Behavioral and Clinical Characteristics of People Living with Diagnosed HIV in California 2020

California Department of Public Health Center for Infectious Diseases Office of AIDS Medical Monitoring Project





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1. Background

The California Medical Monitoring Project (MMP) is an HIV surveillance activity that collects information about behavioral and clinical characteristics from Californians living with diagnosed HIV. The California MMP is part of a cross-sectional, nationally representative, complex sample survey that the Centers for Disease Control and Prevention (CDC) funds in multiple project areas throughout the United States and Puerto Rico [1]. Los Angeles and San Francisco Counties conduct MMP surveillance separately in their jurisdictions and the California Department of Public Health Office of AIDS (OA) conducts MMP surveillance throughout the rest of California.

In 2009, the CDC recognized that there was a lack of representative data about people living with HIV and implemented MMP. Through 2014, MMP used a probability sample of people living with HIV who were receiving HIV medical care [1]. The CDC revised the sampling method in 2015 to include all people living with diagnosed HIV, regardless of whether they were in care. Using the revised sampling method, OA behavioral and clinical surveillance staff collected the data presented in this report between June 2019 and May 2020. The OA MMP staff locate, recruit, and conduct interviews by phone or in-person with sampled participants and abstract information from their medical records from the two years prior to the interview date.

At the national level, MMP data complement National HIV Surveillance System (NHSS) data by providing detailed information about demographics, general health, HIV care, ancillary service use, sexual behaviors, mental health, substance use, discrimination, and HIV stigma among people living with diagnosed HIV (PLWDH). The MMP estimate of percentage of PLWDH who experienced homelessness in the past year serves as a progress indicator for the National HIV/AIDS Strategy (NHAS) for the United States [2]. Experience of HIV stigma among PLWDH, which MMP measures, is under development as an NHAS progress indicator [3].

As of December 31, 2020, 139,703 PLWDH were residing in California, a prevalence of 348.1 per 100,000 population [5]. The rate of new HIV diagnoses in 2020 was 9.9 per 100,000 population, reflecting a 24.4% decrease from 13.1 per 100,000 population in 2016. About 72% of PLWDH in California were receiving HIV care in 2020 and 63.0% had achieved viral suppression. California's Integrated Plan objectives include increasing the percentage of PLWDH in care to a minimum of 90% and the rate of viral suppression to at least 80% [4].

2. Methods

MMP is a cross-sectional survey that, since 2015, has used stratified, 2-stage sampling to achieve a nationally representative sample of PLWDH in the United States and Puerto Rico [1]. In the first sampling stage, 23 project areas from 16 states and Puerto Rico were selected, including Los Angeles, San Francisco, and the California Project Area. The second sampling stage is carried out annually to select adults ages 18+ with diagnosed HIV infection from the NHSS. This report includes California Project Area MMP data from the 2020 annual cycle. The sample for each annual cycle is drawn on December 31 of the prior year, data collection begins on June 1, and all cycle activities are completed by May 31 of the following year. For example, the sample for the 2020 cycle was drawn on December 31, 2019, data collection began on June 1, 2020, and the cycle ended on May 31, 2021.

Eligibility

People living in California (excluding Los Angeles and San Francisco) who, as of December 31 of the prior year, had received an HIV diagnosis and were at least 18 years old were eligible to be sampled for the California Project Area MMP.

Recruitment and Informed Consent

Staff contacted sampled people by phone and mailed letters. At both the national and local levels, MMP operated as a surveillance activity under a non-research determination. All MMP participants provided informed consent prior to the interview and signed a release of information granting access to their medical records.

Interviews

Trained Behavioral and Clinical Surveillance (BCS) staff conducted computer-assisted, structured interviews with participants either in-person or by phone. Interviews lasted approximately 1 hour and gathered information on participant demographics, clinical characteristics, health care and auxiliary service use, sexual behaviors, mental health, and substance use. In-person interviews took place at participants' homes, private areas of clinics and doctor's offices, and private spaces within community-based settings such as public library conference rooms. Participants who completed interviews received tokens of appreciation in the form of \$50 chain store gift cards.

