

# HIV | SURVEILLANCE REPORT

SPECIAL REPORT

**Behavioral and Clinical Characteristics  
of Persons with Diagnosed HIV Infection**  
Medical Monitoring Project, United States  
2022 Cycle (June 2022–May 2023)



Centers for Disease  
Control and Prevention  
National Center for HIV,  
Viral Hepatitis, STD, and  
TB Prevention

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**Erratum statement:** Due to a rounding error in a previous version of this report, the 2025 target value for the NHAS unemployment indicator was incorrectly characterized as 8%. The 2025 NHAS goal for unemployment is a 50% reduction from the 2017 baseline (14.9%) in the percentage of persons with diagnosed HIV who report being out of work, which means the 2025 target value should be 7.45%. Therefore, the rounded value should have been characterized as “approximately 7%.” This error can be found on pages 25, 26, and 71 of this report.

**On the Web:** <https://www.cdc.gov/hiv-data/mmp/index.html>

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

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MMP project areas—[https://www.cdc.gov/hiv-data/mmp/#cdc\\_survey\\_profile\\_surveys\\_used-project-areas](https://www.cdc.gov/hiv-data/mmp/#cdc_survey_profile_surveys_used-project-areas)

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# Commentary



At year-end 2021, an estimated 1,088,769 persons in the United States and 6 dependent areas and freely associated states were living with diagnosed HIV infection, and in 2021, the number of new HIV diagnoses was 36,189 [1]. Although the National HIV Surveillance System (NHSS) collects information about persons with diagnosed HIV infection [1], other surveillance systems provide more detailed information about care seeking, health care use, use of ancillary services, and key behaviors among people at risk for, and with, diagnosed HIV [2, 3]. In 2005, in response to an Institute of Medicine (IOM) report outlining the need for representative data on persons with HIV [4], the Centers for Disease Control and Prevention (CDC) implemented the Medical Monitoring Project (MMP), which from 2009 to 2014, collected data from a 3-stage probability sample of adults receiving HIV medical care [5]. In 2015, in response to recommendations stemming from an IOM review of national HIV data systems [6], MMP sampling and weighting methods were revised to include all adults with diagnosed HIV infection, regardless of HIV care status. MMP is a cross-sectional, nationally representative, complex sample survey that assesses the behavioral and clinical characteristics of adults with diagnosed HIV infection in the United States. These behaviors and clinical outcomes affect people with HIV (PWH)'s health and well-being and the risk of HIV transmission. Data from MMP are critical for achieving the goals of the National HIV/AIDS Strategy [7] and the Ending the HIV Epidemic in the U.S. (EHE) initiative [8], which seek to reduce new HIV infections in the United States by 90% by 2030, prioritize reducing HIV-related disparities and health inequities, and improve PWH's health and well-being.

The 2022 MMP data were collected from a 2-stage probability sample. During the first stage, 16 U.S. states and Puerto Rico were selected from all U.S. states, the District of Columbia, and Puerto Rico. A total of 23 project areas from 16 states, including 6 separately funded jurisdictions within these states, and Puerto Rico were funded to conduct data collection for the 2022 cycle (Table 1). In the second stage, simple random samples of persons aged  $\geq 18$  years with diagnosed HIV infection who were reported to NHSS as of December 31, 2021, were selected from each participating jurisdiction [9].

This report presents unweighted frequencies and weighted prevalence estimates with 95% confidence intervals (CIs) for all characteristics represented by categorical variables. Continuous variables are represented by using median values and 95% CIs. The estimates describe the characteristics of adults with diagnosed HIV infection who are living in the United States, hereafter referred to as *persons with diagnosed HIV* or *persons*. The period referenced for estimates is the 12 months before the respondents' interviews and medical record abstractions unless otherwise noted. Statistical software (SAS, version 9.4) was used for analysis of weighted data [10]. For categorical variables, data are not reported for estimates derived from a denominator size  $< 30$  or for estimates with a coefficient of variation  $\geq 0.30$ . For continuous variables, estimates based on a denominator sample size  $< 30$  were suppressed. Estimates with an absolute confidence interval width  $\geq 30$ , estimates with an absolute confidence interval width between 5 and 30 and a relative confidence interval width  $> 130\%$ , and estimates of 0% or 100% are marked with an asterisk and should be interpreted with caution. No statistical tests were performed. Estimates presented in this report may have been affected by the COVID-19 pandemic. Additional information on MMP is available at <https://www.cdc.gov/hiv-data/mmp/>.

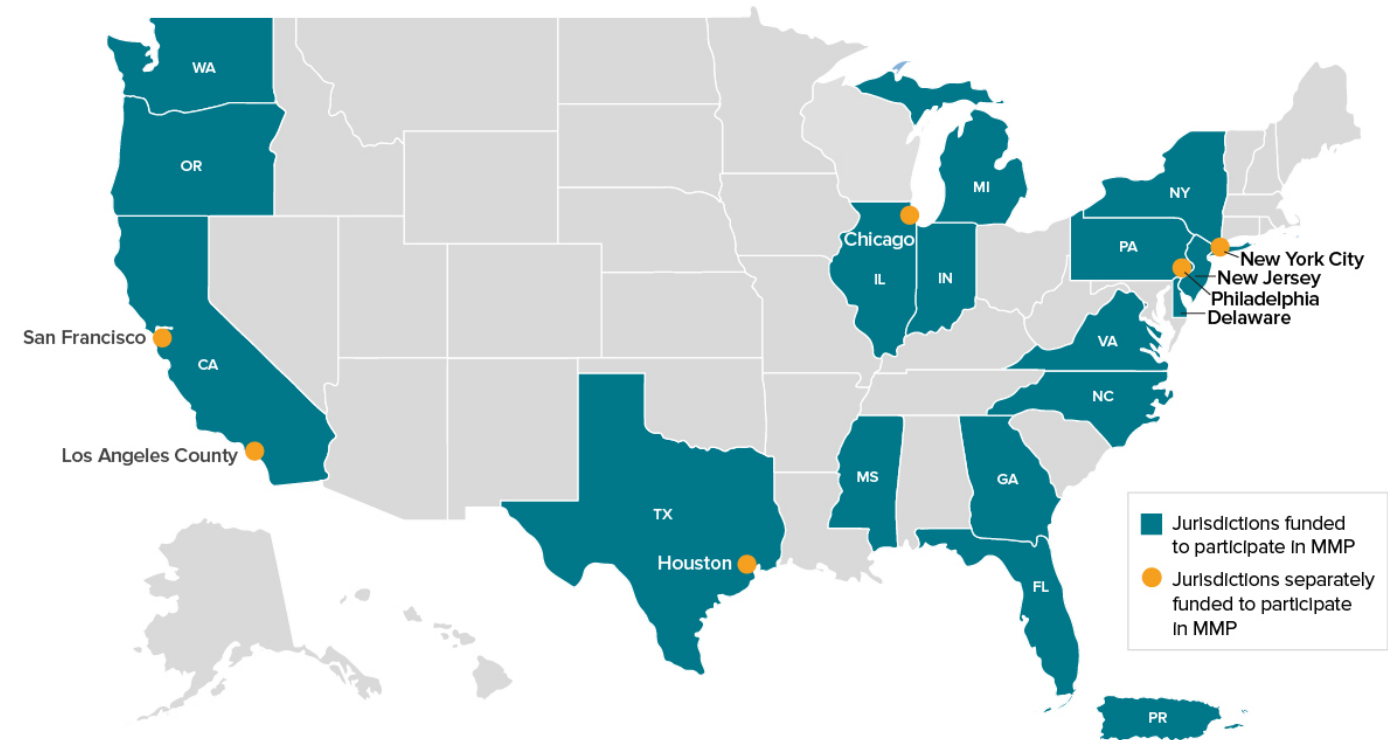
# HIGHLIGHTS OF ANALYSES

## Response Rates

All 16 states, including 6 separately funded jurisdictions within those states, and the 1 territory sampled for MMP participated (Figure 1). In total, 9,700 persons were sampled from NHSS and 3,818 participated (Table 1). Adjusted for eligibility, the response rate was 41% (shown in footnotes of Table 1).

*Note.* Estimates for all figures may not match the tables exactly due to rounding issues.

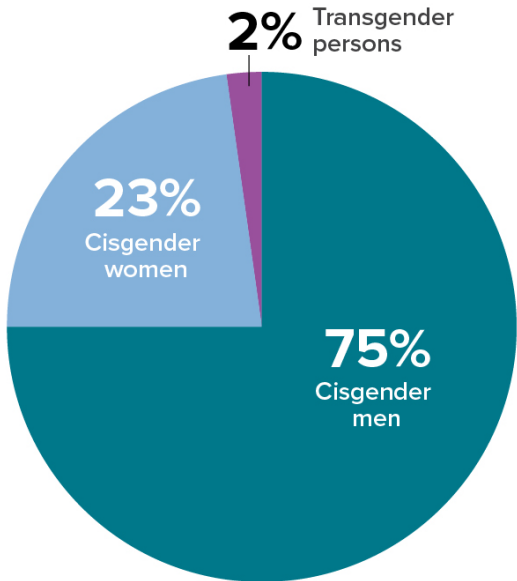
**Figure 1. Participating Medical Monitoring Project sites, including 16 states, 1 territory, and 6 separately funded jurisdictions—United States, 2022**



## Demographic Characteristics and Social Determinants of Health

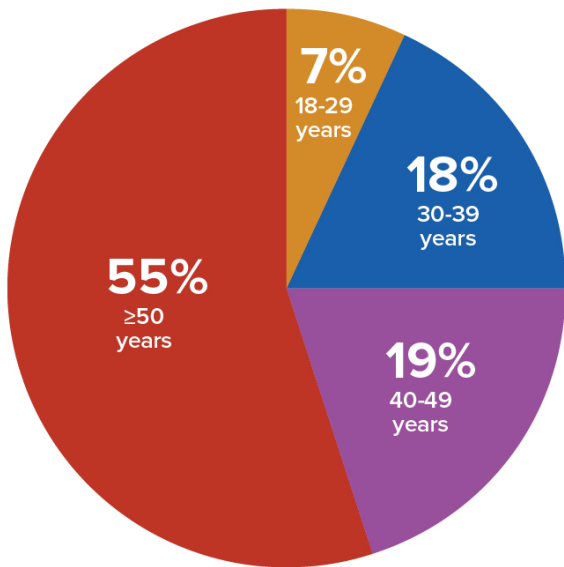
An estimated 75% of persons were cisgender men, 23% were cisgender women, and 2% were transgender (Figure 2; Table 2). Nearly three-quarters (74%) were aged at least 40 years. An estimated 44% identified as lesbian or gay; 44% as heterosexual or straight; 10% as bisexual; and 3% as another sexual orientation (i.e., not lesbian or gay, straight, or bisexual). An estimated 41% identified as Black or African American, 29% identified as White, 24% identified as Hispanic or Latino, 5% identified as multiracial, 1% identified as Asian, and <1% identified as American Indian/Alaska Native or Native Hawaiian/other Pacific Islander persons.

**Figure 2a. Distribution of gender among adults with diagnosed HIV—Medical Monitoring Project, United States, 2022**

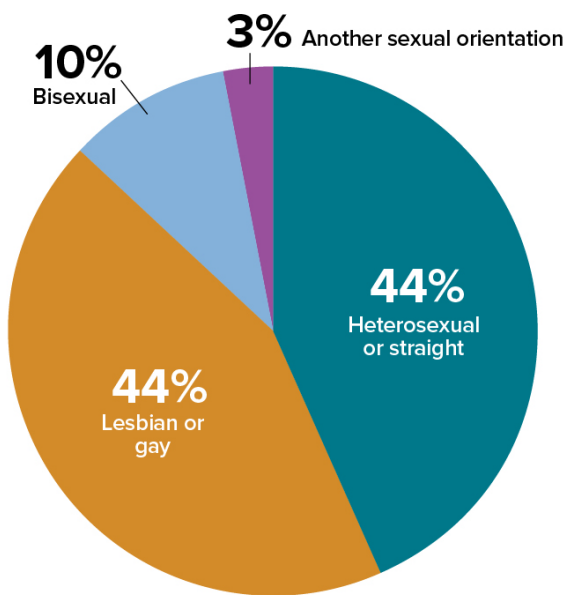


*Note.* Persons were classified as cisgender if sex at birth and gender reported by the person were the same. Transgender persons defined as those who self-identified as transgender or who reported a gender identity different from sex assigned at birth.

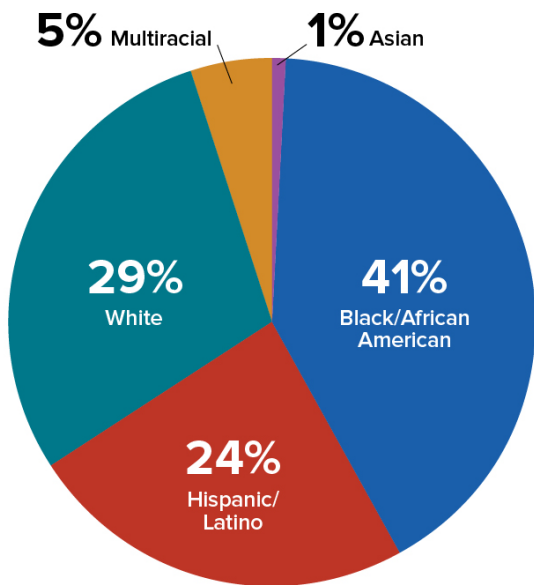
**Figure 2b. Distribution of age among adults with diagnosed HIV—Medical Monitoring Project, United States, 2022**



**Figure 2c. Distribution of sexual orientation among adults with diagnosed HIV—Medical Monitoring Project, United States, 2022**



**Figure 2d. Distribution of race/ethnicity among adults with diagnosed HIV—Medical Monitoring Project, United States, 2022**



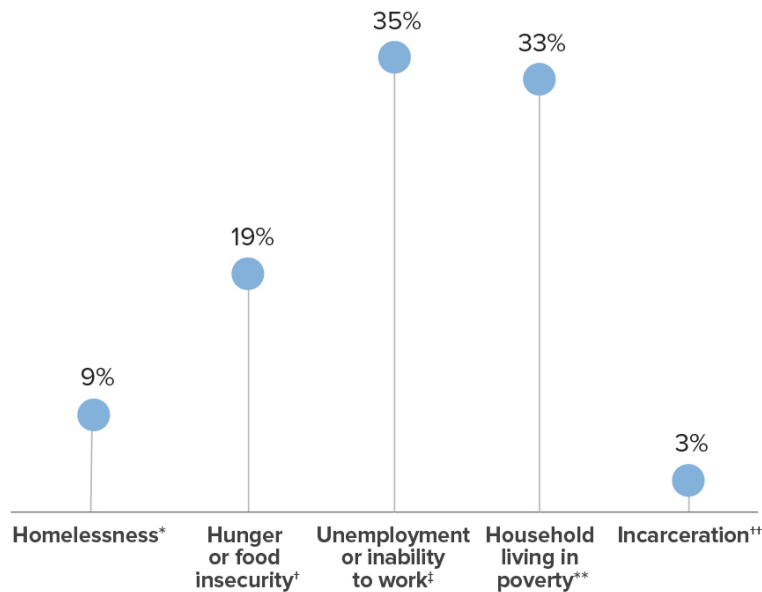
*Note.* Data for American Indian and Alaska native persons and Native Hawaiian and other Pacific Islander persons are not included because the estimates were unstable and therefore are suppressed. Hispanic/Latino persons could identify as any race and are grouped separately.

The estimated prevalence of unstable housing or homelessness among all persons with diagnosed HIV was 18%; 15% experienced unstable housing, and 9% experienced homelessness at any time during the past 12 months (Figure 3a; Table 2). Approximately 19% experienced hunger or food insecurity, 35% were unemployed or unable to work, and 33% had household incomes below the federal poverty threshold. An estimated 15% received Supplemental Security Income (SSI), and 18% received Social Security Disability Insurance (SSDI) (Figure 3b). An estimated 40% had a high school education or less. An estimated 99% had health insurance or coverage for care or medications (including antiretroviral therapy [ART] medications): 47% had coverage through the Ryan White HIV/AIDS Program (RWHAP), 45% had Medicaid, 43% had private health



insurance, and 30% had Medicare (Figure 3c). An estimated 9% were uninsured, including those who received RWHAP assistance only. Overall, 70% perceived their general health as good, very good, or excellent. An estimated 42% had a disability. An estimated 17% were born outside the United States and its territories. Approximately 3% had been incarcerated for >24 hours during the past 12 months.

**Figure 3a. Prevalence of socioeconomic factors and incarceration among adults with diagnosed HIV—Medical Monitoring Project, United States, 2022**



\* Homelessness is defined as living on the street, in a shelter, in a single-room–occupancy hotel, or in a car at any time during the past 12 months.

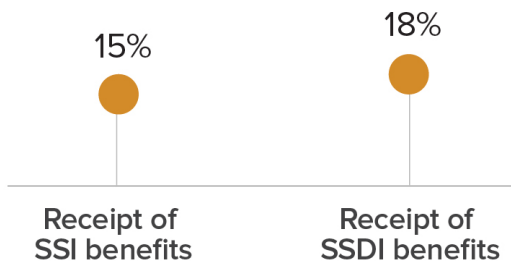
† Hunger or food insecurity is defined as going without food due to lack of money during the past 12 months.

‡ Unemployment or inability to work includes those who were unemployed or unable to work at the time of the interview.

\*\* Household poverty level is based on HHS poverty guidelines. The 2021 guidelines were used for persons interviewed in 2022, and the 2022 guidelines were used for persons interviewed in 2023. More information regarding HHS poverty guidelines is available at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

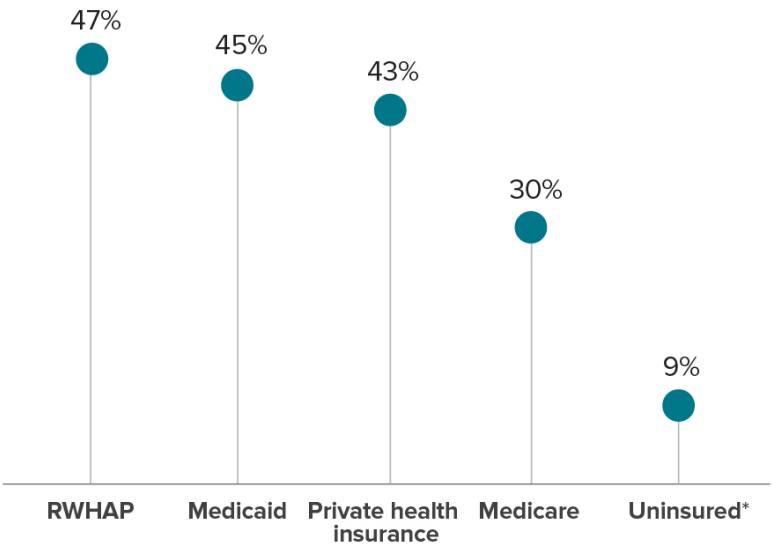
†† Incarcerated >24 hours at any point during the past 12 months.

**Figure 3b. Prevalence of SSI and SSDI benefits among adults with diagnosed HIV—Medical Monitoring Project, United States, 2022**



Abbreviations: SSI, Supplemental Security Income; SSDI, Social Security Disability Insurance.

**Figure 3c. Prevalence of health insurance or coverage for care or medications among adults with diagnosed HIV—Medical Monitoring Project, United States, 2022**



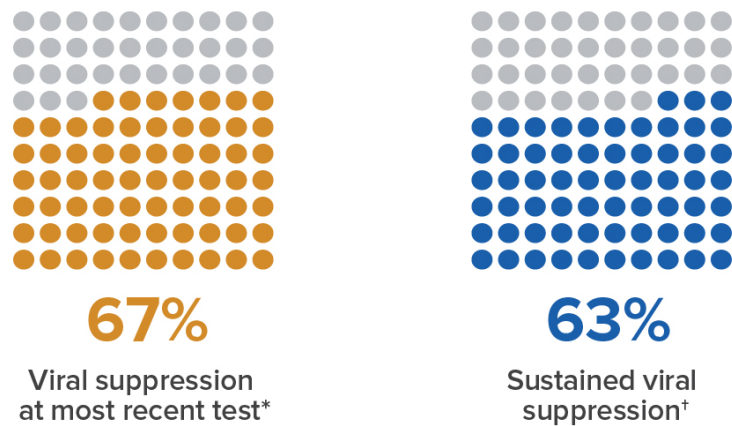
Abbreviation: RWHAP, Ryan White HIV/AIDS Program.  
*Note.* Healthcare insurance/coverage types not mutually exclusive; people could report >1 type of coverage.  
\* Includes people who only have health coverage through the Ryan White HIV/AIDS Program.

## Clinical Characteristics

Overall, 70% received an HIV diagnosis at least 10 years earlier (Table 3). According to the CDC stage of disease classification for HIV infection [11], an estimated 52% of persons ever had stage 3 (AIDS) disease. An estimated 5% of persons had a geometric mean CD4 T-lymphocyte (CD4) count of 0–199 cells/μL. The estimated average geometric mean CD4 count among all persons was 675.7 cells/μL, and the median geometric mean CD4 count was 644 cells/μL (range, 0–2,349) (data not shown in tables or figures).

An estimated 67% of persons had a viral load that was undetectable or <200 copies/mL at the most recent measurement, while 63% had viral loads that were undetectable or <200 copies/mL at all measurements during the past 12 months (sustained viral suppression) (Figure 4; Table 3).

**Figure 4. Percentage of adults with diagnosed HIV who were virally suppressed during the 12 months before interview—Medical Monitoring Project, United States, 2022**



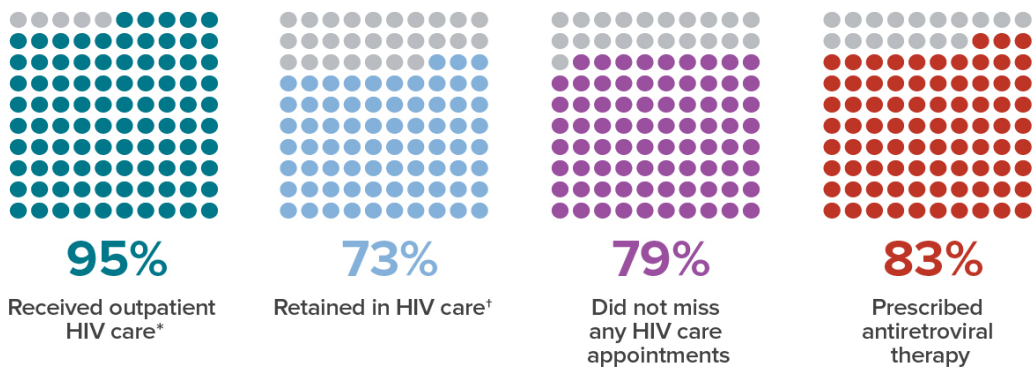
\* Viral load <200 copies/mL or undetectable based on most recent test in the past 12 months.

† Sustained viral suppression defined as having all viral load tests in the past 12 months <200 copies/mL or undetectable.

## Use of Health Care Services and Antiretroviral Treatment (ART)

Overall, 95% had received outpatient HIV care during the past 12 months (Figure 5; Table 4). An estimated 73% were retained in care during the past 12 months, and 51% were retained in care during the past 24 months. Approximately 22% missed at least 1 HIV care visit during the past 12 months. An estimated 83% of persons had an ART prescription documented in the medical record during the 12 months before interview. Of persons who met the clinical criteria for *Pneumocystis pneumonia* (PCP) prophylaxis, 32% had a prescription for PCP prophylaxis documented in the medical record.

**Figure 5. Receipt of HIV care and antiretroviral therapy prescription during the 12 months before interview among adults with diagnosed HIV—Medical Monitoring Project, United States, 2022**

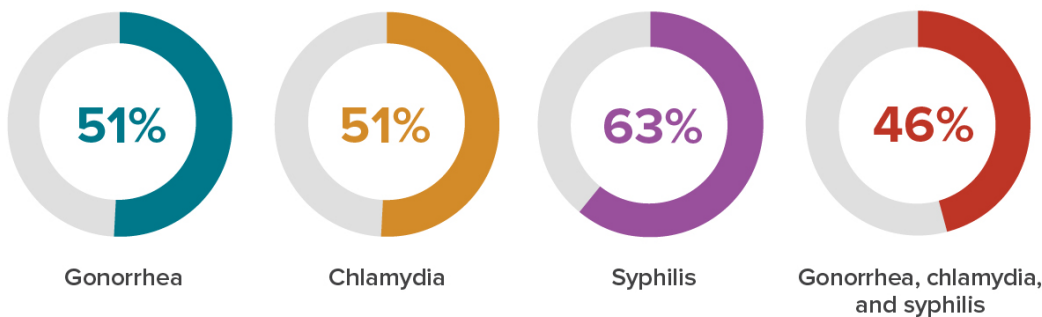


\* Outpatient HIV care was defined as any documentation of the following at the most frequent source of HIV care: encounter with an HIV care provider (could be self-reported), viral load test result, CD4 test result, HIV resistance test or tropism assay, ART prescription, PCP prophylaxis, or MAC prophylaxis.

† Had  $\geq 2$  elements of outpatient HIV care at least 90 days apart during the 12 months prior to interview.

