

2015-2019

GEORGIA MEDICAL MONITORING PROJECT SURVEILLANCE SUMMARY

BEHAVIORAL AND CLINICAL CHARACTERISTICS OF
PERSONS WITH DIAGNOSED HIV INFECTION



INTRODUCTION

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Georgia MMP Team: Natalie Lucas, MPH; Kiswana Branch, MPH; LaShanna Daniels; Melissa Gousse, MPH; Timothy Lockhart, MPH, Shaunta Rutherford MPH, PhD; and Stephen Ray, MSPH.

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This report was prepared by the following staff of the Georgia Department of Public Health: Stephen Ray, MSPH; Pascale Wortley, MD, MPH; Cherie Drenzek, DVM, MS.

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COMMENTARY

At year-end 2019, an estimated 58,371 persons in Georgia were living with diagnosed HIV infection [1]. In 2019, the number of new HIV diagnoses in Georgia was 2,463 [1]. Although the National HIV Surveillance System (NHSS) collects information about persons with diagnosed HIV infection [2], other surveillance systems provide more detailed information about care seeking, health care use, use of ancillary services, and other behaviors [3]. In 2005, in response to an Institute of Medicine report outlining the need for representative data on persons living 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 persons receiving HIV medical care [5]. In 2015, in response to recommendations stemming from an Institute of Medicine review of national HIV data systems [6], MMP sampling and weighting methods were revised to include all persons with diagnosed HIV infection regardless of HIV care status.

MMP is a cross-sectional, nationally representative, complex sample survey that assesses the clinical and behavioral characteristics of adults with diagnosed HIV infection in the United States and Puerto Rico. The MMP samples in cycle years 2015-2019 were selected in 2 consecutive stages: (1)

United States and dependent areas and (2) adults aged ≥ 18 years with diagnosed HIV infection reported to NHSS as of December 31, the year prior to the cycle year (ex: December 31, 2014 for the 2015 cycle). Georgia is one of a total of 20 project areas from 16 states and Puerto Rico which were funded to conduct data collection for MMP during the 2015-2019 cycles.

This report presents unweighted frequencies and weighted prevalence estimates with 95% confidence intervals for selected characteristics. The estimates describe the characteristics of adults with diagnosed

HIV infection who lived in Georgia as of the sampling date for the cycle year in which they participated in the Georgia MMP, hereafter referred to as *persons with diagnosed HIV* or *persons*. The period referenced is the 12 months before the participants' interviews and medical record abstractions unless otherwise noted.

Statistical software (SAS, version 9.4) was used for analysis of weighted data [7]. Data are not reported for estimates with a coefficient of variation ≥ 0.30 . Values with an absolute confidence interval width ≥ 0.30 , and values with an absolute confidence interval width between 0.05 and 0.30 and a relative confidence interval width $> 130\%$ are marked with an asterisk and should be interpreted with caution. No statistical tests were performed. Additional information on MMP is available at

HIGHLIGHTS OF ANALYSES

Response Rates

In total, 2,500 persons considered to be residents of Georgia were sampled from NHSS for cycle years 2015-2019, and 976 participated (Table 1). Adjusted for eligibility, the response rates were 33.5% (2015), 43.9% (2016), 44.6% (2017), 36.6% (2018), and 45.8% (2019).

Sociodemographic Characteristics

An estimated 75% of persons were male, 24% were female and about 2% were transgender (Table 2). Nearly half (44%) identified themselves as heterosexual or straight; 43% as lesbian or gay; 11% as bisexual; and 2% as another sexual orientation. An estimated 70% were black or African American, 20% were white, and 5% were Hispanic or Latino. Two-thirds (68%) were aged at least 40 years, and 55% had received an HIV diagnosis at least 10 years earlier. Over half (62%) had more than a high school education and 96% were born in a U.S. state or territory. The estimated prevalence of homelessness among all persons with diagnosed HIV was 8%. About 15% of persons indicated that they moved in with other people due to financial issues and approximately 35% of peoples indicated moving one or more times in the past 12 months. An estimated 98% had health insurance or coverage for antiretroviral therapy (ART) medications: 42% had coverage through the Ryan White HIV/AIDS Program, 30% had Medicaid, 38% had private health insurance, and 28% had Medicare. An estimated 39% had a disability, 43% were

unemployed, and 36% had household incomes at or below the federal poverty threshold. An estimated 18% received Supplemental Security Income (SSI) and 21% received Social Security Disability Insurance (SSDI).

Clinical Characteristics

According to the CDC stage of disease classification for HIV infection [8], an estimated 55% of persons had ever had stage 3 (AIDS) disease (Table 3). An estimated 10% 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 582 cells/μL, and the median geometric mean CD4 count was 552 cells/μL (range: 2– 2,124) (data not shown in table).

An estimated 68% of persons had an undetectable (<200 copies/mL) viral load at the most recent measurement, while 60% had undetectable viral loads at all measurements during the past 12 months (sustained viral suppression).

Use of Health Care Services

Overall, 97% had received outpatient HIV care during the past 12 months, and 99% had received outpatient HIV care during the past 24 months (Table 4). An estimated 79% were retained in care during the past 12 months, while 60% were retained in care during the past 24 months. An estimated 82% of persons had an ART prescription documented in the medical record during the 12 months before the interview. Of persons who met the clinical criteria for *Pneumocystis pneumonia* (PCP) prophylaxis, 39% had a prescription for PCP prophylaxis documented in the medical record.

Among sexually active persons, an estimated 51% were tested for gonorrhea, 51% for chlamydia, 68% for syphilis, and 47% for all 3 sexually transmitted diseases (STDs) (Table 5).

An estimated 45% of persons were seen in an emergency department at least once, and 4% were seen at least 5 times (Table 6). An estimated 21% of persons were admitted to a hospital for an illness at least once.

Self-reported ART Medication Use and Adherence

An estimated 92% of persons were currently taking ART based on self-report (Table 7). Among the estimated 2% of persons without a history of ART use, 60%* had never taken ART because a health care provider advised a delay in treatment. Among the estimated 9% of persons with a history of ART use who were not currently taking ART, 25%* were not taking ART due to money or insurance problems. (* indicating percentage should be interpreted with caution)

Among persons taking ART, 58% took all of their ART doses in the past 30 days (Table 8). Among persons taking ART, 67% had never been troubled by ART side effects during the past 30 days; 17% had rarely been troubled. The most common reasons given for not taking one's most recently missed ART dose were forgetting (46%) and a change in one's daily routine or being out of town (35%).

Clinical Characteristics by Subgroups

The estimated prevalence of ART prescription documented in a medical record was 82% among males and 83% among females (Table 9). An estimated 83% of blacks or African Americans were prescribed ART, compared with 67%* of Hispanics or Latinos and 83% of

whites. The estimated prevalence of ART prescription was 76% among persons aged 18 to 29 years and 84% among those aged 50 years or older.

The estimated prevalence of sustained viral suppression was 60% among males and 59% among females. An estimated 58% of blacks or African Americans had sustained viral suppression, compared with 46%* of Hispanics or Latinos and 73% of whites. The estimated prevalence of sustained viral suppression was 42% among persons aged 18 to 29 years and 69% among those aged 50 years or older.

Depression and Substance Use

The estimated prevalence of major or other depression in the past 2 weeks based on the Patient Health Questionnaire (PHQ-8) algorithm [9] was 18%, including 9% with major depression (Table 10). Based on the total PHQ-8 symptom score (see the appendix), an estimated 15% of persons had moderate or severe depression. The estimated prevalence of mild, moderate, or severe anxiety in the past 2 weeks based on the Generalized Anxiety Disorder Scale (GAD-7) [10] was 23%, including 9% with severe anxiety.

The estimated prevalence of current smoking was 33%: 27% of persons smoked daily, and 3% less than monthly (Table 11). The estimated prevalence of alcohol use was 66%: 7% of persons drank alcohol daily, 19% weekly, 12% monthly, and 29% less than monthly (Table 12). An estimated 16% of persons engaged in binge drinking during the past 30 days.