Medical Record Abstraction

Staff obtained interview participants' medical records for the two years prior to the interview. Trained BCS staff abstracted information on participant demographics, HIV diagnosis and clinical care, AIDS-related diagnoses, antiretroviral and other medication prescriptions, comorbidities, health care use, and HIV-related laboratory test results.

Data Management and Analysis

BCS staff encrypted computer-assisted interview files and transferred them to CDC using a secure data portal. BCS staff entered medical record abstraction (MRA) data into a secure, encrypted online database accessible to CDC. Staff at CDC cleaned the data and developed statistical weighting variables before returning interview and MRA datasets to OA through secure file transfer.

Estimates presented in this report are weighted to account for probability of selection, nonresponse, and multiplicity (rare instances in which a sampled participant has one or more duplicate NHSS records) [1]. Estimates with a coefficient of variation ≥ 0.30 , a denominator sample size <30, an absolute CI width ≥ 0.30 , or an absolute CI width between 0.05 and 0.30 and a relative CI width $\geq 130\%$ are marked with an asterisk and should be interpreted with caution. Percentages may not sum to 100 and frequency numbers may not sum to the total N due to rounding and missing data in some categories.

Participant Response Rates

For each annual cycle, the California Project Area receives a sample of 500 PLWDH. In 2020, 204 (40.8%) sampled persons completed interviews. Tables and text in this report refer to weighted 2020 MMP data unless otherwise noted. Appendix tables contain estimates for 2016, 2017, 2018, 2019, and 2020 data individually.

2.1. Participant Response Rates - Medical Monitoring Project, CA, 2020				
Year	# Sampled	# Participating	% Participating	
2020	500	204	40.8%	

3. Population Characteristics

Most California Project Area PLWDH were men (86%), 13% were women, and 1% were transgender (Table 3.1). More than half reported being lesbian or gay (64%), 25% heterosexual or straight, and 8% bisexual, and 3% a sexual orientation other than lesbian, gay, heterosexual, straight, or bisexual. About 43% were Latinx, 34% were non-Latinx white, 11% were black/African American and 6% reported multiple racial identities. About 7% were Asian, American Indian/Alaska Native or Native Hawaiian/other Pacific Islander.

3.1. Demographics - Medical Monitoring Project, CA, 2020

	Number ^a	Percentage ^b	95% Cl ^c
Gender			
Male Female Transgender ^d	172 30 <5 obs.	86.4% 12.8% 1.0%*	81.7–91.0 8.2–17.3 0.0–2.1
Sexual Orientation			
Lesbian or gay Heterosexual or straight Bisexual Other	123 51 17 6	63.9% 24.6% 8.3%* 3.2%*	57.1–70.7 18.5–30.7 4.4–12.2 0.7–5.7
Race/Ethnicity			
American Indian/Alaska Native Asian Black/African American Latinx ^e Native Hawaiian/Other Pacific Islander White Multiple races	<5 obs. 10 26 84 <5 obs. 69 12	1.0%* 5.2%* 11.4%* 42.6% 0.4%* 33.5% 5.8%*	0.0-2.5 2.1-8.4 7.1-15.7 35.7-49.6 0.0-1.1 26.9-40.1 2.5-9.1
Age at Time of Interview (yr)			
18–24 25–34 35-44 45-54 ≥55	5 29 31 62 77	2.6%* 13.7%* 15.4% 30.0% 38.3%	0.3-4.8 8.9-18.5 10.3-20.4 23.6-36.4 31.5-45.1
Education			
Less than high school High school diploma or GED More than high school	23 38 139	11.3%* 19.3% 69.5%	6.8–15.7 13.7–24.9 63.0–76.0

