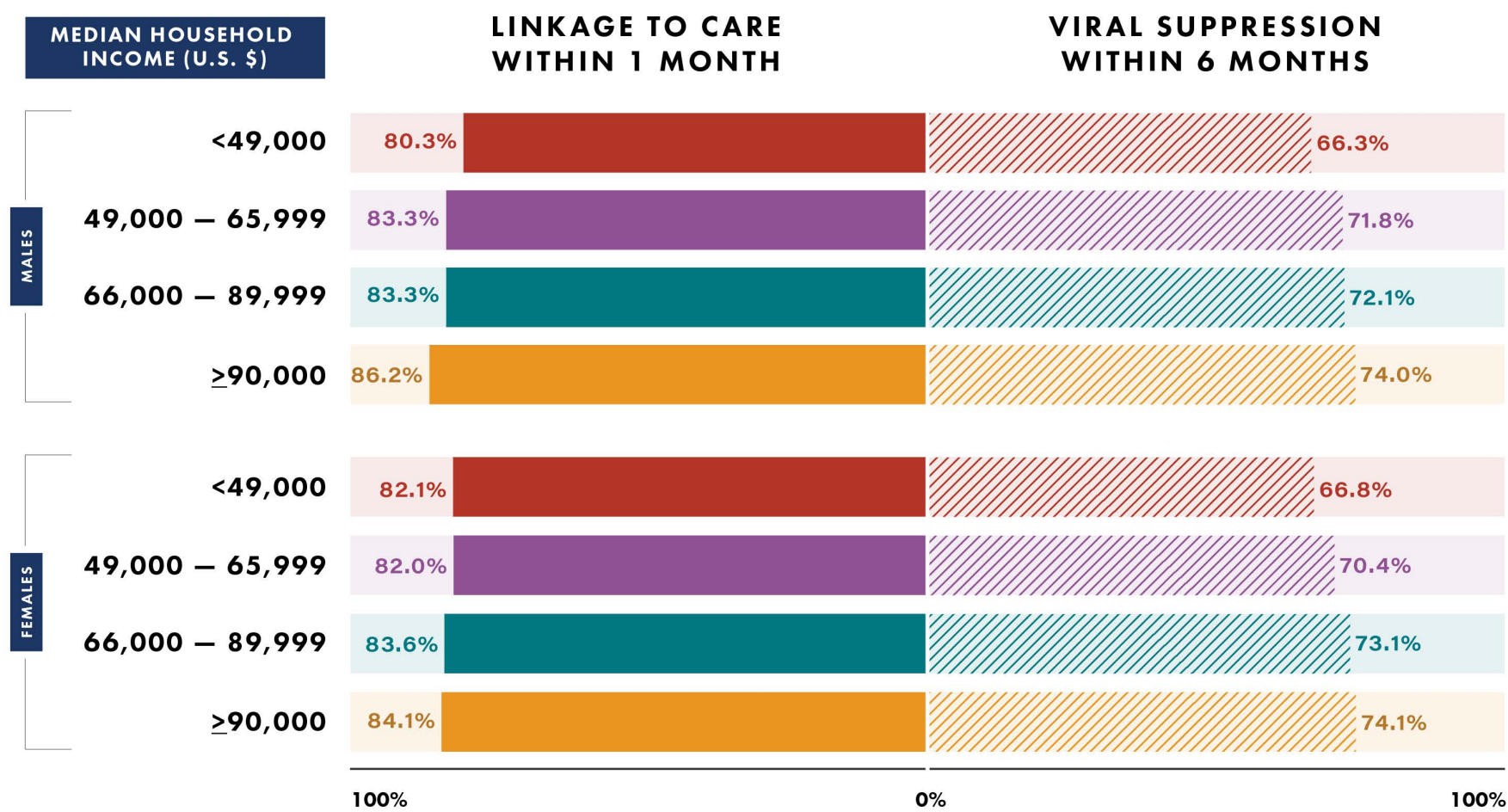
- Diagnoses—rates: males, 35.9; females, 9.1 (Figure 11 and Table 1).
- Linkage—males, 80.3%; females, N/A (Figure 12 and Table 9).
- Viral suppression—males, 66.3%; females, 66.8% (Figure 12 and Table 9).

### Rates and disparities of diagnoses of HIV infection among adults aged ≥18 years, by assigned sex at birth and income level, 2021—census tract level, United States and Puerto Rico





**FIGURE 12**  
Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among adults aged ≥ 18 years, by assigned sex at birth and income level—census tract level, 47 states and the District of Columbia



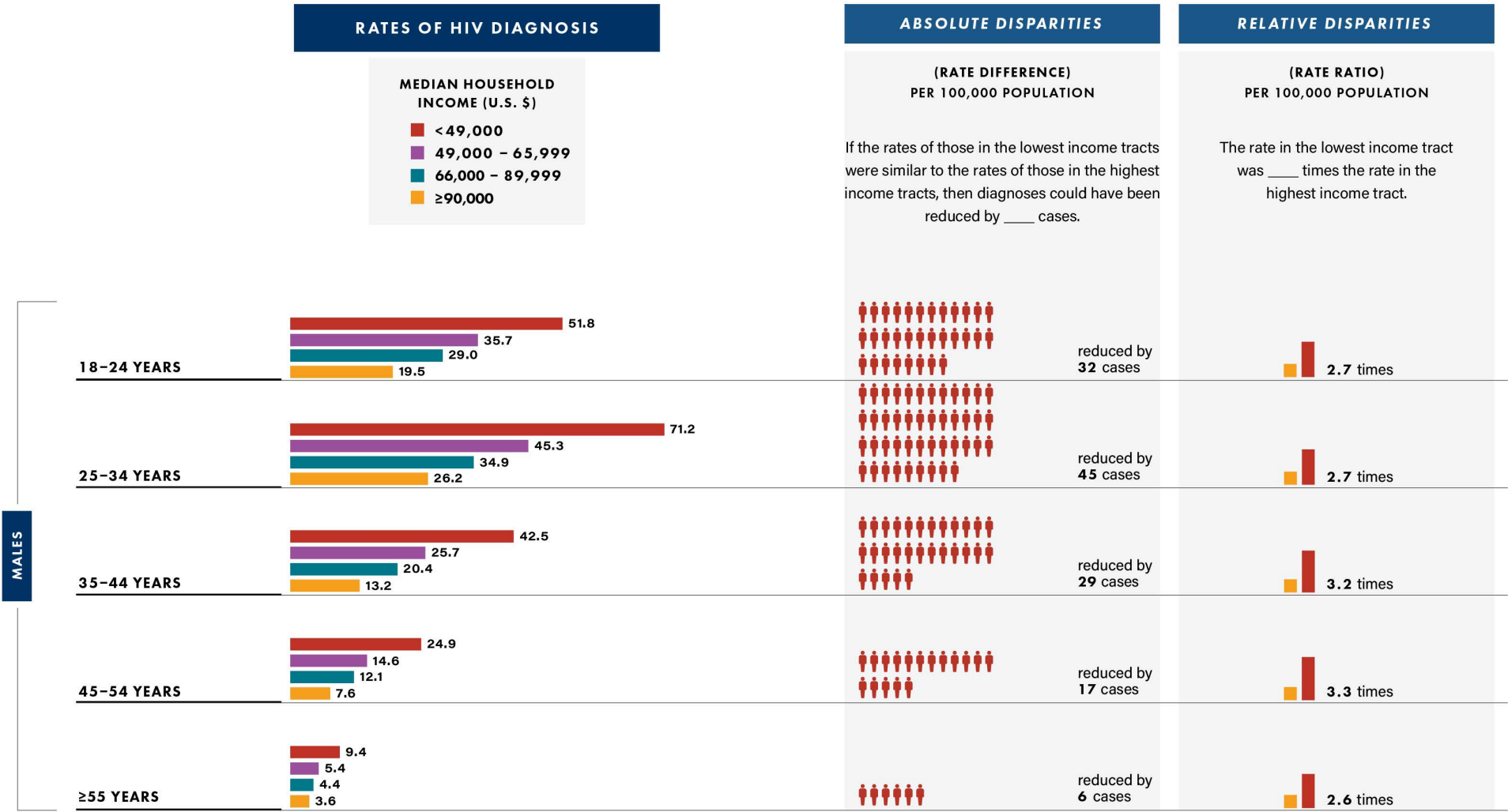
**NOTE** See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Age group

- Diagnoses—all age groups for both sexes (Figures 13a/b and Table 1).
- Linkage—all age groups for males; females aged 25–34 and 44–54 years (Table 9).
- Viral suppression—all age groups for both sexes (Table 9).

**FIGURE 13A**  
Rates and disparities of diagnoses of HIV infection among adult males aged ≥ 18 years, based on assigned sex at birth, by age at diagnosis and income level, 2021—census tract level, United States and Puerto Rico



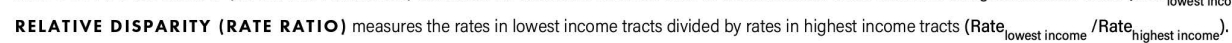
**NOTE** Rates are per 100,000 population.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in lowest income tracts and rates in highest income tracts ( $\text{Rate}_{\text{lowest income}} - \text{Rate}_{\text{highest income}}$ ).

**RELATIVE DISPARITY (RATE RATIO)** measures the rates in lowest income tracts divided by rates in highest income tracts ( $\text{Rate}_{\text{lowest income}} / \text{Rate}_{\text{highest income}}$ ).

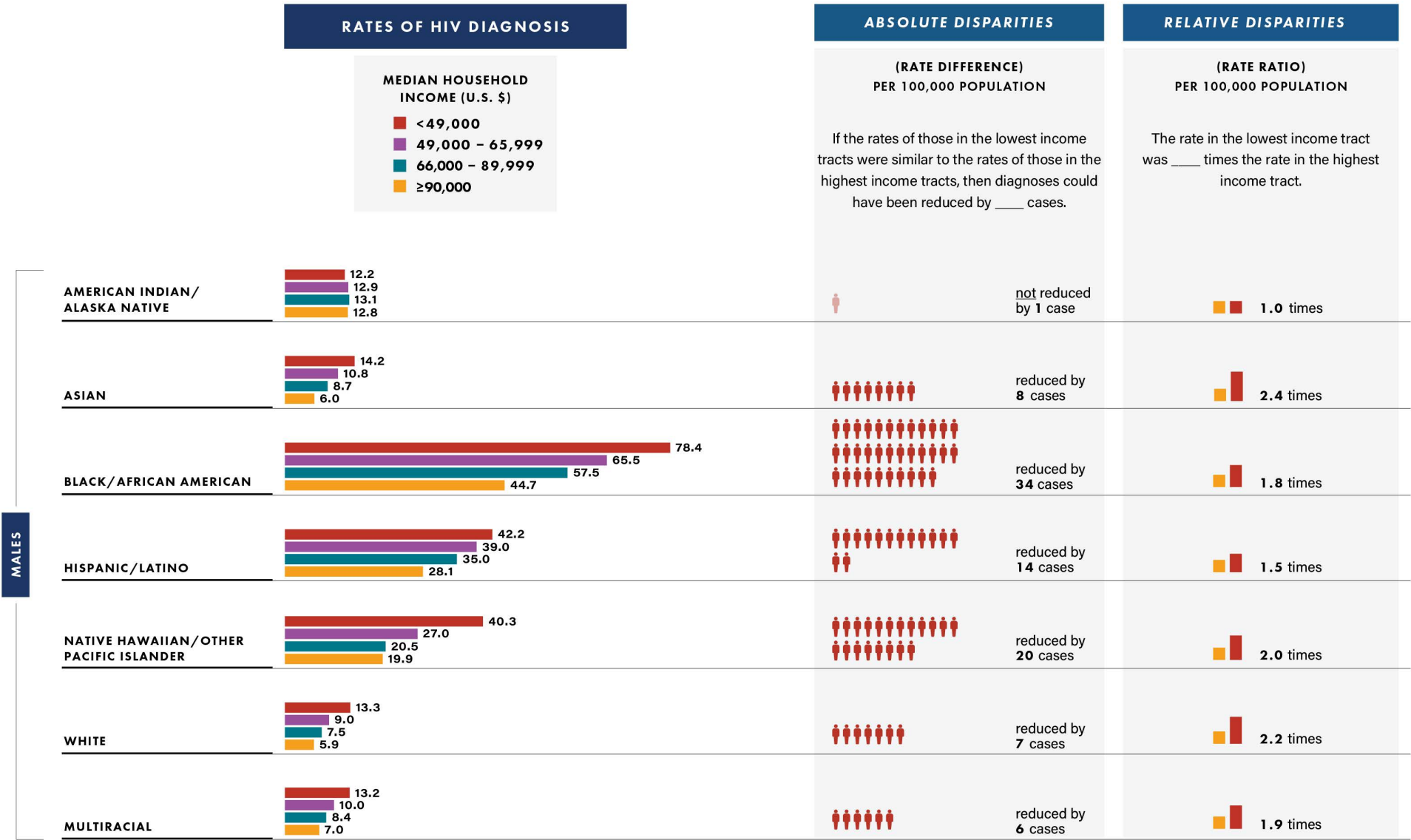


**Rates and disparities of diagnoses of HIV infection among adult females aged  $\geq 18$  years, based on assigned sex at birth, by age at diagnosis and income level, 2021—census tract level, United States and Puerto Rico**



- Diagnoses—all racial/ethnic groups for both sexes (except American Indian/Alaska Native males and Asian females) (Figures 14a/b and Table 2).
- Linkage—Black/African American, Hispanic/Latino, and White males (Table 10).
- Viral suppression—all racial/ethnic groups for males; Black/African American and White females (Table 10).

**FIGURE 1 4A**  
Rates and disparities of diagnoses of HIV infection among adult males aged ≥ 18 years, based on assigned sex at birth, by race/ethnicity and income level, 2021—census tract level, United States and Puerto Rico



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

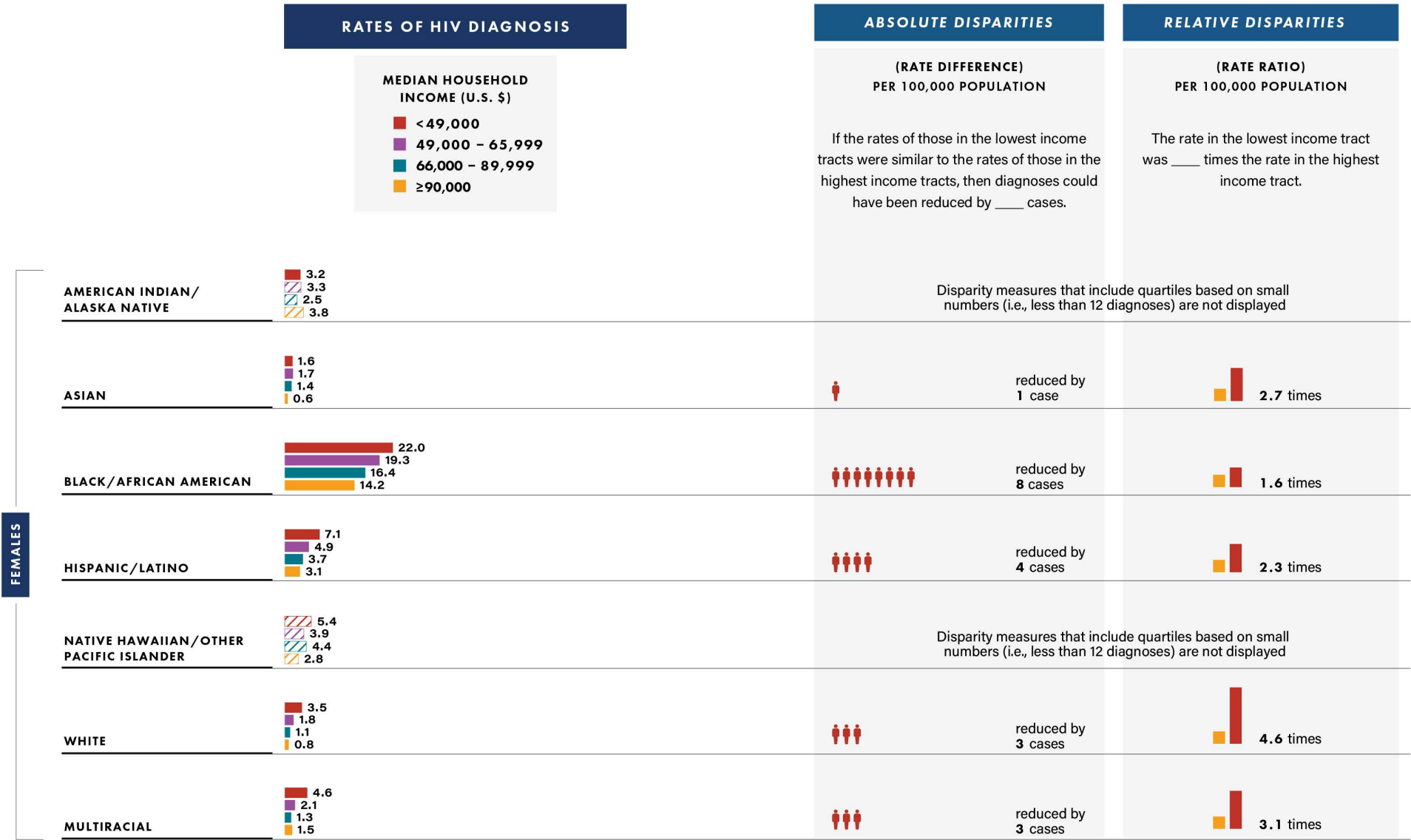
**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in lowest income tracts and rates in highest income tracts ( $\text{Rate}_{\text{lowest income}} - \text{Rate}_{\text{highest income}}$ ).

**RELATIVE DISPARITY (RATE RATIO)** measures the rates in lowest income tracts divided by rates in highest income tracts ( $\text{Rate}_{\text{lowest income}} / \text{Rate}_{\text{highest income}}$ ).





**FIGURE 14B**  
Rates and disparities of diagnoses of HIV infection among adult females aged ≥ 18 years, based on assigned sex at birth, by race/ethnicity and income level, 2021—census tract level, United States and Puerto Rico



**NOTE** Rates are per 100,000 population. Hispanic/Latino persons can be of any race. Striped bars indicate rates based on small numbers (i.e., less than 12 diagnoses) and should be interpreted with caution.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in lowest income tracts and rates in highest income tracts ( $\text{Rate}_{\text{lowest income}} - \text{Rate}_{\text{highest income}}$ ).

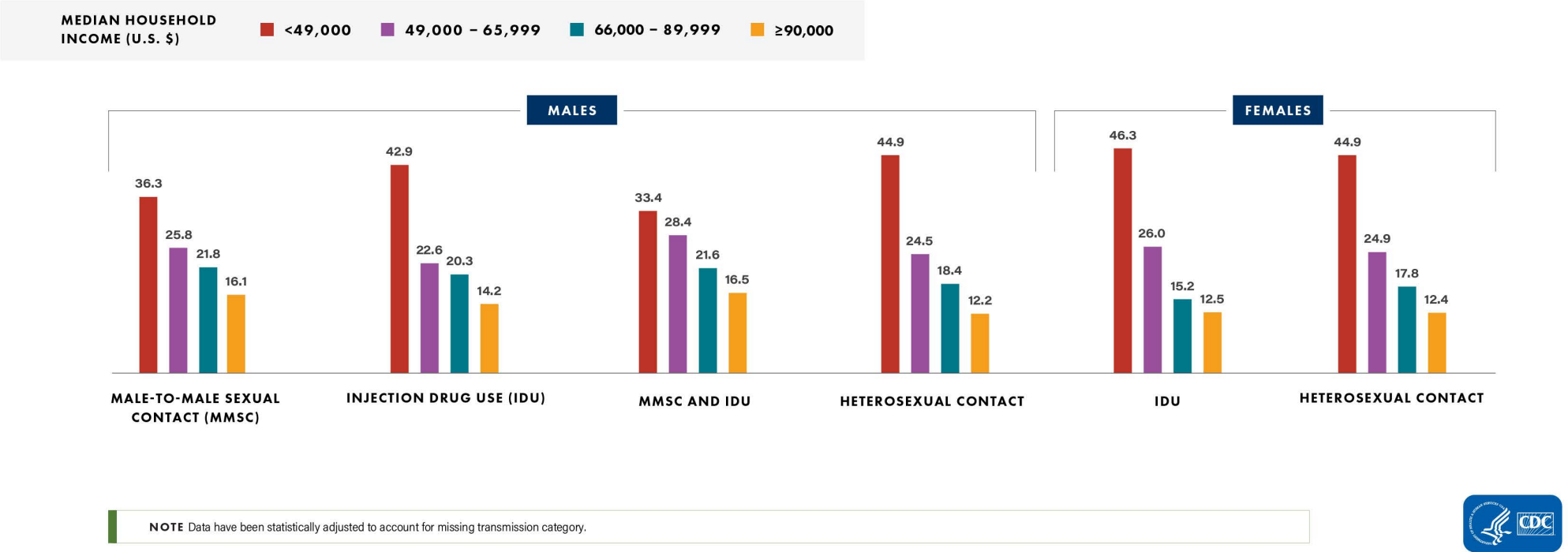
**RELATIVE DISPARITY (RATE RATIO)** measures the rates in lowest income tracts divided by rates in highest income tracts ( $\text{Rate}_{\text{lowest income}} / \text{Rate}_{\text{highest income}}$ ).



### Transmission category

- Diagnoses—all transmission categories for both sexes (Figure 15 and Table 3).
- Linkage—all transmission categories for both sexes (except males with infection attributed to MMSC and IDU and females with infection attributed to IDU) (Table 11).
- Viral suppression—all transmission categories for both sexes (Table 11).
- Among males with infection attributed to MMSC (Table 12):
  - Linkage—all racial/ethnic groups (except American Indian/Alaska Native, Asian, and multiracial), and
  - Viral suppression— all racial/ethnic groups (except multiracial).

**FIGURE 15**  
Diagnoses of HIV infection among adults aged ≥ 18 years, by transmission category, assigned sex at birth, and income level, 2021—census tract level, United States and Puerto Rico



Area of residence and region

Diagnoses—rates (Table 6)

- Males—Area: New Jersey (65.1), followed by Georgia (64.1); Region: South (42.0).
- Females—Area: District of Columbia (32.0), followed by New Jersey (19.1); Region: Northeast (11.3).
- Total—Area: District of Columbia (43.6), followed by New Jersey (40.7); Region: South (26.1).

Use caution when comparing the rates of diagnoses for the District of Columbia to the rates for states.

A look at disparities in diagnoses of HIV infection by income

In 2021, the disparities in HIV diagnosis by income for adults were as follows:

- **Absolute disparities (rate difference)**—If the rates of diagnoses of HIV infection among males or females in the lowest income tracts were similar to the rates among those in the highest income tracts, then diagnoses could have been reduced by 25 cases and 7 cases per 100,000 population, respectively (Figure 11 and Table 1).
- **Relative disparities (rate ratio)**—Among males, the rate of diagnoses in the lowest income tracts was 3.2 times the rate in the highest income tracts, and among females, the rate in the lowest income tracts was 4.6 times the rate in the highest income tracts (Figure 11 and Table 1).

For absolute and relative disparities for assigned sex at birth stratified by age group and race/ethnicity, see Figures 13a/b and 14a/b.

See Technical Notes for additional information on disparity measures.



## Health Insurance Coverage

Health insurance coverage is associated with the use of preventive services and better medical outcomes [16]. Additionally, insured persons with diagnosed HIV are more likely to receive HIV care and treatment, which prolongs life, increases the likelihood of viral suppression, and decreases mortality [17]. Limited access to health insurance and care can increase the risk for HIV and affect health and well-being.

In 2021, adults who lived in tracts with the **lowest health insurance or health coverage plan** (hereafter referred to as health insurance coverage) (where 14% or more of the residents did not have health insurance coverage) accounted for

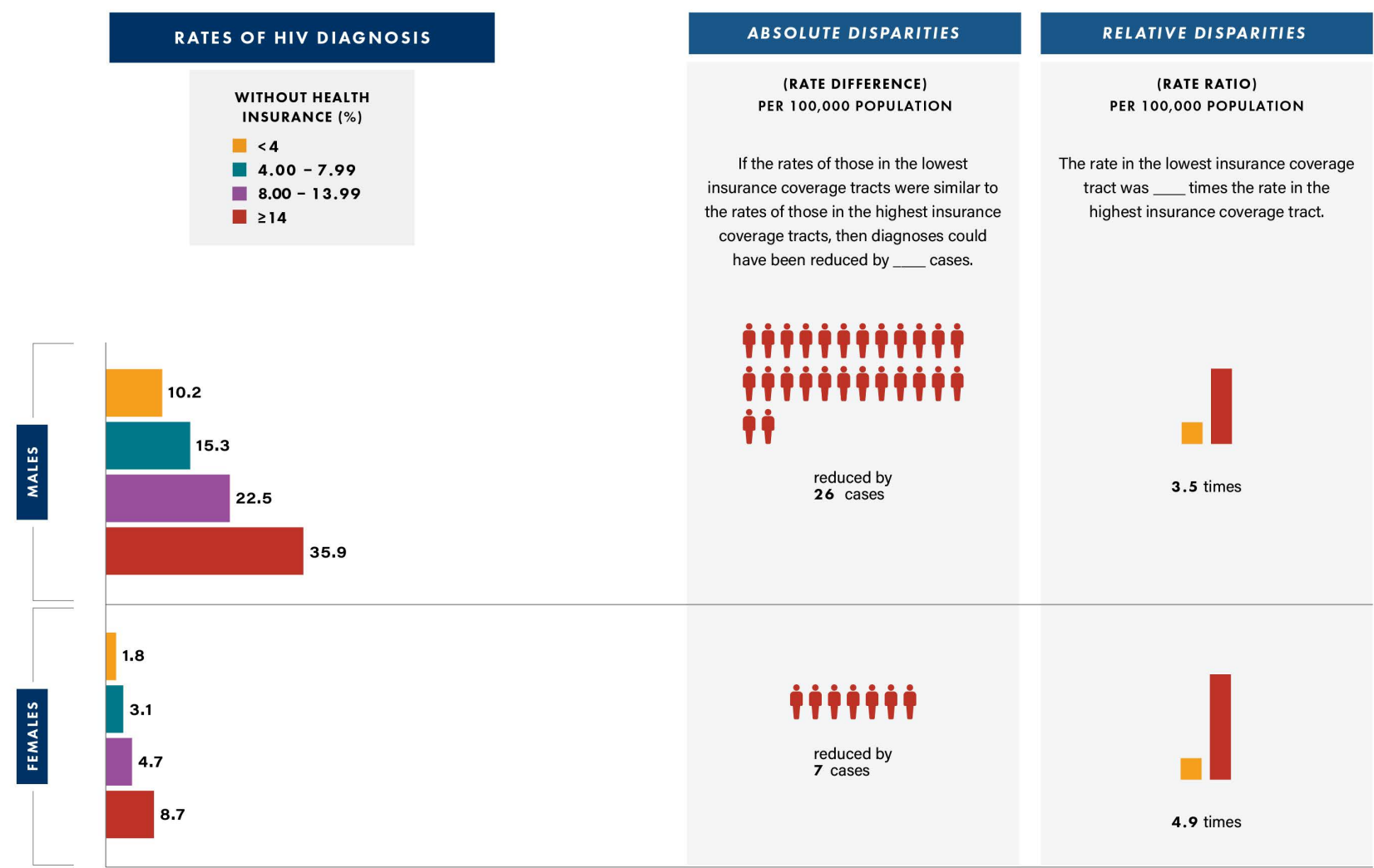
the highest HIV diagnosis rates or percentages (diagnoses),  
the lowest percentages of adults linked to HIV medical care within 1 month of receiving a diagnosis (linkage), and  
the lowest percentages of adults with suppressed viral load within 6 months of receiving an HIV diagnosis (viral suppression) among:

### Assigned sex at birth

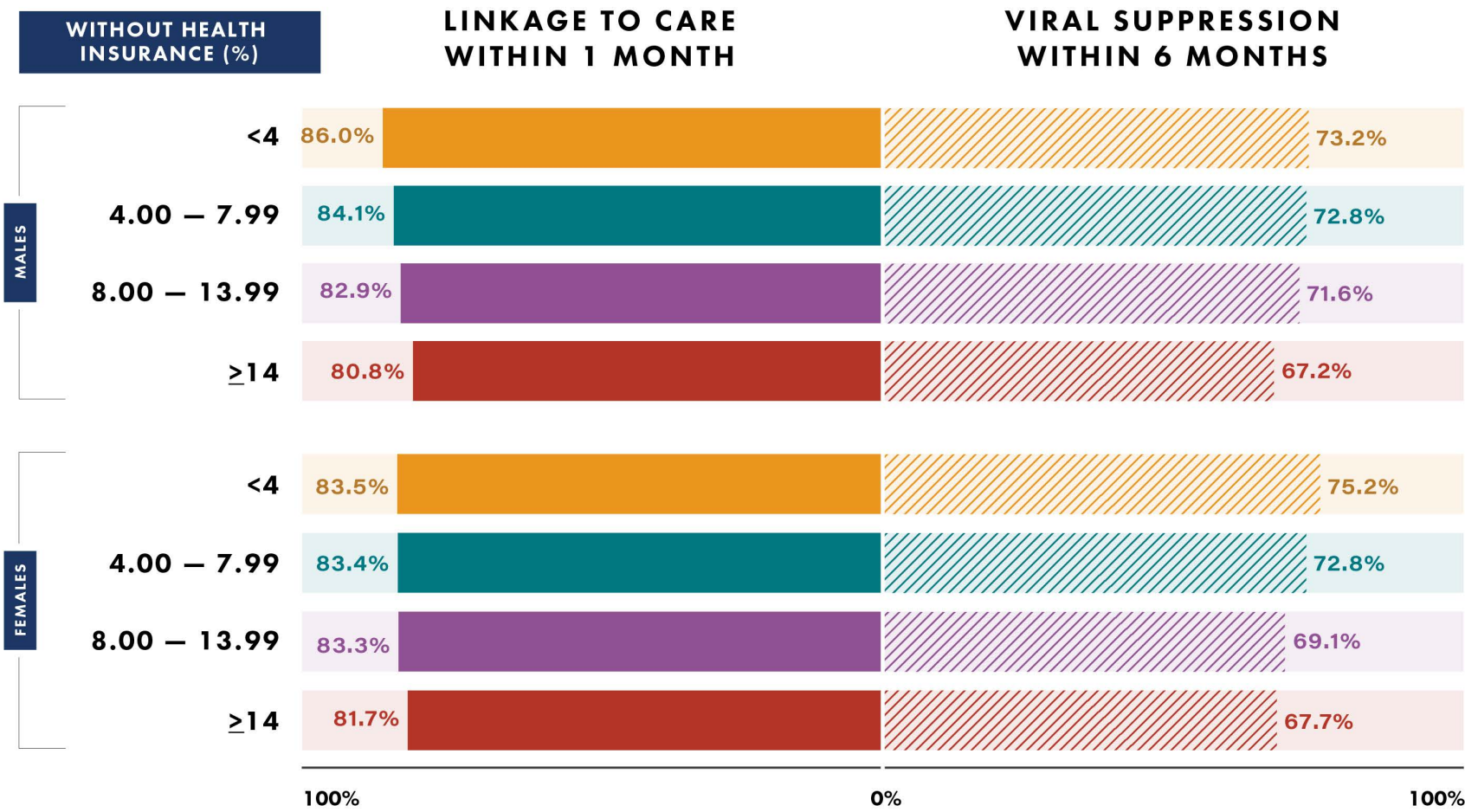
- Diagnoses—rates: males, 35.9; females, 8.7 (Figure 16 and Table 1).
- Linkage—males, 80.8%; females, 81.7% (Figure 17 and Table 9).
- Viral suppression—males, 67.2%; females, 67.7% (Figure 17 and Table 9).



**FIGURE 16**  
Rates and disparities of diagnoses of HIV infection among adults aged ≥ 18 years, by assigned sex at birth and health insurance coverage, 2021—census tract level, United States and Puerto Rico



**FIGURE 17**  
Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among adults aged ≥ 18 years, by assigned sex at birth and health insurance coverage—census tract level, 47 states and the District of Columbia



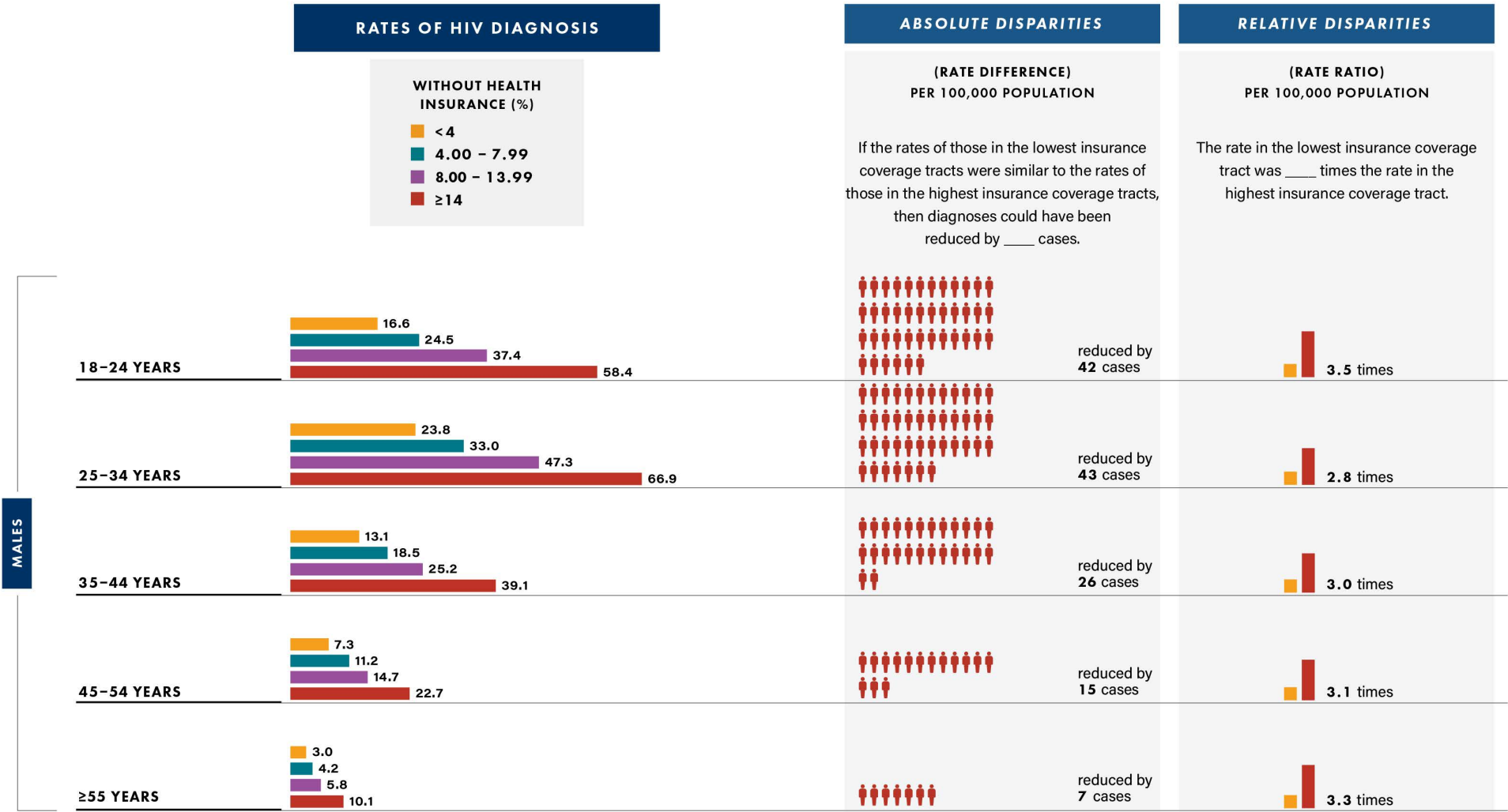
**NOTE** See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Age group

- Diagnoses—all age groups for both sexes (Figures 18a/b and Table 1).
- Linkage—all age groups for males; females aged 25–34 and 45–54 years (Table 9).
- Viral suppression—all age groups for both sexes (Table 9).

**FIGURE 18A**  
Rates and disparities of diagnoses of HIV infection among adult males aged ≥ 18 years, based on assigned sex at birth, by age at diagnosis and health insurance coverage, 2021—census tract level, United States and Puerto Rico



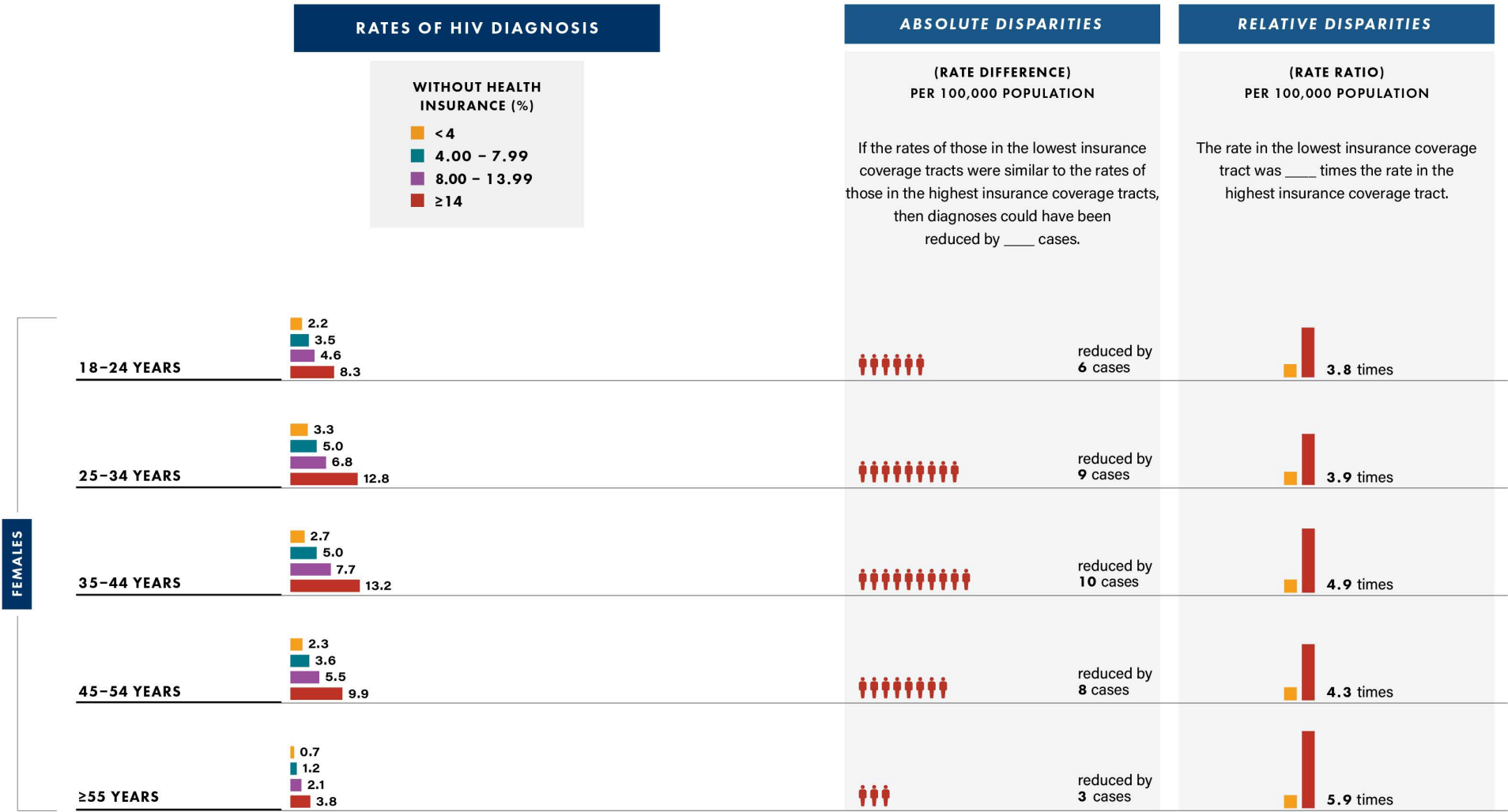
**NOTE** Rates are per 100,000 population.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in lowest insurance coverage tracts and rates in highest insurance coverage tracts ( $\text{Rate}_{\text{lowest insurance coverage}} - \text{Rate}_{\text{highest insurance coverage}}$ ).

**RELATIVE DISPARITY (RATE RATIO)** measures the rates in lowest insurance coverage tracts divided by rates in highest insurance coverage tracts ( $\text{Rate}_{\text{lowest insurance coverage}} / \text{Rate}_{\text{highest insurance coverage}}$ ).



**FIGURE 18B**  
Rates and disparities of diagnoses of HIV infection among adult females aged ≥ 18 years, based on assigned sex at birth, by age at diagnosis and health insurance coverage, 2021—census tract level, United States and Puerto Rico



**NOTE** Rates are per 100,000 population.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in lowest insurance coverage tracts and rates in highest insurance coverage tracts ( $\text{Rate}_{\text{lowest insurance coverage}} - \text{Rate}_{\text{highest insurance coverage}}$ ).

**RELATIVE DISPARITY (RATE RATIO)** measures the rates in lowest insurance coverage tracts divided by rates in highest insurance coverage tracts ( $\text{Rate}_{\text{lowest insurance coverage}} / \text{Rate}_{\text{highest insurance coverage}}$ ).

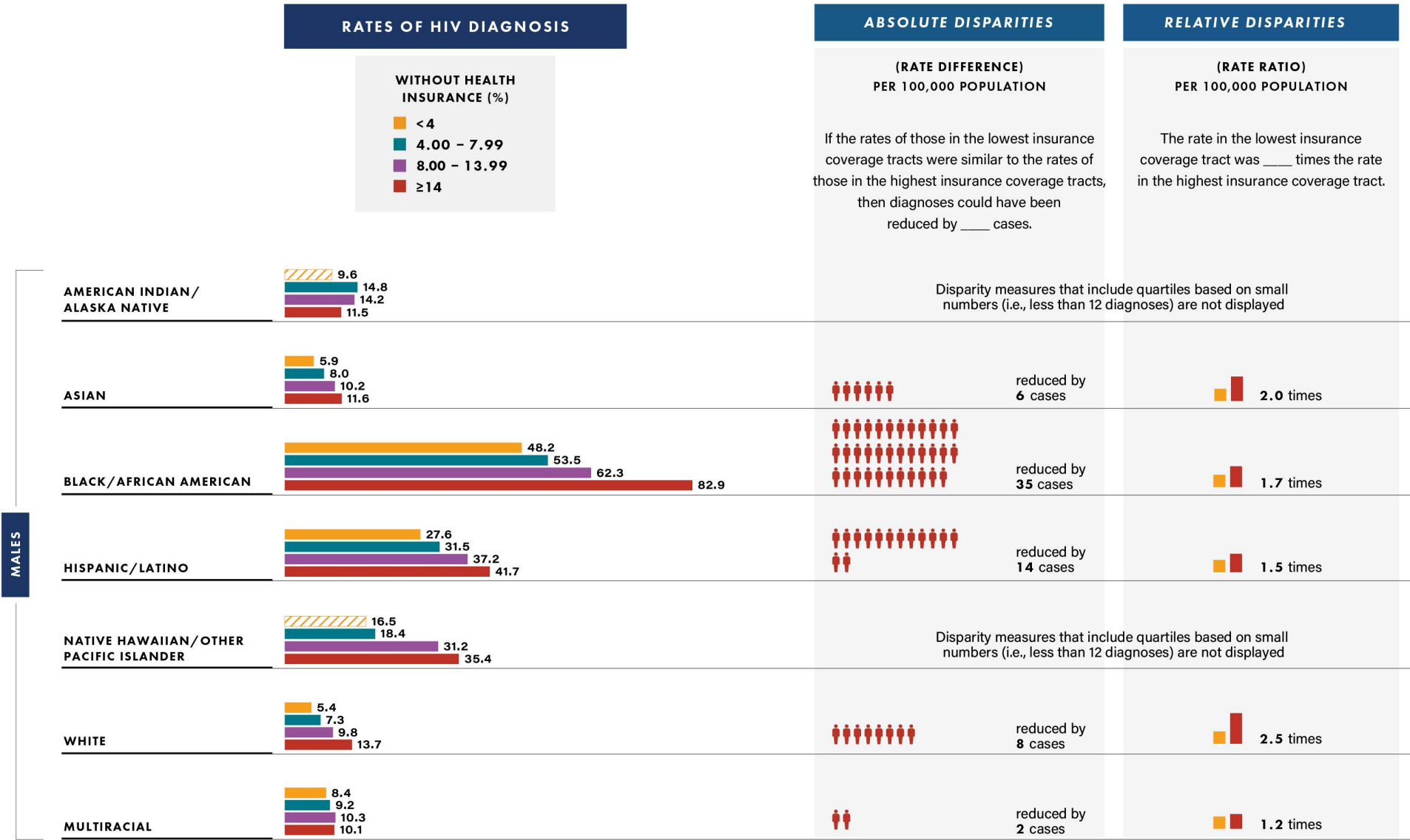


Race/ethnicity

- Diagnoses—all racial/ethnic groups for both sexes (except American Indian/Alaska Native males and multiracial males) (Figures 19a/b and Table 2).
- Linkage—all racial/ethnic groups for both sexes (except Native Hawaiian/other Pacific Islander males, multiracial males and females, and Hispanic/Latino females) (Table 10).
- Viral suppression—all racial/ethnic groups for males and Black/African American and White females (Table 10).



**FIGURE 19A**  
Rates and disparities of diagnoses of HIV infection among adult males aged ≥ 18 years, based on assigned sex at birth, by race/ethnicity and health insurance coverage, 2021—census tract level, United States and Puerto Rico



**NOTE** Rates are per 100,000 population. Hispanic/Latino persons can be of any race. Striped bars indicate rates based on small numbers (i.e., less than 12 diagnoses) and should be interpreted with caution.

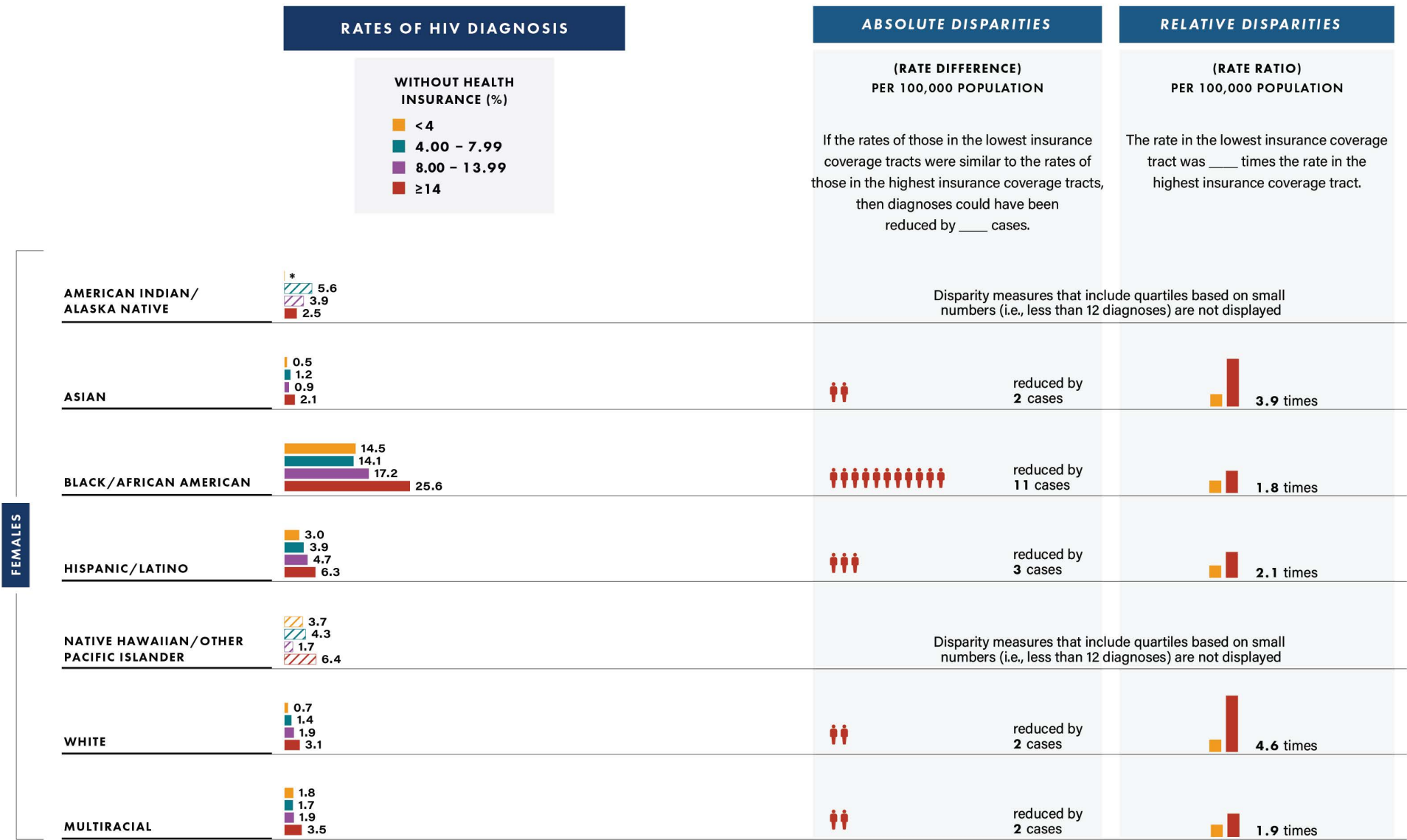
**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in lowest insurance coverage tracts and rates in highest insurance coverage tracts  $(Rate_{lowest\ insurance\ coverage} - Rate_{highest\ insurance\ coverage})$ .

**RELATIVE DISPARITY (RATE RATIO)** measures the rates in lowest insurance coverage tracts divided by rates in highest insurance coverage tracts  $(Rate_{lowest\ insurance\ coverage} / Rate_{highest\ insurance\ coverage})$ .





**FIGURE 19B**  
Rates and disparities of diagnoses of HIV infection among adult females aged ≥ 18 years, based on assigned sex at birth, by race/ethnicity and health insurance coverage, 2021—census tract level, United States and Puerto Rico



**NOTE** Rates are per 100,000 population. Hispanic/Latino persons can be of any race. Striped bars indicate rates based on small numbers (i.e., less than 12 diagnoses) and should be interpreted with caution. Asterisk (\*) indicates disparity measures were not calculated because no diagnoses of HIV infection were reported.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in lowest insurance coverage tracts and rates in highest insurance coverage tracts  $(\text{Rate}_{\text{lowest insurance coverage}} - \text{Rate}_{\text{highest insurance coverage}})$ .

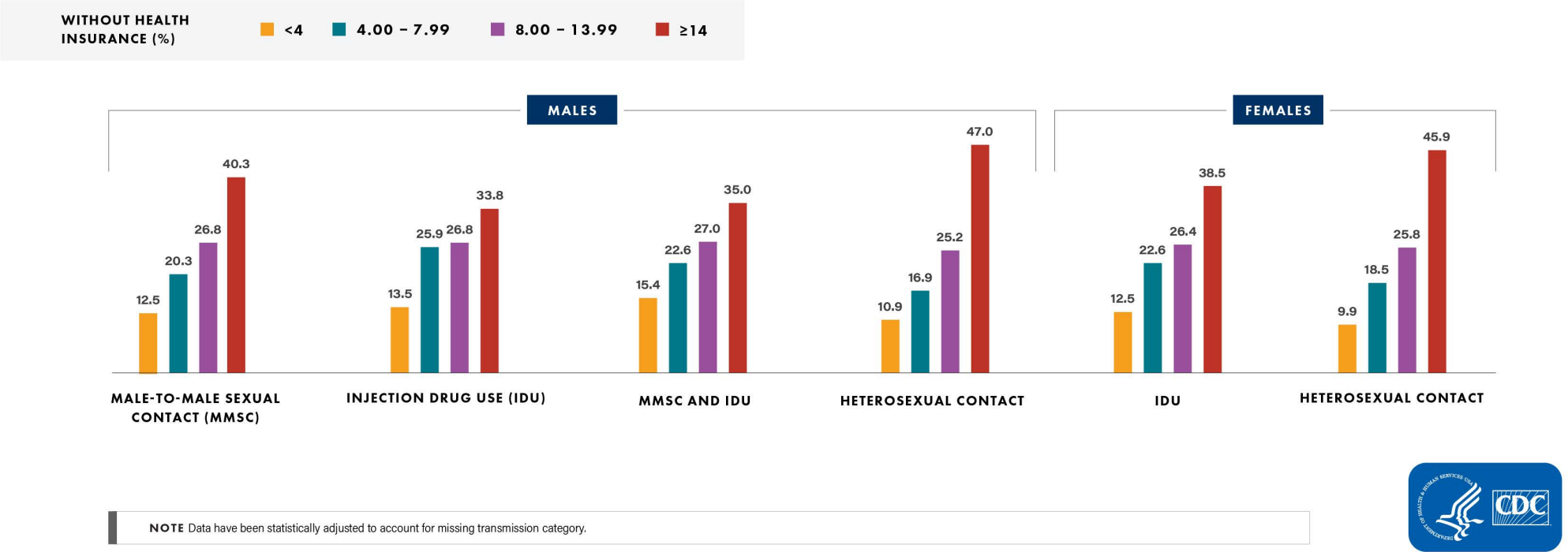
**RELATIVE DISPARITY (RATE RATIO)** measures the rates in lowest insurance coverage tracts divided by rates in highest insurance coverage tracts  $(\text{Rate}_{\text{lowest insurance coverage}} / \text{Rate}_{\text{highest insurance coverage}})$ .



Transmission category

- Diagnoses—all transmission categories for both sexes (Figure 20 and Table 3).
- Linkage—all transmission categories for both sexes (except females with infection attributed to IDU) (Table 11).
- Viral suppression—all transmission categories for both sexes (Table 11).
- Among males with infection attributed to MMSC (Table 12):
  - Linkage— American Indian/Alaska Native (78.4%), Asian (81.2%), Black/African American (77.4%), Hispanic/Latino (84.4%), White (83.1%), and
  - Viral suppression— American Indian/Alaska Native (61.1%), Asian (70.2%), Black/African American (64.9%), Hispanic/Latino (73.2%), White (69.2%), and multiracial (69.7%).

**FIGURE 20**  
Diagnoses of HIV infection among adults aged ≥ 18 years, by transmission category, assigned sex at birth, and health insurance coverage, 2021—census tract level, United States and Puerto Rico



Area of residence and region

Diagnoses rates (Table 7)

- Males—Area: Puerto Rico (60.8), followed by Georgia (51.7); Region: South (39.2).
- Females—Area: Maryland (17.2), followed by Louisiana (15.5); Region: Northeast (10.4).
- Total—Area: Puerto Rico (35.89), followed by Florida and Louisiana (both 32.4); Region: South (20.2).

Use caution when comparing the rates of diagnoses for the District of Columbia to the rates for states.

A look at disparities in diagnoses of HIV infection by health insurance coverage

In 2021, the disparities in HIV diagnosis by health insurance coverage for adults were as follows:

- **Absolute disparities (rate difference)**—If the rates of diagnoses of HIV infection among males or females in the lowest insurance coverage tracts were similar to the rates among those in the highest insurance coverage tracts, then diagnoses could have been reduced by 26 cases and 7 cases per 100,000 population, respectively (Figure 16 and Table 1).
- **Relative disparities (rate ratio)**—Among males, the rate of diagnoses in the lowest income tracts was 3.5 times the rate in the highest income tracts, and among females, the rate in the lowest income tracts was 4.9 times the rate in the highest income tracts (Figure 16 and Table 1).

For absolute and relative disparities for assigned sex at birth stratified by age group and race/ethnicity, see Figures 18a/b and 19a/b.

See Technical Notes for additional information on disparity measures.



## Income Inequality (Gini Index)

Poor health and income inequality are connected. Income inequality and socioeconomic deprivation are 2 key socioeconomic determinants of HIV diagnosis and care outcomes. High levels of income inequality may negatively affect the health of everyone, even the affluent, mainly because income inequality reduces social cohesion, which leads to more stress, fear, and insecurity [18]. Many factors—education and the historical legacy and impact of discrimination—are key components of income inequality [19]. Many of these same factors contribute to disparities in HIV diagnoses; however, assigned sex at birth and race/ethnicity components can also contribute to this disparity.

This report uses the Gini index, which summarizes income distribution, to measure income inequality. The Gini index ranges from 0 or 0%, indicating perfect equality (i.e., lowest income inequality—where all households have an equal share of income), to 1 or 100%, indicating perfect inequality (i.e., highest income inequality—where only 1 household has all the income and the rest have none).

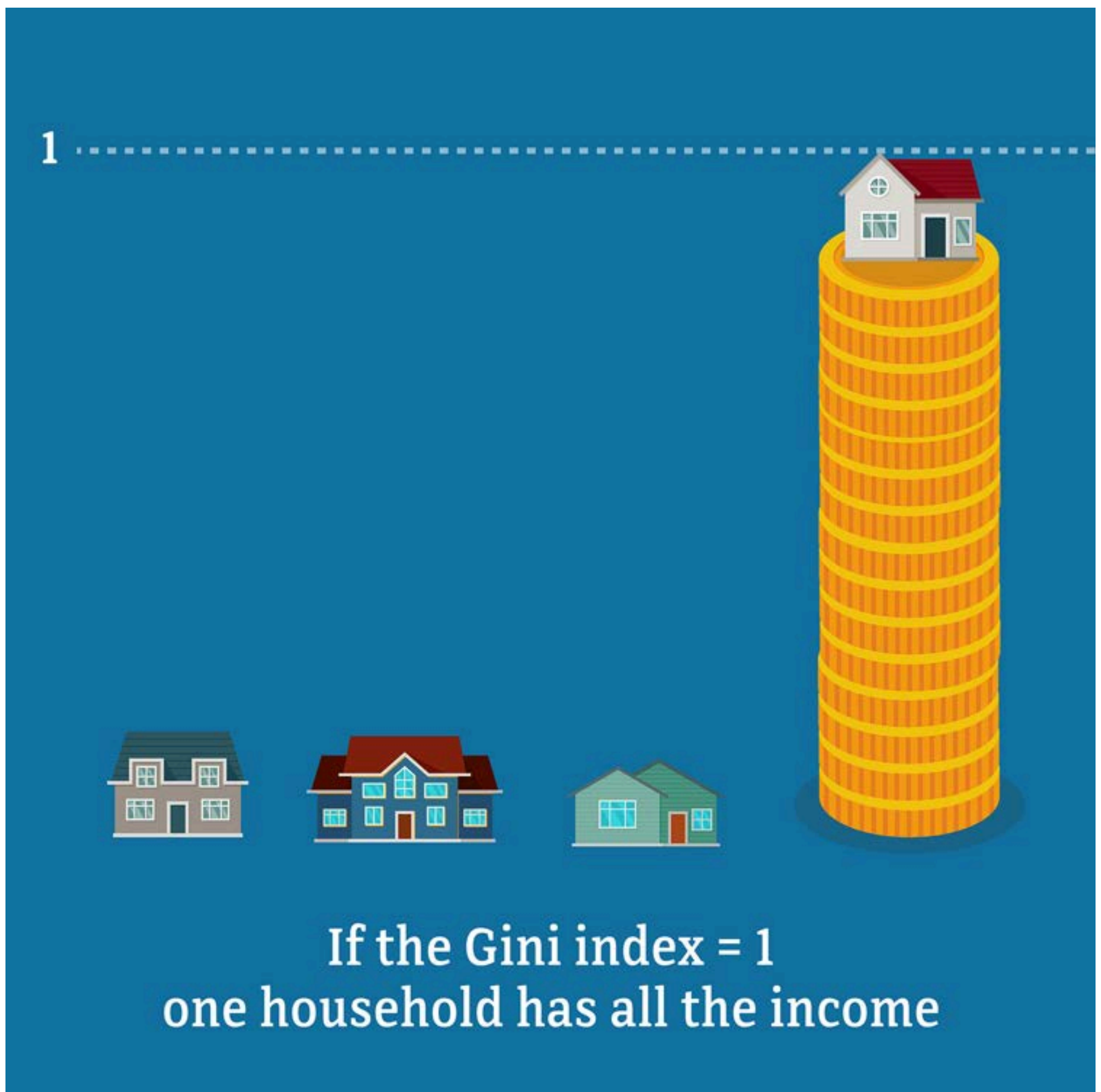
One of the most commonly used ways to measure inequality is the Gini Coefficient.

0



If the Gini index = 0  
all households have equal share of income





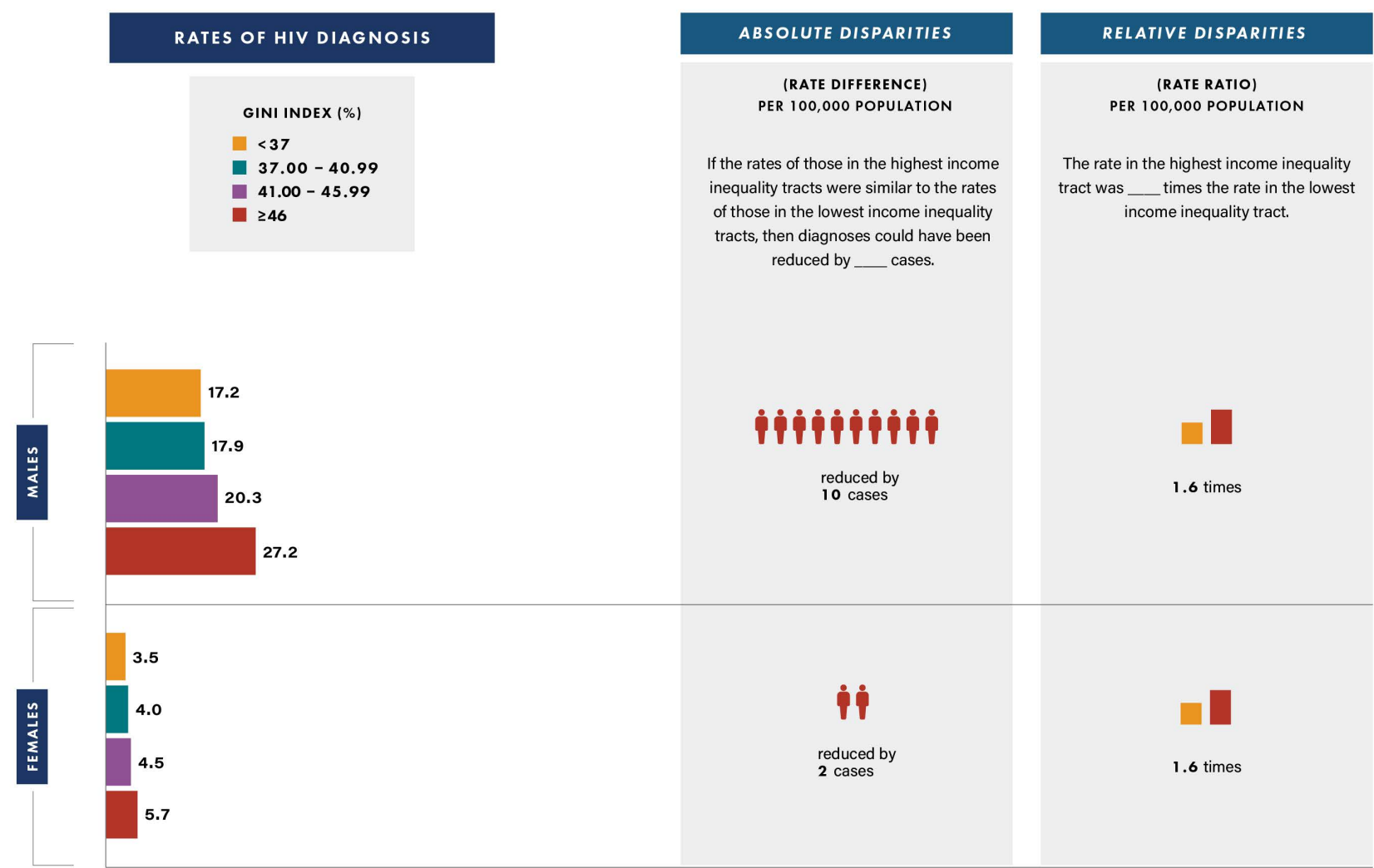
In 2021, adults who lived in tracts with the **highest income inequality** (where income inequality was 46% or more) accounted for

- the highest HIV diagnosis rates or percentages (diagnoses),
- the lowest percentages of adults linked to HIV medical care within 1 month of receiving a diagnosis (linkage), and
- the lowest percentages of adults with suppressed viral load within 6 months of receiving an HIV diagnosis (viral suppression) among:

### Assigned sex at birth

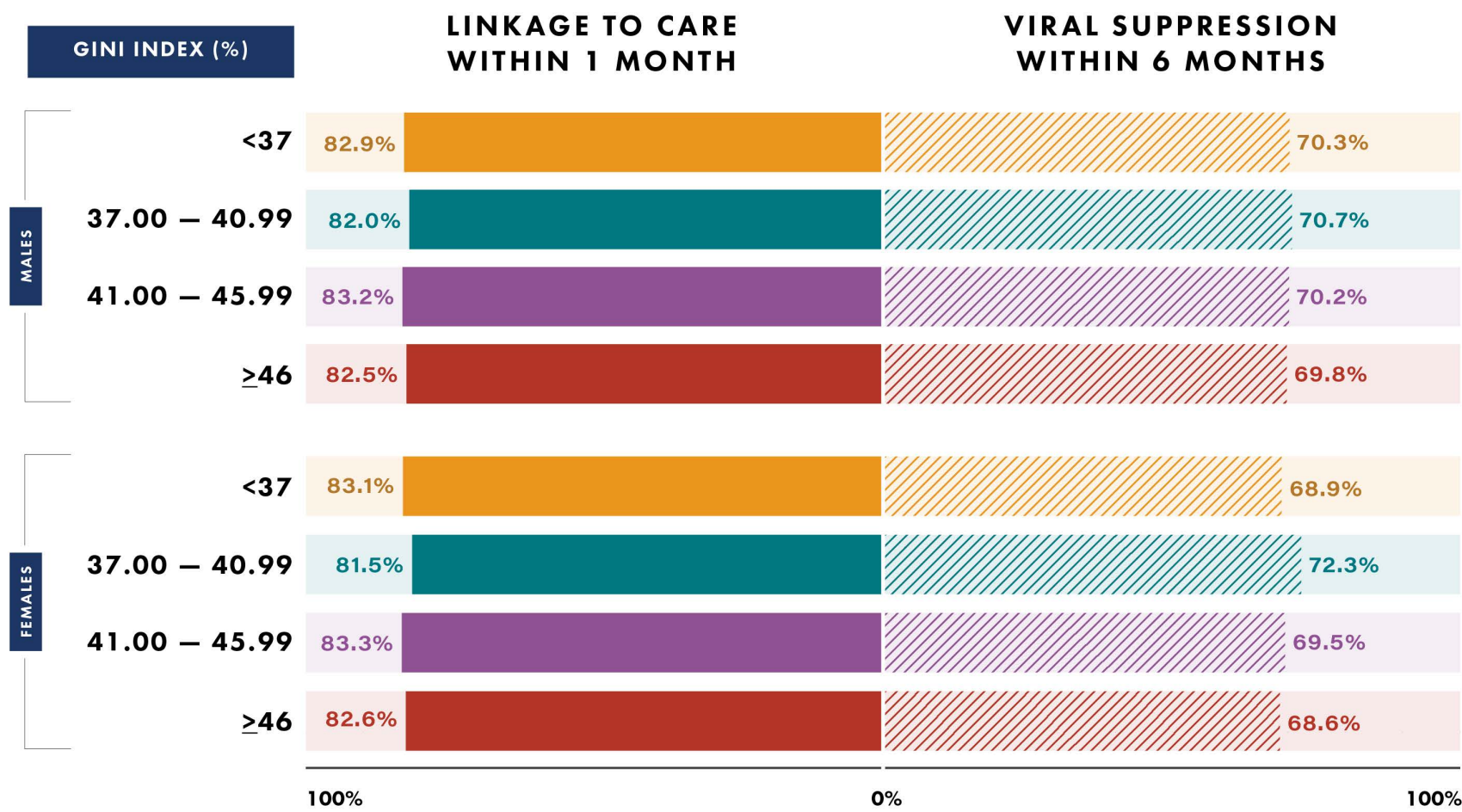
- Diagnoses—rates: males, 27.2; females, 5.7 (Figure 21 and Table 1).
- Linkage—males, N/A; females, N/A (Figure 22 and Table 9).
- Viral suppression—males, 69.8; females, 68.6% (Figure 22 and Table 9).

