

HIV

SURVEILLANCE REPORT

SUPPLEMENTAL REPORT

Volume 23, Number 6

Social Determinants of Health Among Adults with Diagnosed HIV Infection, 2016

**Part A: Census Tract-level Social Determinants of
Health Among Adults with Diagnosed HIV Infection
13 States, the District of Columbia, and Puerto Rico**

**Part B: County-Level Social Determinants of Health
and Selected Care Outcomes Among
Adults with Diagnosed HIV Infection
39 States and the District of Columbia**

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

Data are presented for diagnoses of HIV infection reported to CDC through June 2017 (Part A) and through December 2017 (Part B).

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Suggested citation

Part A:

Centers for Disease Control and Prevention. Social determinants of health among adults with diagnosed HIV infection, 2016. Part A: Census tract-level social determinants of health among adults with diagnosed HIV infection—13 states, the District of Columbia, and Puerto Rico. *HIV Surveillance Supplemental Report* 2018;23(No. 6, pt A). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published October 2018. Accessed [date].

Part B:

Centers for Disease Control and Prevention. Social determinants of health among adults with diagnosed HIV infection, 2016. Part B: County-level social determinants of health and selected care outcomes among adults with diagnosed HIV infection—39 states and the District of Columbia. *HIV Surveillance Supplemental Report* 2018;23(No. 6, pt B). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published October 2018. Accessed [date].

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

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Acknowledgments

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.

This report was prepared by the following staff and contractors of the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, CDC.

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Social Determinants of Health Among Adults with Diagnosed HIV Infection, 2016

Part A: Census Tract-level Social Determinants of Health Among Adults with Diagnosed HIV Infection—13 States, the District of Columbia, and Puerto Rico

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Abbreviations

ACS	American Community Survey
AIDS	acquired immunodeficiency syndrome
CDC	Centers for Disease Control and Prevention
DHAP	Division of HIV/AIDS Prevention
HIV	human immunodeficiency virus
NIR	no identified risk factor
SDH	social determinants of health
VA	United States Department of Veterans Affairs

HIV continues to disproportionately affect various populations in the United States. According to the 2016 *HIV Surveillance Report*, numbers and rates of annual diagnoses of HIV infection decreased from 2011 through 2015 in the United States [1]; however, numbers and rates increased in some populations and remained stable in others. Differences in HIV burden, by sex and race/ethnicity (i.e., blacks/African Americans, Hispanics/Latinos, and whites), have long been highlighted through HIV surveillance data in the United States. Factors other than individual attributes related to sex, race/ethnicity, or behavioral risk factors are likely contributing to the rate disparity, and may be partly explained by a better understanding of the social determinants that affect the health of populations.

The term *social determinants of health* (SDH) refers to the overlapping social structures and economic systems (e.g., social environment, physical environment, health services, and structural and societal factors) that are responsible for most health inequities [2]. Stratifying public health data by key SDH is useful in monitoring health inequities. Addressing the SDH that adversely affect health outcomes may advance efforts in reducing disparities in HIV diagnosis rates between populations. Addressing SDH also helps to quantify 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.

In the white paper *Establishing a Holistic Framework to Reduce Inequities in HIV, Viral Hepatitis, STDs, and Tuberculosis in the United States* [2], the Centers for Disease Control and Prevention (CDC) outlined its vision for reducing health disparities and promoting health equity, with an emphasis on the need to move beyond individual interventions and toward the incorporation of community-level approaches to preventing the transmission of HIV. CDC has adopted the SDH conceptual framework of the World Health Organization, which relates structural determinants (e.g., socioeconomic status, poverty) to intermediary determinants (e.g., psychosocial, behavioral, and biological factors) that may affect individual health status [3]. This framework helps in determining priorities and focusing intervention efforts.

Recognizing the gaps in data regarding SDH and HIV, especially for geographic areas smaller than a state or county, CDC's Division of HIV/AIDS Prevention (DHAP) has incorporated geocoding of HIV surveillance data by state and local HIV surveillance programs. The purpose of the activity is to capture, store, analyze, and display geocoded HIV surveillance data along with SDH indicators that may affect HIV transmission. The activity requires that HIV surveillance data are geocoded to the census tract level for addresses of residence at the time of diagnosis and linked at the census tract level to SDH indicator variable data from the U.S. Census Bureau's American Community Survey (ACS). Using census tract-level surveillance data at the state or local level increases the 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.

This surveillance supplemental report presents data on persons aged 18 years and older with HIV infection diagnosed in 2016 and reported to the National HIV Surveillance System through June 2017. Data were limited to persons aged 18 years and older to more accurately represent the population from which the SDH indicator variables were collected by ACS. The numbers, percentages, and rates of diagnoses of HIV infection were based on data reported from 15 state/local areas that geocoded, linked to ACS, and transmitted to CDC SDH information on cases diagnosed during 2016. These areas are Arizona, Colorado, Connecticut, the District of Columbia, Florida, Georgia, Illinois (Chicago only), Iowa, Minnesota, Oklahoma, Pennsylvania, Puerto Rico, Texas, Virginia, and Washington.

REPORT FORMAT

This report presents numbers and rates of diagnoses of HIV infection in 2016 among persons aged 18 years and older by 6 SDH indicators and selected characteristics that include sex, age, race/ethnicity, transmission category and area of residence. SDH data by race/ethnicity are presented for blacks/African Americans, Hispanics/Latinos, and whites only (Tables 7a/b/c and

8a/b/c); the numbers of HIV diagnoses among American Indians/Alaska Natives, Asians, Native Hawaiians/other Pacific Islanders, and persons of multiple races were too small for meaningful analysis.

The SDH data presented in this report are the result of the linkage of geocoded HIV diagnosis data (at the census tract level) to SDH indicator variables from the 2012–2016 ACS and are based on where the person was living at the time of diagnosis.

The following are the measures for the SDH indicators presented in this report:

- **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) at any time during the 12 months before the survey response (individuals aged 18 years and older)
- **Education level:** proportion of residents in the census tract with less than a high school diploma (individuals aged 18 years and older)
- **Median household income:** median income for a household within the census tract during the 12 months before the survey response
- **Employment status:** proportion of residents in the census tract in the workforce without a job (individuals aged 16 years and older)
- **Health insurance coverage:** proportion of residents in the census tract without health insurance or health coverage plan (individuals aged 18 years and older)
- **Vacant housing:** the proportion of housing units in the census tract that were vacant at the time of the survey response

These SDH indicators were included in this report because they are generally recognized in the scientific literature as population determinants of health.

Although other social determinants may affect health, research on social determinants has emphasized the need to incorporate these specific structural and societal factors into analyses of public health data [4–7]. Readers are encouraged to review Technical Notes for more information on the definitions of the SDH indicator variables used in this report.

Data in this report were limited to persons whose HIV infection had been diagnosed and whose complete residential address information could be geocoded to the census tract level. Cases or census tracts were excluded if

- the address was nonresidential (e.g., military base, corrections facility)
- no census tract was associated with the case
- no SDH information was available for the census tract
- the census tract from the surveillance data could not be matched to a census tract provided by the ACS

The data presented in this HIV surveillance supplemental report are a snapshot of the environment in which people lived at the time of HIV diagnosis. Some SDH indicators may be correlated (e.g., lack of education has been associated with both poverty and low income in the United States [8, 9]), but correlations between SDH indicators were not analyzed for this report. Additional research may guide the development of public health strategies to address the SDH that contribute to the burden of HIV disease in specific populations and may guide the allocation of resources for prevention and treatment services. Caution should be used when interpreting results.

Reported numbers less than 12 and accompanying rates based on these numbers, should be interpreted with caution. Please read all titles and footnotes carefully to ensure a complete understanding of the displayed data.

HIGHLIGHTS OF ANALYSES

The statements in this section, unless otherwise indicated, are based on stable numbers (i.e., based on 12 or more diagnoses). All rates are per 100,000 population and refer to adults aged 18 years and older. Social determinants of health data are estimates for the period 2012–2016, and HIV surveillance data are based on diagnoses of HIV infection in 2016 among adults.

Diagnoses of HIV Infection, by Area of Residence and Selected Characteristics

HIV infection was diagnosed for 14,322 adults (aged 18 years and older) whose residential address information was sufficient for geocoding to the census tract (Table 1). These diagnoses represent approximately 78% of all diagnoses of HIV infection in 2016 among adults in the 13 states, the District of Columbia, and Puerto Rico. Additionally, diagnoses in these 13 states, the District of Columbia, and Puerto Rico represent approximately 36% of all diagnoses of HIV

infection in 2016 among adults in the United States and Puerto Rico.

The overall rate of diagnoses of HIV infection among adults in the 13 states, the District of Columbia, and Puerto Rico was 15.5. The rates of diagnoses of HIV infection were highest in the District of Columbia (53.5), Illinois (33.7, Chicago only), and Georgia (27.2) (Table 1). Use caution when comparing the rates of diagnoses presented in Tables 1 and 2 for the District of Columbia and Chicago to the rates presented for states.

Race/ethnicity (Table 1)

- Among American Indians/Alaska Natives, all HIV diagnosis rates were unstable (i.e., based on fewer than 12 diagnoses of HIV infection) except for Arizona (14.2) and Oklahoma (11.1).
- Among Asians, the HIV diagnosis rate was highest in Illinois (13.4, Chicago only), followed by Arizona (11.7) and Florida (7.4).
- Among blacks/African Americans, the HIV diagnosis rate was highest in the District of Columbia (84.8), followed by Georgia (65.9) and Arizona (65.0).
- Among Hispanics/Latinos, the HIV diagnosis rate was highest in the District of Columbia (64.0), followed by Illinois (30.8, Chicago only) and Pennsylvania (28.5).
- Among Native Hawaiians/other Pacific Islanders, all HIV diagnosis rates were unstable (i.e., based on fewer than 12 diagnoses of HIV infection).
- Among whites, the HIV diagnosis rate was highest in District of Columbia (18.8), followed by Illinois (13.7, Chicago only), and Texas (8.8).
- Among persons of multiple races, the HIV diagnosis rate was highest in Georgia (52.1), followed by Illinois (36.6, Chicago only) and Texas (27.5).

Age (Table 2)

- The highest HIV diagnosis rate (30.6) was among persons aged 25–34 years, followed by 18–24 (25.4) and 35–44 (17.4).
- By area, the rates of diagnoses of HIV infection in all age groups were highest in the District of Columbia, except for the rate among persons aged 18–24 years, which was highest in Illinois (Chicago only). Persons residing in Illinois (Chicago only) accounted for the second highest rates in all

other age groups except among persons aged 25–34 years, which was higher in Georgia.

Diagnoses of HIV Infection, by Race/Ethnicity and Selected Characteristics

Race/ethnicity (Table 3)

Overall, the highest HIV diagnosis rate (55.0) was among blacks/African Americans, which was more than 9 times the rate for whites (5.8) and nearly 3 times the rate for Hispanics/Latinos (20.8). Among males, the highest HIV diagnosis rate (84.9) was among blacks/African Americans, followed by Hispanics/Latinos (36.9), and persons of multiple races (22.2). Among females, the highest HIV diagnosis rate (28.4) was among blacks/African Americans, followed by females of multiple races (5.5) and Hispanics/Latinos (5.0).

Age (Table 3)

- Among males, the highest HIV diagnosis rate (51.2) was among those aged 25–34 years. By race/ethnicity, the highest rates of HIV diagnoses were among males aged 25–34 years for every racial/ethnic group. Among Native Hawaiian/other Pacific Islander males, all HIV diagnosis rates by age groups were unstable (i.e., based on fewer than 12 diagnoses of HIV infection).
- Among females, the highest HIV diagnosis rate (9.5) was among those aged 25–34 years. By race/ethnicity, the highest rates of HIV diagnoses were among females aged 25–34 years for Asians (3.4), black/African Americans (40.2), Hispanics/Latinos (6.9), and white females (2.8). The highest rates of HIV diagnoses for females of multiple races (9.0) were among those aged 45–54 years. For American Indian/Alaska Native and Native Hawaiian/other Pacific Islander females, all HIV diagnosis rates by age groups were unstable (i.e., based on fewer than 12 diagnoses of HIV infection).

Sex and transmission category (Table 3)

- The HIV diagnosis rate was 25.6 for males and 5.9 for females.
- Among males, the largest number of HIV diagnoses was among those with infection attributed to male-to-male sexual contact for every racial/ethnic group.
- Among females, the largest number of HIV diagnoses was among those with infection

attributed to heterosexual contact for every racial/ethnic group.

Diagnoses of HIV Infection, by Selected Characteristics and Selected Social Determinants of Health

Sex (Table 4)

- **Poverty:** The highest HIV diagnosis rates for males (47.1) and females (13.5) were among those who lived in census tracts where 20% or more of the residents lived below the federal poverty level. For both sexes, the rate of HIV diagnoses increased as the percentage of residents living below the federal poverty level increased.
- **Education:** The highest HIV diagnosis rates for males (40.3) and females (12.6) were among those who lived in census tracts where 19% or more of the residents had less than a high school diploma. For both sexes, the rate of HIV diagnoses increased as the percentage of residents with less than a high school diploma increased.
- **Income:** The highest HIV diagnosis rates for males (45.5) and females (13.5) were among those who lived in census tracts where the median household income was less than \$38,000 a year. For both sexes, the rate of HIV diagnoses decreased as the median household income increased.
- **Employment:** The highest HIV diagnosis rates for males (44.0) and females (12.7) were among those who lived in census tracts where 6% or more of the residents were unemployed. For both sexes, the rate of HIV diagnoses increased as the percentage of unemployed persons increased.
- **Insurance:** The highest HIV diagnosis rates for males (45.5) and females (12.5) were among those who lived in census tracts where 21% or more of the residents did not have health insurance or health coverage plan. For both sexes, the rate of HIV diagnoses increased as the percentage of uninsured persons increased.
- **Housing:** The highest HIV diagnosis rate for males (31.9) was among those who lived in census tracts where more than 10% but fewer than 17% of the housing units were vacant. Among females, those who lived in census tracts where 17% or more of the housing units were vacant accounted for the highest rates of diagnoses of HIV infection (8.2).

Age by sex (Table 4)

- **Poverty:** For males and females in all age groups, those who lived in census tracts where 20% or more of the residents lived below the federal poverty level accounted for the highest rates of HIV diagnoses.
- **Education:** For males and females in all age groups, those who lived in census tracts where 19% or more of the residents had less than a high school diploma accounted for the highest rates of HIV diagnoses.
- **Income:** For males and females in all age groups, those who lived in census tracts where the median household income was less than \$38,000 a year accounted for the highest rates of HIV diagnoses.
- **Employment:** For males and females in all age groups, those who lived in census tracts where 6% or more of the residents were unemployed accounted for the highest rates of HIV diagnoses.
- **Insurance:** For males and females in all age groups, those who lived in census tracts where 21% or more of the residents did not have health insurance or health coverage plan accounted for the highest rates of HIV diagnoses.
- **Housing:** For males aged 18–24 years, 35–44 years, and 55–64 years, those who lived in census tracts where 17% or more of the housing units were vacant accounted for the highest rates of HIV diagnoses. For males aged 25–34, 45–54, and greater than or equal to 65 years, those who lived in census tracts where 10% or more but fewer than 17% of the housing units were vacant accounted for the highest rates of HIV diagnoses. For females aged 18–54, those who lived in census tracts where 17% or more of the housing units were vacant accounted for the highest rates of HIV diagnoses. For females aged 55–64, those who lived in census tracts where 10% or more but fewer than 17% of the housing units were vacant accounted for the highest rates of HIV diagnoses. For females aged 65 years and older, those who lived in census tracts where 10% or more of the housing units were vacant accounted for the highest rates of HIV diagnoses.

Race/ethnicity by sex (Table 5)

- **Poverty:** Persons who lived in census tracts where 20% or more of the residents lived below

the federal poverty level accounted for the highest HIV diagnosis rates among blacks/African Americans (males, 104.9; females, 36.7), Hispanics/Latinos (males, 40.8; females, 7.2), and whites (males, 18.0; females, 4.0).

- **Education:** Persons who lived in census tracts where 19% or more of the residents had less than a high school diploma accounted for the highest HIV diagnosis rates among blacks/African Americans females (39.2), Hispanics/Latinos (males, 37.7; females, 6.1), and whites (males, 15.7; females, 4.6). In contrast, among black/African American males, the highest HIV diagnosis rate (88.3) was among those who lived in census tracts where 11% or more but fewer than 19% of the residents had less than a high school diploma.
- **Income:** Persons who lived in census tracts where the median household income was less than \$38,000 a year accounted for the highest HIV diagnosis rates among blacks/African Americans (males, 102.3; females, 36.5), Hispanics/Latinos (males, 40.4; females, 6.8), and whites (males, 15.4; females, 4.3).
- **Employment:** Persons who lived in census tracts where 6% or more of the residents were unemployed accounted for the highest HIV diagnosis rates among blacks/African Americans (males, 102.3; females, 32.4), Hispanics/Latinos (males, 38.3; females, 6.7), and whites (males, 13.8; females, 3.5).
- **Insurance:** Persons who lived in census tracts where 21% or more of the residents did not have health insurance or health coverage plan accounted for the highest HIV diagnosis rates among blacks/African Americans (males, 106.5; females, 38.7), Hispanics/Latinos (males, 42.3; females, 6.2), and whites (males, 18.4; females, 4.3).
- **Housing:** Persons who lived in census tracts where 17% or more of the housing units were vacant accounted for the highest HIV diagnosis rates among blacks/African Americans (males, 98.1; females, 33.5) and white females (2.2). Among Hispanics/Latinos (males, 41.0; females, 6.0) and white males (12.6), those who lived in census tracts where 10% or more but fewer than 17% of the housing units were

vacant accounted for the highest rates of diagnoses of HIV infection.

Transmission category by sex (Table 6)

- **Poverty:** Persons who lived in census tracts where 20% or more of the residents lived below the federal poverty level accounted for the largest percentage of HIV diagnoses for both sexes and in all transmission categories.
- **Education:** Persons who lived in census tracts where 19% or more of the residents had less than a high school diploma accounted for the largest percentage of HIV diagnoses for both sexes and in all transmission categories.
- **Income:** Persons who lived in census tracts where the median household income was less than \$38,000 a year accounted for the largest percentage of HIV diagnoses for both sexes and in all transmission categories.
- **Employment:** Persons who lived in census tracts where 6% or more of the residents were unemployed accounted for the largest percentage of HIV diagnoses for both sexes and in all transmission categories.
- **Insurance:** Persons who lived in census tracts where 21% or more of the residents did not have health insurance or health coverage plan accounted for the largest percentage of HIV diagnoses for both sexes and in all transmission categories.
- **Housing:** Persons who lived in census tracts where 10% or more but fewer than 17% of the housing units are vacant accounted for the largest percentage of HIV diagnoses for both sexes and in all transmission categories.

Diagnoses of HIV Infection, by Race/Ethnicity, Selected Characteristics, and Selected Social Determinants of Health

Transmission category (Tables 7a–c)

- **Poverty:** For black/African American males and females and Hispanic/Latino males and females, the largest percentages of HIV diagnoses were among those who lived in census tracts where 20% or more of the residents lived below the federal poverty level. Among white males whose HIV infection was attributed to male-to-male sexual contact and male-to-male sexual contact *and* injection drug use, the largest percentages of

HIV diagnoses were among those who lived in census tracts where 7% or more but fewer than 12% of the residents lived below the federal poverty level. Among white males whose HIV infection was attributed to injection drug use, the largest percentage of HIV diagnoses was among those who lived in census tracts where 20% or more of the residents lived below the federal poverty level. Among white males whose HIV infection was attributed to heterosexual contact, the largest percentages of HIV diagnoses were among those who lived in census tracts where 12% or more but fewer than 20% of the residents lived below the federal poverty level. Among white females in all transmission categories, the largest percentages of HIV diagnoses were among those who lived in census tracts where 12% or more but fewer than 20% of the residents lived below the federal poverty level.

- **Education:** For black/African American males and females, Hispanic/Latino males and females, and white females in all transmission categories, and for white males whose HIV infection was attributed injection to drug use, the largest percentages of HIV diagnoses were among those who lived in census tracts where 19% or more of the residents had less than a high school diploma. In contrast, among white males whose HIV infection was attributed to male-to-male sexual contact *and* injection drug use, the largest percentage of HIV diagnoses were among those who lived in census tracts where 6% or more but fewer than 11% of the residents had less than a high school diploma. Among white males whose HIV infection was attributed to male-to-male sexual contact or heterosexual contact, the largest percentages of HIV diagnoses were among those who lived in census tracts where fewer than 6% of the residents had less than a high school diploma.
- **Income:** For black/African American males and females, Hispanic/Latino males and females and white females in all transmission categories, and for white males whose HIV infection was attributed to injection drug use, the largest percentages of HIV diagnoses were among those who lived in census tracts where the median household income was less than \$38,000 a year. In contrast, among white males whose HIV

infection was attributed to male-to-male sexual contact, the largest percentages of HIV diagnoses were among those who lived in census tracts where the median household income was greater than or equal to \$70,000 a year. Among white males whose HIV infection was attributed to male-to-male sexual contact *and* injection drug use, the largest percentages of HIV diagnoses were among those who lived in census tracts where the median household income was \$38,000–\$50,999 a year. Among white males whose HIV infection was attributed to heterosexual contact, the largest percentages of HIV diagnoses were among those who lived in census tracts where the median household income was \$51,000–\$69,999 a year.

- **Employment:** For black/African American males and females, Hispanic/Latino females, and white females in all transmission categories, the largest percentages of HIV diagnoses were among those who lived in census tracts where 6% or more of the residents were unemployed. Among Hispanic males whose HIV infection was attributed to male-to-male sexual contact, injection drug use, and heterosexual contact, the largest percentages of HIV diagnoses were among those who lived in census tracts where 6% or more of the residents were unemployed. Among Hispanic males whose HIV infection was attributed to male-to-male sexual contact *and* injection drug use, the largest percentages of HIV diagnoses were among those who lived in census tracts where 4% or more but fewer than 6% of the residents were unemployed. Among white males whose HIV infection was attributed to injection use, the largest percentages of HIV diagnoses were among those who lived in census tracts where 4% or more but fewer than 6% of the residents were unemployed. Among white males whose HIV infection were attributed to male-to-male sexual contact, male-to-male sexual contact *and* injection drug use or heterosexual contact, the largest percentage of HIV diagnoses was among those who lived in census tracts where less than 3% of the residents were unemployed.
- **Insurance:** For black/African American males and females, Hispanic/Latino males and females, and white females in all transmission categories,

and for white males whose HIV infection was attributed to injection drug use, the largest percentages of HIV diagnoses were among those who lived in census tracts where 21% or more of the residents did not have health insurance or health coverage plan. Among white males whose HIV infection was attributed to male-to-male sexual contact or male-to-male sexual contact *and* injection drug use, the largest percentages of HIV diagnoses were among those who lived in census tracts where 7% or more but fewer than 13% of the residents did not have health insurance or health coverage plan. Among white males whose HIV infection was attributed to heterosexual contact, the largest percentages of HIV diagnoses were among those who lived in census tracts where 13% or more but fewer than 21% of the residents did not have health insurance or health coverage plan.

- **Housing:** For black/African American males whose HIV infection was attributed to male-to-male sexual contact, injection drug use, or heterosexual contact, Hispanic/Latino males and white males whose HIV infection was attributed to male-to-male sexual contact, male-to-male sexual contact *and* injection drug use, or heterosexual contact, and females of each racial/ethnicity group in all transmission categories, the largest percentages of HIV diagnoses were among those who lived in census tracts where 10% or more but fewer than 17% of the housing units were vacant. Among black/African American males whose HIV infection was attributed to male-to-male sexual contact *and* injection drug use and Hispanic/Latino males whose HIV infection was attributed to injection drug use, the largest percentages of HIV diagnoses were among those who lived in census tracts where 17% or more of the housing units were vacant. Among white males whose HIV infection was attributed to injection drug use, the largest percentages of HIV diagnoses were among those who lived in census tracts where fewer than 6% of the housing units were vacant.

Age (Tables 8a–c)

Results by race/ethnicity and age group for persons aged 65 years and older are not discussed due to most rates being based on small case counts (i.e., based on fewer than 12 diagnoses of HIV infection).

- **Poverty:** For black/African American males and females and Hispanic/Latino males and females in all age groups, and for white males and females aged 25–64 years, those who lived in census tracts where 20% or more of the residents lived below the federal poverty level accounted for the highest rates of HIV diagnoses. Among white males and females aged 18–24 years, the highest rate of HIV diagnoses was among those who lived in census tracts where 12% or more but fewer than 20% of the residents lived below the federal poverty level. Among Hispanic/Latino females aged 18–24 years, all poverty categories except one category had unstable rates (i.e., based on fewer than 12 diagnoses of HIV infection).
- **Education:** For black/African American females and white males and females in all age groups, and for black/African American males aged 35–64 years, Hispanic/Latino males aged 45–64 years, and Hispanic/Latino females aged 25–54, those who lived in census tracts where 19% or more of the residents had less than a high school diploma accounted for the highest rates of HIV diagnoses. Among Hispanic/Latino males aged 18–44 years, those who lived in census tracts where fewer than 6% of the residents had less than a high school diploma accounted for the highest rates of HIV diagnoses. Among black/African American males aged 18–34 years and Hispanic/Latino females aged 55–64 years, those who lived in census tracts where 11% or more but fewer than 19% of the residents had less than a high school diploma accounted for the highest rate of HIV diagnoses. Among Hispanic/Latino females aged 18–24 years, all education categories except one category had unstable rates (i.e., based on fewer than 12 diagnoses of HIV infection).
- **Income:** For black/African American males and females, Hispanic/Latino males and females in all age groups, and for white males aged 25–64 years and white females aged 25–54, those who lived in census tracts where the median household income was less than \$38,000 a year accounted for the highest rates of HIV diagnoses. Among white males aged 18–24, those who lived in census tracts where the median household income was \$51,000–\$69,999 a year

accounted for the highest rates of HIV diagnoses. Among white females aged 18–24, those who lived in census tracts where the median household income was less than \$38,000 *and* those who lived in census tracts where the median household income was \$51,000–\$69,999 a year accounted for the highest rates of HIV diagnoses.

- **Employment:** For black/African American males and white females in all age groups, and for black/African American females aged 18–44 and 55–64, Hispanic/Latino males aged 35–54 years, Hispanic/Latino females aged 25–64, and white males aged 18–54, those who lived in census tracts where 6% or more of the residents were unemployed accounted for the highest rates of HIV diagnoses. Among black/African American females aged 45–54, Hispanic/Latino males aged 55–64, Hispanic/Latino females aged 18–24, and white males aged 55–64, those who lived in census tracts where 4% or more but fewer than 6% of the residents were unemployed accounted for the highest rates of HIV diagnoses. Among Hispanic/Latino males aged 18–24 years, those who lived in census tracts where 3% or more but fewer than 4% of the residents were unemployed accounted for the highest rates of HIV diagnoses. Among Hispanic/Latino males aged 25–34 years, those who lived in census tracts where 3% or more but fewer than 4% of the residents were unemployed *and* those who lived in census tracts where 6% or more of the residents were unemployed accounted for the highest rates of HIV diagnoses.
- **Insurance:** For black/African American males and females, Hispanic/Latino males, and white males and females in all age groups, and for Hispanic/Latino females aged 25–44 years, those who lived in census tracts where 21% or more of the residents did not have health insurance or health coverage plan accounted for the highest rates of HIV diagnoses. Among Hispanic/Latino females aged 45–54 years, those who lived in census tracts where 13% or more of the residents did not have health insurance or health coverage plan accounted for the highest rates of HIV diagnoses. Among Hispanic/Latino females aged 55–64 years, those who lived in census tracts where 7% or more but fewer than 13% of the residents did not have health insurance or health coverage

plan accounted for the highest rates of HIV diagnoses. Among Hispanic/Latino females aged 18–24 years, all insurance categories except one category had unstable rates (i.e., based on fewer than 12 diagnoses of HIV infection).

- **Housing:** For black/African American males and females in all age groups, and for Hispanic/Latino males aged 55–64, Hispanic/Latino females aged 35–44, white males aged 55–64, and white females aged 25–54, those who lived in census tracts where 17% or more of the housing units were vacant accounted for the highest rates of HIV diagnoses. Among Hispanic/Latino males aged 25–54, Hispanic/Latino females aged 25–34 and 55–64, white males aged 25–54, and white females aged 25–34 and 55–64, those who lived in census tracts where 10% or more but fewer than 17% of the housing units were vacant accounted for the highest rates of HIV diagnoses. Among Hispanic/Latino females aged 45–54, those who lived in census tracts where 10% or more of the housing units were vacant accounted for the highest rates of HIV diagnoses. Among white females aged 18–24, those who lived in census tracts where 6% or more but fewer than 10% of the housing units were vacant *and* those who lived in census tracts where 17% or more of the housing units were vacant accounted for the highest rates of HIV diagnoses. Among Hispanic/Latino males and white males aged 18–24, those who lived in census tracts where 6% or more but fewer than 10% of the housing units were vacant accounted for the highest rates of HIV diagnoses.

GEOCODING OF HIV SURVEILLANCE DATA

CDC funds state and local health departments to conduct HIV surveillance, and some jurisdictions geocode to the census tract level the address of residence at the time of diagnosis. This report includes data for persons aged 18 years and older whose HIV infection was diagnosed during 2016 and reported to the National HIV Surveillance System through June 2017 from 13 states (Arizona, Colorado, Connecticut, Georgia, Florida, Illinois [Chicago only], Iowa, Minnesota, Oklahoma, Pennsylvania, Texas, Virginia, and Washington), the District of Columbia, and Puerto Rico.

After a census tract was assigned to each person's residence at the time of HIV diagnosis (2016), data were linked with the ACS estimates for 2012–2016 to assign a value for each of the SDH indicator variables to each person with diagnosed HIV infection. Cases or census tracts were excluded if the address was nonresidential (e.g., military base, corrections facility), no census tract was associated with the case, no SDH information was available for the census tract, or the census tract from the surveillance data 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 SDH subpopulation totals, they were included in the overall subtotals. Therefore, Tables 4–8a/b/c display differing denominators for SDH subpopulation categories.

SOCIAL DETERMINANTS OF HEALTH INDICATOR VARIABLES

SDH indicator variables [10] and definitions [11] were obtained from the American Community Survey (ACS). This report uses data from the 2012–2016 ACS 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) [12]. 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) [11]. 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.

For this report, the SDH indicator variables were categorized by using empirically derived quartiles. The quartile cut-points were determined by using data from all census tracts in the 13 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 6 SDH indicator variables: federal poverty status, education level, median household income, employment status, health insurance coverage, and vacant housing units.

- **Federal poverty status:** proportion of residents in the census tracts 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 18 years and older)
- **Education level:** proportion of residents in the census tract with less than a high school diploma (individuals aged 18 years and older)
- **Median household income:** median income for a household within the census tract during the 12 months before the survey response
- **Employment status:** proportion of residents in the census tract in the workforce without a job (individuals aged 16 years and older)
- **Health insurance coverage:** proportion of residents in the census tract without health insurance or health coverage plan (individuals aged 18 years and older)
- **Vacant housing units:** proportion of housing units in the census tract that were vacant at the time of the survey response

These variables were included in this report because SDH research has emphasized the need to incorporate these specific structural and societal factors into analyses of public health data in order to contribute to a better understanding of their effects on health outcomes [4–7]. Although correlations between SDH indicators were not analyzed for this report, some SDH indicators may be correlated. For example, lack of education has been associated with poverty and income in the United States [8, 9]. Therefore, caution should be used when interpreting results.

Poverty

The percentage of the population aged 18 years and older who were living below the poverty level was determined by using the sum of the number of family members and the number of unrelated persons in the household whose incomes, during the 12 months before the survey response, were below the federal poverty level. The U.S. Census Bureau uses a 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 less than 15 years. The U.S. Census Bureau defines *poverty areas* as census tracts with poverty levels of 20% or more [13].

Education

The percentage of persons with less than a high school diploma was defined as the percentage of persons aged 18 years and older 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.

Household Income

The median household income was determined by dividing the income distribution into 2 equal parts: one-half of the persons resided in census tracts that fall below the median income and one-half above the median. The median income was based on the distribution of the total number of households, including those with no income. Median income for households was computed on the basis of a standard distribution, rounded to the nearest whole dollar.

Employment

The percentage of unemployed persons was determined by using the Census Bureau's classification of unemployed persons: all civilians aged 16 years old and older are classified as unemployed if they (1) were neither "at work" nor "with a job but not at work" during the reference week (i.e., the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed), (2) were actively looking for work during the 4 weeks before the survey response, or (3) were available to start a job. Also included as unemployed are civilians who did not work at all during the reference week, were waiting to be called back to a job from which they had been laid off, or were available for work except for temporary illness. Employment status excluded persons whose only work was "around the house," who were unpaid volunteers (e.g., for religious or charitable organizations), who were institutionalized, or who were on active duty in the United States Armed Forces.

Unemployment includes all civilians aged 16 years and older, and the denominator population used to calculate these rates in tables 4, 5, and 8a–c also includes persons aged 16 and 17 years. These age categories for employment status are defined by the ACS and could not be altered.

Health Insurance Coverage

The percentage of persons aged 18 years and older 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 65 years and older, 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) 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.

Vacant Housing

A housing unit is vacant if no one is living in it at the time of interview. Units occupied at the time of interview entirely by persons who are staying two months or less and who have a more permanent residence elsewhere are considered to be temporarily occupied, and are classified as “vacant.”

New units not yet occupied are classified as vacant housing units if construction has reached a point where all exterior windows and doors are installed and final usable floors are in place. Vacant units are excluded from the housing inventory if they are open to the elements (i.e., the roof, walls, windows, and/or doors no longer protect the interior from the elements). Also excluded are vacant units with a sign that they are condemned or they are to be demolished.

TABULATION AND PRESENTATION OF DATA

Age

All tables in this report reflect data for persons aged 18 years and older (i.e., adults). This report was limited to adults aged 18 years and older with diagnosed HIV infection to more accurately represent the population from which data are collected for ACS SDH indicator variables. For tables that provide data by age group, the specific age-group assignment (e.g., 18–24 years) was based on that person’s age at the time of HIV diagnosis.

Race and Ethnicity

The data presented in this report were collected using the Office of Management and Budget’s revised 1997 standards for ethnic and racial data, which calls for splitting Asian/Pacific Islander into 2 categories (Asian and Native Hawaiian/other Pacific Islander) and collecting 2 categories of ethnicity (Hispanic or Latino and not Hispanic or Latino) [14]. Hispanics and Latinos can be of any race.

Due to confidentiality concerns, the ACS does not provide age- and sex-specific SDH variables stratified by race and ethnicity for racial groups, except whites (i.e., white, non-Hispanic/Latino). Therefore, the data used for computing the race-specific rates may

include Hispanics/Latinos and should be interpreted with caution. Also, the number of persons reported in each race category may include persons whose ethnicity was not reported.

Geographic Level

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 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) [15].

Transmission Categories

Transmission category is the term used to summarize a person’s possible HIV risk factors; the summary classification results from selecting, from the presumed hierarchical order of probability, the 1 risk factor most likely to have been responsible for transmission. For surveillance purposes, a diagnosis of HIV infection is counted only once in the hierarchy of transmission categories. Persons with > 1 reported risk factor for HIV infection are classified in the transmission category listed first in the hierarchy. The exception is the category for male-to-male sexual contact *and* injection drug use; this group makes up a separate transmission category.

Persons whose transmission category is classified as male-to-male sexual contact include men who have ever had sexual contact with other men (i.e., homosexual contact) and men who have ever had sexual contact with both men and women (i.e., bisexual contact). Persons whose transmission category is classified as heterosexual contact are persons who have ever had heterosexual contact with a person known to have, or to be at high risk for, HIV infection (e.g., a person who injects drugs).

Cases of HIV infection reported without a risk factor listed in the hierarchy of transmission categories are classified as “no identified risk (NIR).” Cases classified as NIR include cases that are being followed up by local health department staff; cases in persons

whose risk-factor information is missing because they died, declined to be interviewed, or were lost to follow-up; and cases in persons who were interviewed or for whom other follow-up information was available but for whom no risk factor was identified.

Because a substantial proportion of cases of HIV infection are reported to CDC without an identified risk factor, multiple imputation is used to assign a transmission category [16]. Multiple imputation is a statistical approach in which each missing transmission category is replaced with a set of plausible values that represent the uncertainty about the true, but missing, value [17]. The plausible values are analyzed by using standard procedures, and the results of these analyses are then combined to produce the final results. In this report, multiple imputation has been used to account for missing transmission category information in tables displaying transmission category (Tables 3, 6, and 7a–c).

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 13 states, the District of Columbia, and Puerto Rico were based on the 5-year estimated total population for those areas [10]. The denominators used for calculating age-, sex-, and race/ethnicity-specific rates were computed by applying the 5-year estimates for age, sex, and race/ethnicity for these areas [10]. Reported numbers less than 12, and rates based on these numbers, should be interpreted with caution.