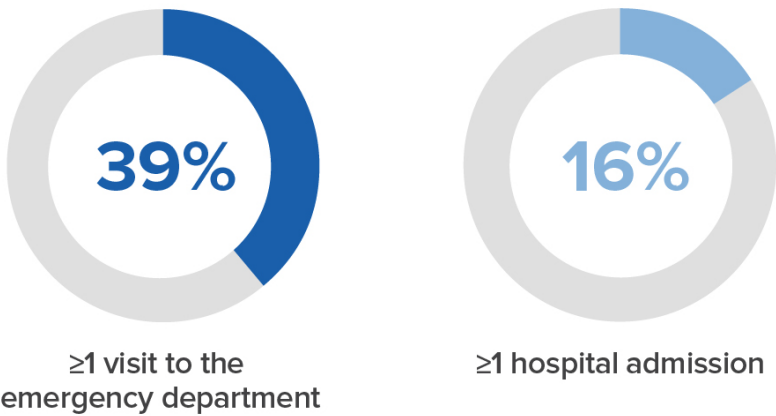
Among persons who are sexually active, an estimated 51% were tested for gonorrhea, 51% for chlamydia, 63% for syphilis, and 46% for all 3 sexually transmitted infections (STIs) (Figure 6; Table 5).

**Figure 6. Percentage of sexually active adults with diagnosed HIV who tested for gonorrhea, chlamydia, or syphilis during the 12 months before interview—Medical Monitoring Project, United States, 2022**



An estimated 39% of persons were seen in an emergency department at least once during the past 12 months, and 4% were seen at least 5 times (Figure 7; Table 6). An estimated 16% of persons were admitted to a hospital for an illness at least once during the past 12 months.

**Figure 7. Percentage of adults with diagnosed HIV who had at least one visit to the emergency room or at least one hospital admission during the 12 months before interview—Medical Monitoring Project, United States, 2022**

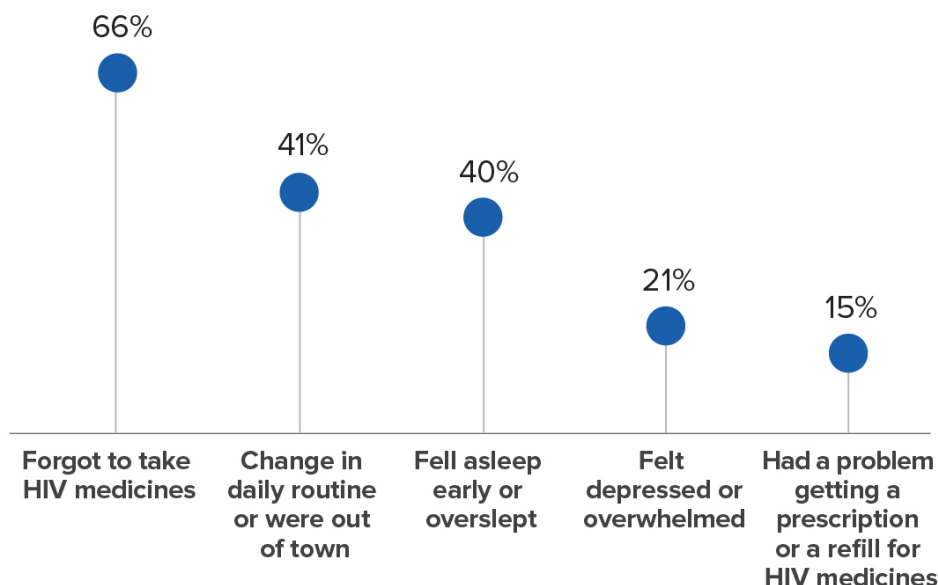


An estimated 99% of persons had ever taken ART and 95% of persons were currently taking ART, both based on self-report (Table 7). Among those with a history of ART use but who were not currently taking ART, 34% were not taking ART due to money or insurance problems, 26% were not taking ART because the health care provider never discussed restarting ART with the person, 22% because the person did not believe they needed ART, and 19% because the person thought ART would make them feel sick or harm them.



Among persons taking ART, 79% had never been troubled by ART side effects during the past 30 days; 13% had rarely been troubled (Table 8). Among persons taking ART, 64% took all of their ART doses in the past 30 days. Among persons who had ever missed a dose, the most common reasons given for not taking one's most recently missed ART dose were forgetting (66%), a change in one's daily routine or being out of town (41%), or falling asleep early or oversleeping (40%) (Figure 8; Table 8).

**Figure 8. Reasons for missing last antiretroviral therapy dose among adults with diagnosed HIV who have ever missed a dose\*—Medical Monitoring Project, United States, 2022**



\* Respondents may report more than one reason for last missed dose.

## Clinical Characteristics by Selected Populations

The estimated prevalence of ART prescription documented in a medical record was 83% among cisgender men, 81% among cisgender women, and 87% among transgender persons (Table 9a). Approximately 78% of bisexual persons and 85% of lesbian or gay persons were prescribed ART, compared with 81% of heterosexual or straight persons. An estimated 81% of Black or African American persons were prescribed ART, compared with 84% of Hispanic or Latino persons and 84% of White persons. The estimated prevalence of ART prescription was 77% among persons aged 18–29 years and 86% among those aged ≥50 years. ART prescription was highest during the 2015 cycle at 85% and was lowest during the 2020 cycle at 79% (Table 9b).

ART dose adherence in the past 30 days was 64% among cisgender men, 63% among cisgender women, and 52% among transgender persons (Table 9a). An estimated 60% of bisexual persons and 61% of lesbian or gay persons were ART dose adherent, compared with 68% of heterosexual or straight persons. Approximately 61% of Black or African American persons and 65% of Hispanic or Latino persons were ART adherent, compared with 66% of White persons. An estimated 53% of persons aged 18–29 years were ART adherent, compared with 72% of persons aged ≥50 years. ART dose adherence was highest during the 2022 cycle at 64% and was lowest during the 2016 cycle (59%) (Table 9b).

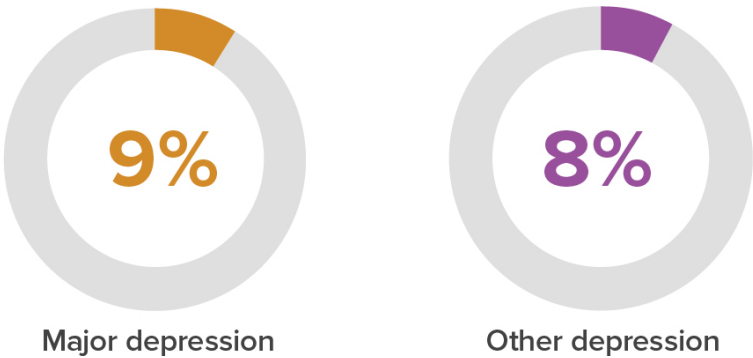
The estimated prevalence of sustained viral suppression was 65% among cisgender men, 59% among cisgender women, and 63% among transgender persons (Table 9a). Approximately 60% of bisexual persons and 68% of lesbian or gay persons, compared with 60% of heterosexual or straight persons, had sustained viral suppression. An estimated 60% of Black or African American persons had sustained viral suppression, compared with 65% of Hispanic or Latino persons and 68% of White persons. The estimated prevalence of sustained viral suppression was 57% among persons aged 18–29 years and 67% among those aged ≥50 years.

The percentage of persons with sustained viral suppression by year ranged between 59% (2020) and 66% (2016) (Table 9b).

### Mental Health and Substance Use

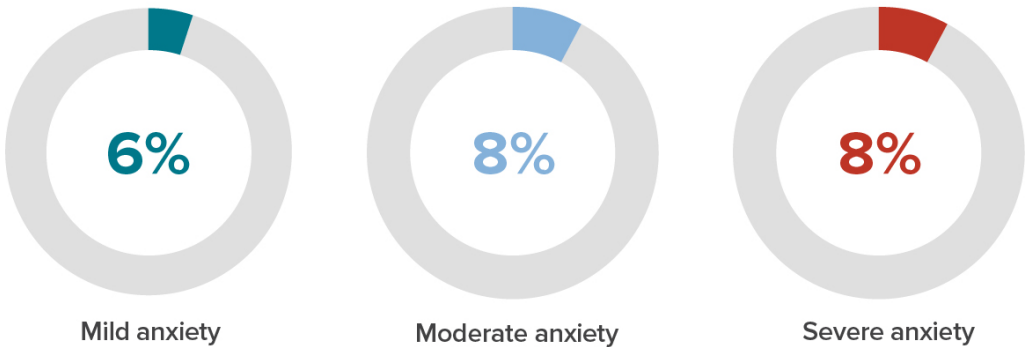
The estimated prevalence of symptoms indicative of major or other depression during the 2 weeks before interview based on the Patient Health Questionnaire (PHQ-8) algorithm [12] was 17%, including 9% with major depression (Figure 9a; Table 10). Based on the total PHQ-8 symptom score (see the appendix), an estimated 14% of persons had symptoms of moderate or severe depression. The estimated prevalence of mild, moderate, or severe symptoms of generalized anxiety disorder during the 2 weeks before interview based on the Generalized Anxiety Disorder Scale (GAD-7) [13] was 22%, including 8% with severe anxiety (Figure 9b; Table 10).

**Figure 9a. Percentage of adults with diagnosed HIV who experienced symptoms of major or other depression\* during the two weeks before interview—Medical Monitoring Project, United States, 2022**



\* Responses to the items on the PHQ-8 were used to define “major depression” and “other depression” according to criteria from the DSM-IV. “Major depression” was defined as having at least 5 symptoms of depression; “other depression” was defined as having 2–4 symptoms of depression. The PHQ-8 classification “other depression” comprises the DSM-IV categories of dysthymia and depressive disorder, not otherwise specified, which includes minor or subthreshold depression.

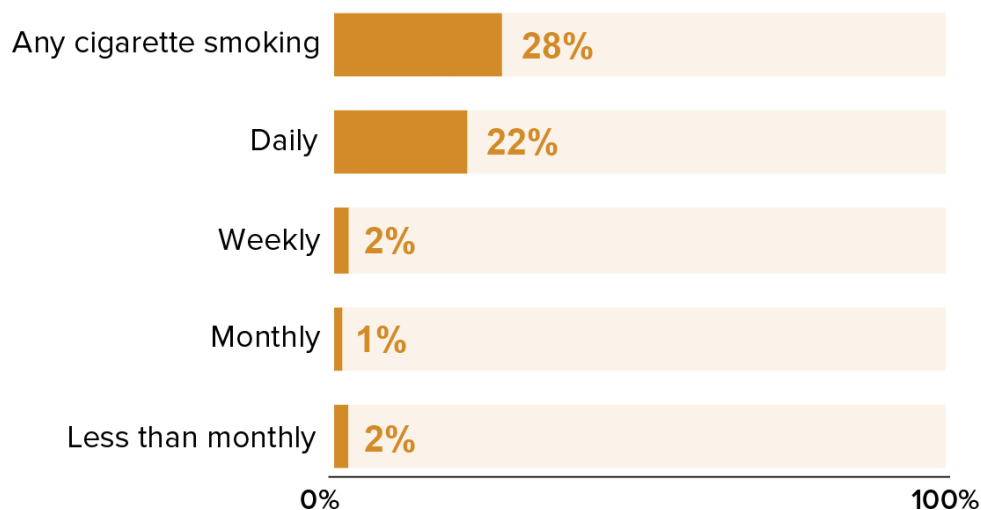
**Figure 9b. Percentage of adults with diagnosed HIV who experienced symptoms of generalized anxiety disorder\* during the two weeks before interview—Medical Monitoring Project, United States, 2022**



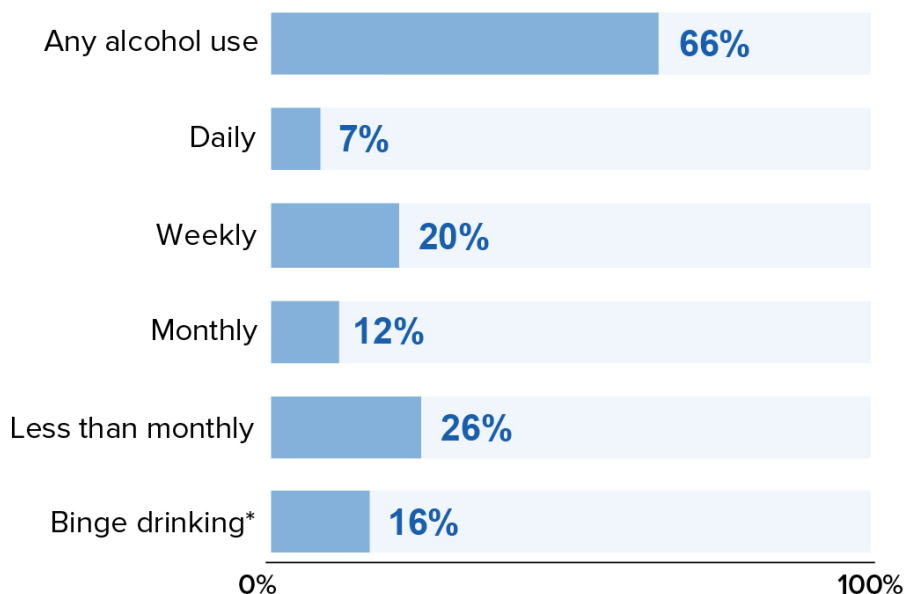
\* Responses to the GAD-7 were used to define “mild anxiety,” “moderate anxiety,” and “severe anxiety,” according to criteria from the DSM-IV. “Severe anxiety” was defined as having a score of ≥15; “moderate anxiety” was defined as having a score of 10–14; and “mild anxiety” was defined as having a score of 5–9.

The estimated prevalence of current smoking was 28%: 22% of persons smoked daily, 2% weekly, 1% monthly, and 2% less than monthly (Figure 10a; Table 11). Overall, 20% of persons used electronic cigarettes or other vaping devices in the past 30 days before interview. The estimated prevalence of alcohol use in the past 12 months was 66%: 7% of persons drank alcohol daily, 20% weekly, 12% monthly, and 26% less than monthly (Figure 10b; Table 12). An estimated 16% of persons engaged in binge drinking during the past 30 days.

**Figure 10a. Percentage of adults with diagnosed HIV who smoked cigarettes during the 12 months before interview—Medical Monitoring Project, United States, 2022**



**Figure 10b. Percentage of adults with diagnosed HIV who drank alcohol during the 12 months before interview—Medical Monitoring Project, United States, 2022**

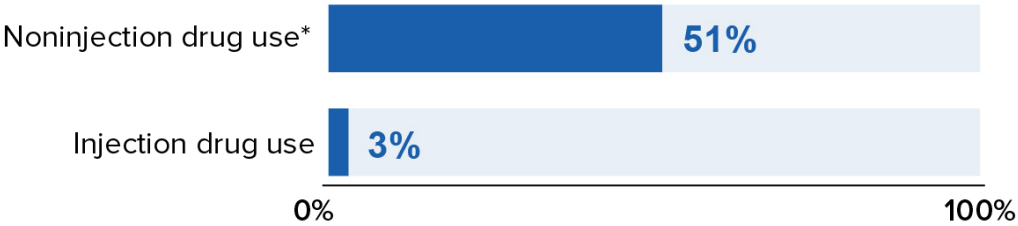


\* Persons who drank  $\geq 5$  alcoholic beverages in a single sitting ( $\geq 4$  for women) during the 30 days before interview.

An estimated 51% of persons used noninjection drugs for nonmedical purposes (Figure 10c; Table 13). In total, an estimated 42% used marijuana (including vaping for medical or nonmedical purposes and nonmedical

use of marijuana by other methods), 14% used poppers (amyl nitrite), 8% used methamphetamines, 6% used cocaine, 5% used club drugs, 3% used crack, 3% used prescription opioids, 2% used prescription tranquilizers, and 1% used heroin or opium. An estimated 3% of persons used injection drugs for nonmedical purposes (Figure 10c; Table 14). In total, an estimated 3% injected methamphetamines and 1% injected heroin.

**Figure 10c. Percentage of adults with diagnosed HIV who used drugs for nonmedical purposes during the 12 months before interview—Medical Monitoring Project, United States, 2022**

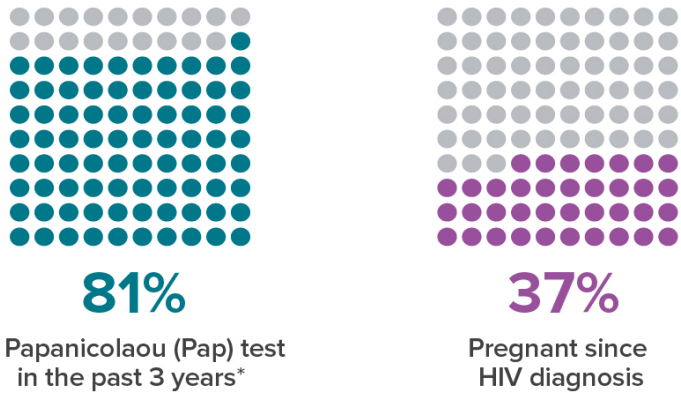


\* Noninjection drug use includes all drugs that were not injected; i.e., administered by any route other than injection, including legal drugs that were not used for medical purposes. Marijuana use includes vaping marijuana for medical or nonmedical purposes in addition to nonmedical use of marijuana by other methods.

**Characteristics Related to Gynecologic and Reproductive Health**

Among women, 81% reported receiving a Papanicolaou (Pap) test in the past 3 years, or since HIV diagnosis for women with a diagnosis within the past 3 years (Figure 11; Table 15). An estimated 37% of females reported being pregnant at least once since receiving an HIV diagnosis.

**Figure 11. Percentage of cisgender women with diagnosed HIV who had a Papanicolaou test during the 3 years before interview\* or became pregnant since receiving an HIV diagnosis—Medical Monitoring Project, United States, 2022**



\* Or since HIV diagnosis, whichever was more recent.

**Sexual Behavior**

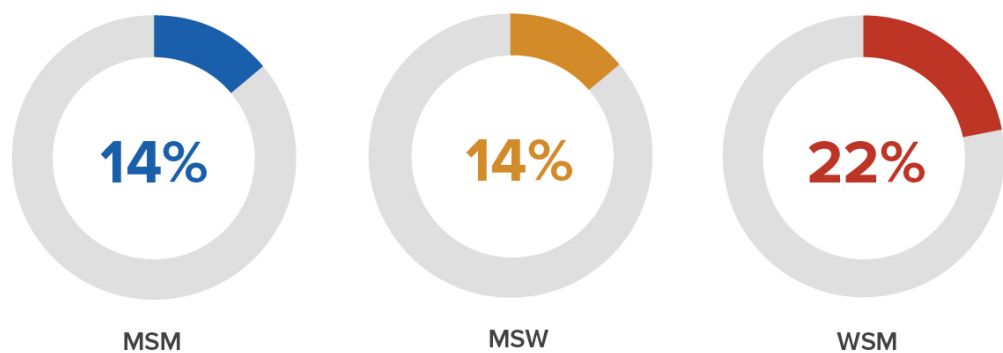
An estimated 62% of cisgender men engaged in vaginal or anal sex; approximately 18% engaged in vaginal sex, 44% had anal sex with cisgender men, and 3% had anal sex with cisgender women (Table 16). Among cisgender women, an estimated 47% engaged in vaginal or anal sex. Approximately 47% had vaginal sex and 5% had anal sex with cisgender men. Among transgender persons, 66% had vaginal or anal sex, and 58% had vaginal or anal sex with cisgender men (Table 17).

Among sexually active cisgender men who had sex with cisgender men (MSM), an estimated 14% engaged in sex without using an HIV prevention strategy, compared with 14% of cisgender men who had sex only with

cisgender women (MSW) and 22% of cisgender women who had sex with cisgender men (WSM) (Figure 12; Table 18).

Persons who were sexually active used a variety of HIV prevention strategies. For instance, an estimated 67% of sexually active MSM engaged in sex while having sustained viral suppression, 50% had condom-protected sex, 25% had condomless sex with a partner on preexposure prophylaxis (PrEP), and 54% had sex with a person with HIV (Figure 13; Table 18). Among sexually active MSW, 57% engaged in sex while having sustained viral suppression, 57% had condom-protected sex, and 20% had sex with a person with HIV. Among sexually active WSM, 57% engaged in sex while having sustained viral suppression, 49% had condom-protected sex, and 16% had sex with a person with HIV.

**Figure 12. Percentage of sexually active adults with diagnosed HIV who engaged in sex without using an HIV prevention strategy\* during the 12 months before interview, by sexual behavior/orientation—Medical Monitoring Project, United States, 2022**

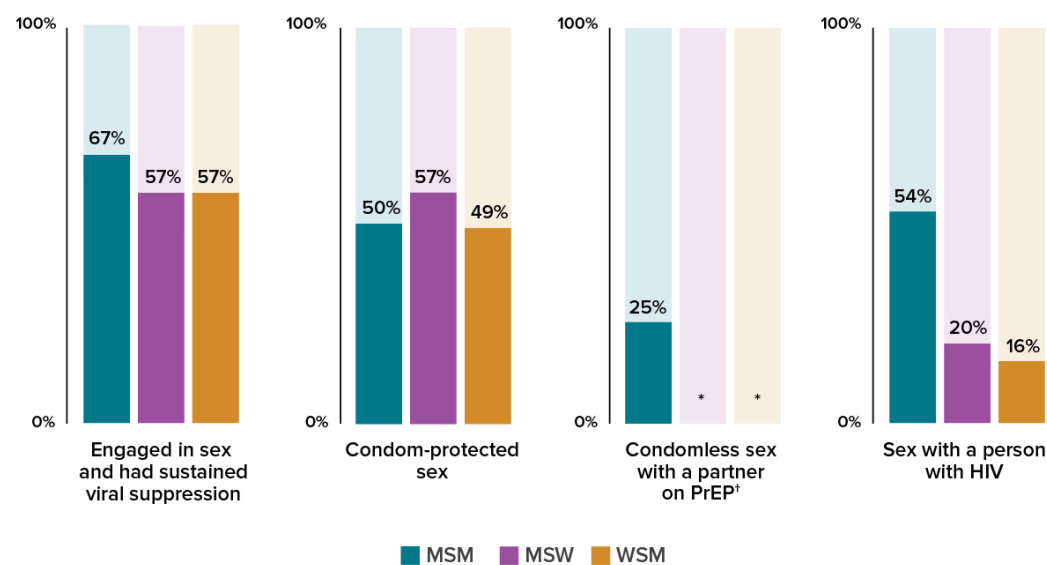


Abbreviations: MSM, cisgender men who have sex with cisgender men; MSW, cisgender men who have sex only with cisgender women; WSM, cisgender women who have sex with cisgender men.

Note. Vaginal or anal sex with at least 1 HIV-negative or unknown status partner while not having sustained viral suppression (all viral load measurements in the past 12 months undetectable or <200 copies/mL), when a condom was not used, and the partner was not known to be taking preexposure prophylaxis (PrEP). PrEP use was only measured among the 5 most recent sex partners and was reported by the partner with HIV.



**Figure 13. Prevention strategies used during the 12 months before interview among sexually active persons with diagnosed HIV, including cisgender men who have sex with cisgender men, cisgender men who have sex with only cisgender women, and cisgender women who have sex with cisgender men—Medical Monitoring Project, United States, 2022**



Abbreviations: PrEP, preexposure prophylaxis; MSM, cisgender men who have sex with cisgender men; MSW, cisgender men who have sex only with cisgender women; WSM, cisgender women who have sex with cisgender men.

\* Excluded are estimates with a coefficient of variation  $\geq 0.30$  and those based on a denominator sample size  $< 30$ .

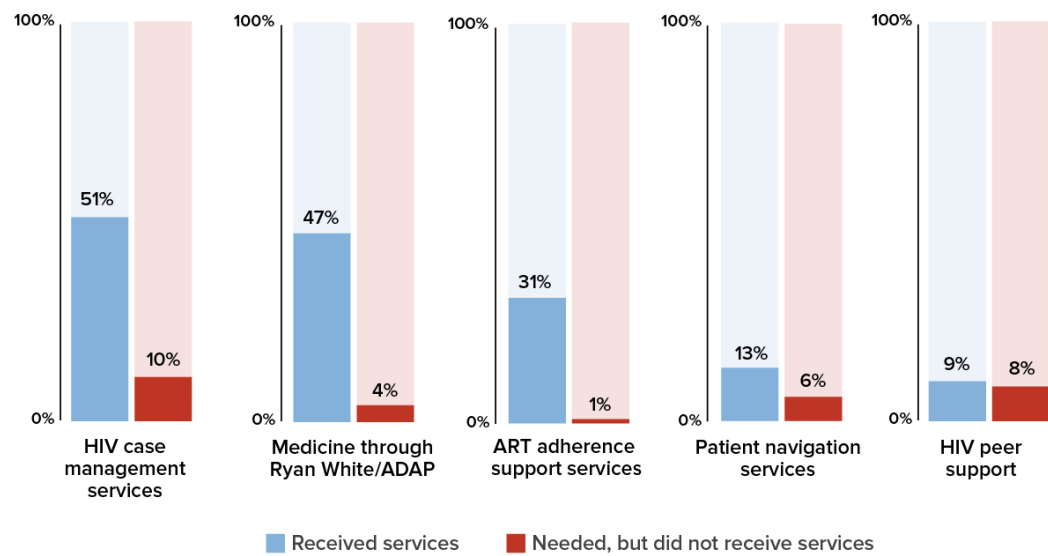
† PrEP use was only measured among the 5 most recent sex partners and was reported by the partner with HIV.