3.1. Demographics - Medical Monitoring Project, CA, 2020(cont.)			
	Number ^a	Percentage ^b	95% Cl ^c
Country or Territory of Birth			
United States or U.S. territory Foreign born	147 54	72.1% 27.9%	65.7–78.5 21.5-34.3
Time Since HIV Diagnosis (yr)			
<5	36	17.8%	12.4–23.2
5–9	30	14.4%	9.4–19.3
≥10	137	67.8%	61.3–74.4
TOTAL	204	100.0%	

Abbreviations: CI, confidence interval; GED, general educational development. Note: Estimates with a coefficient of variation \geq 0.30, a denominator sample size <30, an absolute CI width \geq 0.30, or 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 People 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 Latinx people might be of any race. Persons are classified in only one race/ethnicity category.

The majority (68%) were ages 45 and older and about 16% were under the age of 35. About one quarter (28%) reported having been born in a country other than the United States. The majority (68%) had been living with diagnosed HIV for 10 or more years at the time of the interview, 14% for five to nine years, and 18% for fewer than five years.

In the 12 months prior to the interview, 6% of PLWDH had experienced homelessness, 12% had gone without food due to lack of money, and 22% were living at or below the federal poverty threshold (Table 3.2). Thirty-four percent reported any disability and about 17% received social security disability insurance (SSDI). More than half (69%) were employed or retired and 30% were unemployed. Over half (60%) reported a combined yearly household income below \$40,000.

Almost all (99%) PLWDH reported having health insurance or coverage for medications in the 12 months prior to the interview (Table 3.3). Half received medication coverage through the Ryan White or AIDS Drug Assistance Programs, 46% through Medicaid, 45% through private health insurance, 25% through Medicare, 7% through other public insurance, and 5% through Tricare/ CHAMPUS or the Veterans Administration.

	Number ^a	Percentage ^b	95% Cl ^c
Homeless at Any Time, Past 12 Months ^d			
Yes	13	6.4%*	3.0–9.9
No	188	93.6%	90.1–97.0

3.2. Characteristics, Past 12 Months - Medical Monitoring Project, CA, 2020

3.2. Characteristics, Past 12 Months - Medical Monitoring Project, CA, 2020 (cont.)
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	Number ^a	Percentage ^b	95% Cl ^c
Incarcerated > 24 Hours, Past 12 Months			
Yes	5	2.3%*	0.3–4.4
No	196	97.7%	95.6–99.7
Any Disability ^e			
Yes	68	33.5%	26.8–40.2
No	132	66.5%	59.8–73.2
Received Supplemental Security Income	(SSI)		
Yes	25	12.2%*	7.6–16.8
No	174	87.8%	83.2–92.4
Received Social Security Disability Insur	ance (SSDI)		
Yes	33	16.6%	11.3–21.9
No	166	83.4%	78.1–88.7
Went Without Food Due to Lack of Money			
Yes	23	11.6%*	7.0–16.1
No	177	88.4%	83.9–93.0
Employment Status ^r			
Employed	108	54.3%	47.2–61.4
Unemployed	60	30.4%	23.9–36.9
Student Detine d	<5 obs.	1.0%*	0.0-2.3
Retired	29	14.3%*	9.4–19.2
Combined Yearly Household Income (U.S.			
0–19,999	63	33.3%	26.5-40.2
20,000–39,999 40,000–74,999	50 28	27.1% 14.9%*	20.6–33.7 9.7–20.0
≥75,000	48	24.7%	18.4–30.9
Poverty Guidelines ^h	-	/0	
Above poverty threshold	147	77.9%	71.9–84.0
At or below poverty threshold	42	22.1%	16.0-28.1
· ·			
TOTAL	204	100.0%	

Abbreviations: CI, confidence interval; U.S.\$, U.S. dollar. ^a Numbers are unweighted. ^b Percentages are weighted percentages. ^c CIs incorporate weighted percentages. ^d Living on the street, in a shelter, in a single-room–occupancy hotel, or in a car. ^e Includes physical, mental, and emotional disabilities. ^f Employed includes employed for wages, self-employed, or homemaker. ^g Income from all sources, before taxes, in the last calendar year. ^h Poverty guidelines as defined by Federal Health and Human Services.