An estimated 31% of persons used noninjection drugs for nonmedical purposes

(Table 13). In total, an estimated 28% used marijuana, 6% used poppers (amyl nitrite), 5% used cocaine, 3% used methamphetamines, and 3% used prescription opioids. Almost all persons did not use injection drugs for nonmedical purposes (Table 14).

Gynecologic and Reproductive Health

Among females, 90% reported receiving a Papanicolaou (Pap) test in the past three years (Table 15). An estimated 27% of females reported being pregnant at least once since testing positive for HIV infection.

Sexual Behavior

An estimated 40% of men had receptive anal sex with men, 39% had insertive anal sex with men, and 21% had vaginal sex (Table 16). An estimated 31% of men did not have vaginal or anal sex. Among women, 57% had vaginal sex, and 43% did not have vaginal or anal sex. An estimated 8% of both men who had sex with men and women who had sex with men engaged in high-risk sex (Table 17). In terms of prevention strategies among sexually active persons, an estimated 58% of men who had sex with men engaged in sex while sustainably virally suppressed, 70% had condom-protected sex, and 69% had sex with an HIV-positive partner. Among sexually active men who had sex only with women, 59% engaged in sex while sustainably virally suppressed, 73% had condom-protected sex, and 28% had sex with an HIV-positive partner. Among sexually active women who had sex with men, 55% engaged in sex while sustainably virally suppressed, 56% had condom-protected sex, and 28% had sex with an HIV-positive partner.

Met and Unmet Need for Ancillary Services

An estimated 50% of persons received dental care; 45% received HIV case management services; 42% received medicine through the AIDS Drug Assistance Program (ADAP); and 38% received services through the Supplemental Nutrition Assistance Program (SNAP) or Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) (Table 18). An estimated 31% of persons had unmet needs for dental care; 16% for SNAP or WIC; 13% for shelter or housing services; 11% for meal or food services; 10% for mental health services; 10% for HIV case management services; 11% for transportation assistance; 7% for HIV peer group support; and 5% for patient navigation services.

Intimate Partner Violence and Sexual Violence

An estimated 25% of persons had ever been physically hurt by a romantic or sexual partner, including 4% who experienced this in the past 12 months (Table 19). An estimated 16% of persons had ever been threatened with harm or physically forced to have unwanted sex.

Prevention Activities

An estimated 57% of persons received counseling from a physician, nurse, or other health care worker about HIV and STD risk reduction; 31% had a one-on-one conversation with an outreach worker, a counselor, or a prevention program worker about prevention; and 11% participated in a small-group session (excluding discussions with friends) to discuss the prevention of HIV and other STDs (Table 20). An estimated 50% of persons received free condoms from various organizations.

Division of HIV/AIDS Prevention National Indicators

The estimated prevalence of homelessness among persons who received outpatient HIV care in the past 12 months was 8% (Table 21). The median HIV stigma score (see the appendix) among all persons was 37. An estimated 7% of persons engaged in high-risk sex.

TECHNICAL NOTES

and 2019 cycle) or \$75 (2016 and 2017 cycles) in cash or the equivalent for participation.

POPULATION OF INFERENCE

For the 2015, 2016, 2017, 2018, and 2019 Medical Monitoring Project (MMP) data collection cycles (data collected June 1, 2015–May 31, 2016; June 1, 2016–May 31, 2017; June 1, 2017–May 31, 2018, June 1, 2018–May 31, 2019; June 1, 2019–May 31, 2020 respectively), the population of inference was adults with diagnosed HIV (aged ≥ 18 years) living in Georgia as of December 31st of the year prior to the start of the data collection cycle.

DATA COLLECTION

Persons with diagnosed HIV were sampled for MMP using data from the National HIV Surveillance System (NHSS). Sampled persons were recruited to participate in person, by telephone, or by mail. To be eligible for MMP, the person had to be, as of December 31 of the year prior to the data collection cycle: living with diagnosed HIV infection, aged ≥ 18 years, and residing in Georgia.

A trained interviewer conducted either a computer-assisted telephone interview or an in-person interview. 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 45 minutes) included questions about demographics, health care use, met and unmet needs for ancillary services, sexual behavior, depression and anxiety, gynecologic and reproductive history (females only), drug and alcohol use, and use of prevention services. Participants were given a token of appreciation of \$50 (2015, 2018,

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TABLES

Table 1. Participants, by project area—Medical Monitoring Project, Georgia, 2015-2019

Project area	No. Sampled	No. Participating	% participating^a	% of total
Georgia	2500	976	39.0	4.9

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

^a Not adjusted for eligibility.

Table 2. Characteristics of participants and estimated percentages of persons living with diagnosed HIV infection by selected characteristics—Medical Monitoring Project, Georgia, 2015-2019

	No. ^a	% ^b	95% CI ^c
Gender			
Male	693	74.7	71.8–77.6
Female	265	23.8	21.0–26.6
Transgender ^d	17	1.5	0.7–2.3
Sexual orientation			
Lesbian or gay	380	42.5	39.0–46.0
Heterosexual or straight	459	44.1	40.7–47.5
Bisexual	99	11.3	9.0–13.6
Other sexual orientation	23	2.2	1.3–3.0
Race/ethnicity			
American Indian/Alaska Native	-	-	-
Asian	-	-	-
Black/African American	715	70.1	66.8–73.4
Hispanic/Latino ^e	43	4.9	3.2–6.5
Native Hawaiian/Other Pacific Islander	-	-	-
White	165	19.8	16.9–22.7
Multiple races	49	4.9	3.4–6.3
Age at time of interview (yr)			
18–24	30	3.0	1.9–4.1
25–29	84	8.7	6.8–10.7
30–34	98	10.4	8.3–12.5
35–39	101	11.2	9.0–13.4
40–44	92	9.5	7.5–11.6
45–49	120	12.6	10.3–14.9
50–54	172	16.4	13.9–18.9
55–59	147	13.9	11.7–16.2
60–64	71	8.1	6.0–10.2
≥65	61	6.2	4.5–7.8
Education			
Less than high school	145	13.2	11.0–15.5
High school diploma or GED	243	24.9	21.9–27.9
More than high school	579	61.9	58.5–65.2
Country or territory of birth			
United States or U.S. territory	926	95.8	94.5–97.2
Foreign born	40	4.2	2.8–5.5
Time since HIV diagnosis (yr)			
<5	173	18.2	15.5–20.9

5–9	248	26.6	23.5–29.6
≥10	551	55.2	51.8–58.7
Homeless at any time, past 12 months^f			
Yes	84	8.1	6.3–9.9
No	883	91.9	90.1–93.7
Moved in with other people because of financial problems, past 12 months^m			
Yes	66	14.5	10.9–18.1
No	327	85.5	81.9–89.1
Number of times moved, past 12 months^m			
0	249	65.5	60.3–70.7
1	88	22.0	17.4–26.5
2 or more	56	12.5	9.1–16.0
Evicted from housing, past 12 months^m			
Yes	-	-	-
No	386	98.2	96.8–99.7
Incarcerated > 24 hours, past 12 months			
Yes	57	5.3	3.9–6.7
No	910	94.7	93.3–96.1
Health insurance or coverage for antiretroviral medications, past 12 months^g			
Yes	949	97.5	96.1–98.8
No	15	2.5	1.2–3.9
Type of health insurance or coverage for antiretroviral medications, past 12 months			
Ryan White			
Yes	434	41.5	38.2–44.9
No	518	58.5	55.1–61.8
Medicaid			
Yes	296	29.6	26.4–32.7
No	665	70.4	67.3–73.6
Private health insurance			
Yes	354	38.1	34.7–41.5
No	599	61.9	58.5–65.3
Medicare			
Yes	267	27.7	24.6–30.8
No	689	72.3	69.2–75.4
Other public insurance			
Yes	31	3.2	2.0–4.3
No	921	96.8	95.7–98.0
Tricare/CHAMPUS or Veterans Administration			
Yes	42	6.1	4.1–8.2
No	907	93.9	91.8–95.9
Insurance type unknown^h			
Yes	-	-	-