**FIGURE 21**  
Rates and disparities of diagnoses of HIV infection among adults aged ≥ 18 years, by assigned sex at birth and Gini index, 2021—census tract level, United States and Puerto Rico





**FIGURE 22**  
Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among adults aged ≥ 18 years, by assigned sex at birth and Gini index—census tract level, 47 states and the District of Columbia



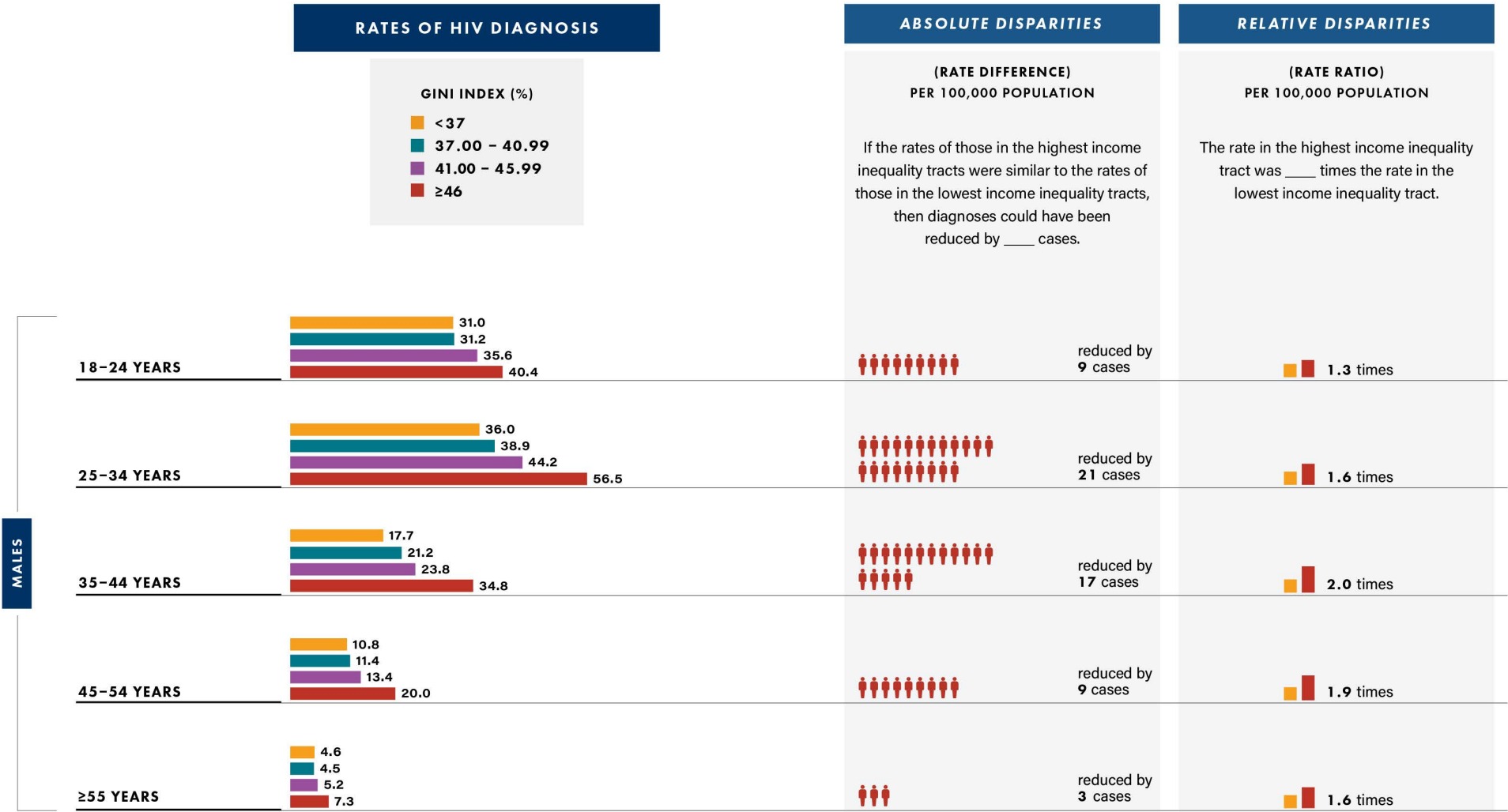
**NOTE** See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on definitions and data specifications.



Age group

- Diagnoses—all age groups for both sexes (Figures 23a/b and Table 1).
- Linkage—age groups 18–24 and 45–54 years for males; age group 35–44 years for females (Table 9).
- Viral suppression—all age groups for males (except males aged 45–54 and ≥ 55 years) (Table 9).

**FIGURE 23A**  
Rates and disparities of diagnoses of HIV infection among adult males aged ≥ 18 years, based on assigned sex at birth, by age at diagnosis and Gini index, 2021—census tract level, United States and Puerto Rico



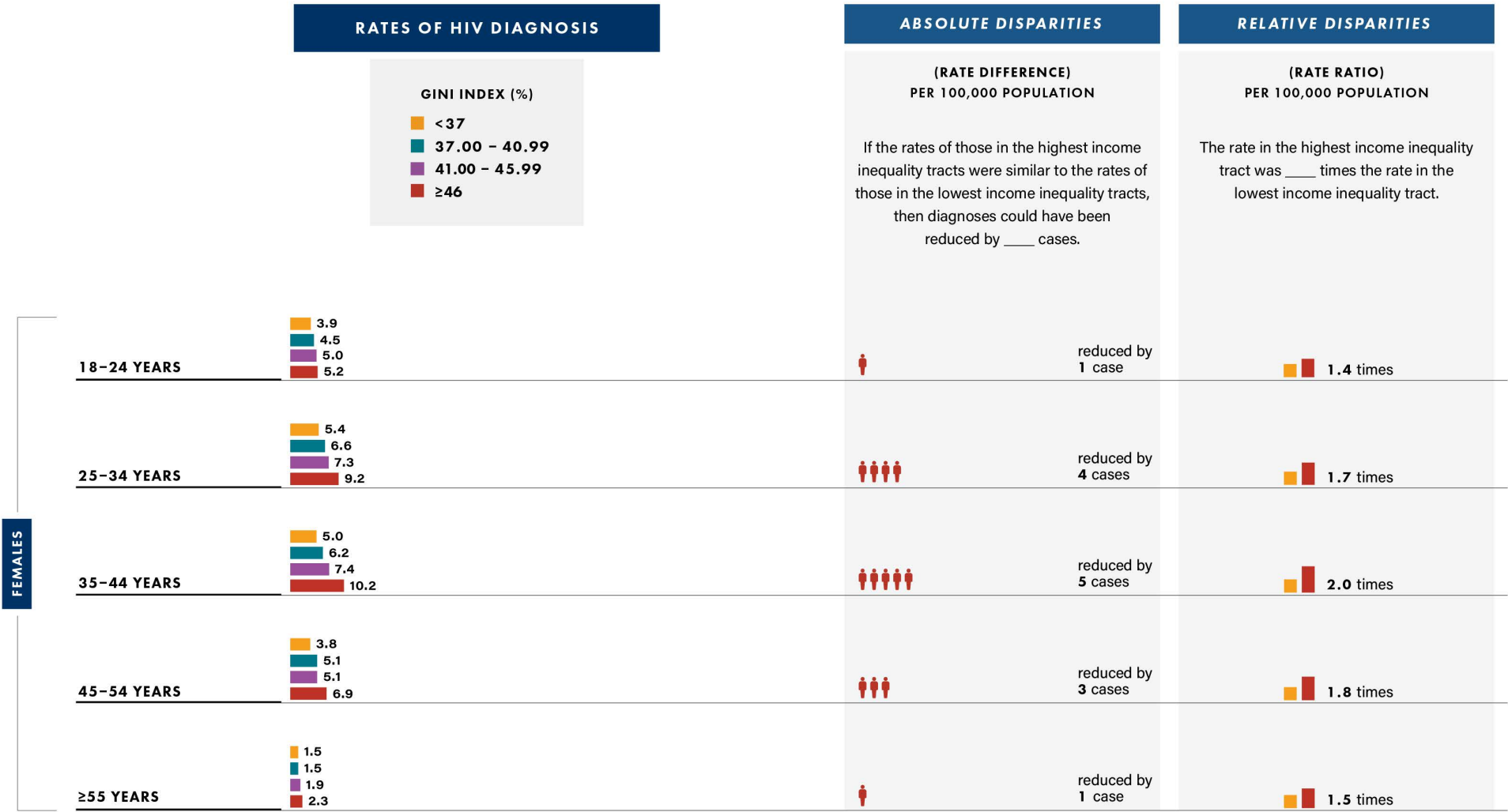
**NOTE** Rates are per 100,000 population.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in highest income inequality tracts and rates in lowest income inequality tracts ( $\text{Rate}_{\text{highest income inequality}} - \text{Rate}_{\text{lowest income inequality}}$ ).

**RELATIVE DISPARITY (RATE RATIO)** measures the rates in highest income inequality tracts divided by rates in lowest income inequality tracts ( $\text{Rate}_{\text{highest income inequality}} / \text{Rate}_{\text{lowest income inequality}}$ ).



**FIGURE 23B**  
Rates and disparities of diagnoses of HIV infection among adult females aged ≥ 18 years, based on assigned sex at birth, by age at diagnosis and Gini index, 2021—census tract level, United States and Puerto Rico



**NOTE** Rates are per 100,000 population.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in highest income inequality tracts and rates in lowest income inequality tracts ( $\text{Rate}_{\text{highest income inequality}} - \text{Rate}_{\text{lowest income inequality}}$ ).

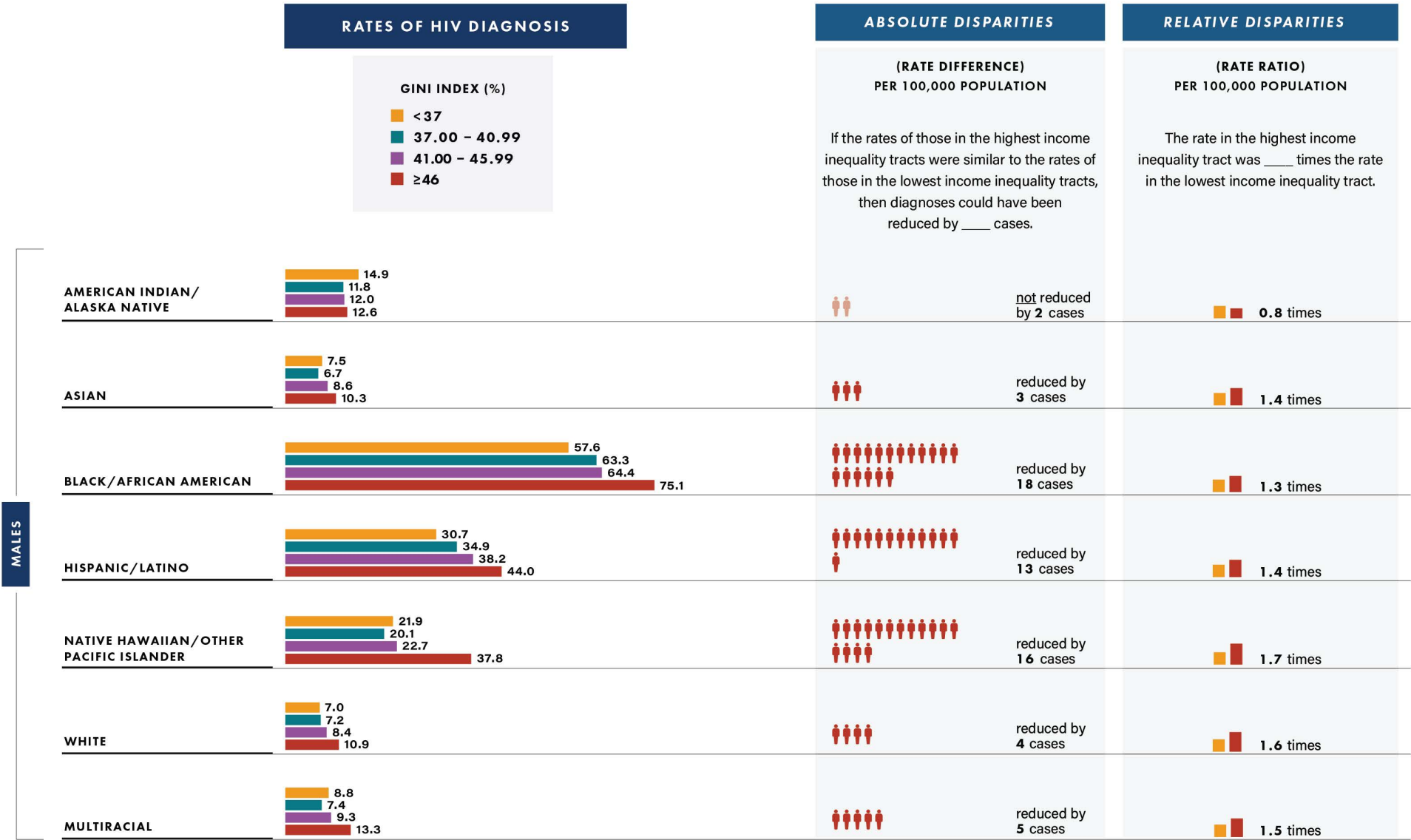
**RELATIVE DISPARITY (RATE RATIO)** measures the rates in highest income inequality tracts divided by rates in lowest income inequality tracts ( $\text{Rate}_{\text{highest income inequality}} / \text{Rate}_{\text{lowest income inequality}}$ ).



Race/ethnicity

- Diagnoses—all racial/ethnic groups for both sexes (except American Indian/Alaska Native males and multiracial females) (Figures 24a/b and Table 2).
- Linkage—Asian males and Black/African American females (Table 10).
- Viral suppression—Black/African American males and females and White females (Table 10).

**FIGURE 24A**  
Rates and disparities of diagnoses of HIV infection among adult males aged ≥ 18 years, based on assigned sex at birth, by race/ethnicity and Gini index, 2021—census tract level, United States and Puerto Rico



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

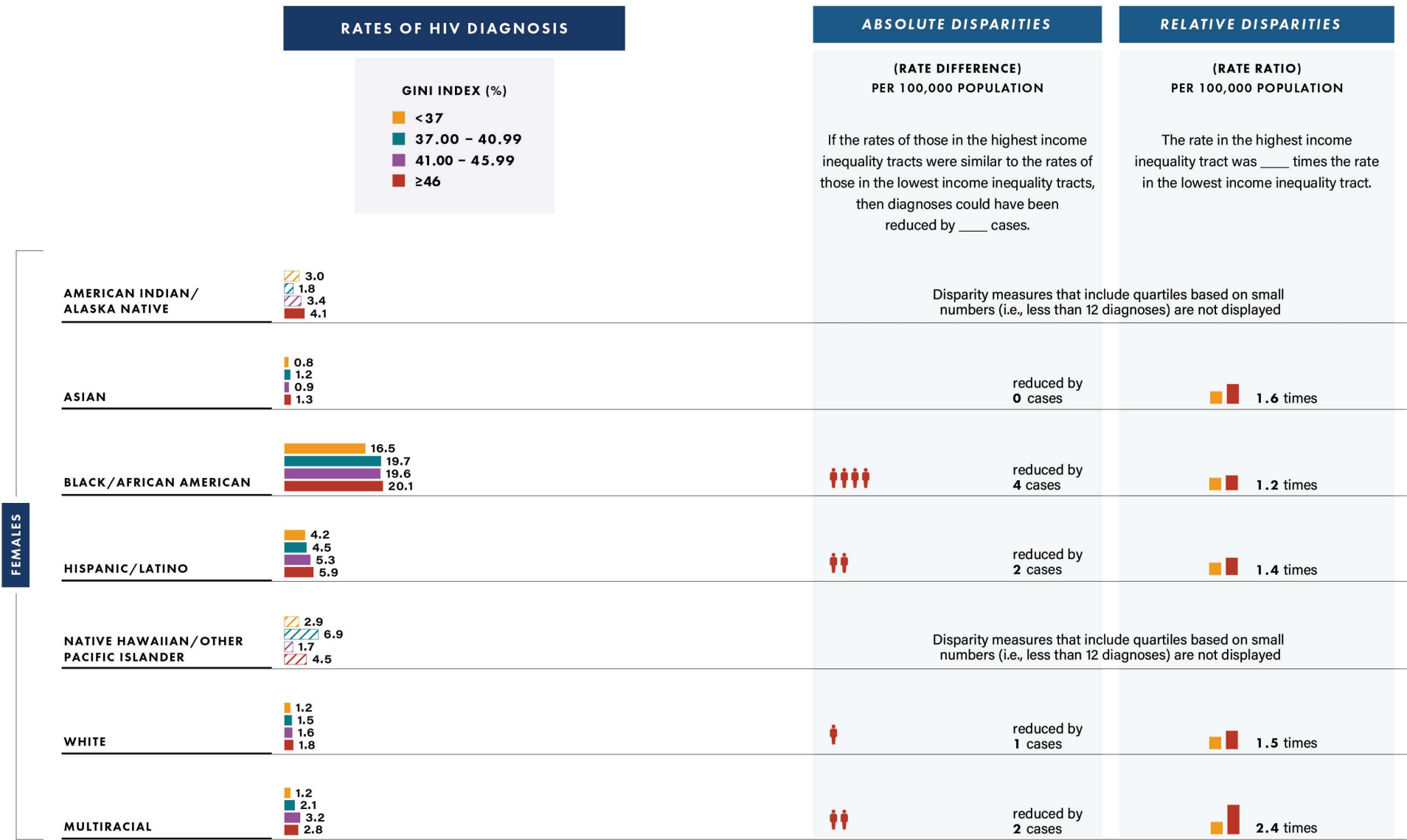
**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in highest income inequality tracts and rates in lowest income inequality tracts ( $\text{Rate}_{\text{highest income inequality}} - \text{Rate}_{\text{lowest income inequality}}$ ).

**RELATIVE DISPARITY (RATE RATIO)** measures the rates in highest income inequality tracts divided by rates in lowest income inequality tracts ( $\text{Rate}_{\text{highest income inequality}} / \text{Rate}_{\text{lowest income inequality}}$ ).





**FIGURE 24B**  
Rates and disparities of diagnoses of HIV infection among adult females aged ≥ 18 years, based on assigned sex at birth, by race/ethnicity and Gini index, 2021—census tract level, United States and Puerto Rico



**NOTE** Rates are per 100,000 population. Hispanic/Latino persons can be of any race. Striped bars indicate rates based on small numbers (i.e., less than 12 diagnoses) and should be interpreted with caution.

**ABSOLUTE DISPARITY (RATE DIFFERENCE)** measures the difference between rates in highest income inequality tracts and rates in lowest income inequality tracts ( $\text{Rate}_{\text{highest income inequality}} - \text{Rate}_{\text{lowest income inequality}}$ ).

**RELATIVE DISPARITY (RATE RATIO)** measures the rates in highest income inequality tracts divided by rates in lowest income inequality tracts ( $\text{Rate}_{\text{highest income inequality}} / \text{Rate}_{\text{lowest income inequality}}$ ).



Transmission category

- Diagnoses—all transmission categories for both sexes (Figure 25 and Table 3).
- Linkage—males with infection attributed to IDU and males with infection attributed to heterosexual contact (Table 11).
- Viral suppression—males with infection attributed to MMSC and IDU, males with infection attributed to heterosexual contact, and females with infection attributed to IDU (Table 11).
- Among males with infection attributed to MMSC (Table 12):
  - Linkage—Asian, and
  - Viral suppression—Black/African American.



**FIGURE 25**  
Diagnoses of HIV infection among adults aged ≥ 18 years, by transmission category, assigned sex at birth, and Gini index, 2021—census tract level, United States and Puerto Rico



Area of residence and region

Diagnoses rates (Table 8):

- Males—Area: Georgia (53.5), followed by District of Columbia (48.5); Region: South (33.9).
- Females—Area: District of Columbia (14.6), followed by Georgia (12.0); Region: South (7.7).
- Total—Area: Georgia (31.8), followed by District of Columbia (30.2); Region: South (20.3).

Use caution when comparing the rates of diagnoses for the District of Columbia to the rates for states.

A look at disparities in diagnoses of HIV infection by income inequality

In 2021, the disparities in HIV diagnosis by income inequality for adults were as follows:

- **Absolute disparities (rate difference)**—If the rates of diagnoses of HIV infection among males or females in the highest income inequality tracts were similar to the rates among those in the lowest income inequality tracts, then diagnoses could have been reduced by 10 cases and 2 cases per 100,000 population, respectively (Figure 21 and Table 1).
- **Relative disparities (rate ratio)**—Among males, the rate of diagnoses in the highest income inequality tracts was 1.6 times the rate in the lowest income inequality tracts, and among females, the rate in the highest income inequality tracts was 1.6 times the rate in the lowest income inequality tracts (Figure 21 and Table 1).

For absolute and relative disparities for assigned sex at birth stratified by age group and race/ethnicity, see Figures 23a/b and 24a/b.

See Technical Notes for additional information on disparity measures.

Last Reviewed: October 17, 2023

# Social Determinants of Health among Adults with Diagnosed HIV Infection in the United States and Puerto Rico, 2021: Special Focus Profiles

## Special Focus Profiles



The Special Focus Profiles section highlights disparities in rates of HIV diagnoses by SDOH variables, including income inequality, and factors for special consideration in addressing health disparities that may be of particular interest to HIV prevention programs in state and local health departments.



# Health Disparities

*Health disparities* are systematic, plausibly avoidable differences in the incidence, prevalence, mortality, and causes of a disease and the related adverse health conditions that exist among specific population groups [5]. Reducing health disparities, achieving health equity, and improving the health of all U.S. population groups are major goals of public health.

Most health disparities are related to SDOH, the conditions in which people are born, grow, live, work, and age [4]. Identification and awareness of differences among population health determinants and health outcomes are essential steps toward reducing health disparities. Recent CDC reports show disparities by selected characteristics in many of the indicators for the EHE and NHAS initiatives [20, 21]. Success in achieving the goals of these initiatives will be determined to some extent by how effectively federal, state, and local agencies and private organizations work with communities to eliminate health disparities among populations experiencing a disproportionate burden of disease, disability, and death.

See Technical Notes for additional information on disparity measures and how the disparities were calculated.

## Disparities—Poverty/Wealth, by Assigned Sex at Birth and Race/Ethnicity

### Male

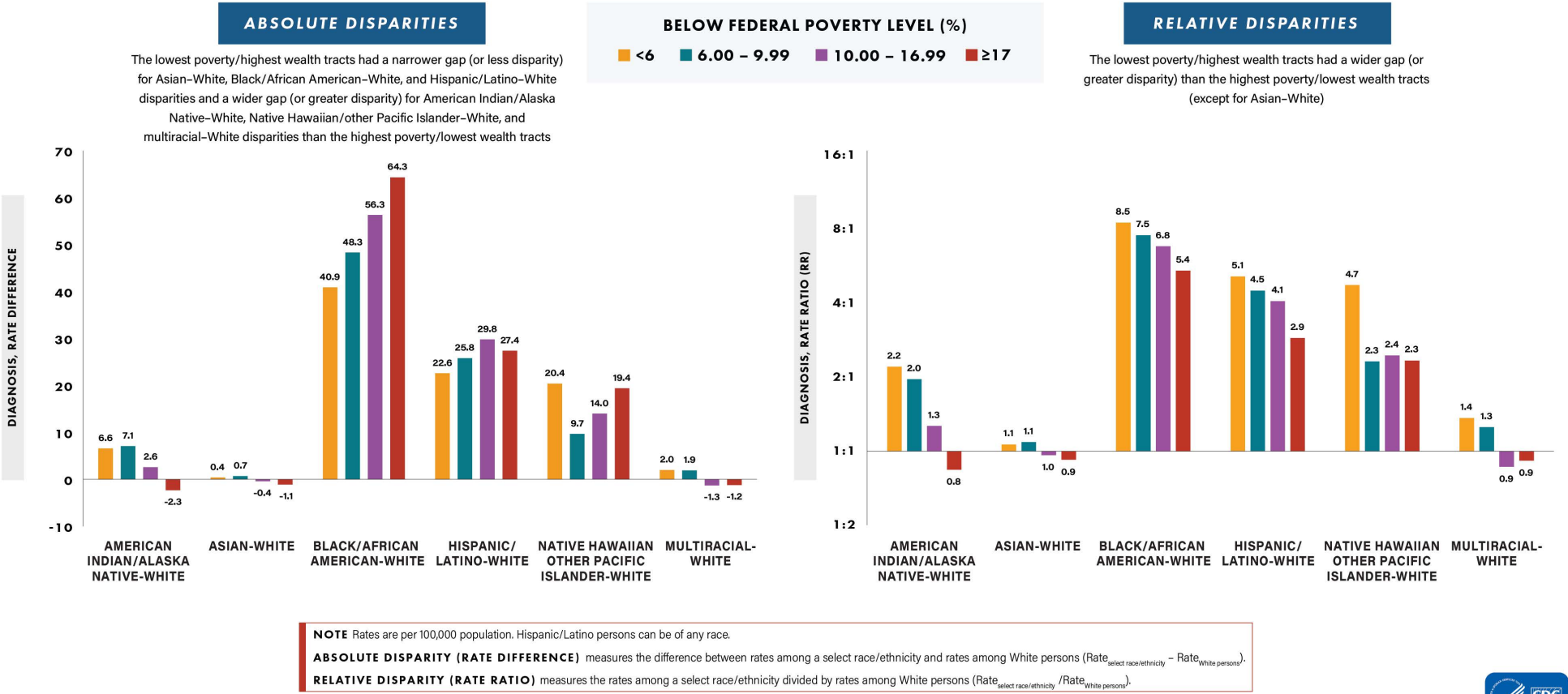
**Highest poverty/lowest wealth**—Among males residing in tracts with the highest poverty/lowest wealth, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Black/African American 5.4 times, Hispanic/Latino 2.9 times, and Native Hawaiian/other Pacific Islander 2.3 times as high as the rate for White males; the rate for White males was 1.2 times as high as the rate for American Indian/Alaska Native and 1.1 times as high as the rate for both Asian and multiracial males (Figure 26 and Table 2).

**Lowest poverty/highest wealth**—Among males residing in tracts with the lowest poverty/highest wealth, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: American Indian/Alaska Native 2.2 times, Asian 1.1 times, Black/African American 8.5 times, Hispanic/Latino 5.1 times, Native Hawaiian/other Pacific Islander 4.7 times, and multiracial males 1.4 times as high as the rate for White males (Figure 26 and Table 2).

### Changes in disparities

- For absolute disparities, the difference between rates among a select race/ethnicity and rates among White males were as follows: the lowest poverty/highest wealth tracts had a narrower gap (or lesser disparity) for Asian–White, Black/African American–White, and Hispanic/Latino–White disparities and a wider gap (or greater disparity) for American Indian/Alaska Native–White, Native Hawaiian/other Pacific Islander–White, and multiracial–White disparities than the highest poverty/lowest wealth tracts (Figure 26).
- For relative disparities, the rates among a select race/ethnicity divided by rates among White males were as follows: the lowest poverty/highest wealth tracts had a wider gap (or greater disparity) than the highest poverty/lowest wealth tracts (except for Asian–White) (Figure 26).

**FIGURE 26**  
**Absolute and relative disparities of diagnoses of HIV infection among adult males aged ≥18 years, based on assigned sex at birth, by race/ethnicity and federal poverty status, 2021—census tract level, United States and Puerto Rico**



Female

**Highest poverty/lowest wealth**—Among females residing in tracts with the highest poverty/lowest wealth, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Black/African American 6.5 times, Hispanic/Latino 2.0 times, and multiracial females 1.1 times as high as the rate for White females; the rate for White females was 1.2 times and 2.7 times as high as the rate for American Indian/Alaska Native and Asian females, respectively (Figure 27 and Table 2).

**Lowest poverty/highest wealth**—Among females residing in tracts with the lowest poverty/highest wealth, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Black/African American 16.6 times, Hispanic/Latino 3.8 times, and multiracial females 1.6 times as high as the rate for White females; the rate for White females was 1.2 times as high as the rate for Asian females (Figure 27 and Table 2).

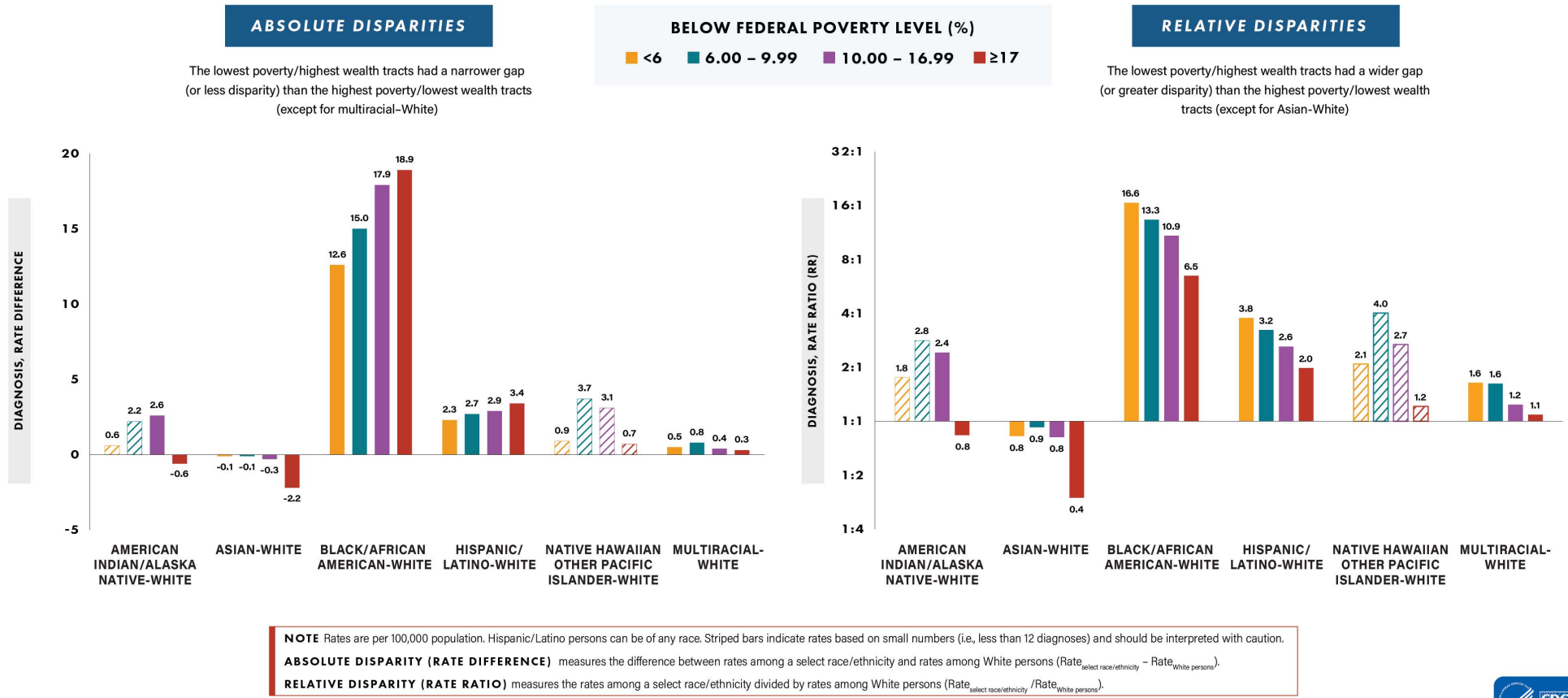
Changes in disparities

- For absolute disparities, the difference between rates among a select race/ethnicity and rates among White females were as follows: the lowest poverty/highest wealth tracts had a narrower gap (or lesser disparity) than the highest poverty/lowest wealth tracts (except for multiracial-White) (Figure 27).
- For relative disparities, the rates among a select race/ethnicity divided by rates among White females were as follows: the lowest poverty/highest wealth tracts had a wider gap (or greater disparity) than the highest poverty/lowest wealth tracts (except for Asian-White) (Figure 27).



FIGURE 27

Absolute and relative disparities of diagnoses of HIV infection among adult females aged ≥18 years, based on assigned sex at birth, by race/ethnicity and federal poverty status, 2021—census tract level, United States and Puerto Rico



## Disparities—Education, by Assigned Sex at Birth and Race/Ethnicity

### Male

**Lowest education**—Among males residing in tracts with the lowest education, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Black/African American 5.3 times, Hispanic/Latino 2.9 times, and Native Hawaiian/other Pacific Islander males 1.9 times as high as the rate for White males; the rate for White males was 1.4 times as high as the rate for American Indian/Alaska Native, 1.1 times for Asian, and 1.6 times for multiracial males (Figure 28 and Table 2).

**Highest education**—Among males residing in tracts with the highest education, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: American Indian/Alaska Native 2.9 times, Black/African American 9.0 times, Hispanic/Latino 5.5 times, Native American/Alaska Native 2.5 times, and multiracial males 1.5 times as high as the rate for White males; the rate for White males was 1.1 times as high as the rate for Asian males (Figure 28 and Table 2).

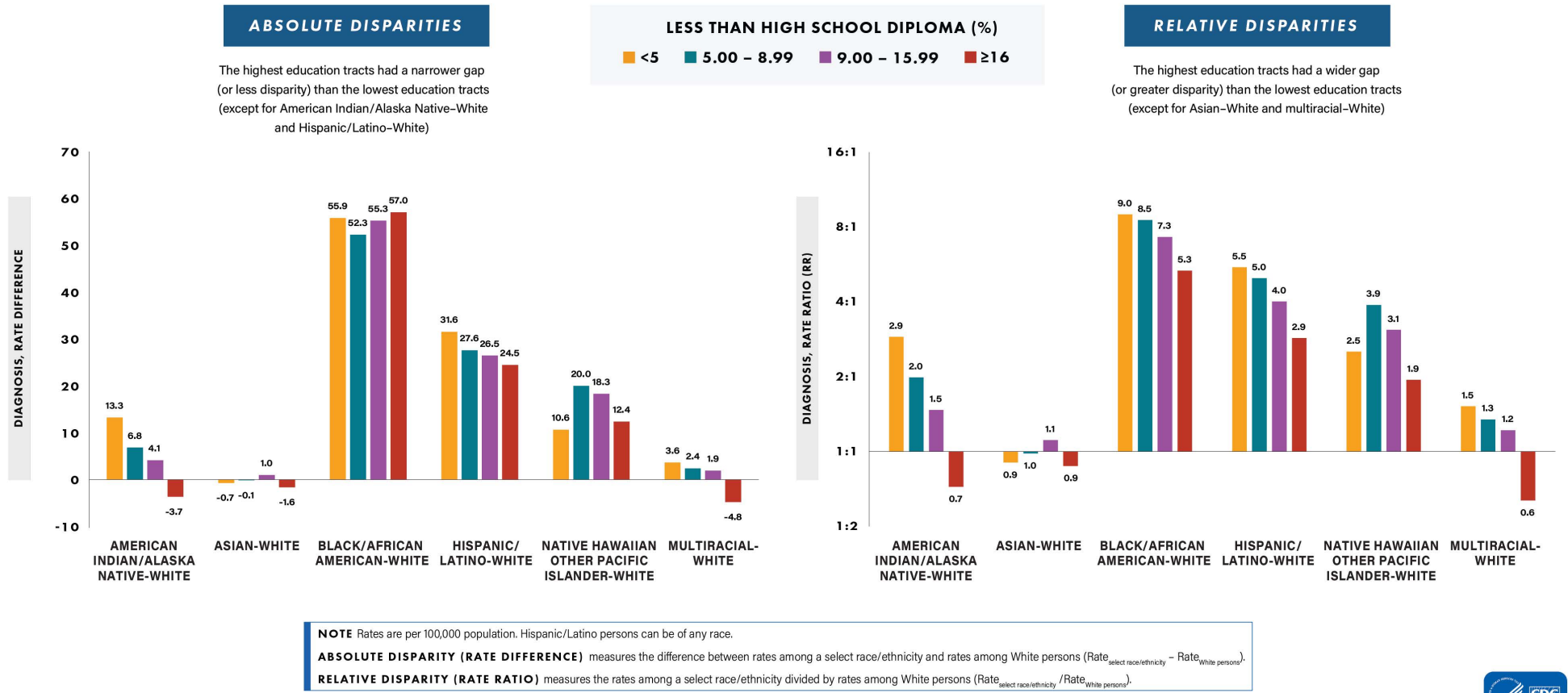
### Changes in disparities

- For absolute disparities, the difference between rates among a select race/ethnicity and rates among White males were as follows: the highest education tracts had a narrower gap (or lesser disparity) than in the lowest education tracts (except for American Indian/Alaska Native-White and Hispanic/Latino-White) (Figure 28).
- For relative disparities, the rates among a select race/ethnicity divided by rates among White males were as follows: the highest education tracts had a wider gap (or greater disparity) than in the lowest education tracts (except for Asian-White and multiracial-White) (Figure 28).



FIGURE 28

Absolute and relative disparities of diagnoses of HIV infection among adult males aged ≥18 years, based on assigned sex at birth, by race/ethnicity and education level, 2021—census tract level, United States and Puerto Rico



Female

**Lowest education**—Among females residing in tracts with the lowest education, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Black/African American 6.4 times and Hispanic/Latino 1.6 times as high as the rate for White females; the rate for White females was 1.8 times and 1.4 times as high as the rate for Asian and multiracial females, respectively (Figure 29 and Table 2).

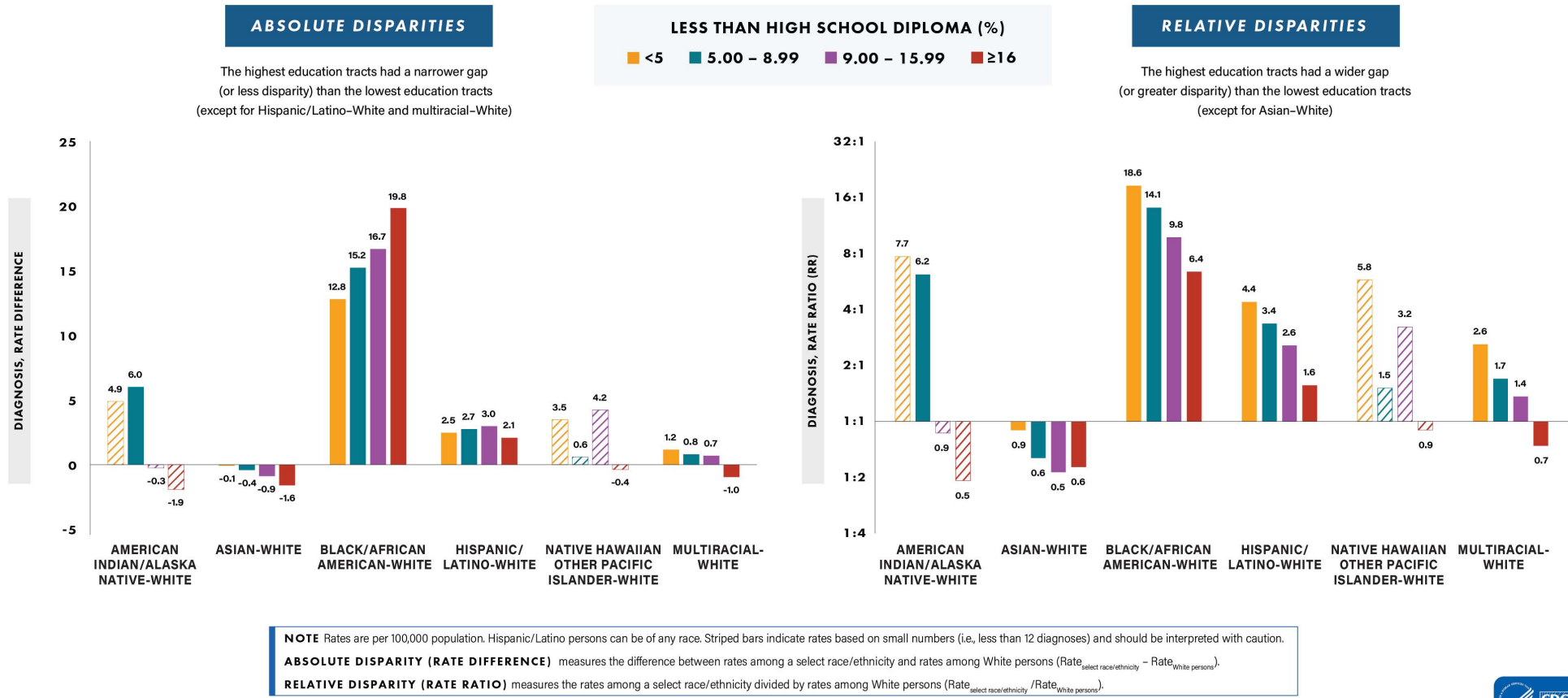
**Highest education**—Among females residing in tracts with the highest education, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Black/African American 18.6 times, Hispanic/Latino 4.4 times, and multiracial females 2.6 times as high as the rate for White females; the rate for White females was 1.1 times as high as the rate for Asian females (Figure 29 and Table 2).

Changes in disparities

- For absolute disparities, the difference between rates among a select race/ethnicity and rates among White females were as follows: the highest education tracts had a narrower gap (or lesser disparity) than in the lowest education tracts (except for Hispanic/Latino-White and multiracial-White) (Figure 29).
- For relative disparities, the rates among a select race/ethnicity divided by rates among White females were as follows: the highest education tracts had a wider gap (or greater disparity) than in the lowest education tracts (except for Asian-White) (Figure 29).

FIGURE 29

Absolute and relative disparities of diagnoses of HIV infection among adult females aged ≥18 years, based on assigned sex at birth, by race/ethnicity and education level, 2021—census tract level, United States and Puerto Rico



## Disparities—Income, by Assigned Sex at Birth and Race/Ethnicity

### Male

**Lowest income**—Among males residing in tracts with the lowest income, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Asian 1.1 times, Black/African American 5.9 times, Hispanic/Latino 3.2 times, and Native Hawaiian/other Pacific Islander males 3.0 times as high as the rate for White males; the rate for White males was 1.1 times as high as the rate for American Indian/Alaska Native males; and White and multiracial males had similar rates (Figure 30 and Table 2).

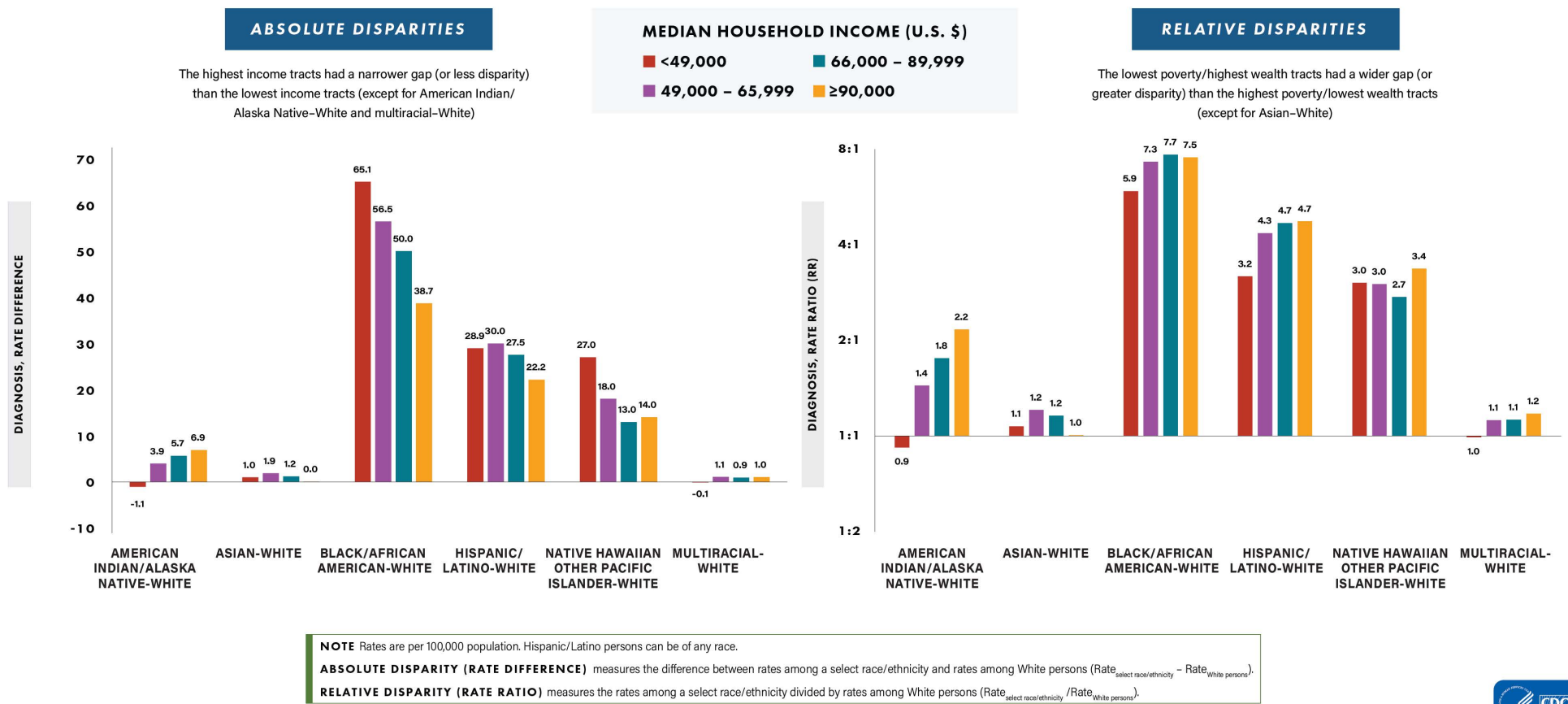
**Highest income**—Among males residing in tracts with the highest income, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: American Indian/Alaska Native 2.2 times, Black/African American 7.5 times, Hispanic/Latino 4.7 times, Native Hawaiian/other Pacific Islander 3.4 times, and multiracial males 1.2 times as high as the rate for White males; White and Asian males had similar rates (Figure 30 and Table 2).

### Changes in disparities

- For absolute disparities, the difference between rates among a select race/ethnicity and rates among White males were as follows: the highest income tracts had a narrower gap (or lesser disparity) than in the lowest income tracts (except for American Indian/Alaska Native-White and multiracial-White) (Figure 30).
- For relative disparities, the rates among a select race/ethnicity divided by rates among White males were as follows: the highest income tracts had a wider gap (or greater disparity) than in the lowest income tracts (except for Asian-White) (Figure 30).

FIGURE 30

Absolute and relative disparities of diagnoses of HIV infection among adult males aged ≥18 years, based on assigned sex at birth, by race/ethnicity and income level, 2021—census tract level, United States and Puerto Rico



Female

**Lowest income**—Among females residing in tracts with the lowest income, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Black/African American 6.4 times, Hispanic/Latino 2.0 times, and multiracial females 1.3 times as high as the rate for White females; the rate for White females was 1.1 times and 2.2 times as high as the rate for American Indian/Alaska Native and Asian females, respectively (Figure 31 and Table 2).

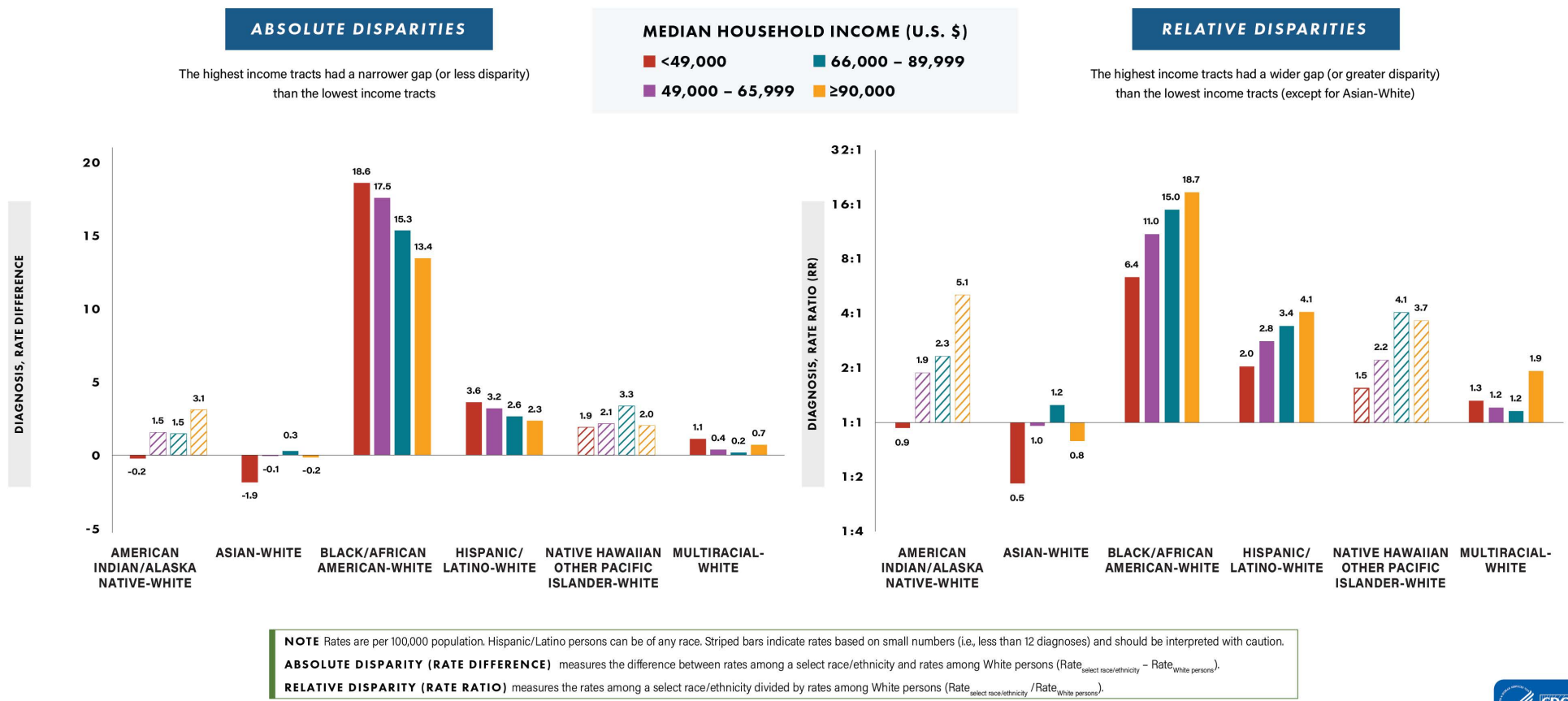
**Highest income**—Among females residing in tracts with the highest income, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Black/African American 18.7 times, Hispanic/Latino 4.1 times, and multiracial females 1.9 times as high as the rate for White females; the rate for White females was 1.3 times as high as the rate for Asian females (Figure 31 and Table 2).

Changes in disparities

- For absolute disparities, the difference between rates among a select race/ethnicity and rates among White females were as follows: the highest income tracts had a narrower gap (or lesser disparity) than in the lowest income tracts (Figure 31).
- For relative disparities, the rates among a select race/ethnicity divided by rates among White females were as follows: the highest income tracts had a wider gap (or greater disparity) than in the lowest income tracts (except for Asian–White) (Figure 31).

FIGURE 31

Absolute and relative disparities of diagnoses of HIV infection among adult females aged ≥18 years, based on assigned sex at birth, by race/ethnicity and income level, 2021—census tract level, United States and Puerto Rico



# Disparities—Health Insurance Coverage, by Assigned Sex at Birth and Race/Ethnicity

## Male

**Lowest health insurance coverage**—Among males residing in tracts with the lowest health insurance coverage, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Black/African American 6.1 times, Hispanic/Latino 3.1 times, and Native Hawaiian/other Pacific Islander males 2.6 times as high as the rate for White males; the rate for White males was 1.2 times as high as the rates for both American Indian/Alaska Native and Asian males and 1.3 times as high as the rates for multiracial males (Figure 32 and Table 2).

**Highest health insurance coverage**—Among males residing in tracts with the highest health insurance coverage, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Asian 1.1 times, Black/African American 9.0 times, Hispanic/Latino 5.1 times, Native Hawaiian/other Pacific Islander 3.1 times, and multiracial males 1.6 times as high as the rate for White males (Figure 32 and Table 2).

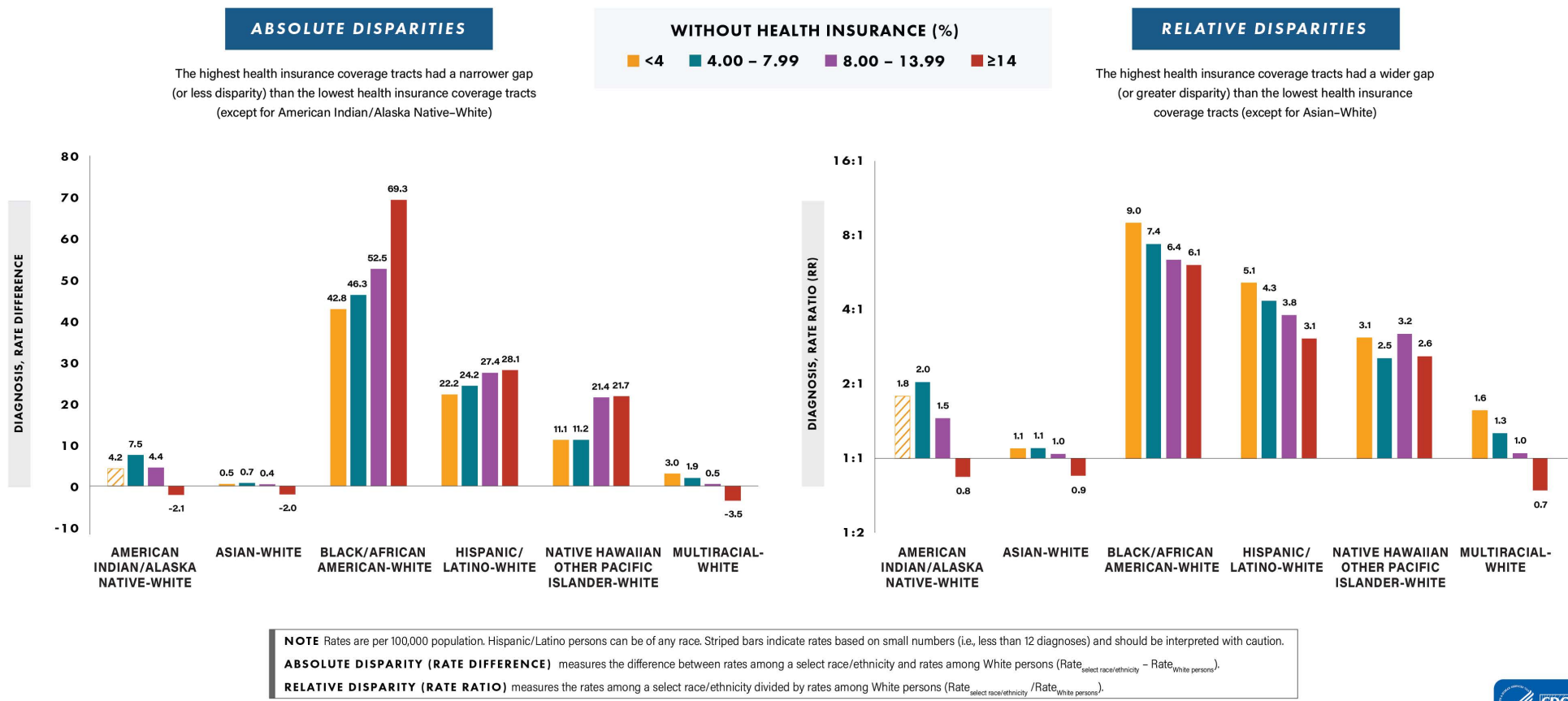
## Changes in disparities

- For absolute disparities, the difference between rates among a select race/ethnicity and rates among White males were as follows: the highest health insurance coverage tracts had a narrower gap (or lesser disparity) than in the lowest health insurance coverage tracts (except for American Indian/Alaska Native–White) (Figure 32).
- For relative disparities, the rates among a select race/ethnicity divided by rates among White males were as follows: the highest health insurance coverage tracts had a wider gap (or greater disparity) than in the lowest health insurance coverage tracts (except for Asian–White) (Figure 32).



FIGURE 32

Absolute and relative disparities of diagnoses of HIV infection among adult males aged ≥18 years, based on assigned sex at birth, by race/ethnicity and health insurance coverage, 2021—census tract level, United States and Puerto Rico



Female

**Lowest health insurance coverage**—Among females residing in tracts with the lowest health insurance coverage, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Black/African American 8.2 times, Hispanic/Latino 2.0 times, and multiracial females 1.1 times as high as the rate for White females; the rate for White females was 1.2 times and 1.5 times as high as the rate for American Indian/Alaska Native and Asian females, respectively (Figure 33 and Table 2).

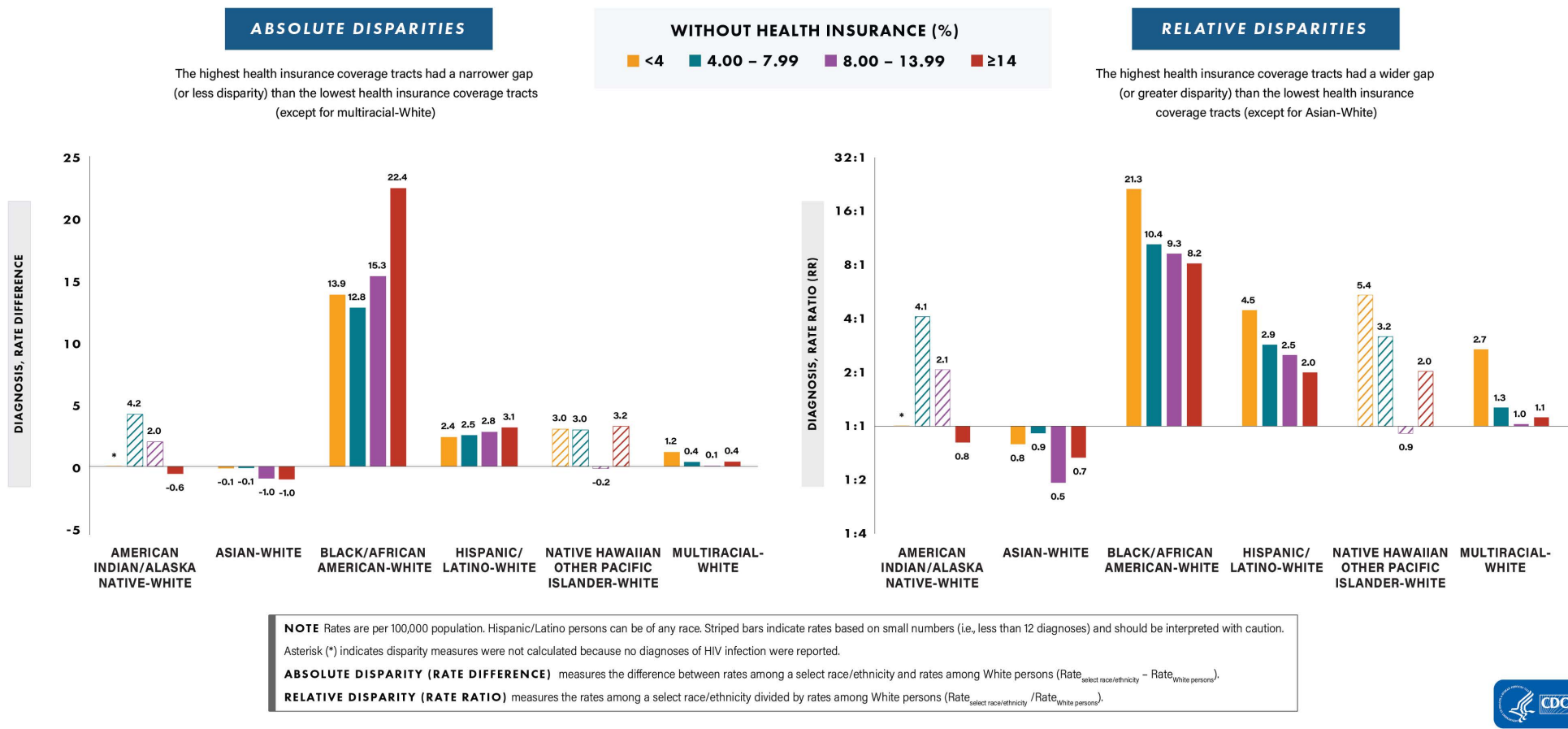
**Highest health insurance coverage**—Among females residing in tracts with the highest health insurance coverage, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Black/African American 21.3 times, Hispanic/Latino 4.5 times, and multiracial females 2.7 times as high as the rate for White females; the rate for White females was 1.3 times as high as the rate for Asian females (Figure 33 and Table 2).

Changes in disparities

- For absolute disparities, the difference between rates among a select race/ethnicity and rates among White females were as follows: the highest health insurance coverage tracts had a narrower gap (or lesser disparity) than the lowest health insurance coverage tracts (except for multiracial-White) (Figure 33).
- For relative disparities, the rates among a select race/ethnicity divided by rates among White females were as follows: the highest health insurance coverage tracts had a wider gap (or greater disparity) than the lowest health insurance coverage tracts (except for Asian-White) (Figure 33).

FIGURE 33

Absolute and relative disparities of diagnoses of HIV infection among adult females aged ≥18 years, based on assigned sex at birth, by race/ethnicity and health insurance coverage, 2021—census tract level, United States and Puerto Rico



## Disparities—Income Inequality, by Assigned Sex at Birth and Race/Ethnicity

### Male

**Highest income inequality**—Among males residing in tracts with the highest income inequality, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: American Indian/Alaska Native 1.2 times, Black/African American 6.9 times, Hispanic/Latino 4.0 times, Native Hawaiian/other Pacific Islander 3.5 times, and multiracial males 1.2 times as high as the rate for White males; the rate for White males was 1.1 times as high as the rate for Asian males (Figure 34 and Table 2).