### Met and Unmet Need for Ancillary Services

Overall, 95% of persons with diagnosed HIV received at least one ancillary service; 71% received at least one HIV support service, 69% received at least one non-HIV medical service, and 51% received at least one subsistence service. Overall, 49% had an unmet need for at least one ancillary service; 19% had an unmet need for at least one HIV support service, 31% had an unmet need for at least one non-HIV medical service, and 29% had an unmet need for at least one subsistence service (data not shown in tables or figures).

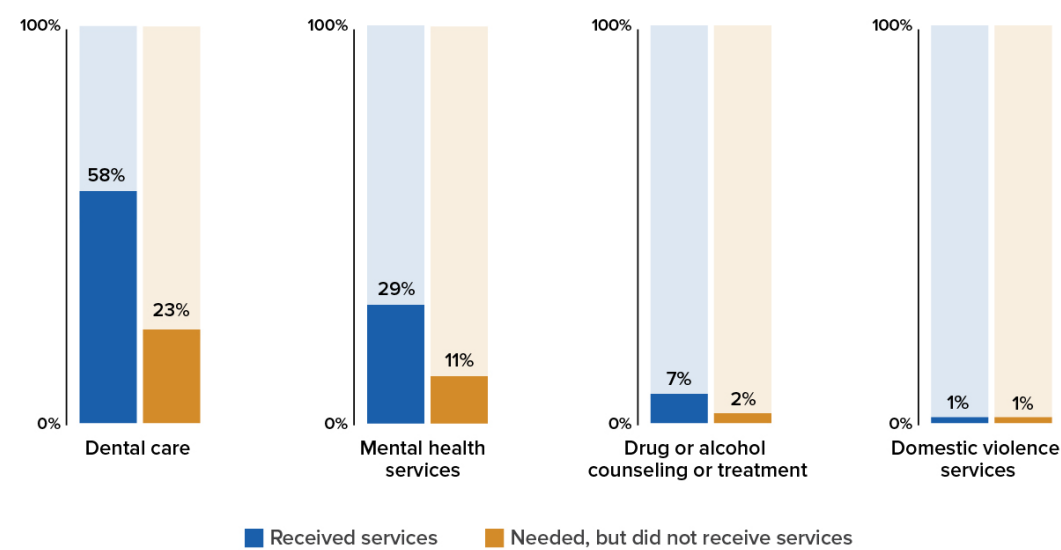
Among all HIV support services, the most commonly reported service received in the 12 months before interview was HIV case management (51%) (Table 19). Among all persons, estimated unmet need for HIV case management services was 10%; among persons with a need for HIV case management, 16% had an unmet need (Figure 14; Table 19). Of all non-HIV medical care services, the most commonly reported service received was dental care (58%). Among all persons, 23% reported an unmet need for dental care; of all persons with a need for dental care, 29% had an unmet need. Among all subsistence services, the most commonly reported service received was obtained through the Supplemental Nutrition Assistance Program (SNAP) or Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) (38%). Among all persons, 13% had an unmet need for SNAP or WIC services; among persons with a need for SNAP/WIC services, 25% had an unmet need.

**Figure 14a. Percentage of adults with diagnosed HIV who received, or who needed but did not receive, ancillary services related to HIV support during the 12 months before interview—Medical Monitoring Project, United States, 2022**

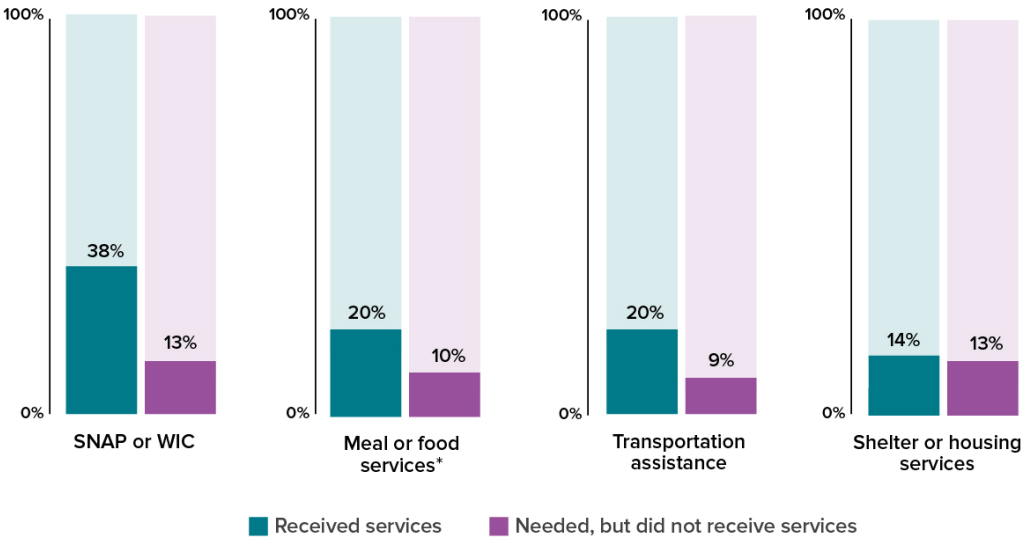


Abbreviations: ADAP, AIDS Drug Assistance Program; ART, antiretroviral therapy.

**Figure 14b. Percentage of adults with diagnosed HIV who received, or who needed but did not receive, ancillary services related to non-HIV medical services during the 12 months before interview—Medical Monitoring Project, United States, 2022**



**Figure 14c. Percentage of adults with diagnosed HIV who received, or who needed but did not receive, ancillary services related to subsistence during the 12 months before interview—Medical Monitoring Project, United States, 2022**



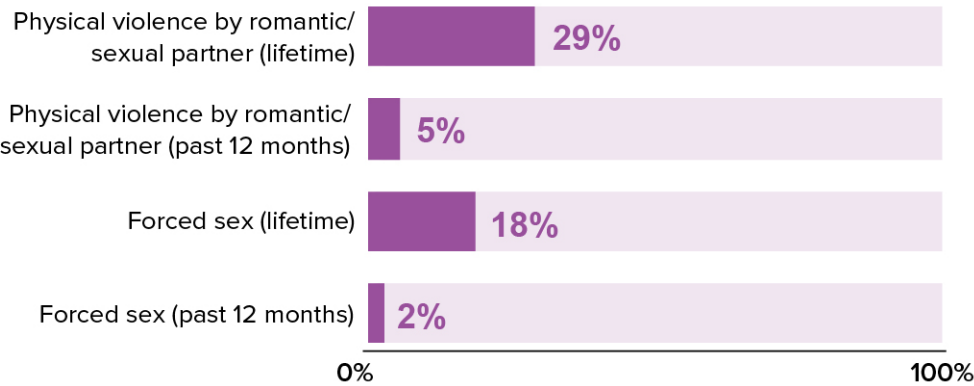
Abbreviations: SNAP, Supplemental Nutrition Assistance Program; WIC: Special Supplemental Nutrition Program for Women, Infants, and Children.

\* Includes services such as soup kitchens, food pantries, food banks, church dinners, or food delivery services.

### Physical Violence and Forced Sex

An estimated 29% of persons had ever been physically hurt by a romantic or sexual partner, including 5% who experienced this in the past 12 months (Figure 15; Table 20). An estimated 18% of persons had ever been threatened with harm or physically forced to have unwanted sex, including 2% who experienced this in the past 12 months.

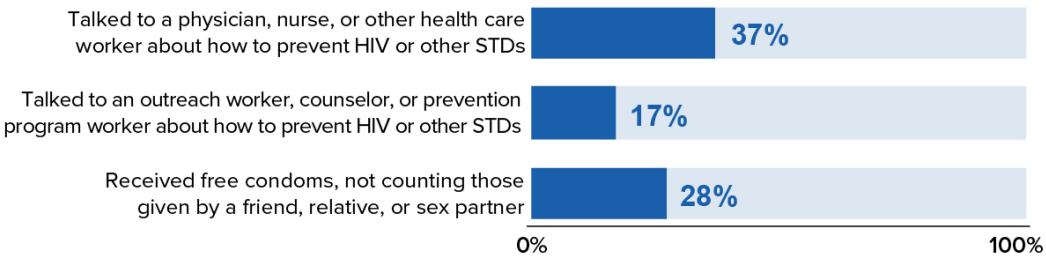
**Figure 15. Percentage of adults with diagnosed HIV who experienced physical violence by an intimate partner or forced sex during their lifetime or the 12 months before interview—Medical Monitoring Project, United States, 2022**



## Prevention Activities

An estimated 37% of persons talked with a physician, nurse, or other health care worker about how to prevent HIV or other STDs; 17% talked to an outreach worker, counselor, or prevention program worker about how to prevent HIV or other sexually transmitted diseases (STDs) (Figure 16; Table 21). An estimated 28% of persons received free condoms, excluding those given by a friend, relative, or sex partner.

**Figure 16. Receipt of HIV and sexually transmitted disease prevention services during the 12 months before interview—Medical Monitoring Project, United States, 2022**



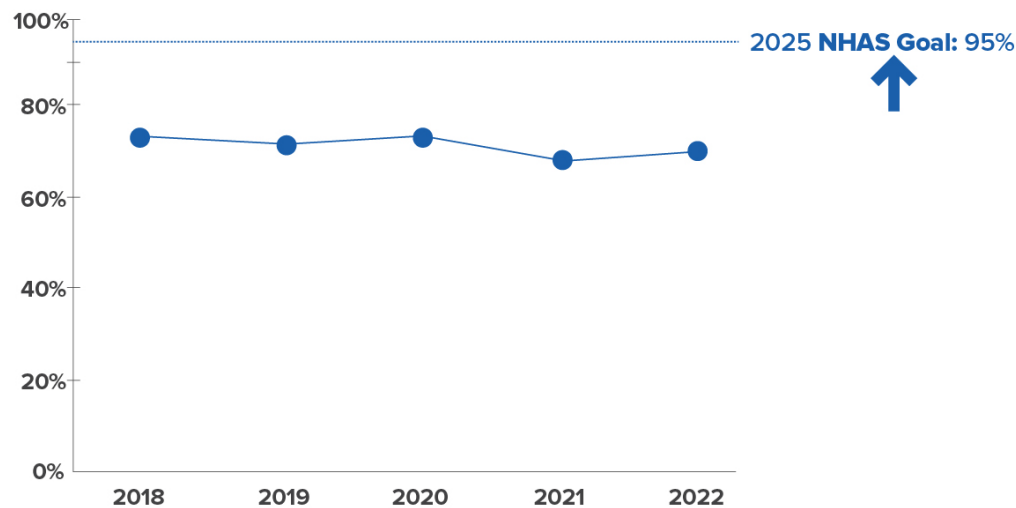
Abbreviation: STDs, sexually transmitted diseases.

## National Indicators

Several National HIV/AIDS Strategy (NHAS) indicators are monitored using MMP data, including HIV stigma and 5 quality of life indicators. Quality of life indicators include 1 measure of physical health (i.e., self-rated health), 1 measure of mental and emotional health (i.e., unmet needs for mental health services among those who needed services), and 3 structural factors (i.e., unstable housing or homelessness, unemployment, and hunger or food insecurity) [7].

During the 2022 cycle, 70% of people reported having good or better self-rated health; the NHAS 2025 target is 95% or higher (Figure 17; Table 22a) [7]. The prevalence of good or better self-rated health was lowest during the 2021 cycle (69%) and was highest during the 2018 and 2020 cycles (72%; Figure 17; Table 23). During the 2022 cycle, 27% of people who had a need for mental health services during the past 12 months did not have their need met; the NHAS 2025 target is 12% or lower (Figure 18; Table 22a) [7]. Unmet need for mental health services was lowest during the 2018 cycle at 20% and was highest during the 2021 cycle at 28% (Figure 18; Table 24). The prevalence of good or better self-rated health and unmet need for mental health services are reported by selected demographic characteristics and NHAS priority populations in Table 22a, and by cycle year and NHAS priority populations in Tables 23–24.

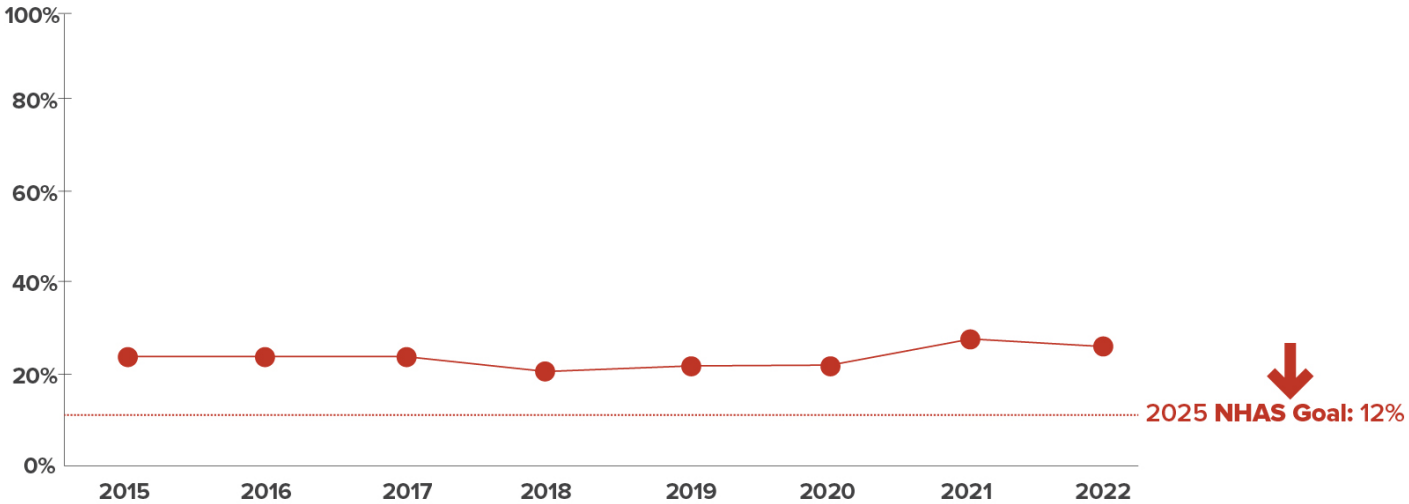
**Figure 17. National HIV/AIDS Strategy (NHAS) indicators: Good or better self-rated health\* among adults with diagnosed HIV, by cycle year—Medical Monitoring Project, United States, 2018–2022**



\* “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview. The NHAS 2025 target is 95% or higher.



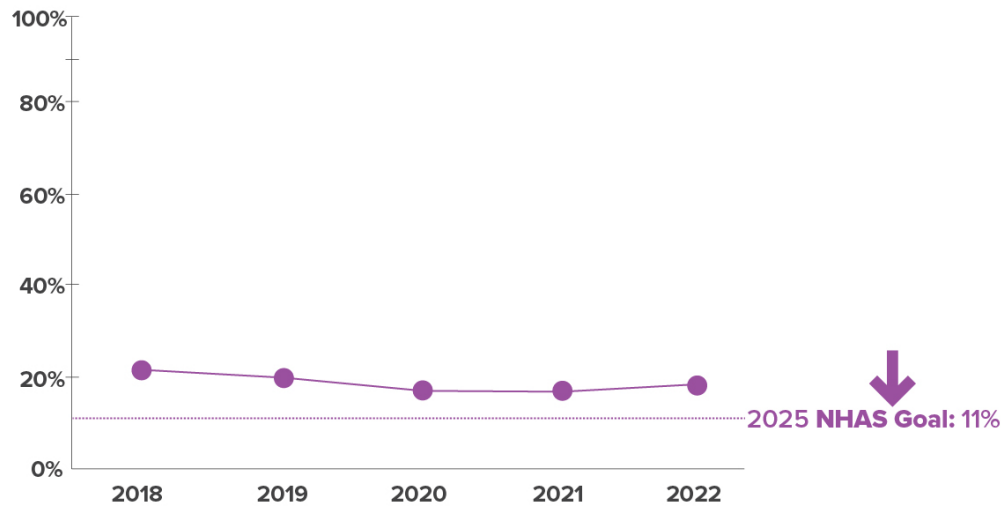
**Figure 18. National HIV/AIDS Strategy (NHAS) indicators: Unmet needs for mental health services\* during the 12 months before interview among adults with diagnosed HIV, by cycle year—Medical Monitoring Project, United States, 2015–2022**



\* “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months. The NHAS 2025 target is 12% or lower.

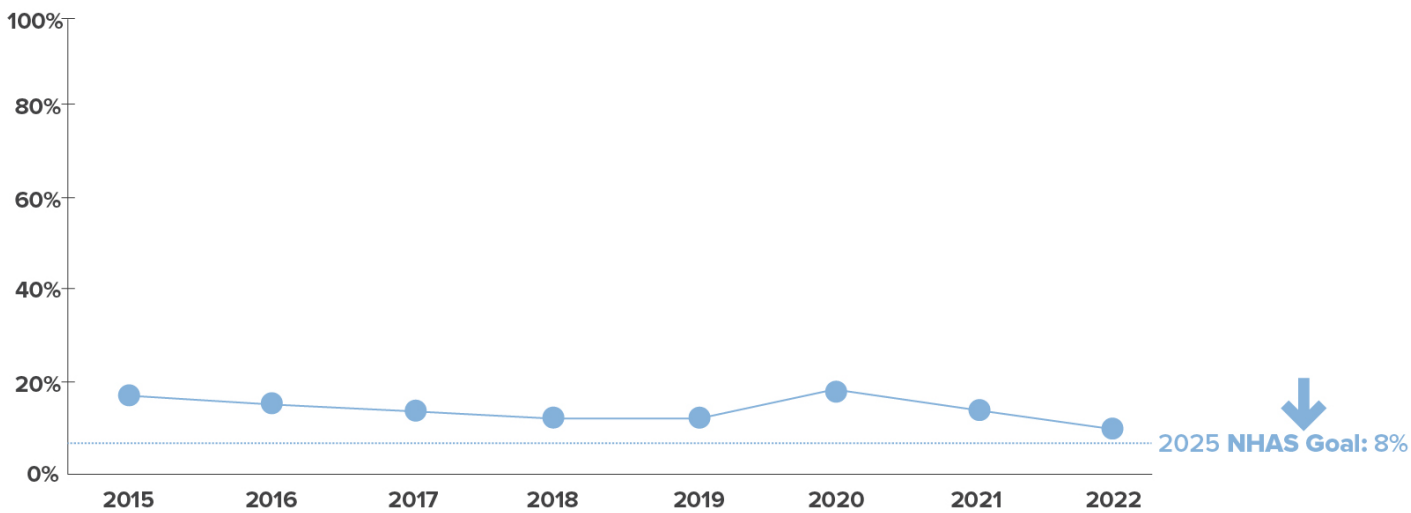
In the 2022 cycle, 18% experienced unstable housing or homelessness during the past 12 months; the NHAS 2025 target is 11% or lower (Figure 19; Table 22b) [7]. The prevalence of unstable housing or homelessness was lowest during the 2021 cycle at 17% and highest during the 2018 cycle at 21% (Figure 19; Table 25). In the 2022 cycle, 11% reported being unemployed at the time of interview; the 2025 NHAS target is 8% or lower (Figure 20; Table 22b) [7]. During the 2015–2022 cycles, unemployment was lowest during the 2022 cycle (11%) and highest during the 2020 cycle (18%; Figure 20; Table 26). In the 2022 cycle, 19% of people experienced hunger or food insecurity during the past 12 months; the 2025 NHAS target is 11% or lower (Figure 21; Table 22b) [7]. The prevalence of hunger or food insecurity was lowest during the 2021 cycle (16%) and highest during the 2015 cycle (22%; Figure 21; Table 27). The prevalence of unstable housing or homelessness, unemployment, and hunger or food insecurity are reported by selected demographic characteristics and NHAS priority populations in Table 22b, and by cycle year and NHAS priority populations in Tables 25–27.

**Figure 19. National HIV/AIDS Strategy indicators: Unstable housing or homelessness\* during the 12 months before interview among adults with diagnosed HIV, by cycle year—Medical Monitoring Project, United States, 2018–2022**



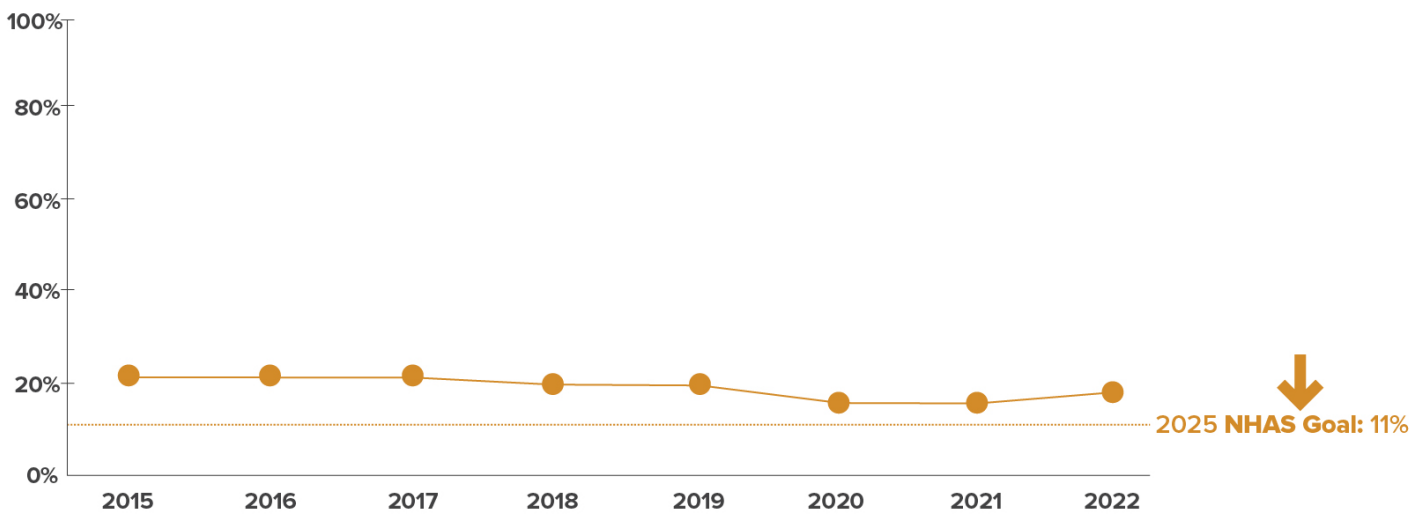
\* “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted at any time) or homelessness (living on the street, in a shelter, in a single-room-occupancy hotel, or in a car at any time) during the past 12 months. The NHAS 2025 target is 11% or lower.

**Figure 20. National HIV/AIDS Strategy (NHAS) indicators: Unemployment\* among adults with diagnosed HIV, by cycle year—Medical Monitoring Project, United States, 2015–2022**



\* Unemployed persons included those who reported being unemployed at the time of the interview. The NHAS 2025 target is 8% or lower.

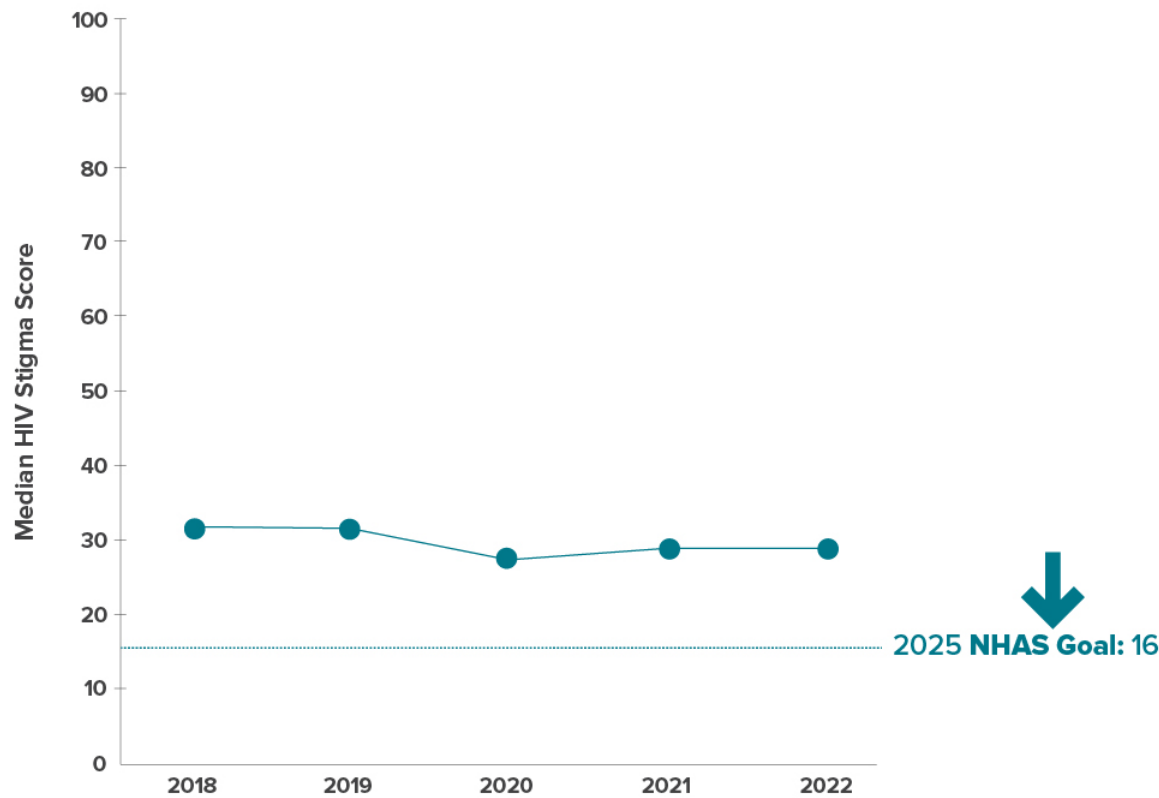
Figure 21. National HIV/AIDS Strategy (NHAS) indicators: Hunger/food insecurity\* during the past 12 months among adults with diagnosed HIV, by cycle year—Medical Monitoring Project, United States, 2015–2022



\* “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months. The NHAS 2025 target is 11% or lower.