Subpopulation stratifications of race and ethnicity data by age group and sex were not available for all race groups (i.e., only available for whites, non-Hispanic/Latino) from the 2012–2016 estimates from the ACS. Rates for racial groups (except whites) may include Hispanics/Latinos, and there may be overlap in populations for these racial groups and Hispanics/Latinos. Therefore, some rates should be interpreted with caution. However, of the denominator population for blacks/African Americans from the ACS in this report, only 4.8% included Hispanics/Latinos (only 2.9% when Puerto Rico is excluded). Additionally, the denominator population from the ACS is based on the entire population aged 18 years and older; the numerator population is limited to persons whose HIV infection had been diagnosed and reported, with complete residential address, to the National HIV Surveillance System. Because the ACS uses predetermined age cat-

egories and varying criteria for SDH variables, the denominators differ for some SDH variables.

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Table 1. Diagnoses of HIV infection among adults, by race/ethnicity and area of residence, 2016—13 states, the District of Columbia, and Puerto Rico

Area of residence	American Indian/ Alaska Native		Asian		Black/African American		Hispanic/Latino ^a		Native Hawaiian/ Other Pacific Islander		White		Multiple races		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Arizona	29	14.2	19	11.7	136	65.0	267	19.8	1	10.2	258	8.3	4	3.5	714	14.0
Colorado	4	10.6	6	4.9	49	30.3	140	18.8	1	17.6	172	5.8	4	3.9	376	9.1
Connecticut	1	14.3	2	1.7	105	37.7	71	19.4	1	132.6	64	3.2	1	1.8	245	8.7
District of Columbia	0	0.0	2	9.1	212	84.8	33	64.0	0	0.0	40	18.8	4	32.6	291	53.5
Florida	5	11.8	31	7.4	1,340	56.8	801	22.2	3	33.8	573	6.1	33	12.0	2,786	17.6
Georgia	4	18.5	21	7.3	1,515	65.9	141	24.2	2	57.5	327	7.5	58	52.1	2,068	27.2
Illinois ^b	2	31.8	19	13.4	406	63.7	170	30.8	1	130.0	107	13.7	15	36.6	720	33.7
Iowa	0	0.0	4	7.9	39	56.6	10	9.7	0	0.0	65	3.1	4	15.1	122	5.1
Minnesota	1	2.6	11	6.3	124	60.7	20	12.0	0	0.0	112	3.2	6	8.8	274	6.6
Oklahoma	22	11.1	4	6.7	68	32.9	31	13.5	0	0.0	127	6.1	10	5.8	262	9.0
Pennsylvania	3	15.9	20	6.4	442	42.4	156	28.5	0	0.0	244	3.0	11	7.7	876	8.7
Puerto Rico	0	0.0	0	0.0	0	0.0	370	13.5	0	0.0	0	0.0	0	0.0	370	13.4
Texas	7	7.4	64	7.1	1,455	61.7	1,569	22.7	2	12.4	828	8.8	99	27.5	4,024	20.3
Virginia	2	11.4	21	5.4	493	40.6	110	22.4	0	0.0	197	4.7	13	9.0	836	13.0
Washington	8	11.7	31	7.0	71	37.0	60	11.4	3	9.4	170	4.2	15	7.4	358	6.5
Total^c	88	11.4	255	7.1	6,455	55.0	3,949	20.8	14	15.2	3,284	5.8	277	13.7	14,322	15.5

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

Rates are per 100,000 population.

The American Community Survey does not provide age- and sex-specific social determinants of health variables stratified by race and ethnicity for racial groups, except whites (i.e., white, non-Hispanic/Latino). Therefore, the denominators used for computing race-specific rates may include Hispanics/Latinos and should be interpreted with caution. See Technical Notes for more details

^a Hispanics/Latinos can be of any race.

^b Data from Chicago only.

^c Totals do not represent all adults whose HIV infection was diagnosed during 2016 in these areas. See Technical Notes for exclusion criteria.

Table 2. Diagnoses of HIV infection among adults, by age at diagnosis and area of residence, 2016—13 states, the District of Columbia, and Puerto Rico

Area of residence	18–24 years		25–34 years		35–44 years		45–54 years		55–64 years		≥65 years		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Arizona	147	22.0	228	25.3	157	18.8	110	13.1	55	6.9	17	1.6	714	14.0
Colorado	74	14.2	143	17.9	67	9.2	60	8.4	27	4.0	5	0.7	376	9.1
Connecticut	45	12.9	80	18.2	39	8.9	45	8.2	25	5.1	11	2.0	245	8.7
District of Columbia	47	57.8	93	62.3	64	69.0	44	57.2	34	49.3	9	12.0	291	53.5
Florida	477	26.9	881	34.8	561	23.0	500	18.2	272	10.5	95	2.5	2,786	17.6
Georgia	453	44.6	774	56.1	347	25.2	301	21.4	151	12.7	42	3.4	2,068	27.2
Illinois ^a	173	59.9	279	52.7	129	33.5	79	23.6	49	16.9	11	3.6	720	33.7
Iowa	27	8.4	39	10.0	27	7.4	16	3.9	12	3.0	1	0.2	122	5.1
Minnesota	62	12.2	88	11.8	64	9.5	36	4.8	22	3.1	2	0.3	274	6.6
Oklahoma	53	13.6	102	19.1	59	12.5	30	6.1	10	2.1	8	1.4	262	9.0
Pennsylvania	208	16.9	306	18.7	140	9.2	136	7.5	69	3.9	17	0.8	876	8.7
Puerto Rico	53	14.9	90	20.3	91	20.3	73	15.7	53	12.2	10	1.6	370	13.4
Texas	911	33.3	1,555	39.7	714	19.6	542	15.6	244	8.2	58	1.9	4,024	20.3
Virginia	194	23.6	299	25.9	145	13.2	115	9.7	63	6.0	20	1.7	836	13.0
Washington	57	8.6	107	10.5	85	9.2	57	6.0	40	4.4	12	1.2	358	6.5
Total^b	2,981	25.4	5,064	30.6	2,689	17.4	2,144	13.2	1,126	7.6	318	1.8	14,322	15.5

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

Rates are per 100,000 population.

The American Community Survey does not provide age- and sex-specific social determinants of health variables stratified by race and ethnicity for racial groups, except whites (i.e., white, non-Hispanic/Latino). Therefore, the denominators used for computing race-specific rates may include Hispanics/Latinos and should be interpreted with caution. See Technical Notes for more details.

^a Data from Chicago only.

^b Totals do not represent all adults whose HIV infection was diagnosed during 2016 in these areas. See Technical Notes for exclusion criteria.

Table 3. Diagnoses of HIV infection among adults, by race/ethnicity and selected characteristics, 2016—13 states, the District of Columbia, and Puerto Rico

	American Indian/ Alaska Native		Asian		Black/African American		Hispanic/ Latino ^a		Native Hawaiian/ Other Pacific Islander		White		Multiple races		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Male																
Age at diagnosis (yr)																
18–24	13	19.6	36	14.9	1,397	147.7	719	44.2	1	11.9	389	12.9	64	27.4	2,619	43.5
25–34	34	42.9	73	18.5	1,746	152.6	1,395	63.7	5	40.0	937	21.1	92	38.1	4,282	51.2
35–44	15	21.4	50	13.3	677	67.3	720	36.5	4	43.4	550	13.2	26	14.2	2,042	26.6
45–54	4	5.8	35	12.1	507	50.4	431	27.1	0	0.0	579	11.6	25	17.6	1,581	19.8
55–64	4	7.5	18	8.9	271	34.0	157	14.8	0	0.0	286	5.8	11	10.5	747	10.5
≥65	2	4.6	4	2.2	91	14.6	48	4.9	1	32.1	90	1.5	2	2.3	238	3.1
Transmission category^b																
Male-to-male sexual contact	56	—	189	—	3,730	—	2,995	—	7	—	2,393	—	188	—	9,558	—
Injection drug use	6	—	5	—	125	—	117	—	0	—	103	—	3	—	358	—
Male-to-male sexual contact and injection drug use	8	—	1	—	75	—	104	—	2	—	194	—	17	—	401	—
Heterosexual contact ^c	2	—	22	—	751	—	252	—	1	—	138	—	11	—	1,177	—
Other ^d	0	—	0	—	7	—	3	—	0	—	3	—	0	—	15	—
Subtotal	72	18.9	216	12.8	4,689	84.9	3,470	36.9	11	24.3	2,831	10.3	220	22.2	11,509	25.6
Female																
Age at diagnosis (yr)																
18–24	1	1.6	6	2.6	227	24.7	51	3.4	0	0.0	64	2.2	13	5.7	362	6.3
25–34	3	3.9	15	3.4	489	40.2	140	6.9	1	7.9	122	2.8	12	4.9	782	9.5
35–44	7	10.0	12	2.8	407	36.7	115	5.9	1	10.5	95	2.3	10	5.3	647	8.4
45–54	3	4.2	4	1.2	354	31.7	96	6.0	1	13.4	91	1.8	14	9.0	563	6.9
55–64	2	3.3	2	0.8	234	25.0	64	5.5	0	0.0	71	1.4	6	5.2	379	4.9
≥65	0	0.0	0	0.0	55	6.0	13	1.0	0	0.0	10	0.1	2	1.8	80	0.8
Transmission category^b																
Heterosexual contact ^c	11	—	36	—	1,635	—	417	—	3	—	342	—	46	—	2,490	—
Injection drug use	5	—	2	—	123	—	61	—	0	—	110	—	10	—	312	—
Other ^d	0	—	1	—	8	—	1	—	0	—	2	—	1	—	12	—
Subtotal	16	4.1	39	2.0	1,766	28.4	479	5.0	3	6.4	453	1.6	57	5.5	2,813	5.9
Total^e	88	11.4	255	7.1	6,455	55.0	3,949	20.8	14	15.2	3,284	5.8	277	13.7	14,322	15.5

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

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

The American Community Survey does not provide age- and sex-specific social determinants of health variables stratified by race and ethnicity for racial groups, except whites (i.e., white, non-Hispanic/Latino). Therefore, the denominators used for computing race-specific rates may include Hispanics/Latinos and should be interpreted with caution. See Technical Notes for more details.

^a Hispanics/Latinos can be of any race.

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

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

^d Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

^e Totals do not represent all adults whose HIV infection was diagnosed during 2016 in these areas. See Technical Notes for exclusion criteria.

Table 4. Diagnoses of HIV infection among adults, by age at diagnosis and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico

	18–24 years		25–34 years		35–44 years		45–54 years		55–64 years		≥65 years		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Male														
Below federal poverty level (%)														
<7	349	25.9	564	27.7	278	11.9	262	10.1	136	6.0	44	1.8	1,633	12.5
7.00–11.99	464	36.0	829	39.4	421	21.9	311	15.5	166	8.9	41	1.9	2,232	19.7
12.00–19.99	677	46.8	1,165	53.7	557	30.7	420	23.0	172	10.5	51	2.8	3,042	28.4
≥20	1,129	59.3	1,722	84.7	785	49.1	588	38.3	273	20.7	102	7.5	4,599	47.1
Less than high school diploma (%)														
<6	399	24.6	708	35.5	336	17.4	286	13.9	153	8.3	51	2.5	1,933	16.8
6.00–10.99	534	38.2	827	40.2	402	20.9	281	13.5	149	7.8	37	1.7	2,230	19.3
11.00–18.99	719	50.4	1,181	56.2	523	27.4	406	20.4	185	10.2	51	2.5	3,065	27.3
≥19	967	61.5	1,566	70.8	781	40.5	608	32.9	260	17.1	99	6.4	4,281	40.3
Median household income (U.S. \$)														
<38,000	1,052	60.8	1,633	85.5	742	48.3	566	37.0	278	20.5	101	6.6	4,372	45.5
38,000–50,999	667	46.5	1,037	51.1	499	29.4	359	20.7	149	9.3	46	2.4	2,757	26.6
51,000–69,999	533	36.4	966	42.4	479	23.4	352	16.6	156	7.9	43	1.9	2,529	20.9
≥70,000	366	27.6	644	30.6	321	13.5	304	11.8	164	7.5	48	2.3	1,847	14.6
Unemployed (%)														
<3	473	28.6	847	34.3	400	16.7	339	13.4	150	6.5	49	1.8	2,258	16.0
3.00–3.99	372	35.2	639	41.8	321	22.1	257	16.6	106	7.6	33	2.2	1,728	20.3
4.00–5.99	675	40.3	1,147	49.2	556	26.3	398	18.3	230	12.0	65	3.2	3,071	25.1
≥6	1,099	67.1	1,649	80.9	765	44.3	587	33.9	261	17.5	91	6.1	4,452	44.0
Without health insurance (%)														
<7	259	19.3	441	25.9	222	12.3	206	9.9	138	7.2	47	2.1	1,313	11.8
7.00–12.99	501	33.4	782	37.5	408	21.1	296	14.4	141	7.4	35	1.6	2,163	18.6
13.00–20.99	669	46.1	1,087	51.8	505	27.4	420	22.0	184	10.7	55	2.9	2,920	26.8
≥21	1,190	69.4	1,971	80.2	907	43.7	659	34.0	284	18.2	101	6.8	5,112	45.5
Vacant housing (%)														
<6	544	32.7	841	34.7	423	17.2	334	13.0	164	7.6	44	2.2	2,350	17.7
6.00–9.99	612	42.6	1,089	51.1	475	25.1	374	19.5	156	9.4	47	2.8	2,753	25.7
10.00–16.99	846	49.4	1,453	62.3	683	34.4	513	25.3	225	12.3	76	3.8	3,796	31.9
≥17	617	52.6	897	61.7	460	34.9	360	24.8	202	13.8	71	3.4	2,607	29.2
Subtotal^a	2,619	43.5	4,282	51.2	2,042	26.6	1,581	19.8	747	10.5	238	3.1	11,509	25.6

Table 4. Diagnoses of HIV infection among adults, by age at diagnosis and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico (cont)

	18–24 years		25–34 years		35–44 years		45–54 years		55–64 years		≥65 years		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Female														
Below federal poverty level (%)														
<7	37	3.1	80	3.8	73	3.0	47	1.7	44	1.8	7	0.2	288	2.1
7.00–11.99	53	4.4	112	5.4	104	5.5	83	4.0	55	2.7	10	0.4	417	3.5
12.00–19.99	79	5.7	201	9.7	156	8.7	143	7.7	107	6.0	21	0.9	707	6.3
≥20	193	10.2	389	19.7	314	19.3	290	18.3	172	11.8	42	2.3	1,400	13.5
Less than high school diploma (%)														
<6	35	2.2	70	3.5	60	3.0	42	1.9	34	1.7	7	0.3	248	2.0
6.00–10.99	58	4.4	131	6.4	109	5.5	84	3.9	56	2.7	15	0.6	453	3.7
11.00–18.99	87	6.3	187	9.0	186	9.6	167	8.0	115	5.8	19	0.7	761	6.3
≥19	182	12.8	394	19.3	292	15.8	270	15.0	174	10.8	39	1.9	1,351	12.6
Median household income (U.S. \$)														
<38,000	188	10.9	389	20.7	298	18.9	294	18.4	188	12.4	45	2.1	1,402	13.5
38,000–50,999	81	6.1	171	8.9	158	9.5	115	6.5	77	4.4	11	0.4	613	5.6
51,000–69,999	59	4.3	144	6.5	111	5.5	102	4.7	63	3.0	11	0.4	490	3.9
≥70,000	34	2.8	78	3.6	80	3.3	52	2.0	50	2.2	13	0.5	307	2.3
Unemployed (%)														
<3	54	3.7	111	4.8	94	4.1	68	2.7	53	2.2	11	0.3	391	2.7
3.00–3.99	26	2.6	85	5.7	64	4.4	70	4.4	39	2.6	13	0.7	297	3.3
4.00–5.99	94	5.9	187	8.1	161	7.5	158	7.0	97	4.7	23	0.9	720	5.6
≥6	188	11.5	399	19.2	328	17.9	267	14.3	190	11.4	33	1.7	1,405	12.7
Without health insurance (%)														
<7	26	2.1	54	3.1	66	3.6	46	2.1	38	1.9	6	0.2	236	2.0
7.00–12.99	44	3.1	102	4.9	101	5.2	68	3.2	67	3.3	14	0.5	396	3.2
13.00–20.99	105	7.5	216	10.4	145	7.7	150	7.6	92	4.9	19	0.8	727	6.3
≥21	187	11.6	410	17.5	335	16.4	299	15.3	181	10.8	41	2.1	1,453	12.5
Vacant housing (%)														
<6	66	4.3	148	6.1	139	5.5	90	3.4	76	3.3	14	0.5	533	3.8
6.00–9.99	80	5.8	176	8.3	145	7.5	104	5.2	66	3.6	12	0.5	583	5.1
10.00–16.99	118	7.1	253	11.1	194	9.7	204	9.8	136	6.9	28	1.1	933	7.4
≥17	98	9.0	205	15.0	169	13.3	165	11.2	100	6.3	26	1.1	763	8.2
Subtotal^a	362	6.3	782	9.5	647	8.4	563	6.9	379	4.9	80	0.8	2,813	5.9
Total^b	2,981	25.4	5,064	30.6	2,689	17.4	2,144	13.2	1,126	7.6	318	1.8	14,322	15.5

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

Rates are per 100,000 population.

The denominator population used to calculate unemployment rates includes persons aged 16 and 17 years, as these age categories are defined by the American Community Survey (ACS) and could not be altered; see Technical Notes for more details.

The ACS does not provide age- and sex-specific social determinants of health (SDH) variables stratified by race and ethnicity for racial groups, except whites (i.e., white, non-Hispanic/Latino). Therefore, the denominators used for computing race-specific rates may include Hispanics/Latinos, and should be interpreted with caution. See Technical Notes for more details.

Row entries indicate categories based on census tracts.

For the definitions of SDH indicator variables used in this report, see http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2016_ACSSubjectDefinitions.pdf.

^a 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 SDH subpopulations.

^b Totals do not represent all adults whose HIV infection was diagnosed during 2016 in these areas. See Technical Notes for exclusion criteria.

Table 5. Diagnoses of HIV infection among adults, by race/ethnicity, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico

	Black/African American		Hispanic/Latino ^a		White	
	No.	Rate	No.	Rate	No.	Rate
Male						
Below federal poverty level (%)						
<7	438	53.1	358	28.5	730	7.3
7.00–11.99	735	72.2	605	34.9	782	9.9
12.00–19.99	1,281	84.3	883	36.4	733	11.7
≥20	2,234	104.9	1,622	40.8	586	18.0
Less than high school diploma (%)						
<6	543	78.0	389	40.6	870	9.7
6.00–10.99	873	78.2	480	35.7	762	9.1
11.00–18.99	1,512	88.3	754	34.0	667	9.9
≥19	1,761	88.0	1,847	37.7	532	15.7
Median household income (U.S. \$)						
<38,000	2,168	102.3	1,547	40.4	514	15.4
38,000–50,999	1,165	86.6	824	36.7	649	10.3
51,000–69,999	870	74.5	692	36.1	831	9.9
≥70,000	484	57.7	405	29.0	837	8.9
Unemployed (%)						
<3	579	58.6	655	33.5	895	8.7
3.00–3.99	490	71.2	549	37.3	610	10.5
4.00–5.99	1,116	79.8	1,019	37.3	776	10.5
≥6	2,504	102.3	1,247	38.3	550	13.8
Without health insurance (%)						
<7	350	59.2	295	22.8	590	6.8
7.00–12.99	750	68.2	526	32.7	766	9.3
13.00–20.99	1,334	79.1	706	37.2	751	11.2
≥21	2,254	106.5	1,943	42.3	724	18.4
Vacant housing (%)						
<6	716	63.6	756	32.3	745	8.5
6.00–9.99	1,000	82.6	844	38.4	765	11.5
10.00–16.99	1,635	91.2	1,159	41.0	843	12.6
≥17	1,337	98.1	709	35.0	478	9.1
Subtotal^b	4,689	84.9	3,470	36.9	2,831	10.3

Table 5. Diagnoses of HIV infection among adults, by race/ethnicity, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico (cont)

	Black/African American		Hispanic/Latino ^a		White	
	No.	Rate	No.	Rate	No.	Rate
Female						
Below federal poverty level (%)						
<7	150	17.4	31	2.4	88	0.8
7.00–11.99	245	22.2	57	3.3	91	1.1
12.00–19.99	440	25.7	98	4.1	142	2.2
≥20	930	36.7	293	7.2	132	4.0
Less than high school diploma (%)						
<6	135	17.9	28	2.7	73	0.8
6.00–10.99	294	22.9	45	3.2	89	1.0
11.00–18.99	487	24.2	111	4.8	135	1.9
≥19	850	39.2	295	6.1	156	4.6
Median household income (U.S. \$)						
<38,000	933	36.5	269	6.8	152	4.3
38,000–50,999	374	24.9	110	5.0	107	1.6
51,000–69,999	284	22.4	67	3.5	115	1.3
≥70,000	174	19.8	33	2.3	79	0.8
Unemployed (%)						
<3	200	23.0	69	3.7	98	0.9
3.00–3.99	155	21.0	59	3.9	70	1.1
4.00–5.99	429	27.1	123	4.4	138	1.8
≥6	982	32.4	228	6.7	147	3.5
Without health insurance (%)						
<7	119	20.2	45	3.2	57	0.6
7.00–12.99	220	18.2	73	4.2	87	1.0
13.00–20.99	477	24.2	85	4.4	137	2.0
≥21	949	38.7	276	6.2	172	4.3
Vacant housing (%)						
<6	324	26.5	87	3.6	101	1.1
6.00–9.99	349	24.5	110	4.9	98	1.4
10.00–16.99	586	28.5	171	6.0	135	1.9
≥17	506	33.5	111	5.5	119	2.2
Subtotal^b	1,766	28.4	479	5.0	453	1.6
Total^c	6,455	55.0	3,949	20.8	3,284	5.8

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

Rates are per 100,000 population.

The denominator population used to calculate unemployment rates includes persons aged 16 and 17 years, as these age categories are defined by the American Community Survey (ACS) and could not be altered; see Technical Notes for more details.

The ACS does not provide age- and sex-specific social determinants of health (SDH) variables stratified by race and ethnicity for racial groups, except whites (i.e., white, non-Hispanic/Latino). Therefore, the denominators used for computing race-specific rates may include Hispanics/Latinos, and should be interpreted with caution. See Technical Notes for more details.

Row entries indicate categories based on census tracts.

For the definitions of SDH indicator variables used in this report, see http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2016_ACSSubjectDefinitions.pdf.

^a Hispanics/Latinos can be of any race.

^b 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 SDH subpopulations.

^c Totals do not represent all adults whose HIV infection was diagnosed during 2016 in these areas. See Technical Notes for exclusion criteria.

Table 6. Diagnoses of HIV infection among adults, by transmission category, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico

	Male-to-male sexual contact		Injection drug use		Male-to-male sexual contact and injection drug use		Heterosexual contact ^a	
	No.	%	No.	%	No.	%	No.	%
Male								
Below federal poverty level (%)								
<7	1,392	14.6	42	11.7	79	19.7	119	10.1
7.00–11.99	1,933	20.2	59	16.4	82	20.4	156	13.3
12.00–19.99	2,541	26.6	90	25.2	100	24.9	306	26.0
≥20	3,690	38.6	167	46.7	140	35.0	596	50.6
Less than high school diploma (%)								
<6	1,698	17.8	39	10.9	86	21.4	108	9.2
6.00–10.99	1,900	19.9	61	17.0	90	22.3	176	15.0
11.00–18.99	2,546	26.6	97	27.2	90	22.3	326	27.7
≥19	3,414	35.7	161	44.9	136	33.9	566	48.1
Median household income (U.S. \$)								
<38,000	3,468	36.3	161	45.1	133	33.3	604	51.3
38,000–50,999	2,281	23.9	95	26.5	102	25.6	274	23.3
51,000–69,999	2,201	23.0	56	15.7	82	20.7	187	15.9
≥70,000	1,607	16.8	46	12.7	81	20.4	111	9.5
Unemployed (%)								
<3	1,960	20.5	58	16.3	105	26.3	133	11.3
3.00–3.99	1,473	15.4	58	16.1	65	16.2	129	11.0
4.00–5.99	2,566	26.9	97	27.2	110	27.5	294	25.0
≥6	3,559	37.2	145	40.5	120	30.0	621	52.8
Without health insurance (%)								
<7	1,098	11.5	52	14.4	62	15.4	100	8.5
7.00–12.99	1,813	19.0	65	18.1	89	22.3	194	16.5
13.00–20.99	2,429	25.4	88	24.7	92	23.0	305	26.0
≥21	4,218	44.1	154	42.9	157	39.3	577	49.1
Vacant housing (%)								
<6	1,985	20.8	69	19.1	104	26.0	190	16.1
6.00–9.99	2,334	24.4	86	24.1	98	24.6	229	19.5
10.00–16.99	3,167	33.1	108	30.2	118	29.6	398	33.9
≥17	2,070	21.7	95	26.5	79	19.8	359	30.5
Subtotal^b	9,558	100	358	100	401	100	1,177	100

Table 6. Diagnoses of HIV infection among adults, by transmission category, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico (cont)

	Male-to-male sexual contact		Injection drug use		Male-to-male sexual contact and injection drug use		Heterosexual contact ^a	
	No.	%	No.	%	No.	%	No.	%
Female								
Below federal poverty level (%)								
<7	—	—	37	11.9	—	—	249	10.0
7.00–11.99	—	—	45	14.3	—	—	370	14.8
12.00–19.99	—	—	81	26.1	—	—	623	25.0
≥20	—	—	148	47.7	—	—	1,248	50.1
Less than high school diploma (%)								
<6	—	—	29	9.2	—	—	218	8.8
6.00–10.99	—	—	46	14.7	—	—	404	16.2
11.00–18.99	—	—	94	30.0	—	—	664	26.7
≥19	—	—	143	46.1	—	—	1,204	48.4
Median household income (U.S. \$)								
<38,000	—	—	151	48.5	—	—	1,248	50.1
38,000–50,999	—	—	70	22.6	—	—	540	21.7
51,000–69,999	—	—	54	17.3	—	—	434	17.4
≥70,000	—	—	36	11.6	—	—	268	10.7
Unemployed (%)								
<3	—	—	53	17.0	—	—	335	13.5
3.00–3.99	—	—	42	13.5	—	—	254	10.2
4.00–5.99	—	—	78	25.1	—	—	639	25.6
≥6	—	—	138	44.4	—	—	1,262	50.7
Without health insurance (%)								
<7	—	—	29	9.4	—	—	206	8.3
7.00–12.99	—	—	46	14.8	—	—	346	13.9
13.00–20.99	—	—	84	26.9	—	—	640	25.7
≥21	—	—	152	48.9	—	—	1,298	52.1
Vacant housing (%)								
<6	—	—	62	19.8	—	—	467	18.8
6.00–9.99	—	—	58	18.8	—	—	523	21.0
10.00–16.99	—	—	110	35.3	—	—	820	32.9
≥17	—	—	81	26.1	—	—	680	27.3
Subtotal^b	—	—	311	100	—	—	2,490	100
Total^c	9,558	100	670	100	401	100	3,667	100

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

Row entries indicate categories based on census tracts.

For the definitions of SDH indicator variables used in this report, see http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2016_ACSSubjectDefinitions.pdf.

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

^b 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 SDH subpopulations.

^c Totals do not represent all adults whose HIV infection was diagnosed during 2016 in these areas. See Technical Notes for exclusion criteria.

Table 7a. Diagnoses of HIV infection among black/African American adults, by transmission category, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico

	Male-to-male sexual contact		Injection drug use		Male-to-male sexual contact and injection drug use		Heterosexual contact ^a	
	No.	%	No.	%	No.	%	No.	%
Male								
Below federal poverty level (%)								
<7	364	9.8	10	8.2	11	14.2	53	7.0
7.00–11.99	610	16.3	16	12.6	11	14.7	99	13.1
12.00–19.99	1,030	27.6	34	27.4	16	22.0	198	26.4
≥20	1,727	46.3	65	51.8	37	49.1	402	53.4
Less than high school diploma (%)								
<6	470	12.6	9	7.5	11	14.3	52	6.9
6.00–10.99	721	19.3	24	19.0	13	17.4	115	15.3
11.00–18.99	1,226	32.9	42	33.4	20	26.8	220	29.3
≥19	1,314	35.2	50	40.1	31	41.5	365	48.5
Median household income (U.S. \$)								
<38,000	1,660	44.5	59	47.1	36	49.0	409	54.5
38,000–50,999	930	24.9	33	26.8	15	21.1	183	24.4
51,000–69,999	735	19.7	20	16.1	11	14.9	103	13.7
≥70,000	405	10.9	12	9.9	11	15.0	56	7.4
Unemployed (%)								
<3	485	13.0	14	11.5	14	18.4	66	8.7
3.00–3.99	398	10.7	14	11.1	7	9.0	71	9.4
4.00–5.99	897	24.1	26	20.8	18	24.1	174	23.1
≥6	1,950	52.3	71	56.6	37	48.4	441	58.7
Without health insurance (%)								
<7	281	7.5	13	10.6	10	13.6	45	6.0
7.00–12.99	616	16.5	17	13.6	10	12.9	107	14.2
13.00–20.99	1,072	28.7	38	30.6	15	19.9	206	27.4
≥21	1,761	47.2	56	45.2	40	53.6	394	52.4
Vacant housing (%)								
<6	578	15.5	19	15.3	18	23.8	100	13.3
6.00–9.99	807	21.6	24	19.4	17	22.4	150	20.0
10.00–16.99	1,309	35.1	44	35.5	18	24.3	261	34.8
≥17	1,035	27.8	37	29.8	22	29.4	240	31.9
Subtotal^b	3,730	100	124	100	75	100	751	100

Table 7a. Diagnoses of HIV infection among black/African American adults, by transmission category, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico (cont)

	Male-to-male sexual contact		Injection drug use		Male-to-male sexual contact and injection drug use		Heterosexual contact ^a	
	No.	%	No.	%	No.	%	No.	%
Female								
Below federal poverty level (%)								
<7	—	—	11	8.9	—	—	138	8.4
7.00–11.99	—	—	12	9.9	—	—	232	14.2
12.00–19.99	—	—	27	22.2	—	—	410	25.1
≥20	—	—	72	59.0	—	—	856	52.3
Less than high school diploma (%)								
<6	—	—	9	7.2	—	—	126	7.7
6.00–10.99	—	—	20	15.8	—	—	272	16.6
11.00–18.99	—	—	36	29.0	—	—	448	27.4
≥19	—	—	59	48.0	—	—	789	48.3
Median household income (U.S. \$)								
<38,000	—	—	72	58.6	—	—	859	52.6
38,000–50,999	—	—	22	17.7	—	—	350	21.4
51,000–69,999	—	—	18	14.4	—	—	265	16.2
≥70,000	—	—	11	9.3	—	—	160	9.8
Unemployed (%)								
<3	—	—	15	12.1	—	—	184	11.2
3.00–3.99	—	—	13	10.7	—	—	141	8.6
4.00–5.99	—	—	28	22.5	—	—	399	24.4
≥6	—	—	68	54.7	—	—	911	55.7
Without health insurance (%)								
<7	—	—	7	5.4	—	—	112	6.8
7.00–12.99	—	—	14	11.4	—	—	203	12.4
13.00–20.99	—	—	38	31.2	—	—	436	26.7
≥21	—	—	64	52.0	—	—	884	54.1
Vacant housing (%)								
<6	—	—	19	15.7	—	—	301	18.4
6.00–9.99	—	—	23	19.1	—	—	325	19.9
10.00–16.99	—	—	45	36.6	—	—	540	33.0
≥17	—	—	35	28.6	—	—	469	28.7
Subtotal^b	—	—	123	100	—	—	1,635	100
Total^c	3,730	100	248	100	75	100	2,386	100

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

Row entries indicate categories based on census tracts.

For the definitions of SDH indicator variables used in this report, see http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2016_ACSSubjectDefinitions.pdf.

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

^b 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 SDH subpopulations.

^c Totals do not represent all adults whose HIV infection was diagnosed during 2016 in these areas. See Technical Notes for exclusion criteria.

Table 7b. Diagnoses of HIV infection among Hispanic/Latino adults, by transmission category, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico

	Male-to-male sexual contact		Injection drug use		Male-to-male sexual contact and injection drug use		Heterosexual contact ^a	
	No.	%	No.	%	No.	%	No.	%
Male								
Below federal poverty level (%)								
<7	319	10.7	5	4.0	19	18.4	14	5.6
7.00–11.99	538	18.0	18	15.5	15	14.7	32	12.8
12.00–19.99	772	25.8	29	24.8	25	23.7	57	22.6
≥20	1,363	45.5	65	55.6	45	43.2	148	59.0
Less than high school diploma (%)								
<6	355	11.9	6	5.1	16	15.5	11	4.3
6.00–10.99	433	14.5	10	8.2	14	13.1	23	9.3
11.00–18.99	653	21.8	23	20.1	16	15.5	61	24.2
≥19	1,553	51.9	78	66.6	58	56.0	157	62.3
Median household income (U.S. \$)								
<38,000	1,288	43.0	69	59.4	41	39.6	148	59.0
38,000–50,999	721	24.1	26	22.7	27	25.8	50	19.7
51,000–69,999	623	20.8	14	11.7	17	16.0	38	15.1
≥70,000	361	12.1	7	6.3	19	18.7	16	6.2
Unemployed (%)								
<3	594	19.8	16	13.7	25	24.1	19	7.7
3.00–3.99	489	16.3	14	12.4	14	13.9	31	12.2
4.00–5.99	875	29.2	34	28.9	33	31.4	76	30.2
≥6	1,037	34.6	52	44.9	32	30.5	126	49.9
Without health insurance (%)								
<7	241	8.0	16	14.1	12	11.4	25	10.0
7.00–12.99	440	14.7	22	19.2	14	13.8	49	19.5
13.00–20.99	619	20.7	20	17.5	21	20.1	46	18.2
≥21	1,696	56.6	57	49.2	57	54.6	132	52.3
Vacant housing (%)								
<6	664	22.2	16	13.7	29	28.1	46	18.4
6.00–9.99	741	24.8	31	26.8	27	26.2	43	17.2
10.00–16.99	1,012	33.8	33	28.5	30	28.9	83	33.0
≥17	576	19.2	36	31.0	17	16.8	79	31.4
Subtotal^b	2,995	100	116	100	104	100	252	100

Table 7b. Diagnoses of HIV infection among Hispanic/Latino adults, by transmission category, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico (cont)

	Male-to-male sexual contact		Injection drug use		Male-to-male sexual contact and injection drug use		Heterosexual contact ^a	
	No.	%	No.	%	No.	%	No.	%
Female								
Below federal poverty level (%)								
<7	—	—	6	9.9	—	—	25	6.0
7.00–11.99	—	—	6	9.7	—	—	51	12.2
12.00–19.99	—	—	10	17.2	—	—	88	21.0
≥20	—	—	38	63.2	—	—	254	60.9
Less than high school diploma (%)								
<6	—	—	4	7.3	—	—	24	5.6
6.00–10.99	—	—	7	11.1	—	—	38	9.1
11.00–18.99	—	—	12	20.1	—	—	99	23.6
≥19	—	—	37	61.6	—	—	257	61.6
Median household income (U.S. \$)								
<38,000	—	—	33	53.6	—	—	236	56.5
38,000–50,999	—	—	15	24.9	—	—	95	22.7
51,000–69,999	—	—	7	11.9	—	—	59	14.2
≥70,000	—	—	6	9.6	—	—	27	6.5
Unemployed (%)								
<3	—	—	8	13.9	—	—	60	14.5
3.00–3.99	—	—	9	15.0	—	—	50	11.9
4.00–5.99	—	—	13	22.3	—	—	109	26.2
≥6	—	—	30	48.8	—	—	198	47.4
Without health insurance (%)								
<7	—	—	6	10.6	—	—	39	9.2
7.00–12.99	—	—	9	14.5	—	—	64	15.3
13.00–20.99	—	—	13	21.8	—	—	72	17.2
≥21	—	—	32	53.1	—	—	243	58.3
Vacant housing (%)								
<6	—	—	11	19.0	—	—	75	18.0
6.00–9.99	—	—	15	24.1	—	—	95	22.8
10.00–16.99	—	—	20	32.2	—	—	151	36.2
≥17	—	—	15	24.8	—	—	96	23.0
Subtotal^b	—	—	61	100	—	—	417	100
Total^c	2,995	100	177	100	104	100	669	100

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

Hispanics/Latinos can be of any race.

Row entries indicate categories based on census tracts.

For the definitions of SDH indicator variables used in this report, see http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2016_ACSSubjectDefinitions.pdf.

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

^b 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 SDH subpopulations.

^c Totals do not represent all adults whose HIV infection was diagnosed during 2016 in these areas. See Technical Notes for exclusion criteria.