3.3. Health Insurance Coverage, Past 12 Months - Medical Monitoring Project, CA, 2020

	Numberª	Percentage ^b	95% Cl ^c
Health Insurance or Coverage for Medica	tions ^d		
Yes	195	99.6%	98.9-100.0
No	<5 obs.	0.4%*	0.0–1.1
Type of Health Insurance or Coverage for	r Medications:		
Ryan White or ADAP			
Yes	96	50.3%	43.1–57.5
No	98	49.7%	42.5–56.9
Medicaid			
Yes	88	45.5%	38.3–52.6
No	107	54.5%	47.4–61.7
Private Health Insurance			
Yes	89	45.1%	37.9–52.3
No	104	54.9%	47.7–62.1
Medicare			
Yes	49	25.4%	19.1–31.7
No	143	74.6%	68.3–80.9
Other Public Insurance			
Yes	12	6.6%*	3.0–10.3
No	179	93.4%	89.7–97.0
Tricare/CHAMPUS or Veterans Adminis	stration		
Yes	10	4.7%*	1.7–7.7
No	180	95.3%	92.3–98.3
Insurance Type Unknown ^e			
Yes	<5 obs.	1.1%*	0.0-2.7
No	190	98.9%	97.3-100.0
TOTAL	204	100.0%	

Abbreviations: CI, confidence interval; CHAMPUS, Civilian Health and Medical Program of the Uniformed Services; ADAP, AIDS Drug Assistance Program. Note: Estimates with a coefficient of variation ≥ 0.30 , a denominator sample size <30, an absolute CI width ≥ 0.30 , or 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 select more than 1 response for health insurance or coverage for medications (including antiretroviral medications). ^e Unknown insurance type means that the person had insurance or coverage for medications), but the type of insurance or coverage could not be determined.

Behavioral and Clinical Characteristics of People Living with Diagnosed HIV in California, 2020

4. Clinical Characteristics and Health Care Services Use

More than half (54%) had clinical characteristics consistent with HIV infection, stage 3 (AIDS) in the 12 months prior to the interview, defined as documentation of an AIDS-defining condition or either a CD4 count of <200 cells/µL or a CD4 percentage of total lymphocytes of <14 (Table 4.1). About two-thirds (68%) had achieved sustained viral suppression (all past

4.1. HIV Disease Stage, CD4+ Lymphocyte Counts, and Viral Suppression, Past 12 Months - Medical Monitoring Project, CA, 2020

	Number ^a	Percentage ^b	95% Cl ^c
HIV Infection Stage 3 (AIDS) ^d			
Yes No	110 94	54.2% 45.8%	47.2–61.2 38.8–52.8
Geometric Mean CD4 Count (cells/µL)			
0–199 200–349 350–499 ≥500	7 16 20 114	4.3%* 10.9%* 12.8%* 72.0%	1.1–7.5 5.8–16.0 7.5–18.2 64.8–79.2
Lowest CD4 Count (cells/µL), Past 12 Months	5		
0-49 50-199 200-349 350-499 ≥500	<5 obs. 6 19 25 105	1.2%* 3.6%* 12.9%* 16.3%* 66.0%	0.0–2.9 0.7–6.5 7.4–18.3 10.4–22.2 58.4–73.6
Most Recent Viral Load Result			
Virally suppressed Not virally suppressed (detectable, ≥200 copies/mL, or missing/unknown)	146 58	71.6% 28.4%	65.2–77.9 22.1–34.8
Sustained Viral Suppression			
Viral suppression sustained Any viral load ≥200 copies/mL or missing unknown	138 66	67.8% 32.2%	61.3–74.4 25.6–38.7
TOTAL	204	100.0%	