No	945	99.2	98.6–99.8
Any disabilityⁱ			
Yes	387	39.0	35.6–42.4
No	580	61.0	57.6–64.4
Received Supplemental Security Income (SSI), past 12 months			
Yes	71	18.2	13.8–22.6
No	314	81.8	77.4–86.2
Received Social Security Disability Insurance (SSDI), past 12 months			
Yes	76	21.0	16.3–25.6
No	309	79.0	74.4–83.7
Perception of general health^m			
Poor	26	6.8	3.8–9.9
Fair	82	21.8	17.1–26.5
Good	163	41.2	35.7–46.7
Very good	76	18.9	14.6–23.3
Excellent	46	11.2	7.8–14.7
Went without food due to lack of money, past 12 months			
Yes	183	19.1	16.4–21.8
No	783	80.9	78.2–83.6
Employment status^j			
Employed	429	45.6	42.2–49.0
Unemployed	434	43.2	39.8–46.6
Student	24	3.0	1.7–4.4
Retired	80	8.2	6.2–10.1
Combined yearly household income (US\$)^k			
0–19,999	424	45.5	42.0–49.1
20,000–39,999	236	25.7	22.6–28.8
40,000–74,999	151	17.7	14.9–20.6
≥75,000	95	11.0	8.8–13.2
Poverty guidelines^l			
Above poverty threshold	565	64.1	60.7–67.5
At or below poverty threshold	341	35.9	32.5–39.3
Total	976	100	

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

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

^d Persons were classified as transgender if sex 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.

^e Hispanics or Latinos might be of any race. Persons are classified in only 1 race/ethnicity category.

^f Living on the street, in a shelter, in a single-room–occupancy hotel, or in a car.

^g Persons could select more than 1 response for health insurance or coverage for medications (including antiretroviral medications).

^h Unknown insurance type means that the person had health insurance or coverage for medications (including antiretroviral medications), but the type of insurance or coverage could not be determined.

ⁱ Includes physical, mental, and emotional disabilities.

^j Employed includes employed for wages, self-employed, or homemaker.

^k Income from all sources, before taxes, in the last calendar year.

^l Poverty guidelines as defined by HHS; the 2015 guidelines were used for persons interviewed in 2016 and the 2018 guidelines were used for persons interviewed in 2019. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

Table 3. Stage of disease, CD4 counts, and viral suppression during the 12 months before the interview—Medical Monitoring Project, Georgia, 2015-2019

	No. ^a	% ^b	95% CI ^c
HIV infection stage 3 (AIDS)^d			
Yes	562	54.5	51.0–58.0
No	410	45.5	42.0–49.0
Geometric mean CD4 count (cells/μL)			
0–199	89	10.3	8.1–12.4
200–349	114	14.2	11.7–16.8
350–499	140	17.2	14.4–20.0
\geq 500	462	58.3	54.7–62.0
Lowest CD4 count (cells/μL), past 12 months			
0–49	38	4.4	3.0–5.9
50–199	75	8.9	6.9–11.0
200–349	142	17.4	14.6–20.1
350–499	151	18.1	15.2–20.9
\geq 500	406	51.2	47.5–54.9
Viral suppression			
Most recent viral load documented undetectable or <200 copies/mL	687	68.3	65.0–71.6
Most recent viral load documented detectable, \geq 200 copies/mL, or missing/unknown	289	31.7	28.4–35.0
Durable viral suppression			
All viral load measurements documented undetectable or <200 copies/mL	604	60.0	56.6–63.5
Any viral load \geq 200 copies/mL or missing/unknown	372	40.0	36.5–43.4
Total	976	100	

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

Source of stage of disease 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. Accessed June 23, 2021.

Note. CD4 counts and viral load measurements are from medical record abstraction.

Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

^d 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 and quality of, care—Medical Monitoring Project, Georgia, 2015-2019

	No. ^a	% ^b	95% CI ^c
Ever received outpatient HIV care^d			
Yes	972	99.6	99.1–100.0
No	-	-	-
Received outpatient HIV care, past 12 months^d			
Yes	955	96.8	95.3–98.4
No	18	3.2	1.6–4.7
Received outpatient HIV care, past 24 months^d			
Yes	967	99.3	98.8–99.9
No	-	-	-
Retained in care, past 12 months^e			
Yes	769	79.3	76.2–82.3
No	168	20.7	17.7–23.8
Retained in care, past 24 months^e			
Yes	569	59.8	56.3–63.3
No	366	40.2	36.7–43.7
Prescribed ART, past 12 months^f			
Yes	827	82.3	79.4–85.2
No	149	17.7	14.8–20.6
Prescribed PCP prophylaxis, past 12 months^g			
Yes	42	38.8	29.0–48.6
No	67	61.2	51.4–71.0
Received influenza vaccination, past 12 months			
Yes	294	75.3	70.5–80.1
No	99	24.7	19.9–29.5
Total	976	100	

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

Note. CD4 counts, viral load measurements, prophylaxes, and vaccinations are from medical record abstraction. Measurement period is the 12 months before the interview unless otherwise noted.

Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

^d 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.

^e Two elements of outpatient HIV care at least 90 days apart in each 12-month period.

^f ART prescription documented in medical record; persons with no medical record abstraction were considered to have no documentation of ART prescription.

^g Among persons with CD4 cell count < 200 cells/ μ L.

Table 5. Sexually transmitted disease testing during the 12 months before the interview, by sexual activity—Medical Monitoring Project, Georgia, 2015-2019

	Total population			Sexually active ^a persons only		
	No. ^b	% ^c	95% CI ^d	No. ^b	% ^c	95% CI ^d
Gonorrhea^e						
Yes, received test	425	45.8	42.3–49.4	303	51.1	46.7–55.5
No test documented	486	54.2	50.6–57.7	276	48.9	44.5–53.3
Chlamydia^f						
Yes, received test	423	45.7	42.1–49.2	301	50.8	46.4–55.3
No test documented	488	54.3	50.8–57.9	278	49.2	44.7–53.6
Syphilis^g						
Yes, received test	587	63.8	60.4–67.3	398	67.5	63.3–71.7
No test documented	324	36.2	32.7–39.6	181	32.5	28.3–36.7
Gonorrhea, chlamydia, and syphilis						
Yes, received all 3 tests	380	41.5	38.0–45.0	278	47.2	42.8–51.7
All 3 tests not documented	531	58.5	55.0–62.0	301	52.8	48.3–57.2
Total	976	100		623	100	

Abbreviations: 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 diseases was based on medical record abstraction.

Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Sexual activity was reported in the interview component of the Medical Monitoring Project and was defined as anal or vaginal intercourse.

^b Numbers are unweighted.

^c Percentages are weighted percentages.

^d CIs incorporate weighted percentages

^e Testing for *Neisseria gonorrhoeae* was defined as documentation of a result from culture, gram stain, enzyme immunoassay (EIA), nucleic acid amplification test (NAAT), or nucleic acid probe.

^f *Chlamydia trachomatis* testing was defined as a result from culture, direct fluorescent antibody (DFA), EIA or enzyme-linked immunoassay (ELISA), NAAT, or nucleic acid probe.

^g Syphilis testing was defined as a result from nontreponemal syphilis tests (rapid plasma reagin [RPR], Venereal Disease Research Laboratory [VDRL]), treponemal syphilis tests (*Treponema pallidum* hemagglutination assay [TPHA], *T. pallidum* particle agglutination [TP-PA], microhemagglutination assay for antibody to *T. pallidum* [MHA-TP], fluorescent treponemal antibody absorbed [FTA-ABS] tests), or dark-field microscopy.

Table 6. Emergency department and hospital admission during the 12 months before the interview—Medical Monitoring Project, Georgia, 2015-2019

	No. ^a	% ^b	95% CI ^c
Number of visits to emergency department			
0	532	55.2	51.8–58.7
1	197	21.1	18.2–24.0
2–4	192	19.8	17.0–22.5
≥5	40	3.9	2.7–5.2
Number of hospital admissions			
0	760	79.3	76.4–82.1
1	132	14.0	11.6–16.5
2–4	57	5.7	4.1–7.3
≥5	-	-	-
Total	976	100	

Abbreviation: CI, confidence interval.