Table 7c. Diagnoses of HIV infection among white adults, by transmission category, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico

	Male-to-male sexual contact		Injection drug use		Male-to-male sexual contact and injection drug use		Heterosexual contact ^a	
	No.	%	No.	%	No.	%	No.	%
Male								
Below federal poverty level (%)								
<7	619	25.9	23	22.5	44	22.9	43	31.3
7.00–11.99	684	28.6	23	22.5	51	26.3	23	16.6
12.00–19.99	617	25.8	23	22.1	50	25.7	42	30.5
≥20	473	19.8	34	32.8	49	25.2	30	21.7
Less than high school diploma (%)								
<6	755	31.6	23	22.6	54	27.6	38	27.3
6.00–10.99	646	27.0	25	23.9	59	30.7	30	21.9
11.00–18.99	561	23.5	25	24.3	43	22.2	37	26.8
≥19	430	18.0	30	29.2	38	19.5	33	24.1
Median household income (U.S. \$)								
<38,000	405	16.9	31	29.6	45	23.2	34	24.3
38,000–50,999	531	22.2	30	28.7	53	27.5	33	24.0
51,000–69,999	724	30.3	19	18.1	50	25.6	38	27.4
≥70,000	733	30.6	24	23.6	46	23.8	33	24.3
Unemployed (%)								
<3	769	32.1	26	24.9	57	29.4	43	31.5
3.00–3.99	517	21.6	26	24.9	43	22.3	22	16.3
4.00–5.99	654	27.3	34	32.6	52	26.7	36	26.0
≥6	453	18.9	18	17.7	42	21.6	36	26.2
Without health insurance (%)								
<7	508	21.2	22	20.9	35	18.1	25	18.2
7.00–12.99	650	27.2	22	21.2	59	30.3	35	25.1
13.00–20.99	627	26.2	28	26.7	53	27.3	42	30.6
≥21	608	25.4	32	31.2	47	24.3	36	26.1
Vacant housing (%)								
<6	623	26.0	31	30.3	52	26.7	38	27.8
6.00–9.99	663	27.7	27	25.7	48	24.9	26	19.1
10.00–16.99	708	29.6	29	28.4	60	30.9	44	32.0
≥17	399	16.7	16	15.6	34	17.5	29	21.1
Subtotal^b	2,393	100	103	100	194	100	138	100

Table 7c. Diagnoses of HIV infection among white adults, by transmission category, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico (cont)

	Male-to-male sexual contact		Injection drug use		Male-to-male sexual contact and injection drug use		Heterosexual contact ^a	
	No.	%	No.	%	No.	%	No.	%
Female								
Below federal poverty level (%)								
<7	—	—	19	16.8	—	—	69	20.3
7.00–11.99	—	—	20	18.6	—	—	70	20.5
12.00–19.99	—	—	39	35.2	—	—	103	30.1
≥20	—	—	32	29.3	—	—	99	29.1
Less than high school diploma (%)								
<6	—	—	13	12.2	—	—	59	17.4
6.00–10.99	—	—	18	16.3	—	—	71	20.7
11.00–18.99	—	—	39	35.2	—	—	95	27.9
≥19	—	—	40	36.2	—	—	116	33.9
Median household income (U.S. \$)								
<38,000	—	—	40	36.8	—	—	111	32.6
38,000–50,999	—	—	28	25.6	—	—	79	23.0
51,000–69,999	—	—	25	22.6	—	—	90	26.2
≥70,000	—	—	17	15.0	—	—	62	18.3
Unemployed (%)								
<3	—	—	26	23.9	—	—	71	20.9
3.00–3.99	—	—	17	15.5	—	—	53	15.5
4.00–5.99	—	—	32	28.7	—	—	106	31.0
≥6	—	—	35	32.0	—	—	112	32.7
Without health insurance (%)								
<7	—	—	14	12.5	—	—	43	12.6
7.00–12.99	—	—	22	20.3	—	—	65	18.9
13.00–20.99	—	—	28	25.0	—	—	109	31.8
≥21	—	—	46	42.2	—	—	125	36.7
Vacant housing (%)								
<6	—	—	28	25.0	—	—	73	21.4
6.00–9.99	—	—	17	15.1	—	—	81	23.7
10.00–16.99	—	—	37	33.8	—	—	97	28.5
≥17	—	—	29	26.0	—	—	90	26.4
Subtotal^b	—	—	110	100	—	—	342	100
Total^c	2,393	100	213	100	194	100	479	100

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

Row entries indicate categories based on census tracts.

For the definitions of SDH indicator variables used in this report, see http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2016_ACSSubjectDefinitions.pdf.

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

^b 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 SDH subpopulations.

^c Totals do not represent all adults whose HIV infection was diagnosed during 2016 in these areas. See Technical Notes for exclusion criteria.

Table 8a. Diagnoses of HIV infection among black/African American adults, by age at diagnosis, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico

	18–24 years		25–34 years		35–44 years		45–54 years		55–64 years		≥65 years	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Male												
Below federal poverty level (%)												
<7	139	110.2	166	106.2	60	34.6	47	27.4	24	20.5	2	2.5
7.00–11.99	221	137.6	280	126.1	112	56.4	78	41.2	40	28.4	4	3.7
12.00–19.99	379	148.5	489	149.4	187	67.3	134	49.4	70	32.4	22	12.8
≥20	658	165.4	810	188.6	318	91.4	248	67.2	137	42.8	63	23.7
Less than high school diploma (%)												
<6	160	110.7	213	142.7	78	59.2	60	48.6	27	31.6	5	8.1
6.00–10.99	281	149.4	333	145.5	132	63.0	75	35.1	49	31.0	3	2.6
11.00–18.99	456	162.4	585	166.0	215	67.6	148	48.0	81	32.0	27	13.5
≥19	500	150.3	615	148.6	252	72.6	224	62.2	114	38.0	56	22.7
Median household income (U.S. \$)												
<38,000	629	162.5	771	180.6	320	93.6	246	67.3	139	43.2	63	22.8
38,000–50,999	364	157.8	446	149.5	158	64	120	50.5	61	32.8	16	10.9
51,000–69,999	258	132.7	360	144.5	125	54.6	77	36.0	42	25.6	8	6.8
≥70,000	145	118.9	168	108.1	74	42.0	64	35.5	29	23.8	4	4.8
Unemployed (%)												
<3	176	107.7	231	102.0	83	41.8	62	35.1	21	16.4	6	6.3
3.00–3.99	161	146.4	182	128.6	66	51.1	51	38.6	24	24.5	6	7.7
4.00–5.99	336	142.0	414	142.7	168	63.8	107	41.8	73	36.4	18	11.8
≥6	724	166.0	919	188.9	360	86.7	287	65.2	153	41.3	61	20.3
Without health insurance (%)												
<7	105	100.7	120	106.3	47	42.6	41	36.9	32	39.0	5	7.0
7.00–12.99	243	129.7	278	130.9	118	58.2	72	35.1	32	19.7	7	5.4
13.00–20.99	381	134.8	513	147.0	183	60.3	154	50.0	81	32.9	22	11.1
≥21	668	181.8	834	180.9	329	86.2	240	63.7	126	41.5	57	25.3
Vacant housing (%)												
<6	233	124.8	238	105.1	110	49.1	76	34.7	45	28.0	14	13.0
6.00–9.99	290	143.6	394	152.0	144	62.4	111	49.9	48	28.5	13	10.2
10.00–16.99	479	153.5	635	167.6	235	74.9	159	49.9	91	34.9	36	17.4
≥17	395	165.8	478	177.2	188	82.1	161	67.0	87	42.6	28	15.5
Subtotal^a	1,397	147.7	1,746	152.6	677	67.3	507	50.4	271	34.0	91	14.6

Table 8a. Diagnoses of HIV infection among black/African American adults, by age at diagnosis, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico (cont)

	18–24 years		25–34 years		35–44 years		45–54 years		55–64 years		≥65 years	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Female												
Below federal poverty level (%)												
<7	18	17.0	45	29.1	42	22.9	25	13.8	17	13.3	3	2.8
7.00–11.99	25	17.4	63	28.6	71	32.7	50	24.0	31	18.5	5	3.4
12.00–19.99	48	19.5	122	35.6	92	30.4	98	31.7	67	25.8	13	5.1
≥20	136	32.2	259	52.1	202	49.7	181	43.2	118	30.9	34	8.4
Less than high school diploma (%)												
<6	16	11.0	43	28.8	29	20.3	22	16.5	20	20.5	5	5.9
6.00–10.99	32	17.2	91	35.6	77	31.5	55	22.7	29	15.5	10	5.9
11.00–18.99	54	19.1	117	30.1	121	33.5	115	31.7	70	22.4	10	3.3
≥19	125	40.8	238	56.5	180	49.8	162	42.9	115	33.9	30	8.3
Median household income (U.S. \$)												
<38,000	135	32.7	257	51.4	191	47.1	186	43.9	129	33.0	35	8.2
38,000–50,999	45	20.5	101	32.8	102	38.1	74	27.9	46	20.5	6	2.8
51,000–69,999	29	17.2	88	34.9	70	27.9	61	25.1	32	16.8	4	2.4
≥70,000	18	16.1	43	27.9	44	23.7	33	18.0	26	20.0	10	8.9
Unemployed (%)												
<3	23	18.9	56	32.3	52	32.0	34	21.6	27	21.1	8	6.4
3.00–3.99	13	12.4	48	34.2	32	23.0	37	27.0	20	18.4	5	4.7
4.00–5.99	51	22.1	109	34.8	100	33.7	103	35.8	51	21.8	15	6.8
≥6	140	30.3	276	46.9	223	43.6	180	33.6	136	29.2	27	5.8
Without health insurance (%)												
<7	10	10.8	29	28.5	34	33.3	21	19.6	21	23.6	4	4.1
7.00–12.99	27	15.3	52	23.7	60	27.4	38	17.0	34	18.7	9	4.8
13.00–20.99	70	24.8	154	40.6	93	26.4	92	26.0	56	18.6	12	4.0
≥21	120	32.5	254	49.4	220	50.4	203	47.0	122	33.5	30	8.9
Vacant housing (%)												
<6	37	21.7	93	39.8	89	35.5	56	23.3	40	22.2	9	6.0
6.00–9.99	43	21.3	105	36.0	89	33.9	67	25.7	36	16.9	9	4.7
10.00–16.99	76	24.5	153	37.2	128	36.0	127	35.1	83	27.0	19	6.1
≥17	71	30.3	138	49.7	101	42.1	104	40.9	74	31.3	18	6.8
Subtotal^a	227	24.7	489	40.2	407	36.7	354	31.7	234	25.0	55	6.0
Total^b	1,624	87.0	2,235	94.7	1,084	51.2	861	40.6	505	29.1	146	9.5

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

Rates are per 100,000 population.

The denominator population used to calculate unemployment rates includes persons aged 16 and 17 years, as these age categories are defined by the American Community Survey (ACS) and could not be altered; see Technical Notes for more details.

The ACS does not provide age- and sex-specific social determinants of health (SDH) variables stratified by race and ethnicity for racial groups, except whites (i.e., white, non-Hispanic/Latino). Therefore, the denominators used for computing race-specific rates may include Hispanics/Latinos, and should be interpreted with caution. See Technical Notes for more details.

Row entries indicate categories based on census tracts.

For the definitions of SDH indicator variables used in this report, see http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2016_ACSSubjectDefinitions.pdf.

^a 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 SDH subpopulations.

^b Totals do not represent all adults whose HIV infection was diagnosed during 2016 in these areas. See Technical Notes for exclusion criteria.

Table 8b. Diagnoses of HIV infection among Hispanic/Latino adults, by age at diagnosis, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico

	18–24 years		25–34 years		35–44 years		45–54 years		55–64 years		≥65 years	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Male												
Below federal poverty level (%)												
<7	88	43.2	144	51.8	67	22.8	41	17.2	14	10.0	4	4.0
7.00–11.99	119	41.6	255	60.1	121	31.5	75	24.8	26	13.8	9	6.0
12.00–19.99	174	41.0	354	59.7	204	38.9	114	28.0	28	11.0	9	4.1
≥20	338	47.9	641	72.4	327	42.6	201	31.3	89	18.7	26	5.2
Less than high school diploma (%)												
<6	98	50.7	163	73.7	79	39.0	31	18.7	16	16.1	2	2.6
6.00–10.99	104	45.4	199	61.7	102	34.4	55	23.7	14	9.5	6	5.1
11.00–18.99	143	38.4	310	60.0	149	31.5	108	28.7	35	14.1	9	3.9
≥19	374	44.9	723	64.0	390	38.9	237	28.9	92	16.3	31	5.7
Median household income (U.S. \$)												
<38,000	306	46.1	618	73.6	312	43.0	195	31.3	90	19.2	26	5.1
38,000–50,999	182	45.1	321	57.9	175	36.5	107	28.7	29	12.4	10	5.0
51,000–69,999	136	41.4	286	60.1	155	35.9	87	26.9	19	9.5	9	5.8
≥70,000	95	43.0	169	54.9	77	23.3	42	15.6	19	12.2	3	2.7
Unemployed (%)												
<3	147	44.6	273	57.9	125	29.3	76	22.7	24	11.4	10	5.5
3.00–3.99	113	44.9	227	66.3	114	36.7	71	27.7	18	10.8	6	4.2
4.00–5.99	203	43.3	410	63.6	216	36.9	125	26.9	53	17.6	12	4.5
≥6	256	44.3	485	66.3	265	40.7	159	29.5	62	16.2	20	5.3
Without health insurance (%)												
<7	60	28.6	111	45.9	69	28.5	30	13.2	21	12.1	4	2.0
7.00–12.99	113	41.7	203	56.6	108	33.2	64	24.0	30	15.4	8	4.1
13.00–20.99	150	45.2	277	60.9	149	36.4	97	30.1	20	9.7	13	7.4
≥21	396	48.9	804	71.4	394	39.7	240	31.0	86	17.7	23	5.7
Vacant housing (%)												
<6	170	42.4	316	57.7	153	29.2	91	21.7	21	8.5	5	2.5
6.00–9.99	192	49.5	344	63.6	168	35.2	95	25.4	32	13.8	13	6.9
10.00–16.99	227	45.5	471	71.0	240	41.3	151	32.5	55	17.1	15	5.0
≥17	130	39.1	263	61.2	158	40.8	94	28.3	49	19.0	15	5.2
Subtotal^a	719	44.2	1,395	63.7	720	36.5	431	27.1	157	14.8	48	4.9

Table 8b. Diagnoses of HIV infection among Hispanic/Latino adults, by age at diagnosis, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico (cont)

	18–24 years		25–34 years		35–44 years		45–54 years		55–64 years		≥65 years	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Female												
Below federal poverty level (%)												
<7	2	1.1	10	3.6	7	2.3	5	2.0	6	3.8	1	0.8
7.00–11.99	7	2.6	17	4.3	14	3.7	11	3.7	6	2.9	2	1.0
12.00–19.99	10	2.6	33	6.2	23	4.6	13	3.2	15	5.4	4	1.4
≥20	32	4.7	80	9.7	71	9.3	67	10.2	37	7.0	6	0.9
Less than high school diploma (%)												
<6	4	2.1	10	4.5	9	4.2	2	1.1	2	1.7	1	0.9
6.00–10.99	6	2.7	13	4.2	11	3.6	6	2.5	8	4.7	1	0.6
11.00–18.99	9	2.5	23	4.7	29	6.1	23	5.9	22	7.8	5	1.6
≥19	32	4.3	94	9.3	66	6.9	65	8.2	32	5.3	6	0.9
Median household income (U.S. \$)												
<38,000	29	4.6	77	9.8	60	8.3	61	9.6	35	6.7	7	1.1
38,000–50,999	16	4.3	32	6.6	30	6.6	18	4.9	12	4.7	2	0.8
51,000–69,999	5	1.7	19	4.3	14	3.3	13	4.0	13	6.0	3	1.5
≥70,000	1	0.5	12	3.9	11	3.2	4	1.4	4	2.4	1	0.7
Unemployed (%)												
<3	9	3.2	29	7.1	14	3.5	9	2.8	7	3.1	1	0.4
3.00–3.99	3	1.3	16	5.0	14	4.5	14	5.4	7	3.8	5	2.6
4.00–5.99	18	4.1	32	5.3	27	4.7	25	5.3	19	5.7	2	0.6
≥6	21	3.8	63	9.1	60	9.1	48	8.6	31	7.3	5	1.0
Without health insurance (%)												
<7	3	1.5	8	3.3	12	4.6	12	4.8	8	4.0	2	0.8
7.00–12.99	3	1.1	20	5.7	20	6.0	14	4.8	14	6.3	2	0.8
13.00–20.99	6	1.9	25	5.9	20	4.9	21	6.5	11	4.8	2	0.9
≥21	39	5.3	87	8.6	63	6.7	49	6.5	31	6.1	7	1.3
Vacant housing (%)												
<6	10	2.7	25	4.8	24	4.5	12	2.8	13	4.7	3	1.1
6.00–9.99	12	3.3	39	7.7	24	5.1	21	5.6	13	5.1	1	0.4
10.00–16.99	21	4.5	50	8.1	33	5.8	37	7.8	26	7.5	4	1.0
≥17	8	2.6	26	6.8	34	9.3	26	7.8	12	4.3	5	1.4
Subtotal^a	51	3.4	140	6.9	115	5.9	96	6.0	64	5.5	13	1.0
Total^b	770	24.5	1,535	36.4	835	21.3	527	16.4	221	9.9	61	2.7

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

Hispanics/Latinos can be of any race.

Rates are per 100,000 population.

The denominator population used to calculate unemployment rates includes persons aged 16 and 17 years, as these age categories are defined by the American Community Survey (ACS) and could not be altered; see Technical Notes for more details.

The ACS does not provide age- and sex-specific social determinants of health (SDH) variables stratified by race and ethnicity for racial groups, except whites (i.e., white, non-Hispanic/Latino). Therefore, the denominators used for computing race-specific rates may include Hispanics/Latinos, and should be interpreted with caution. See Technical Notes for more details.

Row entries indicate categories based on census tracts.

For the definitions of SDH indicator variables used in this report, see http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2016_ACSSubjectDefinitions.pdf.

^a 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 SDH subpopulations.

^b Totals do not represent all adults whose HIV infection was diagnosed during 2016 in these areas. See Technical Notes for exclusion criteria.

Table 8c. Diagnoses of HIV infection among white adults, by age at diagnosis, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico

	18–24 years		25–34 years		35–44 years		45–54 years		55–64 years		≥65 years	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Male												
Below federal poverty level (%)												
<7	100	11.1	215	15.1	129	7.9	165	8.2	87	4.6	34	1.6
7.00–11.99	101	13.5	250	19.3	167	13.9	147	10.4	92	6.3	25	1.4
12.00–19.99	98	14.5	261	23.6	144	15.8	145	13.6	66	6.0	19	1.4
≥20	90	13.4	211	34.8	110	25.9	122	25.3	41	8.3	12	2.1
Less than high school diploma (%)												
<6	111	9.9	283	20.1	152	11.0	180	11.1	102	6.5	42	2.3
6.00–10.99	121	13.9	256	19.0	143	11.2	141	9.2	76	5.0	25	1.4
11.00–18.99	96	14.1	225	20.4	141	14.0	131	10.8	61	4.9	13	0.9
≥19	61	17.7	173	29.8	114	22.2	127	20.8	47	7.7	10	1.4
Median household income (U.S. \$)												
<38,000	78	13.4	184	32.9	86	20.4	110	21.8	45	8.4	11	1.5
38,000–50,999	94	13.3	225	21.5	145	16.5	115	11.0	53	4.8	17	1.1
51,000–69,999	115	13.7	268	19.2	174	13.8	166	11.2	83	5.4	25	1.3
≥70,000	102	11.9	260	18.2	145	9.0	188	9.7	105	5.9	37	2.0
Unemployed (%)												
<3	122	11.8	290	18.4	169	10.7	187	10.0	97	5.2	30	1.3
3.00–3.99	88	14.4	197	21.3	125	13.9	124	11.5	56	5.3	20	1.6
4.00–5.99	101	12.0	260	21.2	148	13.2	144	10.8	92	6.9	31	2.0
≥6	78	14.6	190	26.6	108	18.6	124	18.0	41	5.9	9	1.2
Without health insurance (%)												
<7	78	8.4	183	15.1	87	6.6	128	7.9	79	5.0	35	1.8
7.00–12.99	116	12.6	251	18.6	159	12.6	148	10.0	73	5.0	19	1.1
13.00–20.99	104	14.3	257	22.5	153	15.2	149	12.7	70	5.9	18	1.3
≥21	91	20.7	246	33.7	151	25.5	154	22.1	64	9.2	18	2.3
Vacant housing (%)												
<6	108	11.6	239	16.6	133	8.9	158	9.0	85	5.3	22	1.4
6.00–9.99	106	14.3	278	23.9	143	13.6	151	12.4	69	5.8	18	1.4
10.00–16.99	108	13.6	288	25.3	175	17.7	178	15.2	69	5.8	25	1.7
≥17	67	12.5	132	19.2	99	15.2	92	11.0	63	6.5	25	1.6
Subtotal^a	389	12.9	937	21.1	550	13.2	579	11.6	286	5.8	90	1.5

Table 8c. Diagnoses of HIV infection among white adults, by age at diagnosis, sex, and selected social determinants of health, 2016—13 states, the District of Columbia, and Puerto Rico (cont)

	18–24 years		25–34 years		35–44 years		45–54 years		55–64 years		≥65 years	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Female												
Below federal poverty level (%)												
<7	16	2.0	19	1.3	16	1.0	15	0.7	19	0.9	3	0.1
7.00–11.99	14	2.0	26	2.0	14	1.2	18	1.3	16	1.0	3	0.1
12.00–19.99	17	2.6	41	3.9	32	3.6	27	2.5	22	1.9	3	0.2
≥20	17	2.5	36	6.6	33	8.4	31	6.7	14	2.8	1	0.1
Less than high school diploma (%)												
<6	14	1.3	14	1.0	16	1.2	16	1.0	12	0.7	1	0.0
6.00–10.99	15	1.8	20	1.5	14	1.1	20	1.3	17	1.0	3	0.1
11.00–18.99	17	2.6	42	3.9	31	3.1	22	1.8	19	1.5	4	0.2
≥19	18	5.7	46	8.8	34	7.3	33	5.8	23	3.7	2	0.2
Median household income (U.S. \$)												
<38,000	15	2.6	42	8.3	38	9.6	36	7.3	19	3.4	2	0.2
38,000–50,999	16	2.4	30	3.0	19	2.2	22	2.1	17	1.4	3	0.2
51,000–69,999	21	2.6	33	2.4	20	1.6	20	1.3	18	1.1	3	0.1
≥70,000	12	1.5	17	1.2	18	1.1	13	0.7	17	0.9	2	0.1
Unemployed (%)												
<3	19	2.0	20	1.3	20	1.3	20	1.1	18	0.9	1	0.0
3.00–3.99	7	1.2	16	1.8	17	1.9	17	1.6	10	0.9	3	0.2
4.00–5.99	20	2.5	37	3.1	25	2.3	26	1.9	25	1.8	5	0.3
≥6	18	3.4	49	7.2	33	5.8	28	4.1	18	2.5	1	0.1
Without health insurance (%)												
<7	11	1.3	13	1.1	13	1.0	11	0.7	9	0.5	0	0.0
7.00–12.99	13	1.5	25	1.9	16	1.3	14	0.9	17	1.1	2	0.1
13.00–20.99	19	2.7	32	2.9	28	2.9	30	2.5	23	1.8	5	0.3
≥21	21	5.1	52	7.7	38	6.9	36	5.3	22	3.1	3	0.3
Vacant housing (%)												
<6	13	1.5	24	1.7	21	1.4	20	1.1	21	1.2	2	0.1
6.00–9.99	21	3.0	23	2.0	24	2.3	13	1.0	15	1.2	2	0.1
10.00–16.99	15	1.9	43	3.9	20	2.1	30	2.6	23	1.8	4	0.2
≥17	15	3.0	32	5.0	30	4.9	28	3.4	12	1.2	2	0.1
Subtotal^a	64	2.2	122	2.8	95	2.3	91	1.8	71	1.4	10	0.1
Total^b	453	7.7	1,509	12.1	645	7.8	670	6.7	357	3.5	100	0.8

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

Rates are per 100,000 population.

The denominator population used to calculate unemployment rates includes persons aged 16 and 17 years, as these age categories are defined by the American Community Survey (ACS) and could not be altered; see Technical Notes for more details.

The ACS does not provide age- and sex-specific social determinants of health (SDH) variables stratified by race and ethnicity for racial groups, except whites (i.e., white, non-Hispanic/Latino). Therefore, the denominators used for computing race-specific rates may include Hispanics/Latinos, and should be interpreted with caution. See Technical Notes for more details.

Row entries indicate categories based on census tracts.

For the definitions of SDH indicator variables used in this report, see http://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2016_ACSSubjectDefinitions.pdf.

^a 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 SDH subpopulations.

^b Totals do not represent all adults whose HIV infection was diagnosed during 2016 in these areas. See Technical Notes for exclusion criteria.

Social Determinants of Health Among Adults with Diagnosed HIV Infection, 2016

Part B: County-level Social Determinants of Health and Selected Care Outcomes Among Adults with Diagnosed HIV Infection—39 States and the District of Columbia

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Abbreviations

ACS	American Community Survey
AIDS	acquired immunodeficiency syndrome
ART	antiretroviral therapy
CD4	CD4+ T-lymphocyte count (cells/ μ L) or percentage
CDC	Centers for Disease Control and Prevention
DHAP	Division of HIV/AIDS Prevention
HIV	human immunodeficiency virus
IDU	injection drug use
NHSS	National HIV Surveillance System
NIR	no identified risk factor
OMB	Office of Management and Budget
SDH	social determinants of health
VA	U.S. Department of Veterans Affairs
VL	viral load (copies/mL)

This surveillance supplemental report is released in conjunction with part A of an *HIV Surveillance Supplemental Report*, presenting the results of census tract-level surveillance data at the state/local level in order to increase the 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. The current report, part B, presents the results of focused analyses of National HIV Surveillance System (NHSS) [1] data to measure progress toward achieving national goals and the social determinants associated with HIV, and complements the 2016 *HIV Surveillance Report* [2], and adds to the *Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2016* [3] surveillance supplemental report.

Social determinants of health (SDH) are overlapping social structures and economic systems (e.g., social environment, physical environment, health services, and structural and societal factors) that are responsible for most health inequities [4]. SDH are linked to a lack of opportunity and to a lack of resources to protect, improve, and maintain health [4]. Addressing the SDH that adversely affect health outcomes may (1) advance efforts in reducing disparities in HIV diagnosis rates between populations, and (2) help to quantify health differences between populations or geographic areas, which can provide insight for identifying populations or areas that may benefit from HIV testing, prevention, and treatment initiatives.

The Centers for Disease Control and Prevention (CDC) collects data to monitor progress toward achieving the national goals for HIV testing, care, and treatment outcomes and HIV-related disparities in the United States set forth in the CDC Division of HIV/AIDS Prevention's Strategic Plan [5] and other federal directives [6, 7]. Examining social determinants that affect the health of populations may be useful in identifying and monitoring health inequities, such as disparities in HIV testing, engagement in care, and treatment.

This report presents HIV data from the NHSS on (1) persons aged ≥ 18 years with HIV infection diagnosed during 2016 and (2) persons living with diagnosed HIV infection at year-end 2015 [5]. It also

presents SDH data from the U.S. Census Bureau's American Community Survey (ACS). Data were limited to persons aged ≥ 18 years to more accurately represent the population from which the SDH indicator variables were collected by ACS.

Monitoring stage of disease at diagnosis, linkage to HIV medical care, receipt of HIV medical care, and viral suppression (on the basis of NHSS data) is dependent upon complete reporting of HIV-related laboratory results (including CD4+ T-lymphocyte [CD4] and viral load results) to HIV surveillance programs and CDC. Although most jurisdictions have regulations that require laboratories and providers to report at least a subset of CD4 and viral load test results to health departments, not all jurisdictions have mandatory reporting of all levels of CD4 and viral load (i.e., detectable and undetectable) results. As of December 2017, 40 jurisdictions (39 states and the District of Columbia) required reporting of all levels of CD4 and viral load test results and had reported to CDC at least $\geq 95\%$ of the test results they had received by December 2017 (for specimens collected from January 2015 through September 2017). Data from these 40 jurisdictions represent 85.8% of all persons aged ≥ 18 years living with diagnosed HIV infection at year-end 2015 in the United States and are therefore not representative of data on all persons living with diagnosed HIV infection in the United States. See Table 1 and Technical Notes for a list of the 40 jurisdictions.

For tables that include data by transmission category, the data were statistically adjusted to account for missing transmission category (see Technical Notes).

REPORT CHANGES

This report includes data from 40 jurisdictions that reported complete CD4 and viral load data. The jurisdictions included in this report differ from those in the previous report. A jurisdiction's data are included only if that jurisdiction met CDC's criteria (see Technical Notes) for the collection and reporting of CD4 and viral load test results for all the data years examined. In comparison with the 2015 report, the 2016 report includes data from 2 additional states that met the criteria.

DEFINITIONS AND DATA SPECIFICATIONS

This report presents numbers and percentages of diagnoses of HIV infection through 2016 among persons aged ≥ 18 years by 6 SDH indicators and selected characteristics that include sex, age, race/ethnicity, transmission category, and area of residence. Data by race/ethnicity are presented for blacks/African Americans, Hispanics/Latinos, whites, and other. “Other” includes American Indians/Alaska Natives, Asians, Native Hawaiians/other Pacific Islanders, and persons of multiple races. The only exception is Table 2 that presents data on all racial/ethnic groups.

The SDH data presented in this report are the result of the linkage of county-level HIV diagnosis data to SDH indicator variables from the 2012–2016 ACS. HIV diagnosis, stage 3 (AIDS), and linkage to care data for the year 2016 were calculated based on where the person was living at the time of diagnosis. Receipt of care and viral suppression analyses were assessed for persons with HIV infection diagnosed by year-end 2014 and alive at year-end 2015 using the person’s address of residence at the end of 2015 (i.e., most recent known address).

SDH indicator measures are as follows:

- **Federal poverty status:** proportion of residents in the county who were living below the U.S. poverty level (i.e., below a specified threshold) at any time during the 12 months before the survey response (individuals aged ≥ 18 years)
- **Education level:** proportion of residents in the county with less than a high school diploma (individuals aged ≥ 18 years)
- **Median household income:** median income for a household within the county at any time during the 12 months before the survey response
- **Employment status:** proportion of residents in the county in the workforce without a job (individuals aged ≥ 16 years)
- **Health insurance coverage:** proportion of residents in the county without health insurance or health coverage plan (individuals aged ≥ 18 years)
- **Vacant housing:** proportion of housing units in the census tract that were vacant at the time of the survey response

The data presented in this HIV surveillance supplemental report are a snapshot of the environment in which people lived at the time of HIV diagnosis or

most recently. Some SDH indicators may be correlated (e.g., lack of education has been associated with both poverty and low income in the United States [8, 9], but correlations between SDH indicators were not analyzed for this report. Also, use of county-level data may not fully represent an individual’s socioeconomic status [10, 11]. Caution should be used when interpreting results.

HIGHLIGHTS OF ANALYSES

Important note: The statements in this section for social determinants of health data focus on the lowest percentages at the SDH extremes only (e.g., highest poverty, highest unemployment) and not the overall values within the column, unless otherwise indicated. Also, when highlighting care outcomes the “other” racial group is not considered when making comparisons across groups. Please read all table titles and footnotes carefully to ensure a complete understanding of the displayed data.

Stage 3 (AIDS) Classification at Diagnosis of HIV Infection

Among 33,336 persons aged ≥ 18 years with an HIV infection diagnosis during 2016 in the 40 jurisdictions that reported completed CD4 and viral load test results to CDC, 21.0% of infections were classified as stage 3 (AIDS) at the time of diagnosis (Table 1).

The following percentages are for persons with HIV infection classified as stage 3 (AIDS) at the time of initial diagnosis during 2016, within each characteristic of interest presented (Table 1).

- **Race/ethnicity:** The highest percentage was for Hispanics/Latinos (22.0%), followed by other racial groups—which includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, and multiple races—(21.7%), whites (21.3%), and blacks/African Americans (20.2%).
- **State:** The highest percentage was in Wyoming (38.1%), followed by Delaware (31.2%), West Virginia (30.3%), and South Dakota (29.3%).

Stage of Disease at Diagnosis of HIV Infection

Stage of disease at diagnosis (i.e., HIV infection, stage 1, 2, 3 [AIDS], or unknown) was based on data for persons with HIV infection diagnosed during 2016 in the 40 jurisdictions that reported complete CD4 and viral load test results to CDC. Among 33,336 persons, the

stage of disease at diagnosis was classified as follows (Table 2): stage 1 (24.8%), stage 2 (29.6%), stage 3 (AIDS) (21.0%), and stage unknown (24.6%).

- **Sex:** For both sexes, >50% of infections were diagnosed at an earlier stage (stage 1 or 2) (males: 24.3% [stage 1], 30.1% [stage 2] and females: 27.0% [stage 1], 27.4% [stage 2]). Among females, there was a higher percentage of stage 3 classifications than among males.
- **Age group:** The highest percentages of persons whose infection was diagnosed at an earlier stage (stage 1 or 2) were for persons aged 18–24 years (26.9% [stage 1], 34.2% [stage 2]), followed by persons aged 25–34 years (27.2% [stage 1], 31.0% [stage 2]). In general, the percentages of early diagnosis decreased as age increased. Among persons with a stage 3 classification, the higher percentages were for persons in older age groups.
- **Race/ethnicity:** For all races/ethnicities, >50% of infections were diagnosed at an earlier stage (stage 1 or 2), except American Indians/Alaska Natives. The highest percentages of persons whose infection was diagnosed at an earlier stage (stage 1 or 2) were for Native Hawaiians/Other Pacific Islanders (33.3% [stage 1]; 25.6% [stage 2]), followed by those for persons of multiple races (25.3% [stage 1]; 32.6% [stage 2]), whites (28.9% [stage 1]; 27.4% [stage 2]), Hispanics/Latinos (24.5% [stage 1]; 30.5% [stage 2]) and Asians (18.0% [stage 1]; 36.3% [stage 2]). The stage-unknown percentages were slightly higher among blacks/African Americans and American Indians/Alaska Natives (27.0% and 26.4%, respectively). Please use caution when interpreting data for American Indians/Alaska Natives and for Native Hawaiians/other Pacific Islanders: the numbers are small.
- **Transmission category:** The highest percentages of persons whose infection was diagnosed at an earlier stage of HIV disease were for males with infection attributed to male-to-male sexual contact only (25.2% [stage 1]; 31.0% [stage 2]) and male-to-male sexual contact *and* injection drug use (26.7% [stage 1]; 28.1% [stage 2]). The lowest percentages were for males with infection attributed to heterosexual contact (16.1% [stage 1]; 26.1% [stage 2]) and for males with infection attributed to injection drug use (22.3% [stage 1];

24.9% [stage 2]). Data were statistically adjusted to account for missing transmission category.

Linkage to HIV Medical Care after Diagnosis of HIV Infection, by Selected Characteristics and Selected Social Determinants of Health

Linkage to HIV medical care was based on data for persons with infection diagnosed during 2016 in the 40 jurisdictions that reported complete CD4 and viral load test results to CDC. Linkage to HIV medical care was measured by documentation of at least 1 CD4 or viral load test performed ≤ 1 month or ≤ 3 months after diagnosis. Of the 33,336 persons whose infection was diagnosed during 2016, 75.8% (25,283 persons) were linked to HIV medical care ≤ 1 month after diagnosis, and 85.2% (28,404) were linked to HIV medical care ≤ 3 months after diagnosis (Table 3).

These highlights focus on linkage ≤ 1 month after diagnosis, one of the current national goals for HIV prevention and care. The SDH data focus on the lowest percentages at the SDH extremes only (e.g., highest poverty, highest unemployment). The following percentages are for persons who were linked to HIV medical care ≤ 1 month after diagnosis (Tables 3–5).

Race/ethnicity by sex (Table 3)

Overall, linkage to care was lower among black/African American males (71.0%) and females (75.0%) than in all other racial/ethnic groups, and higher among white males (80.4%) than in all other male racial/ethnic groups, and higher among Hispanic/Latino females (77.4%) than in all other female racial/ethnic groups.

- **Blacks/African Americans:** Among black/African American males, the lowest percentages were among those who lived in counties with the lowest education (68.9%) and lowest health insurance or health care coverage (66.2%). Among black/African American females, linkage was lowest among those who lived in counties with the highest poverty (73.2%), lowest education (71.6%), lowest unemployment (71.9%), and lowest health insurance or health care coverage (69.7%).
- **Hispanics/Latinos:** Among Hispanic/Latino males, the lowest percentages were among those who lived in counties with the lowest education (75.6%), highest unemployment (76.3%), and lowest health insurance or health care coverage (75.9%). Among Hispanic/

Latino females, linkage was lowest among those who lived in counties with the lowest poverty (74.8), highest education (75.8), lowest unemployment (64.3%), and lowest health insurance or health care coverage (75.3%).

- **Whites:** Among white males, the lowest percentages were among those who lived in counties with the lowest education (77.1%) and lowest health insurance or health care coverage (77.0%). Among white females, linkage was lowest among those who lived in counties with the highest unemployment (75.7%) and lowest health insurance or health care coverage (70.6%).

Age by sex (Table 4)

Overall, linkage to care was lower among males (71.4%) aged 18–24 years than males in all other age groups, lower among females (73.9%) aged 25–34 years than females in all other age groups, linkage was higher among males (80.8%) aged 45–54 years than males in all other age groups, and higher among females (79.3%) aged ≥55 years than females in all other age groups.