During the 2022 cycle, the median HIV stigma score was 29; the 2025 NHAS target is 16 or lower (Figure 22; Table 22c) [7]. Median HIV stigma score was lowest during the 2020 cycle (28) and highest during the 2018 cycle (31; Figure 22; Table 28). Median HIV stigma scores are reported by selected demographic characteristics and NHAS priority populations in Table 22c, and by cycle year and NHAS priority populations in Table 28.

**Figure 22. National HIV/AIDS Strategy (NHAS) indicators: Median HIV stigma scores\* during the 12 months before interview among adults with diagnosed HIV, by cycle year—Medical Monitoring Project, United States, 2018–2022**



\* “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about people living with HIV, measured among persons aged ≥18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/table/T1/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: Reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98]. The NHAS 2025 target is 16 or lower.

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**Table 1. Distribution of respondents across project areas—Medical Monitoring Project, United States, 2022**

Project area	No. sampled	No. participating	% participating <sup>a</sup>	% of total
California (excluding Los Angeles County and San Francisco)	500	234	46.8	6.1
Chicago, IL	400	133	33.3	3.5
Delaware	400	201	50.3	5.3
Florida	800	229	28.6	6.0
Georgia	500	163	32.6	4.3
Houston, TX	400	177	44.3	4.6
Illinois (excluding Chicago)	200	80	40.0	2.1
Indiana	400	96	24.0	2.5
Los Angeles County, CA	400	183	45.8	4.8
Michigan	400	192	48.0	5.0
Mississippi	400	101	25.3	2.6
New Jersey	500	227	45.4	5.9
New York (excluding New York City)	200	95	47.5	2.5
New York City, NY	800	288	36.0	7.5
North Carolina	400	175	43.8	4.6
Oregon	400	195	48.8	5.1
Pennsylvania (excluding Philadelphia)	200	74	37.0	1.9
Philadelphia, PA	400	144	36.0	3.8
Puerto Rico	400	196	49.0	5.1
San Francisco, CA	400	156	39.0	4.1
Texas (excluding Houston)	400	164	41.0	4.3
Virginia	400	149	37.3	3.9
Washington	400	166	41.5	4.3
<b>Total</b>	<b>9,700</b>	<b>3,818</b>	<b>39.4<sup>b</sup></b>	<b>100</b>

Note. Percentages might not sum to 100 because of rounding.

<sup>a</sup> Calculated by dividing number of participating respondents by the total number of persons sampled.

<sup>b</sup> The national response rate, which is calculated by dividing the total number of eligible respondents by the total sum of eligible respondents and noneligible respondents, is 41.41%.

**Table 2. Selected characteristics, including demographic characteristics, social determinants of health, and quality of life, among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Demographic characteristics</b>			
<b>Age at time of interview (years)</b>			
18–24	59	1.8	1.2–2.4
25–29	197	5.4	4.4–6.3
30–34	316	8.5	7.6–9.4
35–39	359	9.9	9.0–10.9
40–44	311	9.2	8.1–10.3
45–49	340	9.9	8.9–10.9
50–54	503	12.9	11.6–14.3
55–59	597	14.8	13.6–15.9
60–64	525	12.8	11.7–13.9
≥65	611	14.8	13.7–15.9
<b>Race/ethnicity</b>			
American Indian/Alaska Native	—	—	—
Asian	57	1.3	0.9–1.8
Black/African American	1,497	40.8	32.5–49.2
Hispanic/Latino <sup>d</sup>	937	23.6	16.2–31.0
Native Hawaiian/other Pacific Islander	—	—	—
White	1,117	28.5	24.2–32.9
Multiple races	194	5.1	4.0–6.3
<b>Gender</b>			
Cisgender men <sup>e</sup>	2,861	75.0	72.8–77.2
Cisgender women <sup>e</sup>	875	23.0	20.7–25.3
Transgender persons <sup>e</sup>	80	2.0	1.5–2.5
<b>Sexual orientation</b>			
Lesbian or gay	1,647	43.7	40.0–47.4
Heterosexual or straight	1,575	43.7	40.3–47.1
Bisexual	322	9.6	8.5–10.8
Other	108	3.0	2.3–3.7
<b>Social determinants of health</b>			
<b>Economic stability</b>			
<b>Measures of housing instability</b>			
<b>Unstable housing at any time, past 12 months<sup>f</sup></b>			
Yes	506	15.0	13.7–16.3
No	3,178	85.0	83.7–86.3
<b>Homeless at any time, past 12 months<sup>g</sup></b>			
Yes	322	9.3	8.2–10.4
No	3,371	90.7	89.6–91.8
<b>Unstable housing or homelessness, past 12 months<sup>h</sup></b>			
Yes	613	17.9	16.5–19.3
No	3,073	82.1	80.7–83.5
<b>Hunger/food insecurity<sup>i</sup></b>			
Yes	651	18.6	17.3–19.9
No	3,038	81.4	80.1–82.7
<b>Employment status<sup>j</sup></b>			
Employed	1,852	51.1	49.6–52.6
Unemployed or unable to work	1,286	34.6	32.6–36.6
Student	39	1.2	0.9–1.6
Retired	500	13.1	11.3–14.9
<b>Combined household income (U.S.\$) during previous calendar year<sup>k</sup></b>			
0–19,999	1,475	43.4	39.6–47.2
20,000–39,999	797	25.0	23.4–26.7
40,000–74,999	555	17.2	15.6–18.8
≥75,000	501	14.4	12.0–16.8



**Table 2. Selected characteristics, including demographic characteristics, social determinants of health, and quality of life, among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022 (cont)**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Household income with respect to poverty guidelines<sup>l</sup></b>			
<100% FPL	1,106	33.0	29.5–36.5
100%–138% FPL	449	13.5	12.1–14.9
139%–399% FPL	1,200	37.2	35.3–39.0
≥400% FPL	572	16.3	14.0–18.6
<b>Received Supplemental Security Income (SSI), past 12 months</b>			
Yes	587	15.3	13.8–16.9
No	3,022	84.7	83.1–86.2
<b>Received Social Security Disability Insurance (SSDI), past 12 months</b>			
Yes	670	18.1	16.5–19.6
No	2,929	81.9	80.4–83.5
<b>Education</b>			
<b>Educational attainment</b>			
Less than high school	500	13.5	11.9–15.1
High school diploma or GED	987	26.9	25.1–28.8
More than high school	2,209	59.5	56.9–62.2
<b>Health-related factors</b>			
<b>Confidence in completing health forms</b>			
Extremely	2,034	55.1	52.3–58.0
Quite a bit	748	20.0	17.7–22.3
Somewhat	482	13.4	12.0–14.8
A little bit	246	6.8	5.6–8.0
Not at all	177	4.7	3.8–5.5
<b>Health insurance or coverage for care or medications (including Ryan White HIV/AIDS Program [RWHAP] assistance), past 12 months<sup>m</sup></b>			
Yes	3,628	98.9	98.3–99.4
No	25	1.1	0.6–1.7
<b>Type of health insurance or coverage for care or medications, past 12 months<sup>m</sup></b>			
<b>RWHAP assistance</b>			
Yes	1,738	46.8	42.9–50.8
No	1,803	53.2	49.2–57.1
<b>Medicaid</b>			
Yes	1,649	44.8	40.7–48.8
No	1,949	55.2	51.2–59.3
<b>Private health insurance<sup>n</sup></b>			
Yes	1,539	43.1	40.2–46.0
No	1,996	56.9	54.0–59.8
<b>Medicare</b>			
Yes	1,078	29.5	27.8–31.2
No	2,451	70.5	68.8–72.2
<b>Other public insurance<sup>o</sup></b>			
Yes	—	—	—
No	3,166	91.3	85.7–96.9
<b>Tricare/CHAMPUS or Veterans Administration</b>			
Yes	128	5.0	3.4–6.6
No	3,403	95.0	93.4–96.6
<b>Insurance type unknown<sup>p</sup></b>			
Yes	75	2.0	1.5–2.5
No	3,455	98.0	97.5–98.5
<b>Uninsured<sup>q</sup></b>			
Yes	264	8.5	6.6–10.4
No	3,389	91.5	89.6–93.4

**Table 2. Selected characteristics, including demographic characteristics, social determinants of health, and quality of life, among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022 (cont)**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Quality of life</b>			
<b>Self-rated health</b>			
Poor	205	5.6	4.7–6.5
Fair	918	24.5	23.1–25.9
Good	1,270	34.5	33.0–35.9
Very good	812	22.2	20.9–23.4
Excellent	480	13.2	11.8–14.7
<b>Any disability<sup>f</sup></b>			
Yes	1,547	42.1	40.2–44.1
No	2,141	57.9	55.9–59.8
<b>Social and community context</b>			
<b>Country or territory of birth</b>			
U.S. state or territory	3,053	82.7	80.2–85.2
Outside the United States and its territories	643	17.3	14.8–19.8
<b>Incarcerated &gt;24 hours, past 12 months</b>			
Yes	100	3.0	2.3–3.6
No	3,597	97.0	96.4–97.7
<b>Total</b>	<b>3,818</b>	<b>100</b>	

Abbreviations: CI, confidence interval; GED, general educational development; FPL, federal poverty level; CHAMPUS, Civilian Health and Medical Program of the Uniformed Services; U.S.\$, U.S. dollar; HHS, Department of Health and Human Services [footnotes only].

*Note.* Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding. Excluded are estimates with a coefficient of variation  $\geq 0.30$  and those based on a denominator sample size  $< 30$ .

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Hispanic or Latino persons can be of any race. Persons are classified in only 1 race/ethnicity category.

<sup>e</sup> Persons were classified as cisgender if sex assigned at birth and gender reported by the person were the same. Persons were classified as transgender if sex assigned at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender.

<sup>f</sup> Defined as moving in with others due to financial issues, moving 2 or more times, or being evicted at any time during the past 12 months.

<sup>g</sup> Defined as living on the street, in a shelter, in a single-room–occupancy hotel, or in a car at any time during the past 12 months.

<sup>h</sup> Defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room–occupancy hotel, or in a car) at any time during the past 12 months.

<sup>i</sup> “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

<sup>j</sup> Employed included employed for wages, self-employed, or homemaker.

<sup>k</sup> Income from all sources, before taxes.

<sup>l</sup> Poverty guidelines as defined by HHS; the 2021 guidelines were used for persons interviewed in 2022 and the 2022 guidelines were used for persons interviewed in 2023. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

<sup>m</sup> Persons could select more than 1 response for health insurance or coverage for care or medications (including antiretroviral medications).

<sup>n</sup> Defined as receiving health insurance through a person’s employer or a family member’s employer or purchased through the Health Insurance Marketplace or directly from a health insurance company.

<sup>o</sup> Other public insurance included city, county, state, or other publicly funded insurance, not including Medicaid.

<sup>p</sup> Unknown insurance type means that the person had insurance or coverage for care or medications (including antiretroviral medications), but the type of insurance or coverage could not be determined.

<sup>q</sup> Includes those who did not report having any insurance, or received RWHAP assistance only, without coverage through any other insurance categories.

<sup>r</sup> Includes physical, mental, and emotional disabilities.

**Table 3. Time since HIV diagnosis, stage of disease, CD4 counts, and viral suppression during the 12 months before interview among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Time since HIV diagnosis (years)<sup>d</sup></b>			
<5	441	13.1	12.1–14.0
5–9	639	17.4	16.2–18.7
≥10	2,735	69.5	68.1–70.8
<b>HIV infection stage 3 (AIDS)<sup>e</sup></b>			
Yes	2,026	51.6	49.9–53.3
No	1,791	48.4	46.7–50.1
<b>Geometric mean CD4 count (cells/μL)</b>			
0–199	155	5.2	4.3–6.1
200–349	298	10.7	9.4–12.0
350–499	480	16.1	14.5–17.6
≥500	1,978	68.1	65.7–70.4
<b>Lowest CD4 count (cells/μL), past 12 months</b>			
0–49	45	1.5	0.9–2.1
50–199	159	5.3	4.6–6.1
200–349	365	12.8	11.3–14.3
350–499	526	17.8	16.5–19.1
≥500	1,816	62.6	60.3–64.8
<b>Viral suppression</b>			
Most recent viral load documented undetectable or <200 copies/mL	2,811	67.2	64.3–70.1
Most recent viral load documented detectable, ≥200 copies/mL, or missing/unknown	1,007	32.8	29.9–35.7
<b>Sustained viral suppression</b>			
All viral load measurements documented undetectable or <200 copies/mL	2,648	63.4	60.4–66.4
Any viral load ≥200 copies/mL or missing/unknown	1,170	36.6	33.6–39.6
<b>Total</b>	<b>3,818</b>	<b>100</b>	

Abbreviations: CD4, CD4 T-lymphocyte count (cells/μL); CI, confidence interval; CDC, Centers for Disease Control and Prevention [footnotes only].

Source of disease stage information: CDC. Revised surveillance case definition for HIV infection—United States, 2014. *MMWR* 2014;63(RR-03):1–10. [https://www.cdc.gov/mmwr/indrr\\_2014.html](https://www.cdc.gov/mmwr/indrr_2014.html). Accessed June 24, 2024.

*Note.* CD4 counts and viral load measurements are from medical record abstraction. Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Determined based on date of HIV diagnosis from the National HIV Surveillance System.

<sup>e</sup> HIV infection, stage 3 (AIDS): documentation of an AIDS-defining condition or either a CD4 count of <200 cells/μL 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.

**Table 4. Receipt of HIV care, ART prescription, PCP prophylaxis, and influenza vaccination among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Ever received outpatient HIV care<sup>d</sup></b>			
Yes	3,805	99.7	99.5–100
No	—	—	—
<b>Received outpatient HIV care, past 12 months<sup>d</sup></b>			
Yes	3,714	94.9	93.4–96.4
No	99	5.1	3.6–6.6
<b>Received outpatient HIV care, past 24 months<sup>d</sup></b>			
Yes	3,765	97.8	97.0–98.5
No	37	2.2	1.5–3.0
<b>Retained in care, past 12 months<sup>e</sup></b>			
Yes	2,911	72.5	70.5–74.5
No	782	27.5	25.5–29.5
<b>Retained in care, past 24 months<sup>e</sup></b>			
Yes	2,028	51.2	48.0–54.4
No	1,659	48.8	45.6–52.0
<b>Missed ≥1 HIV care visits, past 12 months</b>			
Yes	750	21.5	19.7–23.2
No	2,918	78.5	76.8–80.3
<b>Prescribed ART, past 12 months<sup>f</sup></b>			
Yes	3,320	82.7	80.4–85.0
No	498	17.3	15.0–19.6
<b>Prescribed PCP prophylaxis, past 12 months<sup>g</sup></b>			
Yes	61	32.1	24.7–39.5
No	132	67.9	60.5–75.3
<b>Received influenza vaccination, past 12 months</b>			
Yes	2,665	71.1	68.6–73.6
No	977	28.9	26.4–31.4
<b>Total</b>	<b>3,818</b>	<b>100</b>	

Abbreviations: CI, confidence interval; ART, antiretroviral therapy; PCP, *Pneumocystis pneumonia*; MAC, *Mycobacterium avium* complex [footnotes only]; CD4, CD4 T-lymphocyte count (cells/μL) [footnotes only].

*Note.* CD4 counts, viral load measurements, and prophylaxes are from medical record abstraction. Influenza vaccination was obtained through interview. Measurement period is the 12 months before interview unless otherwise noted.

Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

Excluded are estimates with a coefficient of variation ≥0.30 and those based on a denominator sample size <30.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Outpatient HIV care was defined as any documentation of the following: encounter with an HIV care provider, viral load test result, CD4 test result, HIV resistance test or tropism assay, ART prescription, PCP prophylaxis, or MAC prophylaxis.

<sup>e</sup> Two elements of outpatient HIV care at least 90 days apart in each 12-month period.

<sup>f</sup> ART prescription documented in medical record; persons with no medical record abstraction were considered to have no documentation of ART prescription.

<sup>g</sup> Among persons with CD4 cell count <200 cells/μL.

**Table 5. Sexually transmitted infection testing during the 12 months before interview among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	Total population			Sexually active <sup>a</sup> persons only		
	No. <sup>b</sup>	Col % <sup>c</sup>	95% CI <sup>d</sup>	No. <sup>b</sup>	Col % <sup>c</sup>	95% CI <sup>d</sup>
<b>Gonorrhea<sup>e</sup></b>						
Yes, received test	1,685	45.4	43.3–47.5	1,067	51.3	49.1–53.5
No test documented	1,878	54.6	52.5–56.7	861	48.7	46.5–50.9
<b>Chlamydia<sup>f</sup></b>						
Yes, received test	1,681	45.0	42.7–47.4	1,057	50.7	48.7–52.8
No test documented	1,882	55.0	52.6–57.3	871	49.3	47.2–51.3
<b>Syphilis<sup>g</sup></b>						
Yes, received test	2,173	58.5	56.0–61.1	1,289	62.8	60.1–65.5
No test documented	1,390	41.5	38.9–44.0	639	37.2	34.5–39.9
<b>Gonorrhea, chlamydia, and syphilis</b>						
Yes, received all 3 tests	1,492	40.2	38.0–42.5	958	45.9	43.8–47.9
Fewer than 3 tests documented	2,071	59.8	57.5–62.0	970	54.1	52.1–56.2
<b>Total</b>	<b>3,818</b>	<b>100</b>		<b>2,055</b>	<b>100</b>	

Abbreviations: Col, column; CI, confidence interval; DFA, direct fluorescent antibody [footnotes only]; EIA, enzyme immunoassay [footnotes only]; ELISA, enzyme-linked immunoassay [footnotes only]; FTA-ABS, fluorescent treponemal antibody absorbed [footnotes only]; MHA-TP, microhemagglutination assay for antibody to *Treponema pallidum* [footnotes only]; NAAT, nucleic acid amplification test [footnotes only]; RPR, rapid plasma reagin [footnotes only]; TP-PA, *T. pallidum* particle agglutination [footnotes only]; TPHA, *T. pallidum* hemagglutination assay [footnotes only]; VDRL, Venereal Disease Research Laboratory [footnotes only].

*Note.* Information on laboratory testing for sexually transmitted infections was based on medical record abstraction.

Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

<sup>a</sup> Sexual activity was reported in the interview component of the Medical Monitoring Project and was defined as anal or vaginal intercourse during the 12 months prior to interview.

<sup>b</sup> Numbers are unweighted.

<sup>c</sup> Percentages are weighted percentages.

<sup>d</sup> CIs incorporate weighted percentages.

<sup>e</sup> Testing for *Neisseria gonorrhoeae* was defined as documentation of a result from culture, DFA, gram stain, EIA or ELISA, NAAT, or nucleic acid probe performed on a specimen from any anatomical site for screening or diagnostic purposes.

<sup>f</sup> *Chlamydia trachomatis* testing was defined as a result from DFA, EIA or ELISA, NAAT, or nucleic acid probe performed on a specimen from any anatomical site for screening or diagnostic purposes.

<sup>g</sup> Syphilis testing was defined as a result from nontreponemal syphilis tests (RPR or VDRL), treponemal syphilis tests (TPHA, TP-PA, MHA-TP, or FTA-ABS tests), or dark-field microscopy performed for screening or diagnostic purposes.

**Table 6. Emergency department visits and hospital admissions during the 12 months before interview among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Number of visits to emergency department</b>			
0	2,250	61.0	59.0–63.0
1	679	18.7	17.5–19.9
2–4	595	16.4	15.1–17.7
≥5	149	3.8	3.1–4.6
<b>Number of hospital admissions</b>			
0	3,060	84.1	82.7–85.5
1	349	9.3	8.2–10.3
2–4	224	5.6	4.7–6.5
≥5	44	1.0	0.7–1.4
<b>Total</b>	<b>3,818</b>	<b>100</b>	

Abbreviation: CI, confidence interval.

*Note.* Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

**Table 7. Antiretroviral therapy (ART) use and reasons for not taking ART among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Ever taken ART</b>			
Yes	3,650	99.3	99.0–99.7
No	23	0.7	0.3–1.0
<b>Currently taking ART</b>			
Yes	3,570	95.4	94.6–96.3
No	103	4.6	3.7–5.4
<b>Reasons for never taking ART<sup>d</sup></b>			
<b>Person did not believe they needed ART</b>			
Yes	—	—	—
No	—	—	—
<b>Health care provider said person should not start taking ART</b>			
Yes	—	—	—
No	—	—	—
<b>Health care provider never discussed taking ART with person</b>			
Yes	—	—	—
No	—	—	—
<b>Money or insurance problems</b>			
Yes	—	—	—
No	—	—	—
<b>Person thinks ART would make them feel sick or harm them</b>			
Yes	—	—	—
No	—	—	—
<b>Reasons for not currently taking ART, among those persons with a history of ART use<sup>d</sup></b>			
<b>Money or insurance problems</b>			
Yes	23	34.2	22.6–45.8
No	57	65.8	54.2–77.4
<b>Health care provider never discussed restarting ART with person</b>			
Yes	19	26.4	15.2–37.7
No	60	73.6	62.3–84.8
<b>Person did not believe they needed ART</b>			
Yes	16	21.7	10.6–32.7
No	63	78.3	67.3–89.4
<b>Person thinks ART would make them feel sick or harm them</b>			
Yes	16	19.4	9.9–29.0
No	63	80.6	71.0–90.1
<b>Health care provider said person should not take ART</b>			
Yes	—	—	—
No	59	98.7	96.9–100
<b>Total</b>	<b>3,818</b>	<b>100</b>	

Abbreviation: CI, confidence interval.

*Note.* Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

Excluded are estimates with a coefficient of variation  $\geq 0.30$  and those based on a denominator sample size  $< 30$ .

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Persons could select more than 1 response for reasons not taking ART.



**Table 8. Antiretroviral therapy (ART) adherence and reasons for missing ART doses among persons with diagnosed HIV taking ART—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>ART adherence in the past 30 days</b>			
<b>How many days did you miss at least 1 dose of any of your HIV medicines?</b>			
0	2,287	63.7	61.6–65.9
1–2	797	22.4	20.7–24.1
3–5	304	8.7	7.6–9.7
6–10	103	3.1	2.3–3.9
≥11	65	2.1	1.4–2.8
<b>How well did you do at taking your HIV medicines in the way you were supposed to?</b>			
Very poor	35	1.2	0.7–1.7
Poor	54	1.8	1.3–2.3
Fair	149	4.0	3.2–4.9
Good	381	11.1	9.9–12.4
Very good	832	23.6	21.5–25.6
Excellent	2,110	58.3	56.1–60.5
<b>How often did you take your HIV medicines in the way you were supposed to?</b>			
Never	19	0.5	0.2–0.8
Rarely	31	0.9	0.6–1.3
Sometimes	70	2.3	1.7–2.9
Usually	153	4.1	3.2–4.9
Almost always	731	20.8	19.5–22.2
Always	2,558	71.3	69.6–73.1
<b>How often were you troubled by ART side effects?</b>			
Never	2,856	79.4	77.7–81.2
Rarely	397	12.7	11.2–14.2
About half the time	116	3.1	2.5–3.6
Most of the time	63	1.9	1.4–2.4
Always	104	2.9	2.2–3.6
<b>Reasons for last missed ART dose among persons who ever missed a dose<sup>d</sup></b>			
<b>Forgot to take HIV medicines</b>			
Yes	845	66.3	63.1–69.5
No	424	33.7	30.5–36.9
<b>Change in your daily routine or were out of town</b>			
Yes	524	41.1	38.0–44.1
No	744	58.9	55.9–62.0
<b>Fell asleep early or overslept</b>			
Yes	503	40.0	36.4–43.7
No	765	60.0	56.3–63.6
<b>Felt depressed or overwhelmed</b>			
Yes	269	21.0	18.4–23.7
No	1,000	79.0	76.3–81.6
<b>Had a problem getting a prescription or a refill for HIV medicines</b>			
Yes	189	15.1	13.2–17.1
No	1,080	84.9	82.9–86.8
<b>Did not feel like taking HIV medicines</b>			
Yes	148	12.0	9.9–14.2
No	1,119	88.0	85.8–90.1
<b>Was drinking or using drugs</b>			
Yes	144	11.6	9.7–13.5
No	1,125	88.4	86.5–90.3
<b>In the hospital or too sick to take HIV medicines</b>			
Yes	93	7.1	5.9–8.2
No	1,176	92.9	91.8–94.1
<b>Had side effects from your HIV medicines</b>			
Yes	86	6.7	5.2–8.2
No	1,179	93.3	91.8–94.8
<b>Had a problem paying for HIV medicines</b>			
Yes	57	5.0	3.7–6.2
No	1,212	95.0	93.8–96.3
<b>Total</b>	<b>3,570</b>	<b>100</b>	

Abbreviation: CI, confidence interval.

*Note.* Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Persons could report more than 1 reason for missed last dose.