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

Table 7. Antiretroviral therapy (ART) use—Medical Monitoring Project, Georgia, 2015-2019

	No. ^a	% ^b	95% CI ^c
Ever taken ART			
Yes	946	97.8	96.6–99.1
No	14	2.2	0.9–3.4
Currently taking ART			
Yes	895	91.5	89.3–93.6
No	69	8.5	6.4–10.7
Reasons for never taking ART^d			
Health care provider never discussed taking ART with person			
Yes	-	-	-
No	12	85.9*	67.5–100.0
Health care provider said person should not start taking ART			
Yes	9	60.3*	31.3–89.4
No	-	-	-
Money or insurance problems			
Yes	-	-	-
No	11	74.9*	49.9–99.9
Person doesn't believe he/she needs ART			
Yes	-	-	-
No	10	67.1*	38.8–95.4
Person thinks ART would make him/her feel sick or harm him/her			
Yes	-	-	-
No	11	78.8*	56.8–100.0
Person decided not to take ART for some other reason			
Yes	-	-	-
No	10	77.3*	55.7–98.9
Reasons for not currently taking ART, among those persons with a history of ART use^d			
Health care provider never discussed restarting ART with person			
Yes	-	-	-
No	43	78.5	64.3–92.7
Health care provider said person should not take ART			
Yes	-	-	-
No	47	95.3	86.5–100.0
Money or insurance problems			
Yes	23	51.3*	36.1–66.6
No	28	48.7*	33.4–63.9

Person doesn't believe he/she needs ART			
Yes	-	-	-
No	42	80.5	67.9–93.1
Person thinks ART would make him/her feel sick or harm him/ her			
Yes	12	23.9	11.0–36.8
No	39	76.1	63.2–89.0
Person decided not to take ART for some other reason			
Yes	23	37.8	23.6–52.0
No	28	62.2	48.0–76.4
Total	976	100	

Abbreviation: CI, confidence interval.

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^{a,b,c} Numbers are unweighted. Percentages are weighed percentages. CIs incorporate weighed percentages.

^d Persons could select more than 1 response for reasons not taking ART.

Table 8. Antiretroviral therapy (ART) adherence among persons taking ART—Medical Monitoring Project, Georgia, 2015-2019

	No. ^a	% ^b	95% CI ^c
ART adherence in the past 30 days			
How many days did you miss at least 1 dose of any of your HIV medicines?			
0	519	58.4	54.8–61.9
1–2	242	26.3	23.2–29.5
3–5	90	10.4	8.2–12.6
6–10	21	2.3	1.2–3.3
11+	22	2.6	1.4–3.7
How well did you do at taking your HIV medicines in the way you were supposed to?			
Very poor	-	-	-
Poor	17	1.9	0.9–2.9
Fair	42	4.8	3.2–6.4
Good	120	13.5	11.0–15.9
Very good	270	29.4	26.2–32.6
Excellent	436	49.3	45.8–52.9
How often did you take your HIV medicines in the way you were supposed to?			
Never	-	-	-
Rarely	-	-	-
Sometimes	21	2.2	1.2–3.3
Usually	43	5.0	3.3–6.7
Almost always	245	27.1	24.0–30.3
Always	571	63.9	60.5–67.4
How often were you troubled by ART side effects?			
Never	606	66.8	63.3–70.2
Rarely	145	16.9	14.2–19.7
About half the time	67	8.1	6.0–10.1
Most of the time	37	4.1	2.7–5.5
Always	34	4.1	2.7–5.6
Reasons for last missed ART dose^d			
Had a problem paying for HIV medicines^e			
Yes	27	7.8	4.8–10.8
No	278	92.2	89.2–95.2
Had a problem getting a prescription or a refill for HIV medicines^e			
Yes	62	19.6	14.8–24.5
No	243	80.4	75.5–85.2
In the hospital or too sick to take HIV medicines			
Yes	61	6.6	4.9–8.3
No	764	93.4	91.7–95.1
Fell asleep early or overslept			

Yes	265	31.9	28.5–35.3
No	558	68.1	64.7–71.5
Change in your daily routine or were out of town			
Yes	283	35.2	31.7–38.7
No	542	64.8	61.3–68.3
Had side effects from your HIV medicines			
Yes	80	10.2	7.9–12.5
No	744	89.8	87.5–92.1
Felt depressed or overwhelmed			
Yes	106	13.1	10.6–15.7
No	719	86.9	84.3–89.4
Was drinking or using drugs			
Yes	49	6.0	4.2–7.8
No	776	94.0	92.2–95.8
Forgot to take HIV medicines			
Yes	372	45.8	42.2–49.5
No	453	54.2	50.5–57.8
Did not feel like taking HIV medicines			
Yes	73	8.4	6.3–10.4
No	753	91.6	89.6–93.7
Total	895	100	

Abbreviation: CI, confidence interval.

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

^d Persons could report more than 1 reason for missed last dose.

Table 9. Antiretroviral therapy (ART) prescription, ART dose adherence, durable viral suppression, and geometric mean CD4 count by subgroups—Medical Monitoring Project, Georgia, 2015-2019

	Prescription of ART			ART dose adherence ^a			Sustained viral			Geometric mean CD4 count		
	No. ^c	Row	95% CI ^e	No. ^c	Row % ^d	95% CI ^e	No. ^c	Row % ^d	95% CI ^e	No. ^c	Row % ^d	95% CI ^e
Gender												
Male	586	81.6	78.2–85.1	356	57.0	52.9–61.2	430	60.3	56.3–64.4	507	90.9	88.6–93.3
Female	224	83.2	78.0–88.4	156	64.1	57.4–70.7	161	58.7	52.0–65.3	195	86.3	81.2–91.3
Transgender ^f	16	97.2	91.7–100.0	-	-	-	13	71.2*	44.6–97.8	13	86.0*	68.0–100.0
Sexual orientation												
Lesbian or gay	316	79.8	74.9–84.7	190	56.9	51.2–62.5	224	58.0	52.6–63.5	266	90.9	87.6–94.1
Heterosexual or straight	391	83.8	79.9–87.7	264	61.0	55.9–66.0	297	62.7	57.8–67.6	346	88.6	85.2–92.0
Bisexual	84	81.2	71.5–90.9	52	56.3	45.2–67.5	60	56.4	45.3–67.5	70	90.0	83.5–96.5
Other sexual orientation	22	95.5	86.7–100.0	9	39.4*	19.0–59.8	16	69.3*	50.1–88.4	20	85.6	70.6–100.0
Race/ethnicity												
American Indian/Alaska Native	-	-	-	-	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-	-	-	-	-
Black/African American	607	82.6	79.3–85.8	357	55.0	50.8–59.1	431	57.6	53.6–61.6	522	88.2	85.5–90.9
Hispanic/Latino ^g	31	66.9*	49.3–84.5	25	55.1*	37.8–72.4	22	46.1*	29.3–62.9	29	96.1	88.6–100.0
Native Hawaiian/Other Pacific Islander	-	-	-	-	-	-	-	-	-	-	-	-
White	139	82.8	75.9–89.7	105	70.8	63.2–78.4	118	72.7	65.2–80.2	121	93.9	89.9–97.8
Multiple races	47	91.1	79.4–100.0	29	59.5*	43.6–75.5	30	56.1*	40.3–71.9	41	90.8	82.8–98.8
Age at time of interview (yr)												
18–29	91	76.3	66.8–85.8	43	44.2	33.5–54.9	50	42.1	32.4–51.8	82	90.9	85.2–96.7
30–39	168	80.9	74.2–87.5	84	45.1	37.4–52.9	106	51.0	43.5–58.5	139	85.7	80.2–91.2
40–49	181	83.5	77.8–89.3	111	58.7	51.0–66.4	133	60.7	53.3–68.0	153	89.5	84.7–94.3
≥50	387	83.9	79.8–88.0	281	67.6	62.9–72.4	315	68.8	64.0–73.6	342	91.4	88.5–94.3

Total	827	82.3	79.4–85.2	519	58.4	54.8–61.9	604	60.0	56.6–63.5	716	89.7	87.6–91.9
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Abbreviations: CD4, CD4 T-lymphocyte count (cells/ μ L); CI, confidence interval. *Note.* Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute confidence interval width ≥ 0.30 , and values with an absolute confidence interval width of between 0.05 and 0.30 and a relative confidence interval width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a In past 30 days, 100% adherence to ART doses.