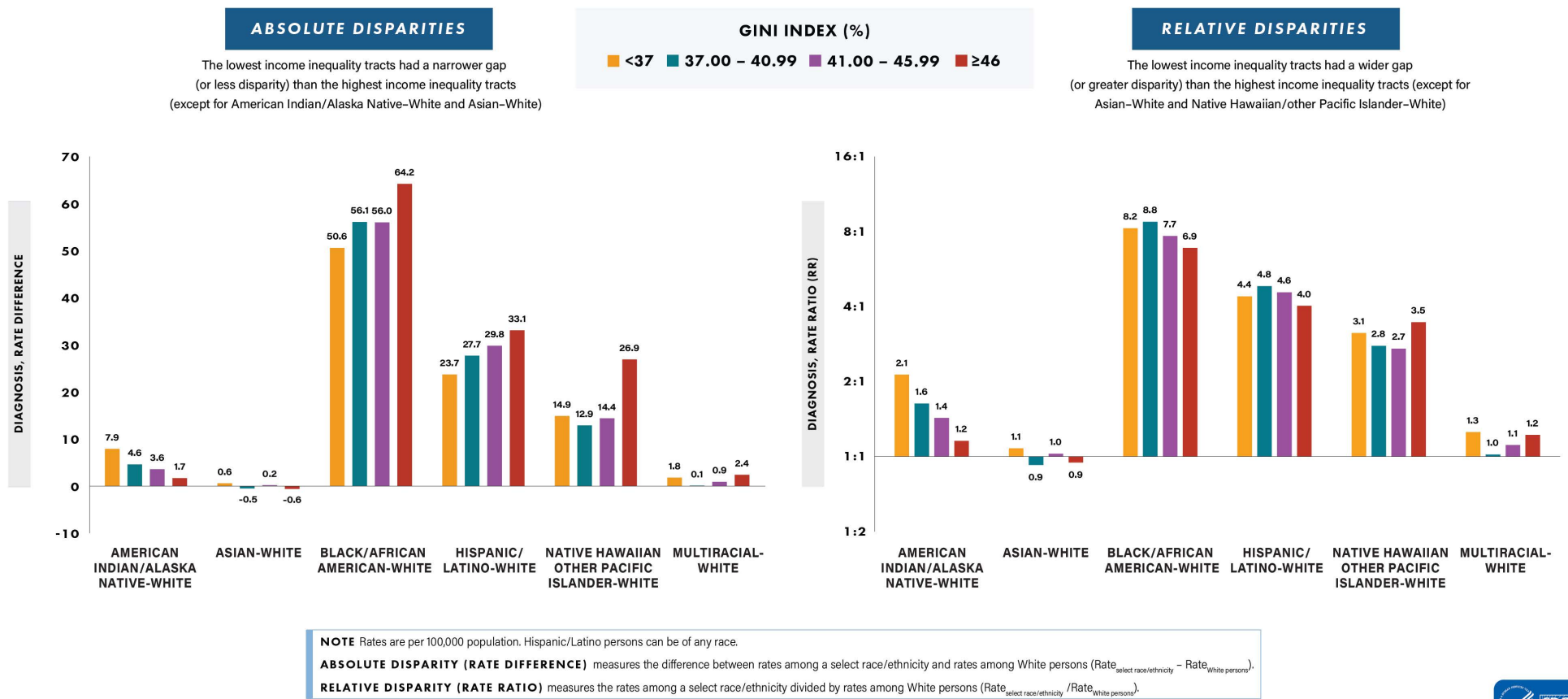
**Lowest income inequality**—Among males residing in tracts with the lowest income inequality, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: American Indian/Alaska Native 2.1 times, Asian 1.1 times, Black/African American 8.2 times, Hispanic/Latino 4.4 times, Native Hawaiian/other Pacific Islander 3.1, and multiracial males 1.3 times as high as the rate for White males (Figure 34 and Table 2).

### Changes in disparities

- For absolute disparities, the difference between rates among a select race/ethnicity and rates among White males were as follows: the lowest income inequality tracts had a narrower gap (or lesser disparity) than in the highest income inequality tracts (except for American Indian/Alaska Native–White and Asian–White) (Figure 34).
- For relative disparities, the rates among a select race/ethnicity divided by rates among White males were as follows: the lowest income inequality tracts had a wider gap (or greater disparity) than in the highest income inequality tracts (except for Asian–White and Native Hawaiian/other Pacific Islander–White) (Figure 34).

FIGURE 34

Absolute and relative disparities of diagnoses of HIV infection among adult males aged ≥18 years, based on assigned sex at birth, by race/ethnicity and Gini index, 2021—census tract level, United States and Puerto Rico



Female

**Highest income inequality**—Among females residing in tracts with the highest income inequality, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: American Indian/Alaska Native 2.2 times, Black/African American 10.9 times, Hispanic/Latino 3.2 times, and multiracial females 1.5 times as high as the rate for White females; the rate for White females was 1.4 times as high as the rate for Asian females (Figure 35 and Table 2).

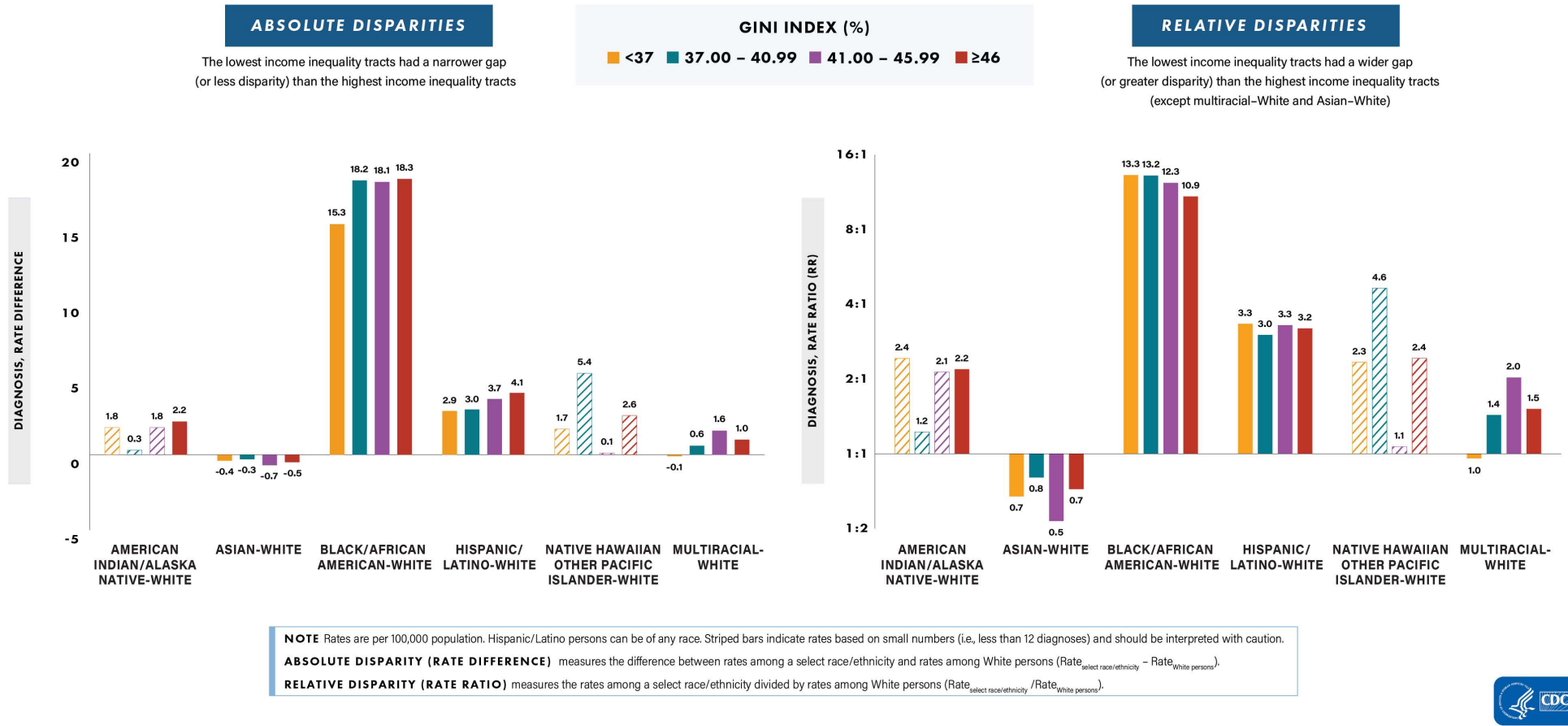
**Lowest income inequality**—Among females residing in tracts with the lowest income inequality, the relative disparities (rate ratios) in HIV diagnosis rates were as follows: Black/African American 13.3 times and Hispanic/Latino 3.3 times as high as the rate for White females; the rate for White females was 1.5 times as high as the rate for Asian females; White and multiracial females had similar rates (Figure 35 and Table 2).

Changes in disparities

- For absolute disparities, the difference between rates among a select race/ethnicity and rates among White females were as follows: the lowest income inequality tracts had a narrower gap (or lesser disparity) than the highest income inequality tracts (Figure 35).
- For relative disparities, the rates among a select race/ethnicity divided by rates among White females were as follows: the lowest income inequality tracts had a wider gap (or greater disparity) than the highest income inequality tracts (except multiracial-White and Asian-White) (Figure 35).

FIGURE 35

Absolute and relative disparities of diagnoses of HIV infection among adult females aged ≥18 years, based on assigned sex at birth, by race/ethnicity and Gini index, 2021—census tract level, United States and Puerto Rico



# Health Disparities Special Considerations

Accurate and timely assessment and monitoring of the magnitude and direction of change of health disparities and their determinants are necessary for evaluation of progress toward the Healthy People 2030 goals of eliminating health disparities, achieving health equity, and attaining health literacy to improve the health and well-being of all [22]. Overall, disparities in HIV are not improving for select populations in the United States [23]. While both downstream and upstream interventions are important, evidence from systematic reviews suggests that downstream prevention interventions (directed at individual-level factors) are more likely than upstream interventions (directed at social- or policy-level factors) to increase health disparities [24].

Below are some important upstream factors, which can lead to downstream and upstream interventions, for special consideration when addressing and reducing health disparities related to poverty, education, income, and health care status among adults aged ≥18 years with diagnosed HIV infection.

## Residential Segregation

The persistence of racial differences in health, for which individual differences in socioeconomic status (SES) are known, may reflect the role that residential segregation and neighborhood quality can play in racial disparities in health. As a result of segregation, higher-income Black/African American persons live in lower-income areas than White persons of similar economic status, and lower-income White persons live in higher-income areas than Black/African American persons of similar economic status [24]. Other racial/ethnic groups experience less residential segregation than Black/African American persons, and although residential segregation is inversely related to income for Hispanic/Latino and Asian persons, the segregation of Black/African American persons is high at all levels of income [24]. Black/African American persons with the highest levels of income experience more residential segregation than Hispanic/Latino and Asian persons with the lowest levels of income [24]. In addition to other SDOH variables, residential segregation may play a role in racial disparities in HIV diagnoses by isolating individuals from access to important resources and affecting neighborhood quality, with lower income and isolated areas being more vulnerable [25].



## Medical Treatment

Hispanic/Latino persons account for one of the largest uninsured groups in the United States [26, 27], and about one-quarter of Hispanic/Latino adults do not have a primary care provider [26]. Additionally, Black/African American persons typically have the lowest linkage to HIV medical care [21]. Black/African American and Hispanic/Latino persons are less likely than White persons to receive high-quality medical treatment after they gain access to medical care [27, 28]. These patterns exist across a broad range of medical procedures and institutional contexts, and they are further compounded by factors like stigma, immigration status, and discrimination, all of which may contribute to disparities in HIV infections [28].

## Psychosocial Stress

Exposure to psychosocial stressors (i.e., stress that may result from poverty, crime, racial discrimination, or other persistent difficulties) may explain the link between SES, race/ethnicity, and poor health outcomes. Chronic exposure to stress is associated with altered physiological functioning, which may increase risks for a broad range of health conditions. Individuals in lower income areas are more likely to report elevated levels of stress and may be more susceptible to the negative effects of stressors [28]. In addition, the subjective experience of discrimination is a neglected stressor that can adversely affect the health of some racial/ethnic populations. Discrimination may contribute to the elevated risk of disease that is sometimes observed among Black/African American persons [28]. Psychosocial stress may play a role in racial disparities in HIV diagnoses by altering physiological functions due to chronic exposure to stress among individuals living in lower income areas and experiencing discrimination [28].

Last Reviewed: October 17, 2023

# Social Determinants of Health among Adults with Diagnosed HIV Infection in the United States and Puerto Rico, 2021: Technical Notes

## Technical Notes



### A. Geocoding of HIV Surveillance Data Overview

CDC funds state and local health departments to conduct HIV surveillance, and jurisdictions geocode to the census tract level the address of residence at the time of diagnosis. This report includes data for adults aged  $\geq 18$  years whose HIV infection was diagnosed during 2021 and reported to the NHSS through January 2023 from the 50 states, the District of Columbia, and Puerto Rico.

After a census tract was assigned to each person's residence at the time of HIV diagnosis (2021), data were linked with the ACS estimates for 2017–2021 to assign a value for each of the SDOH indicator variables to each case. Cases or census tracts were excluded if the address was nonresidential (e.g., military base, corrections facility), a census tract could not be associated with the case, SDOH information was not available for the census tract, or the assigned census tract could not be matched to a census tract provided by the ACS. Although HIV diagnosis data associated with these exclusions were not included in all SDOH subpopulation totals, they were included in the overall subtotals stratified by sex at birth. Therefore, all tables display differing denominators for SDOH subpopulation categories.

All data presented in this report are considered provisional and subject to change as additional reports are submitted for HIV cases and as HIV surveillance data quality improves with further evaluation of the surveillance system and data repository.

## B. Social Determinants of Health Indicator Variables

SDOH indicator variables [29] and definitions [30] were obtained from the U.S. Census Bureau's ACS. This report uses data from the 2017–2021 ACS estimates. The 5-year estimates were used because census tract data are not available for 1-year estimates. The U.S. Census Bureau collected these data during the 5 years and created period estimates based on the information collected. Period estimates are estimates based on information collected over time (60 months for this report) [31]. Period estimates were not calculated as an average of 60 monthly values; the U.S. Census Bureau collected survey information continuously and then aggregated the results over a specific period (5 years) [30]. The data collection was spread evenly across the entire period so as not to over-represent any particular year within the period. All areas were sampled regardless of population size.

### B1. SDOH Variables and Definitions

For this report, the SDOH indicator variables were categorized by using empirically derived quartiles, and each quartile cut point was rounded to the nearest integer. The quartile cut points were determined by using data from all census tracts in the 50 states, the District of Columbia, and Puerto Rico and not just from the data applicable to persons in this report (i.e., persons with an HIV diagnosis). This report presents 5 SDOH indicator variables: federal poverty status, education level, median household income, health insurance coverage, and Gini index.

- **Federal poverty status:** proportion of residents in the census tract who were living below the U.S. poverty level (i.e., below a specified threshold) during the 12 months before the survey response (individuals aged  $\geq 18$  years)
- **Education level:** proportion of residents in the census tract with less than a high school diploma (individuals aged  $\geq 18$  years)
- **Median household income:** median income for a household within the census tract during the 12 months before the survey response
- **Health insurance coverage:** proportion of residents in the census tract without health insurance or health coverage plan (individuals aged  $\geq 18$  years)
- **Gini index:** proportion of household income distribution within the census tract during the 12 months before the survey response

#### B1.1 Poverty and Wealth

The percentage of the population aged  $\geq 18$  years who were living below the poverty level was determined by using the U.S. Census Bureau's set of dollar-value thresholds (i.e., income cutoffs) that vary by family size and composition to determine who lives below the poverty level. A person's poverty status is determined by comparing the person's total family income during the 12 months before the survey response with the poverty threshold appropriate for that person's family size and composition. If the total income of that person's family is less than the threshold appropriate for that family, then the person, together with every member of his or her family, is considered "below the poverty level." In the Census Bureau's determination of poverty status, the following populations were excluded: (1) institutionalized persons, (2) persons residing in military group quarters, (3) persons in college dormitories, and (4) unrelated persons aged  $< 15$  years. The U.S. Census Bureau defines poverty areas as census tracts with poverty levels of 20% or more [32], whereas wealth is defined as a household net worth and is an important defining factor of economic well-being in the United States. In times of economic hardship, such as unemployment, illness, or divorce, a person's or household's financial assets (e.g., savings accounts) are an additional source of income to help pay expenses and bills.

#### B1.2 Education

The percentage of persons with less than a high school diploma was defined as the percentage of persons aged  $\geq 18$  years who were not enrolled in school and were not high school graduates. These people may be referred to as "high school dropouts." No restriction is placed on when they "dropped out" of school; therefore, they may have dropped out before high school and never attended high school.

#### B1.3 Household Income

The median household income was determined by dividing the income distribution into 2 equal parts: one-half of the households in the census tract fall below the median income and one-half above the median. The median income was based on the income distribution of the total number of households, including those with no income.

#### B1.4 Health Insurance Coverage

The percentage of persons aged  $\geq 18$  years without health insurance coverage was determined based on the number of persons without plans or programs that provide comprehensive health coverage (both private health insurance and public coverage). Insured persons include: (1) insurance through a current or former employer (of this person or another family member) or union; (2) insurance purchased directly from an insurance company (by this person or another family member); (3) Medicare, for persons aged  $\geq 65$  years, or persons with certain disabilities; (4) Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low income or a disability; (5) TRICARE or other military health care; and (6) U.S. Department of Veterans Affairs (VA), including those who have ever used or enrolled for VA health care. Persons who had no reported health coverage, or those whose only health coverage was Indian Health Service, were considered uninsured. Also, plans that provide insurance for specific conditions or situations, such as cancer and long-term care policies, are not considered coverage. Likewise, other types of insurance, like dental, vision, life, and disability insurance, are not considered health insurance coverage. The population estimates for health insurance coverage excludes active-duty military personnel and the population living in correctional facilities and nursing homes.

## B1.5 Gini Index

The Gini index of income inequality measures the dispersion of the household income distribution. The Gini index, or index of income concentration, is a statistical measure of income inequality ranging from 0 (or 0%) to 1 (or 100%). A measure of 1 indicates perfect inequality; i.e., one household having all the income and the rest having none. A measure of 0 indicates perfect equality; i.e., all households having an equal share of income. The Gini index is based on the difference between the Lorenz curve (the observed cumulative income distribution) and the straight line denoting a perfectly equal income distribution. This measure is presented for household income.

# C. Tabulation and Presentation of Data

## C1. Definitions and Data Specifications

### C1.1 Diagnoses

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).

More information on counting diagnoses of HIV infection can be found in the Technical Notes of the 2021 HIV Surveillance Report at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance/vol-34/content/technical-notes.html>.

### C1.2 Linkage to HIV Medical Care and Viral Suppression

Data on linkage to HIV medical care and viral suppression were based on persons with HIV diagnosed during 2021 and who resided at the time of diagnosis in any of 48 jurisdictions that reported complete CD4 and viral load laboratory results to CDC. As of December 2022, 48 jurisdictions (47 states and the District of Columbia) met the criteria for the collection and reporting of CD4 and viral load test results: The 47 states are Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

Linkage to HIV medical care within 1 month of HIV diagnosis was measured by documentation of  $\geq 1$  CD4 (count or percentage) or viral load tests performed  $\leq 1$  month of HIV diagnosis, including tests performed on the same date as the date of diagnosis.

Viral suppression within 6 months of diagnosis was defined as a viral load result of  $< 200$  copies/mL at any viral load test within 6 months of an HIV diagnosis made during 2021.

More information on calculating linkage to HIV medical care and viral suppression can be found at <https://www.cdc.gov/hiv/pdf/library/reports/surveillance/hiv-surveillance.html> (Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2021).

### C1.3 Measures of Disparities

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 [33]. The absolute rate difference and the relative disparities were chosen because these measures are used by federal initiatives—Healthy People 2030, NHAS, and EHE—to measure progress in the SDOH and HIV diagnosis indicators. In addition,



- absolute disparity measures the simple difference between two rates. This report examines the disparity rate difference between SDOH variable categories (highest quartile versus lowest quartile) within and between selected characteristics by assigned sex at birth (i.e.,  $\text{Rate}_{\text{highest quartile}} - \text{Rate}_{\text{lowest quartile}}$ ). The absolute difference measures the magnitude of the difference, which provides some indication of how many HIV cases could have been prevented could be improved if the difference between the two rates were eliminated or reduced [34].
- relative disparity measures the relative magnitude of the disparity. This report examines the relative difference as the rate ratio between SDOH variable categories (highest quartile versus lowest quartile) within and between selected characteristics by assigned sex at birth (i.e.,  $\text{Rate}_{\text{highest quartile}} \div \text{Rate}_{\text{lowest quartile}}$ ).
- for changes in disparities,
  - absolute disparity measures the difference between rates among a select race/ethnicity and rates among White persons ( $\text{Rate}_{\text{select race/ethnicity}} - \text{Rate}_{\text{White persons}}$ ).
  - relative disparity measures the rates among a select race/ethnicity divided by rates among White persons ( $\text{Rate}_{\text{select race/ethnicity}} \div \text{Rate}_{\text{White persons}}$ ).
- for this report, White persons are the reference group and this is based on the lowest rate among groups with more than 5% of cases.

## C2. Rates

Rates per 100,000 population were calculated for the numbers of diagnoses of HIV infection. The population denominators used to compute these rates for the 50 states, the District of Columbia, and Puerto Rico were based on the 5-year estimated total population for those areas [29]. The denominators used for calculating age-, sex-, and race/ethnicity-specific rates were computed by applying the 5-year estimates for age, assigned sex at birth, and race/ethnicity for these areas [29]. Reported numbers less than 12, and rates and percentages based on these numbers, should be interpreted with caution.

Subpopulation stratifications of race data by age group and assigned sex at birth from the 2017–2021 ACS estimates may include Hispanic/Latino persons for racial groups other than White persons. As a result, there may be overlap in populations for these racial groups and Hispanic/Latino persons and, therefore, diagnosis rates by race/ethnicity (Table 2) should be interpreted with caution. Of the denominator population from this ACS in this report, for American Indian/Alaska Native persons, 29.0 % were Hispanic/Latino (28.9 % when Puerto Rico is excluded); for Asian persons, 1.2 % were Hispanic/Latino (1.2 % when Puerto Rico is excluded); for Black/African American persons, 3.6 % were Hispanic/Latino (2.9 % when Puerto Rico is excluded); and for Native Hawaiian/other Pacific Islander persons, 9.8 % were Hispanic/Latino (9.7 % when Puerto Rico is excluded). Finally, the denominator population from the ACS is based on the entire population aged  $\geq 18$  years; the numerator population is limited to persons whose HIV infection had been diagnosed and reported, with complete residential address, to the NHSS. Because the ACS uses predetermined age categories and varying criteria for SDOH variables, the denominators differ for some SDOH variables.

## D. Demographic Information

### D1. Age

All tables in this report reflect data for adults aged  $\geq 18$  years. This report was limited to adults aged  $\geq 18$  years with diagnosed HIV infection to align with the population from which data are collected for ACS SDOH indicator variables. For tables that provide data by age group, the specific age-group assignment (e.g., 18–24 years) was based on the person's age at the time of HIV diagnosis.

### D2. Assigned Sex at Birth

Sex designations in this report are based on a person's assigned sex at birth. Data for gender are not provided in this report because of the absence of denominator data from the U.S. Census Bureau, the source of data used for calculating all rates in this report.

### D3. Race and Ethnicity

In the *Federal Register* 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 [35].

Hispanic and Latino persons can be of any race. Due to confidentiality concerns, the ACS age- and sex-specific population counts for racial groups other than White persons may include Hispanic/Latino persons. Therefore, race-specific diagnosis rates (except White persons) should be interpreted with caution. Also, the number of persons reported in each race category may include persons whose ethnicity was not reported.

More information on race and ethnicity can be found in the Technical Notes of the 2021 *HIV Surveillance Report* at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance/vol-34/content/technical-notes.html>.

## D4. Transmission Categories

Transmission category is the term for the classification of cases that summarizes an adult's or adolescent's possible HIV risk factors; the summary classification results from selecting, from the presumed hierarchical order of probability, the 1 (single) risk factor most likely to have been responsible for transmission.

More information on transmission categories can be found in the Technical Notes of the 2021 *HIV Surveillance Report* at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance/vol-34/content/technical-notes.html>.

## E. Geographic Designation

### E1. Census Tract

Data presented in this report reflect the census tract of the person's residential address at the time they received an HIV diagnosis. A census tract is a standard area used by the U.S. Census Bureau for the purpose of counting the population. Census tracts are small, relatively permanent statistical subdivisions of a county delineated by local participants as part of the U.S. Census Bureau's Participant Statistical Areas Program. Census tracts must stay within a county and, therefore, a state. They do not necessarily coincide within any other geography. For example, although some census tracts follow place boundaries, there is no rule that says they must stay within a place. Census tracts are designed to be relatively homogeneous units with respect to population characteristics, economic status, and living conditions at the time of establishment. Each census tract generally contains 1,500 to 8,000 inhabitants (average, 4,000 inhabitants) [36].

### E2. U.S. Census Regions

Data by region reflect the address at the time of diagnosis of HIV infection for tables that present number of diagnoses (Tables 4-8).


More information on U.S. Census regions can be found in the Technical Notes of the 2021 *HIV Surveillance Report* at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>.

### E3. *Ending the HIV Epidemic in the U.S.* (EHE) Phase I Jurisdictions

To accelerate action to end the HIV epidemic, HHS has proposed a plan to reduce new HIV infections in the United States. The 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. For a list of the EHE Phase I jurisdictions, see <https://www.cdc.gov/endhiv/about-ehe/index.html#jurisdictions>.

## Suggested Readings

1. CDC. Social determinants of health among adults with diagnosed HIV infection, 2020. *HIV Surveillance Supplemental Report* 2023;28(No. 2). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published March 2023. Accessed June 27, 2023.
2. Dailey A, Gant Z, Hu X, Lyons SJ, Okello A, Johnson AS. A census tract-level examination of diagnosed HIV infection and social vulnerability themes among Black/African American, Hispanic/Latino, and White adults, 2019—USA. *J Racial Ethn Health Disparities* 2023;1–24. doi:10.1007/s40615-023-01533-5
3. Dailey AF, Gant Z, Hu X, Johnson Lyons S, Okello A, Satcher Johnson A. Association between social vulnerability and rates of HIV diagnoses among Black adults, by selected characteristics and region of residence—United States, 2018. *MMWR* 2022;71(5):167–170. doi:http://dx.doi.org/10.15585/mmwr.mm7105a2
4. Elenwa F, Gant Z, Hu X, Johnson AS. A census tract-level examination of HIV care outcomes and social vulnerability among Black/African American, Hispanic/Latino, and White adults in the Southern United States, 2018. *J Community Health* 2023;1–8. doi:10.1007/s10900-023-01191-y
5. Gant Z, Dailey A, Hu X, et al. A census tract-level examination of diagnosed HIV infection and social vulnerability among Black/African American, Hispanic/Latino, and White adults, 2018: United States. *J Racial Ethn Health Disparities* 2022;1–10. doi:10.1007/s40615-022-01456-7
6. Gant Z, Johnson Lyons S, Jin C, Dailey A, Nwangwu-Ike N, Satcher Johnson A. Geographic differences in social determinants of health among US-born and non-US-born Hispanic/Latino adults with diagnosed HIV infection, United States and Puerto

- Rico, 2017. *Public Health Rep* 2021;136(6):685–696. doi:10.1177/0033354920970539
7. Gillot M, Gant Z, Hu X, Satcher Johnson A. Linkage to HIV medical care and social determinants of health among adults with diagnosed HIV infection in 41 states and the District of Columbia, 2017. *Pub Health Rep* 2021;137(5):888–900. doi:10.1177/00333549211029971
8. Inequality.org. Income Inequality in the United States. <https://inequality.org/facts/income-inequality/>  . Updated December 2021. Accessed December 8, 2022.
9. Logan J, Crepaz N, Luo F, et al. HIV care outcomes in relation to racial redlining and structural factors affecting medical care access among Black and White persons with diagnosed HIV—United States, 2017. *AIDS Behav* 2022;26(9):2941–2953. doi:10.1007/s10461-022-03641-5
10. Jin C, Nwangwu-Ike N, Gant Z, Johnson Lyons S, Satcher Johnson A. Geographic differences and social determinants of health among people with HIV attributed to injection drug use, United States, 2017. *Pub Health Rep* 2022;137(3):525–536. doi:10.1177/00333549211007168
11. Johnson Lyons S, Gant Z, Jin C, Dailey A, Nwangwu-Ike N, Satcher Johnson A. A census tract-level examination of differences in social determinants of health among people with HIV, by race/ethnicity and geography, United States and Puerto Rico, 2017. *Pub Health Rep* 2022;137(2):278–290. doi:10.1177/0033354921990373
12. Nwangwu-Ike N, Jin C, Gant Z, Johnson S, Balaji AB. An examination of geographic differences in social determinants of health among women with diagnosed HIV in the United States and Puerto Rico, 2017. *Open AIDS J* 2021;15:10–20. doi:10.2174/1874613602115010010



# Social Determinants of Health among Adults with Diagnosed HIV Infection in the United States and Puerto Rico, 2021: Tables



Table 1. Diagnoses of HIV infection among adults aged ≥18 years, by age at diagnosis, assigned sex at birth, and selected social determinants of health, 2021—census tract level, United States and Puerto Rico

	18–24 years			25–34 years			35–44 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male									
Below federal poverty level (%)									
<6	785	3,845,493	20.4	1,610	6,032,986	26.7	846	6,734,392	12.6
6.00–9.99	876	3,233,952	27.1	1,882	5,508,690	34.2	975	5,144,427	19.0
10.00–16.99	1,440	3,791,488	38.0	2,833	6,166,669	45.9	1,457	5,319,911	27.4
≥17	2,279	4,657,916	48.9	3,742	5,363,698	69.8	1,840	4,250,791	43.3
Less than high school diploma (%)									
<5	865	4,561,209	19.0	1,788	5,757,323	31.1	909	5,575,880	16.3
5.00–8.99	953	3,486,411	27.3	1,788	5,469,622	32.7	921	5,228,532	17.6
9.00–15.99	1,399	3,678,221	38.0	2,702	5,888,810	45.9	1,315	5,332,674	24.7
≥16	2,164	3,934,261	55.0	3,791	6,047,551	62.7	1,975	5,383,574	36.7
Median household income (U.S. \$)									
<49,000	2,241	4,326,296	51.8	3,701	5,194,613	71.2	1,792	4,214,202	42.5
49,000–65,999	1,352	3,791,448	35.7	2,667	5,882,466	45.3	1,299	5,045,529	25.7





	18–24 years			25–34 years			35–44 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
66,000–89,999	1,060	3,656,422	29.0	2,144	6,139,556	34.9	1,152	5,635,355	20.4
≥90,000	693	3,561,991	19.5	1,513	5,771,175	26.2	854	6,482,523	13.2
Without health insurance (%)									
<4	602	3,623,030	16.6	1,183	4,971,242	23.8	682	5,218,724	13.1
4.00–7.99	1,021	4,160,260	24.5	2,015	6,102,217	33.0	1,056	5,720,586	18.5
8.00–13.99	1,433	3,833,569	37.4	2,800	5,918,620	47.3	1,313	5,218,861	25.2
≥14	2,325	3,982,959	58.4	4,069	6,081,398	66.9	2,067	5,291,528	39.1
Gini index (%)									
<37	1,129	3,646,162	31.0	2,050	5,699,655	36.0	998	5,642,200	17.7
37.00–40.99	1,145	3,664,538	31.2	2,259	5,804,523	38.9	1,162	5,490,195	21.2
41.00–45.99	1,460	4,103,239	35.6	2,772	6,267,616	44.2	1,369	5,742,778	23.8
≥46	1,644	4,068,637	40.4	2,983	5,277,796	56.5	1,586	4,554,336	34.8
Subtotal <sup>a</sup>	5,585	15,660,102	35.7	10,452	23,163,306	45.1	5,335	21,520,660	24.8
Female									
Below federal poverty level (%)									
<6	83	3,522,464	2.4	209	5,971,810	3.5	191	6,804,216	2.8
6.00–9.99	121	3,025,001	4.0	266	5,393,072	4.9	235	5,041,263	4.7
10.00–16.99	169	3,636,875	4.6	407	5,971,358	6.8	428	5,202,293	8.2
≥17	327	4,717,907	6.9	723	5,274,543	13.7	649	4,273,089	15.2
Less than high school diploma (%)									
<5	84	4,512,193	1.9	185	5,732,610	3.2	156	5,661,750	2.8
5.00–8.99	113	3,343,801	3.4	314	5,446,838	5.8	234	5,248,213	4.5
9.00–15.99	191	3,516,937	5.4	437	5,805,511	7.5	432	5,318,638	8.1
≥16	312	3,620,941	8.6	669	5,631,889	11.9	681	5,096,180	13.4
Median household income (U.S. \$)									
<49,000	323	4,305,272	7.5	734	5,171,876	14.2	694	4,306,539	16.1
49,000–65,999	167	3,592,414	4.6	424	5,660,151	7.5	354	4,914,054	7.2
66,000–89,999	129	3,464,300	3.7	258	5,968,494	4.3	257	5,495,597	4.7
≥90,000	79	3,356,316	2.4	186	5,759,025	3.2	193	6,560,399	2.9
Without health insurance (%)									
<4	75	3,452,690	2.2	161	4,945,655	3.3	143	5,282,989	2.7
4.00–7.99	139	4,010,496	3.5	302	6,024,972	5.0	287	5,735,806	5.0
8.00–13.99	172	3,719,862	4.6	396	5,790,714	6.8	398	5,180,922	7.7
≥14	314	3,801,886	8.3	746	5,850,390	12.8	675	5,121,198	13.2
Gini index (%)									
<37	128	3,305,384	3.9	298	5,552,920	5.4	278	5,559,369	5.0
37.00–40.99	158	3,489,368	4.5	375	5,659,662	6.6	335	5,435,672	6.2
41.00–45.99	197	3,923,369	5.0	449	6,137,331	7.3	421	5,726,950	7.4
≥46	217	4,144,117	5.2	483	5,257,973	9.2	469	4,596,676	10.2
Subtotal <sup>a</sup>	717	14,993,872	4.8	1,662	22,616,848	7.3	1,562	21,324,781	7.3
Total <sup>b</sup>	6,302	30,653,974	20.6	12,114	45,780,154	26.5	6,897	42,845,441	16.1

	45–54 years			≥55 years			Total		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male									

	45–54 years			≥55 years			Total		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Below federal poverty level (%)									
<6	503	7,019,310	7.2	476	14,819,733	3.2	4,220	38,451,914	11.0
6.00–9.99	576	4,976,659	11.6	464	11,222,759	4.1	4,773	30,086,487	15.9
10.00–16.99	772	5,019,253	15.4	668	11,003,070	6.1	7,170	31,300,391	22.9
≥17	1,003	3,885,765	25.8	834	8,107,685	10.3	9,698	26,265,855	36.9
Less than high school diploma (%)									
<5	482	5,563,846	8.7	472	12,327,051	3.8	4,516	33,785,309	13.4
5.00–8.99	538	5,183,243	10.4	451	11,783,264	3.8	4,651	31,151,072	14.9
9.00–15.99	742	5,220,236	14.2	596	11,636,996	5.1	6,754	31,756,937	21.3
≥16	1,093	4,981,478	21.9	923	9,442,217	9.8	9,946	29,789,081	33.4
Median household income (U.S. \$)									
<49,000	990	3,978,999	24.9	846	8,959,231	9.4	9,570	26,673,341	35.9
49,000–65,999	700	4,806,471	14.6	588	10,968,497	5.4	6,606	30,494,411	21.7
66,000–89,999	650	5,379,035	12.1	524	11,922,304	4.4	5,530	32,732,672	16.9
≥90,000	507	6,673,471	7.6	475	13,197,955	3.6	4,042	35,687,115	11.3
Without health insurance (%)									
<4	400	5,462,667	7.3	381	12,604,189	3.0	3,248	31,879,852	10.2
4.00–7.99	634	5,655,683	11.2	538	12,816,594	4.2	5,264	34,455,340	15.3
8.00–13.99	734	4,989,336	14.7	619	10,744,017	5.8	6,899	30,704,403	22.5
≥14	1,086	4,793,402	22.7	904	8,988,923	10.1	10,451	29,138,210	35.9
Gini index (%)									
<37	575	5,310,038	10.8	465	10,020,132	4.6	5,217	30,318,187	17.2
37.00–40.99	614	5,389,862	11.4	525	11,556,842	4.5	5,705	31,905,960	17.9
41.00–45.99	764	5,691,614	13.4	675	12,894,781	5.2	7,040	34,700,028	20.3
≥46	901	4,494,292	20.0	777	10,666,059	7.3	7,891	29,061,120	27.2
Subtotal <sup>a</sup>	2,955	20,948,803	14.1	2,532	45,189,528	5.6	26,859	126,482,399	21.2
Female									
Below federal poverty level (%)									
<6	164	7,079,357	2.3	129	16,414,858	0.8	776	39,792,705	2.0
6.00–9.99	179	5,006,142	3.6	155	12,770,728	1.2	956	31,236,206	3.1
10.00–16.99	305	5,034,986	6.1	265	12,767,033	2.1	1,574	32,612,545	4.8
≥17	440	3,990,905	11.0	388	9,720,128	4.0	2,527	27,976,572	9.0
Less than high school diploma (%)									
<5	126	5,673,366	2.2	114	13,907,888	0.8	665	35,487,807	1.9
5.00–8.99	179	5,275,750	3.4	152	13,484,661	1.1	992	32,799,263	3.0
9.00–15.99	331	5,322,720	6.2	277	13,486,514	2.1	1,668	33,450,320	5.0
≥16	452	4,841,470	9.3	394	10,795,134	3.6	2,508	29,985,614	8.4
Median household income (U.S. \$)									
<49,000	461	4,140,558	11.1	406	10,863,329	3.7	2,618	28,787,574	9.1
49,000–65,999	268	4,824,196	5.6	243	12,723,684	1.9	1,456	31,714,499	4.6
66,000–89,999	211	5,402,560	3.9	161	13,519,217	1.2	1,016	33,850,168	3.0
≥90,000	142	6,699,664	2.1	121	14,468,421	0.8	721	36,843,825	2.0
Without health insurance (%)									
<4	129	5,521,958	2.3	93	14,278,624	0.7	601	33,481,916	1.8
4.00–7.99	207	5,761,130	3.6	180	14,648,134	1.2	1,115	36,180,538	3.1

	45–54 years			≥55 years			Total		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
8.00–13.99	277	5,052,262	5.5	266	12,403,634	2.1	1,509	32,147,394	4.7
≥14	475	4,776,107	9.9	398	10,342,564	3.8	2,608	29,892,145	8.7
Gini index (%)									
<37	200	5,314,971	3.8	171	11,114,831	1.5	1,075	30,847,475	3.5
37.00–40.99	275	5,417,750	5.1	192	13,137,409	1.5	1,335	33,139,861	4.0
41.00–45.99	293	5,769,954	5.1	288	14,836,509	1.9	1,648	36,394,113	4.5
≥46	320	4,607,131	6.9	286	12,581,778	2.3	1,775	31,187,675	5.7
Subtotal <sup>a</sup>	1,139	21,113,306	5.4	968	51,674,197	1.9	6,048	131,723,004	4.6
Total <sup>b</sup>	4,094	42,062,109	9.7	3,500	96,863,725	3.6	32,907	258,205,403	12.7

Abbreviations: Pop., population; SDOH, social determinants of health [footnotes only].

*Note.* Rates are per 100,000 population. Row entries indicate categories based on census tracts; data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  .

<sup>a</sup> Because column subtotals were calculated independently of the values for the subpopulations, the values in each column may not sum to the column subtotals. See Technical Notes for criteria used to define SDOH subpopulations.

<sup>b</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.

Table 2. Diagnoses of HIV infection among adults aged ≥18 years, by race/ethnicity, assigned sex at birth, and selected social determinants of health, 2021—census tract level, United States and Puerto Rico

	American Indian/Alaska Native			Asian			Black/African American			Hispanic/Latino <sup>a</sup>		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male												
Below federal poverty level (%)												
<6	17	141,230	12.0	160	2,753,261	5.8	1,212	2,612,289	46.4	1,156	4,123,111	28.0
6.00–9.99	25	172,813	14.5	137	1,707,016	8.0	1,454	2,612,861	55.6	1,493	4,504,114	33.1
10.00–16.99	34	276,987	12.3	140	1,500,211	9.3	2,512	3,807,909	66.0	2,490	6,302,436	39.5
≥17	49	401,114	12.2	146	1,089,642	13.4	4,477	5,679,159	78.8	3,103	7,392,595	42.0
Less than high school diploma (%)												
<5	24	118,527	20.2	155	2,452,518	6.3	1,367	2,174,785	62.9	1,017	2,638,128	38.6
5.00–8.99	24	174,083	13.8	112	1,642,525	6.8	1,700	2,870,977	59.2	1,101	3,183,762	34.6
9.00–15.99	38	294,479	12.9	145	1,484,758	9.8	2,857	4,460,046	64.1	1,765	5,004,092	35.3
≥16	39	411,526	9.5	171	1,486,333	11.5	3,736	5,322,212	70.2	4,360	11,589,516	37.6
Median household income (U.S. \$)												
<49,000	47	384,907	12.2	108	758,214	14.2	4,596	5,863,040	78.4	2,908	6,884,065	42.2
49,000–65,999	35	270,983	12.9	114	1,053,038	10.8	2,314	3,535,387	65.5	2,221	5,700,914	39.0
66,000–89,999	26	197,754	13.1	146	1,684,139	8.7	1,657	2,880,028	57.5	1,899	5,423,478	35.0
≥90,000	17	132,563	12.8	210	3,520,487	6.0	1,033	2,313,477	44.7	1,181	4,204,082	28.1
Without health insurance (%)												
<4	9	93,663	9.6	143	2,435,694	5.9	961	1,994,045	48.2	724	2,626,838	27.6
4.00–7.99	26	175,975	14.8	165	2,070,600	8.0	1,800	3,364,025	53.5	1,386	4,400,878	31.5
8.00–13.99	36	253,251	14.2	154	1,511,146	10.2	2,625	4,211,823	62.3	2,067	5,556,909	37.2

	American Indian/Alaska Native			Asian			Black/African American			Hispanic/Latino <sup>a</sup>		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
≥14	54	469,520	11.5	121	1,042,742	11.6	4,270	5,150,632	82.9	4,065	9,746,421	41.7
Gini index (%)												
<37	25	167,913	14.9	137	1,818,151	7.5	1,882	3,269,618	57.6	1,677	5,460,653	30.7
37.00–40.99	26	220,563	11.8	114	1,707,449	6.7	2,022	3,195,496	63.3	1,910	5,477,473	34.9
41.00–45.99	38	317,330	12.0	161	1,873,003	8.6	2,521	3,915,046	64.4	2,289	5,988,523	38.2
≥46	36	284,998	12.6	170	1,645,565	10.3	3,229	4,297,696	75.1	2,363	5,370,122	44.0
Subtotal <sup>b</sup>	137	998,615	13.7	610	7,066,134	8.6	10,059	14,828,020	67.8	8,491	22,415,498	37.9
Female												
Below federal poverty level (%)												
<6	2	140,167	1.4	21	3,131,813	0.7	368	2,733,731	13.5	126	4,114,793	3.1
6.00–9.99	6	174,285	3.4	22	1,950,162	1.1	461	2,838,811	16.2	174	4,420,644	3.9
10.00–16.99	12	273,324	4.4	25	1,690,787	1.5	844	4,283,573	19.7	292	6,151,820	4.7
≥17	12	416,953	2.9	15	1,165,982	1.3	1,506	6,745,520	22.3	513	7,526,578	6.8
Less than high school diploma (%)												
<5	7	124,558	5.6	18	2,751,486	0.7	326	2,410,138	13.5	89	2,779,129	3.2
5.00–8.99	13	181,344	7.2	14	1,896,430	0.7	535	3,263,683	16.4	127	3,253,609	3.9
9.00–15.99	5	303,725	1.6	17	1,677,503	1.0	961	5,176,395	18.6	244	5,011,040	4.9
≥16	7	396,125	1.8	34	1,623,658	2.1	1,357	5,768,214	23.5	645	11,187,192	5.8
Median household income (U.S. \$)												
<49,000	13	401,521	3.2	13	812,612	1.6	1,549	7,033,489	22.0	498	7,041,242	7.1
49,000–65,999	9	272,184	3.3	20	1,185,888	1.7	761	3,945,136	19.3	273	5,520,917	4.9
66,000–89,999	5	196,510	2.5	26	1,904,670	1.4	513	3,126,704	16.4	199	5,329,900	3.7
≥90,000	5	130,239	3.8	24	3,999,687	0.6	341	2,404,422	14.2	131	4,236,156	3.1
Without health insurance (%)												
<4	0	92,534	0.0	15	2,777,100	0.5	305	2,098,708	14.5	83	2,725,498	3.0
4.00–7.99	10	179,597	5.6	29	2,345,892	1.2	533	3,768,925	14.1	177	4,568,578	3.9
8.00–13.99	10	259,464	3.9	15	1,676,491	0.9	833	4,844,674	17.2	260	5,589,264	4.7
≥14	12	473,507	2.5	24	1,148,780	2.1	1,508	5,900,818	25.6	585	9,343,288	6.3
Gini index (%)												
<37	5	166,107	3.0	17	2,031,717	0.8	572	3,465,632	16.5	219	5,275,480	4.2
37.00–40.99	4	218,513	1.8	23	1,915,759	1.2	703	3,561,681	19.7	243	5,393,660	4.5
41.00–45.99	11	323,650	3.4	18	2,109,566	0.9	877	4,463,946	19.6	313	5,959,331	5.3
≥46	12	296,019	4.1	25	1,875,742	1.3	1,027	5,103,080	20.1	330	5,577,040	5.9
Subtotal <sup>b</sup>	35	1,005,752	3.5	86	7,949,077	1.1	3,288	16,618,430	19.8	1,136	22,230,970	5.1
Total <sup>c</sup>	172	2,004,367	8.6	696	15,015,211	4.6	13,347	31,446,450	42.4	9,627	44,646,468	21.6



	Native Hawaiian/other Pacific Islander			White			Multiracial		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male									
Below federal poverty level (%)									
<6	16	61,882	25.9	1,522	27,880,809	5.5	137	1,841,049	7.4
6.00–9.99	10	58,517	17.1	1,502	20,370,655	7.4	152	1,647,544	9.2
10.00–16.99	15	63,225	23.7	1,814	18,714,315	9.7	165	1,971,877	8.4
≥17	16	47,103	34.0	1,650	11,350,212	14.5	257	1,933,844	13.3
Less than high school diploma (%)									



	Native Hawaiian/other Pacific Islander			White			Multiracial		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
<5	9	51,035	17.6	1,784	25,500,039	7.0	160	1,504,116	10.6
5.00–8.99	15	55,587	27.0	1,560	22,478,604	6.9	139	1,488,155	9.3
9.00–15.99	18	66,404	27.1	1,739	19,789,121	8.8	192	1,794,961	10.7
≥16	15	58,771	25.5	1,405	10,686,413	13.1	220	2,632,761	8.4
Median household income (U.S. \$)									
<49,000	15	37,182	40.3	1,654	12,442,496	13.3	242	1,838,585	13.2
49,000–65,999	13	48,229	27.0	1,731	19,305,032	9.0	178	1,772,205	10.0
66,000–89,999	14	68,324	20.5	1,631	21,784,462	7.5	157	1,864,849	8.4
≥90,000	15	75,248	19.9	1,455	24,549,460	5.9	131	1,880,893	7.0
Without health insurance (%)									
<4	9	54,472	16.5	1,288	23,943,792	5.4	114	1,359,320	8.4
4.00–7.99	13	70,528	18.4	1,713	23,624,755	7.3	161	1,757,672	9.2
8.00–13.99	18	57,678	31.2	1,812	18,520,759	9.8	187	1,823,485	10.3
≥14	17	48,065	35.4	1,675	12,270,571	13.7	249	2,457,676	10.1
Gini index (%)									
<37	15	68,566	21.9	1,318	18,876,470	7.0	163	1,862,232	8.8
37.00–40.99	12	59,753	20.1	1,486	20,589,914	7.2	135	1,835,195	7.4
41.00–45.99	13	57,183	22.7	1,833	21,873,918	8.4	185	1,985,680	9.3
≥46	17	44,956	37.8	1,849	16,926,177	10.9	227	1,702,521	13.3
Subtotal <sup>b</sup>	61	231,797	26.3	6,763	78,454,177	8.6	738	7,419,993	9.9
Female									
Below federal poverty level (%)									
<6	1	59,005	1.7	233	28,700,736	0.8	25	1,875,288	1.3
6.00–9.99	3	61,210	4.9	257	21,079,389	1.2	33	1,668,387	2.0
10.00–16.99	3	61,656	4.9	353	19,443,558	1.8	45	2,003,597	2.2
≥17	2	48,049	4.2	403	11,707,488	3.4	76	2,028,201	3.7
Less than high school diploma (%)									
<5	2	47,471	4.2	193	26,478,457	0.7	30	1,584,940	1.9
5.00–8.99	1	56,876	1.8	271	23,349,000	1.2	31	1,575,309	2.0
9.00–15.99	4	65,375	6.1	389	20,491,305	1.9	48	1,855,658	2.6
≥16	2	60,385	3.3	393	10,669,467	3.7	70	2,566,267	2.7
Median household income (U.S. \$)									
<49,000	2	37,291	5.4	454	13,095,283	3.5	89	1,946,444	4.6
49,000–65,999	2	51,402	3.9	353	20,090,728	1.8	38	1,786,014	2.1
66,000–89,999	3	67,572	4.4	246	22,479,430	1.1	24	1,895,132	1.3
≥90,000	2	72,172	2.8	190	25,071,815	0.8	28	1,917,446	1.5
Without health insurance (%)									
<4	2	54,058	3.7	170	24,962,837	0.7	26	1,414,688	1.8
4.00–7.99	3	69,699	4.3	331	24,444,930	1.4	32	1,858,461	1.7
8.00–13.99	1	59,049	1.7	354	19,069,103	1.9	36	1,885,839	1.9
≥14	3	47,185	6.4	391	12,501,974	3.1	85	2,421,940	3.5
Gini index (%)									
<37	2	68,840	2.9	238	19,149,567	1.2	22	1,844,451	1.2
37.00–40.99	4	57,626	6.9	318	21,278,089	1.5	40	1,867,457	2.1
41.00–45.99	1	58,801	1.7	362	22,738,425	1.6	66	2,042,848	3.2


	Native Hawaiian/other Pacific Islander			White			Multiracial		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
≥46	2	44,588	4.5	328	17,739,626	1.8	51	1,817,309	2.8
Subtotal <sup>b</sup>	9	230,107	3.9	1,304	80,988,229	1.6	190	7,582,174	2.5
Total <sup>c</sup>	70	461,904	15.2	8,067	159,442,406	5.1	928	15,002,167	6.2

Abbreviations: Pop., population; SDOH, social determinants of health [footnotes only]; ACS, American Community Survey [footnotes only].

*Note.* Numbers less than 12, and rates based on these numbers, should be interpreted with caution. Row entries indicate categories based on census tracts; data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  .

- <sup>a</sup> Hispanic/Latino persons can be of any race.
- <sup>b</sup> Because column subtotals were calculated independently of the values for the subpopulations, the values in each column may not sum to the column subtotals. See Technical Notes for criteria used to define SDOH subpopulations.
- <sup>c</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.



Table 3. Diagnoses of HIV infection among adults aged ≥18 years, by transmission category, assigned sex at birth, and selected social determinants of health, 2021—census tract level, United States and Puerto Rico



	Male-to-male sexual contact <sup>a</sup>		Injection drug use <sup>b</sup>		Male-to-male sexual contact <sup>a</sup> and injection drug use <sup>b</sup>		Heterosexual contact <sup>c</sup>	
	No.	%	No.	%	No.	%	No.	%
Male								
Below federal poverty level (%)								
<6	3,553	16.5	159	15.2	198	17.8	306	14.0
6.00–9.99	4,004	18.6	170	16.4	240	21.6	356	16.2
10.00–16.99	5,999	27.9	281	27.0	296	26.6	589	26.9
≥17	7,941	36.9	432	41.4	377	33.9	941	42.9
Less than high school diploma (%)								
<5	3,917	18.2	125	12.0	220	19.8	251	11.4
5.00–8.99	3,872	18.0	181	17.4	225	20.3	369	16.8
9.00–15.99	5,553	25.8	293	28.1	293	26.4	610	27.8
≥16	8,158	37.9	444	42.6	372	33.5	964	44.0
Median household income (U.S. \$)								
<49,000	7,766	36.3	446	42.9	370	33.4	980	44.9
49,000–65,999	5,519	25.8	234	22.6	314	28.4	536	24.5
66,000–89,999	4,675	21.8	210	20.3	239	21.6	402	18.4
≥90,000	3,443	16.1	148	14.2	183	16.5	266	12.2
Without health insurance (%)								
<4	2,695	12.5	141	13.5	171	15.4	238	10.9
4.00–7.99	4,368	20.3	270	25.9	251	22.6	369	16.9
8.00–13.99	5,764	26.8	279	26.8	300	27.0	553	25.2
≥14	8,671	40.3	352	33.8	389	35.0	1,031	47.0
Gini index (%)								
<37	4,396	20.5	175	16.8	209	18.8	433	19.8
37.00–40.99	4,728	22.0	213	20.5	265	23.9	494	22.5

	Male-to-male sexual contact <sup>a</sup>		Injection drug use <sup>b</sup>		Male-to-male sexual contact <sup>a</sup> and injection drug use <sup>b</sup>		Heterosexual contact <sup>c</sup>	
	No.	%	No.	%	No.	%	No.	%
41.00–45.99	5,822	27.1	318	30.5	302	27.2	590	26.9
≥46	6,544	30.5	336	32.2	334	30.0	674	30.8
Subtotal <sup>d</sup>	22,301	100	1,088	100	1,167	100	2,283	100
Female								
Below federal poverty level (%)								
<6	—	—	110	13.0	—	—	660	13.4
6.00–9.99	—	—	142	16.7	—	—	807	16.3
10.00–16.99	—	—	215	25.2	—	—	1,348	27.3
≥17	—	—	384	45.1	—	—	2,126	43.0
Less than high school diploma (%)								
<5	—	—	99	11.6	—	—	561	11.4
5.00–8.99	—	—	137	16.1	—	—	847	17.1
9.00–15.99	—	—	250	29.4	—	—	1,407	28.5
≥16	—	—	366	42.9	—	—	2,126	43.0
Median household income (U.S. \$)								
<49,000	—	—	394	46.3	—	—	2,209	44.9
49,000–65,999	—	—	221	26.0	—	—	1,226	24.9
66,000–89,999	—	—	129	15.2	—	—	878	17.8
≥90,000	—	—	107	12.5	—	—	608	12.4
Without health insurance (%)								
<4	—	—	106	12.5	—	—	488	9.9
4.00–7.99	—	—	193	22.6	—	—	913	18.5
8.00–13.99	—	—	224	26.4	—	—	1,274	25.8
≥14	—	—	328	38.5	—	—	2,266	45.9
Gini index (%)								
<37	—	—	152	17.8	—	—	916	18.5
37.00–40.99	—	—	169	19.8	—	—	1,154	23.4
41.00–45.99	—	—	252	29.6	—	—	1,386	28.1
≥46	—	—	279	32.8	—	—	1,485	30.0
Subtotal <sup>d</sup>	—	—	889	100	—	—	5,118	100
Total <sup>e</sup>	22,301	100	1,977	100	1,167	100	7,400	100

Abbreviation: SDOH, social determinants of health [footnotes only].

*Note.* 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. Row entries indicate categories based on census tracts; data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  .

<sup>a</sup> 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).

<sup>b</sup> 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).

<sup>c</sup> Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

<sup>d</sup> Because column subtotals were calculated independently of the values for the subpopulations, the values in each column may not sum to the column subtotals. See Technical Notes for criteria used to define SDOH subpopulations.

<sup>e</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.

Table 4. Diagnoses of HIV infection among adults aged ≥18 years, by percentage living below federal poverty level, assigned sex at birth, and area of residence, 2021—census tract level, United States and Puerto Rico

✓

Area of residence	Below federal poverty level (%)											
	Male											
	<6			6.00–9.99			10.00–16.99			≥17		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	52	14.8	9	60	15.2	16	126	22.9	13	188	33.7	17
Alaska	6	6.7	—	5	5.4	—	10	12.0	—	1	4.1	—
Arizona	99	12.9	13	98	16.0	14	155	23.6	12	197	30.1	25
Arkansas	25	15.1	8	37	15.6	15	55	15.2	24	110	31.0	20
California	558	13.3	12	732	18.5	10	1,113	27.2	11	998	36.2	14
Colorado	73	8.1	25	94	16.7	12	89	17.9	20	55	20.0	35
Connecticut	38	5.5	34	27	10.3	28	42	19.1	19	64	30.3	24
Delaware	9	7.4	—	13	13.2	21	15	14.9	27	20	39.2	13
District of Columbia	21	33.1	1	22	40.4	1	36	64.1	1	45	51.1	5
Florida	360	17.7	6	557	26.6	4	911	37.5	4	1,141	65.7	1
Georgia	268	24.6	2	323	38.8	2	507	49.2	2	596	63.0	2
Hawaii	13	5.4	35	13	9.0	32	14	10.9	38	5	8.7	—
Idaho	7	4.3	—	16	7.1	38	10	5.0	—	8	9.1	—
Illinois	168	10.2	18	162	13.0	22	253	22.3	14	374	45.3	7
Indiana	58	7.3	26	59	9.2	31	105	17.0	21	165	34.7	16
Iowa	12	3.4	39	13	3.4	41	20	6.6	43	19	11.2	42
Kansas	34	9.6	21	24	8.0	35	22	8.7	41	40	20.3	34
Kentucky	34	10.4	17	46	14.8	18	73	15.9	22	118	19.8	36
Louisiana	58	23.9	3	64	21.6	7	136	28.7	9	345	48.8	6
Maine	6	4.3	—	4	2.5	—	10	5.8	—	3	4.4	—
Maryland	145	13.7	11	143	24.8	6	157	37.9	3	101	43.8	9
Massachusetts	71	6.1	30	50	7.6	36	69	13.9	29	79	20.6	33
Michigan	63	5.3	36	94	9.8	30	101	11.3	36	203	25.3	29
Minnesota	54	5.7	32	48	8.1	34	61	15.4	23	52	23.3	30
Mississippi	21	13.7	10	19	12.6	23	47	15.1	25	145	30.9	22
Missouri	42	6.3	28	61	11.3	26	79	12.6	33	136	28.3	27
Montana	1	1.1	—	6	4.9	—	7	5.1	—	3	3.8	—
Nebraska	17	7.0	27	15	7.5	37	26	15.0	26	21	19.0	37
Nevada	60	18.8	5	86	28.9	3	100	32.2	6	136	52.6	4
New Hampshire	9	3.1	—	7	5.0	—	6	6.1	—	1	4.0	—
New Jersey	155	9.2	22	110	14.2	20	179	33.0	5	267	56.3	3
New Mexico	10	9.3	—	16	11.2	27	20	9.7	39	40	11.7	41
New York	198	8.6	23	263	14.4	19	390	21.3	16	720	43.6	10
North Carolina	161	15.8	7	176	20.9	8	318	28.2	10	386	42.9	11
North Dakota	2	2.3	—	4	4.7	—	8	9.1	—	2	4.5	—
Ohio	80	5.7	33	92	8.8	33	153	14.9	28	316	32.7	19
Oklahoma	35	11.9	15	43	16.2	13	64	12.7	32	116	28.5	26



Area of residence	Below federal poverty level (%)											
	Male											
	<6			6.00–9.99			10.00–16.99			≥17		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Oregon	21	5.8	31	41	9.9	29	54	9.2	40	41	14.4	38
Pennsylvania	86	4.7	37	86	6.9	39	139	13.0	30	257	30.9	21
Puerto Rico	0	0.0	—	4	22.9	—	14	32.1	8	279	23.2	31
Rhode Island	15	10.0	20	6	5.7	—	12	12.0	35	23	32.9	18
South Carolina	45	10.1	19	76	18.6	9	122	21.8	15	170	35.0	15
South Dakota	7	7.2	—	2	2.1	—	5	5.9	—	7	12.5	—
Tennessee	70	12.3	14	87	14.8	17	158	20.1	17	265	42.0	12
Texas	649	20.6	4	552	24.9	5	855	32.1	7	1,110	43.8	8
Utah	34	6.2	29	32	12.1	24	26	13.0	31	17	13.2	40
Vermont	1	1.8	—	1	1.0	—	3	4.2	—	3	9.5	—
Virginia	144	10.4	16	136	16.9	11	132	20.0	18	128	30.8	23
Washington	91	8.5	24	99	11.6	25	87	12.5	34	74	21.0	32
West Virginia	3	3.8	—	8	6.0	—	21	8.7	42	34	13.4	39
Wisconsin	30	3.5	38	39	5.8	40	53	11.1	37	74	26.6	28
Wyoming	1	1.5	—	2	3.1	—	2	3.0	—	0	0.0	—
Region of residence												
Northeast	579	7.0	—	554	10.5	—	850	18.5	—	1,417	37.8	—
Midwest	567	6.6	—	613	9.1	—	886	14.6	—	1,409	30.4	—
South	2,100	16.7	—	2,362	22.9	—	3,733	29.3	—	5,018	44.2	—
West	974	10.9	—	1,240	16.0	—	1,687	21.5	—	1,575	29.6	—
Total <sup>b</sup>	4,220	11.0	—	4,773	15.9	—	7,170	22.9	—	9,698	36.9	—



Area of residence	Below federal poverty level (%)											
	Female											
	<6			6.00–9.99			10.00–16.99			≥17		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	11	3.0	—	17	4.1	9	28	4.7	16	56	8.9	15
Alaska	0	0.0	—	1	1.2	—	4	5.4	—	0	0.0	—
Arizona	15	1.9	10	15	2.3	16	17	2.6	29	28	4.3	32
Arkansas	7	4.1	—	6	2.4	—	15	3.9	18	27	7.1	25
California	87	2.0	8	89	2.2	18	121	2.9	27	187	6.6	26
Colorado	6	0.7	—	17	3.0	14	14	2.8	28	8	3.0	—
Connecticut	5	0.7	—	6	2.1	—	12	5.0	13	25	10.7	7
Delaware	3	2.4	—	1	0.9	—	6	5.4	—	6	10.5	—
District of Columbia	4	6.0	—	6	9.7	—	7	11.2	—	21	20.1	1
Florida	73	3.4	6	107	4.9	6	251	9.7	4	325	17.9	2
Georgia	60	5.2	1	60	6.8	1	136	12.1	1	171	16.6	4
Hawaii	4	1.7	—	4	2.8	—	1	0.7	—	1	1.7	—
Idaho	1	0.6	—	2	0.9	—	1	0.5	—	3	3.5	—
Illinois	13	0.8	18	28	2.2	20	45	3.8	19	92	10.3	8
Indiana	13	1.6	11	10	1.5	—	20	3.1	24	52	10.3	9
Iowa	1	0.3	—	6	1.6	—	1	0.3	—	4	2.3	—
Kansas	4	1.1	—	5	1.7	—	8	3.1	—	7	3.5	—

Area of residence	Below federal poverty level (%)											
	Female											
	<6			6.00–9.99			10.00–16.99			≥17		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Kentucky	8	2.4	—	6	1.9	—	15	3.1	23	31	4.9	31
Louisiana	12	4.7	2	17	5.3	3	33	6.7	6	133	17.3	3
Maine	0	0.0	—	0	0.0	—	1	0.5	—	2	2.9	—
Maryland	50	4.4	3	38	6.0	2	48	10.5	2	39	14.7	6
Massachusetts	20	1.6	12	27	3.8	10	28	5.3	10	37	8.9	16
Michigan	5	0.4	—	9	0.9	—	16	1.7	31	62	7.1	24
Minnesota	8	0.8	—	13	2.2	19	19	4.7	17	19	8.4	19
Mississippi	8	5.0	—	11	6.8	—	26	7.8	5	42	8.1	23
Missouri	5	0.7	—	6	1.1	—	12	1.8	30	19	3.6	33
Montana	0	0.0	—	0	0.0	—	1	0.7	—	1	1.3	—
Nebraska	3	1.2	—	1	0.5	—	4	2.3	—	9	8.0	—
Nevada	7	2.1	—	10	3.4	—	16	5.2	11	21	8.4	20
New Hampshire	1	0.3	—	3	2.0	—	1	1.0	—	0	0.0	—
New Jersey	28	1.6	13	41	5.0	5	57	10.0	3	85	16.5	5
New Mexico	0	0.0	—	2	1.3	—	2	0.9	—	8	2.3	—
New York	38	1.5	14	66	3.4	13	97	5.0	14	168	9.0	13
North Carolina	24	2.2	7	31	3.5	12	78	6.5	8	98	9.8	10
North Dakota	4	5.1	—	4	4.8	—	4	4.8	—	1	2.5	—
Ohio	18	1.2	15	33	3.0	15	38	3.5	21	89	8.6	18
Oklahoma	5	1.6	—	5	1.8	—	15	2.9	26	35	8.4	21
Oregon	2	0.5	—	7	1.6	—	7	1.2	—	5	1.7	—
Pennsylvania	20	1.0	17	16	1.2	21	33	2.9	25	84	9.0	14
Puerto Rico	0	0.0	—	0	0.0	—	4	7.4	—	70	5.1	29
Rhode Island	1	0.7	—	4	3.5	—	3	2.7	—	2	2.7	—
South Carolina	19	4.0	4	23	5.3	4	36	5.9	9	44	8.2	22
South Dakota	0	0.0	—	0	0.0	—	2	2.4	—	2	3.6	—
Tennessee	11	1.8	—	23	3.7	11	30	3.6	20	66	9.6	11
Texas	122	3.8	5	109	4.8	7	181	6.6	7	249	9.6	12
Utah	3	0.5	—	1	0.4	—	2	1.0	—	3	2.4	—
Vermont	0	0.0	—	0	0.0	—	0	0.0	—	0	0.0	—
Virginia	28	2.0	9	36	4.2	8	33	4.8	15	39	8.7	17
Washington	13	1.2	16	19	2.2	17	24	3.5	22	17	5.0	30
West Virginia	2	2.4	—	4	3.0	—	13	5.2	12	17	6.5	27
Wisconsin	4	0.5	—	11	1.7	—	7	1.5	—	17	5.7	28
Wyoming	0	0.0	—	0	0.0	—	1	1.6	—	0	0.0	—
Region of residence												
Northeast	113	1.3	—	163	2.9	—	232	4.8	—	403	9.6	—
Midwest	78	0.9	—	126	1.8	—	176	2.8	—	373	7.6	—
South	447	3.4	—	500	4.6	—	951	7.1	—	1,399	11.5	—
West	138	1.5	—	167	2.1	—	211	2.7	—	282	5.3	—
Total <sup>b</sup>	776	2.0	—	956	3.1	—	1,574	4.8	—	2,527	9.0	—

Area of residence	Below federal poverty level (%)											
	Total											
	<6			6.00–9.99			10.00–16.99			≥17		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	63	8.7	11	77	9.5	14	154	13.4	13	244	20.6	17
Alaska	6	3.5	—	6	3.3	—	14	8.9	29	1	2.2	—
Arizona	114	7.3	13	113	9.0	17	172	13.0	14	225	17.2	26
Arkansas	32	9.5	7	43	8.8	18	70	9.4	26	137	18.7	23
California	645	7.6	12	821	10.3	11	1,234	15.0	11	1,185	21.3	15
Colorado	79	4.4	27	111	9.9	12	103	10.4	21	63	11.7	37
Connecticut	43	3.1	36	33	6.0	28	54	11.7	18	89	20.1	19
Delaware	12	4.8	24	14	6.8	24	21	9.9	23	26	24.0	13
District of Columbia	25	19.1	1	28	24.1	1	43	36.3	1	66	34.3	4
Florida	433	10.3	6	664	15.5	4	1,162	23.2	4	1,466	41.2	1
Georgia	328	14.6	2	383	22.3	2	643	29.8	2	767	38.8	2
Hawaii	17	3.6	30	17	5.9	29	15	5.7	42	6	5.2	—
Idaho	8	2.5	—	18	4.0	40	11	2.7	—	11	6.3	—
Illinois	181	5.4	19	190	7.5	22	298	12.9	15	466	27.1	8
Indiana	71	4.4	26	69	5.3	33	125	9.8	24	217	22.1	14
Iowa	13	1.8	40	19	2.5	42	21	3.4	45	23	6.7	42
Kansas	38	5.3	20	29	4.8	36	30	5.9	41	47	11.9	36
Kentucky	42	6.3	17	52	8.2	21	88	9.3	27	149	12.2	35
Louisiana	70	14.0	3	81	13.2	7	169	17.5	9	478	32.4	5
Maine	6	2.1	—	4	1.2	—	11	3.1	—	5	3.6	—
Maryland	195	8.9	9	181	15.0	5	205	23.5	3	140	28.2	7
Massachusetts	91	3.8	29	77	5.6	32	97	9.4	25	116	14.5	31
Michigan	68	2.8	37	103	5.3	34	117	6.4	39	265	15.9	27
Minnesota	62	3.3	34	61	5.1	35	80	9.9	22	71	15.8	28
Mississippi	29	9.3	8	30	9.6	13	73	11.3	20	187	18.9	22
Missouri	47	3.4	31	67	6.1	27	91	7.1	34	155	15.5	30
Montana	1	0.6	—	6	2.5	—	8	3.0	—	4	2.5	—
Nebraska	20	4.1	28	16	4.0	39	30	8.6	30	30	13.4	33
Nevada	67	10.4	5	96	16.2	3	116	18.8	7	157	30.8	6
New Hampshire	10	1.7	—	10	3.5	—	7	3.6	—	1	1.9	—
New Jersey	183	5.3	22	151	9.5	15	236	21.2	5	352	35.6	3
New Mexico	10	4.6	—	18	6.2	26	22	5.3	43	48	6.9	41
New York	236	5.0	23	329	8.8	20	487	12.9	16	888	25.2	11
North Carolina	185	8.8	10	207	11.9	8	396	17.0	10	484	25.5	10
North Dakota	6	3.7	—	8	4.8	—	12	7.0	36	3	3.5	—
Ohio	98	3.4	32	125	5.8	30	191	9.0	28	405	20.2	18
Oklahoma	40	6.7	16	48	8.8	19	79	7.8	33	151	18.3	24
Oregon	23	3.1	35	48	5.7	31	61	5.1	44	46	8.0	39
Pennsylvania	106	2.8	38	102	4.0	38	172	7.9	32	341	19.3	21
Puerto Rico	0	0.0	—	4	10.7	—	18	18.5	8	349	13.6	32
Rhode Island	16	5.3	21	10	4.5	—	15	7.1	35	25	17.4	25
South Carolina	64	6.9	14	99	11.7	9	158	13.5	12	214	21.0	16
South Dakota	7	3.6	—	2	1.1	—	7	4.1	—	9	8.1	—

Area of residence	Below federal poverty level (%)											
	Total											
	<6			6.00–9.99			10.00–16.99			≥17		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Tennessee	81	6.9	15	110	9.1	16	188	11.6	19	331	25.1	12
Texas	771	12.1	4	661	14.7	6	1,036	19.2	6	1,359	26.5	9
Utah	37	3.4	33	33	6.3	25	28	7.0	37	20	7.8	40
Vermont	1	0.9	—	1	0.5	—	3	2.1	—	3	4.5	—
Virginia	172	6.1	18	172	10.4	10	165	12.3	17	167	19.3	20
Washington	104	4.8	25	118	6.9	23	111	8.0	31	91	13.1	34
West Virginia	5	3.1	—	12	4.5	37	34	6.9	38	51	9.9	38
Wisconsin	34	2.0	39	50	3.8	41	60	6.2	40	91	15.8	29
Wyoming	1	0.8	—	2	1.6	—	3	2.3	—	0	0.0	—
Region of residence												
Northeast	692	4.1	—	717	6.6	—	1,082	11.4	—	1,820	23.0	—
Midwest	645	3.7	—	739	5.4	—	1,062	8.6	—	1,782	18.7	—
South	2,547	9.9	—	2,862	13.5	—	4,684	17.9	—	6,417	27.3	—
West	1,112	6.2	—	1,407	9.0	—	1,898	12.0	—	1,857	17.4	—
Total <sup>b</sup>	4,996	6.4	—	5,729	9.3	—	8,744	13.7	—	12,225	22.5	—

Abbreviation: SDOH, social determinants of health [footnotes only].