**Table 9a. Antiretroviral therapy (ART) prescription, ART dose adherence, sustained viral suppression, and geometric mean CD4 count among persons with diagnosed HIV, by selected demographic characteristics—Medical Monitoring Project, United States, 2022**

	Prescription of ART <sup>a</sup>			ART dose adherence <sup>b</sup>			Sustained viral suppression <sup>c</sup>			Geometric mean CD4 count ≥200 <sup>d</sup>		
	No. <sup>e</sup>	Row % <sup>f</sup>	95% CI <sup>g</sup>	No. <sup>e</sup>	Row % <sup>f</sup>	95% CI <sup>g</sup>	No. <sup>e</sup>	Row % <sup>f</sup>	95% CI <sup>g</sup>	No. <sup>e</sup>	Row % <sup>f</sup>	95% CI <sup>g</sup>
<b>Gender</b>												
Cisgender men <sup>h</sup>	2,498	83.3	80.9–85.7	1,711	64.1	61.7–66.5	2,023	64.9	61.7–68.1	2,074	95.1	94.1–96.1
Cisgender women <sup>h</sup>	747	80.5	77.2–83.7	534	63.4	58.9–67.9	571	58.5	53.8–63.1	621	94.4	92.8–96.1
Transgender persons <sup>h</sup>	73	86.8	77.0–96.7	40	51.6	39.7–63.5	52	62.7	51.3–74.1	59	87.7	80.2–95.1
<b>Sexual orientation</b>												
Lesbian or gay	1,455	84.9	81.6–88.1	980	60.5	58.1–63.0	1,190	67.5	63.5–71.4	1,211	96.0	94.7–97.2
Heterosexual or straight	1,349	80.9	78.3–83.4	1,033	67.8	64.7–71.0	1,045	59.8	56.1–63.5	1,110	94.3	93.0–95.6
Bisexual	271	78.3	72.1–84.4	182	60.3	54.8–65.8	219	60.0	53.8–66.3	231	93.9	91.0–96.9
Other	97	88.5	81.9–95.2	57	57.2	48.2–66.2	75	64.0	55.5–72.5	77	88.2	80.4–96.1
<b>Race/ethnicity</b>												
American Indian/Alaska Native	—	—	—	—	—	—	—	—	—	—	—	—
Asian	53	91.1	79.1–100	39	72.7	59.0–86.4	47	84.1	74.4–93.7	47	99.5	98.6–100
Black/African American	1,279	80.5	77.5–83.4	846	61.4	57.4–65.4	983	59.5	55.1–63.9	1,055	94.4	92.7–96.0
Hispanic/Latino <sup>i</sup>	814	84.3	81.2–87.4	582	65.2	61.8–68.6	659	65.0	59.8–70.2	700	94.9	92.9–96.9
Native Hawaiian/other Pacific Islander	—	—	—	—	—	—	—	—	—	—	—	—
White	989	84.3	80.1–88.6	708	66.4	63.0–69.8	822	67.5	62.9–72.0	809	95.5	93.6–97.4
Multiple races	171	83.9	76.0–91.9	105	58.2	51.0–65.3	125	58.8	48.0–69.6	134	92.2	86.0–98.4
<b>Age at time of interview (years)</b>												
18–29	211	76.8	69.7–84.0	114	52.6	44.3–61.0	158	56.7	48.6–64.8	179	96.5	93.6–99.4
30–39	560	77.6	72.4–82.7	305	48.1	43.4–52.8	424	56.8	52.2–61.4	487	95.3	93.4–97.2
40–49	568	81.8	77.9–85.6	353	58.4	52.6–64.2	452	60.9	56.9–64.8	457	93.0	91.0–95.0
≥50	1,981	85.6	83.6–87.6	1,515	71.8	69.3–74.4	1,614	67.3	63.4–71.3	1,633	95.0	94.0–96.1
<b>Total</b>	<b>3,320</b>	<b>82.7</b>	<b>80.4–85.0</b>	<b>2,287</b>	<b>63.7</b>	<b>61.6–65.9</b>	<b>2,648</b>	<b>63.4</b>	<b>60.4–66.4</b>	<b>2,756</b>	<b>94.8</b>	<b>93.9–95.7</b>

Abbreviations: ART, antiretroviral therapy; CD4, CD4 T-lymphocyte count (cells/μL); CI, confidence interval.

*Note.* Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

Excluded are estimates with a coefficient of variation ≥0.30 and those based on a denominator sample size &lt;30.

<sup>a</sup> Prescription of ART was based on documentation in the medical record in the 12 months before interview.<sup>b</sup> During the 30 days before interview, 100% adherence to ART doses.<sup>c</sup> Defined as having all HIV viral loads being undetectable or <200 copies/mL, as documented in the medical record in the past 12 months before interview.<sup>d</sup> Geometric mean CD4 count was abstracted from medical records and based on the 12 months before interview.<sup>e</sup> Numbers are unweighted.<sup>f</sup> Percentages are weighted percentages.<sup>g</sup> CIs incorporate weighted percentages.<sup>h</sup> Persons were classified as cisgender if sex assigned at birth and gender reported by the person were the same. Persons were classified as transgender if sex assigned at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender.<sup>i</sup> Hispanic or Latino persons can be of any race. Persons are classified in only 1 race/ethnicity category.

**Table 9b. Antiretroviral therapy (ART) prescription, ART dose adherence, sustained viral suppression, and geometric mean CD4 count among persons with diagnosed HIV, by cycle year—Medical Monitoring Project, United States, 2015–2022**

	Prescription of ART <sup>a</sup>			ART dose adherence <sup>b</sup>			Sustained viral suppression <sup>c</sup>			Geometric mean CD4 count ≥200 <sup>d</sup>		
	No. <sup>e</sup>	Row % <sup>f</sup>	95% CI <sup>g</sup>	No. <sup>e</sup>	Row % <sup>f</sup>	95% CI <sup>g</sup>	No. <sup>e</sup>	Row % <sup>f</sup>	95% CI <sup>g</sup>	No. <sup>e</sup>	Row % <sup>f</sup>	95% CI <sup>g</sup>
Cycle year												
2015	3,244	85.3	83.6–87.0	2,018	59.5	57.1–61.9	2,415	62.5	59.6–65.4	2,891	91.0	89.0–93.0
2016	3,575	84.0	80.7–87.3	2,239	58.5	56.3–60.7	2,812	65.5	62.9–68.1	3,165	91.8	90.7–92.9
2017	3,741	84.2	82.3–86.1	2,396	60.8	59.1–62.5	2,862	63.2	59.9–66.5	3,264	92.2	91.1–93.3
2018	3,490	81.2	79.3–83.2	2,279	59.3	57.0–61.6	2,702	62.2	59.5–64.9	3,032	93.0	91.9–94.1
2019	3,542	82.6	80.9–84.3	2,385	61.1	58.5–63.8	2,707	61.0	56.4–65.5	3,005	91.7	90.8–92.7
2020	3,104	78.7	76.2–81.3	2,247	62.1	60.0–64.1	2,403	58.5	54.3–62.7	2,534	92.8	91.7–93.9
2021	3,361	80.4	78.1–82.7	2,415	63.1	61.6–64.6	2,705	62.4	60.2–64.6	2,791	93.0	91.8–94.1
2022	3,320	82.7	80.4–85.0	2,287	63.7	61.6–65.9	2,648	63.4	60.4–66.4	2,756	94.8	93.9–95.7

Abbreviations: ART, antiretroviral therapy; CD4, CD4 T-lymphocyte count (cells/μL); CI, confidence interval.

Note. Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

<sup>a</sup> Prescription of ART was based on documentation in the medical record in the 12 months before interview.

<sup>b</sup> During the 30 days before interview, 100% adherence to ART doses.

<sup>c</sup> Defined as having all HIV viral loads being undetectable or <200 copies/mL, as documented in the medical record in the past 12 months before interview.

<sup>d</sup> Geometric mean CD4 count was abstracted from medical records and based on the 12 months before interview.

<sup>e</sup> Numbers are unweighted.

<sup>f</sup> Percentages are weighted percentages.

<sup>g</sup> CIs incorporate weighted percentages.

**Table 10. Symptoms of depression and generalized anxiety disorder during the 2 weeks before interview among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Symptoms of depression, based on DSM-IV criteria<sup>d</sup></b>			
No depression	3,019	83.3	81.6–85.0
Major depression	304	8.6	7.5–9.8
Other depression	277	8.1	7.0–9.1
<b>Symptoms of moderate or severe depression (PHQ-8 score ≥10)</b>			
Yes	478	13.7	12.1–15.2
No	3,122	86.3	84.8–87.9
<b>Symptoms of generalized anxiety disorder<sup>e</sup></b>			
No anxiety	2,874	78.5	76.7–80.3
Mild anxiety	195	5.7	4.7–6.6
Moderate anxiety	282	7.8	6.9–8.7
Severe anxiety	275	8.0	6.7–9.4
<b>Total</b>	<b>3,818</b>	<b>100</b>	

Abbreviations: CI, confidence interval; DSM-IV, *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition; GAD-7, Generalized Anxiety Disorder 7-item Scale [footnotes only]; PHQ-8, Patient Health Questionnaire.

*Note.* Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Responses to the items on the PHQ-8 were used to define “major depression” and “other depression” according to criteria from the DSM-IV. To meet the criteria for major depression, a respondent must have experienced 5 or more symptoms of depression at least “more than half the days,” and one of the symptoms must be anhedonia or feelings of hopelessness. For “other depression,” a respondent must have experienced 2 to 4 symptoms of depression at least “more than half the days,” and one of the symptoms must be anhedonia or feelings of hopelessness.

<sup>e</sup> Responses to the GAD-7 were used to define “mild anxiety,” “moderate anxiety,” and “severe anxiety” according to criteria from the DSM-IV. “Severe anxiety” was defined as having a score of ≥15; “moderate anxiety” was defined as having a score of 10–14; and “mild anxiety” was defined as having a score of 5–9.

**Table 11. Tobacco and electronic cigarette or other vaping device use among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Smoked ≥ 100 cigarettes (lifetime)</b>			
Yes	1,855	51.6	49.0–54.2
No	1,789	48.4	45.8–51.0
<b>Cigarette smoking status</b>			
Current smoker	978	27.6	25.3–29.9
Former smoker	876	23.9	21.5–26.3
Never smoked	1,789	48.5	45.8–51.1
<b>Frequency of current cigarette smoking</b>			
Daily	789	22.1	19.7–24.5
Weekly	85	2.4	1.9–3.0
Monthly	36	1.1	0.7–1.6
Less than monthly	68	2.0	1.6–2.4
Never	2,665	72.4	70.1–74.7
<b>Smoked ≥ 50 cigars, cigarillos, or little filtered cigars (lifetime)</b>			
Yes	593	17.4	15.2–19.5
No	3,055	82.6	80.5–84.8
<b>Cigars, cigarillos, or little filtered cigars smoking status</b>			
Current smoker	299	9.5	8.1–10.9
Former smoker	292	7.9	6.5–9.2
Never smoked	3,055	82.7	80.5–84.8
<b>Frequency of current cigars, cigarillos, or little filtered cigars smoking</b>			
Daily	123	3.8	2.8–4.8
Some days	80	2.6	2.0–3.2
Rarely	96	3.1	2.3–3.8
Never	3,347	90.5	89.1–91.9
<b>Electronic cigarette or other vaping device smoking status<sup>d</sup></b>			
Used in the past 30 days	692	20.0	18.1–21.8
Used, but not in the past 30 days	546	15.3	13.1–17.6
Never used	2,414	64.7	61.1–68.3
<b>Total</b>	<b>3,818</b>	<b>100</b>	

Abbreviation: CI, confidence interval.

*Note.* Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Includes nicotine, tobacco, marijuana, flavoring, or any other substances.

**Table 12. Alcohol use during the 12 months before interview among persons with diagnosed HIV—  
Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Any alcohol use<sup>d</sup></b>			
Yes	2,345	65.5	63.1–68.0
No	1,303	34.5	32.0–36.9
<b>Frequency of alcohol use</b>			
Daily	249	6.8	5.7–8.0
Weekly	738	20.3	18.6–21.9
Monthly	425	12.0	10.8–13.2
Less than monthly	933	26.4	24.7–28.2
Never	1,303	34.5	32.0–36.9
<b>Binge drinking, past 30 days<sup>e</sup></b>			
Yes	568	15.8	14.7–16.9
No	3,044	84.2	83.1–85.3
<b>Total</b>	<b>3,818</b>	<b>100</b>	

Abbreviation: CI, confidence interval.

*Note.* Numbers might not add to total because of “don’t know” and skipped (missing) data. Percentages might not sum to 100 because of rounding.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Persons who drank  $\geq 1$  alcoholic beverage during the 12 months before interview. Alcoholic beverage was defined as a 12-ounce beer, 5-ounce glass of wine, or 1.5-ounce shot of liquor.

<sup>e</sup> Persons who drank  $\geq 5$  alcoholic beverages in a single sitting ( $\geq 4$  for women) during the 30 days before interview.

**Table 13. Noninjection drug use during the 12 months before interview among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Use of any noninjection drugs<sup>d</sup></b>			
Yes	1,823	51.0	47.9–54.2
No	1,814	49.0	45.8–52.1
<b>Noninjection drugs used<sup>d</sup></b>			
<b>Marijuana<sup>e</sup></b>			
Yes	1,483	41.9	38.5–45.2
No	2,154	58.1	54.8–61.5
<b>Amyl nitrite (poppers)</b>			
Yes	524	14.0	11.6–16.5
No	3,109	86.0	83.5–88.4
<b>Methamphetamine (e.g., crystal meth, tina, crank, ice)</b>			
Yes	298	8.4	6.4–10.4
No	3,336	91.6	89.6–93.6
<b>Cocaine that is smoked or snorted</b>			
Yes	213	5.9	4.9–6.9
No	3,422	94.1	93.1–95.1
<b>Club drugs (e.g., Ecstasy or X, ketamine or Special K, GHB or Liquid Ecstasy)</b>			
Yes	195	5.2	4.1–6.4
No	3,438	94.8	93.6–95.9
<b>Crack</b>			
Yes	98	2.7	2.1–3.4
No	3,539	97.3	96.6–97.9
<b>Prescription opioids (e.g., oxycodone, hydrocodone, Vicodin, Percocet)<sup>f</sup></b>			
Yes	102	2.7	2.1–3.3
No	3,529	97.3	96.7–97.9
<b>Prescription tranquilizers (e.g., Valium, Ativan, Xanax, downers, nerve pills)<sup>f</sup></b>			
Yes	84	2.2	1.4–2.9
No	3,548	97.8	97.1–98.6
<b>Heroin or opium that is smoked or snorted</b>			
Yes	42	1.3	0.8–1.8
No	3,592	98.7	98.2–99.2
<b>Total</b>	<b>3,818</b>	<b>100</b>	

Disclaimer: The use of trade names is for identification only and does not imply endorsement by the Department of Health and Human Services or the Centers for Disease Control and Prevention.

Abbreviations: CI, confidence interval; GHB, gamma hydroxybutyrate.

Note. Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

Persons could report taking > 1 noninjection drug.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Includes all drugs that were not injected (i.e., administered by any route other than injection), including legal drugs that were not used for medical purposes and vaping marijuana.

<sup>e</sup> Includes vaping marijuana.

<sup>f</sup> Not prescribed, or prescribed but taken more than directed.

**Table 14. Injection drug use during the 12 months before interview among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Use of any injection drugs</b>			
Yes	120	3.1	2.0–4.2
No	3,517	96.9	95.8–98.0
<b>Injection drugs used</b>			
<b>Methamphetamine (e.g., crystal meth, tina, crank, ice)</b>			
Yes	107	2.8	1.7–4.0
No	3,529	97.2	96.0–98.3
<b>Heroin</b>			
Yes	23	0.7	0.3–1.0
No	3,613	99.3	99.0–99.7
<b>Cocaine</b>			
Yes	—	—	—
No	3,623	99.8	99.6–99.9
<b>Heroin and cocaine (speedball)</b>			
Yes	—	—	—
No	3,629	99.8	99.7–100
<b>Prescription opioids (e.g., OxyContin, oxycodone, hydrocodone)</b>			
Yes	—	—	—
No	3,631	99.9	99.7–100
<b>Total</b>	<b>3,818</b>	<b>100</b>	

Disclaimer: The use of trade names is for identification only and does not imply endorsement by the Department of Health and Human Services or the Centers for Disease Control and Prevention.

Abbreviation: CI, confidence interval.

*Note.* Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

Excluded are estimates with a coefficient of variation  $\geq 0.30$  and those based on a denominator sample size  $< 30$ .

Persons could report taking  $> 1$  injection drug.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.



**Table 15. Receipt of Papanicolaou testing and pregnancy since HIV diagnosis among cisgender women with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Papanicolaou (Pap) test, past 3 years<sup>d</sup></b>			
Yes	680	80.6	77.0–84.1
No	149	19.4	15.9–23.0
<b>Pregnant since HIV diagnosis</b>			
Yes	296	37.4	33.3–41.5
No	539	62.6	58.5–66.7
<b>Total</b>	<b>875</b>	<b>100</b>	

Abbreviation: CI, confidence interval.

*Note.* Measures are self-reported. Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Or since HIV diagnosis for women with a diagnosis within the past 3 years.

**Table 16. Sexual behavior during the 12 months before interview among cisgender men and cisgender women with diagnosed HIV—Medical Monitoring Project, United States, 2022**

Behavior	Cisgender men			Cisgender women		
	No. <sup>a</sup>	Col % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Col % <sup>b</sup>	95% CI <sup>c</sup>
<b>Engaged in vaginal or anal sex</b>						
Yes	1,630	61.5	59.6–63.5	374	47.4	43.0–51.9
No	1,057	38.5	36.5–40.4	459	52.6	48.1–57.0
<b>Engaged in vaginal sex</b>						
Yes	461	18.0	16.1–19.9	372	47.2	42.7–51.7
No	2,245	82.0	80.1–83.9	461	52.8	48.3–57.3
<b>Engaged in anal sex with cisgender men</b>						
Yes	1,222	44.0	41.5–46.5	40	5.1	3.3–6.9
No	1,611	56.0	53.5–58.5	791	94.9	93.1–96.7
<b>Engaged in anal sex with cisgender women</b>						
Yes	69	2.5	1.8–3.2	NA	NA	NA
No	2,789	97.5	96.8–98.2	NA	NA	NA
<b>Number of vaginal or anal sex partners among sexually active persons</b>						
<b>MSM<sup>d</sup></b>						
Mean	8			NA		
Median	2			NA		
Range	1–300			NA		
<b>MSW<sup>e</sup></b>						
Mean	2			NA		
Median	1			NA		
Range	1–30			NA		
<b>WSM<sup>f</sup></b>						
Mean	NA			1		
Median	NA			1		
Range	NA			1–13		
<b>Total</b>	<b>2,861</b>	<b>100</b>		<b>875</b>	<b>100</b>	

Abbreviations: Col, column; CI, confidence interval; MSM, cisgender men who had sex with cisgender men; MSW, cisgender men who had sex only with cisgender women; WSM, cisgender women who had sex with cisgender men; N/A, not applicable.

*Note.* Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding. Persons were classified as cisgender if sex at birth and gender reported by the person were the same.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Cisgender men who had anal sex with cisgender men in the 12 months before interview.

<sup>e</sup> Cisgender men who had vaginal or anal sex only with cisgender women in the 12 months before interview.

<sup>f</sup> Cisgender women who had vaginal or anal sex with cisgender men in the 12 months before interview.

**Table 17. Sexual behavior during the 12 months before interview among transgender persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

Behavior	Transgender <sup>a</sup>			Transgender women <sup>b</sup>			Transgender men <sup>c</sup>		
	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>
<b>Engaged in vaginal or anal sex</b>									
Yes	50	65.7	52.5–78.8	44	68.0	53.2–82.8	—	—	—
No	25	34.3	21.2–47.5	19	32.0	17.2–46.8	—	—	—
<b>Engaged in vaginal or anal sex with cisgender men</b>									
Yes	44	58.3	44.1–72.6	43	66.4	51.5–81.3	—	—	—
No	31	41.7	27.4–55.9	20	33.6	18.7–48.5	—	—	—
<b>Engaged in vaginal or anal sex with cisgender women</b>									
Yes	—	—	—	—	—	—	—	—	—
No	69	92.7	86.7–98.7	62	98.4	95.3–100	—	—	—
<b>Engaged in vaginal or anal sex with transgender partners</b>									
Yes	—	—	—	—	—	—	—	—	—
No	73	96.5	91.6–100	61	95.9	90.1–100	—	—	—
<b>Reported any sex without using an HIV prevention strategy<sup>g</sup></b>									
Yes	—	—	—	—	—	—	—	—	—
No	70	88.1	80.3–95.9	60	89.2	81.0–97.4	—	—	—
<b>Number of vaginal or anal sex partners<sup>h</sup></b>									
Mean	3			3			—		
Median	1			1			—		
Range	1–20			1–20			—		
<b>Total</b>	<b>80</b>	<b>100</b>		<b>68</b>	<b>100</b>		<b>12</b>	<b>100</b>	

Abbreviations: CI, confidence interval; PrEP, preexposure prophylaxis [footnotes only].

Note. Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

Excluded are estimates with a coefficient of variation  $\geq 0.30$  and those based on a denominator sample size  $< 30$ .

<sup>a</sup> Persons were classified as transgender if sex assigned at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender.

<sup>b</sup> Persons were classified as transgender women if sex assigned at birth and gender were different, or if the person reported that their sex assigned at birth was male, but identified as female or transgender.

<sup>c</sup> Persons were classified as transgender men if sex assigned at birth and gender were different, or if the person reported that their sex assigned at birth was female, but identified as male or transgender.

<sup>d</sup> Numbers are unweighted.

<sup>e</sup> Percentages are weighted percentages.

<sup>f</sup> CIs incorporate weighted percentages.

<sup>g</sup> Vaginal or anal sex with at least 1 partner with an HIV-negative or unknown status while not having sustained viral suppression (defined as having all HIV viral loads being undetectable or  $< 200$  copies/mL, as documented in the medical record in the past 12 months before interview), a condom was not used, and the partner was not on PrEP. PrEP use was only measured among the 5 most recent partners and was reported by the partner with HIV.

<sup>h</sup> Among persons who had vaginal or anal sex in the 12 months before interview.

**Table 18. Sexual behavior during the 12 months before interview among cisgender men who had sex with cisgender men (MSM), cisgender men who had sex only with cisgender women (MSW), and cisgender women who had sex with cisgender men (WSM) with diagnosed HIV—Medical Monitoring Project, United States, 2022**

Behavior	MSM			MSW			WSM		
	No. <sup>a</sup>	Col % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Col % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Col % <sup>b</sup>	95% CI <sup>c</sup>
<b>Engaged in any sex without using an HIV prevention strategy, among all persons<sup>d</sup></b>									
Yes	152	8.9	7.3–10.4	45	7.6	5.1–10.1	67	10.5	7.1–13.9
No	1,779	91.1	89.6–92.7	706	92.4	89.9–94.9	753	89.5	86.1–92.9
<b>Engaged in any sex without using an HIV prevention strategy, among sexually active persons<sup>d</sup></b>									
Yes	152	13.6	11.3–16.0	45	14.4	10.1–18.7	67	21.8	14.8–28.8
No	1,082	86.4	84.0–88.7	343	85.6	81.3–89.9	306	78.2	71.2–85.2
<b>Percentages of sexually active persons who used an HIV prevention strategy with at least 1 partner</b>									
<b>Sex while having sustained viral suppression<sup>e</sup></b>									
Yes	884	67.3	63.0–71.6	258	56.7	50.4–63.0	240	57.0	48.8–65.2
No	351	32.7	28.4–37.0	130	43.3	37.0–49.6	133	43.0	34.8–51.2
<b>Condom-protected sex<sup>f</sup></b>									
Yes	599	49.5	45.3–53.7	230	57.2	48.4–66.1	181	48.9	43.1–54.8
No	632	50.5	46.3–54.7	158	42.8	33.9–51.6	191	51.1	45.2–56.9
<b>Condomless sex with a partner on PrEP<sup>g</sup></b>									
Yes	301	24.5	21.4–27.6	—	—	—	—	—	—
No	930	75.5	72.4–78.6	370	94.5	89.9–99.1	358	95.1	92.0–98.2
<b>Sex with a partner with HIV<sup>h</sup></b>									
Yes	652	53.7	50.9–56.5	83	19.8	15.6–24.0	65	16.4	9.2–23.7
No	583	46.3	43.5–49.1	305	80.2	76.0–84.4	308	83.6	76.3–90.8
<b>Total</b>	<b>1,950</b>	<b>100</b>		<b>755</b>	<b>100</b>		<b>825</b>	<b>100</b>	

Abbreviations: Col, column; CI, confidence interval; MSM, cisgender men who had sex with cisgender men; MSW, cisgender men who had sex only with cisgender women; WSM, cisgender women who had sex with cisgender men; PrEP, preexposure prophylaxis.

*Note.* Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding. Persons who reported no anal, vaginal, or oral sex in the 12 months before interview were categorized according to self-reported sexual orientation. This table does not include information on cisgender women who had sex with cisgender women only, cisgender women who had sex with transgender persons only, or cisgender men who had sex with transgender persons only. Excluded are estimates with a coefficient of variation  $\geq 0.30$  and those based on a denominator sample size  $< 30$ .