Abbreviations: CD4, CD4 T-lymphocyte count (cells/µL); Cl, confidence interval. Source of disease stage information: CDC. <u>Revised surveillance case definition for HIV infection–United States, 2014</u>. (https://stacks.cdc.gov/view/cdc/25361). Accessed February 9, 2022. Note: CD4 counts and viral load measurements are from medical record abstraction. ^aNumbers are unweighted. ^b Percentages are weighted percentages. ^cCls incorporate weighted percentages. ^dHIV 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. 12-month viral load measurements documented undetectable or <200 copies/mL). Past 12-month HIV care retention was seen in 71% of PLWDH and

54% had been retained in HIV care for 24 months prior to the interview (Table 4.2).

4.2. Receipt and Quality of HIV Care, Past 12 Months - Medical Monitoring Project, CA, 2020

	Number ^a	Percentage ^b	95% Cl ^c
Ever Received Outpatient HIV Care ^d			
Yes	204	100.0%	100.0-100.0
Received Outpatient HIV Care, Past 12 Mc	onths ^d		
Yes	195	96.0%	93.3–98.7
Received Outpatient HIV Care, Past 24 Mc	onths ^d		
Yes	202	99.1%	97.8–100.0
Retained in Care, Past 12 Months ^e			
Yes	145	71.3%	65.0–77.7
Retained in Care, Past 24 Months ^e			
Yes	111	54.3%	47.3–61.3
Prescribed ART, Past 12 Months ^f			
Yes	179	87.9%	83.3–92.5
Received Influenza Vaccination, Past 12 N			
Yes	153	77.5%	71.5–83.4
TOTAL	204	100.0%	

Abbreviations: CI, confidence interval; ART, antiretroviral therapy; PCP, Pneumocystis pneumonia; MAC, Mycobacterium avium complex; CD4, CD4 T-lymphocyte count (cells/µL). 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. Note: Estimates with a coefficient of variation ≥0.30, a denominator sample size <30, an absolute CI width ≥0.30, or 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.

Nearly all (99.6%) had ever taken antiretroviral medications (ART) and 98% were currently on

ART (Table 4.3).

4.3. Antiretroviral Therapy (ART) Use - Medical Monitoring Project, CA, 2020					
	Number ^a	Percentage ^b	95% Cl ^c		
Ever Taken ART					
Yes No	197 <5 obs.	99.6% 0.4%*	98.8–100.0 0.0–1.2		
Currently Taking ART					
Yes No	194 5	97.7% 2.3%*	96.2–100.0 0.3–4.3		
Reasons for Never Taking ART ^d :					
Health care provider never discussed t	aking ART with pe	rson			
Yes No	 <5 obs.	 100.0%*	 100.0-100.0		
Health care provider said person shou	ld not start taking	ART			
Yes No	 <5 obs.	 100.0%*	 100.0-100.0		
Money or insurance problems					
Yes No	 <5 obs.	 100.0%*	 100.0-100.0		
Person doesn't believe he/she needs ART					
Yes No	<5 obs. 	100.0%* 	100.0-100.0 		
Person thinks ART would make him/her feel sick or harm him/her					
Yes No	 <5 obs.	 100.0%*	 100.0-100.0		
Person decided not to take ART for sor	ne other reason				
Yes No	<5 obs. 	100.0%* 	100.0-100.0 		
Reasons for Not Currently Taking ART, A	mong Those with a	History of ART Use	2 ^d :		
Health care provider never discussed r	estarting ART with	person			
Yes No	<5 obs. <5 obs.	74.3%* 25.7%*	28.0-100.0 0.0-72.0		
Health care provider said person should not take ART					
Yes No	 <5 obs.	 100.0%*	 100.0-100.0		