- **Ages 18–24 years:** Among males aged 18–24 years, the lowest percentage (68.8%) was among those who lived in counties with the lowest health insurance or health care coverage. Among females aged 18–24 years, linkage was lowest among those who lived in counties with the highest poverty (68.5%), lowest income (68.0%), highest unemployment (70.0%), and lowest health insurance or health care coverage (68.0%).
- **Ages 25–34 years:** Among males aged 25–34 years, the lowest percentage (73.0%) was among those who lived in counties with the lowest health insurance or health care coverage. Among females aged 25–34 years, linkage was lowest among those who lived in counties with the lowest education (71.6%) and lowest health insurance or health care coverage (69.2%).
- **Ages 35–44 years:** Among males aged 35–44 years, the lowest percentages were among those who lived in counties with the lowest education (73.0%), lowest income (73.6%), highest unemployment (75.4%), and lowest health insurance or health care coverage (75.0%). Among females aged 35–44 years, linkage was lowest among

those who lived in counties with the highest poverty (75.2%), lowest education (71.5%), lowest unemployment (67.6%), and lowest health insurance or health care coverage (72.4%).

- **Ages 45–54 years:** Among males aged 45–54 years, the lowest percentages were among those who lived in counties with the lowest education (75.8%), highest unemployment (78.8%), and lowest health insurance or health care coverage (75.3%). Among females aged 45–54 years, linkage was lowest among those who lived in counties with the highest poverty (73.7%), 2 lowest education levels (74.6%), lowest unemployment (71.4%), and lowest health insurance or health care coverage (70.7%).
- **Ages ≥55 years:** Among males aged ≥55 years, the lowest percentages were among those who lived in counties with the lowest education (74.9%), lowest income (75.9%), highest unemployment (78.1%), lowest health insurance or health care coverage (74.0%). Among females aged ≥55 years, linkage was lowest among those who lived in counties with the highest poverty (77.5%), highest unemployment (77.1%), and lowest health insurance or health care coverage (76.6%).

Transmission category by sex (Table 5)

Overall, among males, linkage to care was lower among males with infection attributed to heterosexual contact (73.5%) and higher among males with infection attributed to male-to-male sexual contact (76.3%) than all other transmission categories. For females, among the 2 transmission categories for which data are presented, linkage was slightly lower among females with infection attributed to injection drug use (75.4%) compared to females with infection attributed to heterosexual contact (75.9%). Data were statistically adjusted to account for missing transmission category.

- **Male-to-male sexual contact:** Among males with infection attributed to male-to-male sexual contact, the lowest percentages were among those who lived in counties with the lowest education (73.9%), highest unemployment (75.7%), and lowest health insurance or health care coverage (73.4%).
- **Injection drug use:** Among males with infection attributed to injection drug use, the lowest percentages were among those who lived in coun-

ties with the highest unemployment (73.4%), lowest health insurance or health care coverage (70.1%), and highest vacant housing units (69.2%). Among females with infection attributed to injection drug use, linkage was lowest among those who lived in counties with the highest unemployment (74.1%) and lowest health insurance or health care coverage (72.2%).

- **Male-to-male sexual contact and injection drug use:** Among males with infection attributed to male-to-male sexual contact and injection drug use, the lowest percentages were among those who lived in counties with the highest poverty (72.0%), lowest education (70.2%), lowest income (68.2%), highest unemployment (71.5%), lowest health insurance or health care coverage (68.4%), and highest vacant housing units (69.4%).
- **Heterosexual contact:** Among males with infection attributed to heterosexual contact, the lowest percentages were among those who lived in counties with the highest unemployment (71.9%) and lowest health insurance or health care coverage (70.3%). Among females with infection attributed to heterosexual contact, linkage was lowest among those who lived in counties with the highest poverty (74.4%), lowest education (73.6%), lowest unemployment (73.4%), and lowest health insurance or health care coverage (71.1%).

Receipt of HIV Medical Care, by Selected Characteristics and Selected Social Determinants of Health

Receipt of HIV medical care was based on data for persons with HIV infection diagnosed by year-end 2014 and alive at year-end 2015 in the 40 jurisdictions that reported complete CD4 and viral load test results to CDC. Receipt of any HIV medical care was measured by documentation of ≥ 1 CD4 or viral load tests performed during 2015; retention in HIV medical care (receipt of continuous care) was measured by documentation of ≥ 2 CD4 or viral load tests performed at least 3 months apart during 2015. During 2015, 73.4% of 791,904 persons received HIV medical care, and 57.2% met the criteria for continuous HIV medical care (Table 6).

The highlights below are based on persons who were retained in, or received, continuous HIV medical care, one of the current national goals for HIV prevention and care. The SDH data focus on the lowest percentages at the SDH extremes only (e.g., highest poverty, highest unemployment). The following percentages are for persons who were retained in continuous HIV medical care (Tables 6–8).

Race/ethnicity by sex (Table 6)

Overall, retention in HIV medical care (≥ 2 CD4 or VL tests) was lower among black/African American males (53.8%) than all other male racial/ethnic groups and lower among white females (54.3%) than all other female racial/ethnic groups.

- **Blacks/African Americans:** Among black/African American males, the lowest percentages were among those who lived in counties with the lowest poverty (49.4%), lowest unemployment (48.4%), highest health insurance or health care coverage (51.5%), and highest vacant housing units (53.4%). Among black/African American females, the lowest percentages were among those who lived in counties with the lowest poverty (51.5%), highest education (54.5%), lowest unemployment (51.3%), and highest health insurance or health care coverage (54.8%).
- **Hispanics/Latinos:** Among Hispanic/Latino males, the lowest percentages were among those who lived in counties with the lowest poverty (52.4%), highest education (53.7%), lowest unemployment (42.8%), and highest vacant housing units (49.2%). Among Hispanic/Latino females, retention in care was lowest among those who lived in counties with the lowest poverty (58.8%), lowest unemployment (51.2%), and lowest health insurance or health care coverage (60.7%).
- **Whites:** Among white males, the lowest percentages were among those who lived in counties with the lowest poverty (56.3%), highest income (58.1%), lowest unemployment (53.9%), and lowest vacant housing units (58.8%). Among white females, retention in care was lowest among those who lived in counties with the highest poverty (51.3%), 2 lowest education levels (53.5%), lowest income (53.8%), and lowest unemployment (53.2%).

Age by sex (Table 7)

Overall, retention in HIV medical care was lower among males (53.9%) and females (51.1%) aged 25–34 years than all other age groups. Retention in care was higher among males (58.6%) aged ≥ 45 years than all other male age groups, and retention in care was higher among females (62.1%) aged ≥ 55 years than all other female age groups.

- **Ages 18–24 years:** Among males aged 18–24 years, the lowest percentages were among those who lived in counties with the lowest poverty (53.4%), lowest unemployment (45.6%), and lowest health insurance or health care coverage (53.0%). Among females aged 18–24 years, retention in care was lowest among those who lived in counties with the lowest unemployment (52.6%) and lowest health insurance or health care coverage (53.4%).
- **Ages 25–34 years:** Among males aged 25–34 years, the lowest percentages were among those who lived in counties with the lowest poverty (50.3%), highest and second lowest income levels (52.8%), and lowest unemployment (51.2%). Among females aged 25–34 years, retention in care was lowest among those who lived in counties with the highest unemployment (50.0%), and lowest health insurance or health care coverage (49.6%).
- **Ages 35–44 years:** Among males aged 35–44 years, the lowest percentages were among those who lived in counties with the lowest poverty (52.1%) and lowest unemployment (49.8%). Among females aged 35–44 years, retention in care was lowest among those who lived in counties with the lowest poverty (50.4%), highest education (52.6%), and lowest unemployment (49.1%).
- **Ages 45–54 years:** Among males aged 45–54 years, the lowest percentages were among those who lived in counties with the lowest poverty (54.9%), highest income (57.2%), lowest unemployment (51.6%), and lowest vacant housing units (58.4). Among females aged 45–54 years, retention in care was lowest among those who lived in counties with the lowest poverty (54.9%) and lowest unemployment (52.7%).
- **Ages ≥ 55 years:** Among males aged ≥ 55 years, the lowest percentages were among those who

lived in counties with the lowest poverty (55.2%) and lowest unemployment (50.2%). Among females aged ≥ 55 years, retention in care was lowest among those who lived in counties with the lowest poverty (56.1%), highest income (59.5%), lowest unemployment (55.2%), and lowest vacant housing units (61.7%).

Transmission category by sex (Table 8)

Overall, among males, retention in HIV medical care was lower among those with infection attributed to injection drug use (51.1%) and higher among those with infection attributed to male-to-male sexual contact *and* injection drug use (61.6%) than all other transmission categories. For females, among the 2 transmission categories for which data are presented, retention in care was lower among those with infection attributed to injection drug use (57.3%) compared to those with infection attributed to heterosexual contact (57.4%). Data were statistically adjusted to account for missing transmission category.

- **Male-to-male sexual contact:** Among males with infection attributed to male-to-male sexual contact, the lowest percentages were among those who lived in counties with the lowest poverty (53.9%), highest income (56.7%), lowest unemployment (52.0%), and lowest vacant housing units (57.6%).
- **Injection drug use:** Among males with infection attributed to injection drug use, the lowest percentage was among those who lived in counties with the lowest unemployment (41.3%) and highest and second lowest vacant housing units (48.9%). Among females with infection attributed to injection drug use, retention in care was lowest among those who lived in counties with the lowest poverty (54.7%) and lowest unemployment (47.7%).
- **Male-to-male sexual contact *and* injection drug use:** Among males with infection attributed to male-to-male sexual contact *and* injection drug use, the lowest percentages were among those who lived in counties with the lowest poverty (59.8%) and lowest unemployment (54.8%).
- **Heterosexual contact:** Among males with infection attributed to heterosexual contact, the lowest percentages were among those who lived in counties with the lowest poverty (51.5%), highest and second lowest education level (52.8%),

and lowest unemployment (50.0%). Among females with infection attributed to heterosexual contact, retention in care was lowest among those who lived in counties with the lowest poverty (53.2%), highest education (55.6%), highest and second lowest income level 56.0%, and lowest unemployment (53.5%).

Viral Suppression, by Selected Characteristics and Selected Social Determinants of Health

Viral suppression was measured for persons with HIV infection diagnosed by year-end 2014 and alive at year-end 2015 in the 40 jurisdictions that reported complete CD4 and viral load laboratory results to CDC. Viral suppression was defined as a viral load result of <200 copies/mL at the most recent viral load test during 2015. During 2015, 59.8% of 791,904 persons living with diagnosed HIV infection were virally suppressed (Table 9).

The SDH data focus on the lowest percentages at the SDH extremes only (e.g., highest poverty, highest unemployment). The following percentages are for persons whose most recent viral load test in 2015 indicated viral suppression (denominator: persons who were alive at year-end 2015) (Tables 9–11).

Race/ethnicity by sex (Table 9)

Overall, viral suppression was lower among both black/African American males (53.2%) and females (55.5%) than all other racial/ethnic groups, and viral suppression was higher among white males (67.6%) than all other male racial/ethnic groups.

- **Blacks/African Americans:** Among black/African American males, the lowest percentages were among those who lived in counties with the lowest unemployment (44.8%) and lowest health insurance or health care coverage (52.4%). Among black/African American females, viral suppression was lowest among those who lived in counties with the lowest unemployment (54.3%) and lowest health insurance or health care coverage (54.5%).
- **Hispanics/Latinos:** Among Hispanic/Latino males, the lowest percentages were among those who lived in counties with the lowest poverty (57.6%), highest education (58.1%), lowest unemployment (44.5%), and highest vacant housing units (51.3%). Among Hispanic/Latino females, the lowest percentages were among those who lived in counties with the lowest

unemployment (57.1%) and lowest health insurance or health care coverage (60.5%).

- **Whites:** Among white males, the lowest percentages were among those who lived in counties with the highest poverty (65.8%) and lowest unemployment (63.2%). Among white females, viral suppression was lowest among those who lived in counties with the highest poverty (55.3%), lowest education (57.2%), lowest income (56.6%), and lowest health insurance or health care coverage (58.3%).

Age by sex (Table 10)

Overall, viral suppression was lower among both males (52.5%) and females (45.1%) aged 18–24 years than all other age groups, highest among males aged 45–54 years (62.9%) than all other male age groups, and highest among females (64.2%) aged ≥55 years than all other female age groups.

- **Ages 18–24 years:** Among males aged 18–24 years, the lowest percentages were among those who lived in counties with the lowest unemployment (48.3%) and lowest health insurance or health care coverage (50.2%). Among females aged 18–24 years, viral suppression was lowest among those who lived in counties with the highest unemployment (43.6%) and lowest health insurance or health care coverage (42.0%).
- **Ages 25–34 years:** Among males aged 25–34 years, the lowest percentage (53.1%) was among those who lived in counties with the lowest unemployment. Among females aged 25–34 years, viral suppression was lowest among those who lived in counties with the highest unemployment (46.4%) and lowest health insurance or health care coverage (45.5%).
- **Ages 35–44 years:** Among males aged 35–44 years, the lowest percentages were among those who lived in counties with the highest poverty (57.0%) and lowest unemployment (50.8%). Among females aged 35–44 years, viral suppression was lowest among those who lived in counties with the highest unemployment (53.1%) and lowest health insurance or health care coverage (52.9%).
- **Ages 45–54 years:** Among males aged 45–54 years, the lowest percentages were among those who lived in counties with the highest poverty (60.1%) and lowest unemployment (56.3%).

Among females aged 45–54 years, the lowest percentages were among those who lived in counties with the highest poverty (59.4%) and highest unemployment (60.0%).

- **Ages ≥55 years:** Among males aged ≥55 years, the lowest percentages were among those who lived in counties with the highest poverty (58.6%) and lowest unemployment (56.9%).

Among females aged ≥55 years, viral suppression was lowest (62.2%) among those who lived in counties with the lowest poverty.

Transmission category by sex (Table 11)

Overall, among males, viral suppression was lower among those with infection attributed to injection drug use (49.7%) and higher among those with infection attributed to male-to-male sexual contact (63.0%) than all other transmission categories. For females, among the 2 transmission categories for which data are presented, viral suppression was lower among those with infection attributed to injection drug use (55.4%) compared to those with infection attributed to heterosexual contact (58.7%). Data were statistically adjusted to account for missing transmission category.

- **Male-to-male sexual contact:** Among males with infection attributed to male-to-male sexual contact, the lowest percentages were among those who lived in counties with the highest poverty (61.1%) and lowest unemployment (59.0%).
- **Injection drug use:** Among males with infection attributed to injection drug use, viral suppression was lowest (37.2%) among those who lived in counties with the lowest unemployment. Among females with infection attributed to injection drug use, viral suppression was lowest among those who lived in counties with the 2 highest poverty levels (53.9%) and lowest unemployment (51.2%).
- **Male-to-male sexual contact and injection drug use:** Among males with infection attributed to male-to-male sexual contact and injection drug use, the lowest percentage (52.6%) was among those who lived in counties with the lowest unemployment.
- **Heterosexual contact:** Among males with infection attributed to heterosexual contact, the lowest percentages were among those who lived in counties with the lowest unemployment (50.3%) and lowest health insurance or health care cover-

age (53.7%). Among females with infection attributed to heterosexual contact, viral suppression was lowest among those who lived in counties with the highest unemployment (57.9%) and lowest health insurance or health care coverages (56.9%).

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SURVEILLANCE OF HIV INFECTION

This report includes data reported to the Centers for Disease Control and Prevention (CDC) through December 31, 2017, from 40 jurisdictions (39 states and the District of Columbia). Personally identifiable information was removed before the data were submitted to CDC. As of December 2017, 40 jurisdictions had met the following criteria for the collection and reporting of complete CD4+ T-lymphocyte (CD4) and viral load test results to CDC:

- The jurisdiction's laws/regulations required the reporting of all CD4 and viral load results to the state or local health department.
- Laboratories that perform HIV-related testing for the jurisdictions had reported a minimum of 95% of HIV-related test results to the state or local health department.
- By December 31, 2017, the jurisdiction had reported (to CDC) at least 95% of all CD4 and viral load test results received from January 2015 through September 2017.

The 39 states are Alabama, Alaska, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming. Please use caution when interpreting data on diagnosed HIV infection: the data are provisional. HIV surveillance data may not be representative of all persons infected with HIV because not all infected persons have been (1) tested or (2) tested at a time when their infection could be detected and diagnosed. Also, some states offer anonymous HIV testing; the results of anonymous tests are not reported to the confidential name-based HIV surveillance programs of state and local health departments.

Please also use caution when interpreting laboratory data for persons with diagnosed HIV infection. Laboratory data presented in this report are from 40 jurisdictions with complete CD4 and viral load reporting as

of December 2017. Data from these 40 jurisdictions represent 85.8% of all persons aged ≥ 18 years living with diagnosed HIV infection at year-end 2015 in the United States and are therefore not representative of data on all persons living with diagnosed HIV infection in the United States.

TABULATION AND PRESENTATION OF DATA

Stages of HIV Infection

Both the 2008 and 2014 HIV case definitions were used to classify HIV infection among adults and adolescents [12, 13].

The 2008 case definition was used to classify cases diagnosed from the beginning of the epidemic through 2013. For adults and adolescents, this definition incorporates an HIV infection staging system that includes AIDS (HIV infection, stage 3). The 2008 stages of HIV infection are defined as follows:

- **HIV infection, stage 1:** No AIDS-defining condition and either a CD4 count of ≥ 500 cells/ μ L or a CD4 percentage of total lymphocytes of ≥ 29 .
- **HIV infection, stage 2:** No AIDS-defining condition and either a CD4 count of 200–499 cells/ μ L or a CD4 percentage of total lymphocytes of 14–28.
- **HIV infection, stage 3 (AIDS):** Documentation of an AIDS-defining condition or either a CD4 count of < 200 cells/ μ L or a CD4 percentage of total lymphocytes of < 14 . Documentation of an AIDS-defining condition supersedes a CD4 count or percentage that would not, by itself, be the basis for a stage 3 (AIDS) classification.
- **HIV infection, stage unknown:** No reported information on AIDS-defining conditions and no information available on CD4 count or percentage.

The 2014 case definition was used to classify cases diagnosed in 2014 and later. It is similar to the 2008 case definition except for the inclusion of criteria for stage 0. The stages of HIV infection in the 2014 case definition are based on age-specific CD4 counts or percentages of total lymphocytes and are defined as follows:

- **HIV infection, stages 1, 2, and 3:** Documentation of an AIDS-defining condition is stage 3. Other-

wise, the stage is determined by the lowest CD4 test result.

- **HIV infection, stage unknown:** No reported information on AIDS-defining conditions and no information available on CD4 count or percentage.

Data on persons with HIV infection, stage 3 (AIDS), include persons whose infection has ever been classified as stage 3 (AIDS). These data do not necessarily represent the current stage of disease.

Stage 3 (AIDS) at the time of HIV diagnosis (Table 1) and stage of disease at time of diagnosis (Table 2) were determined by using the first CD4 test result or documentation of an AIDS-defining condition ≤ 3 months after the HIV diagnosis date. If ≥ 2 events occurred during the same month and could thus qualify as “first,” the following conditions were applied:

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

For stage of disease at diagnosis, infections were classified as “stage unknown” if the month of HIV diagnosis was missing, or if, ≤ 3 months after HIV diagnosis, neither a CD4 count nor a CD4 percentage had been determined and no AIDS-defining condition was documented.

SOCIAL DETERMINANTS OF HEALTH INDICATOR VARIABLES

SDH indicator variables [14] and definitions [15] were obtained from the American Community Survey (ACS). This report uses data from the 2012–2016 estimates. The U.S. Census Bureau collected these data over the course of the 5 years and created period esti-

mates based on the information collected. Period estimates are estimates based on information collected over time (60 months for this report) [16]. 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). The data collection was spread evenly across the entire period represented so as not to over-represent any particular year within the period. All areas were sampled regardless of population size.

For this report, the SDH indicator variables were categorized by using empirically derived quartiles. The quartile cut-points were determined by using Census data from all counties in the 39 states and from the District of Columbia and not just from the data applicable to persons in this report (i.e., persons with an HIV diagnosis). This report presents 6 SDH indicator variables: federal poverty status, education level, median household income, employment status, health insurance coverage, and vacant housing units.

- **Federal poverty status:** proportion of residents in the county who were living below the federal poverty level (i.e., below a specified threshold) during the 12 months before the survey response (individuals aged ≥ 18 years)
- **Education level:** proportion of residents in the county with less than a high school diploma (individuals aged ≥ 18 years)
- **Median household income:** median income for a household within the county during the 12 months before the survey response
- **Employment status:** proportion of residents in the county in the workforce without a job (individuals aged ≥ 16 years)
- **Health insurance coverage:** proportion of residents in the county without health insurance or health coverage plan (individuals aged ≥ 18 years)
- **Vacant housing:** proportion of housing units in the census tract that no one was living in at the time of the survey response

The 6 selected SDH variables were included in this report because SDH research has emphasized the need to incorporate these specific structural and societal factors into analyses of public health data in order to contribute to a better understanding of their effects on health outcomes [17–20]. Although correlations between SDH indicators were not analyzed for this report, some SDH indicators may be cor-

related. For example, lack of education has been associated with poverty and income in the United States [8, 9]. Additionally, use of county-level data may not fully represent an individual's socioeconomic status [10, 11]. Therefore, caution should be used when interpreting results.

HIV case surveillance data were linked with ACS estimates for 2012–2016. Each person with diagnosed HIV infection was assigned a value for each of the SDH indicator variables. Cases or counties were excluded if no county information was available for the case, no SDH information was available for the county, or if the county from the surveillance data could not be matched to a county provided by the ACS. Although HIV diagnosis data associated with these exclusions were not included in all SDH subpopulation totals, they were included in the subtotals. Therefore, Tables 3–11 display differing denominators for SDH subpopulation categories.

Poverty

The percentage of the population aged ≥ 18 years who were living below the poverty level was determined by using the sum of the number of family members and the number of unrelated persons in the household whose incomes, during the 12 months before the survey response, were below the federal poverty level. The U.S. Census Bureau uses a 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.

Education

The percentage of persons with less than a high school diploma was defined as the percentage of persons aged ≥ 18 years who were not enrolled in school and were not high school graduates. These people may be referred to as "high school dropouts." There is no restriction on

when they "dropped out" of school; therefore, they may have dropped out before high school and never attended high school.

Household Income

The median household income was determined by dividing the income distribution into 2 equal parts: one-half of the persons resided in counties that fall below the median income and one-half above the median. The median income was based on the distribution of the total number of households, including those with no income. Median income for households was computed on the basis of a standard distribution, rounded to the nearest whole dollar. Median household income are categorized and represent quartiles of median income.

Employment

The percentage of unemployed persons was determined by using the Census Bureau's classification of unemployed persons: all civilians aged ≥ 16 years are classified as unemployed if they (1) were neither "at work" nor "with a job but not at work" during the reference week (i.e., the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed), (2) were actively looking for work during the past 4 weeks, or (3) were available to start a job. Also included as unemployed are civilians who did not work at all during the reference week, were waiting to be called back to a job from which they had been laid off, or were available for work except for temporary illness. Employment status excluded persons whose only work was "around the house," who were unpaid volunteers (e.g., for religious or charitable organizations), who were institutionalized, or who were on active duty in the United States Armed Forces.

Health Insurance Coverage

The percentage of persons aged ≥ 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 persons who are covered by: (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 65 years and older, or persons with certain disabilities, (4) Medicaid, Medical Assistance, or any kind of government-assistance plan for those with

low incomes 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.

Vacant Housing

A housing unit is classified as vacant if no one is living in it at the time of interview. Units occupied at the time of interview entirely by persons who are staying 2 months or less and who have a more permanent residence elsewhere are considered to be temporarily occupied, and are classified as “vacant.”

New units not yet occupied are classified as vacant housing units if construction has reached a point where all exterior windows and doors are installed and final usable floors are in place. Vacant units are excluded from the housing inventory if they are open to the elements (i.e., the roof, walls, windows, and/or doors no longer protect the interior from the elements). Also excluded are vacant units with a sign that they are condemned or they are to be demolished.

LINKAGE TO, AND RECEIPT OF, HIV MEDICAL CARE

National guidelines for the clinical care and treatment of adults and adolescents with HIV [21] recommend CD4 and viral load testing during the first care visit after HIV diagnosis to direct the course of treatment. For patients on a stable, suppressive antiretroviral therapy (ART) regimen for ≤ 2 years, viral load testing is recommended every 3 to 4 months or as clinically indicated to confirm continuous viral suppression. For adherent patients with suppressed viral load and stable immunologic status for > 2 years, monitoring at 6-month intervals may be considered. For patients who have not taken ART, CD4 count should be monitored every 3 to 6 months. Frequent monitoring of CD4 counts, especially among persons with higher counts (> 300 cells/ μL) and consistently suppressed viral loads, is generally not required for patient manage-

ment. For patients who have been taking ART and whose CD4 counts have consistently ranged between 300 and 500 cells/ μL for ≥ 2 years, annual monitoring of CD4 count is recommended. Continued CD4 monitoring for virologically suppressed patients whose CD4 counts have consistently been > 500 cells/ μL for ≥ 2 years is optional. If clinically indicated, the CD4 count should be monitored more frequently (e.g., when changes in a patient’s clinical status decrease CD4 count and thus prompt the need for prophylaxis for opportunistic infection).

The data on linkage to HIV medical care were based on persons whose infection was diagnosed during 2016 and who resided in any of the 40 jurisdictions at the time of diagnosis (Tables 3–5). Linkage to HIV medical care within 1 month after HIV diagnosis was measured by documentation of ≥ 1 CD4 (count or percentage) or viral load test performed ≤ 1 month after HIV diagnosis, including tests performed on the same date as the date of diagnosis. Linkage to HIV medical care within 3 months after HIV diagnosis was measured by documentation of ≥ 1 CD4 (count or percentage) or viral load tests performed ≤ 3 months after HIV diagnosis, including tests performed on the same date as the date of diagnosis.

The data on receipt of HIV medical care were based on persons whose infection was diagnosed by year-end 2014, who resided in any of the 40 jurisdictions as of their most recent known address, and who were alive at year-end 2015 (Tables 6–8). Receipt of any HIV medical care was measured by documentation of ≥ 1 CD4 or viral load tests performed during 2015. Retention in continuous HIV medical care was measured by documentation of ≥ 2 CD4 or viral load tests performed at least 3 months apart during 2015.

For analyses of linkage to, and retention in, care, the month and the year of the earliest HIV-positive test result reported to the surveillance system were used to determine the diagnosis date. Test results were excluded if the month of the sample collection was missing. For linkage to care, data were excluded if the month of diagnosis was missing. For retention in care, data were excluded if the date of death (where applicable) was missing.

VIRAL SUPPRESSION

Viral suppression was measured among persons whose infection was diagnosed by year-end 2014, who resided in any of the 40 jurisdictions as of their most recent known address during 2015, and who

were alive at year-end 2015. Viral suppression was defined as a viral load result of <200 copies/mL at the most recent viral load test during 2015. The cut-off value of <200 copies/mL was based on the following definition of virologic failure: viral load of ≥ 200 copies/mL [21]. If multiple viral load tests were performed during the same month and could thus qualify as “most recent,” the highest viral load (most severe) was selected. If the numerical result was missing or the result was a logarithmic value, the interpretation of the result (e.g., below limit) was used to determine viral suppression. Virologic failure may indicate lack of adherence to ART.

AGE

All tables in this report reflect data for persons aged ≥ 18 years (i.e., adults). This report was limited to adults aged ≥ 18 years with diagnosed HIV infection in order to more accurately represent the population from which data are collected for ACS SDH indicator variables.

- Tables 1–5 (diagnosed HIV infection): age was based on the person’s age at the time of HIV diagnosis.
- Tables 6–11 (persons living with diagnosed HIV infection): age was based on the person’s age at year-end 2014.

RACE AND ETHNICITY

The data presented in this report were collected using the OMB’s revised 1997 standards for ethnic and racial data, which calls for splitting Asian/Pacific Islander into 2 categories (Asian and Native Hawaiian/other Pacific Islander) and collecting 2 categories of ethnicity (Hispanic or Latino and not Hispanic or Latino) [22]. Hispanics and Latinos can be of any race.

Due to confidentiality concerns, the ACS does not provide age- and sex-specific SDH variables stratified by race and ethnicity for racial groups, except whites (i.e., white, non-Hispanic/Latino). Therefore, the data used for computing the race-specific, empirically derived quartiles may include Hispanics/Latinos and should be interpreted with caution. Also, the number of persons reported in each race category may include persons whose ethnicity was not reported.

GEOGRAPHIC DESIGNATION

Data by area of residence reflect the county of the residential address at the time of diagnosis of HIV

infection or at the time of stage 3 (AIDS) classification for Tables 1–5. In Tables 6–11, area of residence is based on most recent known address as of December 31, 2015.

TRANSMISSION CATEGORIES

Transmission category is the term used to summarize a person’s possible HIV risk factors; the summary classification results from selecting, from the presumed hierarchical order of probability, the 1 risk factor most likely to have been responsible for transmission. For surveillance purposes, a diagnosis of HIV infection is counted only once in the hierarchy of transmission categories. Persons with > 1 reported risk factor for HIV infection are classified in the transmission category listed first in the hierarchy. The exception is the category for male-to-male sexual contact *and* injection drug use; this group makes up a separate transmission category.

Persons whose transmission category is classified as male-to-male sexual contact include men who have ever had sexual contact with other men (i.e., homosexual contact) and men who have ever had sexual contact with both men and women (i.e., bisexual contact). Persons whose transmission category is classified as heterosexual contact are persons who have ever had heterosexual contact with a person known to have, or to be at high risk for, HIV infection (e.g., a person who injects drugs).

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

Because a substantial proportion of cases of HIV infection are reported to CDC without an identified risk factor, multiple imputation is used to assign a transmission category [23]. Multiple imputation is a statistical approach in which each missing transmission category is replaced with a set of plausible values that represent the uncertainty about the true, but missing, value [24]. The plausible values are analyzed by using standard procedures, and the results of these analyses are then combined to produce the final results.

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Table 1. Stage 3 (AIDS) at the time of diagnosis of HIV infection, among persons aged ≥18 years, by race/ethnicity and area of residence, 2016—39 states and the District of Columbia

	Black/African American			Hispanic/Latino ^a			White			Other ^b			Total		
	Stage 3 (AIDS) at diagnosis ^c			Stage 3 (AIDS) at diagnosis ^c			Stage 3 (AIDS) at diagnosis ^c			Stage 3 (AIDS) at diagnosis ^c			Stage 3 (AIDS) at diagnosis ^c		
	Total No.	No.	%	Total No.	No.	%	Total No.	No.	%	Total No.	No.	%	Total No.	No.	%
Alabama	441	83	18.8	20	7	35.0	178	44	24.7	23	8	34.8	662	142	21.5
Alaska	5	0	0.0	3	1	33.3	9	2	22.2	20	2	10.0	37	5	13.5
California	939	145	15.4	2,252	465	20.6	1,329	239	18.0	482	95	19.7	5,002	944	18.9
Colorado	58	12	20.7	150	26	17.3	196	39	19.9	17	5	29.4	421	82	19.5
Connecticut	109	26	23.9	78	16	20.5	69	23	33.3	8	3	37.5	264	68	25.8
Delaware	73	18	24.7	8	4	50.0	26	11	42.3	2	1	50.0	109	34	31.2
District of Columbia	238	37	15.5	37	5	13.5	50	12	24.0	7	0	0.0	332	54	16.3
Florida	1,963	447	22.8	1,528	280	18.3	1,068	230	21.5	118	32	27.1	4,677	989	21.1
Georgia	1,781	352	19.8	181	42	23.2	378	67	17.7	114	19	16.7	2,454	480	19.6
Hawaii	11	1	9.1	9	2	22.2	20	2	10.0	40	9	22.5	80	14	17.5
Illinois	726	142	19.6	292	79	27.1	300	63	21.0	73	20	27.4	1,391	304	21.9
Indiana	209	35	16.7	56	17	30.4	190	48	25.3	21	7	33.3	476	107	22.5
Iowa	42	9	21.4	10	1	10.0	71	17	23.9	8	4	50.0	131	31	23.7
Louisiana	801	178	22.2	69	22	31.9	233	61	26.2	10	1	10.0	1,113	262	23.5
Maine	17	3	17.6	1	1	100	33	8	24.2	0	0	0.0	51	12	23.5
Maryland	788	158	20.1	90	15	16.7	143	42	29.4	52	11	21.2	1,073	226	21.1
Massachusetts	197	52	26.4	159	35	22.0	244	43	17.6	31	7	22.6	631	137	21.7
Michigan	417	86	20.6	45	13	28.9	232	66	28.4	37	10	27.0	731	175	23.9
Minnesota	127	35	27.6	24	5	20.8	115	24	20.9	19	1	5.3	285	65	22.8
Mississippi	346	96	27.7	4	1	25.0	60	19	31.7	7	1	14.3	417	117	28.1
Missouri	240	54	22.5	39	8	20.5	204	56	27.5	17	1	5.9	500	119	23.8
Montana	0	0	0.0	1	1	100	18	2	11.1	1	1	100	20	4	20.0
Nebraska	15	2	13.3	16	5	31.3	37	9	24.3	7	2	28.6	75	18	24.0
New Hampshire	7	1	14.3	7	3	42.9	26	6	23.1	3	1	33.3	43	11	25.6
New Mexico	5	1	20.0	77	14	18.2	27	5	18.5	26	8	30.8	135	28	20.7
New York	1,077	233	21.6	961	186	19.4	493	99	20.1	296	63	21.3	2,827	581	20.6
North Carolina	848	157	18.5	144	47	32.6	321	54	16.8	61	15	24.6	1,374	273	19.9
North Dakota	17	5	29.4	7	2	28.6	18	2	11.1	3	2	66.7	45	11	24.4
Oregon	15	3	20.0	38	9	23.7	148	42	28.4	19	3	15.8	220	57	25.9
Rhode Island	16	5	31.3	18	4	22.2	31	9	29.0	3	0	0.0	68	18	26.5
South Carolina	510	114	22.4	51	21	41.2	155	40	25.8	22	4	18.2	738	179	24.3
South Dakota	11	1	9.1	6	3	50.0	19	4	21.1	5	4	80.0	41	12	29.3
Tennessee	415	50	12.0	37	10	27.0	242	49	20.2	14	3	21.4	708	112	15.8
Texas	1,574	289	18.4	1,729	438	25.3	928	182	19.6	206	44	21.4	4,437	953	21.5
Utah	19	3	15.8	32	7	21.9	72	8	11.1	10	1	10.0	133	19	14.3
Virginia	528	109	20.6	128	26	20.3	200	41	20.5	45	5	11.1	901	181	20.1
Washington	89	23	25.8	72	18	25.0	198	44	22.2	64	18	28.1	423	103	24.3
West Virginia	12	2	16.7	0	0	0.0	48	16	33.3	6	2	33.3	66	20	30.3
Wisconsin	105	22	21.0	25	7	28.0	77	15	19.5	17	2	11.8	224	46	20.5
Wyoming	2	1	50.0	2	2	100	14	4	28.6	3	1	33.3	21	8	38.1
Total	14,793	2,990	20.2	8,406	1,848	22.0	8,220	1,747	21.3	1,917	416	21.7	33,336	7,001	21.0

Note. Data are based on residence at diagnosis.

^a Hispanics/Latinos can be of any race.

^b Includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, and multiple races.

^c Based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection.

Table 2. Stage of disease at diagnosis of HIV infection during 2016, among persons aged ≥18 years, by selected characteristics—39 states and the District of Columbia

	Total No.	Stage 1		Stage 2		Stage 3 (AIDS)		Stage unknown ^a	
		(CD4 ≥500 cells/μL or ≥26%)		(CD4 200–499 cells/μL or 14%–25%)		(OI or CD4 <200 cells/μL or <14%)		(No CD4 information)	
		No.	%	No.	%	No.	%	No.	%
Sex									
Male	27,020	6,556	24.3	8,139	30.1	5,575	20.6	6,750	25.0
Female	6,316	1,704	27.0	1,730	27.4	1,426	22.6	1,456	23.1
Age at diagnosis (yr)									
18–24	6,979	1,876	26.9	2,387	34.2	606	8.7	2,110	30.2
25–34	11,593	3,155	27.2	3,591	31.0	1,873	16.2	2,974	25.7
35–44	6,378	1,495	23.4	1,735	27.2	1,702	26.7	1,446	22.7
45–54	5,084	1,079	21.2	1,333	26.2	1,650	32.5	1,022	20.1
≥55	3,302	655	19.8	823	24.9	1,170	35.4	654	19.8
Race/ethnicity									
American Indian/Alaska Native	144	32	22.2	39	27.1	35	24.3	38	26.4
Asian	851	153	18.0	309	36.3	189	22.2	200	23.5
Black/African American	14,793	3,405	23.0	4,406	29.8	2,990	20.2	3,992	27.0
Hispanic/Latino ^b	8,406	2,056	24.5	2,567	30.5	1,848	22.0	1,935	23.0
Native Hawaiian/ Other Pacific Islander	39	13	33.3	10	25.6	10	25.6	6	15.4
White	8,220	2,378	28.9	2,250	27.4	1,747	21.3	1,845	22.4
Multiple races	883	223	25.3	288	32.6	182	20.6	190	21.5
Transmission category^c									
Male-to-male sexual contact	22,190	5,598	25.2	6,869	31.0	4,194	18.9	5,529	24.9
Injection drug use									
Male	1,029	230	22.3	256	24.9	276	26.8	267	25.9
Female	799	220	27.5	211	26.5	179	22.5	188	23.6
Male-to-male sexual contact and injection drug use	1,094	292	26.7	308	28.1	200	18.3	294	26.8
Heterosexual contact ^d									
Male	2,685	432	16.1	701	26.1	898	33.4	655	24.4
Female	5,495	1,478	26.9	1,510	27.5	1,242	22.6	1,265	23.0
Total^e	33,336	8,260	24.8	9,869	29.6	7,001	21.0	8,206	24.6

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

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

Data are based on residence at diagnosis.