*Note.* Data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis and the proportion of residents in the census tract who were living below the U.S. poverty level at any time during the 12 months before the survey response (individuals aged 18 years and older). Rates are per 100,000 population. Numbers less than 12, and rates based on these numbers, should be interpreted with caution. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  .

<sup>a</sup> Based on rate. Ranks were not assigned to areas with rates that were based on reported numbers less than 12.  
<sup>b</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.

Table 5. Diagnoses of HIV infection among adults aged ≥18 years, by percentage with less than high school diploma, assigned sex at birth, and area of residence, 2021—census tract level, United States and Puerto Rico

Area of residence	Less than high school diploma (%)											
	Male											
	<5			5.00–8.99			9.00–15.99			≥16		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	65	19.3	11	92	26.4	6	127	22.5	13	142	23.4	26
Alaska	8	9.0	—	7	5.8	—	7	11.0	—	0	0.0	—
Arizona	121	16.0	14	92	14.3	19	127	22.8	12	210	27.9	18
Arkansas	38	24.0	6	43	17.8	14	77	17.4	23	69	24.8	25
California	467	13.4	18	435	15.8	16	681	22.2	15	1,818	31.3	13
Colorado	101	10.1	25	57	11.4	23	87	20.2	19	66	20.9	32
Connecticut	38	7.7	32	32	7.7	39	37	13.9	30	64	30.3	14
Delaware	12	10.7	23	12	12.4	—	23	20.2	18	10	20.4	—
District of Columbia	37	31.3	3	31	71.9	1	27	41.7	2	29	80.6	1



Area of residence	Less than high school diploma (%)											
	Male											
	<5			5.00–8.99			9.00–15.99			≥16		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Florida	425	20.7	8	549	27.6	3	819	35.8	3	1,177	59.5	2
Georgia	359	41.7	1	333	41.1	2	486	43.6	1	516	46.4	5
Hawaii	13	5.6	38	20	11.3	24	8	6.5	—	4	9.9	—
Idaho	13	7.3	33	10	4.7	—	9	4.6	—	9	9.8	—
Illinois	198	13.3	19	176	14.2	20	265	22.2	14	318	34.1	11
Indiana	65	11.9	21	76	11.0	25	127	15.0	28	119	26.5	21
Iowa	14	3.3	40	22	5.0	42	11	4.6	—	17	16.6	37
Kansas	43	10.1	26	17	6.1	40	23	9.8	38	37	22.6	27
Kentucky	52	16.4	13	50	15.4	18	91	16.2	25	78	15.7	38
Louisiana	81	31.0	4	77	26.5	5	177	33.6	4	268	41.7	6
Maine	11	5.7	—	7	3.2	—	5	4.3	—	0	0.0	—
Maryland	101	15.0	16	129	18.5	13	174	30.0	6	142	41.3	7
Massachusetts	59	5.6	39	57	8.1	37	65	12.9	32	88	20.3	33
Michigan	80	7.0	35	117	9.5	31	144	13.8	31	120	27.5	19
Minnesota	63	7.2	34	67	9.1	34	44	10.8	37	41	29.3	16
Mississippi	18	15.3	15	29	17.0	15	78	21.2	16	107	25.0	24
Missouri	63	9.9	27	68	10.4	28	112	16.2	26	75	22.3	28
Montana	8	4.3	—	7	4.7	—	1	1.2	—	1	10.4	—
Nebraska	11	4.2	—	23	10.3	30	27	18.3	22	18	18.4	34
Nevada	47	19.9	10	63	22.8	8	97	31.1	5	175	48.3	4
New Hampshire	10	4.1	—	8	4.1	—	4	4.5	—	1	3.9	—
New Jersey	100	8.6	30	112	10.9	26	173	25.1	10	326	53.0	3
New Mexico	10	6.4	—	19	12.7	21	34	15.0	29	23	8.6	41
New York	170	9.3	28	211	11.4	22	375	20.1	20	817	38.4	8
North Carolina	196	20.8	7	202	24.2	7	328	27.6	8	316	34.2	10
North Dakota	7	6.6	—	3	2.7	—	4	5.3	—	2	25.0	—
Ohio	118	9.2	29	148	10.8	27	197	17.1	24	178	27.9	17
Oklahoma	46	20.1	9	70	19.5	11	66	12.4	34	76	21.5	29
Oregon	48	10.2	24	46	9.5	32	38	7.7	41	25	12.3	39
Pennsylvania	94	6.2	37	134	8.6	36	167	12.9	33	173	26.9	20
Puerto Rico	15	32.7	2	20	26.8	4	87	28.0	7	175	20.9	31
Rhode Island	5	4.5	—	13	10.3	29	16	15.6	27	22	25.3	23
South Carolina	66	14.4	17	90	22.6	10	132	23.7	11	125	25.4	22
South Dakota	4	3.9	—	8	7.3	—	6	7.0	—	3	8.6	—
Tennessee	82	16.5	12	108	18.7	12	189	21.2	17	202	33.0	12
Texas	593	25.2	5	442	22.8	9	619	26.3	9	1,512	38.3	9
Utah	38	8.3	31	30	8.6	35	20	8.9	40	21	18.1	35
Vermont	2	2.0	—	1	1.0	—	4	6.7	—	1	80.3	—
Virginia	119	11.9	22	138	15.7	17	172	19.7	21	111	21.2	30
Washington	120	12.0	20	85	9.3	33	89	12.2	35	57	17.4	36
West Virginia	7	6.9	—	12	7.8	38	32	11.3	36	15	8.8	40
Wisconsin	54	6.5	36	49	6.0	41	46	9.7	39	47	30.2	15
Wyoming	1	1.3	—	4	4.8	—	0	0.0	—	0	0.0	—

Area of residence	Less than high school diploma (%)											
	Male											
	<5			5.00–8.99			9.00–15.99			≥16		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Region of residence												
Northeast	489	7.3	—	575	9.3	—	846	17.0	—	1,492	35.9	—
Midwest	720	8.9	—	774	9.8	—	1,006	15.3	—	975	27.9	—
South	2,297	21.7	—	2,407	23.7	—	3,617	27.2	—	4,895	37.7	—
West	995	12.0	—	875	12.8	—	1,198	18.2	—	2,409	29.0	—
Total <sup>b</sup>	4,516	13.4	—	4,651	14.9	—	6,754	21.3	—	9,946	33.4	—

Area of residence	Less than high school diploma (%)											
	Female											
	<5			5.00–8.99			9.00–15.99			≥16		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	15	4.0	2	13	3.4	12	36	5.8	11	48	7.5	19
Alaska	1	1.3	—	4	3.5	—	0	0.0	—	0	0.0	—
Arizona	14	1.8	10	18	2.7	16	14	2.5	30	29	4.0	31
Arkansas	5	2.9	—	14	5.4	5	24	5.1	15	12	4.3	30
California	57	1.6	12	57	2.0	21	109	3.4	27	261	4.6	29
Colorado	12	1.2	16	7	1.4	—	9	2.1	—	17	5.9	25
Connecticut	4	0.8	—	14	3.1	14	9	3.1	—	21	9.6	9
Delaware	3	2.4	—	4	3.7	—	4	3.2	—	5	10.7	—
District of Columbia	7	5.3	—	4	7.4	—	17	24.7	1	10	23.8	—
Florida	63	2.8	8	109	5.1	6	234	9.5	4	350	17.9	1
Georgia	48	5.3	1	94	10.3	1	137	11.1	2	148	13.0	5
Hawaii	5	2.2	—	2	1.1	—	2	1.6	—	1	2.5	—
Idaho	1	0.6	—	4	1.9	—	2	1.1	—	0	0.0	—
Illinois	20	1.3	15	26	2.0	22	67	5.2	14	65	7.1	22
Indiana	9	1.6	—	9	1.3	—	35	4.0	23	42	9.1	11
Iowa	5	1.1	—	2	0.4	—	1	0.4	—	4	3.9	—
Kansas	7	1.6	—	3	1.1	—	8	3.4	—	6	3.8	—
Kentucky	8	2.4	—	7	2.0	—	21	3.6	25	24	4.7	27
Louisiana	10	3.5	—	27	8.5	3	56	9.8	3	102	15.5	3
Maine	0	0.0	—	2	0.9	—	0	0.0	—	1	9.1	—
Maryland	25	3.4	5	47	6.2	4	47	7.4	6	56	16.1	2
Massachusetts	20	1.7	11	14	1.9	23	37	7.0	8	41	8.9	14
Michigan	9	0.8	—	20	1.6	25	29	2.7	29	34	7.7	18
Minnesota	13	1.4	14	12	1.6	24	19	4.6	17	15	11.0	6
Mississippi	3	2.3	—	17	9.0	2	27	6.7	9	40	8.8	15
Missouri	7	1.0	—	7	1.0	—	12	1.7	31	16	4.7	28
Montana	0	0.0	—	1	0.7	—	0	0.0	—	1	10.2	—
Nebraska	1	0.4	—	3	1.3	—	6	4.1	—	7	7.4	—
Nevada	2	0.8	—	5	1.7	—	22	7.3	7	25	7.2	21
New Hampshire	1	0.4	—	2	1.0	—	2	2.4	—	0	0.0	—
New Jersey	14	1.1	17	41	3.7	10	63	8.6	5	93	14.9	4
New Mexico	2	1.2	—	1	0.6	—	2	0.8	—	7	2.6	—



Area of residence	Less than high school diploma (%)											
	Female											
	<5			5.00–8.99			9.00–15.99			≥16		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
New York	20	1.0	18	47	2.4	18	88	4.4	19	214	9.4	10
North Carolina	31	3.1	7	40	4.4	8	73	5.7	12	87	8.9	13
North Dakota	6	6.0	—	7	6.6	—	0	0.0	—	0	0.0	—
Ohio	21	1.5	13	37	2.5	17	56	4.6	18	64	10.0	8
Oklahoma	6	2.5	—	14	3.7	11	17	3.1	28	23	6.8	23
Oregon	2	0.4	—	5	1.0	—	7	1.4	—	7	3.6	—
Pennsylvania	16	1.0	19	36	2.2	19	55	4.0	22	46	7.3	20
Puerto Rico	2	3.6	—	7	7.6	—	14	3.7	24	51	5.5	26
Rhode Island	0	0.0	—	3	2.2	—	4	3.7	—	3	3.3	—
South Carolina	19	3.9	3	19	4.3	9	30	4.9	16	54	10.4	7
South Dakota	1	1.0	—	1	0.9	—	2	2.4	—	0	0.0	—
Tennessee	18	3.3	6	17	2.7	15	41	4.3	20	54	8.5	17
Texas	87	3.6	4	100	4.9	7	137	5.6	13	337	8.7	16
Utah	4	0.9	—	1	0.3	—	1	0.5	—	3	2.7	—
Vermont	0	0.0	—	0	0.0	—	0	0.0	—	0	0.0	—
Virginia	21	2.0	9	31	3.3	13	38	4.1	21	46	8.9	12
Washington	9	0.9	—	19	2.1	20	25	3.5	26	20	6.5	24
West Virginia	2	1.9	—	9	5.7	—	17	5.9	10	8	4.7	—
Wisconsin	9	1.1	—	9	1.1	—	11	2.4	—	10	6.3	—
Wyoming	0	0.0	—	0	0.0	—	1	1.9	—	0	0.0	—
Region of residence												
Northeast	75	1.0	—	159	2.4	—	258	4.9	—	419	9.6	—
Midwest	108	1.3	—	136	1.7	—	246	3.6	—	263	7.5	—
South	371	3.3	—	566	5.2	—	956	6.7	—	1,404	10.7	—
West	109	1.3	—	124	1.8	—	194	2.9	—	371	4.6	—
Total <sup>b</sup>	665	1.9	—	992	3.0	—	1,668	5.0	—	2,508	8.4	—

Area of residence	Less than high school diploma (%)											
	Total											
	<5			5.00–8.99			9.00–15.99			≥16		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	80	11.3	9	105	14.3	6	163	13.7	12	190	15.3	25
Alaska	9	5.4	—	11	4.7	—	7	5.9	—	0	0.0	—
Arizona	135	8.8	16	110	8.3	19	141	12.5	17	239	16.2	23
Arkansas	43	13.0	6	57	11.4	13	101	11.1	23	81	14.5	27
California	524	7.4	18	492	8.8	17	790	12.6	15	2,079	18.0	17
Colorado	113	5.7	26	64	6.4	27	96	11.2	22	83	13.8	31
Connecticut	42	4.1	34	46	5.3	36	46	8.3	32	85	19.8	14
Delaware	15	6.4	23	16	7.8	21	27	11.3	21	15	15.6	24
District of Columbia	44	17.6	2	35	36.1	1	44	32.9	1	39	50.0	1
Florida	488	11.4	8	658	16.0	5	1,053	22.2	3	1,527	38.8	2
Georgia	407	23.1	1	427	24.8	2	623	26.5	2	664	29.5	4
Hawaii	18	3.9	35	22	6.2	28	10	4.0	—	5	6.2	—

Area of residence	Less than high school diploma (%)											
	Total											
	<5			5.00–8.99			9.00–15.99			≥16		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Idaho	14	3.9	36	14	3.3	43	11	2.9	—	9	4.9	—
Illinois	218	7.1	19	202	7.9	20	332	13.4	14	383	20.8	11
Indiana	74	6.6	21	85	6.0	30	162	9.4	28	161	17.6	19
Iowa	19	2.2	43	24	2.7	44	12	2.5	42	21	10.3	38
Kansas	50	5.7	25	20	3.6	41	31	6.6	38	43	13.4	33
Kentucky	60	9.2	13	57	8.5	18	112	9.8	26	102	10.2	39
Louisiana	91	16.6	4	104	17.1	3	233	21.2	4	370	28.4	6
Maine	11	2.7	—	9	2.0	—	5	2.1	—	1	4.6	—
Maryland	126	9.0	15	176	12.1	12	221	18.1	6	198	28.6	5
Massachusetts	79	3.6	40	71	4.9	39	102	9.9	25	129	14.4	28
Michigan	89	3.8	37	137	5.5	34	173	8.1	33	154	17.5	20
Minnesota	76	4.3	33	79	5.4	35	63	7.7	36	56	20.3	13
Mississippi	21	8.4	17	46	12.8	10	105	13.6	13	147	16.7	22
Missouri	70	5.3	27	75	5.6	33	124	8.8	29	91	13.4	32
Montana	8	2.2	—	8	2.7	—	1	0.6	—	2	10.3	—
Nebraska	12	2.3	42	26	5.7	31	33	11.3	20	25	13.0	34
Nevada	49	10.2	11	68	12.1	11	119	19.5	5	200	28.1	7
New Hampshire	11	2.3	—	10	2.5	—	6	3.5	—	1	1.9	—
New Jersey	114	4.8	31	153	7.2	22	236	16.6	7	419	33.8	3
New Mexico	12	3.8	38	20	6.5	26	36	7.8	35	30	5.6	42
New York	190	5.0	30	258	6.8	24	463	11.9	18	1,031	23.4	9
North Carolina	227	11.6	7	242	13.9	7	401	16.2	8	403	21.2	10
North Dakota	13	6.3	24	10	4.6	—	4	2.7	—	2	12.4	—
Ohio	139	5.2	29	185	6.5	25	253	10.7	24	242	19.0	15
Oklahoma	52	11.0	10	84	11.3	14	83	7.7	37	99	14.3	29
Oregon	50	5.2	28	51	5.2	38	45	4.5	41	32	8.1	40
Pennsylvania	110	3.5	41	170	5.3	37	222	8.3	31	219	17.2	21
Puerto Rico	17	16.8	3	27	16.2	4	101	14.8	10	226	12.8	35
Rhode Island	5	2.2	—	16	6.1	29	20	9.5	27	25	14.1	30
South Carolina	85	9.0	14	109	13.0	9	162	13.8	11	179	17.7	18
South Dakota	5	2.4	—	9	4.1	—	8	4.8	—	3	4.4	—
Tennessee	100	9.6	12	125	10.4	15	230	12.5	16	256	20.6	12
Texas	680	14.2	5	542	13.6	8	756	15.7	9	1,849	23.6	8
Utah	42	4.6	32	31	4.4	40	21	4.7	40	24	10.5	37
Vermont	2	1.0	—	1	0.5	—	4	3.3	—	1	37.6	—
Virginia	140	6.8	20	169	9.4	16	210	11.7	19	157	15.1	26
Washington	129	6.4	22	104	5.7	32	114	7.8	34	77	12.1	36
West Virginia	9	4.3	—	21	6.8	23	49	8.5	30	23	6.7	41
Wisconsin	63	3.7	39	58	3.5	42	57	6.0	39	57	18.2	16
Wyoming	1	0.6	—	4	2.4	—	1	0.9	—	0	0.0	—
Region of residence												
Northeast	564	4.1	—	734	5.7	—	1,104	10.7	—	1,911	22.5	—
Midwest	828	5.0	—	910	5.6	—	1,252	9.3	—	1,238	17.7	—

Area of residence	Less than high school diploma (%)											
	Total											
	<5			5.00–8.99			9.00–15.99			≥16		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
South	2,668	12.2	—	2,973	14.1	—	4,573	16.6	—	6,299	24.1	—
West	1,104	6.6	—	999	7.2	—	1,392	10.5	—	2,780	16.9	—
Total <sup>b</sup>	5,181	7.5	—	5,643	8.8	—	8,422	12.9	—	12,454	20.8	—

Abbreviation: SDOH, social determinants of health [footnotes only].

*Note.* Data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis and the proportion of residents in the census tract with less than a high school diploma (individuals aged 18 years and older). Rates are per 100,000 population. Numbers less than 12, and rates based on these numbers, should be interpreted with caution. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  .

<sup>a</sup> Based on rate. Ranks were not assigned to areas with rates that were based on reported numbers less than 12.  
<sup>b</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.

Table 6. Diagnoses of HIV infection among adults aged ≥18 years, by median household income, assigned sex at birth, and area of residence, 2021—census tract level, United States and Puerto Rico

Area of residence	Median household income (U.S. \$)											
	Male											
	<49,000			49,000–65,999			66,000–89,999			≥90,000		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	229	31.7	18	100	18.7	19	73	18.9	10	22	10.7	14
Alaska	1	6.1	—	7	12.4	—	8	7.0	—	6	5.9	—
Arizona	192	28.9	24	159	23.6	11	119	17.6	13	77	11.5	13
Arkansas	122	24.9	27	59	15.8	22	32	18.0	11	14	18.3	4
California	670	39.6	13	851	32.1	8	924	23.2	7	946	14.3	8
Colorado	52	21.7	32	86	18.4	20	100	15.3	18	73	8.4	22
Connecticut	55	33.5	15	40	21.3	14	37	10.9	24	39	5.7	29
Delaware	15	40.1	12	19	19.1	18	18	13.3	20	5	5.1	—
District of Columbia	22	59.3	4	21	103.7	1	25	57.9	1	55	34.9	1
Florida	1,276	59.4	3	852	34.9	5	592	27.6	4	232	15.2	7
Georgia	658	64.1	2	452	45.5	2	356	37.9	2	218	23.8	2
Hawaii	2	6.2	—	5	7.4	—	18	10.5	27	19	6.4	26
Idaho	17	12.1	39	8	3.3	—	10	4.8	—	6	6.8	—
Illinois	330	40.8	10	249	22.2	12	216	15.6	17	157	10.3	16
Indiana	194	31.6	19	91	12.3	28	75	9.4	30	25	6.8	24
Iowa	20	11.2	43	21	4.7	40	18	4.3	41	5	3.0	—
Kansas	43	17.3	37	33	9.1	37	19	7.6	37	25	10.4	15
Kentucky	124	19.2	34	96	18.3	21	37	11.6	22	12	6.1	27
Louisiana	352	51.1	6	145	31.0	9	58	16.5	15	44	23.2	3
Maine	3	2.9	—	9	4.9	—	9	4.8	—	2	3.2	—
Maryland	71	42.5	9	139	43.2	3	160	30.9	3	176	13.8	9



Area of residence	Median household income (U.S. \$)											
	Male											
	<49,000			49,000–65,999			66,000–89,999			≥90,000		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Massachusetts	59	23.0	31	40	12.1	30	71	10.9	25	98	6.8	25
Michigan	222	24.4	29	113	10.0	34	84	8.1	36	36	4.8	31
Minnesota	38	19.1	35	70	14.0	26	66	9.0	33	40	5.5	30
Mississippi	156	29.5	23	47	14.8	24	17	10.7	26	9	13.3	—
Missouri	156	24.6	28	87	12.2	29	57	9.9	28	18	4.6	33
Montana	5	4.9	—	8	5.0	—	3	2.2	—	1	3.3	—
Nebraska	22	20.2	33	34	12.7	27	15	7.5	38	8	5.3	—
Nevada	136	52.0	5	108	36.8	4	93	24.9	6	45	17.5	6
New Hampshire	1	2.6	—	7	7.5	—	6	3.2	—	8	3.5	—
New Jersey	235	65.1	1	149	34.4	6	172	20.8	9	153	8.3	23
New Mexico	41	11.7	41	24	12.1	32	14	8.6	34	7	8.7	—
New York	547	45.2	7	294	19.8	15	358	17.8	12	350	12.3	12
North Carolina	456	40.2	11	310	25.4	10	186	22.1	8	88	13.3	11
North Dakota	4	9.7	—	8	9.7	—	3	2.4	—	1	1.9	—
Ohio	350	30.3	21	150	12.1	31	100	8.1	35	38	4.7	32
Oklahoma	135	25.7	25	53	11.8	33	46	14.3	19	23	13.4	10
Oregon	26	11.4	42	44	9.3	36	52	9.2	32	34	9.0	20
Pennsylvania	261	29.5	22	142	10.0	35	107	7.5	39	55	4.5	34
Puerto Rico	286	23.6	30	8	22.1	—	2	17.6	—	0	0.0	—
Rhode Island	23	33.5	16	11	15.4	—	13	9.3	31	9	6.2	—
South Carolina	203	33.3	17	131	21.4	13	55	12.9	21	22	9.2	19
South Dakota	8	11.2	—	7	6.3	—	5	4.2	—	1	3.2	—
Tennessee	304	35.9	14	149	19.2	17	91	16.5	16	35	8.9	21
Texas	1,119	44.0	8	841	33.5	7	703	26.7	5	499	17.7	5
Utah	12	12.1	40	36	15.1	23	36	9.4	29	25	5.8	28
Vermont	2	5.4	—	4	5.7	—	1	0.9	—	1	2.3	—
Virginia	147	31.4	20	135	19.5	16	121	17.0	14	134	9.7	18
Washington	49	18.6	36	79	14.4	25	97	11.1	23	125	9.8	17
West Virginia	40	12.4	38	18	8.0	38	6	4.6	—	2	7.9	—
Wisconsin	79	25.3	26	55	7.5	39	43	5.4	40	19	4.4	35
Wyoming	0	0.0	—	2	2.6	—	3	3.5	—	0	0.0	—
Region of residence												
Northeast	1,186	37.9	—	696	16.3	—	774	13.1	—	715	8.4	—
Midwest	1,466	27.8	—	918	12.3	—	701	9.2	—	373	6.6	—
South	5,429	42.0	—	3,567	28.4	—	2,576	23.9	—	1,590	15.3	—
West	1,203	29.2	—	1,417	23.1	—	1,477	17.6	—	1,364	12.3	—
Total <sup>b</sup>	9,570	35.9	—	6,606	21.7	—	5,530	16.9	—	4,042	11.3	—

Area of residence	Median household income (U.S. \$)											
	Female											
	<49,000			49,000–65,999			66,000–89,999			≥90,000		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	68	8.4	18	29	5.0	12	9	2.2	—	6	2.8	—



Area of residence	Median household income (U.S. \$)											
	Female											
	<49,000			49,000–65,999			66,000–89,999			≥90,000		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alaska	0	0.0	—	3	6.6	—	1	1.0	—	1	1.0	—
Arizona	27	3.9	34	18	2.7	26	20	2.9	14	10	1.5	—
Arkansas	32	6.1	27	13	3.4	24	8	4.4	—	2	2.4	—
California	123	7.0	24	110	4.1	19	124	3.0	12	124	1.8	10
Colorado	12	5.1	32	16	3.5	21	11	1.7	—	6	0.7	—
Connecticut	18	9.9	10	16	7.6	6	5	1.4	—	9	1.3	—
Delaware	6	13.9	—	5	4.4	—	3	2.1	—	2	1.9	—
District of Columbia	16	32.0	1	8	32.1	—	4	9.0	—	10	5.8	—
Florida	384	16.7	4	226	8.8	5	94	4.2	8	47	3.0	4
Georgia	202	17.8	3	107	9.9	3	74	7.4	2	41	4.3	2
Hawaii	1	3.4	—	1	1.5	—	0	0.0	—	6	2.0	—
Idaho	4	2.8	—	0	0.0	—	2	0.9	—	1	1.2	—
Illinois	87	9.9	9	49	4.2	18	25	1.7	19	17	1.1	12
Indiana	61	9.2	15	20	2.6	27	9	1.1	—	5	1.3	—
Iowa	3	1.6	—	5	1.1	—	4	1.0	—	0	0.0	—
Kansas	13	5.3	29	6	1.6	—	3	1.2	—	2	0.8	—
Kentucky	35	5.1	31	15	2.7	25	6	1.8	—	4	2.0	—
Louisiana	124	16.3	5	43	8.9	4	20	5.3	3	7	3.5	—
Maine	2	1.8	—	1	0.5	—	0	0.0	—	0	0.0	—
Maryland	23	11.7	6	39	10.7	2	48	8.4	1	64	4.7	1
Massachusetts	31	10.7	7	18	5.1	11	24	3.5	11	39	2.5	5
Michigan	62	6.3	25	20	1.7	30	7	0.7	—	2	0.3	—
Minnesota	17	8.2	21	19	3.7	20	17	2.3	16	5	0.7	—
Mississippi	55	9.3	14	22	6.5	7	7	4.3	—	2	2.7	—
Missouri	25	3.6	35	10	1.3	—	4	0.7	—	3	0.7	—
Montana	1	1.0	—	1	0.6	—	0	0.0	—	0	0.0	—
Nebraska	8	7.1	—	4	1.5	—	3	1.5	—	2	1.3	—
Nevada	24	9.4	13	13	4.5	15	14	3.7	10	3	1.1	—
New Hampshire	0	0.0	—	0	0.0	—	3	1.6	—	2	0.8	—
New Jersey	78	19.1	2	50	10.8	1	44	5.0	4	37	1.9	9
New Mexico	8	2.2	—	3	1.4	—	1	0.6	—	0	0.0	—
New York	139	9.9	11	74	4.7	14	95	4.4	6	60	2.0	8
North Carolina	120	9.6	12	69	5.3	9	27	3.0	13	15	2.1	6
North Dakota	0	0.0	—	6	7.5	—	5	4.3	—	2	4.0	—
Ohio	100	7.9	22	45	3.4	22	24	1.9	18	9	1.1	—
Oklahoma	33	6.2	26	20	4.3	17	2	0.6	—	5	2.8	—
Oregon	2	0.8	—	8	1.7	—	7	1.2	—	4	1.0	—
Pennsylvania	82	8.2	20	38	2.6	28	22	1.5	20	11	0.9	—
Puerto Rico	72	5.2	30	1	2.3	—	1	8.2	—	0	0.0	—
Rhode Island	2	2.6	—	2	2.6	—	5	3.4	—	1	0.7	—
South Carolina	58	8.6	17	34	5.1	10	20	4.4	7	10	3.9	—
South Dakota	2	2.9	—	1	0.9	—	1	0.8	—	0	0.0	—
Tennessee	80	8.7	16	28	3.4	23	16	2.7	15	5	1.2	—

Area of residence	Median household income (U.S. \$)											
	Female											
	<49,000			49,000–65,999			66,000–89,999			≥90,000		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Texas	281	10.6	8	157	6.1	8	132	4.9	5	91	3.2	3
Utah	1	1.0	—	2	0.9	—	3	0.8	—	3	0.7	—
Vermont	0	0.0	—	0	0.0	—	0	0.0	—	0	0.0	—
Virginia	42	8.3	19	34	4.7	13	31	4.1	9	29	2.0	7
Washington	14	5.4	28	24	4.4	16	20	2.3	17	15	1.2	11
West Virginia	26	7.8	23	8	3.5	—	2	1.5	—	0	0.0	—
Wisconsin	14	4.1	33	15	2.0	29	8	1.0	—	2	0.5	—
Wyoming	0	0.0	—	0	0.0	—	1	1.3	—	0	0.0	—
Region of residence												
Northeast	352	9.9	—	199	4.4	—	198	3.2	—	159	1.8	—
Midwest	392	6.9	—	200	2.6	—	110	1.4	—	49	0.9	—
South	1,585	11.3	—	857	6.5	—	503	4.5	—	340	3.1	—
West	217	5.2	—	199	3.2	—	204	2.4	—	173	1.5	—
Total <sup>b</sup>	2,618	9.1	—	1,456	4.6	—	1,016	3.0	—	721	2.0	—

Area of residence	Median household income (U.S. \$)											
	Total											
	<49,000			49,000–65,999			66,000–89,999			≥90,000		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	297	19.4	18	129	11.6	17	82	10.3	14	28	6.7	13
Alaska	1	3.2	—	10	9.8	—	9	4.1	—	7	3.5	—
Arizona	219	16.2	25	177	13.1	12	139	10.2	15	87	6.4	15
Arkansas	154	15.2	27	72	9.5	23	40	11.1	10	16	10.0	5
California	793	23.1	13	961	17.9	9	1,048	13.0	7	1,070	8.0	9
Colorado	64	13.4	34	102	11.0	20	111	8.5	18	79	4.6	24
Connecticut	73	21.1	15	56	14.0	11	42	6.0	27	48	3.4	28
Delaware	21	26.1	9	24	11.3	18	21	7.5	20	7	3.4	—
District of Columbia	38	43.6	1	29	64.2	1	29	33.0	1	65	19.7	1
Florida	1,660	37.3	4	1,078	21.5	5	686	15.6	5	279	9.0	8
Georgia	860	39.8	3	559	27.0	2	430	22.1	2	259	13.8	2
Hawaii	3	4.9	—	6	4.5	—	18	5.2	31	25	4.2	25
Idaho	21	7.4	39	8	1.7	—	12	2.8	—	7	4.1	—
Illinois	417	24.7	11	298	12.9	14	241	8.5	17	174	5.6	17
Indiana	255	20.0	17	111	7.3	32	84	5.2	30	30	4.0	26
Iowa	23	6.3	42	26	2.9	42	22	2.6	41	5	1.5	—
Kansas	56	11.3	37	39	5.3	40	22	4.3	38	27	5.6	18
Kentucky	159	11.9	36	111	10.4	22	43	6.7	25	16	4.0	27
Louisiana	476	32.9	5	188	19.8	7	78	10.7	12	51	13.0	3
Maine	5	2.3	—	10	2.6	—	9	2.4	—	2	1.5	—
Maryland	94	25.8	10	178	26.0	3	208	19.2	3	240	9.1	7
Massachusetts	90	16.5	24	58	8.4	28	95	7.1	23	137	4.6	23
Michigan	284	14.9	28	133	5.8	37	91	4.3	39	38	2.5	34
Minnesota	55	13.6	32	89	8.8	25	83	5.7	28	45	3.1	30

Area of residence	Median household income (U.S. \$)											
	Total											
	<49,000			49,000–65,999			66,000–89,999			≥90,000		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Mississippi	211	18.8	20	69	10.5	21	24	7.4	21	11	7.8	—
Missouri	181	13.7	31	97	6.6	34	61	5.3	29	21	2.6	33
Montana	6	3.0	—	9	2.9	—	3	1.1	—	1	1.6	—
Nebraska	30	13.5	33	38	7.0	33	18	4.5	36	10	3.3	—
Nevada	160	31.0	6	121	20.8	6	107	14.3	6	48	9.3	6
New Hampshire	1	1.3	—	7	3.7	—	9	2.4	—	10	2.1	—
New Jersey	313	40.7	2	199	22.2	4	216	12.6	8	190	5.0	20
New Mexico	49	6.9	40	27	6.6	35	15	4.5	35	7	4.3	—
New York	686	26.2	8	368	12.0	15	453	10.9	11	410	7.0	12
North Carolina	576	24.1	12	379	15.0	10	213	12.3	9	103	7.5	11
North Dakota	4	5.0	—	14	8.6	27	8	3.3	—	3	2.9	—
Ohio	450	18.6	21	195	7.6	31	124	5.0	34	47	2.9	31
Oklahoma	168	15.9	26	73	8.0	30	48	7.3	22	28	8.0	10
Oregon	28	6.0	43	52	5.5	39	59	5.2	32	38	5.0	21
Pennsylvania	343	18.2	22	180	6.2	36	129	4.4	37	66	2.7	32
Puerto Rico	358	13.8	30	9	11.2	—	3	12.7	—	0	0.0	—
Rhode Island	25	17.3	23	13	8.7	26	18	6.2	26	10	3.4	—
South Carolina	261	20.3	16	165	12.9	13	75	8.5	19	32	6.5	14
South Dakota	10	7.1	—	8	3.7	—	6	2.5	—	1	1.6	—
Tennessee	384	21.8	14	177	11.1	19	107	9.4	16	40	4.9	22
Texas	1,400	26.9	7	998	19.7	8	835	15.7	4	590	10.3	4
Utah	13	6.6	41	38	8.1	29	39	5.1	33	28	3.3	29
Vermont	2	2.6	—	4	2.8	—	1	0.5	—	1	1.1	—
Virginia	189	19.4	19	169	12.0	16	152	10.4	13	163	5.8	16
Washington	63	12.0	35	103	9.4	24	117	6.7	24	140	5.5	19
West Virginia	66	10.0	38	26	5.7	38	8	3.0	—	2	3.9	—
Wisconsin	93	14.3	29	70	4.8	41	51	3.2	40	21	2.5	35
Wyoming	0	0.0	—	2	1.3	—	4	2.4	—	0	0.0	—
Region of residence												
Northeast	1,538	23.0	—	895	10.2	—	972	8.0	—	874	5.0	—
Midwest	1,858	16.9	—	1,118	7.4	—	811	5.2	—	422	3.7	—
South	7,014	26.1	—	4,424	17.1	—	3,079	13.9	—	1,930	9.1	—
West	1,420	17.1	—	1,616	13.1	—	1,681	9.9	—	1,537	6.9	—
Total <sup>b</sup>	12,188	22.0	—	8,062	13.0	—	6,546	9.8	—	4,763	6.6	—

Abbreviation: SDOH, social determinants of health [footnotes only].

*Note.* Data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis and the median income (based on all age groups) for a household within the census tract during the 12 months before the survey response. Rates are per 100,000 population. Numbers less than 12, and rates based on these numbers, should be interpreted with caution. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  .

<sup>a</sup> Based on rate. Ranks were not assigned to areas with rates that were based on reported numbers less than 12.  
<sup>b</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.

Table 7. Diagnoses of HIV infection among adults aged ≥18 years, by percentage without health insurance, assigned sex at birth, and area of residence, 2021—census tract level, United States and Puerto Rico

Area of residence	Without health insurance (%)											
	Male											
	<4			4.00–7.99			8.00–13.99			≥14		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	35	17.5	6	87	19.9	8	134	21.5	17	170	28.5	20
Alaska	2	10.4	—	3	7.2	—	9	9.1	—	8	6.1	—
Arizona	49	9.1	24	98	16.0	15	159	20.6	19	243	31.6	15
Arkansas	23	16.4	8	53	15.5	19	75	18.0	25	76	34.4	14
California	556	12.7	13	905	20.5	7	975	27.4	8	965	36.0	10
Colorado	44	7.9	26	82	12.2	25	88	14.6	32	97	24.2	26
Connecticut	45	6.4	34	40	10.5	33	45	27.0	9	41	30.2	18
Delaware	13	10.0	18	21	15.8	17	22	23.6	15	1	6.3	—
District of Columbia	64	38.6	1	43	61.5	1	16	64.5	1	1	63.3	—
Florida	98	13.7	11	237	16.7	12	761	29.9	6	1,874	51.7	3
Georgia	95	27.6	2	194	34.6	2	397	37.6	3	1,008	52.1	2
Hawaii	19	6.2	35	20	9.9	35	4	7.2	—	2	23.7	—
Idaho	1	1.7	—	6	4.1	—	15	6.2	42	19	8.3	37
Illinois	159	10.7	17	233	15.4	20	286	26.3	10	279	35.9	11
Indiana	42	7.9	27	100	11.1	28	136	18.4	23	109	31.0	17
Iowa	22	4.2	38	21	4.8	42	12	6.3	41	9	16.1	—
Kansas	16	7.1	31	34	10.6	32	27	8.7	38	43	17.6	32
Kentucky	58	10.0	19	101	15.8	16	84	22.3	16	28	28.3	21
Louisiana	63	24.3	3	134	26.9	3	231	37.9	2	175	49.7	5
Maine	7	7.3	—	6	3.3	—	9	4.3	—	1	2.0	—
Maryland	156	16.6	7	171	23.0	4	109	30.1	5	110	46.8	7
Massachusetts	156	7.9	28	77	13.9	22	28	20.5	20	8	27.7	—
Michigan	127	9.2	21	143	9.5	37	145	18.1	24	46	27.1	23
Minnesota	55	5.5	37	90	11.3	26	52	17.4	29	18	28.2	22
Mississippi	14	23.1	4	11	8.2	—	56	17.4	28	151	26.7	25
Missouri	29	7.4	30	54	9.9	36	93	12.8	34	142	21.9	28
Montana	1	2.4	—	9	5.1	—	7	4.4	—	0	0.0	—
Nebraska	8	5.2	—	21	8.7	38	25	12.4	35	25	19.2	31
Nevada	21	15.7	9	58	20.8	6	98	26.1	11	205	51.5	4
New Hampshire	3	1.8	—	11	5.3	—	9	5.6	—	0	0.0	—
New Jersey	119	9.1	23	94	10.9	30	164	26.0	12	334	48.9	6
New Mexico	7	5.1	—	27	13.3	23	29	12.2	36	23	10.4	36
New York	378	11.4	15	517	22.3	5	453	33.0	4	223	34.9	13
North Carolina	56	13.6	12	158	19.5	10	329	25.2	13	498	36.7	9
North Dakota	3	4.7	—	4	3.2	—	8	9.3	—	1	3.6	—
Ohio	132	9.1	22	203	12.6	24	192	18.6	22	114	31.4	16
Oklahoma	8	12.1	—	28	16.0	14	56	14.5	33	166	19.7	30
Oregon	28	7.8	29	72	10.8	31	39	8.6	39	18	10.8	35



Area of residence	Without health insurance (%)											
	Male											
	<4			4.00–7.99			8.00–13.99			≥14		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Pennsylvania	138	6.5	33	195	11.3	27	152	19.1	21	83	23.3	27
Puerto Rico	32	17.8	5	98	16.7	11	115	27.9	7	52	60.8	1
Rhode Island	24	10.8	16	14	11.0	29	11	20.9	—	7	30.7	—
South Carolina	24	12.6	14	58	14.2	21	142	21.4	18	189	29.8	19
South Dakota	0	0.0	—	6	4.9	—	7	6.6	—	8	12.4	—
Tennessee	21	8.4	25	92	15.6	18	172	17.9	27	295	38.1	8
Texas	88	13.9	10	242	19.7	9	527	24.3	14	2,309	35.3	12
Utah	9	4.0	—	28	8.6	39	29	8.6	40	43	16.8	33
Vermont	1	0.9	—	5	4.1	—	2	7.4	—	0	0.0	—
Virginia	52	6.9	32	171	16.5	13	166	18.0	26	151	27.0	24
Washington	84	9.7	20	107	9.9	34	113	15.6	30	47	15.5	34
West Virginia	10	8.0	—	25	7.8	40	26	12.2	37	5	10.2	—
Wisconsin	53	5.9	36	57	6.6	41	58	15.1	31	28	21.7	29
Wyoming	0	0.0	—	0	0.0	—	2	2.0	—	3	4.0	—
Region of residence												
Northeast	871	8.7	—	959	14.8	—	873	24.6	—	697	36.0	—
Midwest	646	7.9	—	966	10.8	—	1,041	17.5	—	822	27.2	—
South	878	14.7	—	1,826	19.1	—	3,303	25.3	—	7,207	39.2	—
West	821	10.8	—	1,415	16.0	—	1,567	20.3	—	1,673	29.4	—
Total <sup>b</sup>	3,248	10.2	—	5,264	15.3	—	6,899	22.5	—	10,451	35.9	—



Area of residence	Without health insurance (%)											
	Female											
	<4			4.00–7.99			8.00–13.99			≥14		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	8	3.7	—	19	4.0	11	30	4.4	16	55	8.4	16
Alaska	0	0.0	—	0	0.0	—	1	1.1	—	4	3.5	—
Arizona	8	1.4	—	18	2.8	21	14	1.8	26	35	4.6	26
Arkansas	6	4.0	—	9	2.5	—	18	4.0	19	22	9.8	9
California	76	1.7	11	141	3.1	16	145	4.0	20	122	4.6	27
Colorado	2	0.4	—	12	1.8	28	11	1.9	—	20	5.3	24
Connecticut	10	1.4	—	17	4.2	10	8	4.3	—	13	9.2	13
Delaware	2	1.4	—	4	2.8	—	9	8.9	—	1	6.1	—
District of Columbia	22	11.8	1	14	17.5	1	1	3.6	—	1	58.6	—
Florida	16	2.0	6	45	3.0	18	182	6.7	6	513	13.7	4
Georgia	13	3.7	3	31	5.2	5	106	9.1	3	277	13.3	6
Hawaii	8	2.7	—	1	0.5	—	1	1.8	—	0	0.0	—
Idaho	0	0.0	—	0	0.0	—	5	2.1	—	2	0.9	—
Illinois	20	1.3	14	38	2.4	25	66	5.6	10	54	7.0	20
Indiana	5	0.9	—	29	3.1	15	24	3.1	25	37	10.1	8
Iowa	2	0.4	—	6	1.4	—	2	1.1	—	2	3.7	—
Kansas	2	0.9	—	5	1.5	—	5	1.6	—	12	5.0	25
Kentucky	11	1.8	—	17	2.5	24	22	5.6	11	10	9.7	—

Area of residence	Without health insurance (%)											
	Female											
	<4			4.00–7.99			8.00–13.99			≥14		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Louisiana	19	7.0	2	38	7.0	3	82	12.5	1	56	15.5	2
Maine	0	0.0	—	1	0.5	—	1	0.5	—	1	2.1	—
Maryland	29	2.9	5	66	8.0	2	39	9.7	2	41	17.2	1
Massachusetts	62	2.9	4	36	6.1	4	10	7.2	—	4	14.2	—
Michigan	17	1.2	15	33	2.1	26	31	3.7	22	11	6.3	—
Minnesota	11	1.1	—	23	2.9	20	19	6.4	7	6	10.0	—
Mississippi	3	4.4	—	6	4.1	—	20	5.7	8	58	9.4	11
Missouri	1	0.2	—	8	1.4	—	7	0.9	—	26	3.8	28
Montana	0	0.0	—	1	0.6	—	1	0.6	—	0	0.0	—
Nebraska	1	0.6	—	2	0.8	—	4	2.0	—	10	7.9	—
Nevada	2	1.5	—	6	2.1	—	10	2.7	—	36	9.4	12
New Hampshire	3	1.8	—	1	0.5	—	1	0.6	—	0	0.0	—
New Jersey	27	1.9	7	34	3.7	12	48	7.2	5	102	14.4	3
New Mexico	1	0.7	—	3	1.4	—	3	1.3	—	5	2.2	—
New York	66	1.9	9	114	4.5	8	125	8.4	4	64	9.8	10
North Carolina	9	2.2	—	26	2.9	19	65	4.6	14	131	9.0	14
North Dakota	3	4.8	—	3	2.5	—	7	8.7	—	0	0.0	—
Ohio	28	1.8	10	54	3.2	14	46	4.2	18	50	13.4	5
Oklahoma	1	1.5	—	5	2.6	—	8	2.0	—	46	5.4	23
Oregon	5	1.3	—	8	1.2	—	4	0.9	—	4	2.4	—
Pennsylvania	35	1.6	13	49	2.7	23	46	5.5	12	23	6.3	21
Puerto Rico	7	3.4	—	30	4.4	9	25	5.3	13	12	12.9	7
Rhode Island	7	2.9	—	2	1.5	—	0	0.0	—	1	4.2	—
South Carolina	3	1.5	—	22	4.9	6	41	5.7	9	56	8.2	17
South Dakota	0	0.0	—	0	0.0	—	2	2.0	—	2	3.3	—
Tennessee	3	1.1	—	17	2.7	22	39	3.8	21	71	8.5	15
Texas	12	1.9	8	38	3.0	17	76	3.4	23	535	8.0	19
Utah	0	0.0	—	3	0.9	—	1	0.3	—	5	2.0	—
Vermont	0	0.0	—	0	0.0	—	0	0.0	—	0	0.0	—
Virginia	13	1.7	12	35	3.2	13	42	4.3	17	46	8.1	18
Washington	10	1.2	—	13	1.2	29	33	4.6	15	17	5.9	22
West Virginia	5	3.8	—	16	4.8	7	10	4.6	—	5	10.7	—
Wisconsin	6	0.7	—	16	1.8	27	13	3.3	24	4	3.2	—
Wyoming	1	8.9	—	0	0.0	—	0	0.0	—	0	0.0	—
Region of residence												
Northeast	210	2.0	—	254	3.7	—	239	6.3	—	208	10.4	—
Midwest	96	1.1	—	217	2.3	—	226	3.6	—	214	7.0	—
South	175	2.8	—	408	4.0	—	790	5.7	—	1,924	10.0	—
West	113	1.4	—	206	2.3	—	229	3.0	—	250	4.5	—
Total <sup>b</sup>	601	1.8	—	1,115	3.1	—	1,509	4.7	—	2,608	8.7	—

Area of residence	Without health insurance (%)											
	Total											
	<4			4.00–7.99			8.00–13.99			≥14		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	43	10.3	5	106	11.6	7	164	12.6	19	225	18.0	23
Alaska	2	6.2	—	3	3.7	—	10	5.2	—	12	4.9	38
Arizona	57	5.2	25	116	9.3	16	173	11.1	24	278	18.2	22
Arkansas	29	10.0	7	62	8.8	21	93	10.8	27	98	22.0	12
California	632	7.1	13	1,046	11.6	6	1,120	15.6	10	1,087	20.3	16
Colorado	46	4.1	32	94	7.0	29	99	8.3	34	117	15.0	27
Connecticut	55	3.8	35	57	7.2	24	53	15.1	12	54	19.5	18
Delaware	15	5.6	20	25	9.0	18	31	15.9	8	2	6.2	—
District of Columbia	86	24.4	1	57	38.0	1	17	32.5	1	2	60.8	—
Florida	114	7.6	12	282	9.6	14	943	17.9	6	2,387	32.4	2
Georgia	108	15.6	2	225	19.4	2	503	22.7	3	1,285	32.0	4
Hawaii	27	4.5	29	21	5.2	39	5	4.5	—	2	11.4	—
Idaho	1	0.8	—	6	2.0	—	20	4.1	42	21	4.6	39
Illinois	179	5.9	17	271	8.8	22	352	15.6	11	333	21.4	14
Indiana	47	4.3	30	129	7.0	28	160	10.6	29	146	20.3	17
Iowa	24	2.2	39	27	3.1	43	14	3.7	43	11	10.1	—
Kansas	18	3.9	34	39	6.0	34	32	5.1	39	55	11.3	33
Kentucky	69	5.8	18	118	9.0	19	106	13.7	16	38	18.8	20
Louisiana	82	15.4	3	172	16.5	3	313	24.7	2	231	32.4	3
Maine	7	3.5	—	7	1.8	—	10	2.4	—	2	2.0	—
Maryland	185	9.5	8	237	15.1	4	148	19.3	5	151	31.9	5
Massachusetts	218	5.3	24	113	9.9	12	38	13.8	15	12	21.0	15
Michigan	144	5.1	26	176	5.8	36	176	10.8	26	57	16.5	26
Minnesota	66	3.3	38	113	7.1	27	71	11.9	21	24	19.3	19
Mississippi	17	13.2	4	17	6.1	33	76	11.3	22	209	17.7	24
Missouri	30	3.7	36	62	5.6	37	100	6.7	38	168	12.6	30
Montana	1	1.2	—	10	2.8	—	8	2.6	—	0	0.0	—
Nebraska	9	2.9	—	23	4.7	41	29	7.1	36	35	13.6	29
Nevada	23	8.5	9	64	11.4	8	108	14.4	14	241	30.9	7
New Hampshire	6	1.8	—	12	2.9	44	10	3.1	—	0	0.0	—
New Jersey	146	5.4	23	128	7.2	25	212	16.3	7	436	31.3	6
New Mexico	8	2.9	—	30	7.2	26	32	6.7	37	28	6.3	37
New York	444	6.5	16	631	13.0	5	578	20.2	4	287	22.2	11
North Carolina	65	7.8	11	184	10.9	10	394	14.5	13	629	22.4	9
North Dakota	6	4.8	—	7	2.9	—	15	9.0	32	1	1.9	—
Ohio	160	5.4	22	257	7.8	23	238	11.2	23	164	22.3	10
Oklahoma	9	6.7	—	33	9.0	17	64	8.2	35	212	12.5	32
Oregon	33	4.5	28	80	5.9	35	43	4.7	40	22	6.6	36
Pennsylvania	173	4.0	33	244	6.8	30	198	12.1	20	106	14.7	28
Puerto Rico	39	10.0	6	128	10.1	11	140	15.9	9	64	35.8	1
Rhode Island	31	6.7	15	16	6.1	32	11	10.2	—	8	17.1	—
South Carolina	27	6.9	14	80	9.4	15	183	13.2	18	245	18.6	21
South Dakota	0	0.0	—	6	2.5	—	9	4.3	—	10	7.9	—

Area of residence	Without health insurance (%)											
	Total											
	<4			4.00–7.99			8.00–13.99			≥14		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Tennessee	24	4.6	27	109	8.9	20	211	10.7	28	366	22.8	8
Texas	100	7.9	10	280	11.2	9	603	13.6	17	2,844	21.5	13
Utah	9	2.0	—	31	4.8	40	30	4.4	41	48	9.4	35
Vermont	1	0.5	—	5	2.0	—	2	3.7	—	0	0.0	—
Virginia	65	4.3	31	206	9.7	13	208	10.9	25	197	17.4	25
Washington	94	5.4	21	120	5.5	38	146	10.1	30	64	10.8	34
West Virginia	15	5.8	19	41	6.3	31	36	8.4	33	10	10.5	—
Wisconsin	59	3.3	37	73	4.2	42	71	9.2	31	32	12.5	31
Wyoming	1	4.3	—	0	0.0	—	2	1.0	—	3	2.1	—
Region of residence												
Northeast	1,081	5.2	—	1,213	9.0	—	1,112	15.2	—	905	23.0	—
Midwest	742	4.5	—	1,183	6.5	—	1,267	10.4	—	1,036	17.0	—
South	1,053	8.6	—	2,234	11.3	—	4,093	15.2	—	9,131	24.3	—
West	934	6.1	—	1,621	9.0	—	1,796	11.6	—	1,923	17.1	—
Total <sup>b</sup>	3,849	5.9	—	6,379	9.0	—	8,408	13.4	—	13,059	22.1	—

Abbreviation: SDOH, social determinants of health [footnotes only].

*Note.* Data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis and the proportion of residents within the census tract without health insurance or health coverage plan (individuals aged 18 years and older). Rates are per 100,000 population. Numbers less than 12, and rates based on these numbers, should be interpreted with caution. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  .

<sup>a</sup> Based on rate. Ranks were not assigned to areas with rates that were based on reported numbers less than 12.  
<sup>b</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.