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Vaginal or anal sex with at least 1 partner with an HIV-negative or unknown status while not having sustained viral suppression (defined as having all HIV viral loads being undetectable or  $< 200$  copies/mL, as documented in the medical record in the past 12 months before interview), a condom was not used, and the partner was not on PrEP. PrEP use was only measured among the 5 most recent partners.

<sup>e</sup> Defined as having all HIV viral loads being undetectable or  $< 200$  copies/mL, as documented in the medical record in the past 12 months before interview.

<sup>f</sup> Condoms were consistently used with at least 1 vaginal or anal sex partner.

<sup>g</sup> At least 1 condomless-sex partner without HIV was on PrEP. PrEP use was only measured among the 5 most recent partners and was reported by the partner with HIV.

<sup>h</sup> Sex with at least 1 partner with HIV.

**Table 19. Met and unmet needs for HIV ancillary services during the 12 months before interview among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	Among all persons with diagnosed HIV						Among persons with diagnosed HIV who had a need for the service		
	Received services			Needed but did not receive services			Needed but did not receive services		
	No. <sup>a</sup>	Col % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Col % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Col % <sup>b</sup>	95% CI <sup>c</sup>
<b>HIV support services</b>									
<b>HIV case management services</b>									
Yes	1,930	50.9	47.0–54.8	289	9.6	8.0–11.3	289	15.9	12.9–18.9
No	1,674	49.1	45.2–53.0	3,315	90.4	88.7–92.0	1,930	84.1	81.1–87.1
<b>Medicine through ADAP</b>									
Yes	1,738	47.2	43.3–51.2	113	3.9	3.0–4.8	113	7.6	5.8–9.3
No	1,772	52.8	48.8–56.7	3,397	96.1	95.2–97.0	1,738	92.4	90.7–94.2
<b>Professional help remembering to take HIV medicines on time or correctly (adherence support services)</b>									
Yes	1,176	31.4	27.2–35.6	25	0.8	0.5–1.1	25	2.5	1.4–3.7
No	2,447	68.6	64.4–72.8	3,598	99.2	98.9–99.5	1,176	97.5	96.3–98.6
<b>Patient navigation services</b>									
Yes	485	12.8	11.2–14.3	201	6.1	5.3–7.0	201	32.4	28.5–36.3
No	3,123	87.2	85.7–88.8	3,407	93.9	93.0–94.7	485	67.6	63.7–71.5
<b>HIV peer group support</b>									
Yes	361	8.9	7.9–10.0	280	8.1	6.9–9.2	280	47.5	42.3–52.6
No	3,256	91.1	90.0–92.1	3,337	91.9	90.8–93.1	361	52.5	47.4–57.7
<b>Non-HIV medical services</b>									
<b>Dental care</b>									
Yes	2,170	57.8	55.4–60.2	775	23.4	20.9–25.8	775	28.8	25.9–31.7
No	1,456	42.2	39.8–44.6	2,851	76.6	74.2–79.1	2,170	71.2	68.3–74.1
<b>Mental health services</b>									
Yes	1,123	28.9	25.4–32.4	354	10.6	9.0–12.1	354	26.8	23.0–30.6
No	2,498	71.1	67.6–74.6	3,267	89.4	87.9–91.0	1,123	73.2	69.4–77.0
<b>Drug or alcohol counseling or treatment</b>									
Yes	251	6.6	5.2–8.0	78	2.3	1.6–3.0	78	25.6	20.1–31.1
No	3,373	93.4	92.0–94.8	3,546	97.7	97.0–98.4	251	74.4	68.9–79.9
<b>Domestic violence services</b>									
Yes	50	1.3	0.9–1.7	41	1.3	0.8–1.7	41	49.4	38.4–60.5
No	3,577	98.7	98.3–99.1	3,586	98.7	98.3–99.2	50	50.6	39.5–61.6
<b>Subsistence services</b>									
<b>SNAP or WIC</b>									
Yes	1,407	38.0	35.6–40.4	429	12.6	10.3–14.9	429	24.9	21.4–28.3
No	2,217	62.0	59.6–64.4	3,195	87.4	85.1–89.7	1,407	75.1	71.7–78.6
<b>Transportation assistance</b>									
Yes	769	20.3	18.8–21.8	313	9.2	8.3–10.2	313	31.3	28.5–34.0
No	2,861	79.7	78.2–81.2	3,317	90.8	89.8–91.7	769	68.7	66.0–71.5
<b>Meal or food services<sup>d</sup></b>									
Yes	729	19.7	18.2–21.1	336	10.1	8.4–11.9	336	34.0	29.1–38.9
No	2,892	80.3	78.9–81.8	3,285	89.9	88.1–91.6	729	66.0	61.1–70.9
<b>Shelter or housing services</b>									
Yes	544	14.1	12.8–15.3	442	12.8	11.0–14.7	442	47.7	42.7–52.8
No	3,080	85.9	84.7–87.2	3,182	87.2	85.3–89.0	544	52.3	47.2–57.3
<b>Total</b>	<b>3,818</b>	<b>100</b>		<b>3,818</b>	<b>100</b>		<b>3,818</b>	<b>100</b>	

Abbreviations: Col, column; CI, confidence interval; ADAP, AIDS Drug Assistance Program; SNAP, Supplemental Nutrition Assistance Program; WIC, Special Supplemental Nutrition Program for Women, Infants, and Children.

Note. Persons could report receiving or needing more than 1 service. Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Includes services such as soup kitchens, food pantries, food banks, church dinners, or food delivery services.

**Table 20. Prevalence of physical violence by an intimate partner and forced sex among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Was ever slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner</b>			
Yes	1,017	28.9	26.9–30.9
No	2,583	71.1	69.1–73.1
<b>Was slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner, past 12 months</b>			
Yes	148	4.8	4.1–5.5
No	3,452	95.2	94.5–95.9
<b>Was ever threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex</b>			
Yes	609	17.7	15.8–19.5
No	2,975	82.3	80.5–84.2
<b>Was threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex, past 12 months</b>			
Yes	59	2.0	1.4–2.6
No	3,524	98.0	97.4–98.6
<b>Total</b>	<b>3,818</b>	<b>100</b>	

Abbreviation: CI, confidence interval.

*Note.* Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

**Table 21. Prevention services received during the 12 months before interview among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Talked to a physician, nurse, or other health care worker about how to prevent HIV or other STDs</b>			
Yes	1,401	37.2	33.7–40.8
No	2,226	62.8	59.2–66.3
<b>Talked to an outreach worker, counselor, or prevention program worker about how to prevent HIV or other STDs</b>			
Yes	651	16.7	13.9–19.5
No	2,979	83.3	80.5–86.1
<b>Received free condoms, not counting those given by a friend, relative, or sex partner</b>			
Yes	1,027	27.7	23.8–31.6
No	2,604	72.3	68.4–76.2
<b>Total</b>	<b>3,818</b>	<b>100</b>	

Abbreviations: CI, confidence interval; STDs, sexually transmitted diseases.

*Note.* Persons could report receiving more than 1 prevention service.

Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

**Table 22a. National HIV/AIDS Strategy indicators: Self-rated health and unmet needs for mental health services during the 12 months before interview among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	Good or better self-rated health <sup>a</sup>			Unmet needs for mental health services among persons who needed mental health services <sup>b</sup>		
	No. <sup>c</sup>	Row % <sup>d</sup>	95% CI <sup>e</sup>	No. <sup>c</sup>	Row % <sup>d</sup>	95% CI <sup>e</sup>
<b>Gender</b>						
Cisgender men <sup>f</sup>	1,984	72.6	70.9–74.2	276	28.1	23.5–32.7
Cisgender women <sup>f</sup>	524	61.5	58.1–65.0	69	23.9	18.5–29.4
Transgender persons <sup>f</sup>	53	64.5	53.4–75.5	—	—	—
<b>Sexual orientation</b>						
Lesbian or gay	1,258	76.5	74.0–79.0	185	28.6	23.6–33.6
Heterosexual or straight	1,006	64.7	62.4–67.0	115	23.6	19.1–28.1
Bisexual	207	65.8	59.2–72.4	37	31.1	21.5–40.7
Other	66	63.9	56.3–71.5	11	20.4	11.4–29.4
<b>Race/ethnicity</b>						
American Indian/Alaska Native	—	—	—	—	—	—
Asian	43	83.6	74.7–92.4	—	—	—
Black/African American	999	69.8	67.1–72.4	130	28.4	23.7–33.2
Hispanic/Latino <sup>g</sup>	634	69.4	66.0–72.7	82	22.7	13.9–31.5
Native Hawaiian/other Pacific Islander	—	—	—	—	—	—
White	759	70.5	67.0–74.0	105	26.6	21.2–31.9
Multiple races	115	63.2	55.1–71.2	28	36.5	25.5–47.4
<b>Age at time of interview (years)</b>						
18–24	46	85.9	77.2–94.6	—	—	—
25–34	384	79.4	75.6–83.2	72	34.4	25.6–43.3
35–44	493	76.1	72.4–79.8	85	31.1	24.2–37.9
45–54	544	66.4	63.0–69.9	87	28.3	22.4–34.1
55–64	703	64.4	61.6–67.2	77	21.4	15.0–27.8
≥65	392	66.4	62.2–70.5	25	14.4	7.4–21.4
<b>National HIV/AIDS Strategy priority populations<sup>h</sup></b>						
All MSM <sup>i</sup>	1,467	75.8	73.4–78.1	220	28.6	24.0–33.3
Black/African American MSM <sup>i</sup>	428	78.2	73.7–82.7	69	36.6	26.2–47.0
Hispanic/Latino MSM <sup>g,i</sup>	357	75.6	71.8–79.4	51	23.5	15.3–31.7
American Indian/Alaska Native MSM <sup>i</sup>	—	—	—	—	—	—
Persons aged 18–24 years <sup>j</sup>	46	85.9	77.2–94.6	—	—	—
Persons who inject drugs <sup>k</sup>	69	61.1	51.5–70.7	24	37.1	23.6–50.6
Black/African American cisgender women	298	65.5	61.6–69.4	30	19.2	13.2–25.3
Transgender women <sup>l</sup>	47	67.6	55.9–79.3	—	—	—
<b>Total</b>	<b>2,562</b>	<b>69.9</b>	<b>68.5–71.2</b>	<b>354</b>	<b>26.8</b>	<b>23.0–30.6</b>

Abbreviations: CI, confidence interval; MSM, cisgender men who have sex with cisgender men.

Note. Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

For weighted percentages: Excluded are estimates with a coefficient of variation ≥0.30 and those based on a denominator sample size <30.

<sup>a</sup> “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

<sup>b</sup> “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

<sup>c</sup> Numbers are unweighted.

<sup>d</sup> Percentages are weighted percentages.

<sup>e</sup> CIs incorporate weighted percentages.

<sup>f</sup> Persons were classified as cisgender if sex assigned at birth and gender reported by the person were the same. Persons were classified as transgender if sex assigned at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender.

<sup>g</sup> Hispanic or Latino persons can be of any race. Persons are classified in only 1 race/ethnicity category.

<sup>h</sup> The National HIV/AIDS Strategy defines priority populations as populations that are disproportionately affected by HIV, and recommends that public health resources be delivered to priority populations for the greatest public health impact. More information is available at <https://www.hiv.gov/federal-response/national-hiv-aids-strategy/national-hiv-aids-strategy-2022-2025/>.

<sup>i</sup> Cisgender men who had anal sex with cisgender men in the 12 months before interview.

<sup>j</sup> Priority population for youth includes persons aged 13–24 years; however, data from MMP are only available and presented for persons aged 18–24 years.

<sup>k</sup> Defined as people who injected drugs in the past 12 months.

<sup>l</sup> Persons with diagnosed HIV were classified as transgender women if the person reported that their sex assigned at birth was male but identified as female or transgender.



**Table 22b. National HIV/AIDS Strategy indicators: Unstable housing or homelessness, unemployment, and hunger/food insecurity during the 12 months before interview among persons with diagnosed HIV, overall and by demographic characteristics—Medical Monitoring Project, United States, 2022**

	Unstable housing or homelessness <sup>a</sup>			Unemployment <sup>b</sup>			Hunger/food insecurity <sup>c</sup>		
	No. <sup>d</sup>	Row % <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	Row % <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	Row % <sup>e</sup>	95% CI <sup>f</sup>
<b>Gender</b>									
Cisgender men <sup>g</sup>	456	17.5	15.9–19.1	321	11.2	9.3–13.0	474	18.6	17.1–20.0
Cisgender women <sup>g</sup>	137	18.3	15.4–21.2	92	11.3	8.0–14.7	157	18.0	15.1–21.0
Transgender persons <sup>g</sup>	19	29.0	17.9–40.2	14	15.6	6.6–24.6	20	27.2	17.5–36.9
<b>Sexual orientation</b>									
Lesbian or gay	243	16.4	14.3–18.5	174	10.6	8.2–13.1	238	16.2	14.1–18.3
Heterosexual or straight	263	18.0	15.9–20.0	187	10.9	8.8–13.0	273	17.2	15.4–18.9
Bisexual	73	21.4	17.0–25.9	48	15.4	10.4–20.4	95	31.2	26.1–36.4
Other	24	25.9	16.8–34.9	—	—	—	32	31.3	23.5–39.0
<b>Race/ethnicity</b>									
American Indian/Alaska Native	—	—	—	—	—	—	—	—	—
Asian	—	—	—	—	—	—	—	—	—
Black/African American	290	21.5	19.0–24.0	192	12.4	9.6–15.1	266	19.1	16.4–21.8
Hispanic/Latino <sup>h</sup>	143	17.7	14.1–21.4	116	12.0	9.2–14.8	192	23.0	18.3–27.8
Native Hawaiian/other Pacific Islander	—	—	—	—	—	—	—	—	—
White	137	13.3	11.6–15.1	86	8.5	5.8–11.3	133	13.8	10.6–17.0
Multiple races	36	19.3	12.9–25.6	24	14.6	8.6–20.6	53	26.1	19.2–33.0
<b>Age at time of interview (years)</b>									
18–24	18	31.6	19.3–43.8	14	22.9	11.6–34.1	12	18.2	8.2–28.1
25–34	139	30.2	23.8–36.5	76	15.9	11.7–20.2	127	26.9	22.5–31.2
35–44	142	23.5	19.0–28.0	112	16.8	12.7–20.9	156	23.9	20.5–27.3
45–54	140	17.4	14.8–20.0	91	10.1	7.1–13.1	166	21.6	18.5–24.7
55–64	122	12.1	9.2–15.0	109	9.6	7.8–11.4	157	15.2	12.8–17.5
≥65	52	9.3	6.8–11.8	25	3.4	1.5–5.3	33	6.0	3.8–8.2
<b>National HIV/AIDS Strategy priority populations<sup>i</sup></b>									
All MSM <sup>j</sup>	306	16.7	14.8–18.6	215	11.0	8.6–13.4	316	17.7	15.8–19.6
Black/African American MSM <sup>j</sup>	118	22.4	18.0–26.8	76	13.4	9.5–17.3	114	21.4	15.6–27.2
Hispanic/Latino MSM <sup>h,j</sup>	73	17.1	12.9–21.2	59	12.1	8.2–16.0	88	20.5	15.5–25.6
American Indian/Alaska Native MSM <sup>j</sup>	—	—	—	—	—	—	—	—	—
Persons aged 18–24 years <sup>k</sup>	18	31.6	19.3–43.8	14	22.9	11.6–34.1	12	18.2	8.2–28.1
Persons who inject drugs <sup>l</sup>	58	50.8	40.5–61.2	28	25.5	15.7–35.2	51	44.4	33.0–55.8
Black/African American cisgender women	75	17.8	13.5–22.2	56	11.4	8.1–14.7	69	13.9	10.4–17.3
Transgender women <sup>m</sup>	17	30.7	18.4–43.0	—	—	—	18	29.2	16.8–41.5
<b>Total</b>	<b>613</b>	<b>17.9</b>	<b>16.5–19.3</b>	<b>427</b>	<b>11.3</b>	<b>9.4–13.2</b>	<b>651</b>	<b>18.6</b>	<b>17.3–19.9</b>

Abbreviations: CI, confidence interval; MSM, cisgender men who have sex with cisgender men.

Note. Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

For weighted percentages: Excluded are estimates with a coefficient of variation ≥0.30 and those based on a denominator sample size <30.

<sup>a</sup> “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted at any time) or homelessness (living on the street, in a shelter, in a single-room-occupancy hotel, or in a car at any time) during the past 12 months.

<sup>b</sup> Unemployed persons included those who reported being unemployed at the time of the interview, excluding persons who were unable to work.

<sup>c</sup> “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

<sup>d</sup> Numbers are unweighted.

<sup>e</sup> Percentages are weighted percentages.

<sup>f</sup> CIs incorporate weighted percentages.

<sup>g</sup> Persons were classified as cisgender if sex assigned at birth and gender reported by the person were the same. Persons were classified as transgender if sex assigned at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender.

<sup>h</sup> Hispanic or Latino persons can be of any race. Persons are classified in only 1 race/ethnicity category.

<sup>i</sup> The National HIV/AIDS Strategy defines priority populations as populations that are disproportionately affected by HIV, and recommends that public health resources be delivered to priority populations for the greatest public health impact. More information is available at <https://www.hiv.gov/federal-response/national-hiv-aids-strategy/national-hiv-aids-strategy-2022-2025/>.

<sup>j</sup> Cisgender men who had anal sex with cisgender men in the 12 months before interview.

<sup>k</sup> Priority population for youth includes persons aged 13–24 years; however, data from MMP are only available and presented for persons aged 18–24 years.

<sup>l</sup> Defined as people who injected drugs in the past 12 months.

<sup>m</sup> Persons with diagnosed HIV were classified as transgender women if the person reported that their sex assigned at birth was male but identified as female or transgender.

**Table 22c. National HIV/AIDS Strategy indicators: Median HIV stigma scores during the 12 months before interview among persons with diagnosed HIV—Medical Monitoring Project, United States, 2022**

	No. <sup>a</sup>	Median <sup>b</sup>	95% CI <sup>c</sup>
<b>Gender</b>			
Cisgender men <sup>d</sup>	2,490	28.2	26.8–29.6
Cisgender women <sup>d</sup>	751	32.9	30.6–35.2
Transgender persons <sup>d</sup>	76	35.1	27.1–43.1
<b>Sexual orientation</b>			
Lesbian or gay	1,529	26.3	24.9–27.7
Heterosexual or straight	1,380	30.7	29.0–32.4
Bisexual	291	37.1	32.8–41.4
Other	82	33.4	27.9–38.8
<b>Race/ethnicity</b>			
American Indian/Alaska Native	—	—	—
Asian	45	34.6	25.9–43.2
Black/African American	1,281	30.4	28.3–32.6
Hispanic/Latino <sup>e</sup>	807	29.7	27.8–31.6
Native Hawaiian/other Pacific Islander	—	—	—
White	1,001	27.7	25.2–30.1
Multiple races	170	29.0	24.1–33.9
<b>Age at time of interview (years)</b>			
18–24	52	37.1	30.3–44.0
25–34	459	34.6	32.4–36.8
35–44	582	30.7	28.1–33.3
45–54	734	31.0	27.8–34.1
55–64	975	27.2	25.4–29.0
≥65	517	23.1	20.7–25.4
<b>National HIV/AIDS Strategy priority populations<sup>f</sup></b>			
All MSM <sup>g</sup>	1,793	27.5	26.0–28.9
Black/African American MSM <sup>g</sup>	505	27.1	25.1–29.2
Hispanic/Latino MSM <sup>e,g</sup>	426	29.3	27.0–31.6
American Indian/Alaska Native MSM <sup>g</sup>	—	—	—
Persons aged 18–24 years <sup>h</sup>	52	37.1	30.3–44.0
Persons who inject drugs <sup>i</sup>	108	30.2	21.7–38.7
Black/African American cisgender women	403	34.2	31.1–37.3
Transgender women <sup>j</sup>	65	34.9	28.1–41.7
<b>Total</b>	<b>3,319</b>	<b>29.3</b>	<b>27.9–30.7</b>

Abbreviations: CI, confidence interval; MSM, cisgender men who have sex with cisgender men.

*Note.* "Median HIV stigma score" defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about people living with HIV, measured among persons aged ≥18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/table/T1/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98].

Numbers might not add to total because of "don't know" and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

Excluded are estimates with a denominator sample size <30.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Persons were classified as cisgender if sex assigned at birth and gender reported by the person were the same. Persons were classified as transgender if sex assigned at birth and gender reported by the person were different, or if the person chose "transgender" in response to the question about self-identified gender.

<sup>e</sup> Hispanic or Latino persons can be of any race. Persons are classified in only 1 race/ethnicity category.

<sup>f</sup> The National HIV/AIDS Strategy defines priority populations as populations that are disproportionately affected by HIV, and recommends that public health resources be delivered to priority populations for the greatest public health impact. More information is available at <https://www.hiv.gov/federal-response/national-hiv-aids-strategy/national-hiv-aids-strategy-2022-2025/>.

<sup>g</sup> Cisgender men who had anal sex with cisgender men in the 12 months before interview.

<sup>h</sup> Priority population for youth includes persons aged 13–24 years; however, data from MMP are only available and presented for persons aged 18–24 years.

<sup>i</sup> Defined as people who injected drugs in the past 12 months.

<sup>j</sup> Persons with diagnosed HIV were classified as transgender women if the person reported that their sex assigned at birth was male but identified as female or transgender.

**Table 23. National HIV/AIDS Strategy indicators: Good or better self-rated health at the time of interview among persons with diagnosed HIV, by NHAS priority populations and cycle year—Medical Monitoring Project, United States, 2018–2022**

	2018			2019			2020			2021			2022		
	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>
<b>Overall</b>	<b>2,825</b>	<b>71.5</b>	<b>69.4–73.6</b>	<b>2,848</b>	<b>70.6</b>	<b>68.7–72.5</b>	<b>2,621</b>	<b>71.5</b>	<b>70.0–73.1</b>	<b>2,697</b>	<b>68.8</b>	<b>67.4–70.3</b>	<b>2,562</b>	<b>69.9</b>	<b>68.5–71.2</b>
All MSM <sup>d</sup>	1,504	78.0	75.5–80.5	1,557	77.6	74.9–80.4	1,518	77.4	75.0–79.7	1,525	76.0	74.2–77.8	1,467	75.8	73.4–78.1
Black/African American MSM <sup>d</sup>	421	78.3	71.6–85.0	444	80.2	76.0–84.4	396	77.2	72.9–81.6	419	77.4	74.0–80.7	428	78.2	73.7–82.7
Hispanic/Latino MSM <sup>d,e</sup>	364	81.1	77.5–84.8	389	80.8	76.2–85.4	361	76.4	72.0–80.8	372	73.4	69.0–77.8	357	75.6	71.8–79.4
American Indian/Alaska Native MSM <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Persons aged 18–24 years <sup>f</sup>	79	93.7	88.5–98.8	70	83.7	76.6–90.8	61	83.4	71.4–95.4	50	87.5	82.0–93.0	46	85.9	77.2–94.6
Persons who inject drugs <sup>g</sup>	69	60.9	51.8–70.0	64	57.3	44.1–70.5	70	71.1	62.1–80.2	61	57.7	46.5–68.8	69	61.1	51.5–70.7
Black/African American cisgender women	408	68.3	62.9–73.7	380	60.2	56.4–64.0	325	66.3	62.3–70.2	311	59.4	53.4–65.4	298	65.5	61.6–69.4
Transgender women <sup>h</sup>	43	65.0	53.5–76.6	51	71.9	61.0–82.9	43	68.8	57.0–80.5	52	62.8	52.1–73.5	47	67.6	55.9–79.3

Abbreviations: CI, confidence interval; MSM, cisgender men who have sex with cisgender men.

Note. "Good or better self-rated health" defined as rating one's health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

The National HIV/AIDS Strategy defines priority populations as populations that are disproportionately affected by HIV, and recommends that public health resources be delivered to priority populations for the greatest public health impact. More information is available at <https://www.hiv.gov/federal-response/national-hiv-aids-strategy/national-hiv-aids-strategy-2022-2025/>.

Numbers might not add to total because of "don't know" and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

Excluded are estimates with a coefficient of variation  $\geq 0.30$  and those based on a denominator sample size  $< 30$ .

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Cisgender men who had anal sex with cisgender men in the 12 months before interview.

<sup>e</sup> Hispanic or Latino persons can be of any race. Persons are classified in only 1 race/ethnicity category.

<sup>f</sup> Priority population for youth includes persons aged 13–24 years; however, data from MMP are only available and presented for persons aged 18–24 years.

<sup>g</sup> Defined as people who injected drugs in the past 12 months.

<sup>h</sup> Persons with diagnosed HIV were classified as transgender women if the person reported that their sex assigned at birth was male but identified as female or transgender.