See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

^a Includes persons with HIV disease classified as stage 0.

^b Hispanics/Latinos can be of any race.

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

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

^e Includes 44 persons whose infection was attributed to hemophilia, blood transfusion, or perinatal exposure or whose risk factor was not reported or not identified. Data not displayed because the numbers were too small to be meaningful.

Table 3. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥18 years, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia

	Total		≤1 month		≤3 months	
	No.	% ^a	≥1 CD4 or VL tests			
			No.	%	No.	%
Black/African American						
Male						
Below federal poverty level (%)						
<10	1,251	11.6	930	74.3	1,055	84.3
10.00–13.99	2,178	20.3	1,548	71.1	1,778	81.6
14.00–16.99	4,464	41.5	3,102	69.5	3,566	79.9
≥17	2,859	26.6	2,066	72.3	2,388	83.5
Less than high school diploma (%)						
<10	1,964	18.3	1,472	74.9	1,652	84.1
10.00–12.99	2,964	27.6	2,077	70.1	2,443	82.4
13.00–18.99	3,699	34.4	2,633	71.2	3,020	81.6
≥19	2,125	19.8	1,464	68.9	1,672	78.7
Median household income (U.S. \$)						
<40,000	1,156	10.8	800	69.2	958	82.9
40,000–46,999	2,219	20.6	1,551	69.9	1,797	81.0
47,000–53,999	2,547	23.7	1,749	68.7	2,047	80.4
≥54,000	4,830	44.9	3,546	73.4	3,985	82.5
Unemployed (%)						
<3	156	1.5	122	78.2	140	89.7
3.00–3.99	1,020	9.5	758	74.3	875	85.8
4.00–4.99	3,450	32.1	2,392	69.3	2,772	80.3
≥5	6,126	57.0	4,374	71.4	5,000	81.6
Without health insurance (%)						
<9	1,095	10.2	873	79.7	960	87.7
9.00–13.99	2,172	20.2	1,594	73.4	1,819	83.7
14.00–17.99	4,414	41.1	3,147	71.3	3,614	81.9
≥18	3,071	28.6	2,032	66.2	2,394	78.0
Vacant housing (%)						
<11	5,674	52.8	4,091	72.1	4,645	81.9
11.00–15.99	3,247	30.2	2,249	69.3	2,621	80.7
16.00–22.99	1,592	14.8	1,133	71.2	1,316	82.7
≥23	239	2.2	173	72.4	205	85.8
Subtotal^b	10,920	100	7,749	71.0	8,908	81.6
Female						
Below federal poverty level (%)						
<10	533	13.9	426	79.9	469	88.0
10.00–13.99	855	22.3	651	76.1	717	83.9
14.00–16.99	1,351	35.2	995	73.6	1,129	83.6
≥17	1,102	28.7	807	73.2	938	85.1
Less than high school diploma (%)						
<10	684	17.8	548	80.1	605	88.5
10.00–12.99	1,159	30.2	864	74.5	968	83.5
13.00–18.99	1,272	33.1	947	74.4	1,082	85.1
≥19	726	18.9	520	71.6	598	82.4
Median household income (U.S. \$)						
<40,000	428	11.1	324	75.7	378	88.3
40,000–46,999	784	20.4	558	71.2	657	83.8
47,000–53,999	939	24.4	677	72.1	765	81.5
≥54,000	1,690	44.0	1,320	78.1	1,453	86.0
Unemployed (%)						
<3	64	1.7	46	71.9	53	82.8
3.00–3.99	452	11.8	374	82.7	404	89.4
4.00–4.99	1,215	31.6	915	75.3	1,040	85.6
≥5	2,110	54.9	1,544	73.2	1,756	83.2
Without health insurance (%)						
<9	471	12.3	395	83.9	427	90.7
9.00–13.99	737	19.2	579	78.6	637	86.4
14.00–17.99	1,463	38.1	1,090	74.5	1,234	84.3
≥18	1,170	30.5	815	69.7	955	81.6
Vacant housing (%)						
<11	2,046	53.3	1,589	77.7	1,752	85.6
11.00–15.99	1,096	28.5	771	70.3	913	83.3
16.00–22.99	583	15.2	428	73.4	486	83.4
≥23	116	3.0	91	78.4	102	87.9
Subtotal^b	3,873	100	2,903	75.0	3,280	84.7
Total	14,793	100	10,652	72.0	12,188	82.4

Table 3. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥18 years, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia (cont)

	Total		≤1 month ≥1 CD4 or VL tests		≤3 months ≥1 CD4 or VL tests	
	No.	% ^a	No.	%	No.	%
Hispanic/Latino^c						
Male						
Below federal poverty level (%)						
<10	802	10.8	644	80.3	708	88.3
10.00–13.99	1,804	24.4	1,437	79.7	1,599	88.6
14.00–16.99	3,120	42.1	2,375	76.1	2,623	84.1
≥17	1,681	22.7	1,297	77.2	1,463	87.0
Less than high school diploma (%)						
<10	703	9.5	566	80.5	626	89.0
10.00–12.99	1,668	22.5	1,342	80.5	1,494	89.6
13.00–18.99	2,586	34.9	1,994	77.1	2,232	86.3
≥19	2,450	33.1	1,851	75.6	2,041	83.3
Median household income (U.S. \$)						
<40,000	425	5.7	342	80.5	369	86.8
40,000–46,999	1,305	17.6	987	75.6	1,135	87.0
47,000–53,999	1,442	19.5	1,102	76.4	1,254	87.0
≥54,000	4,235	57.2	3,322	78.4	3,635	85.8
Unemployed (%)						
<3	103	1.4	87	84.5	94	91.3
3.00–3.99	810	10.9	639	78.9	707	87.3
4.00–4.99	2,850	38.5	2,246	78.8	2,502	87.8
≥5	3,644	49.2	2,781	76.3	3,090	84.8
Without health insurance (%)						
<9	724	9.8	602	83.1	647	89.4
9.00–13.99	927	12.5	754	81.3	831	89.6
14.00–17.99	2,156	29.1	1,663	77.1	1,860	86.3
≥18	3,600	48.6	2,734	75.9	3,055	84.9
Vacant housing (%)						
<11	4,974	67.2	3,889	78.2	4,290	86.2
11.00–15.99	1,724	23.3	1,308	75.9	1,481	85.9
16.00–22.99	515	7.0	402	78.1	452	87.8
≥23	194	2.6	154	79.4	170	87.6
Subtotal^b	7,440	100	5,775	77.6	6,416	86.2
Female						
Below federal poverty level (%)						
<10	123	12.8	92	74.8	107	87.0
10.00–13.99	216	22.5	169	78.2	191	88.4
14.00–16.99	375	39.0	287	76.5	315	84.0
≥17	248	25.8	197	79.4	218	87.9
Less than high school diploma (%)						
<10	95	9.9	72	75.8	85	89.5
10.00–12.99	233	24.2	180	77.3	202	86.7
13.00–18.99	294	30.6	226	76.9	254	86.4
≥19	340	35.3	267	78.5	290	85.3
Median household income (U.S. \$)						
<40,000	100	10.4	85	85.0	91	91.0
40,000–46,999	141	14.7	104	73.8	120	85.1
47,000–53,999	208	21.6	160	76.9	182	87.5
≥54,000	513	53.3	396	77.2	438	85.4
Unemployed (%)						
<3	14	1.5	9	64.3	13	92.9
3.00–3.99	109	11.3	85	78.0	100	91.7
4.00–4.99	378	39.3	290	76.7	328	86.8
≥5	461	47.9	361	78.3	390	84.6
Without health insurance (%)						
<9	130	13.5	108	83.1	117	90.0
9.00–13.99	131	13.6	103	78.6	117	89.3
14.00–17.99	300	31.2	232	77.3	260	86.7
≥18	401	41.7	302	75.3	337	84.0
Vacant housing (%)						
<11	662	68.8	513	77.5	570	86.1
11.00–15.99	193	20.1	146	75.6	163	84.5
16.00–22.99	76	7.9	61	80.3	67	88.2
≥23	31	3.2	25	80.6	31	100
Subtotal^b	966	100	748	77.4	835	86.4
Total	8,406	100	6,523	77.6	7,251	86.3

Table 3. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥18 years, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia (cont)

	Total		≤1 month		≤3 months	
	No.	% ^a	≥1 CD4 or VL tests		≥1 CD4 or VL tests	
	No.	%	No.	%	No.	%
White						
Male						
Below federal poverty level (%)						
<10	1,213	17.3	1,002	82.6	1,094	90.2
10.00–13.99	2,237	32.0	1,818	81.3	2,014	90.0
14.00–16.99	2,592	37.0	2,040	78.7	2,266	87.4
≥17	959	13.7	767	80.0	853	88.9
Less than high school diploma (%)						
<10	1,724	24.6	1,436	83.3	1,577	91.5
10.00–12.99	2,202	31.5	1,756	79.7	1,955	88.8
13.00–18.99	1,993	28.5	1,601	80.3	1,768	88.7
≥19	1,082	15.5	834	77.1	927	85.7
Median household income (U.S. \$)						
<40,000	363	5.2	285	78.5	317	87.3
40,000–46,999	1,053	15.0	816	77.5	930	88.3
47,000–53,999	1,640	23.4	1,282	78.2	1,435	87.5
≥54,000	3,945	56.3	3,244	82.2	3,545	89.9
Unemployed (%)						
<3	233	3.3	190	81.5	213	91.4
3.00–3.99	1,420	20.3	1,162	81.8	1,285	90.5
4.00–4.99	2,792	39.9	2,214	79.3	2,468	88.4
≥5	2,556	36.5	2,061	80.6	2,261	88.5
Without health insurance (%)						
<9	1,276	18.2	1,096	85.9	1,162	91.1
9.00–13.99	1,755	25.1	1,409	80.3	1,579	90.0
14.00–17.99	2,280	32.6	1,820	79.8	2,030	89.0
≥18	1,690	24.1	1,302	77.0	1,456	86.2
Vacant housing (%)						
<11	4,332	61.9	3,487	80.5	3,846	88.8
11.00–15.99	1,529	21.8	1,216	79.5	1,357	88.8
16.00–22.99	846	12.1	688	81.3	763	90.2
≥23	294	4.2	236	80.3	261	88.8
Subtotal^b	7,056	100	5,676	80.4	6,277	89.0
Female						
Below federal poverty level (%)						
<10	220	19.1	184	83.6	199	90.5
10.00–13.99	368	31.9	277	75.3	316	85.9
14.00–16.99	353	30.6	265	75.1	292	82.7
≥17	212	18.4	163	76.9	180	84.9
Less than high school diploma (%)						
<10	304	26.4	249	81.9	271	89.1
10.00–12.99	319	27.7	243	76.2	278	87.1
13.00–18.99	363	31.5	271	74.7	300	82.6
≥19	167	14.5	126	75.4	138	82.6
Median household income (U.S. \$)						
<40,000	84	7.3	72	85.7	75	89.3
40,000–46,999	257	22.3	195	75.9	218	84.8
47,000–53,999	282	24.5	206	73.0	230	81.6
≥54,000	530	46.0	416	78.5	464	87.5
Unemployed (%)						
<3	35	3.0	29	82.9	32	91.4
3.00–3.99	250	21.7	202	80.8	220	88.0
4.00–4.99	453	39.3	344	75.9	391	86.3
≥5	415	36.0	314	75.7	344	82.9
Without health insurance (%)						
<9	191	16.6	155	81.2	170	89.0
9.00–13.99	304	26.4	250	82.2	273	89.8
14.00–17.99	396	34.3	299	75.5	336	84.8
≥18	262	22.7	185	70.6	208	79.4
Vacant housing (%)						
<11	602	52.2	471	78.2	519	86.2
11.00–15.99	295	25.6	230	78.0	253	85.8
16.00–22.99	185	16.0	135	73.0	156	84.3
≥23	71	6.2	53	74.6	59	83.1
Subtotal^b	1,164	100	896	77.0	994	85.4
Total	8,220	100	6,572	80.0	7,271	88.5

Table 3. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥18 years, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia (cont)

	Total		≤1 month		≤3 months	
	No.	% ^a	≥1 CD4 or VL tests		≥1 CD4 or VL tests	
			No.	%	No.	%
Other^d						
Male						
Below federal poverty level (%)						
<10	283	17.7	233	82.3	253	89.4
10.00–13.99	504	31.5	404	80.2	448	88.9
14.00–16.99	575	35.9	457	79.5	500	87.0
≥17	238	14.9	191	80.3	215	90.3
Less than high school diploma (%)						
<10	348	21.8	279	80.2	310	89.1
10.00–12.99	440	27.5	352	80.0	386	87.7
13.00–18.99	445	27.8	359	80.7	398	89.4
≥19	367	22.9	295	80.4	322	87.7
Median household income (U.S. \$)						
<40,000	79	4.9	66	83.5	72	91.1
40,000–46,999	153	9.6	126	82.4	139	90.8
47,000–53,999	277	17.3	204	73.6	236	85.2
≥54,000	1,091	68.2	889	81.5	969	88.8
Unemployed (%)						
<3	33	2.1	27	81.8	28	84.8
3.00–3.99	270	16.9	208	77.0	238	88.1
4.00–4.99	655	40.9	530	80.9	579	88.4
≥5	642	40.1	520	81.0	571	88.9
Without health insurance (%)						
<9	312	19.5	261	83.7	279	89.4
9.00–13.99	380	23.7	309	81.3	340	89.5
14.00–17.99	489	30.6	385	78.7	434	88.8
≥18	419	26.2	330	78.8	363	86.6
Vacant housing (%)						
<11	1,151	71.9	920	79.9	1,012	87.9
11.00–15.99	277	17.3	225	81.2	249	89.9
16.00–22.99	119	7.4	100	84.0	110	92.4
≥23	53	3.3	40	75.5	45	84.9
Subtotal^b	1,604	100	1,289	80.4	1,420	88.5
Female						
Below federal poverty level (%)						
<10	62	19.9	51	82.3	55	88.7
10.00–13.99	96	30.9	74	77.1	83	86.5
14.00–16.99	111	35.7	88	79.3	98	88.3
≥17	42	13.5	32	76.2	36	85.7
Less than high school diploma (%)						
<10	88	28.3	69	78.4	76	86.4
10.00–12.99	90	28.9	70	77.8	78	86.7
13.00–18.99	83	26.7	72	86.7	77	92.8
≥19	50	16.1	34	68.0	41	82.0
Median household income (U.S. \$)						
<40,000	16	5.1	13	81.3	14	87.5
40,000–46,999	40	12.9	33	82.5	38	95.0
47,000–53,999	70	22.5	52	74.3	60	85.7
≥54,000	185	59.5	147	79.5	160	86.5
Unemployed (%)						
<3	5	1.6	4	80.0	5	100
3.00–3.99	53	17.0	40	75.5	44	83.0
4.00–4.99	118	37.9	96	81.4	106	89.8
≥5	135	43.4	105	77.8	117	86.7
Without health insurance (%)						
<9	56	18.0	45	80.4	47	83.9
9.00–13.99	78	25.1	64	82.1	72	92.3
14.00–17.99	115	37.0	89	77.4	102	88.7
≥18	62	19.9	47	75.8	51	82.3
Vacant housing (%)						
<11	205	65.9	163	79.5	178	86.8
11.00–15.99	73	23.5	53	72.6	63	86.3
16.00–22.99	24	7.7	22	91.7	23	95.8
≥23	9	2.9	7	77.8	8	88.9
Subtotal^b	313	100	247	78.9	274	87.5
Total	1,917	100	1,536	80.1	1,694	88.4

Table 3. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥18 years, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia (cont)

	Total		≤1 month ≥1 CD4 or VL tests		≤3 months ≥1 CD4 or VL tests	
	No.	% ^a	No.	%	No.	%
Male						
Total						
Below federal poverty level (%)						
<10	3,549	13.3	2,809	79.1	3,110	87.6
10.00–13.99	6,723	25.1	5,207	77.5	5,839	86.9
14.00–16.99	10,751	40.2	7,974	74.2	8,955	83.3
≥17	5,737	21.4	4,321	75.3	4,919	85.7
Less than high school diploma (%)						
<10	4,739	17.7	3,753	79.2	4,165	87.9
10.00–12.99	7,274	27.2	5,527	76.0	6,278	86.3
13.00–18.99	8,723	32.6	6,587	75.5	7,418	85.0
≥19	6,024	22.5	4,444	73.8	4,962	82.4
Median household income (U.S. \$)						
<40,000	2,023	7.6	1,493	73.8	1,716	84.8
40,000–46,999	4,730	17.7	3,480	73.6	4,001	84.6
47,000–53,999	5,906	22.1	4,337	73.4	4,972	84.2
≥54,000	14,101	52.7	11,001	78.0	12,134	86.1
Unemployed (%)						
<3	525	2.0	426	81.1	475	90.5
3.00–3.99	3,520	13.2	2,767	78.6	3,105	88.2
4.00–4.99	9,747	36.4	7,382	75.7	8,321	85.4
≥5	12,968	48.5	9,736	75.1	10,922	84.2
Without health insurance (%)						
<9	3,407	12.7	2,832	83.1	3,048	89.5
9.00–13.99	5,234	19.6	4,066	77.7	4,569	87.3
14.00–17.99	9,339	34.9	7,015	75.1	7,938	85.0
≥18	8,780	32.8	6,398	72.9	7,268	82.8
Vacant housing (%)						
<11	16,131	60.3	12,387	76.8	13,793	85.5
11.00–15.99	6,777	25.3	4,998	73.7	5,708	84.2
16.00–22.99	3,072	11.5	2,323	75.6	2,641	86.0
≥23	780	2.9	603	77.3	681	87.3
Subtotal^b	27,020	100	20,489	75.8	23,021	85.2
Female						
Below federal poverty level (%)						
<10	938	15.0	753	80.3	830	88.5
10.00–13.99	1,535	24.5	1,171	76.3	1,307	85.1
14.00–16.99	2,190	34.9	1,635	74.7	1,834	83.7
≥17	1,604	25.6	1,199	74.8	1,372	85.5
Less than high school diploma (%)						
<10	1,171	18.7	938	80.1	1,037	88.6
10.00–12.99	1,801	28.7	1,357	75.3	1,526	84.7
13.00–18.99	2,012	32.1	1,516	75.3	1,713	85.1
≥19	1,283	20.5	947	73.8	1,067	83.2
Median household income (U.S. \$)						
<40,000	628	10.0	494	78.7	558	88.9
40,000–46,999	1,222	19.5	890	72.8	1,033	84.5
47,000–53,999	1,499	23.9	1,095	73.0	1,237	82.5
≥54,000	2,918	46.6	2,279	78.1	2,515	86.2
Unemployed (%)						
<3	118	1.9	88	74.6	103	87.3
3.00–3.99	864	13.8	701	81.1	768	88.9
4.00–4.99	2,164	34.5	1,645	76.0	1,865	86.2
≥5	3,121	49.8	2,324	74.5	2,607	83.5
Without health insurance (%)						
<9	848	13.5	703	82.9	761	89.7
9.00–13.99	1,250	19.9	996	79.7	1,099	87.9
14.00–17.99	2,274	36.3	1,710	75.2	1,932	85.0
≥18	1,895	30.2	1,349	71.2	1,551	81.8
Vacant housing (%)						
<11	3,515	56.1	2,736	77.8	3,019	85.9
11.00–15.99	1,657	26.4	1,200	72.4	1,392	84.0
16.00–22.99	868	13.9	646	74.4	732	84.3
≥23	227	3.6	176	77.5	200	88.1
Subtotal^b	6,316	100	4,794	75.9	5,383	85.2
Total	33,336	100	25,283	75.8	28,404	85.2

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); SDH, social determinants of health.

Note. Data are based on residence at diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month or ≤3 months after HIV diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting. Definitions for the SDH indicator variables used in this report can be found at <https://go.usa.gov/xP2d4>.

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

^b 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 SDH subpopulations.

^c Hispanics/Latinos can be of any race.

^d Includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, and multiple races.

Table 4. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥18 years, by age and selected social determinants of health—39 states and the District of Columbia

	Total		≤1 month		≤3 months	
	No.	% ^a	≥1 CD4 or VL tests		≥1 CD4 or VL tests	
	No.	%	No.	%	No.	%
18–24						
Male						
Below federal poverty level (%)						
<10			580	76.1	663	87.0
10.00–13.99	762	12.4	1,054	72.4	1,230	84.5
14.00–16.99	1,455	23.6	1,766	69.9	2,054	81.2
≥17	2,528	41.1	1,007	71.4	1,172	83.1
Less than high school diploma (%)						
<10			831	74.6	955	85.7
10.00–12.99	1,114	18.1	1,142	69.7	1,376	84.0
13.00–18.99	1,638	26.6	1,499	72.0	1,722	82.7
≥19	2,082	33.8	935	70.8	1,066	80.7
Median household income (U.S. \$)						
<40,000			374	68.2	449	81.9
40,000–46,999	548	8.9	805	69.5	946	81.6
47,000–53,999	1,159	18.8	935	67.2	1,122	80.7
≥54,000	1,391	22.6	2,293	75.0	2,602	85.1
Unemployed (%)						
<3			96	76.8	114	91.2
3.00–3.99	125	2.0	548	73.6	647	86.8
4.00–4.99	745	12.1	1,594	70.8	1,863	82.7
≥5	2,253	36.6	2,169	71.5	2,495	82.3
Without health insurance (%)						
<9			531	80.8	583	88.7
9.00–13.99	657	10.7	938	73.2	1,094	85.3
14.00–17.99	1,282	20.8	1,621	70.4	1,905	82.8
≥18	2,302	37.4	1,317	68.8	1,537	80.3
Vacant housing (%)						
<11			2,663	73.3	3,052	84.0
11.00–15.99	3,634	59.0	1,115	68.2	1,319	80.6
16.00–22.99	1,636	26.6	519	70.1	622	84.1
≥23	740	12.0	110	75.9	126	86.9
Subtotal^b	6,216	100	4,436	71.4	5,157	83.0
Female						
Below federal poverty level (%)						
<10			95	84.1	102	90.3
10.00–13.99	113	15.0	130	74.7	142	81.6
14.00–16.99	174	23.0	211	74.3	234	82.4
≥17	284	37.6	126	68.5	151	82.1
Less than high school diploma (%)						
<10			128	84.8	138	91.4
10.00–12.99	151	20.0	155	70.5	176	80.0
13.00–18.99	220	29.1	172	71.7	195	81.3
≥19	240	31.8	107	74.3	120	83.3
Median household income (U.S. \$)						
<40,000			51	68.0	62	82.7
40,000–46,999	75	9.9	107	69.0	126	81.3
47,000–53,999	155	20.5	130	69.1	148	78.7
≥54,000	188	24.9	274	81.3	293	86.9
Unemployed (%)						
<3			9	81.8	11	100
3.00–3.99	11	1.5	96	83.5	103	89.6
4.00–4.99	115	15.2	196	76.6	212	82.8
≥5	256	33.9	261	70.0	303	81.2
Without health insurance (%)						
<9			96	88.9	102	94.4
9.00–13.99	108	14.3	104	78.2	117	88.0
14.00–17.99	133	17.6	207	72.4	230	80.4
≥18	286	37.9	155	68.0	180	78.9
Vacant housing (%)						
<11			333	80.0	361	86.8
11.00–15.99	416	55.1	154	66.7	184	79.7
16.00–22.99	231	30.6	60	69.0	67	77.0
≥23	87	11.5	15	71.4	17	81.0
Subtotal^b	763	100	567	74.3	636	83.4
Total	6,979	100	5,003	71.7	5,793	83.0

Table 4. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥ 18 years, by age and selected social determinants of health—39 states and the District of Columbia (cont)

	Total		≤1 month		≤3 months	
	No.	% ^a	≥1 CD4 or VL tests		≥1 CD4 or VL tests	
			No.	%	No.	%
25–34						
Male						
Below federal poverty level (%)						
<10	1,248	12.8	973	78.0	1,080	86.5
10.00–13.99	2,399	24.6	1,815	75.7	2,059	85.8
14.00–16.99	4,057	41.6	3,015	74.3	3,385	83.4
≥17	2,042	21.0	1,527	74.8	1,754	85.9
Less than high school diploma (%)						
<10	1,731	17.8	1,352	78.1	1,504	86.9
10.00–12.99	2,604	26.7	1,963	75.4	2,226	85.5
13.00–18.99	3,100	31.8	2,284	73.7	2,601	83.9
≥19	2,311	23.7	1,731	74.9	1,947	84.2
Median household income (U.S. \$)						
<40,000	681	7.0	508	74.6	588	86.3
40,000–46,999	1,633	16.8	1,157	70.9	1,345	82.4
47,000–53,999	2,180	22.4	1,586	72.8	1,827	83.8
≥54,000	5,252	53.9	4,079	77.7	4,518	86.0
Unemployed (%)						
<3	167	1.7	127	76.0	140	83.8
3.00–3.99	1,279	13.1	996	77.9	1,118	87.4
4.00–4.99	3,563	36.6	2,649	74.3	3,017	84.7
≥5	4,737	48.6	3,558	75.1	4,003	84.5
Without health insurance (%)						
<9	1,213	12.4	1,003	82.7	1,087	89.6
9.00–13.99	1,815	18.6	1,371	75.5	1,550	85.4
14.00–17.99	3,422	35.1	2,549	74.5	2,873	84.0
≥18	3,296	33.8	2,407	73.0	2,768	84.0
Vacant housing (%)						
<11	6,052	62.1	4,637	76.6	5,191	85.8
11.00–15.99	2,452	25.2	1,775	72.4	2,030	82.8
16.00–22.99	1,003	10.3	738	73.6	850	84.7
≥23	239	2.5	180	75.3	207	86.6
Subtotal^b	9,840	100	7,401	75.2	8,354	84.9
Female						
Below federal poverty level (%)						
<10	215	12.3	161	74.9	183	85.1
10.00–13.99	462	26.5	346	74.9	383	82.9
14.00–16.99	608	34.9	432	71.1	503	82.7
≥17	456	26.2	347	76.1	399	87.5
Less than high school diploma (%)						
<10	323	18.6	254	78.6	285	88.2
10.00–12.99	480	27.6	351	73.1	402	83.8
13.00–18.99	586	33.7	429	73.2	489	83.4
≥19	352	20.2	252	71.6	292	83.0
Median household income (U.S. \$)						
<40,000	180	10.3	141	78.3	161	89.4
40,000–46,999	343	19.7	245	71.4	290	84.5
47,000–53,999	446	25.6	317	71.1	362	81.2
≥54,000	772	44.3	583	75.5	655	84.8
Unemployed (%)						
<3	35	2.0	26	74.3	30	85.7
3.00–3.99	237	13.6	186	78.5	207	87.3
4.00–4.99	617	35.4	449	72.8	514	83.3
≥5	852	48.9	625	73.4	717	84.2
Without health insurance (%)						
<9	232	13.3	186	80.2	206	88.8
9.00–13.99	316	18.2	252	79.7	274	86.7
14.00–17.99	631	36.2	459	72.7	531	84.2
≥18	562	32.3	389	69.2	457	81.3
Vacant housing (%)						
<11	963	55.3	727	75.5	814	84.5
11.00–15.99	460	26.4	327	71.1	388	84.3
16.00–22.99	255	14.6	185	72.5	211	82.7
≥23	63	3.6	47	74.6	55	87.3
Subtotal^b	1,753	100	1,295	73.9	1,478	84.3
Total	11,593	100	8,696	75.0	9,832	84.8

Table 4. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥ 18 years, by age and selected social determinants of health—39 states and the District of Columbia (cont)

	Total		≤1 month		≤3 months	
	No.	% ^a	≥1 CD4 or VL tests		≥1 CD4 or VL tests	
			No.	%	No.	%
35–44						
Male						
Below federal poverty level (%)						
<10	642	13.3	528	82.2	569	88.6
10.00–13.99	1,216	25.2	961	79.0	1,056	86.8
14.00–16.99	1,944	40.3	1,464	75.3	1,620	83.3
≥17	1,017	21.1	768	75.5	872	85.7
Less than high school diploma (%)						
<10	800	16.6	656	82.0	721	90.1
10.00–12.99	1,306	27.1	1,018	77.9	1,133	86.8
13.00–18.99	1,582	32.8	1,221	77.2	1,347	85.1
≥19	1,131	23.5	826	73.0	916	81.0
Median household income (U.S. \$)						
<40,000	329	6.8	242	73.6	276	83.9
40,000–46,999	862	17.9	661	76.7	747	86.7
47,000–53,999	1,041	21.6	782	75.1	883	84.8
≥54,000	2,587	53.7	2,036	78.7	2,211	85.5
Unemployed (%)						
<3	95	2.0	80	84.2	89	93.7
3.00–3.99	660	13.7	533	80.8	585	88.6
4.00–4.99	1,728	35.9	1,347	78.0	1,478	85.5
≥5	2,336	48.5	1,761	75.4	1,965	84.1
Without health insurance (%)						
<9	649	13.5	540	83.2	577	88.9
9.00–13.99	891	18.5	713	80.0	781	87.7
14.00–17.99	1,593	33.1	1,204	75.6	1,362	85.5
≥18	1,686	35.0	1,264	75.0	1,397	82.9
Vacant housing (%)						
<11	2,911	60.4	2,260	77.6	2,473	85.0
11.00–15.99	1,230	25.5	945	76.8	1,069	86.9
16.00–22.99	520	10.8	389	74.8	439	84.4
≥23	158	3.3	127	80.4	136	86.1
Subtotal^b	4,864	100	3,751	77.1	4,151	85.3
Female						
Below federal poverty level (%)						
<10	241	16.0	197	81.7	216	89.6
10.00–13.99	386	25.7	294	76.2	336	87.0
14.00–16.99	521	34.7	393	75.4	438	84.1
≥17	355	23.6	267	75.2	299	84.2
Less than high school diploma (%)						
<10	284	18.9	223	78.5	247	87.0
10.00–12.99	453	30.1	346	76.4	394	87.0
13.00–18.99	454	30.2	359	79.1	395	87.0
≥19	312	20.8	223	71.5	253	81.1
Median household income (U.S. \$)						
<40,000	133	8.8	110	82.7	123	92.5
40,000–46,999	281	18.7	210	74.7	238	84.7
47,000–53,999	343	22.8	249	72.6	281	81.9
≥54,000	746	49.6	582	78.0	647	86.7
Unemployed (%)						
<3	37	2.5	25	67.6	32	86.5
3.00–3.99	231	15.4	184	79.7	207	89.6
4.00–4.99	523	34.8	395	75.5	457	87.4
≥5	712	47.4	547	76.8	593	83.3
Without health insurance (%)						
<9	206	13.7	170	82.5	184	89.3
9.00–13.99	331	22.0	265	80.1	293	88.5
14.00–17.99	532	35.4	402	75.6	451	84.8
≥18	434	28.9	314	72.4	361	83.2
Vacant housing (%)						
<11	877	58.3	678	77.3	750	85.5
11.00–15.99	367	24.4	277	75.5	316	86.1
16.00–22.99	210	14.0	157	74.8	179	85.2
≥23	49	3.3	39	79.6	44	89.8
Subtotal^b	1,514	100	1,158	76.5	1,297	85.7
Total	6,378	100	4,909	77.0	5,448	85.4

Table 4. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥ 18 years, by age and selected social determinants of health—39 states and the District of Columbia (cont)

	Total		≤1 month		≤3 months	
	No.	% ^a	≥1 CD4 or VL tests		≥1 CD4 or VL tests	
	No.	%	No.	%	No.	%
45–54						
Male						
Below federal poverty level (%)						
<10	544	14.5	447	82.2	491	90.3
10.00–13.99	1,004	26.7	830	82.7	906	90.2
14.00–16.99	1,427	37.9	1,121	78.6	1,222	85.6
≥17	786	20.9	639	81.3	700	89.1
Less than high school diploma (%)						
<10	657	17.5	550	83.7	589	89.6
10.00–12.99	1,063	28.3	870	81.8	962	90.5
13.00–18.99	1,199	31.9	979	81.7	1,078	89.9
≥19	842	22.4	638	75.8	690	81.9
Median household income (U.S. \$)						
<40,000	299	8.0	243	81.3	262	87.6
40,000–46,999	645	17.1	528	81.9	589	91.3
47,000–53,999	827	22.0	658	79.6	726	87.8
≥54,000	1,990	52.9	1,608	80.8	1,742	87.5
Unemployed (%)						
<3	90	2.4	83	92.2	87	96.7
3.00–3.99	512	13.6	418	81.6	460	89.8
4.00–4.99	1,359	36.1	1,118	82.3	1,226	90.2
≥5	1,800	47.9	1,418	78.8	1,546	85.9
Without health insurance (%)						
<9	511	13.6	438	85.7	468	91.6
9.00–13.99	766	20.4	652	85.1	708	92.4
14.00–17.99	1,251	33.3	1,019	81.5	1,117	89.3
≥18	1,233	32.8	928	75.3	1,026	83.2
Vacant housing (%)						
<11	2,221	59.1	1,771	79.7	1,934	87.1
11.00–15.99	927	24.6	756	81.6	836	90.2
16.00–22.99	483	12.8	408	84.5	434	89.9
≥23	130	3.5	102	78.5	115	88.5
Subtotal^b	3,794	100	3,065	80.8	3,348	88.2
Female						
Below federal poverty level (%)						
<10	207	16.2	168	81.2	186	89.9
10.00–13.99	282	22.0	212	75.2	245	86.9
14.00–16.99	450	35.1	344	76.4	372	82.7
≥17	342	26.7	252	73.7	291	85.1
Less than high school diploma (%)						
<10	233	18.2	184	79.0	206	88.4
10.00–12.99	367	28.6	284	77.4	315	85.8
13.00–18.99	397	31.0	296	74.6	340	85.6
≥19	284	22.2	212	74.6	233	82.0
Median household income (U.S. \$)						
<40,000	132	10.3	106	80.3	118	89.4
40,000–46,999	243	19.0	176	72.4	205	84.4
47,000–53,999	303	23.7	231	76.2	256	84.5
≥54,000	603	47.1	463	76.8	515	85.4
Unemployed (%)						
<3	21	1.6	15	71.4	17	81.0
3.00–3.99	157	12.3	134	85.4	141	89.8
4.00–4.99	451	35.2	346	76.7	402	89.1
≥5	652	50.9	481	73.8	534	81.9
Without health insurance (%)						
<9	162	12.6	135	83.3	144	88.9
9.00–13.99	271	21.2	208	76.8	233	86.0
14.00–17.99	459	35.8	358	78.0	402	87.6
≥18	389	30.4	275	70.7	315	81.0
Vacant housing (%)						
<11	711	55.5	552	77.6	608	85.5
11.00–15.99	352	27.5	257	73.0	293	83.2
16.00–22.99	171	13.3	129	75.4	149	87.1
≥23	47	3.7	38	80.9	44	93.6
Subtotal^b	1,290	100	984	76.3	1,102	85.4
Total	5,084	100	4,049	79.6	4,450	87.5

Table 4. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥ 18 years, by age and selected social determinants of health—39 states and the District of Columbia (cont)

	Total		≤1 month		≤3 months	
	No.	% ^a	≥1 CD4 or VL tests		≥1 CD4 or VL tests	
			No.	%	No.	%
≥55						
Male						
Below federal poverty level (%)						
<10	353	15.5	281	79.6	307	87.0
10.00–13.99	649	28.5	547	84.3	588	90.6
14.00–16.99	795	34.9	608	76.5	674	84.8
≥17	482	21.1	380	78.8	421	87.3
Less than high school diploma (%)						
<10	437	19.2	364	83.3	396	90.6
10.00–12.99	663	29.1	534	80.5	581	87.6
13.00–18.99	760	33.3	604	79.5	670	88.2
≥19	419	18.4	314	74.9	343	81.9
Median household income (U.S. \$)						
<40,000	166	7.3	126	75.9	141	84.9
40,000–46,999	431	18.9	329	76.3	374	86.8
47,000–53,999	467	20.5	376	80.5	414	88.7
≥54,000	1,215	53.3	985	81.1	1,061	87.3
Unemployed (%)						
<3	48	2.1	40	83.3	45	93.8
3.00–3.99	324	14.2	272	84.0	295	91.0
4.00–4.99	844	37.0	674	79.9	737	87.3
≥5	1,063	46.6	830	78.1	913	85.9
Without health insurance (%)						
<9	377	16.5	320	84.9	333	88.3
9.00–13.99	480	21.1	392	81.7	436	90.8
14.00–17.99	771	33.8	622	80.7	681	88.3
≥18	651	28.6	482	74.0	540	82.9
Vacant housing (%)						
<11	1,313	57.6	1,056	80.4	1,143	87.1
11.00–15.99	532	23.3	407	76.5	454	85.3
16.00–22.99	326	14.3	269	82.5	296	90.8
≥23	108	4.7	84	77.8	97	89.8
Subtotal^b	2,306	100	1,836	79.6	2,011	87.2
Female						
Below federal poverty level (%)						
<10	162	16.4	132	81.5	143	88.3
10.00–13.99	231	23.4	189	81.8	201	87.0
14.00–16.99	327	33.1	255	78.0	287	87.8
≥17	267	27.1	207	77.5	232	86.9
Less than high school diploma (%)						
<10	180	18.2	149	82.8	161	89.4
10.00–12.99	281	28.5	221	78.6	239	85.1
13.00–18.99	335	33.9	260	77.6	294	87.8
≥19	191	19.4	153	80.1	169	88.5
Median household income (U.S. \$)						
<40,000	108	10.9	86	79.6	94	87.0
40,000–46,999	200	20.3	152	76.0	174	87.0
47,000–53,999	219	22.2	168	76.7	190	86.8
≥54,000	460	46.6	377	82.0	405	88.0
Unemployed (%)						
<3	14	1.4	13	92.9	13	92.9
3.00–3.99	124	12.6	101	81.5	110	88.7
4.00–4.99	317	32.1	259	81.7	280	88.3
≥5	532	53.9	410	77.1	460	86.5
Without health insurance (%)						
<9	140	14.2	116	82.9	125	89.3
9.00–13.99	199	20.2	167	83.9	182	91.5
14.00–17.99	366	37.1	284	77.6	318	86.9
≥18	282	28.6	216	76.6	238	84.4
Vacant housing (%)						
<11	548	55.5	446	81.4	486	88.7
11.00–15.99	247	25.0	185	74.9	211	85.4
16.00–22.99	145	14.7	115	79.3	126	86.9
≥23	47	4.8	37	78.7	40	85.1
Subtotal^b	996	100	790	79.3	870	87.3
Total	3,302	100	2,626	79.5	2,881	87.3

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); SDH, social determinants of health.