Table 8. Diagnoses of HIV infection among adults aged ≥18 years, by Gini index percentage, assigned sex at birth, and area of residence, 2021—census tract level, United States and Puerto Rico

▼

Area of residence	Gini index (%)											
	Male											
	<37			37.00–40.99			41.00–45.99			≥46		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	68	21.5	8	89	21.3	11	130	21.5	10	139	26.9	14
Alaska	7	9.1	—	6	6.1	—	6	8.0	—	3	8.0	—
Arizona	168	19.1	11	121	18.3	15	133	20.2	16	127	25.8	17
Arkansas	25	16.1	14	49	19.6	12	55	14.9	26	98	28.3	13
California	718	20.9	9	810	21.8	10	997	22.8	9	874	25.2	18
Colorado	84	11.1	24	64	12.6	25	83	14.5	28	80	20.2	25
Connecticut	15	6.0	36	43	11.7	27	62	15.1	25	51	14.4	36
Delaware	10	10.6	—	12	11.1	29	21	20.7	13	14	20.6	24
District of Columbia	12	38.4	—	16	55.2	1	34	47.3	1	62	48.5	2

Area of residence	Gini index (%)											
	Male											
	<37			37.00–40.99			41.00–45.99			≥46		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Florida	553	30.5	2	679	33.0	3	849	37.1	4	887	41.9	3
Georgia	443	41.7	1	341	37.9	2	425	41.4	2	485	53.5	1
Hawaii	10	5.6	—	13	9.2	36	5	3.6	—	17	15.4	32
Idaho	13	6.0	35	7	4.5	—	15	8.1	41	6	5.1	—
Illinois	143	13.0	19	204	15.5	20	254	19.3	17	356	31.7	9
Indiana	120	15.8	15	85	11.3	28	107	17.3	22	75	19.2	27
Iowa	12	4.4	38	20	5.0	42	17	5.0	43	15	7.9	43
Kansas	42	11.5	23	30	9.9	33	28	10.8	35	20	11.6	41
Kentucky	45	13.9	17	54	13.8	22	95	19.2	18	77	15.9	31
Louisiana	60	25.7	4	95	32.6	5	185	33.6	5	263	40.9	4
Maine	5	5.1	—	4	2.8	—	6	3.6	—	8	6.1	—
Maryland	189	23.6	6	136	21.9	9	121	23.6	8	100	29.2	12
Massachusetts	27	6.3	34	51	7.6	40	96	11.4	34	95	12.6	38
Michigan	105	10.9	25	115	10.3	32	116	11.5	32	125	16.6	30
Minnesota	45	7.7	32	66	9.7	35	47	8.0	42	57	18.9	28
Mississippi	34	18.7	13	37	17.4	17	55	18.9	19	106	26.7	16
Missouri	57	9.3	28	99	15.4	21	73	11.5	33	89	21.2	22
Montana	7	12.3	—	3	3.2	—	3	1.9	—	4	3.6	—
Nebraska	19	9.4	27	19	9.1	37	23	11.8	29	18	14.6	35
Nevada	82	23.3	7	95	32.8	4	114	37.7	3	91	37.6	5
New Hampshire	3	1.8	—	9	6.3	—	5	3.3	—	6	6.6	—
New Jersey	88	11.6	21	171	16.8	18	188	20.8	12	264	32.9	7
New Mexico	16	12.0	20	20	10.7	30	24	10.2	36	26	10.7	42
New York	141	11.6	22	231	13.6	23	383	17.9	21	811	31.9	8
North Carolina	191	24.5	5	259	27.4	7	301	25.6	7	290	29.9	11
North Dakota	1	2.2	—	3	3.6	—	7	6.6	—	5	7.3	—
Ohio	105	8.7	30	171	13.3	24	176	15.8	24	189	22.4	21
Oklahoma	44	13.7	18	70	18.4	14	69	14.9	27	75	24.3	20
Oregon	35	9.3	29	40	9.1	38	43	8.7	40	39	11.7	40
Pennsylvania	81	7.9	31	114	7.9	39	176	11.6	31	197	19.7	26
Puerto Rico	5	29.2	—	21	23.9	8	65	20.4	15	206	24.5	19
Rhode Island	9	9.6	—	12	9.7	34	20	18.8	20	15	14.7	34
South Carolina	68	19.1	12	81	18.6	13	115	21.1	11	149	26.8	15
South Dakota	3	3.8	—	7	7.6	—	4	4.0	—	7	11.1	—
Tennessee	113	20.7	10	107	17.5	16	153	20.6	14	207	31.0	10
Texas	862	26.3	3	717	29.2	6	819	31.2	6	768	35.1	6
Utah	40	7.3	33	33	12.2	26	21	10.2	37	15	12.5	39
Vermont	1	2.9	—	2	3.2	—	3	3.1	—	2	3.2	—
Virginia	165	14.5	16	127	15.6	19	132	17.3	23	116	21.0	23
Washington	91	10.3	26	83	10.4	31	92	11.7	30	85	17.0	29
West Virginia	7	8.4	—	6	3.6	—	23	9.3	39	30	14.2	37
Wisconsin	30	5.3	37	56	7.4	41	64	10.0	38	46	14.8	33
Wyoming	0	0.0	—	2	3.3	—	2	3.4	—	1	2.2	—



Area of residence	Gini index (%)											
	Male											
	<37			37.00–40.99			41.00–45.99			≥46		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Region of residence												
Northeast	370	9.1	—	637	11.2	—	939	14.8	—	1,449	24.8	—
Midwest	682	10.1	—	875	11.5	—	916	13.2	—	1,002	21.1	—
South	2,889	25.1	—	2,875	25.9	—	3,582	27.8	—	3,866	33.9	—
West	1,271	16.0	—	1,297	17.5	—	1,538	18.6	—	1,368	22.0	—
Total <sup>b</sup>	5,217	17.2	—	5,705	17.9	—	7,040	20.3	—	7,891	27.2	—

Area of residence	Gini index (%)											
	Female											
	<37			37.00–40.99			41.00–45.99			≥46		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	16	4.8	8	18	4.0	15	42	6.3	7	36	6.3	13
Alaska	1	1.4	—	0	0.0	—	3	4.4	—	1	2.9	—
Arizona	20	2.3	19	20	3.0	20	17	2.5	28	18	3.6	28
Arkansas	9	5.5	—	12	4.5	10	16	4.1	19	18	4.9	22
California	92	2.7	14	135	3.5	17	134	3.0	26	123	3.4	29
Colorado	12	1.6	21	15	3.0	21	13	2.3	29	5	1.3	—
Connecticut	2	0.8	—	10	2.6	—	15	3.4	23	21	5.4	20
Delaware	1	1.0	—	7	5.9	—	5	4.4	—	3	4.0	—
District of Columbia	3	9.7	—	4	11.8	—	9	11.7	—	22	14.6	1
Florida	146	7.7	2	185	8.5	3	216	8.9	3	209	9.3	5
Georgia	108	9.6	1	104	10.6	1	96	8.8	4	119	12.0	2
Hawaii	5	2.9	—	2	1.4	—	1	0.7	—	2	1.7	—
Idaho	1	0.5	—	3	1.9	—	3	1.6	—	0	0.0	—
Illinois	19	1.7	20	31	2.3	27	48	3.5	22	80	6.5	11
Indiana	21	2.7	13	20	2.6	24	30	4.6	14	24	5.7	18
Iowa	3	1.1	—	2	0.5	—	4	1.2	—	3	1.5	—
Kansas	5	1.4	—	5	1.6	—	9	3.3	—	5	2.9	—
Kentucky	31	15	4.5	9	13	3.2	19	16	3.1	25	16	3.1
Louisiana	13	5.4	5	32	10.1	2	69	11.6	1	81	11.8	3
Maine	0	0.0	—	0	0.0	—	1	0.6	—	2	1.4	—
Maryland	47	5.5	4	43	6.4	5	51	9.2	2	34	8.6	7
Massachusetts	9	2.0	—	18	2.5	25	39	4.3	16	46	5.5	19
Michigan	15	1.5	23	15	1.3	29	24	2.3	30	38	4.7	24
Minnesota	9	1.5	—	19	2.8	22	19	3.1	24	12	3.8	26
Mississippi	11	5.6	—	16	6.9	4	17	5.5	9	43	9.7	4
Missouri	9	1.4	—	15	2.2	28	8	1.2	—	10	2.2	—
Montana	1	1.8	—	0	0.0	—	1	0.6	—	0	0.0	—
Nebraska	7	3.4	—	5	2.4	—	4	2.0	—	1	0.8	—
Nevada	13	3.7	10	12	4.2	13	13	4.2	18	16	6.9	9
New Hampshire	1	0.6	—	1	0.7	—	3	1.9	—	0	0.0	—
New Jersey	26	3.3	12	57	5.3	9	51	5.3	11	77	8.8	6
New Mexico	2	1.4	—	2	1.0	—	6	2.5	—	2	0.8	—



Area of residence	Gini index (%)											
	Female											
	<37			37.00–40.99			41.00–45.99			≥46		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
New York	33	2.6	16	69	3.9	16	100	4.4	15	167	5.8	17
North Carolina	40	4.9	6	60	5.9	6	66	5.2	12	65	6.1	16
North Dakota	1	2.3	—	2	2.6	—	3	3.0	—	7	10.7	—
Ohio	33	2.7	15	46	3.4	18	55	4.6	13	44	4.8	23
Oklahoma	10	3.0	—	17	4.4	11	13	2.7	27	20	6.3	14
Oregon	7	1.8	—	2	0.4	—	6	1.2	—	6	1.7	—
Pennsylvania	17	1.6	22	37	2.5	26	57	3.6	21	42	3.8	27
Puerto Rico	2	9.8	—	8	7.8	—	14	3.9	20	50	5.2	21
Rhode Island	1	1.1	—	0	0.0	—	6	5.2	—	3	2.6	—
South Carolina	18	4.8	7	26	5.5	8	32	5.4	10	46	7.5	8
South Dakota	1	1.3	—	2	2.2	—	1	1.0	—	0	0.0	—
Tennessee	20	3.5	11	28	4.3	12	34	4.3	17	48	6.6	10
Texas	189	5.7	3	143	5.7	7	183	6.8	5	146	6.4	12
Utah	3	0.6	—	5	1.8	—	1	0.5	—	0	0.0	—
Vermont	0	0.0	—	0	0.0	—	0	0.0	—	0	0.0	—
Virginia	27	2.3	18	34	4.1	14	48	5.9	8	27	4.5	25
Washington	21	2.4	17	22	2.8	23	17	2.1	31	13	2.6	31
West Virginia	3	3.5	—	3	1.8	—	16	6.3	6	14	6.3	15
Wisconsin	7	1.2	—	10	1.3	—	12	1.8	32	10	3.1	—
Wyoming	0	0.0	—	0	0.0	—	1	1.7	—	0	0.0	—
Region of residence												
Northeast	89	2.1	—	192	3.2	—	272	4.0	—	358	5.5	—
Midwest	130	1.9	—	172	2.2	—	217	3.0	—	234	4.6	—
South	676	5.7	—	745	6.4	—	929	6.8	—	947	7.7	—
West	178	2.3	—	218	2.9	—	216	2.6	—	186	2.9	—
Total <sup>b</sup>	1,075	3.5	—	1,335	4.0	—	1,648	4.5	—	1,775	5.7	—

Area of residence	Gini index (%)											
	Total											
	<37			37.00–40.99			41.00–45.99			≥46		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Alabama	84	12.9	9	107	12.4	11	172	13.5	9	175	16.1	16
Alaska	8	5.5	—	6	3.2	—	9	6.3	—	4	5.6	—
Arizona	188	10.6	15	141	10.6	18	150	11.2	20	145	14.6	18
Arkansas	34	10.7	14	61	11.8	13	71	9.4	25	116	16.3	15
California	810	11.8	12	945	12.6	10	1,131	12.7	12	997	14.1	20
Colorado	96	6.4	26	79	7.8	26	96	8.4	28	85	10.8	28
Connecticut	17	3.4	37	53	7.0	28	77	9.0	26	72	9.7	32
Delaware	11	5.8	—	19	8.4	24	26	12.2	14	17	11.9	24
District of Columbia	15	24.1	2	20	31.8	1	43	28.9	1	84	30.2	2
Florida	699	18.8	3	864	20.4	4	1,065	22.6	3	1,096	25.1	4
Georgia	551	25.2	1	445	23.7	2	521	24.6	2	604	31.8	1
Hawaii	15	4.3	34	15	5.3	36	6	2.1	—	19	8.4	37

Area of residence	Gini index (%)											
	Total											
	<37			37.00–40.99			41.00–45.99			≥46		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
Idaho	14	3.2	39	10	3.1	—	18	4.9	42	6	2.6	—
Illinois	162	7.3	21	235	8.7	20	302	11.3	19	436	18.6	8
Indiana	141	9.2	16	105	6.9	29	137	10.8	23	99	12.2	23
Iowa	15	2.7	40	22	2.7	42	21	3.1	43	18	4.7	44
Kansas	47	6.4	24	35	5.7	35	37	6.9	32	25	7.3	40
Kentucky	60	9.2	17	67	8.4	23	111	11.0	21	93	9.3	33
Louisiana	73	15.4	5	127	20.9	3	254	22.2	4	344	25.9	3
Maine	5	2.5	—	4	1.4	—	7	2.0	—	10	3.6	—
Maryland	236	14.3	7	179	13.8	9	172	16.1	7	134	18.1	10
Massachusetts	36	4.1	35	69	5.0	38	135	7.7	30	141	8.9	35
Michigan	120	6.2	28	130	5.7	34	140	6.8	35	163	10.4	29
Minnesota	54	4.6	33	85	6.2	31	66	5.5	39	69	11.2	27
Mississippi	45	11.9	10	53	12.0	12	72	12.0	15	149	17.7	12
Missouri	66	5.3	31	114	8.6	22	81	6.2	37	99	11.3	25
Montana	8	7.1	—	3	1.6	—	4	1.3	—	4	1.8	—
Nebraska	26	6.4	25	24	5.7	33	27	6.8	34	19	7.7	39
Nevada	95	13.5	8	107	18.6	5	127	20.7	5	107	22.6	5
New Hampshire	4	1.2	—	10	3.4	—	8	2.6	—	6	3.3	—
New Jersey	114	7.4	20	228	10.9	16	239	12.8	11	341	20.3	7
New Mexico	18	6.6	23	22	5.8	32	30	6.3	36	28	5.7	43
New York	174	7.1	22	300	8.6	21	483	10.9	22	978	18.0	11
North Carolina	231	14.5	6	319	16.3	7	367	15.0	8	355	17.4	13
North Dakota	2	2.2	—	5	3.1	—	10	4.9	—	12	9.0	34
Ohio	138	5.7	29	217	8.2	25	231	10.0	24	233	13.3	21
Oklahoma	54	8.3	19	87	11.3	15	82	8.8	27	95	15.2	17
Oregon	42	5.5	30	42	4.7	39	49	4.9	41	45	6.6	41
Pennsylvania	98	4.7	32	151	5.2	37	233	7.5	31	239	11.3	26
Puerto Rico	7	18.6	—	29	15.3	8	79	11.7	17	256	14.2	19
Rhode Island	10	5.3	—	12	4.7	40	26	11.8	16	18	8.3	38
South Carolina	86	11.7	13	107	11.7	14	147	12.9	10	195	16.7	14
South Dakota	4	2.6	—	9	4.9	—	5	2.5	—	7	5.5	—
Tennessee	133	11.9	11	135	10.7	17	187	12.2	13	255	18.2	9
Texas	1,051	15.9	4	860	17.3	6	1,002	18.9	6	914	20.5	6
Utah	43	4.0	36	38	7.0	27	22	5.3	40	15	6.3	42
Vermont	1	1.4	—	2	1.6	—	3	1.5	—	2	1.6	—
Virginia	192	8.4	18	161	9.8	19	180	11.4	18	143	12.4	22
Washington	112	6.4	27	105	6.6	30	109	6.9	33	98	9.8	31
West Virginia	10	6.0	—	9	2.7	—	39	7.8	29	44	10.1	30
Wisconsin	37	3.3	38	66	4.4	41	76	5.9	38	56	8.8	36
Wyoming	0	0.0	—	2	1.7	—	3	2.5	—	1	1.1	—
Region of residence												
Northeast	459	5.6	—	829	7.1	—	1,211	9.3	—	1,807	14.6	—
Midwest	812	6.0	—	1,047	6.7	—	1,133	8.0	—	1,236	12.6	—


Area of residence	Gini index (%)											
	Total											
	<37			37.00–40.99			41.00–45.99			≥46		
	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>	No.	Rate	Rank <sup>a</sup>
South	3,565	15.2	—	3,620	15.9	—	4,511	17.0	—	4,813	20.3	—
West	1,449	9.1	—	1,515	10.1	—	1,754	10.5	—	1,554	12.4	—
Total <sup>b</sup>	6,292	10.3	—	7,040	10.8	—	8,688	12.2	—	9,666	16.0	—

Abbreviation: SDOH, social determinants of health [footnotes only].

*Note.* Data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis and the proportion of income inequality as measured by the Gini index within the census tract. Rates are per 100,000 population. Numbers less than 12, and rates based on these numbers, should be interpreted with caution. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  .

<sup>a</sup> Based on rate. Ranks were not assigned to areas with rates that were based on reported numbers less than 12.  
<sup>b</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.

Table 9. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among adults aged ≥18 years, by age at diagnosis, assigned sex at birth, and selected social determinants of health—census tract level, 47 states and the District of Columbia



	18–24 years					25–34 years				
	Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
Male										
Below federal poverty level (%)										
<6	748	612	81.8	539	72.1	1,527	1,276	83.6	1,116	73.1
6.00–9.99	836	688	82.3	607	72.6	1,798	1,477	82.1	1,301	72.4
10.00–16.99	1,383	1,132	81.9	986	71.3	2,698	2,259	83.7	1,919	71.1
≥17	2,119	1,656	78.2	1,433	67.6	3,436	2,798	81.4	2,375	69.1
Less than high school diploma (%)										
<5	823	687	83.5	594	72.2	1,710	1,432	83.7	1,256	73.5
5.00–8.99	910	731	80.3	648	71.2	1,677	1,398	83.4	1,236	73.7
9.00–15.99	1,311	1,037	79.1	914	69.7	2,543	2,106	82.8	1,796	70.6
≥16	2,043	1,634	80.0	1,410	69.0	3,531	2,875	81.4	2,423	68.6
Median household income (U.S. \$)										
<49,000	2,087	1,643	78.7	1,394	66.8	3,408	2,749	80.7	2,307	67.7
49,000–65,999	1,301	1,045	80.3	948	72.9	2,533	2,106	83.1	1,818	71.8
66,000–89,999	1,008	820	81.3	725	71.9	2,042	1,690	82.8	1,486	72.8
≥90,000	658	553	84.0	473	71.9	1,436	1,229	85.6	1,074	74.8
Without health insurance (%)										
<4	539	460	85.3	397	73.7	1,079	927	85.9	804	74.5
4.00–7.99	943	783	83.0	690	73.2	1,870	1,554	83.1	1,374	73.5
8.00–13.99	1,362	1,097	80.5	954	70.0	2,621	2,166	82.6	1,905	72.7
≥14	2,243	1,749	78.0	1,525	68.0	3,889	3,163	81.3	2,628	67.6

	18–24 years					25–34 years				
	Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
	No.	No.	%	No.	%	No.	No.	%	No.	%
Gini index (%)										
<37	1,095	889	81.2	763	69.7	1,985	1,634	82.3	1,415	71.3
37.00–40.99	1,094	885	80.9	786	71.8	2,141	1,734	81.0	1,522	71.1
41.00–45.99	1,379	1,103	80.0	963	69.8	2,596	2,170	83.6	1,847	71.1
≥46	1,516	1,209	79.7	1,051	69.3	2,734	2,269	83.0	1,926	70.4
Subtotal <sup>b</sup>	5,260	4,213	80.1	3,682	70.0	9,777	8,060	82.4	6,927	70.8
Female										
Below federal poverty level (%)										
<6	77	68	88.3	57	74.0	196	165	84.2	138	70.4
6.00–9.99	112	90	80.4	85	75.9	252	210	83.3	182	72.2
10.00–16.99	164	121	73.8	102	62.2	388	309	79.6	280	72.2
≥17	295	245	83.1	207	70.2	668	554	82.9	449	67.2
Less than high school diploma (%)										
<5	80	65	81.3	54	67.5	178	152	85.4	131	73.6
5.00–8.99	103	76	73.8	76	73.8	289	243	84.1	210	72.7
9.00–15.99	173	147	85.0	122	70.5	409	342	83.6	277	67.7
≥16	292	236	80.8	199	68.2	628	501	79.8	431	68.6
Median household income (U.S. \$)										
<49,000	292	240	82.2	194	66.4	685	560	81.8	459	67.0
49,000–65,999	161	124	77.0	117	72.7	403	331	82.1	289	71.7
66,000–89,999	125	102	81.6	91	72.8	238	197	82.8	170	71.4
≥90,000	68	56	82.4	47	69.1	175	148	84.6	130	74.3
Without health insurance (%)										
<4	65	53	81.5	45	69.2	139	114	82.0	101	72.7
4.00–7.99	123	98	79.7	92	74.8	277	236	85.2	192	69.3
8.00–13.99	152	125	82.2	105	69.1	374	310	82.9	262	70.1
≥14	308	248	80.5	209	67.9	714	578	81.0	494	69.2
Gini index (%)										
<37	125	104	83.2	82	65.6	289	236	81.7	208	72.0
37.00–40.99	148	116	78.4	104	70.3	353	287	81.3	252	71.4
41.00–45.99	179	145	81.0	131	73.2	416	345	82.9	284	68.3
≥46	196	159	81.1	134	68.4	446	370	83.0	305	68.4
Subtotal <sup>b</sup>	662	533	80.5	461	69.6	1,551	1,274	82.1	1,082	69.8
Total	5,922	4,746	80.1	4,143	70.0	11,328	9,334	82.4	8,009	70.7

	35–44 years					45–54 years				
	Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
	No.	No.	%	No.	%	No.	No.	%	No.	%
Male										
Below federal poverty level (%)										
<6	792	684	86.4	574	72.5	469	408	87.0	360	76.8





	35–44 years					45–54 years				
	Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
	No.	No.	%	No.	%	No.	No.	%	No.	%
6.00–9.99	926	784	84.7	676	73.0	553	459	83.0	394	71.2
10.00–16.99	1,385	1,160	83.8	988	71.3	728	621	85.3	529	72.7
≥17	1,692	1,364	80.6	1,119	66.1	886	732	82.6	579	65.3
Less than high school diploma (%)										
<5	854	733	85.8	634	74.2	464	397	85.6	337	72.6
5.00–8.99	862	708	82.1	627	72.7	501	420	83.8	368	73.5
9.00–15.99	1,231	1,030	83.7	859	69.8	684	591	86.4	503	73.5
≥16	1,850	1,523	82.3	1,238	66.9	988	812	82.2	654	66.2
Median household income (U.S. \$)										
<49,000	1,644	1,310	79.7	1,052	64.0	867	709	81.8	567	65.4
49,000–65,999	1,241	1,055	85.0	885	71.3	665	570	85.7	484	72.8
66,000–89,999	1,087	906	83.3	793	73.0	613	515	84.0	440	71.8
≥90,000	803	702	87.4	614	76.5	484	422	87.2	366	75.6
Without health insurance (%)										
<4	628	541	86.1	458	72.9	369	313	84.8	267	72.4
4.00–7.99	979	831	84.9	732	74.8	576	487	84.5	404	70.1
8.00–13.99	1,224	1,025	83.7	857	70.0	675	568	84.1	496	73.5
≥14	1,964	1,595	81.2	1,310	66.7	1,016	852	83.9	695	68.4
Gini index (%)										
<37	959	807	84.2	668	69.7	547	454	83.0	406	74.2
37.00–40.99	1,091	896	82.1	767	70.3	578	500	86.5	412	71.3
41.00–45.99	1,278	1,068	83.6	904	70.7	713	604	84.7	492	69.0
≥46	1,464	1,218	83.2	1,016	69.4	798	662	83.0	552	69.2
Subtotal <sup>b</sup>	4,964	4,131	83.2	3,482	70.1	2,712	2,281	84.1	1,911	70.5
Female										
Below federal poverty level (%)										
<6	182	155	85.2	139	76.4	151	131	86.8	113	74.8
6.00–9.99	219	185	84.5	158	72.1	167	137	82.0	116	69.5
10.00–16.99	404	333	82.4	286	70.8	280	233	83.2	210	75.0
≥17	585	476	81.4	381	65.1	404	332	82.2	278	68.8
Less than high school diploma (%)										
<5	149	127	85.2	118	79.2	119	101	84.9	95	79.8
5.00–8.99	212	180	84.9	134	63.2	158	127	80.4	110	69.6
9.00–15.99	404	336	83.2	293	72.5	302	257	85.1	216	71.5
≥16	625	506	81.0	419	67.0	423	348	82.3	296	70.0
Median household income (U.S. \$)										
<49,000	627	515	82.1	411	65.6	424	343	80.9	292	68.9
49,000–65,999	335	267	79.7	230	68.7	248	208	83.9	175	70.6
66,000–89,999	240	213	88.8	178	74.2	193	165	85.5	145	75.1
≥90,000	183	150	82.0	141	77.0	133	113	85.0	102	76.7
Without health insurance (%)										
<4	131	104	79.4	99	75.6	113	100	88.5	93	82.3

	35–44 years					45–54 years				
	Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
4.00–7.99	253	210	83.0	190	75.1	188	162	86.2	142	75.5
8.00–13.99	369	309	83.7	255	69.1	253	214	84.6	176	69.6
≥14	637	526	82.6	420	65.9	448	357	79.7	306	68.3
Gini index (%)										
<37	266	232	87.2	189	71.1	186	151	81.2	120	64.5
37.00–40.99	310	254	81.9	229	73.9	250	201	80.4	188	75.2
41.00–45.99	393	323	82.2	259	65.9	276	235	85.1	205	74.3
≥46	421	340	80.8	287	68.2	290	246	84.8	204	70.3
Subtotal <sup>b</sup>	1,436	1,185	82.5	994	69.2	1,044	870	83.3	744	71.3
Total	6,400	5,316	83.1	4,476	69.9	3,756	3,151	83.9	2,655	70.7

	≥55 years					Total				
	Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression	
		≥ 1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥ 1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
Male										
Below federal poverty level (%)										
<6	436	388	89.0	295	67.7	3,972	3,368	84.8	2,884	72.6
6.00–9.99	444	382	86.0	297	66.9	4,557	3,790	83.2	3,275	71.9
10.00–16.99	634	543	85.6	447	70.5	6,828	5,715	83.7	4,869	71.3
≥17	754	621	82.4	490	65.0	8,887	7,171	80.7	5,996	67.5
Less than high school diploma (%)										
<5	443	390	88.0	315	71.1	4,294	3,639	84.7	3,136	73.0
5.00–8.99	425	371	87.3	290	68.2	4,375	3,628	82.9	3,169	72.4
9.00–15.99	549	476	86.7	379	69.0	6,318	5,240	82.9	4,451	70.4
≥16	851	697	81.9	545	64.0	9,263	7,541	81.4	6,270	67.7
Median household income (U.S. \$)										
<49,000	765	630	82.4	499	65.2	8,771	7,041	80.3	5,819	66.3
49,000–65,999	559	471	84.3	387	69.2	6,299	5,247	83.3	4,522	71.8
66,000–89,999	489	434	88.8	332	67.9	5,239	4,365	83.3	3,776	72.1
≥90,000	447	393	87.9	305	68.2	3,828	3,299	86.2	2,832	74.0
Without health insurance (%)										
<4	343	304	88.6	240	70.0	2,958	2,545	86.0	2,166	73.2
4.00–7.99	503	441	87.7	346	68.8	4,871	4,096	84.1	3,546	72.8
8.00–13.99	571	496	86.9	406	71.1	6,453	5,352	82.9	4,618	71.6
≥14	851	693	81.4	537	63.1	9,963	8,052	80.8	6,695	67.2
Gini index (%)										
<37	444	386	86.9	286	64.4	5,030	4,170	82.9	3,538	70.3
37.00–40.99	488	409	83.8	327	67.0	5,392	4,424	82.0	3,814	70.7
41.00–45.99	630	542	86.0	423	67.1	6,596	5,487	83.2	4,629	70.2
≥46	706	597	84.6	493	69.8	7,218	5,955	82.5	5,038	69.8
Subtotal <sup>b</sup>	2,335	1,984	85.0	1,573	67.4	25,048	20,669	82.5	17,575	70.2

	≥55 years					Total				
	Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>a</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
Female										
Below federal poverty level (%)										
<6	121	103	85.1	82	67.8	727	622	85.6	529	72.8
6.00–9.99	147	124	84.4	103	70.1	897	746	83.2	644	71.8
10.00–16.99	243	199	81.9	172	70.8	1,479	1,195	80.8	1,050	71.0
≥17	333	281	84.4	220	66.1	2,285	1,888	82.6	1,535	67.2
Less than high school diploma (%)										
<5	106	88	83.0	76	71.7	632	533	84.3	474	75.0
5.00–8.99	142	123	86.6	98	69.0	904	749	82.9	628	69.5
9.00–15.99	246	200	81.3	167	67.9	1,534	1,282	83.6	1,075	70.1
≥16	350	296	84.6	236	67.4	2,318	1,887	81.4	1,581	68.2
Median household income (U.S. \$)										
<49,000	354	298	84.2	234	66.1	2,382	1,956	82.1	1,590	66.8
49,000–65,999	220	191	86.8	152	69.1	1,367	1,121	82.0	963	70.4
66,000–89,999	151	115	76.2	108	71.5	947	792	83.6	692	73.1
≥90,000	113	98	86.7	78	69.0	672	565	84.1	498	74.1
Without health insurance (%)										
<4	84	73	86.9	62	73.8	532	444	83.5	400	75.2
4.00–7.99	161	130	80.7	113	70.2	1,002	836	83.4	729	72.8
8.00–13.99	237	196	82.7	159	67.1	1,385	1,154	83.3	957	69.1
≥14	362	308	85.1	243	67.1	2,469	2,017	81.7	1,672	67.7
Gini index (%)										
<37	163	132	81.0	110	67.5	1,029	855	83.1	709	68.9
37.00–40.99	169	144	85.2	116	68.6	1,230	1,002	81.5	889	72.3
41.00–45.99	259	220	84.9	179	69.1	1,523	1,268	83.3	1,058	69.5
≥46	253	211	83.4	172	68.0	1,606	1,326	82.6	1,102	68.6
Subtotal <sup>b</sup>	867	724	83.5	591	68.2	5,560	4,586	82.5	3,872	69.6
Total	3,202	2,708	84.6	2,164	67.6	30,608	25,255	82.5	21,447	70.1

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only]; SDOH, social determinants of health [footnotes only].

*Note.* Data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after diagnosis of HIV infection. A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are within 6 months of diagnosis of HIV infection during 2021. Data not provided for states and associated census tracts that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  .

<sup>a</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.

<sup>b</sup> Because column subtotals were calculated independently of the values for the subpopulations, the values in each column may not sum to the column subtotals. See Technical Notes for criteria used to define SDOH subpopulations.

Table 10. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among adults aged ≥18 years, by race/ethnicity, assigned sex at birth, and selected social determinants of health—census tract level, 47 states and the District of Columbia

	American Indian/Alaska Native					Asian					Black/African American				
	Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	%	No.	%		No.	%	No.	%		No.	%	No.	%
Male															
Below federal poverty level (%)															
<6	17	14	82.4	13	76.5	148	138	93.2	118	79.7	1,145	929	81.1	771	67.3
6.00–9.99	24	20	83.3	17	70.8	137	122	89.1	114	83.2	1,389	1,115	80.3	952	68.5
10.00–16.99	34	30	88.2	26	76.5	137	121	88.3	111	81.0	2,397	1,945	81.1	1,606	67.0
≥17	48	38	79.2	27	56.3	142	119	83.8	109	76.8	4,213	3,271	77.6	2,692	63.9
Less than high school diploma (%)															
<5	24	22	91.7	20	83.3	146	133	91.1	120	82.2	1,300	1,050	80.8	895	68.8
5.00–8.99	23	19	82.6	16	69.6	111	99	89.2	94	84.7	1,610	1,274	79.1	1,103	68.5
9.00–15.99	37	31	83.8	27	73.0	138	125	90.6	107	77.5	2,701	2,195	81.3	1,811	67.0
≥16	39	30	76.9	20	51.3	169	143	84.6	131	77.5	3,538	2,745	77.6	2,214	62.6
Median household income (U.S. \$)															
<49,000	46	38	82.6	29	63.0	102	88	86.3	77	75.5	4,348	3,370	77.5	2,730	62.8
49,000–65,999	35	29	82.9	24	68.6	113	96	85.0	90	79.6	2,196	1,770	80.6	1,510	68.8
66,000–89,999	26	20	76.9	17	65.4	145	126	86.9	116	80.0	1,576	1,286	81.6	1,077	68.3
≥90,000	16	15	93.8	13	81.3	199	185	93.0	165	82.9	974	794	81.5	670	68.8
Without health insurance (%)															
<4	9	8	88.9	6	66.7	134	123	91.8	113	84.3	866	712	82.2	581	67.1
4.00–7.99	25	22	88.0	17	68.0	162	147	90.7	133	82.1	1,687	1,380	81.8	1,157	68.6
8.00–13.99	35	30	85.7	28	80.0	152	135	88.8	127	83.6	2,457	1,978	80.5	1,674	68.1
≥14	54	42	77.8	32	59.3	116	95	81.9	79	68.1	4,135	3,191	77.2	2,610	63.1
Gini index (%)															
<37	24	20	83.3	17	70.8	134	119	88.8	106	79.1	1,824	1,460	80.0	1,237	67.8
37.00–40.99	25	19	76.0	15	60.0	109	99	90.8	91	83.5	1,928	1,518	78.7	1,279	66.3
41.00–45.99	38	32	84.2	26	68.4	155	141	91.0	122	78.7	2,369	1,886	79.6	1,571	66.3
≥46	36	31	86.1	25	69.4	165	140	84.8	133	80.6	3,022	2,395	79.3	1,934	64.0
Subtotal <sup>c</sup>	134	113	84.3	91	67.9	580	513	88.4	465	80.2	9,498	7,523	79.2	6,248	65.8
Female															
Below federal poverty level (%)															
<6	2	2	100	2	100	20	18	90.0	13	65.0	344	298	86.6	257	74.7
6.00–9.99	6	6	100	5	83.3	22	19	86.4	16	72.7	430	359	83.5	311	72.3
10.00–16.99	12	10	83.3	9	75.0	24	20	83.3	18	75.0	790	637	80.6	572	72.4
≥17	12	10	83.3	8	66.7	15	13	86.7	13	86.7	1,403	1,167	83.2	955	68.1
Less than high school diploma (%)															
<5	7	7	100	6	85.7	18	17	94.4	11	61.1	310	261	84.2	235	75.8

	American Indian/Alaska Native					Asian					Black/African American				
	Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.	%	No.	No.	%	No.	%	No.	No.	%	No.
5.00–8.99	13	13	100	11	84.6	13	13	100	10	76.9	489	406	83.0	343	70.1
9.00–15.99	5	5	100	4	80.0	16	16	100	14	87.5	881	731	83.0	630	71.5
≥16	7	3	42.9	3	42.9	34	24	70.6	25	73.5	1,287	1,063	82.6	887	68.9
Median household income (U.S. \$)															
<49,000	13	10	76.9	7	53.8	13	10	76.9	11	84.6	1,451	1,196	82.4	976	67.3
49,000–65,999	9	8	88.9	7	77.8	19	17	89.5	14	73.7	710	572	80.6	503	70.8
66,000–89,999	5	5	100	5	100	26	23	88.5	21	80.8	475	405	85.3	356	74.9
≥90,000	5	5	100	5	100	23	20	87.0	14	60.9	317	275	86.8	248	78.2
Without health insurance (%)															
<4	0	0	0	0	0	15	13	86.7	8	53.3	267	228	85.4	214	80.1
4.00–7.99	10	10	100	9	90.0	29	26	89.7	22	75.9	489	409	83.6	364	74.4
8.00–13.99	10	8	80.0	8	80.0	14	12	85.7	10	71.4	765	646	84.4	541	70.7
≥14	12	10	83.3	7	58.3	23	19	82.6	20	87.0	1,446	1,178	81.5	976	67.5
Gini index (%)															
<37	5	5	100	4	80.0	17	15	88.2	11	64.7	545	459	84.2	382	70.1
37.00–40.99	4	3	75.0	2	50.0	21	17	81.0	18	85.7	656	537	81.9	476	72.6
41.00–45.99	11	10	90.9	8	72.7	18	15	83.3	11	61.1	816	689	84.4	580	71.1
≥46	12	10	83.3	10	83.3	25	23	92.0	20	80.0	950	776	81.7	657	69.2
Subtotal <sup>c</sup>	35	28	80.0	24	68.6	82	71	86.6	61	74.4	3,057	2,540	83.1	2,154	70.5
Total	169	141	83.4	115	68.0	662	584	88.2	526	79.5	12,555	10,063	80.2	8,402	66.9

	Hispanic/Latino <sup>a</sup>					Native Hawaiian/other Pacific Islander				
	Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
Male										
Below federal poverty level (%)										
<6	1,099	969	88.2	853	77.6	16	14	87.5	14	87.5
6.00–9.99	1,425	1,202	84.4	1,058	74.2	10	5	50.0	8	80.0
10.00–16.99	2,348	2,009	85.6	1,746	74.4	15	13	86.7	6	40.0
≥17	2,644	2,226	84.2	1,919	72.6	16	13	81.3	11	68.8
Less than high school diploma (%)										
<5	965	845	87.6	733	76.0	9	7	77.8	5	55.6
5.00–8.99	1,023	880	86.0	781	76.3	15	11	73.3	11	73.3
9.00–15.99	1,579	1,349	85.4	1,199	75.9	18	14	77.8	12	66.7
≥16	3,950	3,332	84.4	2,863	72.5	15	13	86.7	11	73.3
Median household income (U.S. \$)										
<49,000	2,453	2,056	83.8	1,760	71.7	15	13	86.7	10	66.7
49,000–65,999	2,107	1,802	85.5	1,564	74.2	13	9	69.2	8	61.5
66,000–89,999	1,791	1,526	85.2	1,358	75.8	14	10	71.4	8	57.1
≥90,000	1,133	992	87.6	869	76.7	15	13	86.7	13	86.7





	Hispanic/Latino <sup>a</sup>					Native Hawaiian/other Pacific Islander				
	Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
Without health insurance (%)										
<4	648	575	88.7	517	79.8	9	9	100	8	88.9
4.00–7.99	1,225	1,059	86.4	941	76.8	13	10	76.9	10	76.9
8.00–13.99	1,866	1,584	84.9	1,396	74.8	18	13	72.2	11	61.1
≥14	3,777	3,188	84.4	2,722	72.1	17	13	76.5	10	58.8
Gini index (%)										
<37	1,625	1,382	85.0	1,179	72.6	15	12	80.0	10	66.7
37.00–40.99	1,786	1,510	84.5	1,331	74.5	12	8	66.7	9	75.0
41.00–45.99	2,103	1,805	85.8	1,552	73.8	13	11	84.6	8	61.5
≥46	1,999	1,706	85.3	1,512	75.6	17	14	82.4	12	70.6
Subtotal <sup>c</sup>	7,693	6,548	85.1	5,703	74.1	61	48	78.7	42	68.9
Female										
Below federal poverty level (%)										
<6	116	95	81.9	79	68.1	1	1	100	1	100
6.00–9.99	162	135	83.3	126	77.8	2	2	100	2	100
10.00–16.99	272	229	84.2	204	75.0	2	0	0	0	0
≥17	394	325	82.5	289	73.4	2	2	100	2	100
Less than high school diploma (%)										
<5	81	67	82.7	60	74.1	2	2	100	2	100
5.00–8.99	114	95	83.3	83	72.8	1	1	100	1	100
9.00–15.99	209	183	87.6	157	75.1	2	1	50.0	1	50.0
≥16	540	439	81.3	398	73.7	2	1	50.0	1	50.0
Median household income (U.S. \$)										
<49,000	386	317	82.1	285	73.8	2	1	50.0	1	50.0
49,000–65,999	250	213	85.2	191	76.4	2	1	50.0	1	50.0
66,000–89,999	182	154	84.6	137	75.3	1	1	100	1	100
≥90,000	123	97	78.9	83	67.5	2	2	100	2	100
Without health insurance (%)										
<4	72	56	77.8	52	72.2	2	2	100	2	100
4.00–7.99	134	111	82.8	96	71.6	2	2	100	2	100
8.00–13.99	217	183	84.3	162	74.7	1	0	0	0	0
≥14	521	434	83.3	388	74.5	2	1	50.0	1	50.0
Gini index (%)										
<37	208	166	79.8	147	70.7	2	2	100	2	100
37.00–40.99	205	173	84.4	155	75.6	3	2	66.7	2	66.7
41.00–45.99	275	227	82.5	204	74.2	1	1	100	1	100
≥46	256	218	85.2	192	75.0	1	0	0	0	0
Subtotal <sup>c</sup>	964	799	82.9	714	74.1	7	5	71.4	5	71.4
Total	8,657	7,347	84.9	6,417	74.1	68	53	77.9	47	69.1

	White					Multiracial				
	Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
Male										
Below federal poverty level (%)										
<6	1,419	1,197	84.4	1,023	72.1	128	107	83.6	92	71.9
6.00–9.99	1,428	1,206	84.5	1,027	71.9	144	120	83.3	99	68.8
10.00–16.99	1,746	1,469	84.1	1,262	72.3	151	128	84.8	112	74.2
≥17	1,580	1,304	82.5	1,070	67.7	244	200	82.0	168	68.9
Less than high school diploma (%)										
<5	1,698	1,452	85.5	1,253	73.8	152	130	85.5	110	72.4
5.00–8.99	1,457	1,237	84.9	1,069	73.4	136	108	79.4	95	69.9
9.00–15.99	1,673	1,379	82.4	1,169	69.9	172	147	85.5	126	73.3
≥16	1,345	1,108	82.4	891	66.2	207	170	82.1	140	67.6
Median household income (U.S. \$)										
<49,000	1,580	1,286	81.4	1,055	66.8	227	190	83.7	158	69.6
49,000–65,999	1,668	1,402	84.1	1,205	72.2	167	139	83.2	121	72.5
66,000–89,999	1,540	1,281	83.2	1,104	71.7	147	116	78.9	96	65.3
≥90,000	1,368	1,192	87.1	1,008	73.7	123	108	87.8	94	76.4
Without health insurance (%)										
<4	1,187	1,025	86.4	863	72.7	105	93	88.6	78	74.3
4.00–7.99	1,607	1,349	83.9	1,175	73.1	152	129	84.9	113	74.3
8.00–13.99	1,750	1,472	84.1	1,260	72.0	175	140	80.0	122	69.7
≥14	1,629	1,330	81.6	1,084	66.5	235	193	82.1	158	67.2
Gini index (%)										
<37	1,251	1,044	83.5	875	69.9	157	133	84.7	114	72.6
37.00–40.99	1,413	1,172	82.9	1,004	71.1	119	98	82.4	85	71.4
41.00–45.99	1,745	1,474	84.5	1,233	70.7	173	138	79.8	117	67.6
≥46	1,762	1,484	84.2	1,268	72.0	217	185	85.3	154	71.0
Subtotal <sup>c</sup>	6,392	5,352	83.7	4,541	71.0	690	572	82.9	485	70.3
Female										
Below federal poverty level (%)										
<6	223	192	86.1	164	73.5	21	16	76.2	13	61.9
6.00–9.99	244	201	82.4	161	66.0	31	24	77.4	23	74.2
10.00–16.99	338	268	79.3	219	64.8	41	31	75.6	28	68.3
≥17	391	314	80.3	223	57.0	68	57	83.8	45	66.2
Less than high school diploma (%)										
<5	188	160	85.1	145	77.1	26	19	73.1	15	57.7
5.00–8.99	248	200	80.6	161	64.9	26	21	80.8	19	73.1
9.00–15.99	378	309	81.7	237	62.7	43	37	86.0	32	74.4
≥16	382	306	80.1	224	58.6	66	51	77.3	43	65.2
Median household income (U.S. \$)										
<49,000	436	355	81.4	255	58.5	81	67	82.7	55	67.9
49,000–65,999	342	282	82.5	222	64.9	35	28	80.0	25	71.4
66,000–89,999	236	188	79.7	158	66.9	22	16	72.7	14	63.6

	White					Multiracial				
	Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
≥90,000	179	149	83.2	131	73.2	23	17	73.9	15	65.2
Without health insurance (%)										
<4	156	128	82.1	108	69.2	20	17	85.0	16	80.0
4.00–7.99	310	257	82.9	214	69.0	28	21	75.0	22	78.6
8.00–13.99	344	278	80.8	216	62.8	34	27	79.4	20	58.8
≥14	386	312	80.8	229	59.3	79	63	79.7	51	64.6
Gini index (%)										
<37	232	190	81.9	149	64.2	20	18	90.0	14	70.0
37.00–40.99	303	243	80.2	208	68.6	38	27	71.1	28	73.7
41.00–45.99	345	282	81.7	217	62.9	57	44	77.2	37	64.9
≥46	316	260	82.3	193	61.1	46	39	84.8	30	65.2
Subtotal <sup>c</sup>	1,246	1,009	81.0	797	64.0	169	134	79.3	117	69.2
Total	7,638	6,361	83.3	5,338	69.9	859	706	82.2	602	70.1

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only]; SDOH, social determinants of health [footnotes only].

*Note.* Data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis. Numbers less than 12, and rates based on these numbers, should be interpreted with caution. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after diagnosis of HIV infection. A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are within 6 months of diagnosis of HIV infection during 2021. Data not provided for states and associated census tracts that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  .

<sup>a</sup> Hispanic/Latino persons can be of any race.  
<sup>b</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.  
<sup>c</sup> Because column subtotals were calculated independently of the values for the subpopulations, the values in each column may not sum to the column subtotals. See Technical Notes for criteria used to define SDOH subpopulations.

Table 11. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among adults aged ≥18 years, by transmission category, assigned sex at birth, and selected social determinants of health—census tract level, 47 states and the District of Columbia

	Male-to-male sexual contact <sup>a</sup>					Injection drug use <sup>b</sup>				
	Total diagnoses <sup>d</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>d</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
Male										
Below federal poverty level (%)										
<6	3,365	2,870	85.3	2,480	73.7	146	118	80.9	87	59.3
6.00–9.99	3,834	3,207	83.7	2,813	73.4	162	117	72.3	89	54.5
10.00–16.99	5,753	4,838	84.1	4,211	73.2	264	201	75.9	135	50.9

	Male-to-male sexual contact <sup>a</sup>					Injection drug use <sup>b</sup>				
	Total diagnoses <sup>d</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>d</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
≥17	7,354	5,986	81.4	5,105	69.4	382	280	73.1	192	50.3
Less than high school diploma (%)										
<5	3,747	3,204	85.5	2,778	74.1	115	87	75.3	61	53.1
5.00–8.99	3,659	3,045	83.2	2,709	74.0	170	139	81.9	91	53.7
9.00–15.99	5,225	4,354	83.3	3,764	72.0	273	203	74.4	149	54.4
≥16	7,678	6,301	82.1	5,360	69.8	398	286	72.1	201	50.5
Median household income (U.S. \$)										
<49,000	7,192	5,825	81.0	4,922	68.4	395	277	70.3	192	48.8
49,000–65,999	5,289	4,434	83.8	3,883	73.4	220	168	76.5	116	52.7
66,000–89,999	4,460	3,744	84.0	3,274	73.4	200	150	74.9	116	57.9
≥90,000	3,276	2,822	86.1	2,466	75.3	137	117	85.4	76	55.6
Without health insurance (%)										
<4	2,470	2,139	86.6	1,850	74.9	130	98	75.8	74	56.8
4.00–7.99	4,075	3,450	84.7	3,037	74.5	244	191	78.2	133	54.2
8.00–13.99	5,439	4,543	83.5	3,977	73.1	255	189	74.0	136	53.2
≥14	8,324	6,770	81.3	5,746	69.0	326	238	73.0	160	49.1
Gini index (%)										
<37	4,258	3,532	83.0	3,047	71.6	166	132	79.5	89	53.5
37.00–40.99	4,510	3,727	82.7	3,254	72.2	197	150	75.8	114	57.6
41.00–45.99	5,486	4,604	83.9	3,964	72.3	295	218	73.9	145	49.2
≥46	6,046	5,032	83.2	4,340	71.8	296	216	72.9	154	52.1
Subtotal <sup>e</sup>	20,967	17,424	83.1	15,081	71.9	992	738	74.4	519	52.3
Female										
Below federal poverty level (%)										
<6	—	—	—	—	—	104	88	84.7	65	62.4
6.00–9.99	—	—	—	—	—	132	105	78.9	82	61.9
10.00–16.99	—	—	—	—	—	205	152	74.1	116	56.5
≥17	—	—	—	—	—	362	289	79.9	196	54.2
Less than high school diploma (%)										
<5	—	—	—	—	—	95	76	79.7	61	64.0
5.00–8.99	—	—	—	—	—	126	104	82.6	77	61.2
9.00–15.99	—	—	—	—	—	236	184	78.0	128	54.2
≥16	—	—	—	—	—	346	270	77.9	193	55.7
Median household income (U.S. \$)										
<49,000	—	—	—	—	—	369	291	79.0	198	53.7
49,000–65,999	—	—	—	—	—	212	164	77.4	122	57.5
66,000–89,999	—	—	—	—	—	124	97	78.4	78	62.7
≥90,000	—	—	—	—	—	98	81	82.6	61	62.5
Without health insurance (%)										
<4	—	—	—	—	—	97	75	77.5	56	58.0
4.00–7.99	—	—	—	—	—	175	137	78.3	104	59.3
8.00–13.99	—	—	—	—	—	214	171	79.6	121	56.6



	Male-to-male sexual contact <sup>a</sup>					Injection drug use <sup>b</sup>				
	Total diagnoses <sup>d</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>d</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
≥14	—	—	—	—	—	317	251	79.1	178	56.0
Gini index (%)										
<37	—	—	—	—	—	146	113	77.3	86	58.9
37.00–40.99	—	—	—	—	—	156	122	78.2	95	60.9
41.00–45.99	—	—	—	—	—	237	187	78.7	134	56.3
≥46	—	—	—	—	—	265	213	80.4	145	54.6
Subtotal <sup>e</sup>	—	—	—	—	—	838	660	78.7	479	57.1
Total	20,967	17,424	83.1	15,081	71.9	1,830	1,397	76.4	998	54.5

	Male-to-male sexual contact <sup>a</sup> and injection drug use <sup>b</sup>					Heterosexual contact <sup>c</sup>				
	Total diagnoses <sup>d</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>d</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
Male										
Below federal poverty level (%)										
<6	190	150	78.9	132	69.5	267	227	84.9	182	68.3
6.00–9.99	226	184	81.2	150	66.5	332	279	84.1	221	66.6
10.00–16.99	281	231	82.2	181	64.5	525	441	84.0	339	64.4
≥17	353	272	77.1	210	59.7	791	627	79.3	485	61.2
Less than high school diploma (%)										
<5	207	165	79.8	143	69.1	222	182	81.7	153	68.7
5.00–8.99	214	171	80.0	148	69.1	328	269	82.1	219	66.6
9.00–15.99	278	222	79.8	171	61.7	537	456	85.0	363	67.6
≥16	351	278	79.3	212	60.4	829	669	80.6	493	59.4
Median household income (U.S. \$)										
<49,000	344	266	77.2	199	57.8	832	666	80.0	500	60.1
49,000–65,999	302	243	80.3	194	64.3	485	400	82.4	327	67.3
66,000–89,999	223	172	77.1	153	68.6	352	295	83.9	230	65.4
≥90,000	175	151	86.6	125	71.3	237	206	86.8	163	68.6
Without health insurance (%)										
<4	158	135	85.7	115	72.7	198	171	85.9	126	63.7
4.00–7.99	232	188	81.0	157	67.7	315	263	83.3	215	68.3
8.00–13.99	288	227	78.8	182	63.2	469	391	83.5	322	68.7
≥14	372	287	77.0	221	59.3	933	750	80.4	562	60.3
Gini index (%)										
<37	202	165	81.6	135	66.7	401	338	84.3	265	66.0
37.00–40.99	249	188	75.4	158	63.3	431	355	82.3	285	66.1
41.00–45.99	288	233	80.9	188	65.3	519	425	81.8	326	62.8
≥46	309	249	80.6	192	62.2	564	456	80.9	350	62.2
Subtotal <sup>e</sup>	1,098	873	79.5	703	64.0	1,971	1,617	82.0	1,258	63.8
Female										
Below federal poverty level (%)										



	Male-to-male sexual contact <sup>a</sup> and injection drug use <sup>b</sup>					Heterosexual contact <sup>c</sup>				
	Total diagnoses <sup>d</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>d</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
<6	—	—	—	—	—	618	530	85.8	462	74.7
6.00–9.99	—	—	—	—	—	758	636	83.9	557	73.5
10.00–16.99	—	—	—	—	—	1,263	1,034	81.9	927	73.4
≥17	—	—	—	—	—	1,908	1,587	83.2	1,328	69.6
Less than high school diploma (%)										
<5	—	—	—	—	—	532	453	85.1	409	76.9
5.00–8.99	—	—	—	—	—	771	639	82.8	546	70.8
9.00–15.99	—	—	—	—	—	1,289	1,091	84.6	940	72.9
≥16	—	—	—	—	—	1,956	1,606	82.1	1,378	70.4
Median household income (U.S. \$)										
<49,000	—	—	—	—	—	1,999	1,653	82.7	1,382	69.1
49,000–65,999	—	—	—	—	—	1,146	950	82.9	835	72.9
66,000–89,999	—	—	—	—	—	815	687	84.3	608	74.6
≥90,000	—	—	—	—	—	569	481	84.4	433	76.1
Without health insurance (%)										
<4	—	—	—	—	—	430	365	84.9	339	78.9
4.00–7.99	—	—	—	—	—	818	691	84.5	619	75.6
8.00–13.99	—	—	—	—	—	1,161	975	84.0	829	71.4
≥14	—	—	—	—	—	2,139	1,756	82.1	1,486	69.5
Gini index (%)										
<37	—	—	—	—	—	876	737	84.1	620	70.7
37.00–40.99	—	—	—	—	—	1,063	872	82.1	785	73.9
41.00–45.99	—	—	—	—	—	1,278	1,075	84.1	919	71.9
≥46	—	—	—	—	—	1,331	1,104	82.9	950	71.3
Subtotal <sup>e</sup>	—	—	—	—	—	4,685	3,897	83.2	3,367	71.9
Total	1,098	873	79.5	703	64.0	6,656	5,514	82.8	4,624	69.5

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only]; SDOH, social determinants of health [footnotes only].

*Note.* Data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤ 1 month after diagnosis of HIV infection. A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are within 6 months of diagnosis of HIV infection during 2021. Data not provided for states and associated census tracts that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  . 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.

<sup>a</sup> 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).  
<sup>b</sup> 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).  
<sup>c</sup> Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.  
<sup>d</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for

exclusion criteria.

<sup>e</sup> Because column subtotals were calculated independently of the values for the subpopulations, the values in each column may not sum to the column subtotals. See Technical Notes for criteria used to define SDOH subpopulations.

Table 12. Linkage to HIV medical care within 1 month and viral suppression within 6 months of HIV diagnosis during 2021 among males aged ≥18 years, based on assigned sex at birth, with infection attributed to male-to-male sexual contact, by race/ethnicity and selected social determinants of health—census tract level, 47 states and the District of Columbia

	American Indian/Alaska Native					Asian					Black/African American				
	Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No. %	No.	%		No.	No. %	No.	%		No.	No. %	No.	%
Below federal poverty level (%)															
<6	14	12	86.1	11	79.2	136	126	92.9	111	81.4	964	787	81.7	659	68.3
6.00–9.99	18	14	79.9	13	74.9	123	110	89.7	105	85.6	1,150	933	81.1	807	70.2
10.00–16.99	30	27	87.7	25	81.1	116	104	89.6	93	80.0	1,973	1,605	81.4	1,359	68.9
≥17	40	31	75.9	23	56.6	127	104	82.3	96	75.9	3,422	2,666	77.9	2,234	65.3
Less than high school diploma (%)															
<5	21	19	91.0	18	86.2	129	117	90.9	105	81.8	1,141	936	82.0	796	69.7
5.00–8.99	18	15	79.3	13	71.2	99	87	88.2	84	85.2	1,343	1,071	79.8	943	70.3
9.00–15.99	33	28	85.0	24	73.1	125	114	91.3	100	80.4	2,233	1,811	81.1	1,517	68.0
≥16	30	22	72.3	17	55.0	149	126	84.7	115	77.1	2,795	2,176	77.9	1,803	64.5
Median household income (U.S. \$)															
<49,000	39	32	80.6	25	63.2	89	77	85.9	65	73.2	3,521	2,737	77.7	2,262	64.2
49,000–65,999	30	24	81.7	22	73.6	99	85	85.3	82	82.6	1,806	1,468	81.3	1,270	70.4
66,000–89,999	22	17	77.7	15	68.8	130	111	86.0	104	80.1	1,323	1,093	82.6	929	70.2
≥90,000	12	11	91.5	10	87.3	179	167	93.5	150	83.9	815	660	81.0	566	69.5
Without health insurance (%)															
<4	5	4	81.1	4	71.7	117	108	92.7	100	85.8	717	593	82.7	487	67.9
4.00–7.99	23	20	88.0	16	70.2	152	137	90.3	124	81.9	1,409	1,161	82.4	986	70.0
8.00–13.99	27	22	81.8	23	85.4	133	118	88.8	110	82.8	2,055	1,661	80.8	1,426	69.4
≥14	48	37	78.4	29	61.1	101	82	81.2	71	70.2	3,329	2,578	77.4	2,161	64.9
Gini index (%)															
<37	19	16	84.0	15	78.7	118	105	88.6	94	79.3	1,512	1,212	80.2	1,044	69.0
37.00–40.99	22	17	75.5	13	60.0	98	91	92.6	83	84.4	1,586	1,253	79.0	1,075	67.8
41.00–45.99	31	25	81.0	23	72.9	137	124	90.6	110	80.9	1,928	1,545	80.1	1,306	67.7
≥46	31	26	84.8	22	69.4	148	124	84.1	118	79.7	2,482	1,981	79.8	1,634	65.8
Total <sup>c</sup>	112	93	83.1	80	71.1	516	456	88.4	417	80.7	7,803	6,214	79.6	5,255	67.3



	Hispanic/Latino <sup>a</sup>					Native Hawaiian/other Pacific Islander				
	Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No. %	No.	%		No.	No. %	No.	%
Below federal poverty level (%)										

	Hispanic/Latino <sup>a</sup>					Native Hawaiian/other Pacific Islander				
	Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%
<6	973	859	88.3	759	78.0	16	14	87.3	14	87.3
6.00–9.99	1,274	1,080	84.8	949	74.5	9	5	55.2	8	88.5
10.00–16.99	2,100	1,792	85.3	1,586	75.5	14	12	85.3	5	36.0
≥17	2,340	1,978	84.5	1,734	74.1	14	12	85.3	9	64.7
Less than high school diploma (%)										
<5	878	773	88.0	672	76.5	9	7	77.8	5	55.6
5.00–8.99	915	784	85.7	698	76.3	13	10	78.2	10	77.4
9.00–15.99	1,406	1,199	85.3	1,087	77.3	18	14	77.3	12	68.2
≥16	3,488	2,954	84.7	2,571	73.7	12	11	91.5	8	66.7
Median household income (U.S. \$)										
<49,000	2,163	1,823	84.3	1,587	73.3	14	12	85.2	9	64.4
49,000–65,999	1,877	1,603	85.4	1,410	75.1	10	8	78.9	6	61.1
66,000–89,999	1,599	1,365	85.4	1,219	76.3	14	10	71.3	8	55.9
≥90,000	1,021	893	87.5	791	77.4	15	13	86.7	13	86.7
Without health insurance (%)										
<4	582	514	88.3	465	79.9	9	9	100	8	88.9
4.00–7.99	1,085	942	86.8	849	78.3	11	9	83.2	9	83.2
8.00–13.99	1,675	1,430	85.4	1,266	75.6	18	13	71.4	11	61.1
≥14	3,345	2,824	84.4	2,449	73.2	14	11	78.3	7	50.7
Gini index (%)										
<37	1,442	1,223	84.8	1,062	73.6	14	11	79.2	10	66.0
37.00–40.99	1,588	1,340	84.4	1,190	74.9	10	8	80.0	8	80.0
41.00–45.99	1,857	1,599	86.1	1,399	75.4	11	9	81.1	6	56.6
≥46	1,796	1,544	85.9	1,375	76.6	17	14	82.5	12	69.9
Total <sup>c</sup>	6,838	5,832	85.3	5,141	75.2	56	45	80.4	38	68.5

	White					Multiracial					Total				
	Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month	VL <200 copies/mL ≤6 months	≥1 CD4 or VL tests ≤1 month	VL <200 copies/mL ≤6 months		≥1 CD4 or VL tests ≤1 month	VL <200 copies/mL ≤6 months							
	No.	No.	%	No.	%	No.	No.	%	No.	%	No.	No.	%	No.	%
Below federal poverty level (%)															
<6	1,150	976	84.8	845	73.5	112	95	85.0	82	73.4	3,365	2,870	85.3	2,480	73.7
6.00–9.99	1,141	966	84.7	848	74.4	119	98	82.7	82	68.9	3,834	3,207	83.7	2,813	73.4
10.00–16.99	1,397	1,192	85.3	1,049	75.1	124	107	86.8	95	76.5	5,753	4,838	84.1	4,211	73.2
≥17	1,205	1,022	84.8	858	71.2	207	174	83.8	151	72.7	7,354	5,986	81.4	5,105	69.4
Less than high school diploma (%)															
<5	1,435	1,238	86.2	1,084	75.5	134	114	85.3	97	72.7	3,747	3,204	85.5	2,778	74.1
5.00–8.99	1,162	991	85.2	882	75.9	109	87	79.7	78	71.5	3,659	3,045	83.2	2,709	74.0
9.00–15.99	1,272	1,068	84.0	919	72.3	139	121	87.0	104	74.5	5,225	4,354	83.3	3,764	72.0
≥16	1,024	860	83.9	716	70.0	180	153	84.8	131	72.6	7,678	6,301	82.1	5,360	69.8
Median household income (U.S. \$)															

	White					Multiracial					Total				
	Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression		Total diagnoses <sup>b</sup>	Linkage to care		Viral suppression	
		≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months			≥1 CD4 or VL tests ≤1 month		VL <200 copies/mL ≤6 months	
		No.	No.	%	No.		%	No.	No.	%		No.	%	No.	No.
<49,000	1,177	983	83.6	834	70.8	189	162	85.9	141	74.6	7,192	5,825	81.0	4,922	68.4
49,000–65,999	1,328	1,129	85.0	991	74.6	140	117	83.8	102	73.1	5,289	4,434	83.8	3,883	73.4
66,000–89,999	1,251	1,050	84.0	916	73.2	122	98	80.6	83	67.8	4,460	3,744	84.0	3,274	73.4
≥90,000	1,127	983	87.3	855	75.9	108	95	88.0	82	75.5	3,276	2,822	86.1	2,466	75.3
Without health insurance (%)															
<4	948	831	87.6	716	75.5	92	80	87.4	71	76.9	2,470	2,139	86.6	1,850	74.9
4.00–7.99	1,274	1,077	84.5	960	75.4	121	104	85.4	92	76.1	4,075	3,450	84.7	3,037	74.5
8.00–13.99	1,389	1,183	85.1	1,039	74.8	143	117	82.4	103	72.1	5,439	4,543	83.5	3,977	73.1
≥14	1,282	1,065	83.1	886	69.2	206	174	84.1	144	69.7	8,324	6,770	81.3	5,746	69.0
Gini index (%)															
<37	1,014	846	83.4	724	71.4	138	119	86.3	99	72.2	4,258	3,532	83.0	3,047	71.6
37.00–40.99	1,108	938	84.6	816	73.7	98	81	82.8	69	71.2	4,510	3,727	82.7	3,254	72.2
41.00–45.99	1,381	1,186	85.8	1,018	73.7	142	116	82.2	102	71.9	5,486	4,604	83.9	3,964	72.3
≥46	1,389	1,186	85.3	1,042	75.0	184	158	85.7	138	74.9	6,046	5,032	83.2	4,340	71.8
Total <sup>c</sup>	5,064	4,296	84.8	3,730	73.7	578	488	84.4	421	72.8	20,967	17,424	83.1	15,081	71.9

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); CDC, the Centers for Disease Control and Prevention [footnotes only]; SDOH, social determinants of health [footnotes only].

*Note.* Male-to-male sexual 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). Numbers less than 12, and rates based on these numbers, should be interpreted with caution. Data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month after diagnosis of HIV infection. A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are within 6 months of diagnosis of HIV infection during 2021. Data not provided for states and associated census tracts that do not have laws requiring reporting of all CD4 and viral loads or that have incomplete reporting of laboratory data to CDC. Areas without laws: Idaho. Areas with incomplete reporting: New Jersey, Pennsylvania (excluding Philadelphia), and Puerto Rico. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  .

<sup>a</sup> Hispanic/Latino persons can be of any race.  
<sup>b</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.  
<sup>c</sup> Because column subtotals were calculated independently of the values for the subpopulations, the values in each column may not sum to the column subtotals. See Technical Notes for criteria used to define SDOH subpopulations.