4.3. Antiretroviral Therapy (ART) Use - Medical Monitoring Project, CA, 2020 *(cont.)*

	Numberª	Percentage ^b	95% Cl ^c
Money or insurance problems			
Yes No	 <5 obs.	 100.0%*	 100.0-100.0
Person doesn't believe he/she needs A	RT		
Yes No	 <5 obs.	 100.0%*	 100.0-100.0
Person thinks ART would make him/he	er feel sick or harm	him/her	
Yes No	 <5 obs.	 100.0%*	 100.0-100.0
Person decided not to take ART for som	ne other reason		
Yes No	<5 obs. <5 obs.	74.3%* 25.7%*	28.0-100.0 0.0-72.0
TOTAL	204	100.0%	

Abbreviation: CI, confidence interval. Note: Estimates with a coefficient of variation ≥ 0.30 , a denominator sample size <30, an absolute CI width ≥ 0.30 , or 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 select more than one response for reasons not taking ART.

Self-reported number of days with at least one missed ART dose in the past 30 days ranged from 0 to eleven or more, with most (86%) reporting 0, 1, or 2 missed doses (Table 4.4). The most commonly cited reasons for the most recent missed ART dose were forgetting to take HIV medicine (71%); change in daily routine or being out of town (40%); falling asleep early or oversleeping (40%); feeling depressed or overwhelmed (19%); and having trouble getting a prescription, a refill, insurance coverage, or paying for HIV medicines (18%).

4.4. Antiretroviral Therapy (ART) Adherence - Medical Monitoring Project, CA, 2020

2020			
	Numberª	Percentage ^b	95% Cl ^c
ART Adherence in the Past 30 Days:			
How many days did you miss at least 1	dose of any of you	r HIV medicines?	
0	123	62.6%	55.6–69.6
1–2	45	23.7%	17.6–29.9
3–5	16	8.7%*	4.5–12.8
6–10	8	4.0%*	1.2–6.8
11+	<5 obs.	1.0%*	0.0–2.3

4.4. Antiretroviral Therapy (ART) Adherence - Medical Monitoring Project, CA, 2020 (cont.)

	Number ^a	Percentage ^b	95% Cl ^c
How well did you do at taking your HIV	medicines in the v	vay you were supp	osed to?
Very poor Poor Fair Good Very good Excellent	 <5 obs. 9 17 45 120	 1.7%* 4.8%* 9.2%* 23.8% 60.6%	 0.0-3.5 1.7-7.9 4.9-13.4 17.6-29.9 53.6-67.7
How often did you take your HIV medic	ines in the way you	u were supposed to	o?
Never Rarely Sometimes Usually Almost always Always	 5 7 54 128	 2.7%* 1.5%* 27.8% 65.4%	 0.3–5.1 1.1–7.1 21.4–34.2 58.6–72.3
How often were you troubled by ART si	de effects?		
Never Rarely About half the time Most of the time Always	142 36 <5 obs. <5 obs. 7	74.4% 18.6% 2.3%* 1.3%* 3.5%*	68.1–80.7 12.9–24.2 0.0–4.6 0.0–2.9 0.9–6.0
Reasons for Last Missed ART Dose ^d :			
Had a problem getting a prescription, a	refill, insurance co	verage, or paying f	for HIV medicines
Yes No	28 130	18.3%* 81.7%	12.1–24.6 75.4–87.9
In the hospital or too sick to take HIV n	nedicines		
Yes No	12 147	8.0%* 92.0%	3.6–12.4 87.6–96.4
Fell asleep early or overslept			
Yes No	64 95	39.9% 60.1%	32.1–47.7 52.3–67.9
Change in your daily routine or were o	ut of town		
Yes No	64 95	40.4% 59.6%	32.6–48.3 51.7–67.4