Note. Data are based on residence at diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month or ≤3 months after HIV diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting. Definitions for the SDH indicator variables used in this report can be found at <https://go.usa.gov/xP2d4>.

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

^b 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 SDH subpopulations.

Table 5. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥18 years, by transmission category and selected social determinants of health—39 states and the District of Columbia

	Total		≤1 month		≤3 months	
	No.	% ^a	≥1 CD4 or VL tests	%	≥1 CD4 or VL tests	%
Male-to-male sexual contact						
Male						
Below federal poverty level (%)						
<10	2,830	12.9	2,249	79.5	2,484	87.8
10.00–13.99	5,403	24.6	4,226	78.2	4,732	87.6
14.00–16.99	9,148	41.6	6,833	74.7	7,646	83.6
≥17	4,595	20.9	3,482	75.8	3,966	86.3
Less than high school diploma (%)						
<10	3,831	17.4	3,061	79.9	3,373	88.1
10.00–12.99	5,907	26.9	4,525	76.6	5,135	86.9
13.00–18.99	7,079	32.2	5,392	76.2	6,063	85.7
≥19	5,160	23.5	3,812	73.9	4,258	82.5
Median household income (U.S. \$)						
<40,000	1,546	7.0	1,154	74.7	1,323	85.6
40,000–46,999	3,762	17.1	2,794	74.3	3,202	85.1
47,000–53,999	4,796	21.8	3,546	73.9	4,055	84.5
≥54,000	11,872	54.0	9,296	78.3	10,250	86.3
Unemployed (%)						
<3	410	1.9	333	81.1	371	90.4
3.00–3.99	2,794	12.7	2,212	79.2	2,469	88.4
4.00–4.99	8,108	36.9	6,170	76.1	6,968	85.9
≥5	10,664	48.5	8,075	75.7	9,020	84.6
Without health insurance (%)						
<9	2,673	12.2	2,230	83.4	2,396	89.7
9.00–13.99	4,245	19.3	3,334	78.5	3,732	87.9
14.00–17.99	7,589	34.5	5,745	75.7	6,493	85.6
≥18	7,470	34.0	5,481	73.4	6,208	83.1
Vacant housing (%)						
<11	13,552	61.7	10,443	77.1	11,622	85.8
11.00–15.99	5,542	25.2	4,130	74.5	4,696	84.7
16.00–22.99	2,298	10.5	1,756	76.4	1,993	86.7
≥23	584	2.7	461	78.9	517	88.5
Subtotal^b	22,190	100	16,933	76.3	18,990	85.6
Female						
Below federal poverty level (%)						
<10	—	—	—	—	—	—
10.00–13.99	—	—	—	—	—	—
14.00–16.99	—	—	—	—	—	—
≥17	—	—	—	—	—	—
Less than high school diploma (%)						
<10	—	—	—	—	—	—
10.00–12.99	—	—	—	—	—	—
13.00–18.99	—	—	—	—	—	—
≥19	—	—	—	—	—	—
Median household income (U.S. \$)						
<40,000	—	—	—	—	—	—
40,000–46,999	—	—	—	—	—	—
47,000–53,999	—	—	—	—	—	—
≥54,000	—	—	—	—	—	—
Unemployed (%)						
<3	—	—	—	—	—	—
3.00–3.99	—	—	—	—	—	—
4.00–4.99	—	—	—	—	—	—
≥5	—	—	—	—	—	—
Without health insurance (%)						
<9	—	—	—	—	—	—
9.00–13.99	—	—	—	—	—	—
14.00–17.99	—	—	—	—	—	—
≥18	—	—	—	—	—	—
Vacant housing (%)						
<11	—	—	—	—	—	—
11.00–15.99	—	—	—	—	—	—
16.00–22.99	—	—	—	—	—	—
≥23	—	—	—	—	—	—
Subtotal^b	—	—	—	—	—	—
Total	22,190	100	16,933	76.3	18,990	85.6

Table 5. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥ 18 years, by transmission category and selected social determinants of health—39 states and the District of Columbia (cont)

	Total		≤1 month		≤3 months	
	No.	% ^a	≥1 CD4 or VL tests		≥1 CD4 or VL tests	
			No.	%	No.	%
Injection drug use						
Male						
Below federal poverty level (%)						
<10	164	16.1	122	74.3	136	82.7
10.00–13.99	263	25.7	194	74.1	223	85.0
14.00–16.99	360	35.2	259	72.0	289	80.4
≥17	235	23.0	179	76.1	194	82.6
Less than high school diploma (%)						
<10	191	18.7	142	74.3	162	84.9
10.00–12.99	264	25.8	194	73.5	217	82.3
13.00–18.99	324	31.7	236	72.8	264	81.6
≥19	243	23.8	183	75.2	199	81.8
Median household income (U.S. \$)						
<40,000	90	8.8	67	74.7	73	81.3
40,000–46,999	194	19.0	138	71.2	163	84.0
47,000–53,999	242	23.7	173	71.5	193	80.0
≥54,000	496	48.5	376	75.8	413	83.2
Unemployed (%)						
<3	168	2.7	22	78.3	26	93.5
3.00–3.99	168	16.4	123	73.6	140	83.5
4.00–4.99	365	35.7	271	74.2	302	82.6
≥5	462	45.2	339	73.4	375	81.3
Without health insurance (%)						
<9	195	19.1	155	79.5	170	87.1
9.00–13.99	240	23.5	173	71.8	194	80.6
14.00–17.99	329	32.2	246	74.9	273	83.0
≥18	258	25.2	181	70.1	206	80.0
Vacant housing (%)						
<11	628	61.5	467	74.3	514	81.7
11.00–15.99	221	21.7	160	72.5	182	82.1
16.00–22.99	132	13.0	100	75.3	114	86.2
≥23	40	3.9	27	69.2	33	83.3
Subtotal^b	1,029	100	759	73.8	847	82.4
Female						
Below federal poverty level (%)						
<10	121	15.3	98	80.6	108	89.1
10.00–13.99	206	25.9	154	74.9	175	84.8
14.00–16.99	291	36.6	211	72.4	236	81.0
≥17	176	22.1	136	77.7	154	87.9
Less than high school diploma (%)						
<10	155	19.5	124	79.8	137	88.5
10.00–12.99	216	27.3	162	74.6	183	84.3
13.00–18.99	239	30.1	176	73.8	199	83.2
≥19	183	23.1	138	75.1	154	84.1
Median household income (U.S. \$)						
<40,000	59	7.5	49	83.2	56	94.1
40,000–46,999	157	19.8	120	76.7	137	87.3
47,000–53,999	186	23.5	131	70.2	148	79.2
≥54,000	391	49.3	299	76.4	332	84.9
Unemployed (%)						
<3	13	1.6	10	81.4	12	94.6
3.00–3.99	134	16.8	108	81.0	121	90.5
4.00–4.99	312	39.4	232	74.3	263	84.3
≥5	335	42.2	248	74.1	276	82.5
Without health insurance (%)						
<9	150	18.9	119	79.5	132	87.6
9.00–13.99	170	21.5	135	79.5	149	87.2
14.00–17.99	271	34.1	198	73.2	229	84.5
≥18	202	25.5	146	72.2	164	80.9
Vacant housing (%)						
<11	488	61.5	368	75.5	411	84.2
11.00–15.99	169	21.3	127	75.2	144	85.3
16.00–22.99	111	14.0	83	75.2	93	83.8
≥23	26	3.3	21	78.9	25	96.2
Subtotal^b	799	100	603	75.4	677	84.7
Total	1,828	100	1,362	74.5	1,524	83.4

Table 5. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥ 18 years, by transmission category and selected social determinants of health—39 states and the District of Columbia (cont)

	Total		≤1 month		≤3 months	
	No.	% ^a	≥1 CD4 or VL tests		≥1 CD4 or VL tests	
			No.	%	No.	%
Male-to-male sexual contact and injection drug use						
Male						
Below federal poverty level (%)						
<10	177	16.2	134	75.9	158	89.5
10.00–13.99	330	30.2	249	75.5	282	85.5
14.00–16.99	368	33.8	266	72.3	308	83.7
≥17	215	19.8	155	72.0	184	85.6
Less than high school diploma (%)						
<10	270	24.7	203	75.5	242	89.6
10.00–12.99	281	25.8	213	75.8	248	88.3
13.00–18.99	340	31.2	247	72.9	284	83.6
≥19	199	18.3	140	70.2	159	79.7
Median household income (U.S. \$)						
<40,000	81	7.4	55	68.2	69	84.9
40,000–46,999	194	17.8	140	72.2	167	85.9
47,000–53,999	203	18.6	148	73.2	171	84.3
≥54,000	612	56.1	460	75.2	526	86.0
Unemployed (%)						
<3	39	3.6	30	76.6	35	87.6
3.00–3.99	233	21.4	183	78.5	210	89.8
4.00–4.99	388	35.6	284	73.2	327	84.3
≥5	429	39.4	307	71.5	362	84.2
Without health insurance (%)						
<9	192	17.6	160	83.3	176	91.5
9.00–13.99	277	25.5	200	72.1	245	88.4
14.00–17.99	378	34.7	278	73.6	319	84.2
≥18	242	22.2	166	68.4	193	79.8
Vacant housing (%)						
<11	688	63.1	512	74.4	589	85.6
11.00–15.99	214	19.6	150	70.2	182	85.0
16.00–22.99	151	13.8	116	76.8	133	88.0
≥23	38	3.4	26	69.4	30	79.5
Subtotal^b	1,094	100	807	73.8	936	85.5
Female						
Below federal poverty level (%)						
<10	—	—	—	—	—	—
10.00–13.99	—	—	—	—	—	—
14.00–16.99	—	—	—	—	—	—
≥17	—	—	—	—	—	—
Less than high school diploma (%)						
<10	—	—	—	—	—	—
10.00–12.99	—	—	—	—	—	—
13.00–18.99	—	—	—	—	—	—
≥19	—	—	—	—	—	—
Median household income (U.S. \$)						
<40,000	—	—	—	—	—	—
40,000–46,999	—	—	—	—	—	—
47,000–53,999	—	—	—	—	—	—
≥54,000	—	—	—	—	—	—
Unemployed (%)						
<3	—	—	—	—	—	—
3.00–3.99	—	—	—	—	—	—
4.00–4.99	—	—	—	—	—	—
≥5	—	—	—	—	—	—
Without health insurance (%)						
<9	—	—	—	—	—	—
9.00–13.99	—	—	—	—	—	—
14.00–17.99	—	—	—	—	—	—
≥18	—	—	—	—	—	—
Vacant housing (%)						
<11	—	—	—	—	—	—
11.00–15.99	—	—	—	—	—	—
16.00–22.99	—	—	—	—	—	—
≥23	—	—	—	—	—	—
Subtotal^b	—	—	—	—	—	—
Total	1,094	100	807	73.8	936	85.5

Table 5. Linkage to HIV medical care after HIV diagnosis during 2016, among persons aged ≥ 18 years, by transmission category and selected social determinants of health—39 states and the District of Columbia (cont)

	Total		≤1 month		≤3 months	
	No.	% ^a	≥1 CD4 or VL tests		≥1 CD4 or VL tests	
	No.	%	No.	%	No.	%
Heterosexual contact^c						
Male						
Below federal poverty level (%)						
<10	375	14.1	302	80.5	329	87.8
10.00–13.99	724	27.3	534	73.7	598	82.6
14.00–16.99	863	32.6	607	70.4	702	81.4
≥17	689	26.0	503	73.1	572	83.1
Less than high school diploma (%)						
<10	442	16.7	342	77.4	383	86.7
10.00–12.99	819	30.9	593	72.4	675	82.4
13.00–18.99	969	36.6	704	72.6	799	82.4
≥19	419	15.8	307	73.2	344	82.1
Median household income (U.S. \$)						
<40,000	305	11.5	215	70.5	250	82.1
40,000–46,999	576	21.7	405	70.3	467	81.1
47,000–53,999	662	25.0	468	70.6	550	83.1
≥54,000	1,107	41.8	858	77.5	933	84.3
Unemployed (%)						
<3	47	1.8	41	87.3	43	92.1
3.00–3.99	322	12.2	246	76.3	283	88.0
4.00–4.99	879	33.2	651	74.0	718	81.6
≥5	1,401	52.9	1,008	71.9	1,157	82.6
Without health insurance (%)						
<9	344	13.0	284	82.6	303	88.1
9.00–13.99	468	17.7	357	76.4	395	84.5
14.00–17.99	1,032	39.0	738	71.5	846	81.9
≥18	806	30.4	567	70.3	657	81.5
Vacant housing (%)						
<11	1,247	47.0	953	76.4	1,055	84.6
11.00–15.99	798	30.1	555	69.6	646	81.0
16.00–22.99	488	18.4	350	71.7	400	81.8
≥23	117	4.4	88	74.8	100	85.4
Subtotal^b	2,685	100	1,972	73.5	2,229	83.0
Female						
Below federal poverty level (%)						
<10	811	14.9	650	80.1	716	88.3
10.00–13.99	1,322	24.2	1,010	76.4	1,125	85.1
14.00–16.99	1,892	34.7	1,419	75.0	1,592	84.2
≥17	1,426	26.2	1,061	74.4	1,216	85.3
Less than high school diploma (%)						
<10	1,008	18.5	806	80.0	892	88.5
10.00–12.99	1,579	29.0	1,190	75.4	1,338	84.8
13.00–18.99	1,768	32.4	1,335	75.5	1,509	85.4
≥19	1,097	20.1	808	73.6	911	83.0
Median household income (U.S. \$)						
<40,000	568	10.4	444	78.2	502	88.3
40,000–46,999	1,064	19.5	769	72.3	896	84.1
47,000–53,999	1,309	24.0	961	73.4	1,086	83.0
≥54,000	2,510	46.0	1,965	78.3	2,167	86.3
Unemployed (%)						
<3	104	1.9	76	73.4	89	86.2
3.00–3.99	727	13.3	590	81.1	644	88.6
4.00–4.99	1,845	33.8	1,407	76.3	1,595	86.5
≥5	2,776	50.9	2,067	74.5	2,322	83.6
Without health insurance (%)						
<9	691	12.7	577	83.5	623	90.2
9.00–13.99	1,074	19.7	855	79.7	945	88.0
14.00–17.99	1,997	36.6	1,507	75.4	1,698	85.0
≥18	1,689	31.0	1,200	71.1	1,385	82.0
Vacant housing (%)						
<11	3,010	55.2	2,352	78.2	2,592	86.1
11.00–15.99	1,486	27.3	1,071	72.1	1,246	83.9
16.00–22.99	755	13.9	561	74.3	637	84.4
≥23	201	3.7	155	77.3	175	87.0
Subtotal^b	5,495	100	4,172	75.9	4,687	85.3
Total	8,180	100	6,145	75.1	6,916	84.5

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); SDH, social determinants of health.

Note. Data are based on residence at diagnosis. Data have been statistically adjusted to account for missing transmission category. Linkage to HIV medical care was defined as having ≥1 CD4 or VL tests ≤1 month or ≤3 months after HIV diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting. Definitions for the SDH indicator variables used in this report can be found at <https://go.usa.gov/xP2d4>.

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

^b 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 SDH subpopulations.

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

Table 6. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.		No.	%	No.	%
Black/African American						
Male						
Below federal poverty level (%)						
<10	22,054		15,116	68.5	10,902	49.4
10.00–13.99	41,455		29,397	70.9	22,968	55.4
14.00–16.99	78,588		55,115	70.1	41,856	53.3
≥17	62,090		43,746	70.5	34,500	55.6
Less than high school diploma (%)						
<10	33,478		23,507	70.2	17,631	52.7
10.00–12.99	55,914		39,063	69.9	30,284	54.2
13.00–18.99	69,292		47,957	69.2	36,072	52.1
≥19	45,503		32,847	72.2	26,239	57.7
Median household income (U.S. \$)						
<40,000	23,400		17,121	73.2	13,866	59.3
40,000–46,999	41,509		28,864	69.5	21,750	52.4
47,000–53,999	48,555		34,736	71.5	27,414	56.5
≥54,000	90,723		62,653	69.1	47,196	52.0
Unemployed (%)						
<3	3,160		2,037	64.5	1,531	48.4
3.00–3.99	18,567		12,890	69.4	9,529	51.3
4.00–4.99	63,195		44,852	71.0	34,310	54.3
≥5	119,265		83,595	70.1	64,856	54.4
Without health insurance (%)						
<9	24,648		16,545	67.1	12,706	51.5
9.00–13.99	45,323		32,169	71.0	24,347	53.7
14.00–17.99	79,797		56,554	70.9	43,202	54.1
≥18	54,419		38,106	70.0	29,971	55.1
Vacant housing (%)						
<11	106,682		75,216	70.5	57,011	53.4
11.00–15.99	59,730		41,831	70.0	32,774	54.9
16.00–22.99	32,977		22,959	69.6	17,703	53.7
≥23	4,798		3,368	70.2	2,738	57.1
Subtotal^b	218,551		153,248	70.1	117,578	53.8
Female						
Below federal poverty level (%)						
<10	13,529		9,526	70.4	6,966	51.5
10.00–13.99	23,836		17,661	74.1	13,902	58.3
14.00–16.99	35,460		25,628	72.3	19,671	55.5
≥17	35,974		26,369	73.3	20,881	58.0
Less than high school diploma (%)						
<10	17,120		12,364	72.2	9,323	54.5
10.00–12.99	31,210		22,646	72.6	17,639	56.5
13.00–18.99	36,974		26,699	72.2	20,375	55.1
≥19	23,495		17,475	74.4	14,083	59.9
Median household income (U.S. \$)						
<40,000	13,368		9,969	74.6	8,093	60.5
40,000–46,999	22,815		16,594	72.7	12,497	54.8
47,000–53,999	28,064		20,956	74.7	16,626	59.2
≥54,000	44,552		31,665	71.1	24,204	54.3
Unemployed (%)						
<3	1,303		898	68.9	668	51.3
3.00–3.99	10,314		7,388	71.6	5,451	52.9
4.00–4.99	34,106		25,102	73.6	19,530	57.3
≥5	63,076		45,796	72.6	35,771	56.7
Without health insurance (%)						
<9	13,466		9,598	71.3	7,384	54.8
9.00–13.99	23,973		17,485	72.9	13,355	55.7
14.00–17.99	41,447		30,551	73.7	23,697	57.2
≥18	29,913		21,550	72.0	16,984	56.8
Vacant housing (%)						
<11	56,408		41,203	73.0	31,732	56.3
11.00–15.99	30,432		21,991	72.3	17,387	57.1
16.00–22.99	19,197		13,987	72.9	10,685	55.7
≥23	2,762		2,003	72.5	1,616	58.5
Subtotal^b	115,294		83,898	72.8	64,921	56.3
Total	333,845		237,146	71.0	182,499	54.7

Table 6. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.		No.	%	No.	%
Hispanic/Latino^c						
Male						
Below federal poverty level (%)						
<10	12,806		8,747	68.3	6,708	52.4
10.00–13.99	32,145		22,531	70.1	18,267	56.8
14.00–16.99	55,603		39,049	70.2	31,655	56.9
≥17	32,632		22,983	70.4	19,437	59.6
Less than high school diploma (%)						
<10	12,382		8,531	68.9	6,654	53.7
10.00–12.99	31,286		22,248	71.1	18,270	58.4
13.00–18.99	41,013		28,191	68.7	22,545	55.0
≥19	48,505		34,340	70.8	28,598	59.0
Median household income (U.S. \$)						
<40,000	12,155		8,768	72.1	7,620	62.7
40,000–46,999	17,600		12,043	68.4	9,823	55.8
47,000–53,999	24,209		17,215	71.1	14,261	58.9
≥54,000	79,222		55,284	69.8	44,363	56.0
Unemployed (%)						
<3	1,631		967	59.3	698	42.8
3.00–3.99	13,180		8,989	68.2	7,040	53.4
4.00–4.99	50,098		34,905	69.7	27,981	55.9
≥5	68,277		48,449	71.0	40,348	59.1
Without health insurance (%)						
<9	21,524		15,033	69.8	12,218	56.8
9.00–13.99	17,718		12,404	70.0	9,934	56.1
14.00–17.99	40,124		27,423	68.3	22,033	54.9
≥18	53,820		38,450	71.4	31,882	59.2
Vacant housing (%)						
<11	94,501		67,230	71.1	54,451	57.6
11.00–15.99	27,149		18,487	68.1	15,364	56.6
16.00–22.99	8,576		5,813	67.8	4,796	55.9
≥23	2,960		1,780	60.1	1,456	49.2
Subtotal^b	137,729		96,422	70.0	78,571	57.0
Female						
Below federal poverty level (%)						
<10	3,908		2,947	75.4	2,297	58.8
10.00–13.99	7,593		5,777	76.1	4,741	62.4
14.00–16.99	10,654		7,830	73.5	6,403	60.1
≥17	10,581		8,021	75.8	6,908	65.3
Less than high school diploma (%)						
<10	3,336		2,591	77.7	2,045	61.3
10.00–12.99	8,172		6,275	76.8	5,148	63.0
13.00–18.99	8,786		6,339	72.1	5,155	58.7
≥19	12,442		9,370	75.3	8,001	64.3
Median household income (U.S. \$)						
<40,000	5,384		4,237	78.7	3,711	68.9
40,000–46,999	3,728		2,715	72.8	2,216	59.4
47,000–53,999	7,013		5,326	75.9	4,434	63.2
≥54,000	16,611		12,297	74.0	9,988	60.1
Unemployed (%)						
<3	303		207	68.3	155	51.2
3.00–3.99	3,191		2,480	77.7	1,966	61.6
4.00–4.99	10,902		8,111	74.4	6,654	61.0
≥5	18,340		13,777	75.1	11,574	63.1
Without health insurance (%)						
<9	6,632		5,135	77.4	4,239	63.9
9.00–13.99	5,329		4,005	75.2	3,292	61.8
14.00–17.99	11,278		8,493	75.3	7,052	62.5
≥18	9,497		6,942	73.1	5,766	60.7
Vacant housing (%)						
<11	23,650		17,919	75.8	14,843	62.8
11.00–15.99	6,185		4,431	71.6	3,696	59.8
16.00–22.99	2,129		1,638	76.9	1,314	61.7
≥23	772		587	76.0	496	64.2
Subtotal^b	33,825		25,343	74.9	20,984	62.0
Total	171,554		121,765	71.0	99,555	58.0

Table 6. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.		No.	%	No.	%
White						
Male						
Below federal poverty level (%)						
<10	30,369		23,239	76.5	17,095	56.3
10.00–13.99	65,845		53,030	80.5	41,124	62.5
14.00–16.99	76,697		58,818	76.7	45,424	59.2
≥17	25,254		19,141	75.8	14,672	58.1
Less than high school diploma (%)						
<10	47,110		37,330	79.2	27,831	59.1
10.00–12.99	64,929		51,109	78.7	40,054	61.7
13.00–18.99	54,062		40,528	75.0	30,469	56.4
≥19	32,064		25,261	78.8	19,961	62.3
Median household income (U.S. \$)						
<40,000	9,309		7,254	77.9	5,720	61.4
40,000–46,999	24,550		19,132	77.9	14,630	59.6
47,000–53,999	41,827		33,504	80.1	26,850	64.2
≥54,000	122,479		94,338	77.0	71,115	58.1
Unemployed (%)						
<3	5,259		3,943	75.0	2,835	53.9
3.00–3.99	37,183		28,519	76.7	21,069	56.7
4.00–4.99	80,765		63,732	78.9	49,291	61.0
≥5	74,958		58,034	77.4	45,120	60.2
Without health insurance (%)						
<9	44,668		34,688	77.7	26,446	59.2
9.00–13.99	45,403		36,298	79.9	27,078	59.6
14.00–17.99	61,301		46,208	75.4	34,822	56.8
≥18	46,793		37,034	79.1	29,969	64
Vacant housing (%)						
<11	124,473		97,064	78.0	73,191	58.8
11.00–15.99	42,253		31,932	75.6	24,867	58.9
16.00–22.99	22,841		18,256	79.9	14,700	64.4
≥23	8,598		6,976	81.1	5,557	64.6
Subtotal^b	209,756		162,498	77.5	124,695	59.4
Female						
Below federal poverty level (%)						
<10	5,407		3,955	73.1	2,856	52.8
10.00–13.99	9,608		7,354	76.5	5,642	58.7
14.00–16.99	8,653		6,180	71.4	4,613	53.3
≥17	4,647		3,204	68.9	2,383	51.3
Less than high school diploma (%)						
<10	7,274		5,481	75.4	4,029	55.4
10.00–12.99	8,763		6,499	74.2	4,895	55.9
13.00–18.99	8,240		5,897	71.6	4,411	53.5
≥19	4,038		2,816	69.7	2,159	53.5
Median household income (U.S. \$)						
<40,000	2,123		1,514	71.3	1,143	53.8
40,000–46,999	5,217		3,848	73.8	2,851	54.6
47,000–53,999	6,602		4,910	74.4	3,742	56.7
≥54,000	14,373		10,421	72.5	7,758	54.0
Unemployed (%)						
<3	1,034		762	73.7	550	53.2
3.00–3.99	5,719		4,237	74.1	3,084	53.9
4.00–4.99	11,141		8,304	74.5	6,293	56.5
≥5	10,421		7,390	70.9	5,567	53.4
Without health insurance (%)						
<9	6,320		4,745	75.1	3,582	56.7
9.00–13.99	7,336		5,440	74.2	3,957	53.9
14.00–17.99	9,146		6,562	71.7	4,887	53.4
≥18	5,513		3,946	71.6	3,068	55.7
Vacant housing (%)						
<11	15,911		11,609	73.0	8,602	54.1
11.00–15.99	6,331		4,477	70.7	3,343	52.8
16.00–22.99	4,252		3,184	74.9	2,448	57.6
≥23	1,821		1,423	78.1	1,101	60.5
Subtotal^b	29,905		21,706	72.6	16,248	54.3
Total	239,661		184,204	76.9	140,943	58.8

Table 6. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.		No.	%	No.	%
Male			Other^d			
Below federal poverty level (%)						
<10	5,628		4,491	79.8	3,354	59.6
10.00–13.99	9,621		7,886	82.0	6,211	64.6
14.00–16.99	12,970		10,480	80.8	8,238	63.5
≥17	5,869		4,775	81.4	3,880	66.1
Less than high school diploma (%)						
<10	7,430		6,070	81.7	4,616	62.1
10.00–12.99	9,838		8,022	81.5	6,299	64.0
13.00–18.99	9,100		7,191	79.0	5,519	60.6
≥19	7,720		6,349	82.2	5,249	68.0
Median household income (U.S. \$)						
<40,000	2,126		1,770	83.3	1,480	69.6
40,000–46,999	3,604		2,866	79.5	2,171	60.2
47,000–53,999	6,353		5,259	82.8	4,296	67.6
≥54,000	22,005		17,737	80.6	13,736	62.4
Unemployed (%)						
<3	490		367	74.9	272	55.5
3.00–3.99	5,321		4,316	81.1	3,268	61.4
4.00–4.99	13,499		10,963	81.2	8,613	63.8
≥5	14,778		11,986	81.1	9,530	64.5
Without health insurance (%)						
<9	8,216		6,675	81.2	5,248	63.9
9.00–13.99	7,683		6,300	82.0	4,825	62.8
14.00–17.99	10,249		8,218	80.2	6,431	62.7
≥18	7,940		6,439	81.1	5,179	65.2
Vacant housing (%)						
<11	23,234		18,873	81.2	14,791	63.7
11.00–15.99	7,164		5,819	81.2	4,600	64.2
16.00–22.99	2,790		2,216	79.4	1,732	62.1
≥23	900		724	80.4	560	62.2
Subtotal^b	36,263		29,281	80.7	23,002	63.4
Female						
Below federal poverty level (%)						
<10	2,041		1,623	79.5	1,216	59.6
10.00–13.99	2,746		2,266	82.5	1,796	65.4
14.00–16.99	2,831		2,258	79.8	1,812	64.0
≥17	2,280		1,895	83.1	1,535	67.3
Less than high school diploma (%)						
<10	2,439		1,987	81.5	1,518	62.2
10.00–12.99	2,571		2,101	81.7	1,646	64.0
13.00–18.99	2,700		2,170	80.4	1,721	63.7
≥19	2,188		1,784	81.5	1,474	67.4
Median household income (U.S. \$)						
<40,000	920		764	83.0	626	68.0
40,000–46,999	1,327		1,087	81.9	843	63.5
47,000–53,999	2,132		1,769	83.0	1,457	68.3
≥54,000	5,519		4,422	80.1	3,433	62.2
Unemployed (%)						
<3	159		126	79.2	85	53.5
3.00–3.99	1,869		1,481	79.2	1,156	61.9
4.00–4.99	3,672		3,015	82.1	2,405	65.5
≥5	4,198		3,420	81.5	2,713	64.6
Without health insurance (%)						
<9	2,386		1,966	82.4	1,549	64.9
9.00–13.99	2,440		2,008	82.3	1,574	64.5
14.00–17.99	3,014		2,423	80.4	1,928	64.0
≥18	2,058		1,645	79.9	1,308	63.6
Vacant housing (%)						
<11	6,488		5,253	81.0	4,145	63.9
11.00–15.99	2,057		1,697	82.5	1,359	66.1
16.00–22.99	1,035		831	80.3	654	63.2
≥23	318		261	82.1	201	63.2
Subtotal^b	10,581		8,564	80.9	6,778	64.1
Total	46,844		37,845	80.8	29,780	63.6

Table 6. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.		No.	%	No.	%
Male			Total			
Below federal poverty level (%)						
<10	70,857		51,593	72.8	38,059	53.7
10.00–13.99	149,066		112,844	75.7	88,570	59.4
14.00–16.99	223,858		163,462	73.0	127,173	56.8
≥17	125,845		90,645	72.0	72,489	57.6
Less than high school diploma (%)						
<10	100,400		75,438	75.1	56,732	56.5
10.00–12.99	161,967		120,442	74.4	94,907	58.6
13.00–18.99	173,467		123,867	71.4	94,605	54.5
≥19	133,792		98,797	73.8	80,047	59.8
Median household income (U.S. \$)						
<40,000	46,990		34,913	74.3	28,686	61.0
40,000–46,999	87,263		62,905	72.1	48,374	55.4
47,000–53,999	120,944		90,714	75.0	72,821	60.2
≥54,000	314,429		230,012	73.2	176,410	56.1
Unemployed (%)						
<3	10,540		7,314	69.4	5,336	50.6
3.00–3.99	74,251		54,714	73.7	40,906	55.1
4.00–4.99	207,557		154,452	74.4	120,195	57.9
≥5	277,278		202,064	72.9	159,854	57.7
Without health insurance (%)						
<9	99,056		72,941	73.6	56,618	57.2
9.00–13.99	116,127		87,171	75.1	66,184	57.0
14.00–17.99	191,471		138,403	72.3	106,488	55.6
≥18	162,972		120,029	73.7	97,001	59.5
Vacant housing (%)						
<11	348,890		258,383	74.1	199,444	57.2
11.00–15.99	136,296		98,069	72.0	77,605	56.9
16.00–22.99	67,184		49,244	73.3	38,931	57.9
≥23	17,256		12,848	74.5	10,311	59.8
Subtotal^b	602,299		441,449	73.3	343,846	57.1
Female						
Below federal poverty level (%)						
<10	24,885		18,051	72.5	13,335	53.6
10.00–13.99	43,783		33,058	75.5	26,081	59.6
14.00–16.99	57,598		41,896	72.7	32,499	56.4
≥17	53,482		39,489	73.8	31,707	59.3
Less than high school diploma (%)						
<10	30,169		22,423	74.3	16,915	56.1
10.00–12.99	50,716		37,521	74.0	29,328	57.8
13.00–18.99	56,700		41,105	72.5	31,662	55.8
≥19	42,163		31,445	74.6	25,717	61.0
Median household income (U.S. \$)						
<40,000	21,795		16,484	75.6	13,573	62.3
40,000–46,999	33,087		24,244	73.3	18,407	55.6
47,000–53,999	43,811		32,961	75.2	26,259	59.9
≥54,000	81,055		58,805	72.5	45,383	56.0
Unemployed (%)						
<3	2,799		1,993	71.2	1,458	52.1
3.00–3.99	21,093		15,586	73.9	11,657	55.3
4.00–4.99	59,821		44,532	74.4	34,882	58.3
≥5	96,035		70,383	73.3	55,625	57.9
Without health insurance (%)						
<9	28,804		21,444	74.4	16,754	58.2
9.00–13.99	39,078		28,938	74.1	22,178	56.8
14.00–17.99	64,885		48,029	74.0	37,564	57.9
≥18	46,981		34,083	72.5	27,126	57.7
Vacant housing (%)						
<11	102,457		75,984	74.2	59,322	57.9
11.00–15.99	45,005		32,596	72.4	25,785	57.3
16.00–22.99	26,613		19,640	73.8	15,101	56.7
≥23	5,673		4,274	75.3	3,414	60.2
Subtotal^b	189,605		139,511	73.6	108,931	57.5
Total	791,904		580,960	73.4	452,777	57.2

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); SDH, social determinants of health.

Note. Data are based on address of residence as of December 31, 2015 (i.e., most recent known address). See Technical Notes for the list of areas that met the criteria for complete laboratory reporting. Definitions for the SDH indicator variables used in this report can be found at <https://go.usa.gov/xP2d4>.

^a Performed ≥3 months apart during 2015.

^b 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 SDH subpopulations.

^c Hispanics/Latinos can be of any race.

^d Includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, multiple races, and unknown races.