Table 13. Diagnoses of HIV infection among adults aged ≥18 years, by age at diagnosis, race/ethnicity, assigned sex at birth, and selected social determinants of health, 2021—census tract level, United States and Puerto Rico

▼

	American Indian/Alaska Native														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male															
Below federal poverty level (%)															
<6	3	20,206	14.8	8	27,033	29.6	3	25,400	11.8	0	26,276	0.0	3	42,315	7.1

	American Indian/Alaska Native														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
6.00–9.99	3	24,626	12.2	10	35,214	28.4	7	33,610	20.8	3	28,807	10.4	2	50,556	4.0
10.00–16.99	6	40,678	14.7	14	61,336	22.8	9	53,306	16.9	2	43,433	4.6	3	78,234	3.8
≥17	11	65,333	16.8	21	90,852	23.1	11	72,349	15.2	5	63,668	7.9	1	108,912	0.9
Less than high school diploma (%)															
<5	5	22,096	22.6	11	24,001	45.8	3	20,970	14.3	1	19,730	5.1	4	31,730	12.6
5.00–8.99	0	24,951	0.0	10	35,680	28.0	10	31,425	31.8	2	28,303	7.1	2	53,724	3.7
9.00–15.99	9	44,271	20.3	18	64,214	28.0	7	54,249	12.9	4	46,138	8.7	0	85,607	0.0
≥16	9	60,561	14.9	14	92,746	15.1	10	79,741	12.5	3	68,986	4.3	3	109,492	2.7
Median household income (U.S. \$)															
<49,000	14	61,612	22.7	17	84,845	20.0	12	69,068	17.4	3	59,962	5.0	1	109,420	0.9
49,000–65,999	3	40,773	7.4	18	60,529	29.7	9	52,336	17.2	3	42,977	7.0	2	74,368	2.7
66,000–89,999	4	28,813	13.9	12	42,676	28.1	4	38,320	10.4	2	32,670	6.1	4	55,275	7.2
≥90,000	2	18,412	10.9	6	24,914	24.1	5	23,915	20.9	2	25,750	7.8	2	39,572	5.1
Without health insurance (%)															
<4	0	13,722	0.0	3	16,690	18.0	3	16,063	18.7	0	16,442	0.0	3	30,746	9.8
4.00–7.99	4	24,741	16.2	12	37,107	32.3	4	32,235	12.4	3	28,615	10.5	3	53,277	5.6
8.00–13.99	4	38,613	10.4	18	53,680	33.5	10	48,419	20.7	4	41,198	9.7	0	71,341	0.0
≥14	15	74,020	20.3	20	106,970	18.7	13	87,948	14.8	3	75,929	4.0	3	124,653	2.4
Gini index (%)															
<37	3	25,607	11.7	13	36,849	35.3	5	34,380	14.5	3	28,399	10.6	1	42,678	2.3
37.00–40.99	4	33,178	12.1	9	48,387	18.6	8	41,426	19.3	2	35,536	5.6	3	62,036	4.8
41.00–45.99	9	48,295	18.6	14	68,960	20.3	12	57,285	20.9	0	51,721	0.0	3	91,069	3.3
≥46	7	43,376	16.1	17	59,992	28.3	5	51,267	9.8	5	46,263	10.8	2	84,100	2.4
Subtotal <sup>b</sup>	25	151,879	16.5	58	216,641	26.8	32	186,385	17.2	13	163,157	8.0	9	280,553	3.2
Female															
Below federal poverty level (%)															
<6	0	17,163	0.0	1	25,613	3.9	1	26,540	3.8	0	25,872	0.0	0	44,979	0.0
6.00–9.99	0	22,820	0.0	4	34,194	11.7	1	31,522	3.2	1	28,234	3.5	0	57,515	0.0
10.00–16.99	1	39,084	2.6	2	56,920	3.5	4	47,270	8.5	4	43,932	9.1	1	86,118	1.2
≥17	2	67,363	3.0	4	82,791	4.8	2	71,486	2.8	3	64,778	4.6	1	130,535	0.8
Less than high school diploma (%)															
<5	0	20,601	0.0	2	24,665	8.1	3	21,173	14.2	2	20,003	10.0	0	38,116	0.0
5.00–8.99	0	26,785	0.0	7	34,588	20.2	2	32,132	6.2	3	29,382	10.2	1	58,457	1.7
9.00–15.99	1	41,395	2.4	0	61,449	0.0	2	53,319	3.8	2	49,035	4.1	0	98,527	0.0
≥16	2	58,193	3.4	2	78,977	2.5	1	70,457	1.4	1	64,430	1.6	1	124,068	0.8
Median household income (U.S. \$)															
<49,000	2	62,259	3.2	2	79,816	2.5	5	68,068	7.3	3	62,782	4.8	1	128,596	0.8
49,000–65,999	1	39,219	2.5	4	54,862	7.3	1	48,366	2.1	2	42,671	4.7	1	87,066	1.1
66,000–89,999	0	27,716	0.0	4	40,329	9.9	0	34,910	0.0	1	32,771	3.1	0	60,784	0.0
≥90,000	0	16,067	0.0	1	23,588	4.2	2	24,983	8.0	2	24,072	8.3	0	41,529	0.0
Without health insurance (%)															
<4	0	12,378	0.0	0	15,685	0.0	0	15,334	0.0	0	16,307	0.0	0	32,830	0.0
4.00–7.99	0	24,126	0.0	3	35,537	8.4	3	31,989	9.4	3	28,788	10.4	1	59,157	1.7
8.00–13.99	2	39,304	5.1	4	51,177	7.8	1	44,687	2.2	2	43,163	4.6	1	81,133	1.2



	American Indian/Alaska Native														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
≥14	1	70,981	1.4	4	97,125	4.1	4	84,808	4.7	3	74,558	4.0	0	146,035	0.0
Gini index (%)															
<37	0	23,764	0.0	2	34,973	5.7	2	32,147	6.2	1	28,085	3.6	0	47,138	0.0
37.00–40.99	0	30,750	0.0	1	42,365	2.4	1	39,555	2.5	1	35,980	2.8	1	69,863	1.4
41.00–45.99	1	45,572	2.2	6	66,063	9.1	2	56,553	3.5	1	52,506	1.9	1	102,956	1.0
≥46	2	46,174	4.3	2	56,060	3.6	3	48,492	6.2	5	46,140	10.8	0	99,153	0.0
Subtotal <sup>b</sup>	3	146,974	2.0	12	199,679	6.0	9	177,081	5.1	9	162,850	5.5	2	319,168	0.6
Total <sup>c</sup>	28	298,853	9.4	70	416,320	16.8	41	363,466	11.3	22	326,007	6.7	11	599,721	1.8

	Asian														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male															
Below federal poverty level (%)															
<6	26	237,495	10.9	58	493,582	11.8	34	635,146	5.4	27	564,139	4.8	15	822,899	1.8
6.00–9.99	22	168,562	13.1	58	392,791	14.8	36	352,108	10.2	14	291,742	4.8	7	501,813	1.4
10.00–16.99	22	178,072	12.4	44	359,873	12.2	37	278,967	13.3	22	241,784	9.1	15	441,515	3.4
≥17	28	258,113	10.8	67	267,374	25.1	23	162,705	14.1	16	136,914	11.7	12	264,536	4.5
Less than high school diploma (%)															
<5	28	353,348	7.9	62	527,254	11.8	34	553,551	6.1	20	438,668	4.6	11	579,697	1.9
5.00–8.99	22	173,707	12.7	41	348,064	11.8	27	348,883	7.7	15	296,103	5.1	7	475,768	1.5
9.00–15.99	24	165,114	14.5	52	329,674	15.8	32	277,256	11.5	23	244,283	9.4	14	468,431	3.0
≥16	24	161,210	14.9	72	310,783	23.2	37	250,626	14.8	21	256,430	8.2	17	507,284	3.4
Median household income (U.S. \$)															
<49,000	17	175,594	9.7	44	182,000	24.2	20	111,176	18.0	18	98,951	18.2	9	190,493	4.7
49,000–65,999	26	142,020	18.3	41	265,226	15.5	23	187,231	12.3	15	160,921	9.3	9	297,640	3.0
66,000–89,999	21	188,492	11.1	66	392,504	16.8	32	327,247	9.8	16	272,969	5.9	11	502,927	2.2
≥90,000	32	316,303	10.1	74	668,696	11.1	55	800,746	6.9	30	699,151	4.3	19	1,035,591	1.8
Without health insurance (%)															
<4	19	278,221	6.8	64	468,753	13.7	34	534,568	6.4	17	457,780	3.7	9	696,372	1.3
4.00–7.99	28	254,698	11.0	60	453,670	13.2	38	415,608	9.1	23	356,927	6.4	16	589,697	2.7
8.00–13.99	33	188,375	17.5	57	351,011	16.2	35	287,007	12.2	21	247,338	8.5	8	437,415	1.8
≥14	18	130,530	13.8	46	240,620	19.1	23	191,771	12.0	18	172,538	10.4	16	307,283	5.2
Gini index (%)															
<37	24	185,965	12.9	50	375,675	13.3	28	408,837	6.8	20	343,748	5.8	15	503,926	3.0
37.00–40.99	17	178,264	9.5	46	365,775	12.6	31	357,737	8.7	13	308,133	4.2	7	497,540	1.4
41.00–45.99	21	204,361	10.3	64	399,385	16.0	38	371,691	10.2	21	327,695	6.4	17	569,871	3.0
≥46	36	268,969	13.4	66	372,225	17.7	33	290,411	11.4	25	254,788	9.8	10	459,172	2.2
Subtotal <sup>b</sup>	101	853,379	11.8	240	1,515,775	15.8	134	1,430,316	9.4	85	1,235,484	6.9	50	2,031,180	2.5
Female															
Below federal poverty level (%)															
<6	3	231,671	1.3	5	549,884	0.9	5	727,629	0.7	6	625,131	1.0	2	997,498	0.2
6.00–9.99	3	168,900	1.8	3	409,801	0.7	9	395,368	2.3	2	340,038	0.6	5	636,055	0.8
10.00–16.99	2	171,741	1.2	4	372,616	1.1	13	312,777	4.2	2	278,012	0.7	4	555,641	0.7

	Asian														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
≥17	0	250,724	0.0	8	259,270	3.1	2	174,997	1.1	2	151,091	1.3	3	329,900	0.9
Less than high school diploma (%)															
<5	2	354,257	0.6	4	565,638	0.7	9	625,837	1.4	2	490,557	0.4	1	715,197	0.1
5.00–8.99	1	174,011	0.6	3	377,449	0.8	4	397,868	1.0	3	341,486	0.9	3	605,616	0.5
9.00–15.99	2	151,218	1.3	4	339,308	1.2	5	310,160	1.6	3	283,245	1.1	3	593,572	0.5
≥16	3	153,292	2.0	9	309,599	2.9	11	276,971	4.0	4	279,018	1.4	7	604,778	1.2
Median household income (U.S. \$)															
<49,000	1	164,222	0.6	7	176,697	4.0	2	121,302	1.6	3	108,715	2.8	0	241,676	0.0
49,000–65,999	2	136,443	1.5	3	264,517	1.1	8	210,157	3.8	3	190,195	1.6	4	384,576	1.0
66,000–89,999	3	180,633	1.7	6	410,260	1.5	10	356,887	2.8	0	321,960	0.0	7	634,930	1.1
≥90,000	2	320,739	0.6	4	736,345	0.5	9	920,018	1.0	6	770,699	0.8	3	1,251,886	0.2
Without health insurance (%)															
<4	2	282,478	0.7	2	512,627	0.4	7	614,238	1.1	3	509,316	0.6	1	858,441	0.1
4.00–7.99	2	249,226	0.8	8	478,665	1.7	6	466,850	1.3	4	405,988	1.0	9	745,163	1.2
8.00–13.99	2	179,920	1.1	4	356,091	1.1	5	318,845	1.6	2	283,966	0.7	2	537,669	0.4
≥14	2	120,701	1.7	6	244,392	2.5	11	210,856	5.2	3	195,002	1.5	2	377,829	0.5
Gini index (%)															
<37	1	174,728	0.6	2	405,311	0.5	9	454,630	2.0	4	376,592	1.1	1	620,456	0.2
37.00–40.99	2	171,203	1.2	4	383,934	1.0	9	399,334	2.3	2	344,390	0.6	6	616,898	1.0
41.00–45.99	3	197,924	1.5	5	416,530	1.2	4	422,103	0.9	3	373,726	0.8	3	699,283	0.4
≥46	2	273,743	0.7	9	385,568	2.3	7	334,671	2.1	3	299,446	1.0	4	582,314	0.7
Subtotal <sup>b</sup>	9	832,778	1.1	20	1,591,994	1.3	30	1,610,836	1.9	13	1,394,306	0.9	14	2,519,163	0.6
Total <sup>c</sup>	110	1,686,157	6.5	260	3,107,769	8.4	164	3,041,152	5.4	98	2,629,790	3.7	64	4,550,343	1.4

	Black/African American														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male															
Below federal poverty level (%)															
<6	350	349,817	100.1	470	513,337	91.6	191	500,059	38.2	102	502,345	20.3	99	746,731	13.3
6.00–9.99	388	361,325	107.4	604	572,075	105.6	245	485,607	50.5	114	455,180	25.0	103	738,674	13.9
10.00–16.99	725	549,416	132.0	1,017	837,983	121.4	383	684,986	55.9	179	624,011	28.7	208	1,111,513	18.7
≥17	1,339	929,790	144.0	1,707	1,208,784	141.2	669	921,565	72.6	356	865,953	41.1	406	1,753,067	23.2
Less than high school diploma (%)															
<5	407	408,725	99.6	577	470,314	122.7	201	386,134	52.1	91	363,843	25.0	91	545,769	16.7
5.00–8.99	511	420,865	121.4	668	611,659	109.2	265	520,729	50.9	132	491,353	26.9	124	826,371	15.0
9.00–15.99	813	633,048	128.4	1,170	941,833	124.2	452	780,185	57.9	207	754,176	27.4	215	1,350,804	15.9
≥16	1,072	752,095	142.5	1,385	1,142,058	121.3	572	931,376	61.4	321	856,050	37.5	386	1,640,633	23.5
Median household income (U.S. \$)															
<49,000	1,388	938,762	147.9	1,758	1,240,733	141.7	682	950,224	71.8	347	894,654	38.8	421	1,838,667	22.9
49,000–65,999	634	519,111	122.1	978	803,532	121.7	378	637,506	59.3	158	574,139	27.5	166	1,001,099	16.6
66,000–89,999	490	403,940	121.3	658	631,997	104.1	242	541,832	44.7	149	503,368	29.6	118	798,891	14.8
≥90,000	269	301,085	89.3	385	429,116	89.7	177	440,615	40.2	95	458,267	20.7	107	684,394	15.6
Without health insurance (%)															

	Black/African American														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
<4	271	300,821	90.1	362	393,949	91.9	173	353,031	49.0	82	348,178	23.6	73	598,066	12.2
4.00–7.99	519	503,396	103.1	704	695,798	101.2	265	582,306	45.5	164	569,646	28.8	148	1,012,879	14.6
8.00–13.99	742	624,539	118.8	1,093	887,508	123.2	385	739,601	52.1	192	704,755	27.2	213	1,255,420	17.0
≥14	1,271	769,598	165.2	1,639	1,155,142	141.9	665	917,298	72.5	313	824,944	37.9	382	1,483,650	25.7
Gini index (%)															
<37	549	479,447	114.5	774	706,889	109.5	268	633,324	42.3	160	589,306	27.2	131	860,652	15.2
37.00–40.99	574	463,160	123.9	797	689,740	115.6	324	583,350	55.5	163	541,965	30.1	164	917,281	17.9
41.00–45.99	741	568,398	130.4	995	839,663	118.5	388	673,570	57.6	189	642,397	29.4	208	1,191,018	17.5
≥46	938	672,009	139.6	1,232	887,187	138.9	507	694,119	73.0	239	668,081	35.8	313	1,376,300	22.7
Subtotal <sup>b</sup>	2,909	2,214,733	131.3	3,966	3,165,864	125.3	1,562	2,618,424	59.7	774	2,465,422	31.4	848	4,363,577	19.4
Female															
Below federal poverty level (%)															
<6	35	313,395	11.2	96	484,037	19.8	97	524,196	18.5	76	528,181	14.4	64	883,922	7.2
6.00–9.99	63	330,446	19.1	112	556,823	20.1	108	518,098	20.8	89	501,939	17.7	89	931,505	9.6
10.00–16.99	87	528,607	16.5	211	859,940	24.5	220	738,456	29.8	174	703,419	24.7	152	1,453,151	10.5
≥17	227	974,209	23.3	447	1,349,935	33.1	348	1,076,547	32.3	246	1,013,081	24.3	238	2,331,748	10.2
Less than high school diploma (%)															
<5	41	422,513	9.7	96	474,939	20.2	69	430,753	16.0	64	401,247	16.0	56	680,686	8.2
5.00–8.99	66	419,355	15.7	165	648,257	25.5	122	585,676	20.8	101	560,407	18.0	81	1,049,988	7.7
9.00–15.99	115	631,084	18.2	251	1,007,905	24.9	237	877,150	27.0	181	872,083	20.8	177	1,788,173	9.9
≥16	190	687,499	27.6	354	1,121,091	31.6	345	964,429	35.8	239	913,423	26.2	229	2,081,772	11.0
Median household income (U.S. \$)															
<49,000	222	970,432	22.9	445	1,404,138	31.7	367	1,127,358	32.6	259	1,063,514	24.4	256	2,468,047	10.4
49,000–65,999	90	497,736	18.1	223	813,627	27.4	176	686,126	25.7	142	645,735	22.0	130	1,301,912	10.0
66,000–89,999	62	375,066	16.5	117	614,760	19.0	136	575,891	23.6	113	550,172	20.5	85	1,010,815	8.4
≥90,000	36	276,228	13.0	78	403,706	19.3	92	455,541	20.2	67	476,825	14.1	68	792,122	8.6
Without health insurance (%)															
<4	39	276,514	14.1	75	371,529	20.2	67	355,035	18.9	72	358,138	20.1	52	737,492	7.1
4.00–7.99	71	490,906	14.5	146	700,246	20.8	127	649,253	19.6	100	634,389	15.8	89	1,294,131	6.9
8.00–13.99	105	614,266	17.1	209	952,259	21.9	221	834,652	26.5	144	805,021	17.9	154	1,638,476	9.4
≥14	197	776,248	25.4	436	1,226,902	35.5	358	1,018,362	35.2	269	949,072	28.3	248	1,930,234	12.8
Gini index (%)															
<37	74	431,978	17.1	155	679,361	22.8	144	673,823	21.4	100	644,807	15.5	99	1,035,663	9.6
37.00–40.99	86	438,216	19.6	195	710,793	27.4	175	630,427	27.8	141	610,402	23.1	106	1,171,843	9.0
41.00–45.99	105	558,376	18.8	228	875,395	26.0	203	751,104	27.0	167	722,793	23.1	174	1,556,278	11.2
≥46	147	713,095	20.6	288	984,479	29.3	251	801,245	31.3	177	768,256	23.0	164	1,836,005	8.9
Subtotal <sup>b</sup>	420	2,160,451	19.4	899	3,252,192	27.6	798	2,858,008	27.9	612	2,747,160	22.3	559	5,600,619	10.0
Total <sup>c</sup>	3,329	4,375,184	76.1	4,865	6,418,056	75.8	2,360	5,476,432	43.1	1,386	5,212,582	26.6	1,407	9,964,196	14.1

	Hispanic/Latino <sup>a</sup>														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male															
Below federal poverty level (%)															

	Hispanic/Latino <sup>a</sup>														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
<6	196	624,273	31.4	507	886,295	57.2	260	925,666	28.1	117	779,779	15.0	76	907,098	8.4
6.00–9.99	277	717,027	38.6	611	1,045,683	58.4	339	994,272	34.1	171	792,736	21.6	95	954,396	10.0
10.00–16.99	448	1,024,837	43.7	1,045	1,492,303	70.0	556	1,342,587	41.4	271	1,085,043	25.0	170	1,357,666	12.5
≥17	632	1,297,630	48.7	1,261	1,643,294	76.7	666	1,460,182	45.6	343	1,189,683	28.8	201	1,801,806	11.2
Less than high school diploma (%)															
<5	183	505,553	36.2	454	602,769	75.3	230	548,226	42.0	94	438,416	21.4	56	543,164	10.3
5.00–8.99	200	506,761	39.5	483	740,399	65.2	239	702,866	34.0	114	548,450	20.8	65	685,286	9.5
9.00–15.99	326	797,128	40.9	759	1,152,870	65.8	375	1,077,711	34.8	193	858,480	22.5	112	1,117,903	10.0
≥16	844	1,878,949	44.9	1,728	2,599,746	66.5	977	2,415,308	40.5	502	2,013,951	24.9	309	2,681,562	11.5
Median household income (U.S. \$)															
<49,000	563	1,183,729	47.6	1,200	1,503,532	79.8	622	1,349,510	46.1	328	1,105,867	29.7	195	1,741,427	11.2
49,000–65,999	441	963,921	45.8	922	1,363,066	67.6	467	1,218,450	38.3	248	971,317	25.5	143	1,184,160	12.1
66,000–89,999	344	871,425	39.5	784	1,282,389	61.1	442	1,187,629	37.2	198	948,664	20.9	131	1,133,371	11.6
≥90,000	197	613,703	32.1	502	897,541	55.9	286	947,317	30.2	125	804,821	15.5	71	940,700	7.5
Without health insurance (%)															
<4	153	439,773	34.8	301	551,264	54.6	157	538,053	29.2	75	456,249	16.4	38	641,499	5.9
4.00–7.99	242	708,266	34.2	589	970,208	60.7	311	898,037	34.6	148	742,357	19.9	96	1,082,010	8.9
8.00–13.99	393	888,577	44.2	886	1,287,558	68.8	424	1,164,566	36.4	220	946,310	23.2	144	1,269,898	11.3
≥14	765	1,635,684	46.8	1,648	2,258,769	73.0	929	2,122,060	43.8	459	1,702,329	27.0	264	2,027,579	13.0
Gini index (%)															
<37	340	913,101	37.2	696	1,258,358	55.3	361	1,225,990	29.4	176	982,903	17.9	104	1,080,301	9.6
37.00–40.99	365	890,251	41.0	804	1,268,485	63.4	428	1,190,505	36.0	178	947,331	18.8	135	1,180,901	11.4
41.00–45.99	428	974,557	43.9	969	1,362,776	71.1	496	1,250,793	39.7	251	1,025,664	24.5	145	1,374,733	10.5
≥46	419	876,742	47.8	953	1,172,555	81.3	536	1,050,645	51.0	297	888,124	33.4	158	1,382,056	11.4
Subtotal <sup>b</sup>	1,609	3,688,391	43.6	3,519	5,095,784	69.1	1,876	4,744,111	39.5	933	3,859,297	24.2	554	5,027,915	11.0
Female															
Below federal poverty level (%)															
<6	14	589,740	2.4	32	835,511	3.8	32	890,500	3.6	27	769,499	3.5	21	1,029,543	2.0
6.00–9.99	19	670,649	2.8	50	975,372	5.1	51	920,201	5.5	36	768,936	4.7	18	1,085,486	1.7
10.00–16.99	42	982,717	4.3	88	1,374,145	6.4	68	1,231,730	5.5	55	1,035,096	5.3	39	1,528,132	2.6
≥17	54	1,260,988	4.3	128	1,546,549	8.3	147	1,392,586	10.6	97	1,193,165	8.1	87	2,133,290	4.1
Less than high school diploma (%)															
<5	12	520,632	2.3	19	597,336	3.2	24	550,417	4.4	17	463,256	3.7	17	647,488	2.6
5.00–8.99	15	495,342	3.0	40	716,848	5.6	40	670,070	6.0	21	553,966	3.8	11	817,383	1.3
9.00–15.99	28	765,361	3.7	59	1,078,868	5.5	63	1,012,072	6.2	56	842,288	6.6	38	1,312,451	2.9
≥16	74	1,737,433	4.3	180	2,339,732	7.7	171	2,203,272	7.8	121	1,907,441	6.3	99	2,999,314	3.3
Median household income (U.S. \$)															
<49,000	49	1,139,431	4.3	124	1,424,900	8.7	147	1,291,673	11.4	92	1,117,557	8.2	86	2,067,681	4.2
49,000–65,999	36	910,648	4.0	84	1,243,925	6.8	54	1,116,008	4.8	61	921,626	6.6	38	1,328,710	2.9
66,000–89,999	28	833,340	3.4	58	1,187,039	4.9	49	1,106,399	4.4	37	923,527	4.0	27	1,279,595	2.1
≥90,000	16	593,360	2.7	32	862,573	3.7	46	907,569	5.1	23	791,744	2.9	14	1,080,910	1.3
Without health insurance (%)															
<4	11	426,865	2.6	21	535,542	3.9	26	530,294	4.9	15	465,810	3.2	10	766,987	1.3
4.00–7.99	21	691,528	3.0	42	945,495	4.4	51	877,549	5.8	34	761,336	4.5	29	1,292,670	2.2

	Hispanic/Latino <sup>a</sup>														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
8.00–13.99	24	867,745	2.8	76	1,198,822	6.3	65	1,106,919	5.9	54	932,588	5.8	41	1,483,190	2.8
≥14	73	1,530,573	4.8	159	2,051,847	7.7	156	1,920,266	8.1	112	1,606,998	7.0	85	2,233,604	3.8
Gini index (%)															
<37	19	846,499	2.2	71	1,174,182	6.0	57	1,143,572	5.0	41	934,769	4.4	31	1,176,458	2.6
37.00–40.99	34	849,912	4.0	67	1,175,619	5.7	67	1,104,510	6.1	50	931,668	5.4	25	1,331,951	1.9
41.00–45.99	44	922,010	4.8	80	1,270,465	6.3	80	1,174,693	6.8	57	1,008,974	5.6	52	1,583,189	3.3
≥46	32	878,766	3.6	80	1,110,827	7.2	94	1,011,909	9.3	67	890,992	7.5	57	1,684,546	3.4
Subtotal <sup>b</sup>	132	3,518,768	3.8	306	4,732,784	6.5	305	4,435,831	6.9	221	3,766,951	5.9	172	5,776,636	3.0
Total <sup>c</sup>	1,741	7,207,159	24.2	3,825	9,828,568	38.9	2,181	9,179,942	23.8	1,154	7,626,248	15.1	726	10,804,551	6.7

	Native Hawaiian/other Pacific Islander														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male															
Below federal poverty level (%)															
<6	2	7,377	27.1	6	14,068	42.6	5	12,433	40.2	2	10,889	18.4	1	17,115	5.8
6.00–9.99	1	8,927	11.2	5	12,205	41.0	1	12,325	8.1	2	9,418	21.2	1	15,642	6.4
10.00–16.99	2	9,970	20.1	4	15,454	25.9	5	12,539	39.9	2	9,185	21.8	2	16,077	12.4
≥17	1	9,289	10.8	7	11,980	58.4	5	9,820	50.9	1	6,132	16.3	2	9,882	20.2
Less than high school diploma (%)															
<5	0	8,736	0.0	4	10,547	37.9	2	10,141	19.7	2	8,132	24.6	1	13,479	7.4
5.00–8.99	2	7,903	25.3	4	13,372	29.9	6	11,173	53.7	3	8,450	35.5	0	14,689	0.0
9.00–15.99	4	10,725	37.3	8	14,699	54.4	3	13,967	21.5	1	10,906	9.2	2	16,107	12.4
≥16	0	8,583	0.0	6	15,371	39.0	5	12,051	41.5	1	8,220	12.2	3	14,546	20.6
Median household income (U.S. \$)															
<49,000	1	7,118	14.0	6	10,059	59.6	5	7,514	66.5	1	4,707	21.2	2	7,784	25.7
49,000–65,999	3	9,088	33.0	5	12,022	41.6	2	9,615	20.8	1	7,148	14.0	2	10,356	19.3
66,000–89,999	2	10,090	19.8	4	15,981	25.0	6	14,613	41.1	2	9,941	20.1	0	17,699	0.0
≥90,000	0	8,771	0.0	7	15,403	45.4	3	15,072	19.9	3	13,645	22.0	2	22,357	8.9
Without health insurance (%)															
<4	0	7,711	0.0	3	10,805	27.8	1	10,647	9.4	3	8,318	36.1	2	16,991	11.8
4.00–7.99	2	10,485	19.1	4	14,977	26.7	5	13,546	36.9	2	12,382	16.2	0	19,138	0.0
8.00–13.99	2	9,281	21.5	9	14,344	62.7	5	12,482	40.1	1	8,217	12.2	1	13,354	7.5
≥14	2	8,102	24.7	6	13,581	44.2	5	10,442	47.9	1	6,707	14.9	3	9,233	32.5
Gini index (%)															
<37	0	10,008	0.0	7	15,796	44.3	6	15,084	39.8	2	11,001	18.2	0	16,677	0.0
37.00–40.99	3	8,552	35.1	6	14,674	40.9	2	11,434	17.5	1	9,301	10.8	0	15,792	0.0
41.00–45.99	1	9,110	11.0	5	12,479	40.1	2	12,014	16.6	0	8,951	0.0	5	14,629	34.2
≥46	2	7,801	25.6	4	10,714	37.3	6	8,501	70.6	4	6,353	63.0	1	11,587	8.6
Subtotal <sup>b</sup>	7	35,947	19.5	24	53,989	44.5	17	47,332	35.9	7	35,708	19.6	6	58,821	10.2
Female															
Below federal poverty level (%)															
<6	0	7,425	0.0	0	11,744	0.0	0	10,502	0.0	1	10,585	9.4	0	18,749	0.0
6.00–9.99	1	7,769	12.9	1	13,303	7.5	1	11,984	8.3	0	9,619	0.0	0	18,535	0.0



	Native Hawaiian/other Pacific Islander														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
10.00–16.99	0	7,600	0.0	1	14,894	6.7	1	12,072	8.3	1	9,925	10.1	0	17,165	0.0
≥17	0	9,230	0.0	0	11,496	0.0	2	8,873	22.5	0	6,758	0.0	0	11,692	0.0
Less than high school diploma (%)															
<5	0	7,450	0.0	1	9,591	10.4	1	8,355	12.0	0	7,564	0.0	0	14,511	0.0
5.00–8.99	0	7,582	0.0	0	12,171	0.0	0	10,991	0.0	1	9,140	10.9	0	16,992	0.0
9.00–15.99	1	8,368	12.0	0	15,129	0.0	2	12,654	15.8	1	10,945	9.1	0	18,279	0.0
≥16	0	8,776	0.0	1	14,581	6.9	1	11,431	8.7	0	9,238	0.0	0	16,359	0.0
Median household income (U.S. \$)															
<49,000	0	7,359	0.0	1	9,327	10.7	1	7,013	14.3	0	4,865	0.0	0	8,727	0.0
49,000–65,999	0	7,034	0.0	0	12,833	0.0	2	9,755	20.5	0	8,746	0.0	0	13,034	0.0
66,000–89,999	1	8,887	11.3	0	14,992	0.0	1	12,816	7.8	1	11,265	8.9	0	19,612	0.0
≥90,000	0	8,523	0.0	1	13,986	7.2	0	13,676	0.0	1	11,834	8.5	0	24,153	0.0
Without health insurance (%)															
<4	0	6,568	0.0	1	10,412	9.6	1	9,200	10.9	0	8,924	0.0	0	18,954	0.0
4.00–7.99	1	9,173	10.9	0	13,787	0.0	1	13,956	7.2	1	11,346	8.8	0	21,437	0.0
8.00–13.99	0	8,790	0.0	0	14,726	0.0	1	10,857	9.2	0	9,029	0.0	0	15,647	0.0
≥14	0	7,564	0.0	1	12,512	8.0	1	9,418	10.6	1	7,588	13.2	0	10,103	0.0
Gini index (%)															
<37	0	8,702	0.0	1	15,224	6.6	1	14,621	6.8	0	11,911	0.0	0	18,382	0.0
37.00–40.99	1	8,480	11.8	1	13,146	7.6	1	9,815	10.2	1	8,831	11.3	0	17,354	0.0
41.00–45.99	0	7,588	0.0	0	13,244	0.0	1	11,319	8.8	0	9,387	0.0	0	17,263	0.0
≥46	0	7,229	0.0	0	9,823	0.0	1	7,675	13.0	1	6,758	14.8	0	13,103	0.0
Subtotal <sup>b</sup>	1	32,176	3.1	2	51,472	3.9	4	43,431	9.2	2	36,887	5.4	0	66,141	0.0
Total <sup>c</sup>	8	68,123	11.7	26	105,461	24.7	21	90,763	23.1	9	72,595	12.4	6	124,962	4.8

	White														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male															
Below federal poverty level (%)															
<6	172	2,445,946	7.0	513	3,910,369	13.1	328	4,453,871	7.4	241	4,998,395	4.8	268	12,072,228	2.2
6.00–9.99	146	1,830,702	8.0	536	3,287,438	16.3	317	3,141,915	10.1	257	3,309,041	7.8	246	8,801,559	2.8
10.00–16.99	191	1,868,739	10.2	654	3,237,129	20.2	434	2,836,477	15.3	277	2,932,382	9.4	258	7,839,588	3.3
≥17	203	1,993,773	10.2	559	2,053,661	27.2	428	1,577,590	27.1	263	1,598,010	16.5	197	4,127,178	4.8
Less than high school diploma (%)															
<5	198	3,081,052	6.4	617	3,918,801	15.7	411	3,890,549	10.6	259	4,174,051	6.2	299	10,435,586	2.9
5.00–8.99	179	2,204,022	8.1	532	3,544,242	15.0	351	3,471,743	10.1	257	3,705,267	6.9	241	9,553,330	2.5
9.00–15.99	175	1,901,596	9.2	615	3,223,826	19.1	415	3,011,989	13.8	300	3,219,401	9.3	234	8,432,309	2.8
≥16	160	1,019,597	15.7	498	1,824,907	27.3	330	1,654,803	19.9	222	1,753,910	12.7	195	4,433,196	4.4
Median household income (U.S. \$)															
<49,000	189	1,864,085	10.1	572	2,089,815	27.4	416	1,680,917	24.7	274	1,788,383	15.3	203	5,019,296	4.0
49,000–65,999	199	1,994,746	10.0	630	3,234,569	19.5	390	2,847,123	13.7	257	2,978,364	8.6	255	8,250,230	3.1
66,000–89,999	164	2,025,556	8.1	566	3,599,744	15.7	388	3,392,404	11.4	266	3,517,210	7.6	247	9,249,548	2.7
≥90,000	158	2,147,985	7.4	489	3,536,848	13.8	306	4,063,883	7.5	239	4,529,002	5.3	263	10,271,742	2.6



	White														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Without health insurance (%)															
<4	127	2,434,063	5.2	404	3,371,596	12.0	299	3,620,513	8.3	209	4,066,569	5.1	249	10,451,051	2.4
4.00–7.99	189	2,503,543	7.5	587	3,748,180	15.7	402	3,636,105	11.1	276	3,843,850	7.2	259	9,893,077	2.6
8.00–13.99	209	1,961,681	10.7	669	3,167,418	21.1	408	2,863,222	14.2	284	2,967,667	9.6	242	7,560,771	3.2
≥14	187	1,282,660	14.6	602	2,201,945	27.3	398	1,890,113	21.1	269	1,959,787	13.7	219	4,936,066	4.4
Gini index (%)															
<37	167	1,895,087	8.8	451	3,147,939	14.3	302	3,190,775	9.5	199	3,263,421	6.1	199	7,379,248	2.7
37.00–40.99	146	1,966,112	7.4	548	3,257,793	16.8	344	3,188,747	10.8	240	3,452,633	7.0	208	8,724,629	2.4
41.00–45.99	210	2,166,875	9.7	647	3,422,109	18.9	402	3,253,170	12.4	289	3,545,648	8.2	285	9,486,116	3.0
≥46	188	2,087,399	9.0	616	2,653,730	23.2	458	2,370,790	19.3	310	2,570,706	12.1	277	7,243,552	3.8
Subtotal <sup>b</sup>	743	8,206,267	9.1	2356	12,511,776	18.8	1,579	12,029,084	13.1	1,072	12,852,629	8.3	1,013	32,854,421	3.1
Female															
Below federal poverty level (%)															
<6	27	2,214,167	1.2	65	3,869,588	1.7	51	4,443,308	1.1	50	4,970,657	1.0	40	13,203,016	0.3
6.00–9.99	30	1,709,123	1.8	85	3,233,335	2.6	57	3,032,125	1.9	47	3,253,591	1.4	38	9,851,215	0.4
10.00–16.99	34	1,785,817	1.9	89	3,125,545	2.8	111	2,738,744	4.1	57	2,870,363	2.0	62	8,923,089	0.7
≥17	33	2,036,681	1.6	109	1,928,690	5.7	128	1,497,073	8.6	84	1,529,955	5.5	49	4,715,089	1.0
Less than high school diploma (%)															
<5	22	2,999,307	0.7	55	3,850,590	1.4	43	3,854,859	1.1	38	4,161,090	0.9	35	11,612,611	0.3
5.00–8.99	27	2,078,332	1.3	86	3,472,993	2.5	59	3,404,435	1.7	47	3,666,520	1.3	52	10,726,720	0.5
9.00–15.99	41	1,791,737	2.3	104	3,135,582	3.3	113	2,928,237	3.9	79	3,163,836	2.5	52	9,471,913	0.5
≥16	34	926,998	3.7	103	1,700,621	6.1	132	1,525,679	8.7	74	1,634,131	4.5	50	4,882,038	1.0
Median household income (U.S. \$)															
<49,000	39	1,854,296	2.1	121	1,987,258	6.1	151	1,641,215	9.2	92	1,750,552	5.3	51	5,861,962	0.9
49,000–65,999	32	1,885,102	1.7	100	3,118,009	3.2	103	2,736,945	3.8	54	2,928,127	1.8	64	9,422,545	0.7
66,000–89,999	33	1,910,535	1.7	67	3,522,418	1.9	54	3,274,643	1.6	51	3,455,429	1.5	41	10,316,405	0.4
≥90,000	20	1,994,285	1.0	60	3,512,357	1.7	38	4,043,580	0.9	41	4,472,585	0.9	31	11,049,008	0.3
Without health insurance (%)															
<4	19	2,307,432	0.8	50	3,331,955	1.5	36	3,608,670	1.0	38	4,050,414	0.9	27	11,664,366	0.2
4.00–7.99	37	2,389,177	1.5	94	3,660,632	2.6	93	3,550,768	2.6	57	3,805,188	1.5	50	11,039,165	0.5
8.00–13.99	35	1,883,630	1.9	94	3,063,863	3.1	98	2,754,111	3.6	68	2,888,007	2.4	59	8,479,492	0.7
≥14	33	1,212,598	2.7	110	2,101,095	5.2	120	1,797,721	6.7	75	1,880,988	4.0	53	5,509,572	1.0
Gini index (%)															
<37	32	1,698,423	1.9	58	3,077,429	1.9	61	3,105,197	2.0	50	3,216,619	1.6	37	8,051,899	0.5
37.00–40.99	29	1,865,924	1.6	95	3,170,928	3.0	74	3,122,786	2.4	69	3,382,727	2.0	51	9,735,724	0.5
41.00–45.99	34	2,058,490	1.7	110	3,327,152	3.3	112	3,180,736	3.5	58	3,497,870	1.7	48	10,674,177	0.4
≥46	29	2,101,650	1.4	85	2,580,301	3.3	100	2,301,540	4.3	61	2,526,656	2.4	53	8,229,479	0.6
Subtotal <sup>b</sup>	128	7,796,374	1.6	361	12,159,786	3.0	368	11,713,210	3.1	251	12,625,577	2.0	196	36,693,282	0.5
Total <sup>c</sup>	871	16,002,641	5.4	2,717	24,671,562	11.0	1,947	23,742,294	8.2	1,323	25,478,206	5.2	1,209	69,547,703	1.7

	Multiracial														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male															

	Multiracial														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Below federal poverty level (%)															
<6	36	322,034	11.2	48	387,786	12.4	25	394,253	6.3	14	321,656	4.4	14	415,320	3.4
6.00–9.99	39	285,278	13.7	58	389,077	14.9	30	342,335	8.8	15	259,108	5.8	10	371,746	2.7
10.00–16.99	46	342,205	13.4	55	479,245	11.5	33	390,178	8.5	19	310,521	6.1	12	449,728	2.7
≥17	65	379,300	17.1	120	444,475	27.0	38	358,449	10.6	19	289,735	6.6	15	461,885	3.2
Less than high school diploma (%)															
<5	44	314,417	14.0	63	350,494	18.0	28	299,586	9.3	15	230,906	6.5	10	308,713	3.2
5.00–8.99	39	272,862	14.3	50	342,550	14.6	23	306,463	7.5	15	229,011	6.5	12	337,269	3.6
9.00–15.99	48	314,892	15.2	80	420,023	19.0	31	357,231	8.7	14	280,877	5.0	19	421,938	4.5
≥16	55	434,768	12.7	88	594,714	14.8	44	526,910	8.4	23	443,584	5.2	10	632,785	1.6
Median household income (U.S. \$)															
<49,000	69	351,062	19.7	104	412,980	25.2	35	338,927	10.3	19	272,205	7.0	15	463,411	3.2
49,000–65,999	46	328,290	14.0	73	431,534	16.9	30	343,897	8.7	18	273,644	6.6	11	394,840	2.8
66,000–89,999	35	322,797	10.8	54	444,977	12.1	38	385,876	9.8	17	297,438	5.7	13	413,761	3.1
≥90,000	35	313,003	11.2	50	404,072	12.4	22	410,802	5.4	13	333,304	3.9	11	419,712	2.6
Without health insurance (%)															
<4	32	263,224	12.2	46	287,829	16.0	15	270,755	5.5	14	218,839	6.4	7	318,673	2.2
4.00–7.99	37	325,513	11.4	59	401,307	14.7	31	345,732	9.0	18	270,888	6.6	16	414,232	3.9
8.00–13.99	50	319,952	15.6	68	440,644	15.4	46	359,507	12.8	12	279,172	4.3	11	424,210	2.6
≥14	67	423,875	15.8	108	570,865	18.9	34	509,230	6.7	23	412,135	5.6	17	541,571	3.1
Gini index (%)															
<37	46	347,049	13.3	59	429,153	13.7	28	402,126	7.0	15	310,256	4.8	15	373,648	4.0
37.00–40.99	36	322,857	11.2	49	430,149	11.4	25	369,539	6.8	17	299,053	5.7	8	413,597	1.9
41.00–45.99	50	349,020	14.3	78	455,115	17.1	31	392,598	7.9	14	313,988	4.5	12	474,959	2.5
≥46	54	306,174	17.6	95	384,539	24.7	41	319,587	12.8	21	256,688	8.2	16	435,533	3.7
Subtotal <sup>b</sup>	191	1,336,939	14.3	289	1,707,781	16.9	135	1,490,190	9.1	71	1,184,378	6.0	52	1,700,705	3.1
Female															
Below federal poverty level (%)															
<6	4	296,263	1.4	10	382,343	2.6	5	393,392	1.3	4	331,259	1.2	2	472,031	0.4
6.00–9.99	5	264,888	1.9	11	377,171	2.9	8	328,694	2.4	4	269,834	1.5	5	427,800	1.2
10.00–16.99	3	329,553	0.9	12	452,847	2.6	11	374,052	2.9	12	318,065	3.8	7	529,080	1.3
≥17	11	389,058	2.8	27	430,202	6.3	20	348,168	5.7	8	300,671	2.7	10	560,102	1.8
Less than high school diploma (%)															
<5	7	316,013	2.2	8	349,213	2.3	7	313,500	2.2	3	246,999	1.2	5	359,215	1.4
5.00–8.99	4	272,064	1.5	13	353,381	3.7	7	302,631	2.3	3	243,461	1.2	4	403,772	1.0
9.00–15.99	3	302,749	1.0	19	403,311	4.7	10	348,489	2.9	9	296,777	3.0	7	504,332	1.4
≥16	9	394,952	2.3	20	536,974	3.7	20	479,961	4.2	13	432,660	3.0	8	721,720	1.1
Median household income (U.S. \$)															
<49,000	10	355,446	2.8	34	400,878	8.5	21	328,924	6.4	12	286,818	4.2	12	574,378	2.1
49,000–65,999	6	304,933	2.0	10	408,061	2.5	10	330,461	3.0	6	280,570	2.1	6	461,989	1.3
66,000–89,999	2	310,204	0.6	6	428,093	1.4	7	373,886	1.9	8	313,005	2.6	1	469,944	0.2
≥90,000	5	297,411	1.7	10	400,383	2.5	6	407,208	1.5	2	335,358	0.6	5	477,086	1.0
Without health insurance (%)															
<4	4	251,630	1.6	12	291,342	4.1	6	275,720	2.2	1	223,212	0.4	3	372,784	0.8

	Multiracial														
	18–24 years			25–34 years			35–44 years			45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
4.00–7.99	7	319,830	2.2	9	405,876	2.2	6	345,823	1.7	8	290,312	2.8	2	496,620	0.4
8.00–13.99	4	315,904	1.3	9	413,103	2.2	7	355,626	2.0	7	298,780	2.3	9	502,426	1.8
≥14	8	397,802	2.0	30	532,293	5.6	25	467,137	5.4	12	407,525	2.9	10	617,183	1.6
Gini index (%)															
<37	2	314,009	0.6	9	417,713	2.2	4	385,204	1.0	4	312,231	1.3	3	415,294	0.7
37.00–40.99	6	309,183	1.9	12	406,922	2.9	8	362,909	2.2	11	304,812	3.6	3	483,631	0.6
41.00–45.99	10	333,919	3.0	20	440,991	4.5	19	383,479	5.0	7	329,138	2.1	10	555,321	1.8
≥46	5	319,868	1.6	19	376,653	5.0	13	312,546	4.2	6	273,551	2.2	8	534,691	1.5
Subtotal <sup>b</sup>	24	1,285,778	1.9	62	1,642,879	3.8	48	1,444,581	3.3	31	1,219,897	2.5	25	1,989,039	1.3
Total <sup>c</sup>	215	2,622,717	8.2	351	3,350,660	10.5	183	2,934,771	6.2	102	2,404,275	4.2	77	3,689,744	2.1

Abbreviations: Pop., population; SDOH, social determinants of health [footnotes only].

*Note.* Numbers less than 12, and rates based on these numbers, should be interpreted with caution. Row entries indicate categories based on census tracts; data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis. Rates are per 100,000 population. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  .

- <sup>a</sup> Hispanic/Latino persons can be of any race.
- <sup>b</sup> Because column subtotals were calculated independently of the values for the subpopulations, the values in each column may not sum to the column subtotals. See Technical Notes for criteria used to define SDOH subpopulations.
- <sup>c</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.

Table 14. Diagnoses of HIV infection among adults aged ≥18 years, by transmission category, race/ethnicity, assigned sex at birth, and selected social determinants of health, 2021—census tract level, United States and Puerto Rico

	American Indian/Alaska Native								Asian							
	Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>		Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male																
Below federal poverty level (%)																
<6	14	13.9	1	33.3	1	5.1	1	13.3	146	28.2	2	15.8	2	10.5	10	26.1
6.00–9.99	19	18.2	2	50.0	3	30.3	2	19.3	123	23.7	2	15.0	4	23.5	9	23.5
10.00–16.99	30	29.1	0	3.3	1	14.1	2	27.7	118	22.8	5	43.3	6	37.3	11	29.9
≥17	40	38.8	0	13.3	5	50.5	3	39.8	131	25.3	3	25.8	4	28.8	8	20.5
Less than high school diploma (%)																
<5	21	20.2	0	0	2	17.2	1	15.7	138	26.6	4	30.8	4	27.5	9	25.1
5.00–8.99	19	18.7	2	50.0	3	27.3	0	4.8	100	19.2	1	11.7	3	17.0	8	22.1
9.00–15.99	33	32.2	1	36.7	0	4.0	3	37.3	130	25.0	2	15.8	3	21.6	10	27.2
≥16	30	28.9	0	13.3	5	51.5	4	42.2	151	29.2	5	41.7	5	34.0	10	25.6
Median household income (U.S. \$)																
<49,000	39	37.7	0	13.3	4	42.4	3	39.8	94	18.4	3	24.6	4	28.9	6	17.1
49,000–65,999	30	28.4	0	13.3	4	36.4	2	18.1	100	19.5	2	12.7	5	30.3	8	20.4

	American Indian/Alaska Native								Asian							
	Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>		Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
66,000–89,999	22	21.6	1	33.3	0	4.0	2	26.5	131	25.4	4	29.7	1	8.6	11	28.5
≥90,000	13	12.3	1	40.0	2	17.2	1	15.7	188	36.7	4	33.1	5	32.2	13	34.0
Without health insurance (%)																
<4	5	5.1	0	6.7	3	25.3	1	12.0	126	24.2	4	35.0	4	28.8	9	23.2
4.00–7.99	23	21.7	0	3.3	1	9.1	3	30.1	154	29.8	3	24.2	3	17.6	5	12.9
8.00–13.99	28	27.4	2	73.3	3	32.3	2	26.5	134	25.8	4	31.7	4	22.9	13	35.3
≥14	48	45.9	1	16.7	3	33.3	3	31.3	105	20.2	1	9.2	5	30.7	11	28.6
Gini index (%)																
<37	20	19.1	1	40.0	1	6.1	3	41.0	121	23.4	4	36.7	2	11.8	9	25.4
37.00–40.99	22	21.2	0	3.3	3	25.3	1	16.9	102	19.8	2	14.2	2	15.0	8	20.3
41.00–45.99	31	29.9	2	50.0	3	31.3	2	28.9	142	27.5	1	9.2	6	37.9	12	32.2
≥46	31	29.9	0	6.7	4	37.4	1	13.3	152	29.3	5	40.0	5	35.3	8	22.2
Subtotal <sup>e</sup>	114	100	3	100	11	100	9	100	541	100	12	100	16	100	40	100
Female																
Below federal poverty level (%)																
<6	—	—	1	6.8	—	—	1	5.9	—	—	1	27.7	—	—	20	25.3
6.00–9.99	—	—	3	22.6	—	—	3	16.0	—	—	1	14.9	—	—	21	27.2
10.00–16.99	—	—	5	36.1	—	—	7	38.5	—	—	1	19.1	—	—	24	30.6
≥17	—	—	5	34.6	—	—	7	39.6	—	—	2	38.3	—	—	13	17.0
Less than high school diploma (%)																
<5	—	—	3	23.3	—	—	4	20.9	—	—	2	40.4	—	—	16	20.6
5.00–8.99	—	—	4	30.1	—	—	9	48.1	—	—	1	17.0	—	—	13	17.0
9.00–15.99	—	—	1	8.3	—	—	4	20.9	—	—	1	14.9	—	—	16	21.0
≥16	—	—	5	38.3	—	—	2	10.2	—	—	1	27.7	—	—	32	41.5
Median household income (U.S. \$)																
<49,000	—	—	5	39.8	—	—	8	41.2	—	—	0	4.3	—	—	13	16.3
49,000–65,999	—	—	3	24.8	—	—	6	30.5	—	—	2	44.7	—	—	18	22.7
66,000–89,999	—	—	2	18.0	—	—	3	13.9	—	—	1	19.1	—	—	25	32.3
≥90,000	—	—	2	17.3	—	—	3	14.4	—	—	2	31.9	—	—	22	28.8
Without health insurance (%)																
<4	—	—	0	0	—	—	0	0	—	—	1	17.0	—	—	14	18.1
4.00–7.99	—	—	5	40.6	—	—	5	24.6	—	—	2	42.6	—	—	26	34.1
8.00–13.99	—	—	2	16.5	—	—	8	41.7	—	—	1	21.3	—	—	14	17.9
≥14	—	—	6	42.9	—	—	6	33.7	—	—	1	19.1	—	—	23	29.9
Gini index (%)																
<37	—	—	2	15.0	—	—	3	16.0	—	—	1	23.4	—	—	16	20.6
37.00–40.99	—	—	2	15.8	—	—	2	10.2	—	—	2	34.0	—	—	21	27.2
41.00–45.99	—	—	4	30.8	—	—	7	36.9	—	—	1	12.8	—	—	17	22.2
≥46	—	—	5	38.3	—	—	7	36.9	—	—	1	29.8	—	—	23	30.1
Subtotal <sup>e</sup>	—	—	14	100	—	—	21	100	—	—	5	100	—	—	80	100
Total <sup>f</sup>	114	100	17	100	11	100	30	100	541	100	17	100	16	100	120	100



	Black/African American								Hispanic/Latino <sup>a</sup>							
	Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>		Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male																
Below federal poverty level (%)																
<6	1,008	12.8	28	9.6	25	12.7	150	11.6	1,018	14.1	37	15.0	41	15.2	60	12.5
6.00–9.99	1,198	15.2	39	13.2	31	16.0	185	14.3	1,333	18.4	40	16.4	53	19.6	67	13.9
10.00–16.99	2,052	26.1	73	24.8	49	25.4	336	25.9	2,212	30.5	68	28.0	73	27.1	136	28.3
≥17	3,606	45.9	155	52.4	89	46.0	625	48.2	2,683	37.0	99	40.6	103	38.1	217	45.3
Less than high school diploma (%)																
<5	1,188	15.1	31	10.5	30	15.7	117	9.0	921	12.7	22	8.9	35	13.0	39	8.1
5.00–8.99	1,409	17.9	46	15.6	28	14.4	215	16.6	978	13.5	23	9.3	44	16.3	55	11.6
9.00–15.99	2,345	29.8	79	26.7	54	28.0	376	29.0	1,557	21.5	47	19.3	58	21.5	103	21.5
≥16	2,924	37.2	140	47.3	81	41.9	589	45.4	3,790	52.3	153	62.5	133	49.3	282	58.9
Median household income (U.S. \$)																
<49,000	3,694	47.3	156	53.4	90	46.5	652	50.5	2,502	34.7	99	40.6	91	34.0	214	44.9
49,000–65,999	1,889	24.2	61	20.7	52	27.0	311	24.1	1,969	27.3	61	24.9	72	27.0	119	24.9
66,000–89,999	1,378	17.6	44	15.0	28	14.5	206	16.0	1,687	23.4	55	22.8	58	21.7	97	20.5
≥90,000	855	10.9	32	10.9	23	11.9	122	9.5	1,060	14.7	28	11.6	46	17.3	46	9.7
Without health insurance (%)																
<4	786	10.0	30	10.3	24	12.2	120	9.3	642	8.9	25	10.1	23	8.4	35	7.3
4.00–7.99	1,492	19.0	68	23.0	35	18.0	203	15.7	1,220	16.8	48	19.8	52	19.2	66	13.7
8.00–13.99	2,172	27.6	74	24.9	51	26.5	326	25.2	1,824	25.2	68	27.8	66	24.5	109	22.8
≥14	3,413	43.4	123	41.8	84	43.3	646	49.9	3,561	49.1	103	42.4	129	48.0	269	56.2
Gini index (%)																
<37	1,550	19.7	40	13.6	33	17.2	258	19.9	1,486	20.5	48	19.9	56	20.6	86	18.0
37.00–40.99	1,643	20.9	55	18.7	38	19.6	285	22.0	1,685	23.3	46	18.9	66	24.6	112	23.4
41.00–45.99	2,042	26.0	83	28.1	47	24.2	346	26.7	2,003	27.7	78	31.9	89	33.2	117	24.5
≥46	2,628	33.4	117	39.6	75	38.9	407	31.4	2,069	28.6	71	29.3	58	21.6	163	34.1
Subtotal <sup>e</sup>	8,187	100	310	100	205	100	1,348	100	7,456	100	254	100	278	100	499	100
Female																
Below federal poverty level (%)																
<6	—	—	26	10.1	—	—	338	11.7	—	—	18	13.4	—	—	108	11.1
6.00–9.99	—	—	42	16.1	—	—	415	14.3	—	—	18	13.8	—	—	155	16.0
10.00–16.99	—	—	58	22.7	—	—	779	26.9	—	—	40	29.9	—	—	251	25.9
≥17	—	—	132	51.1	—	—	1,361	47.0	—	—	57	42.9	—	—	455	46.9
Less than high school diploma (%)																
<5	—	—	27	10.3	—	—	297	10.3	—	—	6	4.7	—	—	82	8.5
5.00–8.99	—	—	37	14.3	—	—	492	17.0	—	—	14	10.3	—	—	113	11.7
9.00–15.99	—	—	79	30.8	—	—	875	30.2	—	—	29	21.8	—	—	214	22.1
≥16	—	—	115	44.5	—	—	1,230	42.5	—	—	84	63.3	—	—	559	57.7
Median household income (U.S. \$)																
<49,000	—	—	131	50.9	—	—	1,406	48.8	—	—	56	42.0	—	—	441	45.7
49,000–65,999	—	—	55	21.4	—	—	699	24.3	—	—	37	28.2	—	—	235	24.3
66,000–89,999	—	—	39	15.2	—	—	468	16.3	—	—	26	19.3	—	—	173	17.9

	Black/African American								Hispanic/Latino <sup>a</sup>							
	Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>		Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
≥90,000	—	—	32	12.5	—	—	306	10.6	—	—	14	10.6	—	—	116	12.1
Without health insurance (%)																
<4	—	—	36	13.9	—	—	266	9.2	—	—	12	9.1	—	—	71	7.3
4.00–7.99	—	—	50	19.4	—	—	476	16.5	—	—	20	14.7	—	—	157	16.2
8.00–13.99	—	—	66	25.5	—	—	760	26.3	—	—	34	25.3	—	—	226	23.3
≥14	—	—	106	41.2	—	—	1,391	48.1	—	—	68	50.9	—	—	515	53.2
Gini index (%)																
<37	—	—	40	15.7	—	—	526	18.2	—	—	28	21.0	—	—	190	19.6
37.00–40.99	—	—	49	19.0	—	—	647	22.4	—	—	29	21.4	—	—	214	22.1
41.00–45.99	—	—	70	27.1	—	—	800	27.6	—	—	37	27.9	—	—	275	28.4
≥46	—	—	98	38.2	—	—	921	31.8	—	—	39	29.6	—	—	290	29.9
Subtotal <sup>e</sup>	—	—	267	100	—	—	2,993	100	—	—	138	100	—	—	995	100
Total <sup>f</sup>	8,187	100	577	100	205	100	4,340	100	7,456	100	392	100	278	100	1,494	100

	Native Hawaiian/other Pacific Islander								White							
	Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>		Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male																
Below federal poverty level (%)																
<6	16	30.4	0	7.1	0	4.0	0	6.7	1,231	24.1	86	18.7	124	21.3	79	24.5
6.00–9.99	9	16.9	0	7.1	1	44.0	0	6.7	1,197	23.4	81	17.6	139	23.9	84	26.0
10.00–16.99	14	26.4	1	85.7	0	4.0	0	6.7	1,439	28.1	126	27.3	157	27.1	91	28.2
≥17	14	26.4	0	0	1	48.0	1	80.0	1,251	24.4	167	36.4	161	27.7	69	21.3
Less than high school diploma (%)																
<5	9	17.4	0	0	0	0	0	0	1,500	29.3	63	13.7	144	24.8	77	23.6
5.00–8.99	13	25.8	0	21.4	1	48.0	0	13.3	1,242	24.3	101	22.1	131	22.6	84	26.0
9.00–15.99	18	34.1	0	7.1	0	8.0	0	6.7	1,316	25.7	156	33.8	168	28.9	98	30.4
≥16	12	22.7	1	71.4	1	44.0	1	80.0	1,060	20.7	140	30.4	138	23.8	65	20.0
Median household income (U.S. \$)																
<49,000	14	26.2	0	7.1	0	8.0	1	80.0	1,223	23.9	177	38.6	166	28.7	87	26.8
49,000–65,999	10	18.4	1	85.7	2	84.0	0	13.3	1,374	26.9	105	23.0	168	29.1	83	25.8
66,000–89,999	14	26.4	0	7.1	0	8.0	0	6.7	1,313	25.7	98	21.4	142	24.7	76	23.5
≥90,000	15	29.1	0	0	0	0	0	0	1,198	23.5	78	17.0	101	17.5	78	24.0
Without health insurance (%)																
<4	9	17.4	0	0	0	0	0	0	1,029	20.1	77	16.7	113	19.5	68	21.1
4.00–7.99	11	21.9	0	7.1	1	52.0	0	20.0	1,340	26.2	145	31.5	145	24.9	82	25.3
8.00–13.99	18	33.9	0	21.4	0	0	0	13.3	1,436	28.1	122	26.6	167	28.8	87	26.7
≥14	14	26.7	1	71.4	1	48.0	1	66.7	1,313	25.7	116	25.3	156	26.9	87	26.9
Gini index (%)																
<37	14	27.9	0	14.3	0	8.0	0	13.3	1,063	20.8	75	16.2	110	19.0	69	21.3



	Native Hawaiian/other Pacific Islander								White							
	Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>		Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
37.00–40.99	10	19.4	0	0	2	80.0	0	0	1,156	22.6	102	22.3	146	25.3	80	24.6
41.00–45.99	11	20.5	1	78.6	0	8.0	1	73.3	1,443	28.2	148	32.3	145	24.9	96	29.5
≥46	17	32.2	0	7.1	0	4.0	0	13.3	1,456	28.4	134	29.2	179	30.8	80	24.6
Subtotal <sup>e</sup>	56	100	1	100	3	100	2	100	5,330	100	477	100	610	100	339	100
Female																
Below federal poverty level (%)																
<6	—	—	0	0	—	—	1	14.9	—	—	61	14.8	—	—	172	20.7
6.00–9.99	—	—	1	43.5	—	—	2	29.9	—	—	73	17.7	—	—	183	22.1
10.00–16.99	—	—	0	0	—	—	3	44.8	—	—	103	25.1	—	—	247	29.8
≥17	—	—	1	56.5	—	—	1	10.4	—	—	175	42.5	—	—	227	27.4
Less than high school diploma (%)																
<5	—	—	1	43.5	—	—	1	14.9	—	—	55	13.4	—	—	137	16.5
5.00–8.99	—	—	0	0	—	—	1	14.9	—	—	77	18.7	—	—	193	23.3
9.00–15.99	—	—	0	13.0	—	—	4	55.2	—	—	134	32.5	—	—	252	30.5
≥16	—	—	1	43.5	—	—	1	14.9	—	—	145	35.4	—	—	246	29.7
Median household income (U.S. \$)																
<49,000	—	—	1	43.5	—	—	1	14.9	—	—	185	45.1	—	—	268	32.4
49,000–65,999	—	—	0	13.0	—	—	2	25.4	—	—	115	28.1	—	—	237	28.6
66,000–89,999	—	—	0	0	—	—	3	44.8	—	—	58	14.1	—	—	186	22.5
≥90,000	—	—	1	43.5	—	—	1	14.9	—	—	52	12.7	—	—	136	16.5
Without health insurance (%)																
<4	—	—	1	43.5	—	—	1	14.9	—	—	53	13.0	—	—	114	13.7
4.00–7.99	—	—	0	13.0	—	—	3	40.3	—	—	110	26.7	—	—	220	26.6
8.00–13.99	—	—	0	0	—	—	1	14.9	—	—	115	27.9	—	—	238	28.7
≥14	—	—	1	43.5	—	—	2	29.9	—	—	133	32.4	—	—	257	31.0
Gini index (%)																
<37	—	—	2	87.0	—	—	0	0	—	—	76	18.4	—	—	162	19.5
37.00–40.99	—	—	0	13.0	—	—	4	55.2	—	—	83	20.2	—	—	232	27.9
41.00–45.99	—	—	0	0	—	—	1	14.9	—	—	127	31.0	—	—	233	28.2
≥46	—	—	0	0	—	—	2	29.9	—	—	125	30.4	—	—	202	24.4
Subtotal <sup>e</sup>	—	—	2	100	—	—	7	100	—	—	433	100	—	—	864	100
Total <sup>f</sup>	56	100	4	100	3	100	8	100	5,330	100	910	100	610	100	1,203	100

	Multiracial							
	Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>	
	No.	%	No.	%	No.	%	No.	%
Male								
Below federal poverty level (%)								
<6	119		20.0		5		17.8	
6.00–9.99	126		21.1		8		26.7	
10.00–16.99	135		22.6		8		27.8	
≥17	217		36.4		8		27.8	

	Multiracial							
	Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>	
	No.	%	No.	%	No.	%	No.	%
Less than high school diploma (%)								
<5	141	23.6	6	20.3	5	13.4	8	17.4
5.00–8.99	110	18.5	8	28.1	16	39.2	5	10.4
9.00–15.99	154	25.8	9	30.2	10	24.3	20	42.4
≥16	191	32.0	6	21.4	9	23.1	14	29.8
Median household income (U.S. \$)								
<49,000	201	33.8	10	36.7	14	35.7	17	35.9
49,000–65,999	148	24.9	5	16.7	12	29.0	14	30.2
66,000–89,999	131	22.1	9	30.2	8	20.1	9	20.0
≥90,000	114	19.2	5	16.4	6	15.1	6	13.9
Without health insurance (%)								
<4	99	16.5	5	18.1	5	12.7	5	11.1
4.00–7.99	128	21.5	6	22.4	15	38.2	11	24.1
8.00–13.99	152	25.5	10	34.9	9	22.3	16	34.3
≥14	217	36.4	7	24.6	11	26.8	14	30.4
Gini index (%)								
<37	143	24.0	6	22.1	7	17.6	7	15.0
37.00–40.99	110	18.5	8	28.5	8	20.3	8	18.3
41.00–45.99	150	25.2	6	19.9	13	31.3	17	35.9
≥46	192	32.2	8	29.5	12	30.8	14	30.9
Subtotal <sup>e</sup>	616	100	30	100	44	100	48	100
Female								
Below federal poverty level (%)								
<6	—	—	4	12.3	—	—	21	14.2
6.00–9.99	—	—	5	16.3	—	—	28	18.9
10.00–16.99	—	—	8	27.0	—	—	37	24.8
≥17	—	—	13	44.3	—	—	62	42.1
Less than high school diploma (%)								
<5	—	—	5	16.7	—	—	25	16.7
5.00–8.99	—	—	5	16.3	—	—	26	17.6
9.00–15.99	—	—	6	20.3	—	—	42	28.2
≥16	—	—	14	46.7	—	—	56	37.6
Median household income (U.S. \$)								
<49,000	—	—	16	51.7	—	—	73	49.4
49,000–65,999	—	—	8	25.7	—	—	30	20.3
66,000–89,999	—	—	3	10.3	—	—	21	14.1
≥90,000	—	—	4	12.3	—	—	24	16.1
Without health insurance (%)								
<4	—	—	3	11.0	—	—	22	15.1
4.00–7.99	—	—	6	20.0	—	—	26	17.4
8.00–13.99	—	—	7	24.3	—	—	29	19.2
≥14	—	—	13	44.7	—	—	72	48.3
Gini index (%)								
<37	—	—	2	8.0	—	—	20	13.2

	Multiracial							
	Male-to-male sexual contact <sup>b</sup>		Injection drug use <sup>c</sup>		Male-to-male sexual contact <sup>b</sup> and injection drug use <sup>c</sup>		Heterosexual contact <sup>d</sup>	
	No.	%	No.	%	No.	%	No.	%
37.00–40.99	—	—	4	14.7	—	—	35	23.9
41.00–45.99	—	—	13	42.0	—	—	53	35.8
≥46	—	—	11	35.3	—	—	40	27.1
Subtotal <sup>e</sup>	—	—	31	100	—	—	158	100
Total <sup>f</sup>	616	100	61	100	44	100	206	100

Abbreviation: SDOH, social determinants of health [footnotes only].

*Note.* 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. Numbers less than 12, and rates based on these numbers, should be interpreted with caution. Row entries indicate categories based on census tracts; data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  .

- <sup>a</sup> Hispanic/Latino persons can be of any race.
- <sup>b</sup> 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).
- <sup>c</sup> 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).
- <sup>d</sup> Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.
- <sup>e</sup> Because column subtotals were calculated independently of the values for the subpopulations, the values in each column may not sum to the column subtotals. See Technical Notes for criteria used to define SDOH subpopulations.
- <sup>f</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.