^b All viral load measurements in the 12 months preceding the interview documented undetectable or < 200 copies/mL.

^c Numbers are unweighted.

^d Percentages are weighted percentages.

^e CIs incorporate weighted percentages.

^f Persons were classified as transgender if sex 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.

^g Hispanics or Latinos might be of any race. Persons are classified in only 1 race/ethnicity category.

Table 10. Depression and anxiety during the 2 weeks before the interview—
Medical Monitoring Project, Georgia, 2015-2019

	No. ^a	% ^b	95% CI ^c
Depression based on DSM-IV criteria^d			
No depression	781	81.8	79.2–84.5
Other depression	92	9.1	7.2–11.0
Major depression	85	9.1	7.1–11.1
Moderate or severe depression (PHQ-8 score ≥10)			
Yes	143	15.1	12.6–17.5
No	816	84.9	82.5–87.4
Anxiety^e			
No anxiety	740	76.8	73.9–79.8
Mild anxiety	58	6.2	4.5–7.8
Moderate anxiety	80	8.3	6.4–10.1
Severe anxiety	82	8.7	6.8–10.7
Total	976	100	

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 missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

^d 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.

^e 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 use—Medical Monitoring Project, Georgia, 2015-2019

	No. ^a	% ^b	95% CI ^c
Smoked ≥100 cigarettes (lifetime)			
Yes	490	50.4	46.9–53.8
No	468	49.6	46.2–53.1
Cigarette smoking status			
Never smoked	490	50.4	46.9–53.8
Former smoker	153	16.4	13.8–19.1
Current smoker	315	33.2	29.9–36.5
Frequency of current cigarette smoking			
Never	643	66.8	63.5–70.1
Daily	255	26.8	23.7–29.8
Weekly	23	2.7	1.4–4.0
Monthly	-	-	-
Less than monthly	26	2.7	1.6–3.8
Smoked ≥50 cigars, cigarillos, or little filtered cigars (lifetime)			
Yes	167	17.7	15.0–20.4
No	792	82.3	79.6–85.0
Cigars, cigarillos, or little filtered cigars smoking status			
Never smoked	792	82.3	79.6–85.0
Former smoker	78	8.4	6.4–10.5
Current smoker	89	9.3	7.3–11.3
Frequency of current cigars, cigarillos, or little filtered cigars smoking			
Never	870	90.7	88.7–92.7
Daily	20	2.3	1.2–3.4
Some days	34	3.6	2.3–4.9
Rarely	35	3.4	2.3–4.6
Electronic cigarette smoking status			
Never used electronic cigarettes	682	70.6	67.5–73.8

Used electronic cigarettes, but not in the past 30 days	212	22.6	19.7–25.6
Used electronic cigarettes in the past 30 days	64	6.7	5.0–8.5
Total	976	100	

Abbreviation: CI, confidence interval.

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

**Table 12. Alcohol use during the 12 months before the interview—
Medical Monitoring Project, Georgia, 2015-2019**

	No. ^a	% ^b	95% CI ^c
Any alcohol use^d			
Yes	626	66.4	63.1–69.7
No	333	33.6	30.3–36.9
Frequency of alcohol use			
Daily	59	6.5	4.8–8.3
Weekly	185	19.3	16.6–22.0
Monthly	117	11.8	9.6–14.0
Less than monthly	265	28.8	25.6–32.0
Never	333	33.6	30.3–36.9
Binge drinking past 30 days^e			
Yes	146	15.9	13.3–18.5
No	807	84.1	81.5–86.7
Total	976	100	

Abbreviation: CI, confidence interval.

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

^d Persons who drank at least 1 alcoholic beverage during the 12 months before the interview. Alcoholic beverage was defined as a 12-ounce beer, 5-ounce glass of wine, or 1.5-ounce shot of liquor.

^e Persons who drank ≥ 5 alcoholic beverages in a single sitting (≥ 4 for women) during the 30 days before the interview.

Table 13. Noninjection drug use during the 12 months before the interview—Medical Monitoring Project, Georgia, 2015-2019

	No. ^a	% ^b	95% CI ^c
Use of any noninjection drugs^d			
Yes	295	30.8	27.7–34.0
No	663	69.2	66.0–72.3
Noninjection drugs^d used			
Marijuana			
Yes	267	27.8	24.7–30.9
No	691	72.2	69.1–75.3
Crack			
Yes	21	1.8	1.0–2.6
No	937	98.2	97.4–99.0
Cocaine that is smoked or snorted			
Yes	50	5.2	3.7–6.7
No	908	94.8	93.3–96.3
Methamphetamine (e.g., crystal meth, tina, crank, ice)			
Yes	25	2.9	1.7–4.1
No	933	97.1	95.9–98.3
Amphetamine (e.g., speed, bennies, uppers)			
Yes	-	-	-
No	949	99.1	98.4–99.7
Club drugs (e.g., Ecstasy or X, ketamine or Special K, GHB or Liquid Ecstasy)			
Yes	21	2.4	1.3–3.4
No	937	97.6	96.6–98.7
Amyl nitrite (poppers)			
Yes	53	6.2	4.4–7.9
No	905	93.8	92.1–95.6
Prescription opioids (e.g., oxycodone, hydrocodone, Vicodin, Percocet)^e			
Yes	30	3.1	1.9–4.2
No	928	96.9	95.8–98.1
Prescription tranquilizers (e.g., Valium, Ativan, Xanax, downers, nerve pills)^e			
Yes	22	2.3	1.3–3.2
No	936	97.7	96.8–98.7
Total	976	100	

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 missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

Persons could report taking more than 1 noninjection drug.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

^d 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.

^e Not prescribed, or prescribed but taken more than directed.

**Table 14. Injection drug use during the 12 months before the interview—
Medical Monitoring Project, Georgia, 2015-2019**

	No. ^a	% ^b	95% CI ^c
Use of any injection drugs			
Yes	14	1.9	0.9–3.0
No	944	98.1	97.0–99.1
Injection drugs used			
Cocaine			
Yes	-	-	-
No	955	99.7	99.3–100.0
Heroin			
Yes	-	-	-
No	956	99.8	99.4–100.0
Heroin and cocaine (speedball)			
No	958	100*	-
Methamphetamine (e.g., crystal meth, tina, crank, ice)			
Yes	-	-	-
No	946	98.3	97.2–99.3
Amphetamine (e.g., speed, bennies, uppers)			
Yes	-	-	-
No	955	99.7	99.3–100.0
Prescription opioids (e.g., oxycontin, oxycodone, hydrocodone)			
No	958	100*	-
Total	976	100	

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 missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

Persons could report taking more than 1 injection drug.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

**Table 15. Gynecological care and reproductive health among women—
Medical Monitoring Project, Georgia, 2015-2019**

	No. ^a	% ^b	95% CI ^c
Papanicolaou (Pap) test, past 3 years^d			
Yes	95	90.4	85.0–95.8
No	12	9.6	4.2–15.0
Pregnant since HIV diagnosis			
Yes	65	26.8	20.7–32.9
No	192	73.2	67.1–79.3
Total	265	100	

Abbreviation: CI, confidence interval.

Note. Measures are self-reported. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

^d Or since HIV diagnosis for women with a diagnosis within the past 3 years. Data for this variable is available starting from the 2018 cycle. The results shown do not include data from 2015-2017.

Table 16. Sexual behavior during the 12 months before the interview among cisgender men and women—Medical Monitoring Project, Georgia, 2015-2019

Behavior	Men			Women		
	No. ^a	% ^b	95% CI ^c	No. ^a	% ^b	95% CI ^c
Engaged in anal sex with men						
Receptive						
Yes	267	40.0	35.9–44.1	-	-	-
No	409	60.0	55.9–64.1	249	96.6	94.2–99.0
Insertive						
Yes	263	38.9	34.9–43.0	-	-	-
No	411	61.1	57.0–65.1	-	-	-
Engaged in anal sex with women						
Yes	-	-	-	-	-	-
No	680	98.4	97.4–99.5	-	-	-
Engaged in vaginal sex						
Yes	136	19.9	16.7–23.2	143	56.7	50.1–63.2
No	542	80.1	76.8–83.3	116	43.3	36.8–49.9
Engaged in vaginal or anal sex						
Yes	468	69.3	65.6–73.1	143	56.7	50.1–63.2
No	209	30.7	26.9–34.4	116	43.3	36.8–49.9
Number of vaginal or anal sex partners among						
MSM^d						
Mean	4			-		
Median	2			-		
Range	1–70			-		
MSW^e						
Mean	2			-		
Median	1			-		
Range	1–25			-		
WSM^f						
Mean	-			1		
Median	-			1		
Range	-			1–6		
Total	693	100		265	100	

Abbreviations: CI, confidence interval; MSM, men who had sex with men; MSW, men who had sex only with women; WSM, women who had sex with men.