Table 7. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by age and selected social determinants of health—39 states and the District of Columbia

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.		No.	%	No.	%
			18–24			
Male						
Below federal poverty level (%)						
<10	2,611		1,957	75.0	1,394	53.4
10.00–13.99	4,666		3,508	75.2	2,565	55.0
14.00–16.99	8,955		6,720	75.0	4,856	54.2
≥17	5,964		4,441	74.5	3,262	54.7
Less than high school diploma (%)						
<10	3,808		2,861	75.1	2,033	53.4
10.00–12.99	5,600		4,264	76.1	3,146	56.2
13.00–18.99	7,417		5,446	73.4	3,901	52.6
≥19	5,371		4,055	75.5	2,997	55.8
Median household income (U.S. \$)						
<40,000	2,348		1,742	74.2	1,326	56.5
40,000–46,999	4,073		3,025	74.3	2,142	52.6
47,000–53,999	5,170		3,863	74.7	2,843	55.0
≥54,000	10,605		7,996	75.4	5,766	54.4
Unemployed (%)						
<3	331		229	69.2	151	45.6
3.00–3.99	2,384		1,808	75.8	1,328	55.7
4.00–4.99	7,678		5,842	76.1	4,246	55.3
≥5	11,803		8,747	74.1	6,352	53.8
Without health insurance (%)						
<9	2,595		2,011	77.5	1,491	57.5
9.00–13.99	4,563		3,488	76.4	2,535	55.6
14.00–17.99	8,487		6,349	74.8	4,576	53.9
≥18	6,551		4,778	72.9	3,475	53.0
Vacant housing (%)						
<11	13,120		9,934	75.7	7,216	55.0
11.00–15.99	5,899		4,364	74.0	3,214	54.5
16.00–22.99	2,675		1,954	73.0	1,385	51.8
≥23	502		374	74.5	262	52.2
Subtotal^b	23,346		17,486	74.9	12,698	54.4
Female						
Below federal poverty level (%)						
<10	802		605	75.4	446	55.6
10.00–13.99	1,344		1,006	74.9	748	55.7
14.00–16.99	2,130		1,546	72.6	1,178	55.3
≥17	1,962		1,454	74.1	1,127	57.4
Less than high school diploma (%)						
<10	976		755	77.4	579	59.3
10.00–12.99	1,631		1,194	73.2	884	54.2
13.00–18.99	2,004		1,474	73.6	1,092	54.5
≥19	1,627		1,188	73.0	944	58.0
Median household income (U.S. \$)						
<40,000	853		641	75.1	509	59.7
40,000–46,999	1,147		855	74.5	619	54.0
47,000–53,999	1,506		1,107	73.5	851	56.5
≥54,000	2,732		2,008	73.5	1,520	55.6
Unemployed (%)						
<3	114		87	76.3	60	52.6
3.00–3.99	675		513	76.0	391	57.9
4.00–4.99	2,118		1,585	74.8	1,179	55.7
≥5	3,331		2,426	72.8	1,869	56.1
Without health insurance (%)						
<9	918		690	75.2	539	58.7
9.00–13.99	1,197		924	77.2	704	58.8
14.00–17.99	2,347		1,739	74.1	1,307	55.7
≥18	1,776		1,258	70.8	949	53.4
Vacant housing (%)						
<11	3,523		2,657	75.4	2,045	58.0
11.00–15.99	1,646		1,173	71.3	895	54.4
16.00–22.99	879		641	72.9	457	52.0
≥23	190		140	73.7	102	53.7
Subtotal^b	6,562		4,846	73.8	3,680	56.1
Total	29,908		22,332	74.7	16,378	54.8

Table 7. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by age and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.		No.	%	No.	%
25–34						
Male						
Below federal poverty level (%)						
<10	10,119		7,269	71.8	5,085	50.3
10.00–13.99	19,822		14,782	74.6	10,858	54.8
14.00–16.99	36,385		26,589	73.1	19,453	53.5
≥17	20,027		14,893	74.4	11,216	56.0
Less than high school diploma (%)						
<10	15,339		11,364	74.1	8,156	53.2
10.00–12.99	22,224		16,346	73.6	12,043	54.2
13.00–18.99	26,439		19,286	72.9	13,833	52.3
≥19	22,351		16,537	74.0	12,580	56.3
Median household income (U.S. \$)						
<40,000	7,554		5,657	74.9	4,399	58.2
40,000–46,999	13,500		9,879	73.2	7,128	52.8
47,000–53,999	19,138		14,162	74.0	10,696	55.9
≥54,000	46,161		33,835	73.3	24,389	52.8
Unemployed (%)						
<3	1,462		1,051	71.9	748	51.2
3.00–3.99	10,290		7,713	75.0	5,487	53.3
4.00–4.99	30,296		22,453	74.1	16,480	54.4
≥5	44,305		32,316	72.9	23,897	53.9
Without health insurance (%)						
<9	11,712		8,813	75.2	6,397	54.6
9.00–13.99	17,198		12,964	75.4	9,335	54.3
14.00–17.99	30,866		22,523	73.0	16,356	53.0
≥18	26,577		19,233	72.4	14,524	54.6
Vacant housing (%)						
<11	53,700		39,829	74.2	29,011	54.0
11.00–15.99	21,602		15,731	72.8	11,721	54.3
16.00–22.99	9,106		6,547	71.9	4,821	52.9
≥23	1,945		1,426	73.3	1,059	54.4
Subtotal^b	91,110		66,983	73.5	49,077	53.9
Female						
Below federal poverty level (%)						
<10	3,002		2,143	71.4	1,533	51.1
10.00–13.99	5,831		4,201	72.0	3,099	53.1
14.00–16.99	8,708		5,909	67.9	4,275	49.1
≥17	7,190		5,031	70.0	3,746	52.1
Less than high school diploma (%)						
<10	4,112		2,964	72.1	2,112	51.4
10.00–12.99	6,681		4,607	69.0	3,344	50.1
13.00–18.99	8,148		5,713	70.1	4,133	50.7
≥19	5,790		4,000	69.1	3,064	52.9
Median household income (U.S. \$)						
<40,000	2,942		2,069	70.3	1,585	53.9
40,000–46,999	4,941		3,453	69.9	2,451	49.6
47,000–53,999	6,310		4,407	69.8	3,238	51.3
≥54,000	10,538		7,355	69.8	5,379	51.0
Unemployed (%)						
<3	439		311	70.8	227	51.7
3.00–3.99	3,021		2,187	72.4	1,563	51.7
4.00–4.99	8,565		6,138	71.7	4,508	52.6
≥5	12,706		8,648	68.1	6,355	50.0
Without health insurance (%)						
<9	3,158		2,272	71.9	1,685	53.4
9.00–13.99	4,882		3,527	72.2	2,532	51.9
14.00–17.99	9,277		6,519	70.3	4,756	51.3
≥18	7,414		4,966	67.0	3,680	49.6
Vacant housing (%)						
<11	13,476		9,590	71.2	7,067	52.4
11.00–15.99	6,716		4,594	68.4	3,345	49.8
16.00–22.99	3,749		2,551	68.0	1,829	48.8
≥23	790		549	69.5	412	52.2
Subtotal^b	26,011		18,163	69.8	13,293	51.1
Total	117,121		85,146	72.7	62,370	53.3

Table 7. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by age and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.		No.	%	No.	%
35–44						
Male						
Below federal poverty level (%)						
<10	13,583		9,827	72.3	7,073	52.1
10.00–13.99	28,965		21,596	74.6	16,410	56.7
14.00–16.99	46,188		33,705	73.0	25,749	55.7
≥17	23,896		17,118	71.6	13,426	56.2
Less than high school diploma (%)						
<10	19,730		14,822	75.1	10,890	55.2
10.00–12.99	30,489		22,373	73.4	17,090	56.1
13.00–18.99	34,061		24,485	71.9	18,364	53.9
≥19	28,352		20,566	72.5	16,314	57.5
Median household income (U.S. \$)						
<40,000	9,026		6,654	73.7	5,359	59.4
40,000–46,999	17,016		12,157	71.4	9,206	54.1
47,000–53,999	23,787		17,791	74.8	13,875	58.3
≥54,000	62,803		45,644	72.7	34,218	54.5
Unemployed (%)						
<3	2,240		1,571	70.1	1,116	49.8
3.00–3.99	14,905		11,075	74.3	8,036	53.9
4.00–4.99	41,253		30,431	73.8	23,102	56.0
≥5	54,234		39,169	72.2	30,404	56.1
Without health insurance (%)						
<9	17,268		12,612	73.0	9,448	54.7
9.00–13.99	22,194		16,693	75.2	12,397	55.9
14.00–17.99	38,064		27,601	72.5	20,790	54.6
≥18	35,106		25,340	72.2	20,023	57.0
Vacant housing (%)						
<11	70,257		51,719	73.6	38,949	55.4
11.00–15.99	26,981		19,451	72.1	15,190	56.3
16.00–22.99	12,323		8,849	71.8	6,758	54.8
≥23	3,071		2,227	72.5	1,761	57.3
Subtotal^b	118,944		86,597	72.8	65,914	55.4
Female						
Below federal poverty level (%)						
<10	6,567		4,585	69.8	3,310	50.4
10.00–13.99	11,070		8,118	73.3	6,213	56.1
14.00–16.99	15,129		10,798	71.4	8,069	53.3
≥17	12,572		9,016	71.7	6,880	54.7
Less than high school diploma (%)						
<10	8,058		5,822	72.3	4,241	52.6
10.00–12.99	12,555		8,935	71.2	6,748	53.7
13.00–18.99	14,356		10,270	71.5	7,635	53.2
≥19	10,369		7,490	72.2	5,848	56.4
Median household income (U.S. \$)						
<40,000	5,334		3,876	72.7	3,057	57.3
40,000–46,999	8,383		6,031	71.9	4,381	52.3
47,000–53,999	11,155		8,182	73.3	6,253	56.1
≥54,000	20,466		14,428	70.5	10,781	52.7
Unemployed (%)						
<3	760		527	69.3	373	49.1
3.00–3.99	5,744		4,118	71.7	3,010	52.4
4.00–4.99	15,567		11,318	72.7	8,623	55.4
≥5	23,267		16,554	71.1	12,466	53.6
Without health insurance (%)						
<9	6,463		4,664	72.2	3,475	53.8
9.00–13.99	9,580		6,892	71.9	5,045	52.7
14.00–17.99	16,624		12,047	72.5	9,118	54.8
≥18	12,671		8,914	70.3	6,834	53.9
Vacant housing (%)						
<11	25,665		18,468	72.0	13,927	54.3
11.00–15.99	11,590		8,215	70.9	6,247	53.9
16.00–22.99	6,647		4,777	71.9	3,475	52.3
≥23	1,436		1,057	73.6	823	57.3
Subtotal^b	47,961		34,306	71.5	25,761	53.7
Total	166,905		120,903	72.4	91,675	54.9

Table 7. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by age and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.		No.	%	No.	%
			45–54			
Male						
Below federal poverty level (%)						
<10	24,806		18,353	74.0	13,610	54.9
10.00–13.99	52,620		40,518	77.0	31,935	60.7
14.00–16.99	75,113		55,911	74.4	44,029	58.6
≥17	41,143		30,081	73.1	24,480	59.5
Less than high school diploma (%)						
<10	34,845		26,404	75.8	19,944	57.2
10.00–12.99	55,965		42,581	76.1	33,722	60.3
13.00–18.99	58,597		42,539	72.6	32,907	56.2
≥19	44,275		33,339	75.3	27,481	62.1
Median household income (U.S. \$)						
<40,000	15,466		11,732	75.9	9,837	63.6
40,000–46,999	29,470		21,662	73.5	16,940	57.5
47,000–53,999	40,854		31,376	76.8	25,563	62.6
≥54,000	107,892		80,093	74.2	61,714	57.2
Unemployed (%)						
<3	3,771		2,627	69.7	1,947	51.6
3.00–3.99	26,115		19,526	74.8	14,700	56.3
4.00–4.99	70,955		53,777	75.8	42,090	59.3
≥5	92,841		68,933	74.2	55,317	59.6
Without health insurance (%)						
<9	35,292		26,364	74.7	20,442	57.9
9.00–13.99	39,511		30,030	76.0	22,849	57.8
14.00–17.99	63,711		46,684	73.3	36,325	57.0
≥18	55,168		41,785	75.7	34,438	62.4
Vacant housing (%)						
<11	118,663		89,114	75.1	69,278	58.4
11.00–15.99	45,429		33,280	73.3	26,639	58.6
16.00–22.99	23,379		17,709	75.7	14,243	60.9
≥23	6,211		4,760	76.6	3,894	62.7
Subtotal^b	204,946		152,738	74.5	120,142	58.6
Female						
Below federal poverty level (%)						
<10	8,194		6,103	74.5	4,500	54.9
10.00–13.99	14,534		11,207	77.1	8,930	61.4
14.00–16.99	17,958		13,405	74.6	10,593	59.0
≥17	17,531		13,230	75.5	10,799	61.6
Less than high school diploma (%)						
<10	9,857		7,473	75.8	5,685	57.7
10.00–12.99	16,674		12,736	76.4	10,097	60.6
13.00–18.99	18,215		13,352	73.3	10,427	57.2
≥19	13,471		10,384	77.1	8,613	63.9
Median household income (U.S. \$)						
<40,000	7,134		5,549	77.8	4,647	65.1
40,000–46,999	10,589		7,822	73.9	6,085	57.5
47,000–53,999	14,019		10,839	77.3	8,787	62.7
≥54,000	26,475		19,735	74.5	15,303	57.8
Unemployed (%)						
<3	877		627	71.5	462	52.7
3.00–3.99	6,776		5,118	75.5	3,859	57.0
4.00–4.99	18,893		14,355	76.0	11,362	60.1
≥5	31,671		23,845	75.3	19,139	60.4
Without health insurance (%)						
<9	10,050		7,664	76.3	6,006	59.8
9.00–13.99	13,018		9,807	75.3	7,604	58.4
14.00–17.99	20,908		15,854	75.8	12,590	60.2
≥18	14,241		10,620	74.6	8,622	60.5
Vacant housing (%)						
<11	33,590		25,570	76.1	20,107	59.9
11.00–15.99	13,987		10,345	74.0	8,369	59.8
16.00–22.99	8,782		6,592	75.1	5,195	59.2
≥23	1,858		1,438	77.4	1,151	61.9
Subtotal^b	61,398		46,255	75.3	36,595	59.6
Total	266,344		198,993	74.7	156,737	58.8

Table 7. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by age and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.	No.	%	No.	%	
		≥55				
Male						
Below federal poverty level (%)						
<10	19,738	14,187	71.9	10,897	55.2	
10.00–13.99	42,993	32,440	75.5	26,802	62.3	
14.00–16.99	57,217	40,537	70.8	33,086	57.8	
≥17	34,815	24,112	69.3	20,105	57.7	
Less than high school diploma (%)						
<10	26,678	19,987	74.9	15,709	58.9	
10.00–12.99	47,689	34,878	73.1	28,906	60.6	
13.00–18.99	46,953	32,111	68.4	25,600	54.5	
≥19	33,443	24,300	72.7	20,675	61.8	
Median household income (U.S. \$)						
<40,000	12,596	9,128	72.5	7,765	61.6	
40,000–46,999	23,204	16,182	69.7	12,958	55.8	
47,000–53,999	31,995	23,522	73.5	19,844	62.0	
≥54,000	86,968	62,444	71.8	50,323	57.9	
Unemployed (%)						
<3	2,736	1,836	67.1	1,374	50.2	
3.00–3.99	20,557	14,592	71.0	11,355	55.2	
4.00–4.99	57,375	41,949	73.1	34,277	59.7	
≥5	74,095	52,899	71.4	43,884	59.2	
Without health insurance (%)						
<9	32,189	23,141	71.9	18,840	58.5	
9.00–13.99	32,661	23,996	73.5	19,068	58.4	
14.00–17.99	50,343	35,246	70.0	28,441	56.5	
≥18	39,570	28,893	73.0	24,541	62.0	
Vacant housing (%)						
<11	93,150	67,787	72.8	54,990	59.0	
11.00–15.99	36,385	25,243	69.4	20,841	57.3	
16.00–22.99	19,701	14,185	72.0	11,724	59.5	
≥23	5,527	4,061	73.5	3,335	60.3	
Subtotal^b	163,953	117,645	71.8	96,015	58.6	
Female						
Below federal poverty level (%)						
<10	6,320	4,615	73.0	3,546	56.1	
10.00–13.99	11,004	8,526	77.5	7,091	64.4	
14.00–16.99	13,673	10,238	74.9	8,384	61.3	
≥17	14,227	10,758	75.6	9,155	64.3	
Less than high school diploma (%)						
<10	7,166	5,409	75.5	4,298	60.0	
10.00–12.99	13,175	10,049	76.3	8,255	62.7	
13.00–18.99	13,977	10,296	73.7	8,375	59.9	
≥19	10,906	8,383	76.9	7,248	66.5	
Median household income (U.S. \$)						
<40,000	5,532	4,349	78.6	3,775	68.2	
40,000–46,999	8,027	6,083	75.8	4,871	60.7	
47,000–53,999	10,821	8,426	77.9	7,130	65.9	
≥54,000	20,844	15,279	73.3	12,400	59.5	
Unemployed (%)						
<3	609	441	72.4	336	55.2	
3.00–3.99	4,877	3,650	74.8	2,834	58.1	
4.00–4.99	14,678	11,136	75.9	9,210	62.7	
≥5	25,060	18,910	75.5	15,796	63.0	
Without health insurance (%)						
<9	8,215	6,154	74.9	5,049	61.5	
9.00–13.99	10,401	7,788	74.9	6,293	60.5	
14.00–17.99	15,729	11,870	75.5	9,793	62.3	
≥18	10,879	8,325	76.5	7,041	64.7	
Vacant housing (%)						
<11	26,203	19,699	75.2	16,176	61.7	
11.00–15.99	11,066	8,269	74.7	6,929	62.6	
16.00–22.99	6,556	5,079	77.5	4,145	63.2	
≥23	1,399	1,090	77.9	926	66.2	
Subtotal^b	47,673	35,941	75.4	29,602	62.1	
Total	211,626	153,586	72.6	125,617	59.4	

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); SDH, social determinants of health.

Note. Data are based on address of residence as of December 31, 2015 (i.e., most recent known address). See Technical Notes for the list of areas that met the criteria for complete laboratory reporting. Definitions for the SDH indicator variables used in this report can be found at <https://go.usa.gov/xP2d4>.

^a Performed ≥3 months apart during 2015.

^b 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 SDH subpopulations.

Table 8. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by transmission category and selected social determinants of health—39 states and the District of Columbia

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.		No.	%	No.	%
Male						
Below federal poverty level (%)						
<10	50,264		37,146	73.9	27,091	53.9
10.00–13.99	106,009		82,142	77.5	63,969	60.3
14.00–16.99	171,218		127,370	74.4	98,802	57.7
≥17	80,334		59,622	74.2	47,137	58.7
Less than high school diploma (%)						
<10	73,837		56,370	76.3	42,049	56.9
10.00–12.99	115,690		88,201	76.2	69,034	59.7
13.00–18.99	122,323		89,461	73.1	67,847	55.5
≥19	95,976		72,248	75.3	58,069	60.5
Median household income (U.S. \$)						
<40,000	28,616		21,661	75.7	17,529	61.3
40,000–46,999	58,648		43,556	74.3	33,471	57.1
47,000–53,999	85,086		65,713	77.2	52,491	61.7
≥54,000	235,476		175,350	74.5	133,507	56.7
Unemployed (%)						
<3	6,890		4,955	71.9	3,582	52.0
3.00–3.99	53,341		39,879	74.8	29,494	55.3
4.00–4.99	152,141		115,770	76.1	89,548	58.9
≥5	195,454		145,677	74.5	114,375	58.5
Without health insurance (%)						
<9	68,144		51,454	75.5	39,322	57.7
9.00–13.99	80,180		61,890	77.2	46,543	58.0
14.00–17.99	135,227		99,742	73.8	75,780	56.0
≥18	124,275		93,194	75.0	75,353	60.6
Vacant housing (%)						
<11	255,061		192,138	75.3	146,877	57.6
11.00–15.99	98,781		72,857	73.8	57,367	58.1
16.00–22.99	42,749		32,623	76.3	25,880	60.5
≥23	11,235		8,661	77.1	6,875	61.2
Subtotal^b	431,191		322,956	74.9	249,727	57.9
Female						
Below federal poverty level (%)						
<10	—		—	—	—	—
10.00–13.99	—		—	—	—	—
14.00–16.99	—		—	—	—	—
≥17	—		—	—	—	—
Less than high school diploma (%)						
<10	—		—	—	—	—
10.00–12.99	—		—	—	—	—
13.00–18.99	—		—	—	—	—
≥19	—		—	—	—	—
Median household income (U.S. \$)						
<40,000	—		—	—	—	—
40,000–46,999	—		—	—	—	—
47,000–53,999	—		—	—	—	—
≥54,000	—		—	—	—	—
Unemployed (%)						
<3	—		—	—	—	—
3.00–3.99	—		—	—	—	—
4.00–4.99	—		—	—	—	—
≥5	—		—	—	—	—
Without health insurance (%)						
<9	—		—	—	—	—
9.00–13.99	—		—	—	—	—
14.00–17.99	—		—	—	—	—
≥18	—		—	—	—	—
Vacant housing (%)						
<11	—		—	—	—	—
11.00–15.99	—		—	—	—	—
16.00–22.99	—		—	—	—	—
≥23	—		—	—	—	—
Subtotal^b	—		—	—	—	—
Total	431,191		322,956	74.9	249,727	57.9

Table 8. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by transmission category and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.		No.	%	No.	%
Injection drug use						
Male						
Below federal poverty level (%)						
<10	7,156		4,716	65.9	3,605	50.4
10.00–13.99	13,950		9,090	65.2	7,458	53.5
14.00–16.99	17,327		10,638	61.4	8,428	48.6
≥17	17,977		11,397	63.4	9,487	52.8
Less than high school diploma (%)						
<10	8,652		5,755	66.5	4,481	51.8
10.00–12.99	15,648		9,974	63.7	8,153	52.1
13.00–18.99	17,563		10,711	61.0	8,352	47.6
≥19	14,547		9,401	64.6	7,991	54.9
Median household income (U.S. \$)						
<40,000	7,248		4,901	67.6	4,253	58.7
40,000–46,999	9,369		5,890	62.9	4,481	47.8
47,000–53,999	12,636		8,007	63.4	6,589	52.1
≥54,000	27,157		17,042	62.8	13,655	50.3
Unemployed (%)						
<3	1,365		774	56.7	564	41.3
3.00–3.99	6,981		4,573	65.5	3,556	50.9
4.00–4.99	18,771		11,761	62.7	9,483	50.5
≥5	29,292		18,734	64.0	15,374	52.5
Without health insurance (%)						
<9	13,793		8,682	62.9	7,180	52.1
9.00–13.99	13,513		8,679	64.2	6,835	50.6
14.00–17.99	19,152		11,981	62.6	9,718	50.7
≥18	9,952		6,498	65.3	5,245	52.7
Vacant housing (%)						
<11	34,560		22,429	64.9	18,255	52.8
11.00–15.99	12,110		7,279	60.1	5,919	48.9
16.00–22.99	7,792		4,975	63.8	3,850	49.4
≥23	1,948		1,158	59.4	953	48.9
Subtotal^b	59,679		37,828	63.4	30,508	51.1
Female						
Below federal poverty level (%)						
<10	5,016		3,622	72.2	2,744	54.7
10.00–13.99	9,403		7,048	75.0	5,622	59.8
14.00–16.99	11,858		8,403	70.9	6,563	55.3
≥17	12,702		9,212	72.5	7,507	59.1
Less than high school diploma (%)						
<10	6,087		4,558	74.9	3,488	57.3
10.00–12.99	10,699		7,850	73.4	6,207	58.0
13.00–18.99	12,151		8,514	70.1	6,582	54.2
≥19	10,041		7,361	73.3	6,159	61.3
Median household income (U.S. \$)						
<40,000	5,132		3,847	75.0	3,256	63.5
40,000–46,999	6,669		4,793	71.9	3,615	54.2
47,000–53,999	8,994		6,713	74.6	5,437	60.5
≥54,000	18,183		12,931	71.1	10,127	55.7
Unemployed (%)						
<3	626		418	66.8	298	47.7
3.00–3.99	4,630		3,436	74.2	2,637	57.0
4.00–4.99	12,840		9,333	72.7	7,409	57.7
≥5	20,883		15,097	72.3	12,092	57.9
Without health insurance (%)						
<9	8,310		6,145	74.0	4,902	59.0
9.00–13.99	9,613		6,924	72.0	5,384	56.0
14.00–17.99	13,441		9,633	71.7	7,709	57.4
≥18	7,615		5,581	73.3	4,441	58.3
Vacant housing (%)						
<11	24,196		17,760	73.4	14,189	58.6
11.00–15.99	8,301		5,816	70.1	4,659	56.1
16.00–22.99	5,395		3,903	72.3	2,955	54.8
≥23	1,087		805	74.1	633	58.2
Subtotal^b	41,366		29,939	72.4	23,712	57.3
Total	101,046		67,768	67.1	54,220	53.7

Table 8. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by transmission category and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.		No.	%	No.	%
Male-to-male sexual contact and injection drug use						
Male						
Below federal poverty level (%)						
<10	4,952		3,847	77.7	2,961	59.8
10.00–13.99	12,443		9,989	80.3	7,873	63.3
14.00–16.99	16,227		12,496	77.0	9,818	60.5
≥17	8,981		6,914	77.0	5,638	62.8
Less than high school diploma (%)						
<10	8,053		6,429	79.8	4,978	61.8
10.00–12.99	12,003		9,567	79.7	7,598	63.3
13.00–18.99	12,795		9,612	75.1	7,450	58.2
≥19	9,751		7,638	78.3	6,264	64.2
Median household income (U.S. \$)						
<40,000	3,670		2,951	80.4	2,495	68.0
40,000–46,999	6,523		4,957	76.0	3,819	58.5
47,000–53,999	8,228		6,491	78.9	5,223	63.5
≥54,000	24,182		18,847	77.9	14,752	61.0
Unemployed (%)						
<3	1,122		815	72.6	614	54.8
3.00–3.99	6,754		5,297	78.4	4,118	61.0
4.00–4.99	15,798		12,483	79.0	9,841	62.3
≥5	18,930		14,651	77.4	11,716	61.9
Without health insurance (%)						
<9	8,293		6,665	80.4	5,308	64.0
9.00–13.99	9,216		7,350	79.7	5,715	62.0
14.00–17.99	14,313		10,881	76.0	8,540	59.7
≥18	10,782		8,350	77.4	6,728	62.4
Vacant housing (%)						
<11	27,131		21,370	78.8	16,862	62.2
11.00–15.99	8,878		6,755	76.1	5,390	60.7
16.00–22.99	5,093		3,927	77.1	3,083	60.5
≥23	1,501		1,194	79.5	956	63.7
Subtotal^b	45,136		35,137	77.8	27,782	61.6
Female						
Below federal poverty level (%)						
<10	—		—	—	—	—
10.00–13.99	—		—	—	—	—
14.00–16.99	—		—	—	—	—
≥17	—		—	—	—	—
Less than high school diploma (%)						
<10	—		—	—	—	—
10.00–12.99	—		—	—	—	—
13.00–18.99	—		—	—	—	—
≥19	—		—	—	—	—
Median household income (U.S. \$)						
<40,000	—		—	—	—	—
40,000–46,999	—		—	—	—	—
47,000–53,999	—		—	—	—	—
≥54,000	—		—	—	—	—
Unemployed (%)						
<3	—		—	—	—	—
3.00–3.99	—		—	—	—	—
4.00–4.99	—		—	—	—	—
≥5	—		—	—	—	—
Without health insurance (%)						
<9	—		—	—	—	—
9.00–13.99	—		—	—	—	—
14.00–17.99	—		—	—	—	—
≥18	—		—	—	—	—
Vacant housing (%)						
<11	—		—	—	—	—
11.00–15.99	—		—	—	—	—
16.00–22.99	—		—	—	—	—
≥23	—		—	—	—	—
Subtotal^b	—		—	—	—	—
Total	45,136		35,137	77.8	27,782	61.6

Table 8. Receipt of HIV medical care among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by transmission category and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		≥1 CD4 or VL tests		≥2 CD4 or VL tests ^a	
	Total No.	No.	%	No.	%	
Heterosexual contact^c						
Male						
Below federal poverty level (%)						
<10	7,584	5,216	68.8	3,909	51.5	
10.00–13.99	15,402	10,717	69.6	8,592	55.8	
14.00–16.99	17,573	11,909	67.8	9,319	53.0	
≥17	17,139	11,772	68.7	9,522	55.6	
Less than high school diploma (%)						
<10	8,820	6,114	69.3	4,661	52.8	
10.00–12.99	17,268	11,736	68.0	9,376	54.3	
13.00–18.99	19,268	13,024	67.6	10,181	52.8	
≥19	12,342	8,740	70.8	7,124	57.7	
Median household income (U.S. \$)						
<40,000	6,824	4,994	73.2	4,106	60.2	
40,000–46,999	11,924	7,930	66.5	6,185	51.9	
47,000–53,999	13,916	9,739	70.0	7,928	57.0	
≥54,000	25,034	16,951	67.7	13,122	52.4	
Unemployed (%)						
<3	1,021	676	66.2	511	50.0	
3.00–3.99	6,417	4,425	69.0	3,351	52.2	
4.00–4.99	19,186	13,239	69.0	10,420	54.3	
≥5	31,073	21,273	68.5	17,060	54.9	
Without health insurance (%)						
<9	7,725	5,337	69.1	4,201	54.4	
9.00–13.99	12,010	8,353	69.6	6,415	53.4	
14.00–17.99	21,012	14,603	69.5	11,550	55.0	
≥18	16,951	11,320	66.8	9,175	54.1	
Vacant housing (%)						
<11	28,954	20,196	69.8	15,742	54.4	
11.00–15.99	15,412	10,407	67.5	8,343	54.1	
16.00–22.99	10,941	7,308	66.8	5,818	53.2	
≥23	2,390	1,703	71.2	1,439	60.2	
Subtotal^b	60,906	41,771	68.6	33,001	54.2	
Female						
Below federal poverty level (%)						
<10	19,173	13,918	72.6	10,191	53.2	
10.00–13.99	33,258	25,158	75.6	19,797	59.5	
14.00–16.99	44,417	32,518	73.2	25,162	56.6	
≥17	39,381	29,254	74.3	23,362	59.3	
Less than high school diploma (%)						
<10	23,279	17,239	74.1	12,943	55.6	
10.00–12.99	38,778	28,782	74.2	22,425	57.8	
13.00–18.99	43,254	31,634	73.1	24,336	56.3	
≥19	30,919	23,194	75.0	18,809	60.8	
Median household income (U.S. \$)						
<40,000	16,052	12,189	75.9	9,934	61.9	
40,000–46,999	25,722	18,917	73.5	14,397	56.0	
47,000–53,999	33,793	25,480	75.4	20,203	59.8	
≥54,000	60,663	44,263	73.0	33,979	56.0	
Unemployed (%)						
<3	2,106	1,525	72.4	1,126	53.5	
3.00–3.99	15,897	11,724	73.8	8,690	54.7	
4.00–4.99	45,519	34,125	75.0	26,629	58.5	
≥5	72,708	53,475	73.5	42,067	57.9	
Without health insurance (%)						
<9	19,598	14,622	74.6	11,298	57.7	
9.00–13.99	28,516	21,321	74.8	16,255	57.0	
14.00–17.99	49,805	37,201	74.7	28,904	58.0	
≥18	38,311	27,704	72.3	22,056	57.6	
Vacant housing (%)						
<11	75,476	56,157	74.4	43,474	57.6	
11.00–15.99	35,679	26,043	73.0	20,531	57.5	
16.00–22.99	20,646	15,307	74.1	11,831	57.3	
≥23	4,429	3,342	75.5	2,678	60.5	
Subtotal^b	143,471	106,049	73.9	82,420	57.4	
Total	204,378	147,820	72.3	115,421	56.5	

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL); SDH, social determinants of health.

Note. Data are based on address of residence as of December 31, 2015 (i.e., most recent known address). Data have been statistically adjusted to account for missing transmission category. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting. Definitions for the SDH indicator variables used in this report can be found at <https://go.usa.gov/xP2d4>.

^a Performed ≥3 months apart during 2015.

^b 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 SDH subpopulations.

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

Table 9. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
Black/African American				
Male				
Below federal poverty level (%)				
<10	22,054	10.8	11,687	53.0
10.00–13.99	41,455	20.3	23,107	55.7
14.00–16.99	78,588	38.5	41,106	52.3
≥17	62,090	30.4	32,993	53.1
Less than high school diploma (%)				
<10	33,478	16.4	18,116	54.1
10.00–12.99	55,914	27.4	30,143	53.9
13.00–18.99	69,292	33.9	35,739	51.6
≥19	45,503	22.3	24,895	54.7
Median household income (U.S. \$)				
<40,000	23,400	11.5	13,009	55.6
40,000–46,999	41,509	20.3	21,086	50.8
47,000–53,999	48,555	23.8	26,361	54.3
≥54,000	90,723	44.4	48,437	53.4
Unemployed (%)				
<3	3,160	1.5	1,417	44.8
3.00–3.99	18,567	9.1	9,789	52.7
4.00–4.99	63,195	30.9	34,308	54.3
≥5	119,265	58.4	63,379	53.1
Without health insurance (%)				
<9	24,648	12.1	13,180	53.5
9.00–13.99	45,323	22.2	24,517	54.1
14.00–17.99	79,797	39.1	42,686	53.5
≥18	54,419	26.7	28,510	52.4
Vacant housing (%)				
<11	106,682	52.2	58,036	54.4
11.00–15.99	59,730	29.3	31,538	52.8
16.00–22.99	32,977	16.2	16,724	50.7
≥23	4,798	2.3	2,595	54.1
Subtotal^a	218,551	100	116,370	53.2
Female				
Below federal poverty level (%)				
<10	13,529	12.4	7,504	55.5
10.00–13.99	23,836	21.9	13,943	58.5
14.00–16.99	35,460	32.6	19,232	54.2
≥17	35,974	33.1	19,830	55.1
Less than high school diploma (%)				
<10	17,120	15.7	9,764	57.0
10.00–12.99	31,210	28.7	17,384	55.7
13.00–18.99	36,974	34.0	19,895	53.8
≥19	23,495	21.6	13,466	57.3
Median household income (U.S. \$)				
<40,000	13,368	12.3	7,587	56.8
40,000–46,999	22,815	21.0	12,268	53.8
47,000–53,999	28,064	25.8	15,850	56.5
≥54,000	44,552	40.9	24,804	55.7
Unemployed (%)				
<3	1,303	1.2	707	54.3
3.00–3.99	10,314	9.5	5,696	55.2
4.00–4.99	34,106	31.3	19,454	57.0
≥5	63,076	58.0	34,652	54.9
Without health insurance (%)				
<9	13,466	12.4	7,611	56.5
9.00–13.99	23,973	22.0	13,408	55.9
14.00–17.99	41,447	38.1	23,174	55.9
≥18	29,913	27.5	16,316	54.5
Vacant housing (%)				
<11	56,408	51.8	32,153	57.0
11.00–15.99	30,432	28.0	16,635	54.7
16.00–22.99	19,197	17.6	10,177	53.0
≥23	2,762	2.5	1,544	55.9
Subtotal^a	115,294	100	64,043	55.5
Total	333,845	100	180,413	54.0

Table 9. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
				Hispanic/Latino ^b
Male				
Below federal poverty level (%)				
<10	12,806	9.6	7,382	57.6
10.00–13.99	32,145	24.1	19,634	61.1
14.00–16.99	55,603	41.7	32,987	59.3
≥17	32,632	24.5	19,500	59.8
Less than high school diploma (%)				
<10	12,382	9.3	7,199	58.1
10.00–12.99	31,286	23.5	19,344	61.8
13.00–18.99	41,013	30.8	24,138	58.9
≥19	48,505	36.4	28,822	59.4
Median household income (U.S. \$)				
<40,000	12,155	9.1	7,202	59.3
40,000–46,999	17,600	13.2	10,329	58.7
47,000–53,999	24,209	18.2	14,463	59.7
≥54,000	79,222	59.5	47,509	60.0
Unemployed (%)				
<3	1,631	1.2	725	44.5
3.00–3.99	13,180	9.9	7,431	56.4
4.00–4.99	50,098	37.6	29,995	59.9
≥5	68,277	51.3	41,352	60.6
Without health insurance (%)				
<9	21,524	16.2	13,056	60.7
9.00–13.99	17,718	13.3	10,536	59.5
14.00–17.99	40,124	30.1	22,901	57.1
≥18	53,820	40.4	33,010	61.3
Vacant housing (%)				
<11	94,501	71.0	56,984	60.3
11.00–15.99	27,149	20.4	16,110	59.3
16.00–22.99	8,576	6.4	4,890	57.0
≥23	2,960	2.2	1,519	51.3
Subtotal^a	137,729	100	82,036	59.6
Female				
Below federal poverty level (%)				
<10	3,908	11.9	2,403	61.5
10.00–13.99	7,593	23.2	4,794	63.1
14.00–16.99	10,654	32.5	6,435	60.4
≥17	10,581	32.3	6,586	62.2
Less than high school diploma (%)				
<10	3,336	10.2	2,130	63.8
10.00–12.99	8,172	25.0	5,160	63.1
13.00–18.99	8,786	26.8	5,193	59.1
≥19	12,442	38.0	7,735	62.2
Median household income (U.S. \$)				
<40,000	5,384	16.4	3,473	64.5
40,000–46,999	3,728	11.4	2,204	59.1
47,000–53,999	7,013	21.4	4,324	61.7
≥54,000	16,611	50.7	10,217	61.5
Unemployed (%)				
<3	303	0.9	173	57.1
3.00–3.99	3,191	9.7	1,953	61.2
4.00–4.99	10,902	33.3	6,705	61.5
≥5	18,340	56.0	11,387	62.1
Without health insurance (%)				
<9	6,632	20.3	4,205	63.4
9.00–13.99	5,329	16.3	3,317	62.2
14.00–17.99	11,278	34.5	6,954	61.7
≥18	9,497	29.0	5,742	60.5
Vacant housing (%)				
<11	23,650	72.2	14,740	62.3
11.00–15.99	6,185	18.9	3,667	59.3
16.00–22.99	2,129	6.5	1,334	62.7
≥23	772	2.4	477	61.8
Subtotal^a	33,825	100	20,828	61.6
Total	171,554	100	102,864	60.0