**Table 24. National HIV/AIDS Strategy indicators: Unmet needs for mental health services during the 12 months before interview among persons with diagnosed HIV, by NHAS priority populations and cycle year—Medical Monitoring Project, United States, 2015–2022**

	2015			2016			2017			2018		
	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>
<b>Overall</b>	<b>347</b>	<b>24.0</b>	<b>20.9–27.1</b>	<b>350</b>	<b>23.8</b>	<b>20.7–26.9</b>	<b>372</b>	<b>24.2</b>	<b>21.0–27.5</b>	<b>317</b>	<b>19.8</b>	<b>17.1–22.5</b>
All MSM <sup>d</sup>	185	26.4	21.9–30.8	207	27.4	23.9–31.0	213	27.0	22.9–31.2	166	19.6	16.5–22.7
Black/African American MSM <sup>d</sup>	42	30.3	20.9–39.7	51	27.7	20.3–35.1	66	30.9	23.1–38.6	40	18.9	13.9–23.8
Hispanic/Latino MSM <sup>d,e</sup>	43	26.3	16.5–36.1	52	29.8	21.7–37.9	43	25.2	15.5–34.8	42	20.5	12.5–28.4
American Indian/Alaska Native MSM <sup>d</sup>	—	—	—	—	—	—	—	—	—	0	0*	—
Persons aged 18–24 years <sup>f</sup>	10	39.9*	22.0–57.7	—	—	—	—	—	—	—	—	—
Persons who inject drugs <sup>g</sup>	17	22.9	13.7–32.2	—	—	—	21	30.2	19.2–41.3	22	28.1	14.8–41.5
Black/African American cisgender women	77	31.4	24.2–38.6	40	20.6	11.0–30.3	57	25.2	18.3–32.1	58	28.4	20.4–36.5
Transgender women <sup>h</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	2019			2020			2021			2022		
	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>
<b>Overall</b>	<b>336</b>	<b>20.8</b>	<b>17.4–24.3</b>	<b>275</b>	<b>21.0</b>	<b>18.2–23.8</b>	<b>389</b>	<b>27.7</b>	<b>22.9–32.5</b>	<b>354</b>	<b>26.8</b>	<b>23.0–30.6</b>
All MSM <sup>d</sup>	183	24.1	19.5–28.7	171	24.3	21.0–27.5	226	29.2	24.7–33.7	220	28.6	24.0–33.3
Black/African American MSM <sup>d</sup>	50	27.6	21.2–33.9	45	27.1	19.3–34.9	67	34.8	28.5–41.2	69	36.6	26.2–47.0
Hispanic/Latino MSM <sup>d,e</sup>	49	21.0	14.4–27.5	46	24.7	16.1–33.3	54	23.9	15.2–32.5	51	23.5	15.3–31.7
American Indian/Alaska Native MSM <sup>d</sup>	0	0*	—	—	—	—	—	—	—	0	0*	—
Persons aged 18–24 years <sup>f</sup>	—	—	—	—	—	—	—	—	—	—	—	—
Persons who inject drugs <sup>g</sup>	—	—	—	15	19.9	10.4–29.4	20	28.9	14.9–42.9	24	37.1	23.6–50.6
Black/African American cisgender women	52	22.3	17.0–27.6	25	20.9	13.6–28.3	45	28.6	17.0–40.3	30	19.2	13.2–25.3
Transgender women <sup>h</sup>	—	—	—	—	—	—	10	32.9*	14.9–51.0	—	—	—

Abbreviations: CI, confidence interval; MSM, cisgender men who have sex with cisgender men.

Note. "Unmet need for mental health services from a mental health professional" defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

The National HIV/AIDS Strategy defines priority populations as populations that are disproportionately affected by HIV, and recommends that public health resources be delivered to priority populations for the greatest public health impact. More information is available at <https://www.hiv.gov/federal-response/national-hiv-aids-strategy/national-hiv-aids-strategy-2022-2025/>.

Numbers might not add to total because of "don't know" and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

Excluded are estimates with a coefficient of variation  $\geq 0.30$  and those based on a denominator sample size  $< 30$ .

Estimates with an absolute CI width  $\geq 30$ , estimates with an absolute CI width between 5 and 30 and a relative CI width  $> 130\%$ , and estimates of 0% or 100% are marked with an asterisk (\*) and should be interpreted with caution.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Cisgender men who had anal sex with cisgender men in the 12 months before interview.

<sup>e</sup> Hispanic or Latino persons can be of any race. Persons are classified in only 1 race/ethnicity category.

<sup>f</sup> Priority population for youth includes persons aged 13–24 years; however, data from MMP are only available and presented for persons aged 18–24 years.

<sup>g</sup> Defined as people who injected drugs in the past 12 months.

<sup>h</sup> Persons with diagnosed HIV were classified as transgender women if the person reported that their sex assigned at birth was male but identified as female or transgender.

**Table 25. National HIV/AIDS Strategy indicators: Unstable housing or homelessness during the 12 months before interview among persons with diagnosed HIV, by NHAS priority populations and cycle year—Medical Monitoring Project, United States, 2018–2022**

	2018			2019			2020			2021			2022		
	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>
<b>Overall</b>	<b>870</b>	<b>21.0</b>	<b>19.5–22.6</b>	<b>791</b>	<b>19.8</b>	<b>18.0–21.6</b>	<b>630</b>	<b>17.2</b>	<b>15.2–19.2</b>	<b>651</b>	<b>17.0</b>	<b>15.3–18.6</b>	<b>613</b>	<b>17.9</b>	<b>16.5–19.3</b>
All MSM <sup>d</sup>	373	18.5	16.5–20.5	369	19.0	16.9–21.1	327	16.9	14.8–19.1	302	15.9	13.5–18.2	306	16.7	14.8–18.6
Black/African American MSM <sup>d</sup>	150	26.2	22.3–30.1	148	27.8	22.4–33.2	119	22.6	18.7–26.5	104	19.4	14.1–24.7	118	22.4	18.0–26.8
Hispanic/Latino MSM <sup>d,e</sup>	86	18.5	14.9–22.2	93	18.0	13.6–22.3	95	19.0	14.6–23.5	101	18.1	14.1–22.1	73	17.1	12.9–21.2
American Indian/Alaska Native MSM <sup>d</sup>	—	—	—	0	0*	—	—	—	—	—	—	—	—	—	—
Persons aged 18–24 years <sup>f</sup>	39	47.5*	32.1–62.8	35	40.8	30.1–51.5	23	30.4	20.2–40.7	17	26.1	14.5–37.7	18	31.6	19.3–43.8
Persons who inject drugs <sup>g</sup>	57	46.7	32.8–60.7	58	56.1	45.6–66.5	39	29.4	17.4–41.3	44	45.7	34.8–56.6	58	50.8	40.5–61.2
Black/African American cisgender women	134	21.0	17.8–24.3	128	21.3	17.7–25.0	85	15.1	11.7–18.5	90	18.7	14.7–22.7	75	17.8	13.5–22.2
Transgender women <sup>h</sup>	22	32.1	18.4–45.8	30	38.9	26.0–51.8	19	32.5	19.6–45.3	19	28.4	18.2–38.7	17	30.7	18.4–43.0

Abbreviations: CI, confidence interval; MSM, cisgender men who have sex with cisgender men.

*Note.* “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted at any time) or homelessness (living on the street, in a shelter, in a single-room–occupancy hotel, or in a car at any time) during the past 12 months.

The National HIV/AIDS Strategy defines priority populations as populations that are disproportionately affected by HIV, and recommends that public health resources be delivered to priority populations for the greatest public health impact. More information is available at <https://www.hiv.gov/federal-response/national-hiv-aids-strategy/national-hiv-aids-strategy-2022-2025/>.

Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

Excluded are estimates with a coefficient of variation  $\geq 0.30$  and those based on a denominator sample size  $< 30$ .

Estimates with an absolute CI width  $\geq 30$ , estimates with an absolute CI width between 5 and 30 and a relative CI width  $> 130\%$ , and estimates of 0% or 100% are marked with an asterisk (\*) and should be interpreted with caution.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Cisgender men who had anal sex with cisgender men in the 12 months before interview.

<sup>e</sup> Hispanic or Latino persons can be of any race. Persons are classified in only 1 race/ethnicity category.

<sup>f</sup> Priority population for youth includes persons aged 13–24 years; however, data from MMP are only available and presented for persons aged 18–24 years.

<sup>g</sup> Defined as people who injected drugs in the past 12 months.

<sup>h</sup> Persons with diagnosed HIV were classified as transgender women if the person reported that their sex assigned at birth was male but identified as female or transgender.

**Table 26. National HIV/AIDS Strategy indicators: Unemployment status at the time of interview among persons with diagnosed HIV, by NHAS priority populations and cycle year—Medical Monitoring Project, United States, 2015–2022**

	2015			2016			2017			2018		
	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>
<b>Overall</b>	<b>574</b>	<b>16.8</b>	<b>15.2–18.5</b>	<b>640</b>	<b>15.7</b>	<b>14.2–17.3</b>	<b>634</b>	<b>14.9</b>	<b>13.5–16.4</b>	<b>550</b>	<b>13.9</b>	<b>12.6–15.1</b>
All MSM <sup>d</sup>	256	15.5	12.6–18.3	284	14.5	12.3–16.7	287	13.3	11.7–14.9	248	12.5	10.9–14.1
Black/African American MSM <sup>d</sup>	82	19.2	12.3–26.1	103	18.3	14.7–21.9	112	19.0	15.7–22.3	95	16.8	13.7–20.0
Hispanic/Latino MSM <sup>d,e</sup>	66	16.5	12.2–20.9	58	14.0	9.8–18.3	67	14.4	10.5–18.2	68	14.2	10.5–17.8
American Indian/Alaska Native MSM <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	—	—
Persons aged 18–24 years <sup>f</sup>	25	26.6	16.1–37.0	24	24.7	14.7–34.8	19	21.3	13.3–29.4	23	24.4	13.3–35.5
Persons who inject drugs <sup>g</sup>	27	23.7	12.6–34.7	36	34.7	23.1–46.4	38	38.2*	22.4–54.0	37	32.7	22.3–43.0
Black/African American cisgender women	98	17.3	12.8–21.8	98	16.3	12.7–19.8	96	15.7	12.4–19.0	79	14.8	12.0–17.6
Transgender women <sup>h</sup>	—	—	—	14	27.4	14.4–40.3	19	30.1	17.7–42.5	—	—	—
	2019			2020			2021			2022		
	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>
<b>Overall</b>	<b>556</b>	<b>13.7</b>	<b>12.2–15.3</b>	<b>644</b>	<b>18.1</b>	<b>16.5–19.7</b>	<b>558</b>	<b>14.7</b>	<b>13.4–16.0</b>	<b>427</b>	<b>11.3</b>	<b>9.4–13.2</b>
All MSM <sup>d</sup>	266	12.6	11.1–14.1	345	19.1	17.2–20.9	292	15.0	12.8–17.1	215	11.0	8.6–13.4
Black/African American MSM <sup>d</sup>	84	14.9	11.8–18.0	109	23.8	20.0–27.7	96	18.1	14.1–22.0	76	13.4	9.5–17.3
Hispanic/Latino MSM <sup>d,e</sup>	70	13.1	10.3–16.0	93	21.6	16.4–26.7	82	15.6	11.8–19.4	59	12.1	8.2–16.0
American Indian/Alaska Native MSM <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	—	—
Persons aged 18–24 years <sup>f</sup>	22	23.2	14.0–32.4	24	34.1	19.5–48.7	—	—	—	14	22.9	11.6–34.1
Persons who inject drugs <sup>g</sup>	33	29.6	18.5–40.7	29	30.1	19.7–40.6	40	38.8	25.9–51.6	28	25.5	15.7–35.2
Black/African American cisgender women	82	13.1	9.8–16.3	79	14.8	11.4–18.2	59	13.5	9.9–17.0	56	11.4	8.1–14.7
Transgender women <sup>h</sup>	17	27.2	13.0–41.4	21	37.0*	21.9–52.2	19	24.5	15.6–33.3	—	—	—

Abbreviations: CI, confidence interval; MSM, cisgender men who have sex with cisgender men.

Note. Unemployed persons included those who reported being unemployed at the time of the interview, excluding persons who were unable to work.

The National HIV/AIDS Strategy defines priority populations as populations that are disproportionately affected by HIV, and recommends that public health resources be delivered to priority populations for the greatest public health impact. More information is available at <https://www.hiv.gov/federal-response/national-hiv-aids-strategy/national-hiv-aids-strategy-2022-2025/>.

Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

Excluded are estimates with a coefficient of variation  $\geq 0.30$  and those based on a denominator sample size  $< 30$ .

Estimates with an absolute CI width  $\geq 30$ , estimates with an absolute CI width between 5 and 30 and a relative CI width  $> 130\%$ , and estimates of 0% or 100% are marked with an asterisk (\*) and should be interpreted with caution.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Cisgender men who had anal sex with cisgender men in the 12 months before interview.

<sup>e</sup> Hispanic or Latino persons can be of any race. Persons are classified in only 1 race/ethnicity category.

<sup>f</sup> Priority population for youth includes persons aged 13–24 years; however, data from MMP are only available and presented for persons aged 18–24 years.

<sup>g</sup> Defined as people who injected drugs in the past 12 months.

<sup>h</sup> Persons with diagnosed HIV were classified as transgender women if the person reported that their sex assigned at birth was male but identified as female or transgender.

**Table 27. National HIV/AIDS Strategy indicators: Hunger or food insecurity during the 12 months before interview among persons with diagnosed HIV, by NHAS priority populations and cycle year—Medical Monitoring Project, United States, 2015–2022**

	2015			2016			2017			2018		
	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>
<b>Overall</b>	<b>771</b>	<b>21.5</b>	<b>19.6–23.3</b>	<b>865</b>	<b>21.2</b>	<b>19.6–22.9</b>	<b>866</b>	<b>21.1</b>	<b>19.2–22.9</b>	<b>802</b>	<b>19.5</b>	<b>18.2–20.8</b>
All MSM <sup>d</sup>	329	19.2	16.4–21.9	365	18.3	16.1–20.5	376	18.2	15.4–20.9	333	16.7	15.0–18.3
Black/African American MSM <sup>d</sup>	104	23.3	16.9–29.6	121	22.1	18.0–26.2	132	20.4	15.9–24.9	127	22.9	18.9–27.0
Hispanic/Latino MSM <sup>d,e</sup>	87	23.4	17.5–29.3	90	21.4	17.0–25.9	87	19.2	14.9–23.5	92	18.0	13.7–22.2
American Indian/Alaska Native MSM <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	—	—
Persons aged 18–24 years <sup>f</sup>	20	24.2	14.5–33.9	28	28.3	18.5–38.1	27	29.7	20.2–39.2	32	30.8	20.4–41.3
Persons who inject drugs <sup>g</sup>	42	38.6	29.6–47.6	52	45.9	36.1–55.8	49	45.4*	29.2–61.6	52	46.6	34.5–58.7
Black/African American cisgender women	124	22.0	17.7–26.2	137	22.8	19.3–26.3	132	22.3	19.0–25.5	135	21.1	16.5–25.8
Transgender women <sup>h</sup>	—	—	—	20	34.7	23.8–45.6	18	32.1	18.7–45.5	28	41.3	26.9–55.7
	2019			2020			2021			2022		
	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>
<b>Overall</b>	<b>781</b>	<b>19.9</b>	<b>18.0–21.8</b>	<b>592</b>	<b>16.4</b>	<b>15.2–17.6</b>	<b>607</b>	<b>15.7</b>	<b>14.2–17.3</b>	<b>651</b>	<b>18.6</b>	<b>17.3–19.9</b>
All MSM <sup>d</sup>	338	17.7	15.5–19.9	288	15.3	13.3–17.3	274	13.9	12.1–15.7	316	17.7	15.8–19.6
Black/African American MSM <sup>d</sup>	113	20.4	15.4–25.5	103	21.5	17.7–25.2	89	15.4	12.3–18.5	114	21.4	15.6–27.2
Hispanic/Latino MSM <sup>d,e</sup>	86	17.8	13.4–22.2	85	18.0	13.8–22.2	93	16.5	13.2–19.9	88	20.5	15.5–25.6
American Indian/Alaska Native MSM <sup>d</sup>	—	—	—	—	—	—	—	—	—	0	0*	—
Persons aged 18–24 years <sup>f</sup>	21	25.3	15.2–35.4	24	28.8	16.5–41.1	19	30.5	18.0–43.1	12	18.2	8.2–28.1
Persons who inject drugs <sup>g</sup>	51	49.2	38.3–60.2	34	28.1	15.0–41.3	39	36.9	27.2–46.5	51	44.4	33.0–55.8
Black/African American cisgender women	113	17.6	14.1–21.0	62	12.1	8.8–15.4	72	14.4	11.0–17.8	69	13.9	10.4–17.3
Transgender women <sup>h</sup>	32	43.7	29.0–58.5	19	25.5	13.2–37.9	28	40.3*	23.8–56.8	18	29.2	16.8–41.5

Abbreviations: CI, confidence interval; MSM, cisgender men who have sex with cisgender men.

Note. "Hunger/food insecurity" defined as going without food due to lack of money during the past 12 months.

The National HIV/AIDS Strategy defines priority populations as populations that are disproportionately affected by HIV, and recommends that public health resources be delivered to priority populations for the greatest public health impact. More information is available at <https://www.hiv.gov/federal-response/national-hiv-aids-strategy/national-hiv-aids-strategy-2022-2025/>.

Numbers might not add to total because of "don't know" and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

Excluded are estimates with a coefficient of variation  $\geq 0.30$  and those based on a denominator sample size  $< 30$ .

Estimates with an absolute CI width  $\geq 30$ , estimates with an absolute CI width between 5 and 30 and a relative CI width  $> 130\%$ , and estimates of 0% or 100% are marked with an asterisk (\*) and should be interpreted with caution.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Cisgender men who had anal sex with cisgender men in the 12 months before interview.

<sup>e</sup> Hispanic or Latino persons can be of any race. Persons are classified in only 1 race/ethnicity category.

<sup>f</sup> Priority population for youth includes persons aged 13–24 years; however, data from MMP are only available and presented for persons aged 18–24 years.

<sup>g</sup> Defined as people who injected drugs in the past 12 months.

<sup>h</sup> Persons with diagnosed HIV were classified as transgender women if the person reported that their sex assigned at birth was male but identified as female or transgender.

**Table 28. National HIV/AIDS Strategy indicators: Median HIV stigma scores during the 12 months before interview among persons with diagnosed HIV, by NHAS priority populations and cycle year—Medical Monitoring Project, United States, 2018–2022**

	2018			2019			2020			2021			2022		
	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	Row % <sup>b</sup>	95% CI <sup>c</sup>
<b>Overall</b>	<b>3,824</b>	<b>31.2</b>	<b>30.3–32.1</b>	<b>3,904</b>	<b>30.7</b>	<b>29.2–32.1</b>	<b>3,518</b>	<b>28.4</b>	<b>27.7–29.2</b>	<b>3,712</b>	<b>28.8</b>	<b>27.6–30.1</b>	<b>3,319</b>	<b>29.3</b>	<b>27.9–30.7</b>
All MSM <sup>d</sup>	1,873	29.3	28.0–30.5	1,941	28.2	25.8–30.5	1,883	27.0	25.9–28.1	1,922	27.2	25.5–28.9	1,793	27.5	26.0–28.9
Black/African American MSM <sup>d</sup>	528	32.8	29.3–36.3	542	29.7	27.3–32.2	496	28.7	26.6–30.9	529	25.4	23.5–27.3	505	27.1	25.1–29.2
Hispanic/Latino MSM <sup>d,e</sup>	436	32.0	29.6–34.3	458	28.9	26.4–31.3	445	28.1	25.7–30.4	489	29.1	27.0–31.2	426	29.3	27.0–31.6
American Indian/Alaska Native MSM <sup>d</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Persons aged 18–24 years <sup>f</sup>	87	39.5	33.4–45.6	82	36.6	27.8–45.4	70	44.3	34.3–54.3	54	42.1	33.4–50.9	52	37.1	30.3–44.0
Persons who inject drugs <sup>g</sup>	116	34.9	25.2–44.6	103	29.3	18.5–40.1	102	28.0	20.0–36.0	105	35.0	26.8–43.3	108	30.2	21.7–38.7
Black/African American cisgender women	581	37.5	34.8–40.2	598	35.3	32.4–38.2	464	29.3	27.5–31.1	494	30.7	25.3–36.1	403	34.2	31.1–37.3
Transgender women <sup>h</sup>	65	33.7	26.6–40.8	74	32.5	25.2–39.8	64	34.1	26.0–42.2	76	34.2	28.3–40.0	65	34.9	28.1–41.7

Abbreviations: CI, confidence interval; MSM, cisgender men who have sex with cisgender men.

*Note.* “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about people living with HIV, measured among persons aged ≥18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/table/T1/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98]. HIV stigma estimates are not available prior to 2018 cycle year.

The National HIV/AIDS Strategy defines priority populations as populations that are disproportionately affected by HIV, and recommends that public health resources be delivered to priority populations for the greatest public health impact. More information is available at <https://www.hiv.gov/federal-response/national-hiv-aids-strategy/national-hiv-aids-strategy-2022-2025/>.

Numbers might not add to total because of “don’t know” and skipped (missing) responses. Percentages might not sum to 100 because of rounding.

Excluded are estimates with a coefficient of variation ≥0.30 and those based on a denominator sample size <30.

<sup>a</sup> Numbers are unweighted.

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

<sup>d</sup> Cisgender men who had anal sex with cisgender men in the 12 months before interview.

<sup>e</sup> Hispanic or Latino persons can be of any race. Persons are classified in only 1 race/ethnicity category.

<sup>f</sup> Priority population for youth includes persons aged 13–24 years; however, data from MMP are only available and presented for persons aged 18–24 years.

<sup>g</sup> Defined as people who injected drugs in the past 12 months.

<sup>h</sup> Persons with diagnosed HIV were classified as transgender women if the person reported that their sex assigned at birth was male but identified as female or transgender.



# Technical Notes & Appendix

## POPULATION OF INFERENCE

For the 2022 Medical Monitoring Project (MMP) data collection cycle (data collected June 1, 2022–May 31, 2023), the population of inference was adults with diagnosed HIV (aged  $\geq 18$  years) living in the United States.

A total of 23 areas were funded to conduct data collection for the 2022 cycle: California (including the separately funded jurisdictions of Los Angeles County and San Francisco), Delaware, Florida, Georgia, Illinois (including the separately funded jurisdiction of Chicago), Indiana, Michigan, Mississippi, New Jersey, New York (including the separately funded jurisdiction of New York City), North Carolina, Oregon, Pennsylvania (including the separately funded jurisdiction of Philadelphia), Puerto Rico, Texas (including the separately funded jurisdiction of Houston), Virginia, and Washington.

## DATA COLLECTION

Persons with diagnosed HIV were sampled for MMP using data from the National HIV Surveillance System (NHSS). Sampled persons were recruited by mail, by telephone, or in person. To be eligible for MMP, the person had to be, as of December 31, 2021: living with diagnosed HIV infection, aged  $\geq 18$  years, and residing in an MMP project area. The respondent eligibility criteria were the same in all participating project areas.

A trained interviewer conducted an interview in person or via telephone or video. English and Spanish versions of the questionnaire were used in the 2022 cycle. The interview was offered in a language other than English or Spanish if a translator was available. Persons who agreed to participate were interviewed over the telephone or in a private location (e.g., at home or in a clinic). The interview (approximately 40 minutes) included questions about demographic characteristics, social determinants of health, health care use, met and unmet needs for ancillary services, sexual behavior, symptoms of depression and anxiety, gynecologic and reproductive history, substance use, and use of HIV/STD prevention services. Respondents were given a token of appreciation of no more than \$50 in cash or the equivalent for participation; the form of tokens differed by project area according to local considerations.

After the interview, MMP staff abstracted clinical data from the medical records of respondents at the health care facility identified by the respondent as their most frequent source of HIV care. Abstracted information included diagnoses of AIDS-defining conditions, prescription of antiretroviral therapy (ART) medications, laboratory results, and health care use in the 24 months before the interview. Because data collected from medical records were abstracted at the facility reported as the most frequent source of HIV care, care received from other providers may not be captured if that information was not sent to the person's most frequent source of HIV care, which could affect, for example, antiretroviral therapy prescription estimates.

For further technical details, please see the appendix.

## METHODS

The Medical Monitoring Project (MMP) uses a stratified, 2-stage sampling design. States were sampled first, with probability proportional to size (PPS). All 50 states, the District of Columbia, and Puerto Rico (defined as primary sampling units [PSUs]) were eligible for selection.

From these 52 PSUs, 20 were selected by using PPS sampling based on AIDS prevalence at the end of 2002. According to the PPS sampling method, states with a higher AIDS prevalence had a higher probability of selection, and those with a lower AIDS prevalence had a lower probability of selection [1, 2]. Six municipal jurisdictions receive separate funding for HIV surveillance (Chicago, Illinois; Houston, Texas; Los Angeles County, California; New York City, New York; Philadelphia, Pennsylvania; and San Francisco, California); these areas were included with the state for first-stage sampling and constituted a city-state unit. If a state included a city with independent HIV surveillance authority (e.g., Texas, which includes Houston), selection of the state included selection of the city (i.e., city-state units were selected together).

In 2004, 19 states (including the 6 separately funded areas within those states) and Puerto Rico were selected from the 52 PSUs, resulting in 26 MMP project areas. Because of funding constraints for the 2009 data collection cycle, 3 project areas (Maryland, Massachusetts, and South Carolina) were randomly selected to discontinue participation in MMP, and the total number of MMP areas was reduced to 23.

Analyses carried out in 2014 and subsequently in 2021 found that the original measure of size with which states were originally sampled (i.e., AIDS prevalence in 2002) was still a reasonable proxy for the distribution of HIV prevalence. The selected sample of states was still sufficiently representative of the population of persons with diagnosed HIV; consequently, selecting a new sample for the 2015 and subsequent data collection cycles was unwarranted. In addition, the change in the sampling frame and the availability of national totals from the National HIV Surveillance System (NHSS) presented new options for calibrating weights, further lessening the need for any adjustments to the sample of states.