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

^d Among men who had anal sex with men in the 12 months before the interview.

^e Among men who had vaginal or anal sex only with women in the 12 months before the interview.

^f Among women who had vaginal or anal sex with men in the 12 months before the interview.

Table 17. Sexual behavior during the 12 months before the interview among men who had sex with men (MSM), men who had sex only with women (MSW), and women who had sex with men (WSM)—Medical Monitoring Project, Georgia, 2015-2019

Behavior	MSM			MSW			WSM		
	No.	% ^b	95% CI ^c	No. ^a	% ^b	95% CI ^c	No.	% ^b	95% CI ^c
Engaged in any high-risk sex^d									
Yes	38	7.6	5.1–10.1	-	-	-	19	8.3	4.4–12.3
No	434	92.4	89.9–94.9	192	94.6	90.7–98.6	235	91.7	87.7–95.6
Engaged in any high-risk sex among sexually active persons^d									
Yes	38	10.4	7.0–13.8	-	-	-	19	14.6	7.9–21.2
No	314	89.6	86.2–93.0	104	90.9	84.3–97.5	124	85.4	78.8–92.1
Percentages of sexually-active persons who used a prevention strategy with at least 1 partner									
Sex while sustainably virally suppressed^e									
Yes	207	57.9	52.2–63.6	69	58.8	48.8–68.7	84	55.0	45.9–64.2
No	147	42.1	36.4–47.8	44	41.2	31.3–51.2	59	45.0	35.8–54.1
Condom-protected sex^f									
Yes	241	70.3	65.2–75.5	81	73.4	64.9–82.0	82	56.2	47.0–65.3
No	111	29.7	24.5–34.8	31	26.6	18.0–35.1	60	43.8	34.7–53.0
Condomless sex with a partner on PrEP^g									
Yes	35	9.1	6.0–12.2	-	-	-	-	-	-
No	317	90.9	87.8–94.0	112	99.4	98.2–100.0	140	97.8	95.3–100.0
Sex with an HIV positive partner^h									
Yes	245	68.8	63.5–74.2	35	27.9	19.5–36.4	41	28.4	20.1–36.7
No	109	31.2	25.8–36.5	78	72.1	63.6–80.5	102	71.6	63.3–79.9
Total	478	100		202	100		256	100	

Abbreviations: CI, confidence interval; PrEP, preexposure prophylaxis.

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. Persons who reported no anal, vaginal or oral sex in the 12 months before the interview were categorized according to self-reported sexual orientation. This table does not include information on women who had sex with women only, women who had sex with transgender persons only, or men who had sex with transgender persons only.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

^d Vaginal or anal sex with at least 1 HIV-negative or unknown status partner while not sustainably virally suppressed, a condom was not used, and the partner was not on PrEP. PrEP use was only measured among the 5 most recent partners.

^e HIV viral load <200 copies/mL documented in the medical record at every measure in the past 12 months before the interview.

^f Condoms were consistently used with at least 1 vaginal or anal sex partner.

^g At least 1 HIV-negative condomless-sex partner was on PrEP. PrEP use was only measured among the 5 most recent partners and was reported by the HIV-positive partner.

^h Sex with at least 1 HIV-positive partner.

Table 18. Met and unmet needs for ancillary services during the 12 months before the interview—Medical Monitoring Project, Georgia, 2015-2019

	Persons who received services			Persons who needed but did not receive services by time of interview		
	No. ^a	% ^b	95% CI ^c	No. ^a	% ^b	95% CI ^c
Dental care						
Yes	475	49.5	46.0–53.0	305	31.2	28.1–34.4
No	485	50.5	47.0–54.0	655	68.8	65.6–71.9
HIV case management services						
Yes	457	45.6	42.1–49.0	96	10.2	8.1–12.4
No	501	54.4	51.0–57.9	862	89.8	87.6–91.9
Medicine through ADAP						
Yes	434	41.6	38.2–45.0	33	3.9	2.4–5.4
No	517	58.4	55.0–61.8	918	96.1	94.6–97.6
Supplemental Nutrition Assistance Program (SNAP) or Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)						
Yes	379	38.0	34.6–41.3	149	15.5	13.0–18.0
No	581	62.0	58.7–65.4	811	84.5	82.0–87.0
Professional help remembering to take HIV medicines on time or correctly (adherence support services)						
Yes	346	33.9	30.7–37.2	-	-	-
No	610	66.1	62.8–69.3	950	99.5	99.0–99.9
Mental health services						
Yes	252	26.0	22.9–29.0	98	9.9	7.9–11.9
No	707	74.0	71.0–77.1	861	90.1	88.1–92.1
Meal or food services^d						
Yes	158	15.1	12.8–17.5	109	11.4	9.2–13.6
No	802	84.9	82.5–87.2	851	88.6	86.4–90.8
Transportation assistance						
Yes	173	16.9	14.3–19.5	104	10.6	8.4–12.7
No	786	83.1	80.5–85.7	855	89.4	87.3–91.6
HIV peer group support						
Yes	107	10.0	8.0–11.9	72	6.9	5.3–8.6
No	849	90.0	88.1–92.0	884	93.1	91.4–94.7
Patient navigation services						
Yes	107	9.5	7.7–11.3	45	4.6	3.1–6.0
No	849	90.5	88.7–92.3	911	95.4	94.0–96.9
Shelter or housing services						
Yes	83	7.9	6.1–9.7	137	13.1	10.9–15.3
No	876	92.1	90.3–93.9	822	86.9	84.7–89.1

Drug or alcohol counseling or treatment

Yes	46	4.7	3.2–6.2	23	2.4	1.4–3.4
No	913	95.3	93.8–96.8	936	97.6	96.6–98.6

Domestic violence services

Yes	-	-	-	-	-	-
No	953	99.0	98.1–99.9	956	99.7	99.4–100.0
Total	976	100		976	100	

Abbreviations: CI, confidence interval; ADAP, AIDS Drug Assistance Program.

Note. Persons could report receiving or needing more than 1 service. Numbers might not add to total because of missing data.

Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with an absolute confidence interval width ≥ 0.30 and values with an absolute confidence interval width of between 0.05 and 0.30 and a relative confidence interval width $>130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

^d Includes services such as soup kitchens, food pantries, food banks, church dinners, or food delivery services.

Table 19. Intimate partner violence and sexual violence—Medical Monitoring Project, Georgia, 2015-2019

	No. ^a	% ^b	95% CI ^c
Was ever slapped, punched, shoved, kicked, choked or otherwise physically hurt by a romantic or sexual partner			
Yes	241	25.1	22.0–28.1
No	713	74.9	71.9–78.0
Was slapped, punched, shoved, kicked, choked or otherwise physically hurt by a romantic or sexual partner, past 12 months			
Yes	37	3.8	2.5–5.2
No	916	96.2	94.8–97.5
Was ever threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex			
Yes	147	16.0	13.4–18.7
No	809	84.0	81.3–86.6
Was threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex, past 12 months			
Yes	-	-	-
No	948	99.3	98.8–99.9
Total	976	100	

Abbreviation: CI, confidence interval.

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

Table 20. Prevention services received during the 12 months before the interview—Medical Monitoring Project, Georgia, 2015-2019

	No. ^a	% ^b	95% CI ^c
One-on-one HIV/STD risk-reduction conversation with physician, nurse, or other health care worker			
Yes	543	56.5	53.1–59.9
No	418	43.5	40.1–46.9
One-on-one HIV/STD risk-reduction conversation with outreach worker, counselor, or prevention program worker			
Yes	306	31.1	27.9–34.3
No	655	68.9	65.7–72.1
Attended an organized HIV/STD risk-reduction session involving a small group of people			
Yes	116	11.4	9.3–13.5
No	846	88.6	86.5–90.7
Received free condoms			
Yes	478	50.0	46.5–53.4
No	485	50.0	46.6–53.5
Total	976	100	

Abbreviation: CI, confidence interval.