Table 9. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
White				
Male				
Below federal poverty level (%)				
<10	30,369	15.3	20,147	66.3
10.00–13.99	65,845	33.2	47,176	71.6
14.00–16.99	76,697	38.7	50,762	66.2
≥17	25,254	12.7	16,606	65.8
Less than high school diploma (%)				
<10	47,110	23.8	32,259	68.5
10.00–12.99	64,929	32.8	45,298	69.8
13.00–18.99	54,062	27.3	34,971	64.7
≥19	32,064	16.2	22,163	69.1
Median household income (U.S. \$)				
<40,000	9,309	4.7	6,199	66.6
40,000–46,999	24,550	12.4	16,259	66.2
47,000–53,999	41,827	21.1	29,077	69.5
≥54,000	122,479	61.8	83,156	67.9
Unemployed (%)				
<3	5,259	2.7	3,322	63.2
3.00–3.99	37,183	18.8	24,868	66.9
4.00–4.99	80,765	40.8	55,945	69.3
≥5	74,958	37.8	50,556	67.4
Without health insurance (%)				
<9	44,668	22.5	31,409	70.3
9.00–13.99	45,403	22.9	30,946	68.2
14.00–17.99	61,301	30.9	39,558	64.5
≥18	46,793	23.6	32,778	70.0
Vacant housing (%)				
<11	124,473	62.8	84,793	68.1
11.00–15.99	42,253	21.3	27,985	66.2
16.00–22.99	22,841	11.5	15,763	69.0
≥23	8,598	4.3	6,150	71.5
Subtotal^a	209,756	100	141,811	67.6
Female				
Below federal poverty level (%)				
<10	5,407	19.1	3,316	61.3
10.00–13.99	9,608	33.9	6,169	64.2
14.00–16.99	8,653	30.6	4,964	57.4
≥17	4,647	16.4	2,569	55.3
Less than high school diploma (%)				
<10	7,274	25.7	4,588	63.1
10.00–12.99	8,763	30.9	5,335	60.9
13.00–18.99	8,240	29.1	4,787	58.1
≥19	4,038	14.3	2,308	57.2
Median household income (U.S. \$)				
<40,000	2,123	7.5	1,202	56.6
40,000–46,999	5,217	18.4	3,095	59.3
47,000–53,999	6,602	23.3	4,024	61.0
≥54,000	14,373	50.8	8,697	60.5
Unemployed (%)				
<3	1,034	3.7	640	61.9
3.00–3.99	5,719	20.2	3,475	60.8
4.00–4.99	11,141	39.3	6,922	62.1
≥5	10,421	36.8	5,981	57.4
Without health insurance (%)				
<9	6,320	22.3	4,038	63.9
9.00–13.99	7,336	25.9	4,410	60.1
14.00–17.99	9,146	32.3	5,355	58.6
≥18	5,513	19.5	3,215	58.3
Vacant housing (%)				
<11	15,911	56.2	9,607	60.4
11.00–15.99	6,331	22.4	3,654	57.7
16.00–22.99	4,252	15.0	2,578	60.6
≥23	1,821	6.4	1,179	64.7
Subtotal^a	29,905	100	17,841	59.7
Total	239,661	100	159,652	66.6

Table 9. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
				Other ^c
Male				
Below federal poverty level (%)				
<10	5,628	16.5	3,734	66.3
10.00–13.99	9,621	28.2	6,749	70.1
14.00–16.99	12,970	38.0	8,561	66.0
≥17	5,869	17.2	3,828	65.2
Less than high school diploma (%)				
<10	7,430	21.8	5,030	67.7
10.00–12.99	9,838	28.9	6,797	69.1
13.00–18.99	9,100	26.7	5,832	64.1
≥19	7,720	22.6	5,213	67.5
Median household income (U.S. \$)				
<40,000	2,126	6.2	1,408	66.2
40,000–46,999	3,604	10.6	2,219	61.6
47,000–53,999	6,353	18.6	4,305	67.8
≥54,000	22,005	64.6	14,940	67.9
Unemployed (%)				
<3	490	1.4	288	58.8
3.00–3.99	5,321	15.6	3,588	67.4
4.00–4.99	13,499	39.6	9,222	68.3
≥5	14,778	43.4	9,774	66.1
Without health insurance (%)				
<9	8,216	24.1	5,749	70.0
9.00–13.99	7,683	22.5	5,161	67.2
14.00–17.99	10,249	30.1	6,673	65.1
≥18	7,940	23.3	5,289	66.6
Vacant housing (%)				
<11	23,234	68.2	15,769	67.9
11.00–15.99	7,164	21.0	4,744	66.2
16.00–22.99	2,790	8.2	1,747	62.6
≥23	900	2.6	612	68.0
Subtotal^a	36,263	100	24,225	66.8
Female				
Below federal poverty level (%)				
<10	2,041	20.6	1,310	64.2
10.00–13.99	2,746	27.7	1,841	67.0
14.00–16.99	2,831	28.6	1,754	62.0
≥17	2,280	23.0	1,430	62.7
Less than high school diploma (%)				
<10	2,439	24.6	1,586	65.0
10.00–12.99	2,571	26.0	1,694	65.9
13.00–18.99	2,700	27.3	1,673	62.0
≥19	2,188	22.1	1,382	63.2
Median household income (U.S. \$)				
<40,000	920	9.3	583	63.4
40,000–46,999	1,327	13.4	787	59.3
47,000–53,999	2,132	21.5	1,383	64.9
≥54,000	5,519	55.8	3,582	64.9
Unemployed (%)				
<3	159	1.6	100	62.9
3.00–3.99	1,869	18.9	1,182	63.2
4.00–4.99	3,672	37.1	2,433	66.3
≥5	4,198	42.4	2,620	62.4
Without health insurance (%)				
<9	2,386	24.1	1,593	66.8
9.00–13.99	2,440	24.7	1,549	63.5
14.00–17.99	3,014	30.5	1,897	62.9
≥18	2,058	20.8	1,296	63.0
Vacant housing (%)				
<11	6,488	65.5	4,196	64.7
11.00–15.99	2,057	20.8	1,322	64.3
16.00–22.99	1,035	10.5	605	58.5
≥23	318	3.2	212	66.7
Subtotal^a	10,581	100	6,749	63.8
Total	46,844	100	30,974	66.1

Table 9. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by race/ethnicity and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
Male	Total			
Below federal poverty level (%)				
<10	70,857	12.4	42,950	60.6
10.00–13.99	149,066	26.2	96,666	64.8
14.00–16.99	223,858	39.3	133,416	59.6
≥17	125,845	22.1	72,927	57.9
Less than high school diploma (%)				
<10	100,400	17.6	62,604	62.4
10.00–12.99	161,967	28.4	101,582	62.7
13.00–18.99	173,467	30.5	100,680	58.0
≥19	133,792	23.5	81,093	60.6
Median household income (U.S. \$)				
<40,000	46,990	8.2	27,818	59.2
40,000–46,999	87,263	15.3	49,893	57.2
47,000–53,999	120,944	21.2	74,206	61.4
≥54,000	314,429	55.2	194,042	61.7
Unemployed (%)				
<3	10,540	1.9	5,752	54.6
3.00–3.99	74,251	13.0	45,676	61.5
4.00–4.99	207,557	36.4	129,470	62.4
≥5	277,278	48.7	165,061	59.5
Without health insurance (%)				
<9	99,056	17.4	63,394	64.0
9.00–13.99	116,127	20.4	71,160	61.3
14.00–17.99	191,471	33.6	111,818	58.4
≥18	162,972	28.6	99,587	61.1
Vacant housing (%)				
<11	348,890	61.2	215,582	61.8
11.00–15.99	136,296	23.9	80,377	59.0
16.00–22.99	67,184	11.8	39,124	58.2
≥23	17,256	3.0	10,876	63.0
Subtotal^a	602,299	100	364,442	60.5
Female				
Below federal poverty level (%)				
<10	24,885	13.8	14,533	58.4
10.00–13.99	43,783	24.4	26,747	61.1
14.00–16.99	57,598	32.0	32,385	56.2
≥17	53,482	29.8	30,415	56.9
Less than high school diploma (%)				
<10	30,169	16.8	18,068	59.9
10.00–12.99	50,716	28.2	29,573	58.3
13.00–18.99	56,700	31.5	31,548	55.6
≥19	42,163	23.5	24,891	59.0
Median household income (U.S. \$)				
<40,000	21,795	12.1	12,845	58.9
40,000–46,999	33,087	18.4	18,354	55.5
47,000–53,999	43,811	24.4	25,581	58.4
≥54,000	81,055	45.1	47,300	58.4
Unemployed (%)				
<3	2,799	1.6	1,620	57.9
3.00–3.99	21,093	11.7	12,306	58.3
4.00–4.99	59,821	33.3	35,514	59.4
≥5	96,035	53.4	54,640	56.9
Without health insurance (%)				
<9	28,804	16.0	17,447	60.6
9.00–13.99	39,078	21.7	22,684	58.0
14.00–17.99	64,885	36.1	37,380	57.6
≥18	46,981	26.1	26,569	56.6
Vacant housing (%)				
<11	102,457	57.0	60,696	59.2
11.00–15.99	45,005	25.0	25,278	56.2
16.00–22.99	26,613	14.8	14,694	55.2
≥23	5,673	3.2	3,412	60.1
Subtotal^a	189,605	100	109,461	57.7
Total	791,904	100	473,903	59.8

Abbreviations: VL, viral load (copies/mL); SDH, social determinants of health.

Note. Data are based on address of residence as of December 31, 2015 (i.e., most recent known address). A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2015. Definitions for the SDH indicator variables used in this report can be found at <https://go.usa.gov/xP2d4>.

^a 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 SDH subpopulations.

^b Hispanics/Latinos can be of any race.

^c Includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, multiple races, and unknown races.

Table 10. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by age and selected social determinants of health—39 states and the District of Columbia

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
			18–24	
Male				
Below federal poverty level (%)				
<10	2,611	11.8	1,429	54.7
10.00–13.99	4,666	21.0	2,525	54.1
14.00–16.99	8,955	40.3	4,610	51.5
≥17	5,964	26.9	3,104	52.0
Less than high school diploma (%)				
<10	3,808	17.2	2,028	53.3
10.00–12.99	5,600	25.2	3,098	55.3
13.00–18.99	7,417	33.4	3,738	50.4
≥19	5,371	24.2	2,804	52.2
Median household income (U.S. \$)				
<40,000	2,348	10.6	1,229	52.3
40,000–46,999	4,073	18.4	2,056	50.5
47,000–53,999	5,170	23.3	2,654	51.3
≥54,000	10,605	47.8	5,729	54.0
Unemployed (%)				
<3	331	1.5	160	48.3
3.00–3.99	2,384	10.7	1,343	56.3
4.00–4.99	7,678	34.6	4,123	53.7
≥5	11,803	53.2	6,042	51.2
Without health insurance (%)				
<9	2,595	11.7	1,473	56.8
9.00–13.99	4,563	20.6	2,500	54.8
14.00–17.99	8,487	38.2	4,408	51.9
≥18	6,551	29.5	3,287	50.2
Vacant housing (%)				
<11	13,120	59.1	7,052	53.7
11.00–15.99	5,899	26.6	3,073	52.1
16.00–22.99	2,675	12.1	1,285	48.0
≥23	502	2.3	258	51.4
Subtotal^a	23,346	100	12,250	52.5
Female				
Below federal poverty level (%)				
<10	802	12.9	405	50.5
10.00–13.99	1,344	21.5	656	48.8
14.00–16.99	2,130	34.1	910	42.7
≥17	1,962	31.5	858	43.7
Less than high school diploma (%)				
<10	976	15.6	521	53.4
10.00–12.99	1,631	26.1	734	45.0
13.00–18.99	2,004	32.1	861	43.0
≥19	1,627	26.1	713	43.8
Median household income (U.S. \$)				
<40,000	853	13.7	391	45.8
40,000–46,999	1,147	18.4	477	41.6
47,000–53,999	1,506	24.1	642	42.6
≥54,000	2,732	43.8	1,319	48.3
Unemployed (%)				
<3	114	1.8	64	56.1
3.00–3.99	675	10.8	338	50.1
4.00–4.99	2,118	34.0	974	46.0
≥5	3,331	53.4	1,453	43.6
Without health insurance (%)				
<9	918	14.7	470	51.2
9.00–13.99	1,197	19.2	556	46.4
14.00–17.99	2,347	37.6	1,057	45.0
≥18	1,776	28.5	746	42.0
Vacant housing (%)				
<11	3,523	56.5	1,679	47.7
11.00–15.99	1,646	26.4	709	43.1
16.00–22.99	879	14.1	357	40.6
≥23	190	3.0	84	44.2
Subtotal^a	6,562	100	2,960	45.1
Total	29,908	100	15,210	50.9

Table 10. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by age and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
	25–34			
Male				
Below federal poverty level (%)				
<10	10,119	11.7	5,639	55.7
10.00–13.99	19,822	23.0	11,762	59.3
14.00–16.99	36,385	42.1	19,880	54.6
≥17	20,027	23.2	11,055	55.2
Less than high school diploma (%)				
<10	15,339	17.8	8,759	57.1
10.00–12.99	22,224	25.7	12,680	57.1
13.00–18.99	26,439	30.6	14,393	54.4
≥19	22,351	25.9	12,504	55.9
Median household income (U.S. \$)				
<40,000	7,554	8.7	4,190	55.5
40,000–46,999	13,500	15.6	7,107	52.6
47,000–53,999	19,138	22.2	10,599	55.4
≥54,000	46,161	53.5	26,440	57.3
Unemployed (%)				
<3	1,462	1.7	777	53.1
3.00–3.99	10,290	11.9	6,038	58.7
4.00–4.99	30,296	35.1	17,297	57.1
≥5	44,305	51.3	24,224	54.7
Without health insurance (%)				
<9	11,712	13.6	7,154	61.1
9.00–13.99	17,198	19.9	9,889	57.5
14.00–17.99	30,866	35.7	16,788	54.4
≥18	26,577	30.8	14,505	54.6
Vacant housing (%)				
<11	53,700	62.2	30,799	57.4
11.00–15.99	21,602	25.0	11,718	54.2
16.00–22.99	9,106	10.5	4,739	52.0
≥23	1,945	2.3	1,080	55.5
Subtotal^a	91,110	100	50,887	55.9
Female				
Below federal poverty level (%)				
<10	3,002	12.1	1,572	52.4
10.00–13.99	5,831	23.6	3,005	51.5
14.00–16.99	8,708	35.2	3,997	45.9
≥17	7,190	29.1	3,402	47.3
Less than high school diploma (%)				
<10	4,112	16.6	2,137	52.0
10.00–12.99	6,681	27.0	3,155	47.2
13.00–18.99	8,148	32.9	3,874	47.5
≥19	5,790	23.4	2,810	48.5
Median household income (U.S. \$)				
<40,000	2,942	11.9	1,427	48.5
40,000–46,999	4,941	20.0	2,301	46.6
47,000–53,999	6,310	25.5	2,898	45.9
≥54,000	10,538	42.6	5,350	50.8
Unemployed (%)				
<3	439	1.8	217	49.4
3.00–3.99	3,021	12.2	1,551	51.3
4.00–4.99	8,565	34.6	4,310	50.3
≥5	12,706	51.4	5,898	46.4
Without health insurance (%)				
<9	3,158	12.8	1,667	52.8
9.00–13.99	4,882	19.7	2,475	50.7
14.00–17.99	9,277	37.5	4,461	48.1
≥18	7,414	30.0	3,373	45.5
Vacant housing (%)				
<11	13,476	54.5	6,894	51.2
11.00–15.99	6,716	27.2	3,047	45.4
16.00–22.99	3,749	15.2	1,647	43.9
≥23	790	3.2	388	49.1
Subtotal^a	26,011	100	12,576	48.3
Total	117,121	100	63,463	54.2

Table 10. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by age and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
	35–44			
Male				
Below federal poverty level (%)				
<10	13,583	12.1	8,078	59.5
10.00–13.99	28,965	25.7	18,155	62.7
14.00–16.99	46,188	41.0	27,007	58.5
≥17	23,896	21.2	13,630	57.0
Less than high school diploma (%)				
<10	19,730	17.5	12,162	61.6
10.00–12.99	30,489	27.1	18,481	60.6
13.00–18.99	34,061	30.2	19,707	57.9
≥19	28,352	25.2	16,520	58.3
Median household income (U.S. \$)				
<40,000	9,026	8.0	5,128	56.8
40,000–46,999	17,016	15.1	9,551	56.1
47,000–53,999	23,787	21.1	14,242	59.9
≥54,000	62,803	55.8	37,949	60.4
Unemployed (%)				
<3	2,240	2.0	1,137	50.8
3.00–3.99	14,905	13.2	9,103	61.1
4.00–4.99	41,253	36.6	24,990	60.6
≥5	54,234	48.2	31,640	58.3
Without health insurance (%)				
<9	17,268	15.3	10,740	62.2
9.00–13.99	22,194	19.7	13,582	61.2
14.00–17.99	38,064	33.8	21,986	57.8
≥18	35,106	31.2	20,562	58.6
Vacant housing (%)				
<11	70,257	62.4	42,523	60.5
11.00–15.99	26,981	24.0	15,639	58.0
16.00–22.99	12,323	10.9	6,857	55.6
≥23	3,071	2.7	1,851	60.3
Subtotal^a	118,944	100	70,314	59.1
Female				
Below federal poverty level (%)				
<10	6,567	14.5	3,653	55.6
10.00–13.99	11,070	24.4	6,325	57.1
14.00–16.99	15,129	33.4	7,979	52.7
≥17	12,572	27.7	6,721	53.5
Less than high school diploma (%)				
<10	8,058	17.8	4,620	57.3
10.00–12.99	12,555	27.7	6,703	53.4
13.00–18.99	14,356	31.7	7,690	53.6
≥19	10,369	22.9	5,665	54.6
Median household income (U.S. \$)				
<40,000	5,334	11.8	2,876	53.9
40,000–46,999	8,383	18.5	4,461	53.2
47,000–53,999	11,155	24.6	6,061	54.3
≥54,000	20,466	45.1	11,280	55.1
Unemployed (%)				
<3	760	1.7	416	54.7
3.00–3.99	5,744	12.7	3,188	55.5
4.00–4.99	15,567	34.3	8,730	56.1
≥5	23,267	51.3	12,344	53.1
Without health insurance (%)				
<9	6,463	14.3	3,666	56.7
9.00–13.99	9,580	21.1	5,256	54.9
14.00–17.99	16,624	36.7	9,051	54.4
≥18	12,671	27.9	6,705	52.9
Vacant housing (%)				
<11	25,665	56.6	14,344	55.9
11.00–15.99	11,590	25.6	6,070	52.4
16.00–22.99	6,647	14.7	3,449	51.9
≥23	1,436	3.2	815	56.8
Subtotal^a	47,961	100	26,026	54.3
Total	166,905	100	96,340	57.7

Table 10. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by age and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
	45–54			
Male				
Below federal poverty level (%)				
<10	24,806	12.8	15,550	62.7
10.00–13.99	52,620	27.2	35,262	67.0
14.00–16.99	75,113	38.8	46,799	62.3
≥17	41,143	21.2	24,722	60.1
Less than high school diploma (%)				
<10	34,845	18.0	22,408	64.3
10.00–12.99	55,965	28.9	36,505	65.2
13.00–18.99	58,597	30.3	35,457	60.5
≥19	44,275	22.9	27,963	63.2
Median household income (U.S. \$)				
<40,000	15,466	8.0	9,555	61.8
40,000–46,999	29,470	15.2	17,637	59.8
47,000–53,999	40,854	21.1	26,316	64.4
≥54,000	107,892	55.7	68,825	63.8
Unemployed (%)				
<3	3,771	1.9	2,122	56.3
3.00–3.99	26,115	13.5	16,524	63.3
4.00–4.99	70,955	36.6	45,969	64.8
≥5	92,841	47.9	57,718	62.2
Without health insurance (%)				
<9	35,292	18.2	23,138	65.6
9.00–13.99	39,511	20.4	24,895	63.0
14.00–17.99	63,711	32.9	38,731	60.8
≥18	55,168	28.5	35,569	64.5
Vacant housing (%)				
<11	118,663	61.3	75,844	63.9
11.00–15.99	45,429	23.5	27,983	61.6
16.00–22.99	23,379	12.1	14,396	61.6
≥23	6,211	3.2	4,110	66.2
Subtotal^a	204,946	100	128,816	62.9
Female				
Below federal poverty level (%)				
<10	8,194	14.1	4,973	60.7
10.00–13.99	14,534	25.0	9,311	64.1
14.00–16.99	17,958	30.8	10,771	60.0
≥17	17,531	30.1	10,419	59.4
Less than high school diploma (%)				
<10	9,857	16.9	6,156	62.5
10.00–12.99	16,674	28.6	10,318	61.9
13.00–18.99	18,215	31.3	10,515	57.7
≥19	13,471	23.1	8,485	63.0
Median household income (U.S. \$)				
<40,000	7,134	12.3	4,451	62.4
40,000–46,999	10,589	18.2	6,078	57.4
47,000–53,999	14,019	24.1	8,771	62.6
≥54,000	26,475	45.5	16,174	61.1
Unemployed (%)				
<3	877	1.5	534	60.9
3.00–3.99	6,776	11.6	4,148	61.2
4.00–4.99	18,893	32.5	11,793	62.4
≥5	31,671	54.4	18,999	60.0
Without health insurance (%)				
<9	10,050	17.3	6,326	62.9
9.00–13.99	13,018	22.4	7,835	60.2
14.00–17.99	20,908	35.9	12,699	60.7
≥18	14,241	24.5	8,614	60.5
Vacant housing (%)				
<11	33,590	57.7	20,875	62.1
11.00–15.99	13,987	24.0	8,331	59.6
16.00–22.99	8,782	15.1	5,082	57.9
≥23	1,858	3.2	1,186	63.8
Subtotal^a	61,398	100	37,276	60.7
Total	266,344	100	166,092	62.4

Table 10. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by age and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
	≥ 55			
Male				
Below federal poverty level (%)				
<10	19,738	12.8	12,254	62.1
10.00–13.99	42,993	27.8	28,962	67.4
14.00–16.99	57,217	37.0	35,120	61.4
≥17	34,815	22.5	20,416	58.6
Less than high school diploma (%)				
<10	26,678	17.2	17,247	64.6
10.00–12.99	47,689	30.8	30,818	64.6
13.00–18.99	46,953	30.3	27,385	58.3
≥19	33,443	21.6	21,302	63.7
Median household income (U.S. \$)				
<40,000	12,596	8.1	7,716	61.3
40,000–46,999	23,204	15.0	13,542	58.4
47,000–53,999	31,995	20.7	20,395	63.7
≥54,000	86,968	56.2	55,099	63.4
Unemployed (%)				
<3	2,736	1.8	1,556	56.9
3.00–3.99	20,557	13.3	12,668	61.6
4.00–4.99	57,375	37.1	37,091	64.6
≥5	74,095	47.9	45,437	61.3
Without health insurance (%)				
<9	32,189	20.8	20,889	64.9
9.00–13.99	32,661	21.1	20,294	62.1
14.00–17.99	50,343	32.5	29,905	59.4
≥18	39,570	25.6	25,664	64.9
Vacant housing (%)				
<11	93,150	60.2	59,364	63.7
11.00–15.99	36,385	23.5	21,964	60.4
16.00–22.99	19,701	12.7	11,847	60.1
≥23	5,527	3.6	3,577	64.7
Subtotal^a	163,953	100	102,175	62.3
Female				
Below federal poverty level (%)				
<10	6,320	14.0	3,930	62.2
10.00–13.99	11,004	24.3	7,450	67.7
14.00–16.99	13,673	30.2	8,728	63.8
≥17	14,227	31.5	9,015	63.4
Less than high school diploma (%)				
<10	7,166	15.8	4,634	64.7
10.00–12.99	13,175	29.1	8,663	65.8
13.00–18.99	13,977	30.9	8,608	61.6
≥19	10,906	24.1	7,218	66.2
Median household income (U.S. \$)				
<40,000	5,532	12.2	3,700	66.9
40,000–46,999	8,027	17.7	5,037	62.8
47,000–53,999	10,821	23.9	7,209	66.6
≥54,000	20,844	46.1	13,177	63.2
Unemployed (%)				
<3	609	1.3	389	63.9
3.00–3.99	4,877	10.8	3,081	63.2
4.00–4.99	14,678	32.5	9,707	66.1
≥5	25,060	55.4	15,946	63.6
Without health insurance (%)				
<9	8,215	18.2	5,318	64.7
9.00–13.99	10,401	23.0	6,562	63.1
14.00–17.99	15,729	34.8	10,112	64.3
≥18	10,879	24.1	7,131	65.5
Vacant housing (%)				
<11	26,203	57.9	16,904	64.5
11.00–15.99	11,066	24.5	7,121	64.4
16.00–22.99	6,556	14.5	4,159	63.4
≥23	1,399	3.1	939	67.1
Subtotal^a	47,673	100	30,623	64.2
Total	211,626	100	132,798	62.8

Abbreviations: VL, viral load (copies/mL); SDH, social determinants of health.

Note. Data are based on address of residence as of December 31, 2015 (i.e., most recent known address). A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2015. Definitions for the SDH indicator variables used in this report can be found at <https://go.usa.gov/xP2d4>.

^a 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 SDH subpopulations.

Table 11. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by transmission category and selected social determinants of health—39 states and the District of Columbia

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
Male-to-male sexual contact				
Male				
Below federal poverty level (%)				
<10	50,264	12.3	31,403	62.5
10.00–13.99	106,009	26.0	71,680	67.6
14.00–16.99	171,218	42.0	105,706	61.7
≥17	80,334	19.7	49,099	61.1
Less than high school diploma (%)				
<10	73,837	18.1	47,351	64.1
10.00–12.99	115,690	28.4	75,740	65.5
13.00–18.99	122,323	30.0	74,368	60.8
≥19	95,976	23.5	60,428	63.0
Median household income (U.S. \$)				
<40,000	28,616	7.0	17,487	61.1
40,000–46,999	58,648	14.4	35,667	60.8
47,000–53,999	85,086	20.9	54,457	64.0
≥54,000	235,476	57.7	150,276	63.8
Unemployed (%)				
<3	6,890	1.7	4,066	59.0
3.00–3.99	53,341	13.1	33,983	63.7
4.00–4.99	152,141	37.3	98,667	64.9
≥5	195,454	47.9	121,171	62.0
Without health insurance (%)				
<9	68,144	16.7	45,650	67.0
9.00–13.99	80,180	19.7	51,539	64.3
14.00–17.99	135,227	33.2	81,886	60.6
≥18	124,275	30.5	78,813	63.4
Vacant housing (%)				
<11	255,061	62.5	162,846	63.8
11.00–15.99	98,781	24.2	60,752	61.5
16.00–22.99	42,749	10.5	26,848	62.8
≥23	11,235	2.8	7,441	66.2
Subtotal^a	431,191	100	271,549	63.0
Female				
Below federal poverty level (%)				
<10	—	—	—	—
10.00–13.99	—	—	—	—
14.00–16.99	—	—	—	—
≥17	—	—	—	—
Less than high school diploma (%)				
<10	—	—	—	—
10.00–12.99	—	—	—	—
13.00–18.99	—	—	—	—
≥19	—	—	—	—
Median household income (U.S. \$)				
<40,000	—	—	—	—
40,000–46,999	—	—	—	—
47,000–53,999	—	—	—	—
≥54,000	—	—	—	—
Unemployed (%)				
<3	—	—	—	—
3.00–3.99	—	—	—	—
4.00–4.99	—	—	—	—
≥5	—	—	—	—
Without health insurance (%)				
<9	—	—	—	—
9.00–13.99	—	—	—	—
14.00–17.99	—	—	—	—
≥18	—	—	—	—
Vacant housing (%)				
<11	—	—	—	—
11.00–15.99	—	—	—	—
16.00–22.99	—	—	—	—
≥23	—	—	—	—
Subtotal^a	—	—	—	—
Total	431,191	100	271,549	63.0

Table 11. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by transmission category and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
	Injection drug use			
Male				
Below federal poverty level (%)				
<10	7,156	12.7	3,755	52.5
10.00–13.99	13,950	24.7	7,429	53.3
14.00–16.99	17,327	30.7	8,197	47.3
≥17	17,977	31.9	8,752	48.7
Less than high school diploma (%)				
<10	8,652	15.3	4,635	53.6
10.00–12.99	15,648	27.7	8,050	51.4
13.00–18.99	17,563	31.1	8,024	45.7
≥19	14,547	25.8	7,425	51.0
Median household income (U.S. \$)				
<40,000	7,248	12.8	3,881	53.5
40,000–46,999	9,369	16.6	4,114	43.9
47,000–53,999	12,636	22.4	6,410	50.7
≥54,000	27,157	48.1	13,728	50.5
Unemployed (%)				
<3	1,365	2.4	508	37.2
3.00–3.99	6,981	12.4	3,586	51.4
4.00–4.99	18,771	33.3	9,343	49.8
≥5	29,292	51.9	14,697	50.2
Without health insurance (%)				
<9	13,793	24.5	7,238	52.5
9.00–13.99	13,513	24.0	6,602	48.9
14.00–17.99	19,152	34.0	9,311	48.6
≥18	9,952	17.6	4,983	50.1
Vacant housing (%)				
<11	34,560	61.3	18,001	52.1
11.00–15.99	12,110	21.5	5,746	47.4
16.00–22.99	7,792	13.8	3,437	44.1
≥23	1,948	3.5	950	48.8
Subtotal^a	59,679	100	29,670	49.7
Female				
Below federal poverty level (%)				
<10	5,016	12.9	2,848	56.8
10.00–13.99	9,403	24.1	5,594	59.5
14.00–16.99	11,858	30.4	6,386	53.9
≥17	12,702	32.6	6,848	53.9
Less than high school diploma (%)				
<10	6,087	15.6	3,579	58.8
10.00–12.99	10,699	27.4	6,120	57.2
13.00–18.99	12,151	31.2	6,216	51.2
≥19	10,041	25.8	5,762	57.4
Median household income (U.S. \$)				
<40,000	5,132	13.2	2,961	57.7
40,000–46,999	6,669	17.1	3,419	51.3
47,000–53,999	8,994	23.1	5,161	57.4
≥54,000	18,183	46.6	10,136	55.7
Unemployed (%)				
<3	626	1.6	320	51.2
3.00–3.99	4,630	11.9	2,593	56.0
4.00–4.99	12,840	32.9	7,346	57.2
≥5	20,883	53.6	11,418	54.7
Without health insurance (%)				
<9	8,310	21.3	4,864	58.5
9.00–13.99	9,613	24.7	5,216	54.3
14.00–17.99	13,441	34.5	7,351	54.7
≥18	7,615	19.5	4,245	55.7
Vacant housing (%)				
<11	24,196	62.1	13,865	57.3
11.00–15.99	8,301	21.3	4,456	53.7
16.00–22.99	5,395	13.8	2,737	50.7
≥23	1,087	2.8	617	56.8
Subtotal^a	41,366	100	22,932	55.4
Total	101,046	100	52,602	52.1

Table 11. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by transmission category and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
Male-to-male sexual contact and injection drug use				
Male				
Below federal poverty level (%)				
<10	4,952	11.6	3,040	61.4
10.00–13.99	12,443	29.2	8,039	64.6
14.00–16.99	16,227	38.1	9,350	57.6
≥17	8,981	21.1	5,260	58.6
Less than high school diploma (%)				
<10	8,053	18.9	5,096	63.3
10.00–12.99	12,003	28.2	7,598	63.3
13.00–18.99	12,795	30.0	7,287	56.9
≥19	9,751	22.9	5,710	58.6
Median household income (U.S. \$)				
<40,000	3,670	8.6	2,258	61.5
40,000–46,999	6,523	15.3	3,651	56.0
47,000–53,999	8,228	19.3	5,013	60.9
≥54,000	24,182	56.8	14,767	61.1
Unemployed (%)				
<3	1,122	2.6	590	52.6
3.00–3.99	6,754	15.9	4,126	61.1
4.00–4.99	15,798	37.1	9,763	61.8
≥5	18,930	44.4	11,211	59.2
Without health insurance (%)				
<9	8,293	19.5	5,471	66.0
9.00–13.99	9,216	21.6	5,684	61.7
14.00–17.99	14,313	33.6	8,286	57.9
≥18	10,782	25.3	6,249	58.0
Vacant housing (%)				
<11	27,131	63.7	16,641	61.3
11.00–15.99	8,878	20.8	5,158	58.1
16.00–22.99	5,093	12.0	2,915	57.2
≥23	1,501	3.5	976	65.0
Subtotal^a	45,136	100	27,150	60.2
Female				
Below federal poverty level (%)				
<10	—	—	—	—
10.00–13.99	—	—	—	—
14.00–16.99	—	—	—	—
≥17	—	—	—	—
Less than high school diploma (%)				
<10	—	—	—	—
10.00–12.99	—	—	—	—
13.00–18.99	—	—	—	—
≥19	—	—	—	—
Median household income (U.S. \$)				
<40,000	—	—	—	—
40,000–46,999	—	—	—	—
47,000–53,999	—	—	—	—
≥54,000	—	—	—	—
Unemployed (%)				
<3	—	—	—	—
3.00–3.99	—	—	—	—
4.00–4.99	—	—	—	—
≥5	—	—	—	—
Without health insurance (%)				
<9	—	—	—	—
9.00–13.99	—	—	—	—
14.00–17.99	—	—	—	—
≥18	—	—	—	—
Vacant housing (%)				
<11	—	—	—	—
11.00–15.99	—	—	—	—
16.00–22.99	—	—	—	—
≥23	—	—	—	—
Subtotal^a	—	—	—	—
Total	45,136	100	27,150	60.2

Table 11. HIV viral suppression at most recent viral load test in 2015, among persons aged ≥18 years with HIV infection diagnosed by year-end 2014 and alive at year-end 2015, by transmission category and selected social determinants of health—39 states and the District of Columbia (cont)

	Persons alive at year-end 2015		VL <200 copies/mL	
	No.	%	No.	%
	Heterosexual contact^b			
Male				
Below federal poverty level (%)				
<10	7,584	13.1	4,256	56.1
10.00–13.99	15,402	26.7	8,870	57.6
14.00–16.99	17,573	30.5	9,420	53.6
≥17	17,139	29.7	9,249	54.0
Less than high school diploma (%)				
<10	8,820	15.3	4,964	56.3
10.00–12.99	17,268	29.9	9,499	55.0
13.00–18.99	19,268	33.4	10,312	53.5
≥19	12,342	21.4	7,020	56.9
Median household income (U.S. \$)				
<40,000	6,824	11.8	3,935	57.7
40,000–46,999	11,924	20.7	6,109	51.2
47,000–53,999	13,916	24.1	7,809	56.1
≥54,000	25,034	43.4	13,941	55.7
Unemployed (%)				
<3	1,021	1.8	514	50.3
3.00–3.99	6,417	11.1	3,583	55.8
4.00–4.99	19,186	33.3	10,833	56.5
≥5	31,073	53.9	16,865	54.3
Without health insurance (%)				
<9	7,725	13.4	4,448	57.6
9.00–13.99	12,010	20.8	6,711	55.9
14.00–17.99	21,012	36.4	11,530	54.9
≥18	16,951	29.4	9,106	53.7
Vacant housing (%)				
<11	28,954	50.2	16,504	57.0
11.00–15.99	15,412	26.7	8,200	53.2
16.00–22.99	10,941	19.0	5,670	51.8
≥23	2,390	4.1	1,419	59.4
Subtotal^a	60,906	100	33,487	55.0
Female				
Below federal poverty level (%)				
<10	19,173	14.1	11,335	59.1
10.00–13.99	33,258	24.4	20,554	61.8
14.00–16.99	44,417	32.6	25,349	57.1
≥17	39,381	28.9	22,926	58.2
Less than high school diploma (%)				
<10	23,279	17.1	14,048	60.3
10.00–12.99	38,778	28.5	22,841	58.9
13.00–18.99	43,254	31.8	24,737	57.2
≥19	30,919	22.7	18,537	60.0
Median household income (U.S. \$)				
<40,000	16,052	11.8	9,593	59.8
40,000–46,999	25,722	18.9	14,607	56.8
47,000–53,999	33,793	24.8	19,931	59.0
≥54,000	60,663	44.5	36,033	59.4
Unemployed (%)				
<3	2,106	1.5	1,260	59.8
3.00–3.99	15,897	11.7	9,408	59.2
4.00–4.99	45,519	33.4	27,416	60.2
≥5	72,708	53.4	42,080	57.9
Without health insurance (%)				
<9	19,598	14.4	12,103	61.8
9.00–13.99	28,516	20.9	17,018	59.7
14.00–17.99	49,805	36.6	29,236	58.7
≥18	38,311	28.1	21,807	56.9
Vacant housing (%)				
<11	75,476	55.4	45,436	60.2
11.00–15.99	35,679	26.2	20,325	57.0
16.00–22.99	20,646	15.2	11,693	56.6
≥23	4,429	3.3	2,710	61.2
Subtotal^a	143,471	100	84,196	58.7
Total	204,378	100	117,683	57.6

Abbreviations: VL, viral load (copies/mL); SDH, social determinants of health.

Note. Data are based on address of residence as of December 31, 2015 (i.e., most recent known address). Data have been statistically adjusted to account for missing transmission category. A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2015. Definitions for the SDH indicator variables used in this report can be found at <https://go.usa.gov/xP2d4>.

^a 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 SDH subpopulations.

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