At the second stage, persons with a reported diagnosis in NHSS were sampled after the selection of the states. The sampling frame was the national case surveillance data set containing records submitted to the Centers for Disease Control and Prevention (CDC) as of December 31, 2021. Using NHSS data, the initial national frame dataset was created for persons who were alive, had diagnosed HIV infection, were aged 18 years or older, and were living in the United States, the District of Columbia, or Puerto Rico on the sampling date (i.e., December 31, 2021). Each case was assigned to a surveillance jurisdiction based on the most recently reported residence in NHSS. These addresses primarily came from case report forms and HIV-related laboratory reports. From this initial national frame, CDC staff drew simple random samples for the 23 project areas; project area staff then linked their samples to local case surveillance systems and extracted contact information for use in locating sampled persons, whom they then attempted to recruit.

### Eligibility and Response Classifications

Persons were eligible for participation if, as of the sampling date, they had received a diagnosis of HIV, were aged  $\geq 18$  years, were alive, and were a resident of an MMP project area. Sampled persons were presumed to be eligible based on their information in NHSS unless data from another source contradicted this status. Persons were classified into 4 categories: (1) eligible respondents, (2) contacted nonrespondents, (3) nonrespondents who were not contacted, and (4) ineligible persons. These categories were used in calculating final response rates and contact rates following standard formulas [3].

### Weighting

#### Overview

For the 2022 MMP cycle, sets of weights were produced nationally, for the city-state combinations, and for each project area. This report presents national weighted data and, thus, represents all adults with diagnosed

HIV infection living in the United States. Nationally, data were weighted based on known probabilities of selection at the state or jurisdiction level and person level and then adjusted for multiplicity and nonresponse. After adjusting for nonresponse, the weights were poststratified to population totals from the NHSS frame. Extreme weights, if present, were trimmed, and the weights were adjusted to the same population totals.

For the weighting process, an updated sampling frame was obtained from NHSS data approximately a year and a half after sampling, during which time additional information reported to NHSS may have become available for sampled persons and additional diagnoses may have been reported. This updated sampling frame added records that would have been eligible if their information had been reported to NHSS on the date the initial sample was drawn; primarily, these were diagnoses that occurred during the year prior to the MMP sampling date (for the 2022 cycle, December 31, 2021). Additionally, some persons were found to have had multiple records at the time of sampling that were later identified as duplicate records. In some cases, updated information indicated that a person originally judged eligible and included on the original frame was ineligible. The updated sampling frame data also provided descriptive information for all sampled persons regardless of response and were the source of data used for nonresponse analysis and weighting.

### **Adjustments for unequal selection probabilities**

The first step in the computation of weights was the calculation of base weights that reflect the sampling design probabilities. The base weight for each sampled person incorporates both the probability of selecting a project area, and the probability of selecting a person within a project area. A person who was sampled from one jurisdiction but lived in another area at the time of sampling retained the original base weight. Prior to weighting, such cross-jurisdictional records were grouped with their project area of residence at the time of sampling. This moving of records did not affect the national weights, but did affect the project area weight totals, increasing some while decreasing others.

### **Adjustments for multiplicity**

A multiplicity factor was applied to the person weight for persons with records found to be present more than once after the original frame was compared to the updated sampling frame. This factor, which accounts for some persons' multiple opportunities for being sampled, was capped at 2 and was applicable for only 30 persons.

### **Adjustments for nonresponse**

A nonresponse-adjustment factor was applied to the multiplicity-adjusted base weight based on an analysis of nonresponse. In 2022, updated sampling frame data provided descriptive information about all sampled persons, which was used to assess how these characteristics were associated with nonresponse. The potential predictors of nonresponse were: race/ethnicity, male-to-male sexual contact (MMSC) HIV transmission category, HIV/AIDS disease stage, disease progression measured by most recent viral load test reported to NHSS, time since HIV diagnosis, age of most recent contact information, the person's frequency of receipt of HIV care (as indicated by NHSS records), movement to a different MMP jurisdiction since the time of sampling, non-U.S. birthplace, sex at birth, and age at sampling date. The nonresponse analysis followed a 2-step process. First, a bivariate analysis was conducted to determine which characteristics were potential predictors of nonresponse; then, a multivariate analysis using the significant characteristics from the bivariate analysis was conducted to identify independent predictors of nonresponse. Three significant predictors from this multivariate analysis were used to create weighting classes for the national data. In 2022, the significant predictors of nonresponse were: disease progression measured by the most recent viral load test reported to NHSS, time since HIV diagnosis, and the person's frequency of receipt of HIV care, as indicated by NHSS records. Within weighting classes, the adjustment factor for nonresponse was the ratio of the sum of the multiplicity-adjusted base weights for eligible sampled cases to the sum of these weights for eligible respondents. The multiplicity-adjusted weight within each nonresponse weighting class was then multiplied by the nonresponse-adjustment factor to produce the nonresponse-adjusted weights.

## Poststratification and trimming

Poststratification methods ensure that weighted totals sum to known population totals and, therefore, minimize the potential for biases due to nonresponse and noncoverage. However, poststratification can also add additional variance to the weights. Thus, trimming procedures are used to control weight variability and reduce its impact on survey variances. MMP used an iterative approach that combines poststratification and trimming so that trimmed weights retain their variance-reducing features after poststratification and ensures that poststratified weights add up to known population totals.

The nonresponse-adjusted weights were first poststratified to population totals from the updated sampling frame. The poststratification cells were defined by crossing sex at birth, race/ethnicity, and age group. Nationally, there were 32 poststratification cells. Poststratification adjustments were performed within each poststratification cell so that the weighted sum was preserved in each cell. To reduce additional variance added to poststratified weights, cells were collapsed and the need for weight trimming was evaluated. Poststratified cells were collapsed when cells had 2 or fewer respondents or had an extreme adjustment factor ( $\geq 1.75$ ). The need for trimming was then assessed. If the design effect due to weighting (measured as  $1 + CV^2$ , where CV is the coefficient of variation of the weights) had exceeded 1.75, we would have capped the weights at the median weight plus 4 times the interquartile range of the weights; where trimming occurred, the weights were redistributed and poststratified again to the population totals. However, no trimming was needed for the national weights.

## Design variables

Nationally, design variables indicating strata and cluster membership for each participating person accounting for the sample design were created. Many project areas were sampled with certainty because of higher AIDS prevalence, and each of these was defined as its own stratum. Elsewhere, strata were created by grouping 2 to 3 project areas (PSUs in the stratified PPS design) that had similar selection probabilities. Among the 23 project areas, 14 were sampled with certainty. The 14 certainty project areas each represent a stratum, and each person within the stratum is a cluster. The remaining 9 noncertainty project areas were grouped to create strata, and each noncertainty project area was a cluster within the stratum. Multiple project areas within certainty states were effectively substrata, and each project area remained its own stratum. For local estimates, variance estimation was conditional on the initial sampling of states as PSUs, meaning that this stage of sampling was ignored. Respondents were treated as having come from a simple random sample with replacement, although the various adjustment factors induced unequal weights.

## DEFINITIONS

### Demographic Characteristics and Social Determinants of Health

- **Gender:** Categories were cisgender men, cisgender women, and transgender. Persons were classified as cisgender if sex at birth and gender reported by the person were the same. Respondents were classified as transgender if reported sex at birth and current gender as reported by the respondent were not the same or if the respondent answered “transgender” to the interview question regarding self-identified gender. Persons whose sex assigned at birth was male, but who identified as female or transgender, were classified as transgender women. Persons whose sex assigned at birth was female, but who identified as male or transgender, were classified as transgender men.
- **Race/ethnicity:** Respondents were asked about whether they considered themselves as being of Hispanic, Latino/a, or Spanish origin. They were also asked about racial groups they identified as; respondents could check all categories that applied to them. These data were used to create the following analytic racial/ethnic categories: American Indian/Alaska Native, Asian, Black/African American, Hispanic/Latino, Native Hawaiian/other Pacific Islander, White, and multiple races. Hispanic/Latino persons could be of any race.

- **Health insurance or coverage for care or medications (including receipt of Ryan White HIV/AIDS Program [RWHAP] assistance):** Respondents were asked whether they had health insurance or coverage for care or medications (including antiretroviral [ART] medications) during the 12 months before interview—including assistance through the RWHAP, a federally-funded comprehensive care program that provides HIV primary care, medications, and essential support services for low-income persons with HIV [4]. Responses to these questions were combined and categorized as private health insurance, Medicaid, Medicare, RWHAP, Tricare/CHAMPUS or Veterans Administration coverage, insurance classified as other public health insurance, and unknown insurance. Private insurance included receipt of health insurance through a person’s employer or family member’s employer, or health insurance purchased through the Health Insurance Marketplace or directly from a health insurance company. Respondents could select more than 1 response for health insurance or coverage for care or medications. Those who only received RWHAP assistance were considered to not have health insurance.
- **Federal poverty guidelines:** Respondents were asked about their combined monthly or yearly household income (in U.S.\$) from all sources during the 12 months before interview. The number of persons meeting the current federal poverty threshold was determined by using the U.S. Department of Health and Human Services poverty guidelines that corresponded to the calendar year for which income was asked. These guidelines are issued yearly for the 48 contiguous states and Washington, D.C., and are an indicator used for determining eligibility for many federal and state programs. The 2021 guidelines were used for persons interviewed in 2022, and the 2022 guidelines were used for persons interviewed in 2023 [5]. Because the poverty guidelines are not defined for the territory of Puerto Rico, the guidelines for the contiguous states and Washington, D.C. were used for this jurisdiction. Respondents were asked to specify the range of their income, and household income was assumed to be the midpoint of the income range.
- **Disability:** Defined as having a physical, mental, and/or emotional disability. Respondents were considered to have a disability if they reported being deaf or having serious difficulty hearing; being blind or having serious difficulty seeing, even when wearing glasses; having serious difficulty concentrating, remembering, or making decisions because of a physical, mental, or emotional condition; having serious difficulty walking or climbing stairs; having difficulty dressing or bathing; or having difficulty completing errands alone such as visiting a doctor’s office or shopping because of a physical, mental, or emotional condition.

## Clinical Characteristics

- **CDC stage of disease classification for HIV infection:** Defined according to CDC’s 2014 revised surveillance case definition for HIV infection [6]. Information from NHSS was used to determine the most advanced HIV disease stage ever reached by respondents.

## Use of Health Care Services

- **Outpatient HIV medical care:** Defined as documentation of any of the following at the most frequent source of HIV care: encounter with an HIV care provider (could be self-reported), viral load test result, CD4 test result, HIV resistance test or tropism assay, ART prescription, *pneumocystis* pneumonia (PCP) prophylaxis, or *Mycobacterium avium* complex (MAC) prophylaxis. All were measured through documentation in the person’s medical record; an encounter with an HIV care provider was also measured based on interview self-report. Persons were considered to be retained in care if they had 2 elements of outpatient HIV care at least 90 days apart in each 12-month period reviewed.
- **ART prescription:** Defined as a prescription in the medical record, during the 12 months before interview, of any of the following medications: abacavir, amprenavir, atazanavir, bictegravir, cabotegravir, cobicistat, darunavir, delavirdine, didanosine, dolutegravir, doravirine, efavirenz, elvitegravir, emtricitabine, enfuvirtide, etravirine, fosamprenavir, fostemsavir, ibalizumab, indinavir, lamivudine, lenacapravir, lopinavir/ritonavir, maraviroc, nelfinavir, nevirapine, raltegravir, rilpivirine, ritonavir, saquinavir, stavudine, tenofovir alafenamide, tenofovir disoproxil fumarate, tipranavir, or zidovudine. Persons with no medical record abstraction were considered to have no documentation of ART prescription.

- **PCP prophylaxis:** Defined as documentation in the medical record that prophylaxis for PCP was prescribed among persons with a CD4 count of <200 cells/μL in the 12 months before interview [7]. Persons prescribed regimens typically given as PCP prophylaxis (trimethoprim-sulfamethoxazole, dapsone with or without pyrimethamine and leucovorin, aerosolized pentamidine, and atovaquone) were not presumptively categorized as having received PCP prophylaxis unless it was specifically stated in the medical record that prescription of these medications was for PCP prophylaxis or no length of time was specified for the course of treatment.
- **Influenza vaccination:** Respondents were asked whether they had received seasonal influenza vaccine during the 12 months before interview.
- ***Neisseria gonorrhoeae* testing:** Defined as documentation in the medical record, during the 12 months before interview, of a result from culture, Gram stain, enzyme immunoassay (EIA), nucleic acid amplification test (NAAT), or nucleic acid probe performed on a specimen from any anatomical site for screening or diagnostic purposes.
- ***Chlamydia trachomatis* testing:** Defined as documentation in the medical record, during the 12 months before interview, of a result from culture, direct fluorescent antibody (DFA), EIA or enzyme-linked immunoassay (ELISA), NAAT, or nucleic acid probe performed on a specimen from any anatomical site for screening or diagnostic purposes.
- **Syphilis testing:** Defined as documentation in the medical record, during the 12 months before interview, of a result from nontreponemal serologic tests (rapid plasma reagin [RPR], Venereal Disease Research Laboratory [VDRL]), treponemal serologic tests (*Treponema pallidum* hemagglutination assay [TPHA], *T. pallidum* particle agglutination [TP-PA], microhemagglutination assay for antibodies to *T. pallidum* [MHA-TP], chemiluminescence immunoassay [CIA], fluorescent treponemal antibody absorption [FTA-ABS] tests), polymerase chain reactions (PCR), or dark-field microscopy performed for screening or diagnostic purposes.

## Self-reported ART Medication Use and Adherence

- **ART adherence:** Respondents were asked about their adherence to ART in the 30 days before interview using questions from a 3-item scale developed by Wilson and colleagues [8]. Respondents were asked about how many days they missed at least 1 dose of their HIV medicines, how often they took their HIV medicines in the way they were supposed to, and how good a job they did at taking their HIV medicines in the way they were supposed to during the 30 days before interview.

## Depression and Substance Use

- **Symptoms of depression:** Respondents were asked questions from the Patient Health Questionnaire (PHQ-8), an 8-item scale used to measure frequency of depressed mood in the preceding 2 weeks [9]. The PHQ-8 has the following question: “Over the last 2 weeks, how often have you been bothered by any of the following problems?” The respondent is then asked about the following problems: (1) little interest or pleasure in doing things (anhedonia); (2) feeling down, depressed, or hopeless; (3) trouble falling/staying asleep, or sleeping too much; (4) feeling tired or having little energy; (5) poor appetite or overeating; (6) feeling bad about yourself or that you are a failure or have let yourself or your family down; (7) trouble concentrating on things, such as reading the newspaper or watching television; and (8) moving or speaking so slowly that other people could have noticed, or being fidgety or restless or moving around a lot more than usual. Response categories were “not at all,” “several days,” “more than half the days,” and “nearly every day” with points (0–3) assigned to each response category, respectively. The PHQ-8 responses were scored by using 2 methods. Method 1: an algorithm involving criteria from the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV-TR) [10], for diagnosing major depression was used to classify adults with diagnosed HIV as having major depression, other depression, or no depression. To meet the criteria for major depression, a respondent must have experienced 5 or more symptoms at least “more than half the days,” and one of the symptoms must be anhedonia or feelings of hopelessness. The PHQ-8 classification “other depression” comprises the DSM-IV categories of dysthymia and depressive disorder, not otherwise specified, which includes minor or subthreshold depression. Method 2: scores for each response category were summed to produce a total score between 0 and 24 points. Current depression of moderate or severe intensity was defined as a total score of  $\geq 10$ .
- **Symptoms of generalized anxiety disorder:** Respondents were asked questions from the Generalized Anxiety Disorder Scale (GAD-7), a 7-item scale used to screen for and measure the severity of generalized anxiety disorder [11]. The GAD-7 has the following question: “Over the last 2 weeks, how often have you been bothered by any of the following problems?” The respondent was then asked about the following problems: (1) feeling nervous, anxious, or on edge; (2) not being able to stop or control worrying; (3) worrying too much about different things; (4) trouble relaxing; (5) being so restless that it is hard to sit still; (6) becoming easily annoyed or irritable; and (7) feeling afraid as if something awful might happen. Responses were scored according to criteria from the DSM-IV-TR [10]. Response categories were “not at all,” “several days,” “more than half the days,” and “nearly every day,” with points (0–3) assigned to each response category, respectively. Scores for each response category were summed to produce a total score between 0 and 21 points. “Severe anxiety” was defined as having a score of  $\geq 15$ ; “moderate anxiety” was defined as having a score of 10–14; and “mild anxiety” was defined as having a score of 5–9.
- **Alcohol use:** Respondents were asked about alcohol use during the 30 days and the 12 months before interview. A drink was defined as 12 ounces of beer, a 5-ounce glass of wine, or a 1.5-ounce shot of liquor.
- **Binge drinking:** Defined as  $\geq 5$  drinks in a single sitting ( $\geq 4$  drinks for women) in the past 30 days [12].
- **Electronic cigarette or other vaping device smoking status:** History of use of electronic cigarettes or other vaping devices in one’s lifetime or during the past 30 days was based on history of vaping e-cigarettes or other vaping devices to vape nicotine, tobacco, marijuana (e.g., marijuana concentrates, marijuana waxes, THC or hash oils), flavoring or other substances.
- **Noninjection drug use:** Defined as use of any noninjection drugs for nonmedical purposes during the 12 months before interview, including marijuana (including through vaping), amyl nitrate (poppers), methamphetamine (e.g., crystal meth, tina, crank, ice), cocaine that is smoked or snorted, club drugs (e.g., Ecstasy or X, ketamine or Special K, gamma hydroxybutyrate or Liquid Ecstasy), crack, prescription opioids (e.g., oxycodone, hydrocodone, Vicodin, Percocet), prescription tranquilizers (e.g., Valium, Ativan, Xanax, downers, nerve pills), or heroin or opium. Marijuana use includes vaping marijuana for medical or nonmedical purposes in addition to nonmedical use of marijuana by other methods. The use of



trade names is for identification only and does not imply endorsement by the Department of Health and Human Services or the Centers for Disease Control and Prevention.

- **Injection drug use:** Defined as use of any injection drug use during the 12 months before interview, including methamphetamine (e.g., crystal meth, tina, crank, ice), heroin, cocaine, heroin and cocaine (speedball), or prescription opioids (e.g., OxyContin, oxycodone, hydrocodone).

## Sexual Behavior and Use of Prevention Services

- **Sexual behavior/orientation:** Sexual behavior/orientation was categorized into three groups: MSM, MSW, and WSM. MSM represented cisgender men who had sex with cisgender men; MSW represented cisgender men who had sex only with cisgender women; WSM represented cisgender women who had sex with cisgender men. Women who had sex with only women were not included in sexual behavior tables. Whenever possible, categories were coded based on sexual behavior data based on the 12 months before interview. For those who reported not having sex during the 12 months before interview, persons were categorized based on sexual orientation.
- **Prevention strategies:** Reported behaviors that decrease the likelihood of HIV transmission to a sexual partner, including:
  - Sex while having sustained viral suppression: Vaginal or anal sex and the person's HIV viral loads were documented in the medical record as undetectable or <200 copies/mL at every measure in the past 12 months before interview.
  - Condom-protected sex: Condoms were consistently used with at least 1 vaginal or anal sex partner.
  - Condomless sex with a partner on preexposure prophylaxis (PrEP): At least 1 condomless-sex partner with an HIV-negative status was on PrEP. PrEP use was only measured among the 5 most recent partners and was reported by the partner with HIV.
  - Sex with a partner with HIV: Vaginal or anal sex with at least 1 partner with HIV.
- **Sex without using an HIV prevention strategy:** Vaginal or anal sex with at least 1 partner with an HIV-negative or unknown status while not having sustained viral suppression, when a condom was not used, and the partner was not known to be taking PrEP.

## Met and Unmet Needs for HIV Ancillary Services

HIV ancillary services were defined as services that support retention in routine HIV medical care and viral suppression, such as HIV case management, dental care, and mental health services [13]. HIV ancillary services could include services that support HIV medical care more directly or those that support a person's general health through other types of services. HIV ancillary services were grouped into three categories: HIV support services, non-HIV medical services, and subsistence services. HIV support services included: HIV case management, medicine through ADAP, adherence support services, HIV peer group support, and patient navigation services (patient navigation services could have been for HIV medical care or other types of care). Non-HIV medical services included: dental care, mental health services, drug or alcohol counseling or treatment, and domestic violence services. Subsistence services included: Supplemental Nutrition Assistance Program (SNAP) or Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), transportation assistance, meal or food services, and shelter or housing services.

- **Met need:** Defined as an HIV ancillary service received during the 12 months before interview.
- **Unmet need:** Defined as an HIV ancillary service that the respondent reported as needed, but not received, during the 12 months before interview.

## National Indicators

Several National HIV/AIDS Strategy (NHAS) indicators are monitored through MMP data, including HIV stigma and 5 quality of life indicators. Quality of life indicators include measures of physical health (i.e., self-rated health), mental and emotional health (i.e., unmet needs for mental health services among those who



needed services), and structural factors (i.e., unstable housing or homelessness, unemployment, and hunger or food insecurity). All NHAS indicators are reported among all adults with diagnosed HIV, by selected demographic characteristics, by year, and for NHAS priority populations, including all MSM, Black/African American MSM, Hispanic/Latino MSM, American Indian/Alaska Native MSM, persons aged 18–24 years, persons who inject drugs, Black/African American cisgender women, and transgender women [14].

#### *NHAS indicators:*

- **Self-rated health:** Self-rated health is assessed using a single question that captures the respondent's general health at the time of interview by using a Likert-type scale with the following responses: poor, fair, good, very good, or excellent. Self-rated health was dichotomized as good or better health (i.e., good, very good, or excellent) versus less than good health (i.e., poor, fair). This measure is also used in several other national initiatives and surveys examining self-rated health among the general U.S. population (e.g., Healthy People 2030, National Health and Nutrition Examination Survey [NHANES], Behavioral Risk Factor Surveillance System [BRFSS]) [15, 16, 17]. The NHAS 2025 goal for self-rated health among PWH is 95%.
- **Unmet needs for mental health services from a mental health professional among persons with diagnosed HIV who reported an unmet or met need for services from a mental health professional:** This measure was assessed through 2 questions. First, respondents were asked if they saw or talked to a mental health professional (e.g., psychologist, psychiatrist, psychiatric nurse, or clinical social worker) about their health during the past 12 months. Next, they were asked if they needed to see or talk to a mental health professional about their health. The denominator represents people who needed mental health services (i.e., those with a met or unmet need), and was defined as those who received services (met need) and those who needed, but did not receive, services (unmet need). The numerator represents those who needed, but did not receive, services (unmet need). The NHAS 2025 goal for unmet needs for mental health services among those who needed services is 12% among PWH.
- **Unstable housing or homelessness:** Persons were considered to have experienced unstable housing if they reported moving in with others due to financial issues, moving 2 or more times, or being evicted at any time during the past 12 months. Persons were considered to have experienced homelessness if they reported living on the street, in a shelter, in a single-room–occupancy hotel, or in a car during the past 12 months. Persons were considered to have experienced unstable housing or homelessness if they reported any form of unstable housing or homelessness during the past 12 months. The NHAS 2025 goal for unstable housing or homelessness among PWH is 11%.
- **Unemployment:** Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV. The NHAS 2025 goal for unemployment among PWH is 8%.
- **Hunger/food insecurity:** Persons who reported being hungry and not eating because they did not have enough money for food during the past 12 months were considered to be food insecure. The NHAS 2025 goal for hunger/food insecurity among PWH is 11%.
- **HIV stigma:** Defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about people living with HIV, measured among persons aged  $\geq 18$  years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is discussed in Wright, et al [18]. The NHAS 2025 goal for the median HIV stigma score among PWH is 16.

### *NHAS priority populations:*

- **Gay, bisexual, or other men who had sex with men (MSM):** Included cisgender men with diagnosed HIV who reported having sex with  $\geq 1$  cisgender man in the past 12 months (among persons who had sex during the past 12 months) and cisgender men with diagnosed HIV who reported identifying as gay or bisexual (among those who did not have sex during the past 12 months).
- **Black/African American MSM:** Included MSM with diagnosed HIV who identified as non-Hispanic/Latino Black/African American race/ethnicity.
- **Hispanic/Latino MSM:** Included MSM with diagnosed HIV who identified as Hispanic/Latino race/ethnicity. Hispanics or Latinos could be of any race.
- **American Indian/Alaska Native MSM:** Included MSM with diagnosed HIV who identified as American Indian/Alaska Native race/ethnicity.
- **Black/African American cisgender women:** Included cisgender women with diagnosed HIV who identified as non-Hispanic Black/African American race/ethnicity.
- **Transgender women:** Persons with diagnosed HIV were classified as transgender women if the person reported that their sex assigned at birth was male but identified as female or transgender.
- **Persons aged 18–24 years:** Priority population for youths includes persons with diagnosed HIV aged 13–24 years; however, data from MMP are only available and presented for persons aged 18–24 years.
- **People who inject drugs:** Included persons with diagnosed HIV who reported injecting drugs for non-medical purposes during the past 12 months.

## ETHICS STATEMENT

In accordance with guidelines for defining public health research [19], CDC has determined MMP is public health surveillance used for disease control, program, or policy purposes. Local institutional review board approval was obtained from participating areas when required. Informed consent was obtained from all interviewed respondents.

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