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

Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥ 0.30 , “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size < 30 , values with an absolute CI width ≥ 0.30 , and values with an absolute CI width between 0.05 and 0.30 and a relative CI width $> 130\%$ are marked with an asterisk and should be interpreted with caution.

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

Table 21. National indicators: homelessness, HIV stigma, and high-risk sex—Medical Monitoring Project, Georgia, 2015-2019

	Homeless in the 12 months preceding the interview among persons receiving HIV care in the			HIV stigma ^b			Engaged in any high-risk sex ^c			Engaged in any sex without using an HIV prevention strategy in the 12 months before interview ^d		
	No. ^d	Row % ^e	95% CI ^f	No. ^d	Row media	Interquartile range	No. ^d	Row % ^e	95% CI ^f	No. ^d	Row % ^e	95% CI ^f
Gender												
Male	61	8.3	6.2–10.4	670	33.6	31.0–36.2	265	26.9	24.3–29.5	46	6.9	4.8–9.0
Female	17	6.4	3.2–9.5	251	43.9	40.1–47.7	104	36.8	31.2–42.5	19	8.1	4.3–12.0
Transgender ^g	-	-	-	17	54.0*	38.0–70.0	9	62.2*	36.1–88.3	-	-	-
Sexual orientation												
Lesbian or gay	26	6.0	3.7–8.4	374	32.3	29.2–35.5	155	25.4	21.5–29.2	32	8.2	5.2–11.1
Heterosexual or straight	33	7.7	5.0–10.4	441	40.2	37.1–43.2	171	35.1	30.4–39.8	26	6.7	3.9–9.4
Bisexual	17	15.3	8.0–22.6	96	34.1	26.7–41.5	38	25.4	20.2–30.6	-	-	-
Other sexual orientation	-	-	-	23	51.4*	35.6–67.2	11	45.8*	20.5–71.1	-	-	-
Race/ethnicity												
American Indian/Alaska Native	-	-	-	2	62.5	62.5–65.9	-	-	-	-	-	-
Asian	-	-	-	1	55.0	55.0–55.0	-	-	-	-	-	-
Black/African American	65	9.2	7.0–11.5	686	36.7	34.0–39.3	284	30.1	26.4–33.8	41	6.1	4.1–8.1
Hispanic/Latino ^h	-	-	-	42	36.7*	19.3–54.0	16	29.6*	0.0–62.7	-	-	-
Native Hawaiian/Other Pacific Islander	-	-	-	1	37.5	37.5–37.5	-	-	-	-	-	-
White	-	-	-	159	36.4	32.2–40.6	57	25.8	20.6–31.1	-	-	-
Multiple races	-	-	-	48	47.9*	32.2–63.6	21	45.0*	22.2–67.7	-	-	-
Age at time of interview (yr)												
18–29	16	14.2	7.4–20.9	110	39.3	34.7–43.9	51	37.4	30.7–44.1	19	16.0	8.9–23.0
30–39	27	12.4	7.8–16.9	191	39.2	35.8–42.5	82	33.1	25.8–40.3	22	11.0	6.3–15.7
40–49	-	-	-	205	36.1	30.9–41.3	78	27.2	20.5–33.9	-	-	-

≥50	26	6.1	3.7–8.5	433	34.7	31.0–38.3	167	26.8	23.4–30.1	15	3.8	1.7–5.9
Total	82	8.2	6.4–10.0	939	37.2	34.9–39.5	378	29.5	26.5–32.5	66	7.2	5.3–9.0

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

Note. Numbers might not add to total because of missing data.

Excluded are estimates with a coefficient of variation ≥0.30, estimates based on a denominator sample size <30, “don’t know” responses, and skipped (missing) responses. Estimates with an absolute CI width ≥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.

a Living on the street, in a shelter, in a single-room–occupancy hotel, or in a car.

b Ten-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma since HIV diagnosis, current disclosure concerns, current negative self-image, and current perceived public attitudes about people living with HIV.

c Ten-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma during the past 12 months: personalized stigma since HIV diagnosis, current disclosure concerns, current negative self-image, and current perceived public attitudes about people living with HIV.

d Vaginal or anal sex with at least 1 partner of HIV-negative or unknown status while not having sustained viral load suppression, a condom was not used, and the partner was not on PrEP. PrEP use was only measured among the 5 most recent partners.

e Numbers are unweighted.

f Percentages are weighted percentages.

g CIs incorporate weighted percentages.

h Persons were classified as transgender if sex 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.

Appendix: Methods and Definitions

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]. 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. An analysis carried out in 2014 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 in 2010 (the most recent year for which prevalence estimates were available at the time). Consequently, we concluded that the selected sample of states was still sufficiently representative of the population of persons with diagnosed HIV and that 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, the year prior to the data collection cycle. This national data set was divided into 24 separate frame files according to the most recently reported residence information, with 1 frame for each of the 23 project areas and 1 residual file for all non-MMP project areas. Individuals were eligible for sampling if their vital status was alive, they were aged ≥ 18 years, and they were residents of the United States. Records in the NHSS are deidentified (under provisions of CDC's Assurance of Confidentiality) and include only limited information about where the person currently resides, lacking the more exact address information contained in local case surveillance systems. CDC staff drew simple random samples from the 23 project area frame files, and 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.

Nonresponse Analysis and Weighting

Data used to generate national estimates were weighted for the probability of selection based upon known probabilities of selection of states and individuals within states. In addition, data were weighted to adjust for nonresponse by using predictors of response, including sex, race/ethnicity, age of most recent contact information, transmission category, and the person's receipt of care as documented by laboratory test results in NHSS records. In 2016, frame data extracted from NHSS provided information for all sampled persons in MMP, regardless of response to the interview or from the medical record abstraction. These data provided descriptive information about all sampled persons for assessing how person characteristics were associated with nonresponse and were the source of data used for nonresponse analysis and weighting.

Eligibility and Response Classifications

Persons were eligible for participation if, as of the sampling date, they had received a diagnosis of HIV, were aged ≥ 18 years, alive, and 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 in accordance with standard formulas [2].

Weighting Overview

For the 2015-2019 MMP cycles, sets of weights at the national level of analysis were produced independently of the local levels of analysis. Base weights were applied, and

statistical adjustments were then made for multiplicity and nonresponse at the person level. These nonresponse adjustments distributed the base weights of nonresponding persons to responding persons, so that the sum of the adjusted weights equaled the sum of the base weights. After adjusting for nonresponse, the weights were then poststratified to population totals from the NHSS frame. Extreme weights were trimmed and the weights were adjusted to the same population totals. For the weighting process, an updated sampling frame was created by returning to the source of surveillance records approximately a year later, during which time additional information may have become available for persons reported to NHSS and additional diagnoses may have been reported. This updated frame added to the frame all records that would have been eligible if their information had met the inclusion criteria; primarily, these were diagnoses that occurred during the year prior to the MMP sampling date (for the 2019 cycle, December 31, 2018), but had not yet been reported on the date the initial sample was drawn. Additionally, some persons were found to have had multiple records pertaining to them at the time of sampling, which 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.

Adjustments for unequal selection probabilities

The base weight was the inverse probability of selection for the person, which varied by 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 had no effect on the national weights, but did affect the project area weight totals, increasing some slightly 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 when the original frame was compared to the updated frame. This factor, which accounts for some persons' multiple opportunities for being sampled, was capped at 2.0 and was applicable for only 84 persons.

Adjustments for nonresponse

A nonresponse adjustment factor was then applied to the base weight. This factor makes use of information available for every sampled case from the NHSS frame data: personal demographics, HIV exposure category, laboratory data, and diagnosis data. Definitions of weighting classes were based on variables that were determined in bivariate analyses to be significantly related to response at the national or project area level. For the national adjustment factor, weighting classes were based on variables related to response: sex at birth, age of most recent contact information, and the person's frequency of receipt of care (as indicated by NHSS records). For local project area data, the factors used for this adjustment varied, depending on the results of bivariate analyses. Within weighting classes, the adjustment 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.