Table A1. Adults aged ≥18 years living below federal poverty level, by assigned sex at birth and area of residence, 2017–2021 5-year ACS estimates—census tract level, United States and Puerto Rico

Area of residence	Below federal poverty level (%)							
	Male							
	<6		6.00–9.99		10.00–16.99		≥17	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Alabama	352,367	19.0	393,844	21.2	551,000	29.7	558,096	30.1
Alaska	89,700	30.8	93,266	32.1	83,288	28.6	24,689	8.5
Arizona	768,728	28.6	611,258	22.7	657,933	24.4	653,823	24.3
Arkansas	165,974	14.8	237,334	21.2	361,993	32.3	355,315	31.7
California	4,211,262	28.1	3,955,135	26.3	4,089,075	27.2	2,756,114	18.4
Colorado	901,488	40.3	561,600	25.1	496,381	22.2	275,429	12.3
Connecticut	689,762	49.9	261,024	18.9	220,171	15.9	211,191	15.3
Delaware	121,244	32.6	98,715	26.6	100,502	27.1	51,046	13.7
District of Columbia	63,449	24.2	54,476	20.8	56,154	21.4	88,138	33.6
Florida	2,033,067	24.5	2,093,208	25.2	2,430,829	29.3	1,736,355	20.9
Georgia	1,089,914	28.0	833,269	21.4	1,029,444	26.4	945,376	24.3
Hawaii	241,481	42.3	143,698	25.2	128,129	22.4	57,765	10.1
Idaho	163,745	24.2	224,560	33.2	201,253	29.7	87,844	13.0
Illinois	1,647,484	33.9	1,249,307	25.7	1,133,219	23.3	826,503	17.0
Indiana	790,026	31.3	638,680	25.3	618,174	24.5	475,529	18.9



Area of residence	Below federal poverty level (%)							
	Male							
	<6		6.00–9.99		10.00–16.99		≥17	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Iowa	355,612	29.4	380,694	31.5	301,608	25.0	169,712	14.1
Kansas	353,873	32.1	298,626	27.1	252,256	22.9	196,711	17.9
Kentucky	327,340	19.3	311,624	18.4	459,976	27.2	594,810	35.1
Louisiana	242,669	14.1	295,975	17.2	473,450	27.5	707,243	41.1
Maine	140,293	26.1	158,049	29.4	171,355	31.9	67,601	12.6
Maryland	1,059,106	46.5	575,676	25.3	414,016	18.2	230,593	10.1
Massachusetts	1,160,379	43.0	659,788	24.4	496,169	18.4	382,665	14.2
Michigan	1,180,825	30.8	958,823	25.0	894,663	23.3	802,393	20.9
Minnesota	946,192	43.8	595,157	27.5	395,997	18.3	223,146	10.3
Mississippi	152,802	14.1	150,370	13.9	311,109	28.7	469,040	43.3
Missouri	668,791	28.9	537,683	23.2	626,951	27.1	480,796	20.8
Montana	88,663	20.9	121,255	28.5	136,018	32.0	79,124	18.6
Nebraska	243,904	33.5	199,283	27.4	173,754	23.9	110,554	15.2
Nevada	319,452	26.9	297,997	25.1	310,145	26.1	258,773	21.8
New Hampshire	286,677	52.1	140,201	25.5	98,190	17.8	25,277	4.6
New Jersey	1,689,923	48.5	777,051	22.3	541,618	15.6	474,366	13.6
New Mexico	107,363	13.5	142,875	17.9	205,450	25.7	342,293	42.9
New York	2,314,880	30.4	1,822,364	23.9	1,828,161	24.0	1,652,822	21.7
North Carolina	1,017,982	26.2	840,522	21.6	1,125,812	29.0	899,748	23.2
North Dakota	85,154	28.2	85,024	28.1	87,876	29.1	44,396	14.7
Ohio	1,412,789	31.8	1,042,310	23.4	1,028,279	23.1	966,258	21.7
Oklahoma	293,718	20.0	266,010	18.1	505,463	34.3	406,861	27.6
Oregon	362,202	22.0	415,319	25.2	585,312	35.5	285,160	17.3
Pennsylvania	1,841,987	36.9	1,247,855	25.0	1,068,879	21.4	831,089	16.7
Puerto Rico	3,792	0.3	17,501	1.4	43,664	3.5	1,200,123	94.9
Rhode Island	149,868	35.2	105,923	24.9	99,643	23.4	69,915	16.4
South Carolina	444,911	23.4	409,024	21.5	558,363	29.4	485,764	25.6
South Dakota	96,895	28.9	97,194	29.0	84,888	25.4	55,842	16.7
Tennessee	570,564	22.2	586,432	22.8	784,604	30.5	630,793	24.5
Texas	3,145,625	29.8	2,219,183	21.0	2,664,527	25.2	2,531,981	24.0
Utah	552,694	48.2	264,010	23.0	200,199	17.5	128,593	11.2
Vermont	57,029	22.2	96,225	37.5	72,006	28.0	31,466	12.3
Virginia	1,381,306	42.3	804,897	24.7	660,697	20.3	415,402	12.7
Washington	1,068,888	36.0	851,996	28.7	695,713	23.4	351,843	11.9
West Virginia	78,727	11.1	133,688	18.9	241,847	34.2	253,706	35.8
Wisconsin	851,521	37.4	666,993	29.3	477,466	21.0	277,948	12.2
Wyoming	67,827	30.0	63,516	28.1	66,722	29.5	27,835	12.3
Region of residence								
Northeast	8,330,798	38.0	5,268,480	24.0	4,596,192	20.9	3,746,392	17.1
Midwest	8,633,066	33.1	6,749,774	25.9	6,075,131	23.3	4,629,788	17.7
South	12,540,765	26.7	10,304,247	22.0	12,729,786	27.1	11,360,267	24.2
West	8,943,493	29.9	7,746,485	25.9	7,855,618	26.3	5,329,285	17.8
Total	38,451,914	30.5	30,086,487	23.9	31,300,391	24.8	26,265,855	20.8

Area of residence	Below federal poverty level (%)							
	Female							
	<6		6.00–9.99		10.00–16.99		≥17	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Alabama	370,285	18.3	419,225	20.8	601,747	29.8	627,613	31.1
Alaska	81,138	30.9	86,483	33.0	73,709	28.1	20,944	8.0
Arizona	795,373	28.9	641,224	23.3	660,190	24.0	652,320	23.7
Arkansas	170,099	14.4	248,662	21.1	382,792	32.5	377,866	32.0
California	4,318,592	28.2	4,048,731	26.4	4,160,327	27.1	2,812,705	18.3
Colorado	895,664	40.5	557,581	25.2	492,780	22.3	263,144	11.9
Connecticut	713,489	48.5	284,777	19.3	241,032	16.4	232,676	15.8
Delaware	126,380	31.4	108,011	26.8	110,787	27.5	57,323	14.2
District of Columbia	67,165	22.7	61,946	20.9	62,464	21.1	104,340	35.3
Florida	2,155,966	24.6	2,202,693	25.2	2,579,873	29.5	1,817,879	20.8
Georgia	1,155,176	27.5	880,401	21.0	1,127,356	26.9	1,031,748	24.6
Hawaii	234,254	41.1	145,036	25.4	133,470	23.4	57,878	10.1
Idaho	162,127	24.0	227,278	33.7	199,268	29.5	86,712	12.8
Illinois	1,710,993	33.7	1,296,334	25.5	1,178,071	23.2	891,961	17.6
Indiana	805,647	30.7	660,090	25.1	655,361	25.0	505,145	19.2
Iowa	359,181	29.3	385,879	31.5	307,628	25.1	171,630	14.0
Kansas	362,486	32.5	300,850	27.0	254,484	22.8	198,143	17.8
Kentucky	336,175	19.0	324,246	18.3	481,522	27.2	630,855	35.6
Louisiana	256,918	14.0	318,045	17.3	491,999	26.8	767,794	41.8
Maine	146,819	26.0	166,039	29.4	182,244	32.2	70,061	12.4
Maryland	1,126,126	45.4	631,139	25.4	458,812	18.5	265,205	10.7
Massachusetts	1,240,695	42.8	707,104	24.4	531,610	18.3	417,788	14.4
Michigan	1,216,315	30.4	983,341	24.6	937,493	23.4	867,531	21.7
Minnesota	951,685	43.6	598,655	27.4	408,545	18.7	225,694	10.3
Mississippi	160,303	13.6	162,669	13.8	334,586	28.4	520,031	44.2
Missouri	701,166	28.8	562,414	23.1	649,703	26.7	521,655	21.4
Montana	88,332	21.1	119,321	28.4	133,981	31.9	77,955	18.6
Nebraska	247,710	33.6	202,282	27.5	173,856	23.6	112,860	15.3
Nevada	326,116	27.7	296,205	25.1	305,708	25.9	250,275	21.2
New Hampshire	288,329	51.4	147,932	26.4	97,895	17.4	27,059	4.8
New Jersey	1,792,175	48.5	819,146	22.2	571,266	15.4	515,293	13.9
New Mexico	111,382	13.5	149,780	18.2	211,451	25.7	349,953	42.5
New York	2,452,472	29.9	1,936,836	23.6	1,951,466	23.8	1,872,588	22.8
North Carolina	1,073,343	25.7	894,917	21.4	1,202,647	28.8	1,001,206	24.0
North Dakota	79,103	27.6	83,395	29.1	83,385	29.1	40,553	14.2
Ohio	1,459,696	31.2	1,104,331	23.6	1,087,467	23.2	1,034,525	22.1
Oklahoma	304,116	20.1	277,527	18.3	512,937	33.9	418,219	27.6
Oregon	371,780	22.1	424,673	25.2	600,502	35.6	288,743	17.1
Pennsylvania	1,909,401	36.3	1,289,521	24.5	1,119,813	21.3	936,782	17.8
Puerto Rico	3,845	0.3	19,934	1.4	53,813	3.7	1,369,164	94.6
Rhode Island	153,569	33.8	115,316	25.4	111,517	24.6	73,535	16.2
South Carolina	477,133	23.2	435,285	21.2	610,124	29.6	535,517	26.0
South Dakota	95,962	29.2	92,844	28.3	84,188	25.6	55,274	16.8

Area of residence	Below federal poverty level (%)							
	Female							
	<6		6.00–9.99		10.00–16.99		≥17	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Tennessee	606,239	22.1	620,612	22.6	832,110	30.3	687,059	25.0
Texas	3,217,678	29.8	2,269,882	21.0	2,725,067	25.2	2,594,412	24.0
Utah	545,484	48.0	262,979	23.1	201,829	17.7	127,161	11.2
Vermont	58,563	22.0	97,999	36.8	74,062	27.8	35,398	13.3
Virginia	1,428,753	41.9	851,714	25.0	680,734	20.0	449,373	13.2
Washington	1,078,085	36.4	853,689	28.8	693,319	23.4	340,731	11.5
West Virginia	82,579	11.4	133,153	18.3	249,685	34.4	261,169	35.9
Wisconsin	855,295	37.1	666,039	28.9	482,560	20.9	299,552	13.0
Wyoming	65,348	30.2	62,041	28.7	63,310	29.3	25,575	11.8
Region of residence								
Northeast	8,755,512	37.4	5,564,670	23.8	4,880,905	20.9	4,181,180	17.9
Midwest	8,845,239	32.7	6,936,454	25.7	6,302,741	23.3	4,924,523	18.2
South	13,114,434	26.5	10,840,127	21.9	13,445,242	27.1	12,147,609	24.5
West	9,073,675	30.0	7,875,021	26.0	7,929,844	26.2	5,354,096	17.7
Total	39,792,705	30.2	31,236,206	23.7	32,612,545	24.8	27,976,572	21.3

Area of residence	Below federal poverty level (%)											
	Total											
	<6			6.00–9.99			10.00–16.99			≥17		
	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>
Alabama	722,652	18.7	0.9	813,069	21.0	1.3	1,152,747	29.8	1.8	1,185,709	30.6	2.2
Alaska	170,838	30.9	0.2	179,749	32.5	0.3	156,997	28.4	0.2	45,633	8.2	0.1
Arizona	1,564,101	28.7	2.0	1,252,482	23.0	2.0	1,318,123	24.2	2.1	1,306,143	24.0	2.4
Arkansas	336,073	14.6	0.4	485,996	21.1	0.8	744,785	32.4	1.2	733,181	31.9	1.4
California	8,529,854	28.1	10.9	8,003,866	26.4	13.1	8,249,402	27.2	12.9	5,568,819	18.3	10.3
Colorado	1,797,152	40.4	2.3	1,119,181	25.2	1.8	989,161	22.3	1.5	538,573	12.1	1.0
Connecticut	1,403,251	49.2	1.8	545,801	19.1	0.9	461,203	16.2	0.7	443,867	15.6	0.8
Delaware	247,624	32.0	0.3	206,726	26.7	0.3	211,289	27.3	0.3	108,369	14.0	0.2
District of Columbia	130,614	23.4	0.2	116,422	20.9	0.2	118,618	21.3	0.2	192,478	34.5	0.4
Florida	4,189,033	24.6	5.4	4,295,901	25.2	7.0	5,010,702	29.4	7.8	3,554,234	20.8	6.6
Georgia	2,245,090	27.7	2.9	1,713,670	21.2	2.8	2,156,800	26.7	3.4	1,977,124	24.4	3.6
Hawaii	475,735	41.7	0.6	288,734	25.3	0.5	261,599	22.9	0.4	115,643	10.1	0.2
Idaho	325,872	24.1	0.4	451,838	33.4	0.7	400,521	29.6	0.6	174,556	12.9	0.3
Illinois	3,358,477	33.8	4.3	2,545,641	25.6	4.2	2,311,290	23.3	3.6	1,718,464	17.3	3.2
Indiana	1,595,673	31.0	2.0	1,298,770	25.2	2.1	1,273,535	24.7	2.0	980,674	19.0	1.8
Iowa	714,793	29.4	0.9	766,573	31.5	1.3	609,236	25.1	1.0	341,342	14.0	0.6
Kansas	716,359	32.3	0.9	599,476	27.0	1.0	506,740	22.9	0.8	394,854	17.8	0.7
Kentucky	663,515	19.1	0.8	635,870	18.3	1.0	941,498	27.2	1.5	1,225,665	35.4	2.3
Louisiana	499,587	14.1	0.6	614,020	17.3	1.0	965,449	27.2	1.5	1,475,037	41.5	2.7
Maine	287,112	26.0	0.4	324,088	29.4	0.5	353,599	32.1	0.6	137,662	12.5	0.3
Maryland	2,185,232	45.9	2.8	1,206,815	25.3	2.0	872,828	18.3	1.4	495,798	10.4	0.9
Massachusetts	2,401,074	42.9	3.1	1,366,892	24.4	2.2	1,027,779	18.4	1.6	800,453	14.3	1.5
Michigan	2,397,140	30.6	3.1	1,942,164	24.8	3.2	1,832,156	23.4	2.9	1,669,924	21.3	3.1

Area of residence	Below federal poverty level (%)											
	Total											
	<6			6.00–9.99			10.00–16.99			≥17		
	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>
Minnesota	1,897,877	43.7	2.4	1,193,812	27.5	1.9	804,542	18.5	1.3	448,840	10.3	0.8
Mississippi	313,105	13.8	0.4	313,039	13.8	0.5	645,695	28.6	1.0	989,071	43.7	1.8
Missouri	1,369,957	28.8	1.8	1,100,097	23.2	1.8	1,276,654	26.9	2.0	1,002,451	21.1	1.8
Montana	176,995	21.0	0.2	240,576	28.5	0.4	269,999	32.0	0.4	157,079	18.6	0.3
Nebraska	491,614	33.6	0.6	401,565	27.4	0.7	347,610	23.7	0.5	223,414	15.3	0.4
Nevada	645,568	27.3	0.8	594,202	25.1	1.0	615,853	26.0	1.0	509,048	21.5	0.9
New Hampshire	575,006	51.7	0.7	288,133	25.9	0.5	196,085	17.6	0.3	52,336	4.7	0.1
New Jersey	3,482,098	48.5	4.5	1,596,197	22.2	2.6	1,112,884	15.5	1.7	989,659	13.8	1.8
New Mexico	218,745	13.5	0.3	292,655	18.1	0.5	416,901	25.7	0.7	692,246	42.7	1.3
New York	4,767,352	30.1	6.1	3,759,200	23.7	6.1	3,779,627	23.9	5.9	3,525,410	22.3	6.5
North Carolina	2,091,325	26.0	2.7	1,735,439	21.5	2.8	2,328,459	28.9	3.6	1,900,954	23.6	3.5
North Dakota	164,257	27.9	0.2	168,419	28.6	0.3	171,261	29.1	0.3	84,949	14.4	0.2
Ohio	2,872,485	31.4	3.7	2,146,641	23.5	3.5	2,115,746	23.2	3.3	2,000,783	21.9	3.7
Oklahoma	597,834	20.0	0.8	543,537	18.2	0.9	1,018,400	34.1	1.6	825,080	27.6	1.5
Oregon	733,982	22.0	0.9	839,992	25.2	1.4	1,185,814	35.6	1.9	573,903	17.2	1.1
Pennsylvania	3,751,388	36.6	4.8	2,537,376	24.8	4.1	2,188,692	21.4	3.4	1,767,871	17.3	3.3
Puerto Rico	7,637	0.3	0.0	37,435	1.4	0.1	97,477	3.6	0.2	2,569,287	94.7	4.7
Rhode Island	303,437	34.5	0.4	221,239	25.2	0.4	211,160	24.0	0.3	143,450	16.3	0.3
South Carolina	922,044	23.3	1.2	844,309	21.3	1.4	1,168,487	29.5	1.8	1,021,281	25.8	1.9
South Dakota	192,857	29.1	0.2	190,038	28.7	0.3	169,076	25.5	0.3	111,116	16.8	0.2
Tennessee	1,176,803	22.1	1.5	1,207,044	22.7	2.0	1,616,714	30.4	2.5	1,317,852	24.8	2.4
Texas	6,363,303	29.8	8.1	4,489,065	21.0	7.3	5,389,594	25.2	8.4	5,126,393	24.0	9.5
Utah	1,098,178	48.1	1.4	526,989	23.1	0.9	402,028	17.6	0.6	255,754	11.2	0.5
Vermont	115,592	22.1	0.1	194,224	37.2	0.3	146,068	27.9	0.2	66,864	12.8	0.1
Virginia	2,810,059	42.1	3.6	1,656,611	24.8	2.7	1,341,431	20.1	2.1	864,775	13.0	1.6
Washington	2,146,973	36.2	2.7	1,705,685	28.7	2.8	1,389,032	23.4	2.2	692,574	11.7	1.3
West Virginia	161,306	11.2	0.2	266,841	18.6	0.4	491,532	34.3	0.8	514,875	35.9	0.9
Wisconsin	1,706,816	37.3	2.2	1,333,032	29.1	2.2	960,026	21.0	1.5	577,500	12.6	1.1
Wyoming	133,175	30.1	0.2	125,557	28.4	0.2	130,032	29.4	0.2	53,410	12.1	0.1
Region of residence												
Northeast	17,086,310	37.7	21.8	10,833,150	23.9	17.7	9,477,097	20.9	14.8	7,927,572	17.5	14.6
Midwest	17,478,305	32.9	22.3	13,686,228	25.8	22.3	12,377,872	23.3	19.4	9,554,311	18.0	17.6
South	25,655,199	26.6	32.8	21,144,374	21.9	34.5	26,175,028	27.1	41.0	23,507,876	24.4	43.3
West	18,017,168	30.0	23.0	15,621,506	26.0	25.5	15,785,462	26.3	24.7	10,683,381	17.8	19.7
Total	78,244,619	30.4	100	61,322,693	23.8	100	63,912,936	24.8	100	54,242,427	21.0	100

Abbreviations: ACS, American Community Survey; SDOH, social determinants of health [footnotes only].

*Note.* Proportion of residents in the census tract who were living below the U.S. poverty level at any time during the 12 months before the survey response (individuals aged 18 years and older).

<sup>a</sup> Percentage of male residents of area.  
<sup>b</sup> Percentage of female residents of area.  
<sup>c</sup> Percentage of residents of area.  
<sup>d</sup> Percentage of SDOH subpopulation total.

Table A2. Adults aged ≥18 years with less than high school diploma, by assigned sex at birth and area of residence, 2017–2021 5-year ACS estimates—census tract level, United States and Puerto Rico

Area of residence	Less than high school diploma (%)							
	Male							
	<5		5.00–8.99		9.00–15.99		≥16	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Alabama	336,705	18.1	348,962	18.8	563,268	30.4	606,721	32.7
Alaska	88,783	30.5	121,095	41.6	63,764	21.9	17,301	5.9
Arizona	754,709	27.9	643,714	23.8	557,463	20.6	753,606	27.8
Arkansas	158,088	14.1	241,803	21.6	442,832	39.5	278,152	24.8
California	3,486,182	23.1	2,750,349	18.2	3,073,452	20.3	5,799,551	38.4
Colorado	1,000,538	44.5	500,918	22.3	430,932	19.2	316,296	14.1
Connecticut	494,024	35.6	416,350	30.0	266,386	19.2	211,186	15.2
Delaware	111,684	30.0	97,162	26.1	113,774	30.6	49,088	13.2
District of Columbia	118,361	45.1	43,097	16.4	64,759	24.7	36,000	13.7
Florida	2,054,404	24.7	1,987,943	23.9	2,289,917	27.6	1,978,908	23.8
Georgia	860,494	22.1	810,634	20.8	1,115,768	28.6	1,111,735	28.5
Hawaii	231,058	40.4	176,287	30.8	123,985	21.7	40,442	7.1
Idaho	176,884	26.1	212,510	31.4	195,903	28.9	92,105	13.6
Illinois	1,490,093	30.7	1,243,294	25.6	1,192,265	24.5	931,324	19.2
Indiana	544,167	21.5	689,592	27.3	845,535	33.4	449,650	17.8
Iowa	429,062	35.4	441,848	36.5	237,166	19.6	102,368	8.5
Kansas	426,783	38.7	276,811	25.1	234,510	21.3	163,501	14.8
Kentucky	316,685	18.6	324,860	19.1	560,987	33.0	496,560	29.2
Louisiana	261,479	15.2	290,300	16.9	526,513	30.6	643,141	37.4
Maine	193,132	35.9	216,925	40.4	116,631	21.7	10,610	2.0
Maryland	673,950	29.4	695,546	30.3	580,027	25.3	344,111	15.0
Massachusetts	1,057,994	39.2	707,418	26.2	503,378	18.6	432,866	16.0
Michigan	1,149,271	29.8	1,230,428	31.9	1,044,429	27.1	436,431	11.3
Minnesota	876,271	40.5	740,200	34.2	406,052	18.8	139,801	6.5
Mississippi	117,902	10.9	170,633	15.8	367,559	33.9	427,286	39.4
Missouri	633,355	27.4	654,300	28.3	690,814	29.9	335,752	14.5
Montana	186,370	43.8	149,298	35.1	80,279	18.9	9,623	2.3
Nebraska	259,573	35.6	224,124	30.8	147,143	20.2	98,006	13.4
Nevada	236,629	19.9	276,148	23.3	311,406	26.2	362,636	30.6
New Hampshire	241,423	43.9	195,181	35.5	88,084	16.0	25,657	4.7
New Jersey	1,163,424	33.3	1,029,573	29.5	688,038	19.7	614,664	17.6
New Mexico	155,050	19.4	150,172	18.7	227,175	28.4	268,688	33.5
New York	1,819,408	23.7	1,848,752	24.1	1,865,272	24.3	2,128,989	27.8
North Carolina	942,291	24.2	835,848	21.5	1,187,612	30.5	925,276	23.8
North Dakota	106,801	35.3	111,947	37.0	75,714	25.0	7,988	2.6
Ohio	1,288,124	28.9	1,375,175	30.9	1,153,602	25.9	637,014	14.3
Oklahoma	228,679	15.5	359,580	24.4	532,003	36.1	353,196	24.0
Oregon	468,994	28.5	483,761	29.4	492,432	29.9	202,806	12.3



Area of residence	Less than high school diploma (%)							
	Male							
	<5		5.00–8.99		9.00–15.99		≥16	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Pennsylvania	1,507,145	30.1	1,565,483	31.3	1,293,543	25.8	642,131	12.8
Puerto Rico	45,919	3.6	74,551	5.9	311,245	24.6	835,513	65.9
Rhode Island	110,256	25.9	125,684	29.5	102,373	24.1	87,036	20.5
South Carolina	459,081	24.1	398,879	20.9	557,613	29.2	491,849	25.8
South Dakota	103,870	31.0	109,777	32.8	86,241	25.8	34,931	10.4
Tennessee	497,309	19.3	577,109	22.4	890,775	34.6	612,308	23.8
Texas	2,356,646	22.2	1,939,235	18.3	2,353,824	22.2	3,945,407	37.2
Utah	456,469	39.8	350,228	30.5	224,921	19.6	116,091	10.1
Vermont	99,686	38.8	95,708	37.3	60,086	23.4	1,246	0.5
Virginia	1,002,269	30.6	876,920	26.8	872,495	26.6	523,102	16.0
Washington	1,000,842	33.7	911,274	30.7	732,292	24.6	326,672	11.0
West Virginia	101,355	14.3	152,948	21.6	283,394	40.0	170,271	24.1
Wisconsin	826,586	36.3	816,858	35.9	475,941	20.9	155,886	6.9
Wyoming	79,052	35.0	83,880	37.1	55,365	24.5	7,603	3.4
Region of residence								
Northeast	6,686,492	30.4	6,201,074	28.2	4,983,791	22.6	4,154,385	18.9
Midwest	8,133,956	31.1	7,914,354	30.3	6,589,412	25.2	3,492,652	13.4
South	10,597,382	22.5	10,151,459	21.6	13,303,120	28.3	12,993,111	27.6
West	8,321,560	27.7	6,809,634	22.7	6,569,369	21.9	8,313,420	27.7
Total	33,785,309	26.7	31,151,072	24.6	31,756,937	25.1	29,789,081	23.6

Area of residence	Less than high school diploma (%)							
	Female							
	<5		5.00–8.99		9.00–15.99		≥16	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Alabama	373,405	18.5	383,797	19.0	624,551	30.9	637,885	31.6
Alaska	78,733	30.0	112,859	43.0	55,867	21.3	14,815	5.6
Arizona	786,999	28.6	678,184	24.6	571,370	20.7	718,723	26.1
Arkansas	172,424	14.6	259,969	22.0	467,673	39.6	279,583	23.7
California	3,590,829	23.4	2,856,778	18.6	3,186,105	20.8	5,719,675	37.3
Colorado	997,511	45.1	503,656	22.8	423,327	19.1	287,263	13.0
Connecticut	519,379	35.3	448,673	30.5	285,814	19.4	219,027	14.9
Delaware	122,991	30.6	106,862	26.5	125,830	31.3	46,856	11.6
District of Columbia	131,254	44.4	53,827	18.2	68,898	23.3	41,936	14.2
Florida	2,222,128	25.3	2,130,388	24.3	2,462,417	28.1	1,952,344	22.3
Georgia	904,254	21.6	910,244	21.7	1,237,665	29.5	1,142,624	27.2
Hawaii	225,129	39.4	178,792	31.3	127,015	22.3	39,770	7.0
Idaho	180,471	26.7	215,492	31.9	188,652	27.9	90,770	13.4
Illinois	1,568,132	30.9	1,318,709	26.0	1,278,063	25.2	912,582	18.0
Indiana	574,333	21.8	718,692	27.3	874,580	33.3	462,704	17.6
Iowa	438,153	35.7	451,941	36.8	234,427	19.1	101,950	8.3
Kansas	445,579	39.9	280,222	25.1	232,198	20.8	158,344	14.2
Kentucky	334,493	18.9	345,026	19.5	587,342	33.1	506,279	28.6

Area of residence	Less than high school diploma (%)							
	Female							
	<5		5.00–8.99		9.00–15.99		≥16	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Louisiana	287,532	15.7	316,187	17.2	573,108	31.2	657,962	35.9
Maine	210,714	37.3	224,495	39.7	118,985	21.1	10,969	1.9
Maryland	732,163	29.5	763,681	30.8	638,917	25.7	347,001	14.0
Massachusetts	1,161,504	40.0	749,080	25.8	528,146	18.2	461,742	15.9
Michigan	1,199,927	29.9	1,279,594	31.9	1,090,618	27.2	442,958	11.0
Minnesota	904,124	41.4	735,319	33.7	408,618	18.7	136,518	6.2
Mississippi	130,891	11.1	189,444	16.1	404,236	34.3	453,018	38.5
Missouri	675,647	27.7	692,664	28.4	725,596	29.8	341,031	14.0
Montana	184,038	43.9	147,592	35.2	78,134	18.6	9,829	2.3
Nebraska	269,141	36.5	228,479	31.0	144,961	19.7	94,143	12.8
Nevada	244,334	20.7	285,845	24.3	300,148	25.5	348,062	29.5
New Hampshire	245,924	43.8	204,109	36.4	85,106	15.2	26,076	4.6
New Jersey	1,236,511	33.4	1,102,105	29.8	734,995	19.9	624,272	16.9
New Mexico	164,914	20.0	156,374	19.0	236,086	28.7	265,581	32.3
New York	1,956,879	23.8	1,972,971	24.0	2,022,518	24.6	2,282,560	27.7
North Carolina	1,007,386	24.1	905,252	21.7	1,284,933	30.8	976,109	23.4
North Dakota	100,814	35.2	105,366	36.8	72,159	25.2	8,097	2.8
Ohio	1,367,049	29.2	1,460,204	31.2	1,219,442	26.0	639,324	13.6
Oklahoma	242,794	16.0	381,322	25.2	552,395	36.5	337,097	22.3
Oregon	485,670	28.8	504,086	29.9	503,216	29.9	192,726	11.4
Pennsylvania	1,611,707	30.7	1,647,230	31.3	1,365,225	26.0	633,704	12.1
Puerto Rico	55,171	3.8	92,492	6.4	373,489	25.8	925,617	64.0
Rhode Island	119,020	26.2	135,582	29.9	109,239	24.1	90,096	19.8
South Carolina	487,642	23.7	438,963	21.3	617,705	30.0	517,368	25.1
South Dakota	104,065	31.7	109,122	33.2	81,654	24.9	33,427	10.2
Tennessee	542,356	19.7	623,150	22.7	949,698	34.6	632,549	23.0
Texas	2,435,253	22.5	2,038,017	18.8	2,457,125	22.7	3,890,898	36.0
Utah	457,122	40.2	347,887	30.6	221,037	19.4	111,552	9.8
Vermont	105,968	39.8	96,485	36.3	62,152	23.4	1,417	0.5
Virginia	1,043,584	30.6	929,495	27.2	926,646	27.1	515,216	15.1
Washington	1,012,820	34.1	920,566	31.0	722,830	24.4	309,608	10.4
West Virginia	107,634	14.8	157,637	21.7	289,943	39.9	171,372	23.6
Wisconsin	854,648	37.1	822,709	35.7	468,006	20.3	158,083	6.9
Wyoming	76,664	35.4	81,648	37.8	51,460	23.8	6,502	3.0
Region of residence								
Northeast	7,167,606	30.6	6,580,730	28.1	5,312,180	22.7	4,349,863	18.6
Midwest	8,501,612	31.5	8,203,021	30.4	6,830,322	25.3	3,489,161	12.9
South	11,278,184	22.7	10,933,261	22.0	14,269,082	28.8	13,106,097	26.4
West	8,485,234	28.0	6,989,759	23.1	6,665,247	22.0	8,114,876	26.8
Total	35,487,807	26.9	32,799,263	24.9	33,450,320	25.4	29,985,614	22.8

Area of residence	Less than high school diploma (%)											
	Total											
	<5			5.00–8.99			9.00–15.99			≥16		
	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>
Alabama	710,110	18.3	1.0	732,759	18.9	1.1	1,187,819	30.7	1.8	1,244,606	32.1	2.1
Alaska	167,516	30.3	0.2	233,954	42.3	0.4	119,631	21.6	0.2	32,116	5.8	0.1
Arizona	1,541,708	28.2	2.2	1,321,898	24.2	2.1	1,128,833	20.7	1.7	1,472,329	26.9	2.5
Arkansas	330,512	14.4	0.5	501,772	21.8	0.8	910,505	39.6	1.4	557,735	24.2	0.9
California	7,077,011	23.2	10.2	5,607,127	18.4	8.8	6,259,557	20.5	9.6	11,519,226	37.8	19.3
Colorado	1,998,049	44.8	2.9	1,004,574	22.5	1.6	854,259	19.2	1.3	603,559	13.5	1.0
Connecticut	1,013,403	35.4	1.5	865,023	30.2	1.4	552,200	19.3	0.8	430,213	15.0	0.7
Delaware	234,675	30.3	0.3	204,024	26.4	0.3	239,604	30.9	0.4	95,944	12.4	0.2
District of Columbia	249,615	44.7	0.4	96,924	17.4	0.2	133,657	23.9	0.2	77,936	14.0	0.1
Florida	4,276,532	25.0	6.2	4,118,331	24.1	6.4	4,752,334	27.8	7.3	3,931,252	23.0	6.6
Georgia	1,764,748	21.8	2.5	1,720,878	21.3	2.7	2,353,433	29.1	3.6	2,254,359	27.9	3.8
Hawaii	456,187	39.9	0.7	355,079	31.1	0.6	251,000	22.0	0.4	80,212	7.0	0.1
Idaho	357,355	26.4	0.5	428,002	31.6	0.7	384,555	28.4	0.6	182,875	13.5	0.3
Illinois	3,058,225	30.8	4.4	2,562,003	25.8	4.0	2,470,328	24.9	3.8	1,843,906	18.6	3.1
Indiana	1,118,500	21.7	1.6	1,408,284	27.3	2.2	1,720,115	33.3	2.6	912,354	17.7	1.5
Iowa	867,215	35.6	1.3	893,789	36.7	1.4	471,593	19.4	0.7	204,318	8.4	0.3
Kansas	872,362	39.3	1.3	557,033	25.1	0.9	466,708	21.0	0.7	321,845	14.5	0.5
Kentucky	651,178	18.8	0.9	669,886	19.3	1.0	1,148,329	33.1	1.8	1,002,839	28.9	1.7
Louisiana	549,011	15.4	0.8	606,487	17.1	0.9	1,099,621	30.9	1.7	1,301,103	36.6	2.2
Maine	403,846	36.6	0.6	441,420	40.0	0.7	235,616	21.4	0.4	21,579	2.0	0.0
Maryland	1,406,113	29.4	2.0	1,459,227	30.6	2.3	1,218,944	25.5	1.9	691,112	14.5	1.2
Massachusetts	2,219,498	39.6	3.2	1,456,498	26.0	2.3	1,031,524	18.4	1.6	894,608	16.0	1.5
Michigan	2,349,198	29.8	3.4	2,510,022	31.9	3.9	2,135,047	27.1	3.3	879,389	11.2	1.5
Minnesota	1,780,395	41.0	2.6	1,475,519	33.9	2.3	814,670	18.7	1.2	276,319	6.4	0.5
Mississippi	248,793	11.0	0.4	360,077	15.9	0.6	771,795	34.1	1.2	880,304	38.9	1.5
Missouri	1,309,002	27.6	1.9	1,346,964	28.4	2.1	1,416,410	29.8	2.2	676,783	14.3	1.1
Montana	370,408	43.8	0.5	296,890	35.1	0.5	158,413	18.7	0.2	19,452	2.3	0.0
Nebraska	528,714	36.1	0.8	452,603	30.9	0.7	292,104	19.9	0.4	192,149	13.1	0.3
Nevada	480,963	20.3	0.7	561,993	23.8	0.9	611,554	25.9	0.9	710,698	30.0	1.2
New Hampshire	487,347	43.8	0.7	399,290	35.9	0.6	173,190	15.6	0.3	51,733	4.7	0.1
New Jersey	2,399,935	33.4	3.5	2,131,678	29.6	3.3	1,423,033	19.8	2.2	1,238,936	17.2	2.1
New Mexico	319,964	19.7	0.5	306,546	18.9	0.5	463,261	28.5	0.7	534,269	32.9	0.9
New York	3,776,287	23.8	5.5	3,821,723	24.0	6.0	3,887,790	24.5	6.0	4,411,549	27.8	7.4
North Carolina	1,949,677	24.2	2.8	1,741,100	21.6	2.7	2,472,545	30.7	3.8	1,901,385	23.6	3.2
North Dakota	207,615	35.3	0.3	217,313	36.9	0.3	147,873	25.1	0.2	16,085	2.7	0.0
Ohio	2,655,173	29.1	3.8	2,835,379	31.0	4.4	2,373,044	26.0	3.6	1,276,338	14.0	2.1
Oklahoma	471,473	15.8	0.7	740,902	24.8	1.2	1,084,398	36.3	1.7	690,293	23.1	1.2
Oregon	954,664	28.6	1.4	987,847	29.6	1.5	995,648	29.9	1.5	395,532	11.9	0.7
Pennsylvania	3,118,852	30.4	4.5	3,212,713	31.3	5.0	2,658,768	25.9	4.1	1,275,835	12.4	2.1
Puerto Rico	101,090	3.7	0.1	167,043	6.2	0.3	684,734	25.2	1.1	1,761,130	64.9	2.9
Rhode Island	229,276	26.1	0.3	261,266	29.7	0.4	211,612	24.1	0.3	177,132	20.1	0.3
South Carolina	946,723	23.9	1.4	837,842	21.1	1.3	1,175,318	29.6	1.8	1,009,217	25.4	1.7
South Dakota	207,935	31.4	0.3	218,899	33.0	0.3	167,895	25.3	0.3	68,358	10.3	0.1

Area of residence	Less than high school diploma (%)											
	Total											
	<5			5.00–8.99			9.00–15.99			≥16		
	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>
Tennessee	1,039,665	19.5	1.5	1,200,259	22.5	1.9	1,840,473	34.6	2.8	1,244,857	23.4	2.1
Texas	4,791,899	22.4	6.9	3,977,252	18.6	6.2	4,810,949	22.5	7.4	7,836,305	36.6	13.1
Utah	913,591	40.0	1.3	698,115	30.5	1.1	445,958	19.5	0.7	227,643	10.0	0.4
Vermont	205,654	39.3	0.3	192,193	36.8	0.3	122,238	23.4	0.2	2,663	0.5	0.0
Virginia	2,045,853	30.6	3.0	1,806,415	27.0	2.8	1,799,141	26.9	2.8	1,038,318	15.5	1.7
Washington	2,013,662	33.9	2.9	1,831,840	30.9	2.9	1,455,122	24.5	2.2	636,280	10.7	1.1
West Virginia	208,989	14.6	0.3	310,585	21.7	0.5	573,337	40.0	0.9	341,643	23.8	0.6
Wisconsin	1,681,234	36.7	2.4	1,639,567	35.8	2.6	943,947	20.6	1.4	313,969	6.9	0.5
Wyoming	155,716	35.2	0.2	165,528	37.4	0.3	106,825	24.2	0.2	14,105	3.2	0.0
Region of residence												
Northeast	13,854,098	30.5	20.0	12,781,804	28.1	20.0	10,295,971	22.7	15.8	8,504,248	18.7	14.2
Midwest	16,635,568	31.3	24.0	16,117,375	30.3	25.2	13,419,734	25.2	20.6	6,981,813	13.1	11.7
South	21,875,566	22.6	31.6	21,084,720	21.8	33.0	27,572,202	28.5	42.3	26,099,208	27.0	43.7
West	16,806,794	27.9	24.3	13,799,393	22.9	21.6	13,234,616	22.0	20.3	16,428,296	27.3	27.5
Total	69,273,116	26.8	100	63,950,335	24.8	100	65,207,257	25.3	100	59,774,695	23.2	100

Abbreviations: ACS, American Community Survey; SDOH, social determinants of health [footnotes only].

*Note.* Proportion of residents in the census tract with less than a high school diploma at the time of the survey response (individuals aged 18 years and older).

- <sup>a</sup> Percentage of male residents of area.
- <sup>b</sup> Percentage of female residents of area.
- <sup>c</sup> Percentage of residents of area.
- <sup>d</sup> Percentage of SDOH subpopulation total.

Table A3. Median household income among adults aged ≥18 years, by sex assigned at birth and area of residence, 2017–2021 5-year ACS estimates—census tract level, United States and Puerto Rico

Area of residence	Median household income (U.S. \$)							
	Male							
	<49,000		49,000–65,999		66,000–89,999		≥90,000	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Alabama	722,954	39.1	533,929	28.9	385,387	20.9	204,795	11.1
Alaska	16,478	5.7	56,471	19.6	113,956	39.5	101,910	35.3
Arizona	665,342	24.8	672,911	25.1	674,584	25.2	667,617	24.9
Arkansas	490,893	43.9	372,842	33.4	177,666	15.9	76,449	6.8
California	1,689,800	11.3	2,652,864	17.8	3,985,028	26.7	6,616,762	44.3
Colorado	239,141	10.7	466,971	21.0	654,456	29.4	866,592	38.9
Connecticut	164,167	12.0	187,547	13.7	339,424	24.7	682,180	49.7
Delaware	37,377	10.1	99,693	26.8	135,784	36.5	98,653	26.6
District of Columbia	37,108	14.4	20,252	7.8	43,194	16.7	157,804	61.1
Florida	2,146,566	26.0	2,438,757	29.5	2,146,413	26.0	1,522,145	18.4
Georgia	1,026,304	26.5	992,671	25.6	939,080	24.2	916,012	23.6

Area of residence	Median household income (U.S. \$)							
	Male							
	<49,000		49,000–65,999		66,000–89,999		≥90,000	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Hawaii	32,110	5.7	67,172	11.8	172,238	30.3	296,279	52.2
Idaho	140,379	20.7	239,431	35.3	208,997	30.9	88,542	13.1
Illinois	809,481	16.7	1,122,736	23.2	1,384,980	28.6	1,521,443	31.4
Indiana	613,780	24.4	742,820	29.5	794,653	31.6	367,399	14.6
Iowa	179,179	14.9	445,072	37.0	414,155	34.4	166,020	13.8
Kansas	247,984	22.5	362,912	33.0	249,465	22.7	240,249	21.8
Kentucky	646,673	38.4	524,101	31.1	317,923	18.9	196,548	11.7
Louisiana	688,740	40.5	468,060	27.6	351,819	20.7	189,976	11.2
Maine	105,204	19.6	183,744	34.2	185,951	34.6	61,821	11.5
Maryland	166,971	7.3	321,984	14.1	517,197	22.7	1,272,457	55.8
Massachusetts	256,895	9.6	330,932	12.3	651,592	24.3	1,446,653	53.9
Michigan	909,846	23.8	1,132,025	29.6	1,034,223	27.0	749,652	19.6
Minnesota	198,454	9.2	498,997	23.1	731,462	33.9	730,157	33.8
Mississippi	529,457	49.3	317,726	29.6	158,581	14.8	67,822	6.3
Missouri	633,233	27.4	716,013	31.0	573,000	24.8	389,179	16.8
Montana	102,247	24.1	158,631	37.3	133,525	31.4	30,617	7.2
Nebraska	108,908	15.0	267,736	36.8	200,115	27.5	150,629	20.7
Nevada	261,687	22.1	293,298	24.7	373,948	31.5	257,047	21.7
New Hampshire	39,161	7.1	92,735	16.9	187,198	34.1	230,046	41.9
New Jersey	360,995	10.4	433,045	12.5	828,046	23.8	1,850,210	53.3
New Mexico	349,423	44.1	199,131	25.2	162,811	20.6	80,241	10.1
New York	1,210,118	16.0	1,485,661	19.6	2,015,477	26.6	2,854,037	37.7
North Carolina	1,133,108	29.4	1,222,353	31.7	841,825	21.8	662,680	17.2
North Dakota	41,129	13.6	82,482	27.3	125,561	41.5	53,278	17.6
Ohio	1,154,836	26.1	1,243,583	28.1	1,228,239	27.7	800,772	18.1
Oklahoma	525,348	35.8	448,984	30.6	321,828	21.9	171,298	11.7
Oregon	228,028	13.9	470,812	28.6	566,736	34.4	379,658	23.1
Pennsylvania	884,310	17.8	1,425,549	28.7	1,433,281	28.9	1,216,428	24.5
Puerto Rico	1,211,513	95.9	36,164	2.9	11,382	0.9	3,971	0.3
Rhode Island	68,723	16.2	71,209	16.7	139,236	32.7	146,181	34.4
South Carolina	609,776	32.3	612,425	32.4	426,593	22.6	239,372	12.7
South Dakota	71,717	21.4	111,936	33.4	119,426	35.7	31,740	9.5
Tennessee	845,887	32.9	775,307	30.2	552,236	21.5	394,970	15.4
Texas	2,541,515	24.2	2,508,404	23.9	2,637,862	25.1	2,824,696	26.9
Utah	99,123	8.7	237,658	20.8	381,036	33.3	427,452	37.3
Vermont	37,369	14.6	70,448	27.4	105,904	41.3	43,005	16.8
Virginia	468,119	14.4	693,815	21.3	711,385	21.9	1,378,613	42.4
Washington	263,240	8.9	549,297	18.6	873,590	29.5	1,274,815	43.1
West Virginia	322,292	45.8	225,365	32.0	131,390	18.7	25,323	3.6
Wisconsin	312,848	13.8	733,991	32.3	797,887	35.1	427,131	18.8
Wyoming	27,405	12.1	75,759	33.5	84,947	37.6	37,789	16.7
Region of residence								
Northeast	3,126,942	14.3	4,280,870	19.6	5,886,109	27.0	8,530,561	39.1



Area of residence	Median household income (U.S. \$)							
	Male							
	<49,000		49,000–65,999		66,000–89,999		≥90,000	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Midwest	5,281,395	20.3	7,460,303	28.7	7,653,166	29.4	5,627,649	21.6
South	12,939,088	27.7	12,576,668	26.9	10,796,163	23.1	10,399,613	22.3
West	4,114,403	13.8	6,140,406	20.6	8,385,852	28.2	11,125,321	37.4
Total	26,673,341	21.2	30,494,411	24.3	32,732,672	26.1	35,687,115	28.4

Area of residence	Median household income (U.S. \$)							
	Female							
	<49,000		49,000–65,999		66,000–89,999		≥90,000	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Alabama	808,106	40.2	579,343	28.8	407,632	20.3	215,342	10.7
Alaska	14,384	5.5	45,599	17.4	103,675	39.6	98,156	37.5
Arizona	689,554	25.1	679,224	24.8	693,586	25.3	681,661	24.8
Arkansas	524,879	44.5	387,765	32.9	182,828	15.5	82,996	7.0
California	1,746,538	11.4	2,702,077	17.7	4,096,384	26.8	6,742,216	44.1
Colorado	237,541	10.8	459,321	20.8	647,376	29.3	862,702	39.1
Connecticut	181,610	12.4	211,144	14.4	360,769	24.6	711,788	48.6
Delaware	43,146	10.7	112,502	28.0	142,596	35.4	104,257	25.9
District of Columbia	50,042	17.2	24,934	8.6	44,615	15.3	171,547	58.9
Florida	2,302,295	26.4	2,577,006	29.5	2,252,718	25.8	1,588,890	18.2
Georgia	1,133,987	27.2	1,075,932	25.8	1,004,529	24.1	957,454	23.0
Hawaii	29,639	5.2	66,608	11.7	172,593	30.4	298,632	52.6
Idaho	141,894	21.0	236,880	35.1	213,069	31.6	83,481	12.4
Illinois	877,301	17.3	1,179,548	23.3	1,439,068	28.5	1,561,837	30.9
Indiana	663,938	25.3	775,512	29.6	805,517	30.7	375,604	14.3
Iowa	186,143	15.2	449,271	36.7	418,841	34.2	168,745	13.8
Kansas	247,492	22.2	366,169	32.8	256,452	23.0	244,941	22.0
Kentucky	688,553	39.0	545,509	30.9	327,987	18.6	201,475	11.4
Louisiana	759,452	41.8	481,113	26.5	377,020	20.7	201,187	11.1
Maine	108,532	19.2	194,948	34.5	193,845	34.3	67,392	11.9
Maryland	196,959	7.9	363,539	14.7	568,528	22.9	1,350,711	54.5
Massachusetts	289,558	10.0	356,427	12.4	690,388	23.9	1,548,302	53.7
Michigan	991,901	24.8	1,167,565	29.2	1,064,544	26.7	768,119	19.2
Minnesota	207,444	9.5	507,972	23.3	730,069	33.4	737,767	33.8
Mississippi	592,040	50.6	339,945	29.1	163,867	14.0	73,877	6.3
Missouri	686,834	28.3	749,463	30.8	588,600	24.2	406,110	16.7
Montana	99,993	23.8	156,728	37.4	131,761	31.4	31,054	7.4
Nebraska	112,862	15.3	272,457	37.0	196,987	26.7	154,383	21.0
Nevada	254,017	21.6	287,687	24.4	375,091	31.8	261,314	22.2
New Hampshire	38,922	7.0	94,867	16.9	190,426	34.0	235,566	42.1
New Jersey	407,782	11.1	461,667	12.5	880,809	23.9	1,937,095	52.5
New Mexico	356,191	43.6	212,647	26.0	168,044	20.5	80,938	9.9
New York	1,410,554	17.3	1,579,776	19.3	2,138,511	26.2	3,036,112	37.2
North Carolina	1,255,591	30.2	1,310,007	31.5	893,804	21.5	702,861	16.9

Area of residence	Median household income (U.S. \$)							
	Female							
	<49,000		49,000–65,999		66,000–89,999		≥90,000	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
North Dakota	38,984	13.6	80,522	28.1	116,692	40.7	50,238	17.5
Ohio	1,260,038	27.0	1,310,025	28.0	1,274,003	27.2	831,290	17.8
Oklahoma	533,918	35.4	461,731	30.6	333,409	22.1	179,708	11.9
Oregon	238,604	14.2	482,399	28.6	574,878	34.1	387,930	23.0
Pennsylvania	996,905	19.0	1,483,100	28.3	1,499,683	28.6	1,254,958	24.0
Puerto Rico	1,382,697	95.8	44,003	3.0	12,254	0.8	4,980	0.3
Rhode Island	75,571	16.6	78,121	17.2	148,899	32.8	151,346	33.3
South Carolina	677,092	33.0	662,264	32.3	456,288	22.3	253,965	12.4
South Dakota	69,806	21.3	106,816	32.5	119,011	36.3	32,635	9.9
Tennessee	917,235	33.5	820,402	29.9	585,452	21.4	418,781	15.3
Texas	2,656,475	24.7	2,556,915	23.7	2,670,372	24.8	2,887,370	26.8
Utah	98,126	8.6	233,215	20.5	385,503	33.9	420,395	37.0
Vermont	40,399	15.2	74,574	28.0	106,952	40.2	44,097	16.6
Virginia	506,197	14.9	720,161	21.2	756,603	22.2	1,417,798	41.7
Washington	259,908	8.8	547,043	18.5	878,634	29.7	1,274,204	43.1
West Virginia	335,188	46.3	230,758	31.9	132,007	18.2	25,685	3.5
Wisconsin	339,256	14.7	735,777	32.0	798,189	34.7	427,491	18.6
Wyoming	25,501	11.8	75,521	34.9	78,810	36.4	36,442	16.8
Region of residence								
Northeast	3,549,833	15.2	4,534,624	19.5	6,210,282	26.7	8,986,656	38.6
Midwest	5,681,999	21.1	7,701,097	28.6	7,807,973	29.0	5,759,160	21.4
South	13,981,155	28.3	13,249,826	26.8	11,300,255	22.9	10,833,904	21.9
West	4,191,890	13.9	6,184,949	20.5	8,519,404	28.3	11,259,125	37.3
Total	28,787,574	21.9	31,714,499	24.2	33,850,168	25.8	36,843,825	28.1

Area of residence	Median household income (U.S. \$)											
	Total											
	<49,000			49,000–65,999			66,000–89,999			≥90,000		
	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>
Alabama	1,531,060	39.7	2.8	1,113,272	28.9	1.8	793,019	20.6	1.2	420,137	10.9	0.6
Alaska	30,862	5.6	0.1	102,070	18.5	0.2	217,631	39.5	0.3	200,066	36.3	0.3
Arizona	1,354,896	25.0	2.4	1,352,135	24.9	2.2	1,368,170	25.2	2.1	1,349,278	24.9	1.9
Arkansas	1,015,772	44.2	1.8	760,607	33.1	1.2	360,494	15.7	0.5	159,445	6.9	0.2
California	3,436,338	11.4	6.2	5,354,941	17.7	8.6	8,081,412	26.7	12.1	13,358,978	44.2	18.4
Colorado	476,682	10.8	0.9	926,292	20.9	1.5	1,301,832	29.4	2.0	1,729,294	39.0	2.4
Connecticut	345,777	12.2	0.6	398,691	14.0	0.6	700,193	24.7	1.1	1,393,968	49.1	1.9
Delaware	80,523	10.4	0.1	212,195	27.4	0.3	278,380	36.0	0.4	202,910	26.2	0.3
District of Columbia	87,150	15.9	0.2	45,186	8.2	0.1	87,809	16.0	0.1	329,351	59.9	0.5
Florida	4,448,861	26.2	8.0	5,015,763	29.5	8.1	4,399,131	25.9	6.6	3,111,035	18.3	4.3
Georgia	2,160,291	26.8	3.9	2,068,603	25.7	3.3	1,943,609	24.2	2.9	1,873,466	23.3	2.6
Hawaii	61,749	5.4	0.1	133,780	11.8	0.2	344,831	30.4	0.5	594,911	52.4	0.8
Idaho	282,273	20.9	0.5	476,311	35.2	0.8	422,066	31.2	0.6	172,023	12.7	0.2
Illinois	1,686,782	17.0	3.0	2,302,284	23.3	3.7	2,824,048	28.5	4.2	3,083,280	31.2	4.3

Area of residence	Median household income (U.S. \$)											
	Total											
	<49,000			49,000–65,999			66,000–89,999			≥90,000		
	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>
Indiana	1,277,718	24.9	2.3	1,518,332	29.5	2.4	1,600,170	31.1	2.4	743,003	14.5	1.0
Iowa	365,322	15.0	0.7	894,343	36.8	1.4	832,996	34.3	1.3	334,765	13.8	0.5
Kansas	495,476	22.4	0.9	729,081	32.9	1.2	505,917	22.8	0.8	485,190	21.9	0.7
Kentucky	1,335,226	38.7	2.4	1,069,610	31.0	1.7	645,910	18.7	1.0	398,023	11.5	0.5
Louisiana	1,448,192	41.2	2.6	949,173	27.0	1.5	728,839	20.7	1.1	391,163	11.1	0.5
Maine	213,736	19.4	0.4	378,692	34.4	0.6	379,796	34.5	0.6	129,213	11.7	0.2
Maryland	363,930	7.6	0.7	685,523	14.4	1.1	1,085,725	22.8	1.6	2,623,168	55.1	3.6
Massachusetts	546,453	9.8	1.0	687,359	12.3	1.1	1,341,980	24.1	2.0	2,994,955	53.8	4.1
Michigan	1,901,747	24.3	3.4	2,299,590	29.4	3.7	2,098,767	26.8	3.2	1,517,771	19.4	2.1
Minnesota	405,898	9.3	0.7	1,006,969	23.2	1.6	1,461,531	33.7	2.2	1,467,924	33.8	2.0
Mississippi	1,121,497	50.0	2.0	657,671	29.3	1.1	322,448	14.4	0.5	141,699	6.3	0.2
Missouri	1,320,067	27.8	2.4	1,465,476	30.9	2.4	1,161,600	24.5	1.7	795,289	16.8	1.1
Montana	202,240	23.9	0.4	315,359	37.3	0.5	265,286	31.4	0.4	61,671	7.3	0.1
Nebraska	221,770	15.1	0.4	540,193	36.9	0.9	397,102	27.1	0.6	305,012	20.8	0.4
Nevada	515,704	21.8	0.9	580,985	24.6	0.9	749,039	31.7	1.1	518,361	21.9	0.7
New Hampshire	78,083	7.0	0.1	187,602	16.9	0.3	377,624	34.1	0.6	465,612	42.0	0.6
New Jersey	768,777	10.7	1.4	894,712	12.5	1.4	1,708,855	23.9	2.6	3,787,305	52.9	5.2
New Mexico	705,614	43.8	1.3	411,778	25.6	0.7	330,855	20.6	0.5	161,179	10.0	0.2
New York	2,620,672	16.7	4.7	3,065,437	19.5	4.9	4,153,988	26.4	6.2	5,890,149	37.4	8.1
North Carolina	2,388,699	29.8	4.3	2,532,360	31.6	4.1	1,735,629	21.6	2.6	1,365,541	17.0	1.9
North Dakota	80,113	13.6	0.1	163,004	27.7	0.3	242,253	41.1	0.4	103,516	17.6	0.1
Ohio	2,414,874	26.5	4.4	2,553,608	28.1	4.1	2,502,242	27.5	3.8	1,632,062	17.9	2.3
Oklahoma	1,059,266	35.6	1.9	910,715	30.6	1.5	655,237	22.0	1.0	351,006	11.8	0.5
Oregon	466,632	14.0	0.8	953,211	28.6	1.5	1,141,614	34.3	1.7	767,588	23.1	1.1
Pennsylvania	1,881,215	18.5	3.4	2,908,649	28.5	4.7	2,932,964	28.8	4.4	2,471,386	24.2	3.4
Puerto Rico	2,594,210	95.8	4.7	80,167	3.0	0.1	23,636	0.9	0.0	8,951	0.3	0.0
Rhode Island	144,294	16.4	0.3	149,330	17.0	0.2	288,135	32.8	0.4	297,527	33.8	0.4
South Carolina	1,286,868	32.7	2.3	1,274,689	32.4	2.0	882,881	22.4	1.3	493,337	12.5	0.7
South Dakota	141,523	21.3	0.3	218,752	33.0	0.4	238,437	36.0	0.4	64,375	9.7	0.1
Tennessee	1,763,122	33.2	3.2	1,595,709	30.0	2.6	1,137,688	21.4	1.7	813,751	15.3	1.1
Texas	5,197,990	24.4	9.4	5,065,319	23.8	8.1	5,308,234	24.9	8.0	5,712,066	26.8	7.9
Utah	197,249	8.6	0.4	470,873	20.6	0.8	766,539	33.6	1.2	847,847	37.1	1.2
Vermont	77,768	14.9	0.1	145,022	27.7	0.2	212,856	40.7	0.3	87,102	16.7	0.1
Virginia	974,316	14.6	1.8	1,413,976	21.3	2.3	1,467,988	22.1	2.2	2,796,411	42.0	3.9
Washington	523,148	8.8	0.9	1,096,340	18.5	1.8	1,752,224	29.6	2.6	2,549,019	43.1	3.5
West Virginia	657,480	46.0	1.2	456,123	31.9	0.7	263,397	18.4	0.4	51,008	3.6	0.1
Wisconsin	652,104	14.3	1.2	1,469,768	32.1	2.4	1,596,076	34.9	2.4	854,622	18.7	1.2
Wyoming	52,906	12.0	0.1	151,280	34.2	0.2	163,757	37.0	0.2	74,231	16.8	0.1
Region of residence												
Northeast	6,676,775	14.8	12.0	8,815,494	19.5	14.2	12,096,391	26.8	18.2	17,517,217	38.8	24.2
Midwest	10,963,394	20.7	19.8	15,161,400	28.6	24.4	15,461,139	29.2	23.2	11,386,809	21.5	15.7
South	26,920,243	28.0	48.5	25,826,494	26.9	41.5	22,096,418	23.0	33.2	21,233,517	22.1	29.3
West	8,306,293	13.9	15.0	12,325,355	20.6	19.8	16,905,256	28.2	25.4	22,384,446	37.4	30.9

Area of residence	Median household income (U.S. \$)											
	Total											
	<49,000			49,000–65,999			66,000–89,999			≥90,000		
	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>
Total	55,460,915	21.6	100	62,208,910	24.2	100	66,582,840	25.9	100	72,530,940	28.2	100

Abbreviations: ACS, American Community Survey; SDOH, social determinants of health [footnotes only].

*Note.* Median household income (all age groups) in the census tract during the 12 months before the survey response.

- <sup>a</sup> Percentage of male residents of area.
- <sup>b</sup> Percentage of female residents of area.
- <sup>c</sup> Percentage of residents of area.
- <sup>d</sup> Percentage of SDOH subpopulation total.

Table A4. Adults aged ≥ 18 years without health insurance, by assigned sex at birth and area of residence, 2017–2021 5-year ACS estimates—census tract level, United States and Puerto Rico

▼

Area of residence	Without health insurance (%)							
	Male							
	<4		4.00–7.99		8.00–13.99		≥14	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Alabama	200,517	10.8	436,930	23.5	622,295	33.5	595,914	32.1
Alaska	19,180	6.6	41,518	14.3	98,578	33.9	131,667	45.3
Arizona	539,549	20.0	614,162	22.8	771,357	28.6	768,795	28.5
Arkansas	140,433	12.5	342,751	30.6	417,035	37.2	220,656	19.7
California	4,363,417	29.1	4,410,592	29.4	3,560,879	23.7	2,683,953	17.9
Colorado	556,327	24.9	674,656	30.2	604,389	27.0	400,347	17.9
Connecticut	699,333	50.6	381,095	27.6	166,788	12.1	135,816	9.8
Delaware	129,664	34.9	132,705	35.7	93,339	25.1	15,799	4.3
District of Columbia	165,883	63.3	69,946	26.7	24,807	9.5	1,581	0.6
Florida	713,132	8.6	1,419,479	17.1	2,547,510	30.7	3,622,176	43.6
Georgia	344,373	8.8	561,358	14.4	1,056,976	27.1	1,935,296	49.6
Hawaii	305,329	53.5	201,857	35.3	55,445	9.7	8,442	1.5
Idaho	60,330	8.9	145,071	21.4	243,106	35.9	228,895	33.8
Illinois	1,482,608	30.5	1,508,667	31.1	1,087,081	22.4	778,157	16.0
Indiana	532,161	21.1	904,033	35.8	738,732	29.2	351,699	13.9
Iowa	526,104	43.5	438,449	36.2	190,119	15.7	55,772	4.6
Kansas	226,013	20.5	321,985	29.2	309,899	28.1	243,708	22.1
Kentucky	579,736	34.2	637,770	37.7	377,245	22.3	98,999	5.8
Louisiana	259,023	15.1	497,978	29.0	610,060	35.5	352,276	20.5
Maine	95,823	17.8	184,036	34.3	207,724	38.7	49,715	9.3
Maryland	938,549	41.2	743,546	32.6	362,092	15.9	235,204	10.3
Massachusetts	1,982,827	73.4	552,953	20.5	136,828	5.1	28,832	1.1
Michigan	1,373,177	35.7	1,501,313	39.1	799,284	20.8	169,751	4.4
Minnesota	999,325	46.3	797,881	36.9	299,429	13.9	63,857	3.0
Mississippi	60,655	5.6	134,666	12.4	322,443	29.8	565,557	52.2
Missouri	393,126	17.0	546,200	23.6	726,416	31.4	648,479	28.0
Montana	41,670	9.8	176,672	41.6	159,816	37.6	46,902	11.0

Area of residence	Without health insurance (%)							
	Male							
	<4		4.00–7.99		8.00–13.99		≥14	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Nebraska	154,056	21.2	240,773	33.1	202,148	27.8	130,518	17.9
Nevada	133,396	11.2	279,192	23.5	375,678	31.7	398,101	33.6
New Hampshire	163,740	29.8	207,520	37.7	160,055	29.1	19,030	3.5
New Jersey	1,306,966	37.5	863,617	24.8	630,015	18.1	682,360	19.6
New Mexico	136,519	17.1	203,184	25.5	236,761	29.7	221,517	27.8
New York	3,308,086	43.3	2,317,281	30.3	1,371,818	18.0	639,252	8.4
North Carolina	411,972	10.6	809,993	20.8	1,306,012	33.6	1,356,955	34.9
North Dakota	63,620	21.0	125,042	41.3	86,055	28.5	27,733	9.2
Ohio	1,445,642	32.5	1,606,741	36.1	1,034,209	23.2	363,044	8.2
Oklahoma	66,027	4.5	175,313	11.9	386,708	26.3	844,004	57.3
Oregon	360,366	21.9	666,538	40.4	453,700	27.5	167,389	10.2
Pennsylvania	2,107,759	42.2	1,730,995	34.7	796,143	16.0	356,232	7.1
Puerto Rico	180,091	14.2	586,870	46.4	412,603	32.6	85,516	6.8
Rhode Island	223,134	52.5	126,711	29.8	52,704	12.4	22,800	5.4
South Carolina	191,018	10.1	409,261	21.6	663,480	35.0	634,303	33.4
South Dakota	42,077	12.6	122,141	36.5	105,969	31.6	64,632	19.3
Tennessee	250,323	9.7	588,987	22.9	959,746	37.3	774,137	30.1
Texas	635,018	6.0	1,228,361	11.6	2,168,422	20.5	6,539,603	61.9
Utah	223,416	19.5	326,765	28.5	338,968	29.6	256,347	22.4
Vermont	107,229	41.8	121,686	47.4	27,202	10.6	609	0.2
Virginia	748,223	22.9	1,035,282	31.7	923,420	28.3	560,290	17.1
Washington	863,824	29.1	1,077,333	36.3	725,013	24.4	302,270	10.2
West Virginia	125,046	17.7	321,372	45.4	212,593	30.0	48,957	6.9
Wisconsin	892,103	39.2	869,097	38.2	383,780	16.9	128,948	5.7
Wyoming	11,937	5.3	37,016	16.4	101,529	44.9	75,418	33.4
Region of residence								
Northeast	9,994,897	45.5	6,485,894	29.5	3,549,277	16.2	1,934,646	8.8
Midwest	8,130,012	31.1	8,982,322	34.4	5,963,121	22.8	3,026,298	11.6
South	5,959,592	12.7	9,545,698	20.3	13,054,183	27.8	18,401,707	39.2
West	7,615,260	25.5	8,854,556	29.6	7,725,219	25.8	5,690,043	19.0
Total	31,879,852	25.3	34,455,340	27.3	30,704,403	24.3	29,138,210	23.1

Area of residence	Without health insurance (%)							
	Female							
	<4		4.00–7.99		8.00–13.99		≥14	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Alabama	218,899	10.8	473,785	23.5	674,705	33.4	652,249	32.3
Alaska	13,218	5.0	40,043	15.3	94,328	36.0	114,685	43.7
Arizona	564,579	20.5	635,961	23.1	789,039	28.7	761,622	27.7
Arkansas	150,256	12.7	359,796	30.5	445,462	37.8	224,135	19.0
California	4,508,945	29.4	4,573,048	29.8	3,605,372	23.5	2,663,611	17.4
Colorado	561,756	25.4	676,886	30.6	592,303	26.8	379,608	17.2
Connecticut	739,539	50.2	406,520	27.6	184,984	12.6	141,791	9.6



Area of residence	Without health insurance (%)							
	Female							
	<4		4.00–7.99		8.00–13.99		≥14	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Delaware	139,627	34.7	144,757	36.0	101,606	25.2	16,511	4.1
District of Columbia	186,556	63.0	80,224	27.1	27,428	9.3	1,707	0.6
Florida	785,609	9.0	1,518,402	17.3	2,719,354	31.0	3,743,454	42.7
Georgia	349,546	8.3	600,635	14.3	1,161,516	27.7	2,082,984	49.7
Hawaii	300,409	52.6	204,857	35.9	56,247	9.9	9,125	1.6
Idaho	63,502	9.4	149,733	22.2	239,311	35.4	222,839	33.0
Illinois	1,546,591	30.5	1,586,372	31.2	1,168,675	23.0	775,721	15.3
Indiana	554,622	21.1	937,657	35.6	770,642	29.3	367,388	14.0
Iowa	545,824	44.5	438,370	35.7	188,800	15.4	53,477	4.4
Kansas	232,711	20.8	323,342	29.0	317,884	28.5	242,406	21.7
Kentucky	603,097	34.0	672,445	37.9	393,677	22.2	103,579	5.8
Louisiana	272,471	14.9	542,563	29.6	658,005	35.9	361,717	19.7
Maine	105,261	18.6	195,705	34.6	215,615	38.2	48,582	8.6
Maryland	1,014,595	40.9	825,138	33.3	402,946	16.2	238,603	9.6
Massachusetts	2,147,920	74.1	585,439	20.2	138,907	4.8	28,206	1.0
Michigan	1,449,116	36.1	1,556,506	38.8	830,853	20.7	175,237	4.4
Minnesota	1,029,737	47.1	797,269	36.5	297,344	13.6	60,229	2.8
Mississippi	68,072	5.8	144,885	12.3	349,855	29.7	614,777	52.2
Missouri	421,646	17.3	569,791	23.4	762,136	31.3	681,365	28.0
Montana	43,075	10.3	174,744	41.6	153,904	36.7	47,866	11.4
Nebraska	159,731	21.7	245,908	33.4	203,723	27.7	127,346	17.3
Nevada	136,702	11.6	283,424	24.1	376,566	32.0	381,612	32.4
New Hampshire	169,953	30.3	213,432	38.0	159,808	28.5	18,022	3.2
New Jersey	1,405,920	38.0	911,057	24.6	670,871	18.1	710,032	19.2
New Mexico	142,888	17.4	215,910	26.2	237,683	28.9	226,085	27.5
New York	3,565,815	43.3	2,525,212	30.7	1,486,769	18.1	655,177	8.0
North Carolina	418,232	10.0	885,084	21.2	1,415,379	33.9	1,454,438	34.9
North Dakota	62,647	21.9	117,773	41.1	80,304	28.0	25,712	9.0
Ohio	1,521,469	32.5	1,695,096	36.2	1,096,054	23.4	373,400	8.0
Oklahoma	67,716	4.5	189,934	12.6	397,709	26.3	857,440	56.7
Oregon	379,186	22.5	686,752	40.7	453,608	26.9	166,152	9.9
Pennsylvania	2,215,365	42.1	1,832,503	34.9	843,079	16.0	366,605	7.0
Puerto Rico	208,135	14.4	675,046	46.7	470,340	32.5	93,235	6.4
Rhode Island	239,853	52.8	134,616	29.7	55,611	12.3	23,857	5.3
South Carolina	202,011	9.8	445,379	21.6	724,452	35.2	686,217	33.3
South Dakota	42,990	13.1	121,356	37.0	102,488	31.2	61,434	18.7
Tennessee	269,645	9.8	632,940	23.0	1,014,060	36.9	830,506	30.2
Texas	625,634	5.8	1,277,856	11.8	2,249,699	20.8	6,666,940	61.6
Utah	224,718	19.8	325,334	28.6	335,615	29.5	251,786	22.1
Vermont	111,936	42.1	125,911	47.3	27,568	10.4	607	0.2
Virginia	773,194	22.6	1,092,393	32.0	978,612	28.7	570,182	16.7
Washington	869,210	29.3	1,085,115	36.6	721,837	24.3	289,662	9.8
West Virginia	132,094	18.2	331,532	45.6	216,258	29.8	46,702	6.4

Area of residence	Without health insurance (%)							
	Female							
	<4		4.00–7.99		8.00–13.99		≥14	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Wisconsin	908,434	39.4	878,646	38.1	389,599	16.9	126,767	5.5
Wyoming	11,259	5.2	37,456	17.3	98,804	45.7	68,755	31.8
Region of residence								
Northeast	10,701,562	45.7	6,930,395	29.6	3,783,212	16.2	1,992,879	8.5
Midwest	8,475,518	31.4	9,268,086	34.3	6,208,502	23.0	3,070,482	11.4
South	6,277,254	12.7	10,217,748	20.6	13,930,723	28.1	19,152,141	38.6
West	7,819,447	25.9	9,089,263	30.1	7,754,617	25.6	5,583,408	18.5
Total	33,481,916	25.4	36,180,538	27.5	32,147,394	24.4	29,892,145	22.7

Area of residence	Without health insurance (%)											
	Total											
	<4			4.00–7.99			8.00–13.99			≥14		
	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>
Alabama	419,416	10.8	0.6	910,715	23.5	1.3	1,297,000	33.5	2.1	1,248,163	32.2	2.1
Alaska	32,398	5.9	0.0	81,561	14.7	0.1	192,906	34.9	0.3	246,352	44.5	0.4
Arizona	1,104,128	20.3	1.7	1,250,123	23.0	1.8	1,560,396	28.7	2.5	1,530,417	28.1	2.6
Arkansas	290,689	12.6	0.4	702,547	30.5	1.0	862,497	37.5	1.4	444,791	19.3	0.8
California	8,872,362	29.2	13.6	8,983,640	29.6	12.7	7,166,251	23.6	11.4	5,347,564	17.6	9.1
Colorado	1,118,083	25.1	1.7	1,351,542	30.4	1.9	1,196,692	26.9	1.9	779,955	17.5	1.3
Connecticut	1,438,872	50.4	2.2	787,615	27.6	1.1	351,772	12.3	0.6	277,607	9.7	0.5
Delaware	269,291	34.8	0.4	277,462	35.8	0.4	194,945	25.2	0.3	32,310	4.2	0.1
District of Columbia	352,439	63.1	0.5	150,170	26.9	0.2	52,235	9.4	0.1	3,288	0.6	0.0
Florida	1,498,741	8.8	2.3	2,937,881	17.2	4.2	5,266,864	30.9	8.4	7,365,630	43.2	12.5
Georgia	693,919	8.6	1.1	1,161,993	14.4	1.6	2,218,492	27.4	3.5	4,018,280	49.7	6.8
Hawaii	605,738	53.1	0.9	406,714	35.6	0.6	111,692	9.8	0.2	17,567	1.5	0.0
Idaho	123,832	9.2	0.2	294,804	21.8	0.4	482,417	35.7	0.8	451,734	33.4	0.8
Illinois	3,029,199	30.5	4.6	3,095,039	31.2	4.4	2,255,756	22.7	3.6	1,553,878	15.6	2.6
Indiana	1,086,783	21.1	1.7	1,841,690	35.7	2.6	1,509,374	29.3	2.4	719,087	13.9	1.2
Iowa	1,071,928	44.0	1.6	876,819	36.0	1.2	378,919	15.5	0.6	109,249	4.5	0.2
Kansas	458,724	20.7	0.7	645,327	29.1	0.9	627,783	28.3	1.0	486,114	21.9	0.8
Kentucky	1,182,833	34.1	1.8	1,310,215	37.8	1.9	770,922	22.2	1.2	202,578	5.8	0.3
Louisiana	531,494	15.0	0.8	1,040,541	29.3	1.5	1,268,065	35.7	2.0	713,993	20.1	1.2
Maine	201,084	18.2	0.3	379,741	34.4	0.5	423,339	38.4	0.7	98,297	8.9	0.2
Maryland	1,953,144	41.0	3.0	1,568,684	33.0	2.2	765,038	16.1	1.2	473,807	10.0	0.8
Massachusetts	4,130,747	73.7	6.3	1,138,392	20.3	1.6	275,735	4.9	0.4	57,038	1.0	0.1
Michigan	2,822,293	35.9	4.3	3,057,819	38.9	4.3	1,630,137	20.8	2.6	344,988	4.4	0.6
Minnesota	2,029,062	46.7	3.1	1,595,150	36.7	2.3	596,773	13.7	0.9	124,086	2.9	0.2
Mississippi	128,727	5.7	0.2	279,551	12.4	0.4	672,298	29.7	1.1	1,180,334	52.2	2.0
Missouri	814,772	17.2	1.2	1,115,991	23.5	1.6	1,488,552	31.3	2.4	1,329,844	28.0	2.3
Montana	84,745	10.0	0.1	351,416	41.6	0.5	313,720	37.1	0.5	94,768	11.2	0.2
Nebraska	313,787	21.4	0.5	486,681	33.2	0.7	405,871	27.7	0.6	257,864	17.6	0.4
Nevada	270,098	11.4	0.4	562,616	23.8	0.8	752,244	31.8	1.2	779,713	33.0	1.3
New Hampshire	333,693	30.0	0.5	420,952	37.9	0.6	319,863	28.8	0.5	37,052	3.3	0.1

Area of residence	Without health insurance (%)											
	Total											
	<4			4.00–7.99			8.00–13.99			≥14		
	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>
New Jersey	2,712,886	37.8	4.2	1,774,674	24.7	2.5	1,300,886	18.1	2.1	1,392,392	19.4	2.4
New Mexico	279,407	17.2	0.4	419,094	25.9	0.6	474,444	29.3	0.8	447,602	27.6	0.8
New York	6,873,901	43.3	10.5	4,842,493	30.5	6.9	2,858,587	18.0	4.5	1,294,429	8.2	2.2
North Carolina	830,204	10.3	1.3	1,695,077	21.0	2.4	2,721,391	33.8	4.3	2,811,393	34.9	4.8
North Dakota	126,267	21.4	0.2	242,815	41.2	0.3	166,359	28.2	0.3	53,445	9.1	0.1
Ohio	2,967,111	32.5	4.5	3,301,837	36.1	4.7	2,130,263	23.3	3.4	736,444	8.1	1.2
Oklahoma	133,743	4.5	0.2	365,247	12.2	0.5	784,417	26.3	1.2	1,701,444	57.0	2.9
Oregon	739,552	22.2	1.1	1,353,290	40.6	1.9	907,308	27.2	1.4	333,541	10.0	0.6
Pennsylvania	4,323,124	42.2	6.6	3,563,498	34.8	5.0	1,639,222	16.0	2.6	722,837	7.1	1.2
Puerto Rico	388,226	14.3	0.6	1,261,916	46.5	1.8	882,943	32.6	1.4	178,751	6.6	0.3
Rhode Island	462,987	52.7	0.7	261,327	29.7	0.4	108,315	12.3	0.2	46,657	5.3	0.1
South Carolina	393,029	9.9	0.6	854,640	21.6	1.2	1,387,932	35.1	2.2	1,320,520	33.4	2.2
South Dakota	85,067	12.8	0.1	243,497	36.7	0.3	208,457	31.4	0.3	126,066	19.0	0.2
Tennessee	519,968	9.8	0.8	1,221,927	23.0	1.7	1,973,806	37.1	3.1	1,604,643	30.2	2.7
Texas	1,260,652	5.9	1.9	2,506,217	11.7	3.5	4,418,121	20.7	7.0	13,206,543	61.7	22.4
Utah	448,134	19.6	0.7	652,099	28.6	0.9	674,583	29.5	1.1	508,133	22.3	0.9
Vermont	219,165	41.9	0.3	247,597	47.4	0.4	54,770	10.5	0.1	1,216	0.2	0.0
Virginia	1,521,417	22.8	2.3	2,127,675	31.8	3.0	1,902,032	28.5	3.0	1,130,472	16.9	1.9
Washington	1,733,034	29.2	2.7	2,162,448	36.4	3.1	1,446,850	24.4	2.3	591,932	10.0	1.0
West Virginia	257,140	17.9	0.4	652,904	45.5	0.9	428,851	29.9	0.7	95,659	6.7	0.2
Wisconsin	1,800,537	39.3	2.8	1,747,743	38.2	2.5	773,379	16.9	1.2	255,715	5.6	0.4
Wyoming	23,196	5.2	0.0	74,472	16.8	0.1	200,333	45.3	0.3	144,173	32.6	0.2
Region of residence												
Northeast	20,696,459	45.6	31.7	13,416,289	29.6	19.0	7,332,489	16.2	11.7	3,927,525	8.7	6.7
Midwest	16,605,530	31.3	25.4	18,250,408	34.4	25.8	12,171,623	22.9	19.4	6,096,780	11.5	10.3
South	12,236,846	12.7	18.7	19,763,446	20.5	28.0	26,984,906	28.0	42.9	37,553,848	38.9	63.6
West	15,434,707	25.7	23.6	17,943,819	29.8	25.4	15,479,836	25.7	24.6	11,273,451	18.7	19.1
Total	65,361,768	25.3	100	70,635,878	27.4	100	62,851,797	24.4	100	59,030,355	22.9	100

Abbreviations: ACS, American Community Survey; SDOH, social determinants of health [footnotes only].

*Note.* Proportion of residents in the census tract without health insurance or health coverage plan at the time of the survey response (individuals aged 18 years and older).

- <sup>a</sup> Percentage of male residents of area.
- <sup>b</sup> Percentage of female residents of area.
- <sup>c</sup> Percentage of residents of area.
- <sup>d</sup> Percentage of SDOH subpopulation total.

Table A5. Gini index among adults aged ≥18 years, by assigned sex at birth and area of residence, 2017–2021 5-year ACS estimates—census tract level, United States and Puerto Rico

▼

Area of residence	Gini index (%)							
	Male							
	<37		37.00–40.99		41.00–45.99		≥46	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Alabama	316,198	17.0	417,048	22.5	604,467	32.6	517,590	27.9
Alaska	77,249	26.7	98,919	34.2	75,019	26.0	37,628	13.0
Arizona	877,355	32.6	662,236	24.6	659,496	24.5	492,094	18.3
Arkansas	154,882	13.8	249,669	22.3	368,004	32.9	346,762	31.0
California	3,430,815	22.9	3,715,807	24.8	4,373,167	29.2	3,467,429	23.1
Colorado	757,574	33.9	507,204	22.7	572,297	25.6	396,379	17.7
Connecticut	250,322	18.1	368,320	26.6	409,581	29.6	353,925	25.6
Delaware	94,393	25.4	107,648	29.0	101,394	27.3	68,072	18.3
District of Columbia	31,240	12.0	28,983	11.2	71,900	27.7	127,723	49.2
Florida	1,815,707	21.9	2,060,463	24.9	2,288,704	27.6	2,118,228	25.6
Georgia	1,063,571	27.3	898,973	23.1	1,026,163	26.3	905,784	23.3
Hawaii	178,374	31.3	141,713	24.8	140,093	24.6	110,460	19.4
Idaho	216,104	31.9	157,125	23.2	185,967	27.5	118,206	17.4
Illinois	1,101,903	22.7	1,319,090	27.2	1,312,860	27.0	1,122,656	23.1
Indiana	761,052	30.2	752,230	29.8	617,716	24.5	391,399	15.5
Iowa	273,366	22.7	402,782	33.4	339,178	28.1	191,051	15.8
Kansas	366,274	33.3	303,227	27.5	260,238	23.6	171,727	15.6
Kentucky	322,961	19.1	390,518	23.1	495,172	29.2	484,925	28.6
Louisiana	233,824	13.6	291,430	17.0	551,136	32.1	642,940	37.4
Maine	98,371	18.3	141,647	26.4	167,069	31.1	130,211	24.2
Maryland	801,426	35.2	622,196	27.3	513,194	22.5	342,575	15.0
Massachusetts	430,110	15.9	675,077	25.0	839,850	31.1	751,783	27.9
Michigan	960,405	25.0	1,112,626	29.0	1,009,863	26.3	752,518	19.6
Minnesota	585,575	27.1	682,327	31.6	591,071	27.4	301,519	14.0
Mississippi	182,287	16.8	213,018	19.7	290,452	26.8	397,564	36.7
Missouri	615,042	26.6	644,358	27.8	635,803	27.5	419,004	18.1
Montana	56,705	13.3	94,555	22.2	162,088	38.1	111,712	26.3
Nebraska	201,219	27.7	208,369	28.6	194,577	26.8	123,223	16.9
Nevada	351,971	29.7	289,988	24.4	302,532	25.5	241,844	20.4
New Hampshire	165,219	30.0	142,095	25.8	152,483	27.7	90,548	16.5
New Jersey	760,343	21.8	1,016,131	29.2	902,901	25.9	803,347	23.1
New Mexico	133,769	16.8	186,747	23.4	235,298	29.5	242,167	30.3
New York	1,218,732	16.0	1,700,889	22.4	2,143,858	28.2	2,544,953	33.4
North Carolina	780,096	20.1	946,039	24.4	1,176,513	30.4	969,426	25.0
North Dakota	45,992	15.2	82,532	27.3	105,594	34.9	68,332	22.6
Ohio	1,203,056	27.1	1,281,337	28.9	1,112,061	25.1	842,267	19.0
Oklahoma	321,581	21.8	379,948	25.8	462,352	31.4	308,116	20.9
Oregon	378,280	23.0	441,116	26.8	495,589	30.1	333,008	20.2
Pennsylvania	1,022,215	20.5	1,437,336	28.9	1,519,033	30.5	1,001,544	20.1
Puerto Rico	17,104	1.4	87,786	6.9	318,005	25.1	842,185	66.6
Rhode Island	93,267	21.9	123,888	29.1	106,486	25.0	101,708	23.9
South Carolina	355,138	18.8	436,089	23.0	546,263	28.8	556,406	29.4

Area of residence	Gini index (%)							
	Male							
	<37		37.00–40.99		41.00–45.99		≥46	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
South Dakota	79,549	23.8	92,139	27.5	100,329	30.0	62,802	18.8
Tennessee	546,638	21.3	611,292	23.8	743,776	28.9	668,448	26.0
Texas	3,281,495	31.1	2,454,296	23.3	2,621,138	24.9	2,185,866	20.7
Utah	547,264	47.8	271,413	23.7	206,209	18.0	120,434	10.5
Vermont	34,773	13.5	63,458	24.7	96,386	37.5	62,109	24.2
Virginia	1,134,196	34.8	811,608	24.9	764,805	23.4	551,665	16.9
Washington	883,520	29.8	801,399	27.0	783,809	26.4	499,712	16.8
West Virginia	82,878	11.7	165,429	23.4	247,841	35.0	211,820	29.9
Wisconsin	567,047	24.9	754,343	33.2	640,679	28.2	311,859	13.7
Wyoming	59,760	26.5	61,104	27.0	59,569	26.4	45,467	20.1
Region of residence								
Northeast	4,073,352	18.6	5,668,841	25.9	6,337,647	28.9	5,840,128	26.6
Midwest	6,760,480	25.9	7,635,360	29.3	6,919,969	26.5	4,758,357	18.2
South	11,518,511	24.6	11,084,647	23.6	12,873,274	27.5	11,403,910	24.3
West	7,948,740	26.6	7,429,326	24.9	8,251,133	27.6	6,216,540	20.8
Total	30,318,187	24.1	31,905,960	25.3	34,700,028	27.5	29,061,120	23.1

Area of residence	Gini index (%)							
	Female							
	<37		37.00–40.99		41.00–45.99		≥46	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Alabama	336,279	16.7	446,151	22.1	668,107	33.1	568,328	28.2
Alaska	69,192	26.4	90,496	34.6	68,128	26.0	33,998	13.0
Arizona	888,082	32.3	674,002	24.5	684,538	24.9	502,283	18.3
Arkansas	162,624	13.8	265,604	22.5	386,267	32.8	364,901	30.9
California	3,425,614	22.4	3,803,186	24.8	4,502,218	29.4	3,595,693	23.5
Colorado	740,666	33.5	505,608	22.9	573,853	26.0	388,584	17.6
Connecticut	249,841	17.0	391,052	26.6	443,963	30.2	387,118	26.3
Delaware	96,360	23.9	118,915	29.5	112,579	28.0	74,647	18.5
District of Columbia	31,055	10.6	33,907	11.6	76,987	26.3	150,430	51.5
Florida	1,899,265	21.7	2,170,298	24.8	2,432,760	27.8	2,245,003	25.7
Georgia	1,125,931	26.8	977,121	23.3	1,095,474	26.1	995,575	23.7
Hawaii	169,751	29.8	138,989	24.4	146,490	25.7	115,290	20.2
Idaho	215,306	31.9	161,891	24.0	184,878	27.4	113,310	16.8
Illinois	1,117,258	22.0	1,376,901	27.1	1,359,112	26.8	1,224,088	24.1
Indiana	773,701	29.5	777,320	29.6	656,426	25.0	418,767	15.9
Iowa	274,796	22.4	407,594	33.3	346,978	28.3	194,945	15.9
Kansas	362,936	32.5	307,980	27.6	273,675	24.5	171,372	15.4
Kentucky	332,757	18.8	406,311	22.9	514,760	29.0	518,894	29.3
Louisiana	238,747	13.0	315,989	17.2	593,164	32.3	686,852	37.4
Maine	99,571	17.6	145,203	25.7	176,511	31.2	143,878	25.5
Maryland	853,427	34.4	673,663	27.1	557,170	22.5	397,022	16.0
Massachusetts	439,544	15.2	715,357	24.7	903,295	31.2	836,721	28.9



Area of residence	Gini index (%)							
	Female							
	<37		37.00–40.99		41.00–45.99		≥46	
	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>	No.	% <sup>a</sup>
Michigan	973,922	24.3	1,156,783	28.9	1,062,857	26.5	810,041	20.2
Minnesota	582,548	26.7	680,942	31.2	605,857	27.7	315,232	14.4
Mississippi	195,172	16.6	230,309	19.6	308,389	26.2	443,719	37.7
Missouri	632,198	26.0	684,291	28.1	664,901	27.3	453,538	18.6
Montana	55,467	13.2	94,438	22.5	157,828	37.6	111,856	26.7
Nebraska	203,740	27.7	210,417	28.6	200,073	27.2	122,459	16.6
Nevada	349,893	29.7	285,244	24.2	310,855	26.4	232,297	19.7
New Hampshire	162,957	29.0	148,077	26.4	160,303	28.6	89,878	16.0
New Jersey	782,608	21.2	1,069,437	28.9	965,684	26.1	879,977	23.8
New Mexico	138,425	16.8	191,473	23.3	243,071	29.6	249,597	30.3
New York	1,245,722	15.2	1,792,170	21.8	2,285,013	27.8	2,885,537	35.2
North Carolina	813,625	19.5	1,013,665	24.3	1,274,740	30.6	1,068,314	25.6
North Dakota	43,575	15.2	77,979	27.2	99,363	34.7	65,519	22.9
Ohio	1,231,956	26.3	1,355,555	28.9	1,186,828	25.3	911,672	19.5
Oklahoma	329,924	21.8	390,094	25.8	474,346	31.4	318,393	21.0
Oregon	383,340	22.7	446,810	26.5	506,643	30.1	348,905	20.7
Pennsylvania	1,056,924	20.1	1,483,045	28.2	1,598,778	30.4	1,112,322	21.2
Puerto Rico	20,466	1.4	102,303	7.1	357,395	24.7	966,592	66.8
Rhode Island	94,772	20.9	130,128	28.7	114,287	25.2	114,750	25.3
South Carolina	377,205	18.3	474,573	23.1	592,499	28.8	611,355	29.7
South Dakota	74,654	22.7	92,399	28.1	96,133	29.3	65,082	19.8
Tennessee	570,484	20.8	650,118	23.7	793,750	28.9	729,063	26.6
Texas	3,320,900	30.7	2,520,252	23.3	2,691,556	24.9	2,273,609	21.0
Utah	537,077	47.2	271,186	23.8	209,890	18.5	119,142	10.5
Vermont	36,038	13.5	64,198	24.1	101,311	38.1	64,475	24.2
Virginia	1,159,719	34.0	837,483	24.6	813,211	23.8	600,156	17.6
Washington	870,297	29.3	798,255	26.9	795,102	26.8	502,170	16.9
West Virginia	84,914	11.7	164,316	22.6	253,914	34.9	223,442	30.8
Wisconsin	561,853	24.4	761,252	33.0	653,167	28.4	327,174	14.2
Wyoming	54,397	25.2	59,131	27.3	59,036	27.3	43,710	20.2
Region of residence								
Northeast	4,167,977	17.8	5,938,667	25.4	6,749,145	28.9	6,514,656	27.9
Midwest	6,833,137	25.3	7,889,413	29.2	7,205,370	26.7	5,079,889	18.8
South	11,928,388	24.1	11,688,769	23.6	13,639,673	27.5	12,269,703	24.8
West	7,897,507	26.1	7,520,709	24.9	8,442,530	27.9	6,356,835	21.0
Total	30,847,475	23.4	33,139,861	25.2	36,394,113	27.7	31,187,675	23.7

Area of residence	Gini index (%)											
	Total											
	<37			37.00–40.99			41.00–45.99			≥46		
	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>
Alabama	652,477	16.8	1.1	863,199	22.3	1.3	1,272,574	32.8	1.8	1,085,918	28.0	1.8
Alaska	146,441	26.6	0.2	189,415	34.4	0.3	143,147	26.0	0.2	71,626	13.0	0.1

Area of residence	Gini index (%)											
	Total											
	<37			37.00–40.99			41.00–45.99			≥46		
	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>
Arizona	1,765,437	32.5	2.9	1,336,238	24.6	2.1	1,344,034	24.7	1.9	994,377	18.3	1.7
Arkansas	317,506	13.8	0.5	515,273	22.4	0.8	754,271	32.8	1.1	711,663	31.0	1.2
California	6,856,429	22.6	11.2	7,518,993	24.8	11.6	8,875,385	29.3	12.5	7,063,122	23.3	11.7
Colorado	1,498,240	33.7	2.4	1,012,812	22.8	1.6	1,146,150	25.8	1.6	784,963	17.7	1.3
Connecticut	500,163	17.5	0.8	759,372	26.6	1.2	853,544	29.9	1.2	741,043	26.0	1.2
Delaware	190,753	24.6	0.3	226,563	29.3	0.3	213,973	27.6	0.3	142,719	18.4	0.2
District of Columbia	62,295	11.3	0.1	62,890	11.4	0.1	148,887	27.0	0.2	278,153	50.4	0.5
Florida	3,714,972	21.8	6.1	4,230,761	24.8	6.5	4,721,464	27.7	6.6	4,363,231	25.6	7.2
Georgia	2,189,502	27.1	3.6	1,876,094	23.2	2.9	2,121,637	26.2	3.0	1,901,359	23.5	3.2
Hawaii	348,125	30.5	0.6	280,702	24.6	0.4	286,583	25.1	0.4	225,750	19.8	0.4
Idaho	431,410	31.9	0.7	319,016	23.6	0.5	370,845	27.4	0.5	231,516	17.1	0.4
Illinois	2,219,161	22.3	3.6	2,695,991	27.1	4.1	2,671,972	26.9	3.8	2,346,744	23.6	3.9
Indiana	1,534,753	29.8	2.5	1,529,550	29.7	2.4	1,274,142	24.7	1.8	810,166	15.7	1.3
Iowa	548,162	22.6	0.9	810,376	33.3	1.2	686,156	28.2	1.0	385,996	15.9	0.6
Kansas	729,210	32.9	1.2	611,207	27.6	0.9	533,913	24.1	0.8	343,099	15.5	0.6
Kentucky	655,718	18.9	1.1	796,829	23.0	1.2	1,009,932	29.1	1.4	1,003,819	29.0	1.7
Louisiana	472,571	13.3	0.8	607,419	17.1	0.9	1,144,300	32.2	1.6	1,329,792	37.4	2.2
Maine	197,942	18.0	0.3	286,850	26.0	0.4	343,580	31.2	0.5	274,089	24.9	0.5
Maryland	1,654,853	34.8	2.7	1,295,859	27.2	2.0	1,070,364	22.5	1.5	739,597	15.5	1.2
Massachusetts	869,654	15.6	1.4	1,390,434	24.9	2.1	1,743,145	31.2	2.5	1,588,504	28.4	2.6
Michigan	1,934,327	24.7	3.2	2,269,409	29.0	3.5	2,072,720	26.4	2.9	1,562,559	19.9	2.6
Minnesota	1,168,123	26.9	1.9	1,363,269	31.4	2.1	1,196,928	27.5	1.7	616,751	14.2	1.0
Mississippi	377,459	16.7	0.6	443,327	19.6	0.7	598,841	26.5	0.8	841,283	37.2	1.4
Missouri	1,247,240	26.3	2.0	1,328,649	28.0	2.0	1,300,704	27.4	1.8	872,542	18.4	1.4
Montana	112,172	13.3	0.2	188,993	22.4	0.3	319,916	37.9	0.4	223,568	26.5	0.4
Nebraska	404,959	27.7	0.7	418,786	28.6	0.6	394,650	27.0	0.6	245,682	16.8	0.4
Nevada	701,864	29.7	1.1	575,232	24.3	0.9	613,387	25.9	0.9	474,141	20.1	0.8
New Hampshire	328,176	29.5	0.5	290,172	26.1	0.4	312,786	28.1	0.4	180,426	16.2	0.3
New Jersey	1,542,951	21.5	2.5	2,085,568	29.0	3.2	1,868,585	26.0	2.6	1,683,324	23.4	2.8
New Mexico	272,194	16.8	0.4	378,220	23.3	0.6	478,369	29.5	0.7	491,764	30.3	0.8
New York	2,464,454	15.6	4.0	3,493,059	22.1	5.4	4,428,871	28.0	6.2	5,430,490	34.3	9.0
North Carolina	1,593,721	19.8	2.6	1,959,704	24.4	3.0	2,451,253	30.5	3.4	2,037,740	25.3	3.4
North Dakota	89,567	15.2	0.1	160,511	27.3	0.2	204,957	34.8	0.3	133,851	22.7	0.2
Ohio	2,435,012	26.7	4.0	2,636,892	28.9	4.1	2,298,889	25.2	3.2	1,753,939	19.2	2.9
Oklahoma	651,505	21.8	1.1	770,042	25.8	1.2	936,698	31.4	1.3	626,509	21.0	1.0
Oregon	761,620	22.8	1.2	887,926	26.6	1.4	1,002,232	30.1	1.4	681,913	20.5	1.1
Pennsylvania	2,079,139	20.3	3.4	2,920,381	28.5	4.5	3,117,811	30.5	4.4	2,113,866	20.7	3.5
Puerto Rico	37,570	1.4	0.1	190,089	7.0	0.3	675,400	24.9	1.0	1,808,777	66.7	3.0
Rhode Island	188,039	21.4	0.3	254,016	28.9	0.4	220,773	25.1	0.3	216,458	24.6	0.4
South Carolina	732,343	18.5	1.2	910,662	23.1	1.4	1,138,762	28.8	1.6	1,167,761	29.6	1.9
South Dakota	154,203	23.3	0.3	184,538	27.8	0.3	196,462	29.6	0.3	127,884	19.3	0.2
Tennessee	1,117,122	21.0	1.8	1,261,410	23.7	1.9	1,537,526	28.9	2.2	1,397,511	26.3	2.3
Texas	6,602,395	30.9	10.8	4,974,548	23.3	7.6	5,312,694	24.9	7.5	4,459,475	20.9	7.4

Area of residence	Gini index (%)											
	Total											
	<37			37.00–40.99			41.00–45.99			≥46		
	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>	No.	% <sup>c</sup>	% <sup>d</sup>
Utah	1,084,341	47.5	1.8	542,599	23.8	0.8	416,099	18.2	0.6	239,576	10.5	0.4
Vermont	70,811	13.5	0.1	127,656	24.4	0.2	197,697	37.8	0.3	126,584	24.2	0.2
Virginia	2,293,915	34.4	3.8	1,649,091	24.7	2.5	1,578,016	23.6	2.2	1,151,821	17.3	1.9
Washington	1,753,817	29.6	2.9	1,599,654	27.0	2.5	1,578,911	26.6	2.2	1,001,882	16.9	1.7
West Virginia	167,792	11.7	0.3	329,745	23.0	0.5	501,755	35.0	0.7	435,262	30.3	0.7
Wisconsin	1,128,900	24.7	1.8	1,515,595	33.1	2.3	1,293,846	28.3	1.8	639,033	14.0	1.1
Wyoming	114,157	25.8	0.2	120,235	27.2	0.2	118,605	26.8	0.2	89,177	20.2	0.1
Region of residence												
Northeast	8,241,329	18.2	13.5	11,607,508	25.6	17.8	13,086,792	28.9	18.4	12,354,784	27.3	20.5
Midwest	13,593,617	25.6	22.2	15,524,773	29.2	23.9	14,125,339	26.6	19.9	9,838,246	18.5	16.3
South	23,446,899	24.3	38.3	22,773,416	23.6	35.0	26,512,947	27.5	37.3	23,673,613	24.6	39.3
West	15,846,247	26.4	25.9	14,950,035	24.9	23.0	16,693,663	27.8	23.5	12,573,375	20.9	20.9
Total	61,165,662	23.7	100	65,045,821	25.3	100	71,094,141	27.6	100	60,248,795	23.4	100

Abbreviations: ACS, American Community Survey; SDOH, social determinants of health [footnotes only].

*Note.* Proportion of household income distribution within the census tract during the 12 months before the survey response.



- <sup>a</sup> Percentage of male residents of area.
- <sup>b</sup> Percentage of female residents of area.
- <sup>c</sup> Percentage of residents of area.
- <sup>d</sup> Percentage of SDOH subpopulation total.

Table B1. Diagnoses of HIV infection among adults aged ≥18 years, by assigned sex at birth and selected social determinants of health, 2021—census tract level, EHE Phase I jurisdictions

	Male			Female			Total <sup>a</sup>		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Below federal poverty level (%)									
<6	1,839	9,179,100	20.0	309	9,635,529	3.2	2,148	18,814,629	11.4
6.00–9.99	2,291	7,826,611	29.3	399	8,223,912	4.9	2,690	16,050,523	16.8
10.00–16.99	3,740	9,133,225	40.9	734	9,654,357	7.6	4,474	18,787,582	23.8
≥17	5,019	8,129,686	61.7	1,250	8,807,325	14.2	6,269	16,937,011	37.0
Less than high school diploma (%)									
<5	2,182	8,786,049	24.8	251	9,256,384	2.7	2,433	18,042,433	13.5
5.00–8.99	1,957	6,557,342	29.8	381	7,065,799	5.4	2,338	13,623,141	17.2
9.00–15.99	2,967	7,535,739	39.4	735	8,201,176	9.0	3,702	15,736,915	23.5
≥16	5,787	11,475,254	50.4	1,325	11,829,544	11.2	7,112	23,304,798	30.5
Median household income (U.S. \$)									
<49,000	4,599	6,795,388	67.7	1,213	7,566,911	16.0	5,812	14,362,299	40.5
49,000–65,999	3,199	7,056,309	45.3	648	7,490,477	8.7	3,847	14,546,786	26.4
66,000–89,999	2,892	8,744,339	33.1	489	9,184,874	5.3	3,381	17,929,213	18.9
≥90,000	2,136	11,511,573	18.6	330	11,938,466	2.8	2,466	23,450,039	10.5
Without health insurance (%)									
<4	1,394	7,199,301	19.4	214	7,688,024	2.8	1,608	14,887,325	10.8

	Male			Female			Total <sup>a</sup>		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
4.00–7.99	2,291	7,965,719	28.8	439	8,623,982	5.1	2,730	16,589,701	16.5
8.00–13.99	3,226	8,411,383	38.4	649	8,993,643	7.2	3,875	17,405,026	22.3
≥14	5,979	10,711,735	55.8	1,390	11,039,577	12.6	7,369	21,751,312	33.9
Gini index (%)									
<37	2,511	7,975,457	31.5	506	8,246,727	6.1	3,017	16,222,184	18.6
37.00–40.99	2,724	7,909,224	34.4	578	8,296,646	7.0	3,302	16,205,870	20.4
41.00–45.99	3,382	9,019,511	37.5	723	9,566,238	7.6	4,105	18,585,749	22.1
≥46	4,266	9,323,850	45.8	885	10,189,337	8.7	5,151	19,513,187	26.4
Subtotal <sup>b</sup>	13,119	34,354,384	38.2	2,731	36,352,903	7.5	15,850	70,707,287	22.4

Abbreviations: EHE, Ending the HIV Epidemic in the US initiative; Pop., population; SDOH, social determinants of health [footnotes only].

*Note.* Rates are per 100,000 population. Row entries indicate categories based on census tracts; data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  . For a list of the EHE Phase I jurisdictions, see <https://www.cdc.gov/endhiv/jurisdictions.html>.

<sup>a</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.

<sup>b</sup> Because column subtotals were calculated independently of the values for the subpopulations, the values in each column may not sum to the column subtotals. See Technical Notes for criteria used to define SDOH subpopulations.

Table B2. Diagnoses of HIV infection among adults aged ≥18 years, by age at diagnosis, assigned sex at birth, and selected social determinants of health, 2021—census tract level, EHE Phase I jurisdictions

	18–24 years			25–34 years			35–44 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male									
Below federal poverty level (%)									
<6	311	860,656	36.1	735	1,620,295	45.4	375	1,701,421	22.0
6.00–9.99	422	832,087	50.7	907	1,673,935	54.2	462	1,447,631	31.9
10.00–16.99	695	1,101,918	63.1	1,508	2,070,246	72.8	792	1,676,993	47.2
≥17	1,141	1,287,041	88.7	1,955	1,859,303	105.1	967	1,428,193	67.7
Less than high school diploma (%)									
<5	387	1,018,501	38.0	894	1,798,236	49.7	441	1,553,434	28.4
5.00–8.99	403	683,255	59.0	757	1,331,718	56.8	402	1,193,217	33.7
9.00–15.99	577	863,398	66.8	1,219	1,604,913	76.0	594	1,366,101	43.5
≥16	1,203	1,551,167	77.6	2,237	2,510,058	89.1	1,160	2,156,598	53.8
Median household income (U.S. \$)									
<49,000	1,046	1,034,875	101.1	1,783	1,477,987	120.6	885	1,169,891	75.6
49,000–65,999	617	922,707	66.9	1,318	1,610,425	81.8	647	1,273,881	50.8
66,000–89,999	557	1,012,355	55.0	1,174	1,935,872	60.6	584	1,611,967	36.2
≥90,000	329	1,073,367	30.7	808	2,168,712	37.3	467	2,170,437	21.5
Without health insurance (%)									
<4	257	748,146	34.4	542	1,320,966	41.0	293	1,247,131	23.5
4.00–7.99	420	891,688	47.1	894	1,630,743	54.8	449	1,409,296	31.9

	18–24 years			25–34 years			35–44 years		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
8.00–13.99	644	1,005,829	64.0	1,348	1,833,901	73.5	630	1,531,708	41.1
≥14	1,249	1,454,685	85.9	2,321	2,438,835	95.2	1,224	2,066,168	59.2
Gini index (%)									
<37	540	990,437	54.5	1,011	1,648,338	61.3	478	1,555,685	30.7
37.00–40.99	536	923,843	58.0	1,095	1,683,532	65.0	559	1,473,126	37.9
41.00–45.99	670	1,019,970	65.7	1,364	1,920,400	71.0	677	1,629,538	41.5
≥46	821	1,131,977	72.5	1,633	1,964,812	83.1	880	1,589,343	55.4
Subtotal <sup>a</sup>	2,617	4,116,321	63.6	5,203	7,244,925	71.8	2,639	6,269,350	42.1
Female									
Below federal poverty level (%)									
<6	31	818,479	3.8	94	1,628,672	5.8	78	1,742,394	4.5
6.00–9.99	53	798,392	6.6	98	1,661,155	5.9	102	1,425,730	7.2
10.00–16.99	73	1,101,835	6.6	183	2,049,314	8.9	204	1,657,905	12.3
≥17	167	1,331,333	12.5	350	1,883,951	18.6	314	1,454,497	21.6
Less than high school diploma (%)									
<5	34	1,050,164	3.2	70	1,816,838	3.9	57	1,572,007	3.6
5.00–8.99	44	691,765	6.4	126	1,355,250	9.3	85	1,212,747	7.0
9.00–15.99	80	857,179	9.3	183	1,634,541	11.2	192	1,396,335	13.8
≥16	166	1,476,557	11.2	346	2,419,281	14.3	364	2,101,554	17.3
Median household income (U.S. \$)									
<49,000	151	1,056,431	14.3	332	1,537,792	21.6	326	1,237,612	26.3
49,000–65,999	73	908,153	8.0	179	1,579,604	11.3	154	1,263,869	12.2
66,000–89,999	64	1,001,112	6.4	120	1,902,276	6.3	126	1,574,518	8.0
≥90,000	36	1,041,466	3.5	93	2,180,703	4.3	89	2,186,166	4.1
Without health insurance (%)									
<4	28	743,164	3.8	66	1,359,007	4.9	54	1,276,533	4.2
4.00–7.99	51	905,530	5.6	108	1,663,975	6.5	122	1,454,598	8.4
8.00–13.99	73	1,006,713	7.3	164	1,828,304	9.0	165	1,548,921	10.7
≥14	172	1,418,270	12.1	387	2,372,221	16.3	357	2,000,485	17.8
Gini index (%)									
<37	62	903,020	6.9	131	1,631,779	8.0	141	1,556,905	9.1
37.00–40.99	74	909,474	8.1	171	1,656,896	10.3	142	1,457,675	9.7
41.00–45.99	87	1,010,742	8.6	186	1,906,690	9.8	178	1,642,342	10.8
≥46	101	1,208,550	8.4	237	2,026,322	11.7	237	1,622,762	14.6
Subtotal <sup>a</sup>	325	4,075,665	8.0	735	7,225,910	10.2	709	6,282,643	11.3
Total <sup>b</sup>	2,942	8,191,986	35.9	5,938	14,470,835	41.0	3,348	12,551,993	26.7



	45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate
Male						
Below federal poverty level (%)						
<6	214	1,707,496	12.5	204	3,289,232	6.2
6.00–9.99	278	1,313,710	21.2	222	2,559,248	8.7
10.00–16.99	385	1,506,910	25.5	360	2,777,158	13.0
≥17	517	1,257,991	41.1	439	2,297,158	19.1



	45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate
Less than high school diploma (%)						
<5	241	1,457,257	16.5	219	2,958,621	7.4
5.00–8.99	206	1,115,094	18.5	189	2,234,058	8.5
9.00–15.99	313	1,260,546	24.8	264	2,440,781	10.8
≥16	634	1,961,682	32.3	553	3,295,749	16.8
Median household income (U.S. \$)						
<49,000	458	1,058,936	43.3	427	2,053,699	20.8
49,000–65,999	337	1,142,749	29.5	280	2,106,547	13.3
66,000–89,999	318	1,455,691	21.8	259	2,728,454	9.5
≥90,000	279	2,104,785	13.3	253	3,994,272	6.3
Without health insurance (%)						
<4	156	1,217,104	12.8	146	2,665,954	5.5
4.00–7.99	278	1,343,652	20.7	250	2,690,340	9.3
8.00–13.99	338	1,405,242	24.1	266	2,634,703	10.1
≥14	622	1,820,131	34.2	563	2,931,916	19.2
Gini index (%)						
<37	274	1,425,536	19.2	208	2,355,461	8.8
37.00–40.99	276	1,360,268	20.3	258	2,468,455	10.5
41.00–45.99	362	1,517,808	23.9	309	2,931,795	10.5
≥46	482	1,477,411	32.6	450	3,160,307	14.2
Subtotal <sup>a</sup>	1,417	5,794,579	24.5	1,243	10,929,209	11.4
Female						
Below federal poverty level (%)						
<6	62	1,741,387	3.6	44	3,704,597	1.2
6.00–9.99	77	1,330,532	5.8	69	3,008,103	2.3
10.00–16.99	139	1,530,005	9.1	135	3,315,298	4.1
≥17	223	1,303,068	17.1	196	2,834,476	6.9
Less than high school diploma (%)						
<5	44	1,471,689	3.0	46	3,345,686	1.4
5.00–8.99	67	1,157,715	5.8	59	2,648,322	2.2
9.00–15.99	147	1,328,424	11.1	133	2,984,697	4.5
≥16	243	1,947,820	12.5	206	3,884,332	5.3
Median household income (U.S. \$)						
<49,000	210	1,131,669	18.6	194	2,603,407	7.5
49,000–65,999	125	1,171,432	10.7	117	2,567,419	4.6
66,000–89,999	106	1,472,113	7.2	73	3,234,855	2.3
≥90,000	55	2,111,896	2.6	57	4,418,235	1.3
Without health insurance (%)						
<4	36	1,231,486	2.9	30	3,077,834	1.0
4.00–7.99	84	1,395,726	6.0	74	3,204,153	2.3
8.00–13.99	127	1,458,628	8.7	120	3,151,077	3.8
≥14	254	1,819,187	14.0	220	3,429,414	6.4
Gini index (%)						
<37	90	1,458,744	6.2	82	2,696,279	3.0
37.00–40.99	120	1,387,164	8.7	71	2,885,437	2.5

	45–54 years			≥55 years		
	No.	Pop.	Rate	No.	Pop.	Rate
41.00–45.99	134	1,545,980	8.7	138	3,460,484	4.0
≥46	157	1,512,327	10.4	153	3,819,376	4.0
Subtotal <sup>a</sup>	511	5,905,648	8.7	451	12,863,037	3.5
Total <sup>b</sup>	1,928	11,700,227	16.5	1,694	23,792,246	7.1


Abbreviations: EHE, Ending the HIV Epidemic in the US initiative; Pop., population; SDOH, social determinants of health [footnotes only].

*Note.* Rates are per 100,000 population. Row entries indicate categories based on census tracts; data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  . For a list of the EHE Phase I jurisdictions, see <https://www.cdc.gov/endhiv/jurisdictions.html>.

<sup>a</sup> Because column subtotals were calculated independently of the values for the subpopulations, the values in each column may not sum to the column subtotals. See Technical Notes for criteria used to define SDOH subpopulations.

<sup>b</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.

Table B3. Diagnoses of HIV infection among adults aged ≥18 years, by race/ethnicity, assigned sex at birth, and selected social determinants of health, 2021—census tract level, EHE Phase I jurisdictions





	American Indian/Alaska Native			Asian			Black/African American			Hispanic/Latino <sup>a</sup>		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male												
Below federal poverty level (%)												
<6	8	37,803	21.2	76	1,026,480	7.4	574	956,069	60.0	627	1,705,125	36.8
6.00–9.99	10	45,595	21.9	85	843,348	10.1	743	1,012,425	73.4	883	2,078,070	42.5
10.00–16.99	14	65,063	21.5	93	873,520	10.6	1,317	1,556,902	84.6	1,619	3,240,924	50.0
≥17	15	65,239	23.0	97	595,633	16.3	2,395	2,339,069	102.4	1,821	3,105,612	58.6
Less than high school diploma (%)												
<5	11	28,184	39.0	82	956,443	8.6	686	800,666	85.7	608	1,076,886	56.5
5.00–8.99	8	30,555	26.2	48	666,069	7.2	819	1,057,207	77.5	587	1,220,623	48.1
9.00–15.99	12	45,342	26.5	95	727,251	13.1	1,380	1,776,609	77.7	924	1,967,336	47.0
≥16	16	111,238	14.4	126	995,021	12.7	2,148	2,254,840	95.3	2,831	5,890,323	48.1
Median household income (U.S. \$)												
<49,000	13	51,944	25.0	68	360,348	18.9	2,318	2,209,810	104.9	1,637	2,658,560	61.6
49,000–65,999	8	55,535	14.4	70	558,488	12.5	1,203	1,354,738	88.8	1,362	2,725,426	50.0
66,000–89,999	16	58,125	27.5	103	881,547	11.7	915	1,241,474	73.7	1,220	2,699,435	45.2
≥90,000	10	46,674	21.4	107	1,524,698	7.0	565	1,012,873	55.8	708	1,997,056	35.5
Without health insurance (%)												
<4	5	23,719	21.1	72	942,643	7.6	479	726,808	65.9	364	907,452	40.1
4.00–7.99	13	40,119	32.4	99	950,424	10.4	891	1,305,686	68.2	700	1,635,041	42.8
8.00–13.99	12	58,112	20.6	92	812,975	11.3	1,260	1,616,102	78.0	1,213	2,492,524	48.7
≥14	17	91,842	18.5	88	636,644	13.8	2,400	2,217,743	108.2	2,673	5,098,168	52.4
Gini index (%)												
<37	13	51,213	25.4	60	743,437	8.1	972	1,326,671	73.3	978	2,535,318	38.6
37.00–40.99	10	55,450	18.0	63	771,857	8.2	992	1,195,477	83.0	1,174	2,614,109	44.9

	American Indian/Alaska Native			Asian			Black/African American			Hispanic/Latino <sup>a</sup>		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
41.00–45.99	10	57,147	17.5	102	922,138	11.1	1,267	1,491,332	85.0	1,344	2,649,403	50.7
≥46	14	49,391	28.3	125	898,622	13.9	1,797	1,839,621	97.7	1,452	2,319,696	62.6
Subtotal <sup>b</sup>	48	215,319	22.3	358	3,344,784	10.7	5,136	5,889,322	87.2	5,025	10,155,168	49.5
Female												
Below federal poverty level (%)												
<6	1	37,186	2.7	4	1,185,304	0.3	173	1,057,875	16.4	69	1,753,462	3.9
6.00–9.99	2	44,575	4.5	14	959,395	1.5	227	1,175,542	19.3	96	2,095,743	4.6
10.00–16.99	1	62,150	1.6	13	983,484	1.3	448	1,864,075	24.0	169	3,250,796	5.2
≥17	2	65,060	3.1	8	650,806	1.2	813	2,897,687	28.1	295	3,178,738	9.3
Less than high school diploma (%)												
<5	3	28,181	10.6	6	1,093,272	0.5	136	915,172	14.9	49	1,162,511	4.2
5.00–8.99	2	30,650	6.5	4	771,180	0.5	252	1,264,929	19.9	58	1,294,671	4.5
9.00–15.99	1	44,702	2.2	7	826,721	0.8	499	2,162,217	23.1	130	2,045,007	6.4
≥16	0	105,911	0.0	22	1,092,330	2.0	774	2,657,398	29.1	392	5,783,775	6.8
Median household income (U.S. \$)												
<49,000	2	52,207	3.8	8	397,613	2.0	793	2,795,766	28.4	280	2,753,265	10.2
49,000–65,999	0	55,653	0.0	9	615,669	1.5	398	1,636,100	24.3	156	2,714,485	5.7
66,000–89,999	3	55,356	5.4	12	988,167	1.2	284	1,436,301	19.8	115	2,729,099	4.2
≥90,000	1	45,128	2.2	10	1,761,841	0.6	177	1,084,610	16.3	75	2,040,635	3.7
Without health insurance (%)												
<4	0	23,575	0.0	5	1,098,758	0.5	138	844,439	16.3	37	978,157	3.8
4.00–7.99	4	41,183	9.7	13	1,090,045	1.2	263	1,580,063	16.6	75	1,758,107	4.3
8.00–13.99	1	56,625	1.8	7	898,341	0.8	406	1,952,065	20.8	143	2,590,866	5.5
≥14	1	87,685	1.1	14	695,911	2.0	854	2,621,416	32.6	374	4,956,854	7.5
Gini index (%)												
<37	0	49,422	0.0	7	826,658	0.8	302	1,498,763	20.1	133	2,500,925	5.3
37.00–40.99	0	54,025	0.0	10	861,727	1.2	352	1,413,773	24.9	134	2,619,991	5.1
41.00–45.99	2	56,320	3.6	9	1,038,733	0.9	454	1,791,086	25.3	163	2,691,183	6.1
≥46	4	49,018	8.2	13	1,048,615	1.2	553	2,288,070	24.2	199	2,461,674	8.1
Subtotal <sup>b</sup>	6	209,444	2.9	41	3,783,503	1.1	1,683	6,999,716	24.0	634	10,285,964	6.2
Total <sup>c</sup>	54	424,763	12.7	399	7,128,287	5.6	6,819	12,889,038	52.9	5,659	20,441,132	27.7

	Native Hawaiian/other Pacific Islander			White			Multiracial		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Male									
Below federal poverty level (%)									
<6	8	16,157	49.5	496	5,209,167	9.5	50	621,218	8.0
6.00–9.99	3	16,330	18.4	497	3,665,348	13.6	70	618,617	11.3
10.00–16.99	11	19,475	56.5	614	3,230,116	19.0	72	823,621	8.7
≥17	8	13,216	60.5	579	1,949,034	29.7	104	706,879	14.7
Less than high school diploma (%)									
<5	4	11,874	33.7	717	5,669,315	12.6	74	517,248	14.3
5.00–8.99	5	11,191	44.7	443	3,406,354	13.0	47	459,554	10.2
9.00–15.99	10	17,298	57.8	479	2,855,800	16.8	67	587,534	11.4
≥16	11	24,998	44.0	547	2,148,843	25.5	108	1,211,899	8.9

	Native Hawaiian/other Pacific Islander			White			Multiracial		
	No.	Pop.	Rate	No.	Pop.	Rate	No.	Pop.	Rate
Median household income (U.S. \$)									
<49,000	8	8,901	89.9	467	1,471,237	31.7	88	603,290	14.6
49,000–65,999	6	13,525	44.4	478	2,257,703	21.2	72	645,530	11.2
66,000–89,999	10	20,896	47.9	558	3,671,139	15.2	70	737,040	9.5
≥90,000	6	21,363	28.1	676	6,605,658	10.2	64	769,762	8.3
Without health insurance (%)									
<4	3	12,801	23.4	424	4,402,389	9.6	47	409,242	11.5
4.00–7.99	7	17,190	40.7	510	3,830,897	13.3	71	550,317	12.9
8.00–13.99	10	18,111	55.2	567	3,265,647	17.4	72	680,487	10.6
≥14	10	17,076	58.6	685	2,564,544	26.7	106	1,131,527	9.4
Gini index (%)									
<37	6	19,438	30.9	412	3,147,220	13.1	70	691,656	10.1
37.00–40.99	6	15,785	38.0	437	3,114,100	14.0	42	692,783	6.1
41.00–45.99	6	16,003	37.5	576	3,723,304	15.5	77	724,585	10.6
≥46	12	13,813	86.9	760	4,055,451	18.7	106	657,730	16.1
Subtotal <sup>b</sup>	31	65,361	47.4	2,223	14,080,312	15.8	298	2,776,235	10.7
Female									
Below federal poverty level (%)									
<6	0	16,185	0.0	54	5,344,452	1.0	8	648,851	1.2
6.00–9.99	0	17,161	0.0	48	3,743,229	1.3	12	638,084	1.9
10.00–16.99	2	20,646	9.7	87	3,296,610	2.6	14	852,579	1.6
≥17	1	14,681	6.8	103	1,920,457	5.4	28	741,461	3.8
Less than high school diploma (%)									
<5	0	11,095	0.0	45	5,785,906	0.8	12	556,991	2.2
5.00–8.99	0	12,290	0.0	57	3,510,585	1.6	8	500,174	1.6
9.00–15.99	2	18,269	10.9	81	2,924,478	2.8	15	637,620	2.4
≥16	1	27,067	3.7	109	2,097,882	5.2	27	1,188,475	2.3
Median household income (U.S. \$)									
<49,000	1	10,337	9.7	103	1,507,468	6.8	26	643,312	4.0
49,000–65,999	1	15,582	6.4	68	2,332,034	2.9	16	669,213	2.4
66,000–89,999	1	21,070	4.7	64	3,767,264	1.7	10	759,424	1.3
≥90,000	0	21,517	0.0	57	6,659,603	0.9	10	796,420	1.3
Without health insurance (%)									
<4	0	12,846	0.0	27	4,530,003	0.6	7	438,866	1.6
4.00–7.99	1	19,270	5.2	73	3,929,621	1.9	10	601,015	1.7
8.00–13.99	0	19,684	0.0	77	3,310,531	2.3	15	718,934	2.1
≥14	2	16,900	11.8	115	2,545,661	4.5	30	1,123,998	2.7
Gini index (%)									
<37	0	20,266	0.0	56	3,178,711	1.8	8	696,847	1.1
37.00–40.99	2	16,937	11.8	65	3,169,446	2.1	15	704,725	2.1
41.00–45.99	0	17,151	0.0	73	3,790,041	1.9	22	754,883	2.9
≥46	1	14,276	7.0	98	4,156,927	2.4	17	722,644	2.4
Subtotal <sup>b</sup>	3	68,721	4.4	298	14,318,851	2.1	66	2,883,260	2.3
Total <sup>c</sup>	34	134,082	25.4	2,521	28,399,163	8.9	364	5,659,495	6.4

Abbreviations: EHE, Ending the HIV Epidemic in the US initiative; Pop., population; SDOH, social determinants of health [footnotes only].

*Note.* Rates are per 100,000 population. Numbers less than 12, and rates based on these numbers, should be interpreted with caution. Row entries indicate categories based on census tracts; data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  . For a list of the EHE Phase I jurisdictions, see <https://www.cdc.gov/endhiv/jurisdictions.html>.

<sup>a</sup> Hispanic/Latino persons can be of any race.  
<sup>b</sup> Because column subtotals were calculated independently of the values for the subpopulations, the values in each column may not sum to the column subtotals. See Technical Notes for criteria used to define SDOH subpopulations.  
<sup>c</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.

Table B4. Diagnoses of HIV infection among adults aged ≥18 years, by transmission category, assigned sex at birth, and selected social determinants of health, 2021—census tract level, EHE Phase I jurisdictions



▼

	Male-to-male sexual contact <sup>a</sup>		Injection drug use <sup>b</sup>		Male-to-male sexual contact <sup>a</sup> and injection drug use <sup>b</sup>		Heterosexual contact <sup>c</sup>	
	No.	%	No.	%	No.	%	No.	%
Male								
Below federal poverty level (%)								
<6	1,590	14.5	47	11.2	72	17.0	129	12.1
6.00–9.99	1,979	18.0	64	15.2	83	19.6	165	15.5
10.00–16.99	3,221	29.3	117	28.1	120	28.3	280	26.3
≥17	4,186	38.1	190	45.5	149	35.1	491	46.1
Less than high school diploma (%)								
<5	1,945	17.7	50	12.0	89	21.0	97	9.1
5.00–8.99	1,678	15.3	55	13.1	69	16.3	154	14.4
9.00–15.99	2,513	22.9	84	20.1	93	22.0	275	25.8
≥16	4,842	44.1	229	54.8	172	40.7	540	50.7
Median household income (U.S. \$)								
<49,000	3,803	34.8	179	43.1	132	31.3	481	45.5
49,000–65,999	2,750	25.2	88	21.2	105	24.8	255	24.1
66,000–89,999	2,507	22.9	81	19.5	98	23.3	204	19.3
≥90,000	1,864	17.1	67	16.2	86	20.5	117	11.1
Without health insurance (%)								
<4	1,197	10.9	46	11.0	69	16.2	82	7.7
4.00–7.99	1,972	18.0	100	24.0	78	18.6	138	13.0
8.00–13.99	2,781	25.3	99	23.6	104	24.6	241	22.6
≥14	5,027	45.8	173	41.5	172	40.6	604	56.7
Gini index (%)								
<37	2,177	19.8	52	12.4	73	17.3	208	19.5
37.00–40.99	2,331	21.3	87	21.0	81	19.1	222	20.8
41.00–45.99	2,858	26.1	122	29.3	120	28.3	279	26.2
≥46	3,603	32.8	156	37.3	149	35.3	356	33.4
Subtotal <sup>d</sup>	11,160	100	428	100	438	100	1,084	100
Female								
Below federal poverty level (%)								



	Male-to-male sexual contact <sup>a</sup>		Injection drug use <sup>b</sup>		Male-to-male sexual contact <sup>a</sup> and injection drug use <sup>b</sup>		Heterosexual contact <sup>c</sup>	
	No.	%	No.	%	No.	%	No.	%
<6	—	—	39	12.0	—	—	267	11.4
6.00–9.99	—	—	45	13.9	—	—	351	14.9
10.00–16.99	—	—	82	25.2	—	—	648	27.6
≥17	—	—	159	49.0	—	—	1,081	46.1
Less than high school diploma (%)								
<5	—	—	32	9.7	—	—	218	9.3
5.00–8.99	—	—	38	11.6	—	—	339	14.4
9.00–15.99	—	—	89	27.4	—	—	641	27.3
≥16	—	—	167	51.3	—	—	1,148	48.9
Median household income (U.S. \$)								
<49,000	—	—	144	44.6	—	—	1,060	45.4
49,000–65,999	—	—	77	23.9	—	—	565	24.2
66,000–89,999	—	—	57	17.4	—	—	428	18.3
≥90,000	—	—	46	14.1	—	—	282	12.1
Without health insurance (%)								
<4	—	—	35	10.6	—	—	177	7.6
4.00–7.99	—	—	65	20.1	—	—	370	15.8
8.00–13.99	—	—	81	25.0	—	—	562	24.0
≥14	—	—	144	44.3	—	—	1,237	52.7
Gini index (%)								
<37	—	—	58	17.7	—	—	444	18.9
37.00–40.99	—	—	58	17.9	—	—	514	21.9
41.00–45.99	—	—	85	26.2	—	—	634	27.0
≥46	—	—	124	38.3	—	—	754	32.2
Subtotal <sup>d</sup>	—	—	332	100	—	—	2,378	100
Total <sup>e</sup>	11,160	100	760	100	438	100	3,462	100

Abbreviations: EHE, Ending the HIV Epidemic in the US initiative; SDOH, social determinants of health [footnotes only].

*Note.* 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. Row entries indicate categories based on census tracts; data reflect the census tract of the person’s residential address at the time they received an HIV diagnosis. For the definitions of SDOH indicator variables used in this report, see [http://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2021\\_ACSSubjectDefinitions.pdf](http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2021_ACSSubjectDefinitions.pdf)  . For a list of the EHE Phase I jurisdictions, see <https://www.cdc.gov/endhiv/jurisdictions.html>.

<sup>a</sup> 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).

<sup>b</sup> 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).

<sup>c</sup> Heterosexual contact with a person known to have, or with a risk factor for, HIV infection.

<sup>d</sup> Because column subtotals were calculated independently of the values for the subpopulations, the values in each column may not sum to the column subtotals. See Technical Notes for criteria used to define SDOH subpopulations.

<sup>e</sup> Totals do not represent all adults aged ≥18 years whose HIV infection was diagnosed during 2021 in these areas. See Technical Notes for exclusion criteria.






































# Social Determinants of Health among Adults with Diagnosed HIV Infection in the United States and Puerto Rico, 2021: Guide to Acronyms and Initialisms

ACS	American Community Survey
AIDS	acquired immunodeficiency syndrome
CD4	CD4+ T-lymphocyte count (cells/ $\mu$ L) or percentage
CDC	Centers for Disease Control and Prevention
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
NHAS	National HIV/AIDS Strategy (2022–2025)
NHSS	National HIV Surveillance System
SDOH	social determinants of health
SES	socioeconomic status
VA	United States Department of Veterans Affairs

Last Reviewed: October 17, 2023

# References

1. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. [Healthy People 2030](#)  . Updated January 15, 2021. Accessed February 3, 2023.
2. White House Office of National AIDS Policy. [National HIV/AIDS strategy for the United States 2022–2025](#)  . Published August 2022. Accessed February 3, 2023.
3. U.S. Department of Health and Human Services. [What is ‘Ending the HIV Epidemic in the U.S.’?](#)  Updated March 31, 2021. Accessed February 3, 2023.
4. World Health Organization Commission on Social Determinants of Health. [Closing the gap in a generation: Health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health](#)  . Published 2008. Accessed February 3, 2023.
5. CDC. . Published October 2010. Accessed February 3, 2023.
6. Irwin V, Zhang J, Wang X, et al. [Report on the Condition of Education 2021 \(NCES 2021-144\)](#)   . U.S. Department of Education. Washington, DC: National Center for Education Statistics. Published May 2021. Accessed June 26, 2023.
7. Egerter S, Braveman P, Sadegh-Nobari T, Grossman-Kahn R, Dekker M. Issue Brief 6: Education and Health. <http://www.commissiononhealth.org>  . Published September 2009. Accessed December 8, 2022.
8. American Psychological Association. [HIV/AIDS and Socioeconomic Status](#)   . Published 2010. Accessed February 3, 2023.
9. Gillespie S, Kadiyala S, Greener R. Is poverty or wealth driving HIV transmission? *AIDS* 2007;21(Suppl 7):S5–S16. doi:[10.1097/01.aids.0000300531.74730.72](https://doi.org/10.1097/01.aids.0000300531.74730.72) 
10. Merriam-Webster. Poverty. <https://www.merriam-webster.com/dictionary/poverty>  . Accessed February 3, 2023.
11. Merriam-Webster. Wealth. <https://www.merriam-webster.com/dictionary/wealth>  . Accessed February 3, 2023.
12. Global Partnership for Education. [How education plays a key role in the fight against AIDS](#)  . Published December 1, 2018. Accessed February 3, 2023.
13. Marmot M. Status syndrome. *Significance* 2004;1(4):150–154. doi:[10.1111/j.1740-9713.2004.00058.x](https://doi.org/10.1111/j.1740-9713.2004.00058.x) 
14. Naidu V, Harris G. The impact of HIV/AIDS morbidity and mortality on households—a review of household studies. *South African J Econ* 2005;73(S1):533–544. doi:[10.1111/j.1813-6982.2005.00037.x](https://doi.org/10.1111/j.1813-6982.2005.00037.x) 
15. Harrison KM, Ling Q, Song R, Hall HI. County-level socioeconomic status and survival after HIV diagnosis, United States. *Ann Epidemiol* 2008;18(12):919–927. doi:[10.1016/j.annepidem.2008.09.003](https://doi.org/10.1016/j.annepidem.2008.09.003) 

16. Yehia BR, Fleishman JA, Agwu AL, et al. Health insurance coverage for persons in HIV care, 2006–2012. *J Acquir Immune Defic Syndr* 2014;67(1):102–106. doi:[10.1097/QAI.0000000000000251](https://doi.org/10.1097/QAI.0000000000000251) 
17. CDC. [Diagnose and treat to save lives: Decreasing deaths among people with HIV](#). Published November 2021. Accessed February 3, 2023.
18. Pickett KE, Wilkinson RG. Income inequality and health: A causal review. *Soc Sci Med* 2015;128:316–326. doi:[10.1016/j.socscimed.2014.12.031](https://doi.org/10.1016/j.socscimed.2014.12.031) 
19. Kochhar R, Cilluffo A. [Key findings on the rise in income inequality within America's racial and ethnic groups](#) . Published July 12, 2018. Accessed February 3, 2023.
20. CDC. *HIV Surveillance Report*, 2021; vol. 34. <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published May 2023. Accessed February 3, 2023.
21. CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2021. *HIV Surveillance Supplemental Report* 2022;27(No.3). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published May 2022. Accessed February 3, 2023.
22. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. [Healthy People 2030 Framework](#) . Updated August 2021. Accessed February 3, 2023.
23. Peinado S, Treiman K, Uhrig JD, Taylor JC, Stryker JE. Effectively communicating about HIV and other health disparities: Findings from a literature review and future directions. *Front Commun* 2021;5:539174. doi:[10.3389/fcomm.2020.539174](https://doi.org/10.3389/fcomm.2020.539174) 
24. Williams DR, Jackson PB. Social sources of racial disparities in health. *Health Aff* 2005;24(2):325–334. doi:[10.1377/hlthaff.24.2.325](https://doi.org/10.1377/hlthaff.24.2.325) 
25. Oluyomi AO, Mazul AL, Dong Y, et al. Area deprivation index and segregation on the risk of HIV: a US Veteran case–control study. *Lancet Reg Health Am* 2023;20:100468. doi:[10.1016/j.lana.2023.100468](https://doi.org/10.1016/j.lana.2023.100468) 
26. Branch B, Conway D. [Health insurance coverage by race and Hispanic origin: 2021](#)  . *American Community Survey Briefs* 2022:1–17. Accessed February 3, 2023.
27. Office of the Assistant Secretary for Planning and Evaluation, Office of Health Policy, U.S. Department of Health and Human Services. [Health insurance coverage and access to care among Latinos: Recent trends and key challenges](#) . *Issue Brief* 2021;HP-2021-2:1–15. Accessed February 3, 2023.
28. Williams D, Collins C. Racial residential segregation: A fundamental cause of racial disparities in health. *Pub Health Rep* 2001;116(5):404–416. doi:[10.1093/phr/116.5.404](https://doi.org/10.1093/phr/116.5.404)
29. U.S. Census Bureau. [American Community Survey: 2017–2021 5-year estimates](#) . Published March 2022. Accessed February 3, 2023.
30. U.S. Census Bureau. [American Community Survey and Puerto Rico Community Survey: 2021 subject definitions](#)  . Accessed February 3, 2023.
31. U.S. Census Bureau. [Understanding and using American Community Survey data: What all data users need to know](#) . Published September 2020. Accessed February 3, 2023.
32. U.S. Census Bureau. Poverty glossary. <http://www.census.gov/topics/income-poverty/poverty/about/glossary.html> . Updated May 2023. Accessed February 3, 2023.
33. Moonesinghe R, Beckles GL. Measuring health disparities: A comparison of absolute and relative disparities. *PeerJ* 2015;24(3):e1438. doi:[10.7717/peerj.1438](https://doi.org/10.7717/peerj.1438) 
34. Pearcy JN, Keppel KG. A summary measure of health disparity. *Pub Health Rep* 2002;117(3):273–280. doi:[10.1093/phr/117.3.273](https://doi.org/10.1093/phr/117.3.273) 
35. Office of Management and Budget. [Revisions to the standards for the classification of federal data on race and ethnicity](#) . *Federal Register* 1997;62:58782–58790. Accessed February 3, 2023.
36. U.S. Census Bureau. [Glossary—census tract](#) . Updated April 2022. Accessed February 3, 2023.

Last Reviewed: October 17, 2023