Poststratification

The updated sampling frame provided information on the size and characteristics of the population with diagnosed HIV, which was used for poststratification to known distributions. A count of records on this updated frame provided an updated total population size estimate. Poststratifying to this total forced the sample-based estimate of population size to conform and corrected for late reports. This adjustment was performed within classes defined by key demographics (age, race/ethnicity, and gender), so that the weight sum was preserved in each class.

Trimming

After poststratification, the need for trimming the adjusted weights, so as not to inflate variance, was assessed. Where the design effect due to weighting (measured as $1 + CV^2$, where CV is the coefficient of variation of the weights) exceeded 1.75, we capped the weights at the median weight plus 4 times the interquartile range of the weights, then redistributed the excess to preserve the weight total. This was implemented in 4 project areas, but was not needed for national weights. The effect of other weighting adjustments, however, reduced weight totals through the exclusion of sampled persons found to be ineligible, while approximately maintaining the proportional distributions of the factors used in the poststratification.

Design variables and variance estimation

Nationally, design variables indicating strata and cluster membership for each participating person accounted for the sample design. Many states were sampled with certainty, because of their higher AIDS prevalence, and each of these was defined as its own stratum. Elsewhere, strata were created by grouping 2 to 3 states (PSUs in the stratified PPS design) that had similar selection probabilities.

Multiple project areas within certainty states were effectively substrata, and each project area remained its own stratum. For certainty PSUs, the participant was the cluster. For the strata composed of noncertainty states, the state was the cluster. For local estimates, variance estimation was conditional on the initial sampling of states as PSUs, meaning that this stage of sampling was ignored. Participants were treated as having come from a simple random sample with replacement, although the various adjustment factors induced unequal weights.

DEFINITIONS

Sociodemographic Characteristics

- **Gender:** Categories were male, female, and trans-gender. Participants were classified as transgender if reported sex at birth and current gender as reported by the participant were not the same or if the participant answered “transgender” to the interview question regarding self-identified gender.
- **Health insurance, including coverage for antiretroviral therapy (ART) medications:** Participants were asked whether they had health insurance or coverage for ART medications during the 12 months before the interview. Responses to these questions were combined and categorized as private health insurance, Medicaid, Medicare, Ryan White HIV/AIDS Program, Tricare/ CHAMPUS and Veterans Administration coverage, insurance classified as other public health insurance, and unknown insurance. Participants could select more than 1 response for health insurance, including coverage for ART medications.
- **Federal poverty guidelines:** Participants were asked about their combined monthly or yearly household income (in US\$) from all

sources during the 12 months before the 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 2015 guidelines [3] were used for participants interviewed in 2016, and the 2018 guidelines [4] were used for persons interviewed in 2019. 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. Participants were asked to specify the range of their income, and household income was assumed to be the midpoint of the income range.

Clinical Characteristics

- **CDC stage of disease classification for HIV infection:** Defined according to CDC’s 2014 revised surveillance case definition for HIV infection [5]. Information from NHSS was used to determine the most advanced HIV disease stage ever reached by participants.

Use of Health Care Services

- **Outpatient HIV medical care:** Defined as documentation of any 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. 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 the interview, of any of the following medications: abacavir, amprenavir, atazanavir, cobicistat, darunavir, delavirdine, didanosine, dolutegravir, efavirenz, elvitegravir, emtricitabine, enfuvirtide, etravirine, fosamprenavir, indinavir, lamivudine, 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.

• ***Pneumocystis pneumonia* (PCP) prophylaxis:** Defined as documentation in the medical record that prophylaxis for PCP was prescribed among persons with a CD4 count of <200 cells/ μ L in the 12 months before the interview [6]. 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 this was specifically stated in the medical record or no length of time was specified for the course of treatment.

• ***Mycobacterium avium* complex (MAC) prophylaxis:** Defined as documentation in the medical record that prophylaxis for MAC disease was prescribed among persons with a CD4 count of <50 cells/ μ L in the 12 months before the interview [6]. Persons prescribed regimens typically given as MAC prophylaxis (azithromycin with or without ethambutol

and/or rifabutin, clarithromycin with or without ethambutol and/or rifabutin, and rifabutin with or without azithromycin or azithromycin along with ethambutol) were not presumptively categorized as having received MAC prophylaxis unless this was specifically stated in the medical record or no length of time was specified for the course of treatment.

• **Influenza vaccination:** Participants were asked whether they had received seasonal influenza vaccine during the 12 months before the interview.

• ***Neisseria gonorrhoeae* testing:** Defined as documentation in the medical record, during the 12 months before the interview, of a result from culture, Gram stain, enzyme immunoassay (EIA), nucleic acid amplification test (NAAT), or nucleic acid probe.

• ***Chlamydia trachomatis* testing:** Defined as documentation in the medical record, during the 12 months before the interview, of a result from culture direct fluorescent antibody (DFA), EIA or enzyme-linked immunoassay (ELISA), NAAT, or nucleic acid probe.

• **Syphilis testing:** Defined as documentation in the medical record, during the 12 months before the 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.

Self-reported ART Medication Use and Adherence

• **ART adherence:** Participants were asked about their adherence to ART in the 30 days before the interview using questions from a 3-item scale developed by Wilson and colleagues [7]. Participants 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 the interview.

Depression and Substance Use

• **Depression:** Participants 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 [8]. 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) [9], 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 participant 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. For other depression, a participant must have experienced 2 to 4 symptoms at least "more than half the days," and one of the symptoms must be anhedonia or feelings of hopelessness. 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 ≥ 10 .

• **Anxiety:** Participants 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 [10]. 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 is 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 [9]. 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 ≥ 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:** Participants were asked about alcohol use during the 30 days and the 12 months before the 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 ≥ 5 drinks in a single sitting for men and ≥ 4 drinks in a single sitting for women in the past 30 days.

Sexual Behavior

• **Prevention modalities:** Reported behaviors that decrease the likelihood of HIV transmission to a sexual partner, including

- Sex while sustainably virally suppressed: Vaginal or anal sex and the person's HIV viral load was documented in the medical record as < 200 copies/mL at every measure in the past 12 months before the 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 HIV-negative

condomless-sex partner was on PrEP. PrEP use was only measured among the 5 most recent partners and was reported by the HIV-positive partner.

- Sex with an HIV-positive partner: Vaginal or anal sex with at least 1 HIV-positive partner.

• **High-risk sex:** Vaginal or anal sex with at least 1 HIV-negative or unknown status partner while not sustainably virally suppressed, when a condom was not used, and the partner was not known to be taking PrEP.

Met and Unmet Needs for Ancillary Services

• **Met need:** Defined as an ancillary service (e.g., HIV case management service, dental care, mental health service) received during the 12 months before the interview.

• **Unmet need:** Defined as an ancillary service that the participant reported as needed, but not received, during the 12 months before the interview.

Division of HIV/AIDS Prevention National Indicators

Measures in this section are used by CDC's Division of HIV/AIDS Prevention for national monitoring and evaluation purposes.

• **Homelessness among persons receiving HIV care:** Defined as living on the street, in a shelter, in a single-room-occupancy hotel, or in a car at any time during the 12 months before the interview among person who received any outpatient HIV medical care in the 12 months before the interview.

•**HIV stigma:** Defined as the 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, disclosure concerns, negative self-image, and perceived public attitudes about people with HIV [11].

•**High-risk sex:** See “Sexual Behavior” section.

ETHICS STATEMENT

In accordance with guidelines for defining public health research [12], CDC determined MMP was public health surveillance used for disease control, program, or policy purposes. Local institutional review board approval was obtained at participating states and territories when required. Informed consent was obtained from all interviewed participants.

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HIV/AIDS RESOURCES

Georgia Department of Public Health

<https://dph.georgia.gov/health-topics/office-hiv aids>

Medical Monitoring Project

<https://www.cdc.gov/hiv/statistics/systems/mmp/index.html>

Centers for Disease Control and Prevention

<https://www.cdc.gov/hiv/default.html>