4.4. Antiretroviral Therapy (ART) Adherence - Medical Monitoring Project, CA, 2020 (cont.)

	Number ^a	Percentage ^b	95% Cl ^c
Had side effects from your HIV medicin	ies		
Yes No	12 147	7.7%* 92.3%	3.4–11.9 88.1–96.6
Felt depressed or overwhelmed			
Yes No	32 127	19.4% 80.6%	13.3–25.6 74.4–86.7
Was drinking or using drugs			
Yes No	20 139	12.4%* 80.6%	7.2–17.7 82.3–92.8
Forgot to take HIV medicines			
Yes No	113 46	70.9% 29.1%	63.7–78.1 21.9–36.3
Did not feel like taking HIV medicines			
Yes No	14 145	8.6%* 91.4%	4.2–12.9 87.1–95.8
TOTAL	204	100.0%	

Abbreviation: CI, confidence interval. Note: Estimates with a coefficient of variation ≥ 0.30 , a denominator sample size <30, an absolute CI width ≥ 0.30 , or 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 People could report more than one reason for last missed ART dose.

Stratification of ART prescription, dose adherence, and sustained viral suppression by

gender, sexual orientation, race/ethnicity, and age group are available in Table 4.5.

4.5. Antiretroviral Therapy (ART) Prescription and Dose Adherence, and Sustained Viral Suppression, by Selected Characteristics - Medical Monitoring Project, CA, 2020 27.8-100.0 100-100.0 67.6-100.0 .5-77.8 28.7-67.0 ĿŪ. 62.2-78.6 53.3-80.0 26.9-76.0 0.0-100.0 <u>ب</u> 4 36.4-75.7 .4-79.0 61.3-74.4 C 59.8-74.1 Ů 54.7-88. 29.3-90. 59.3-81 52.8-81 66.5-82 100-100. 95% Sustained Viral Suppression^b 57. 32. 67.0% 67.6% 70.3% 74.6% 70.4% 66.6% 52.2%* 100%* 67.8% 71.4%* 67.1%* 51.4%* <5 obs. 66.2%* 59.9%* 86.0%* 55.7%* 47.8%* 56.0%* 100%* р% obs. obs. 138 <5 obs. 115 ∞ 9 15 21 34 48 10 2 13 29 86 87 57 °# ŝ Ч С S 4 4 δ 0 0 ŝ \sim 0 ε 0 ŝ 0 3 ~

	Pres	Prescription of ART	ofART	ART I	Dose Ad	ART Dose Adherence ^a
	¥	р%	95% CI [€]	×#	р%	95% CI [€]
Gender						
Male Female Transgender ^f	153 24 <5 obs.	153 88.9% 24 80.0%* <5 obs.100.0%*	84.1–93.7 64.9–95.1 100–100	106 16 <5 obs.	62.0% 53.1%* 58.6%*	54.6–69.5 33.9–72.4 0.0–100.0
Sexual Orientation						
Lesbian or gay Heterosexual or straight Bisexual	110 45 12	88.9% 88.0% 76.2%*	83.1–94.6 78.7–97.4 55.9–96.4	7 8	64.5% 57.1%* 44.5%*	55.9–73.1 42.9–71.4 20.1–68.9
Other	Ś	83.1%*	52.6-100.0	Ŋ	83.8%*	83.8%* 54.5-100.0
Race/Ethnicity						
American Indian/Alaska Native	<5 obs.	<5 obs. 100%*	100-100.0 <5 obs. 47.8%*	<5 obs.	47.8%*	0.0-100.0
Asian	8	80.2%*	55.3-100.0	8	79.7%*	54.5-100.0
Black/African American	21	84.0%* 85.0%	70.7-97.3	10		19.0-58.3
Latinx ^y Native Hawaiian/Other	/2 /E obc	%0.C8 */0001	0.001.001	с 1 , 40	54.8% */0001	45.8-001/ 1001
Pacific Islander	< 005.	_	*00001 .200 C> 0.001-001	-200 C>	100% 66.002	100-100.C
wnite Multiple Races	03 12	91.4% 100%*	0.02-24.00 100-100.0	11	00.9% 93.0%*	79.6–100.0
Age at Time of Interview (yr)	(yr)					
18–29	14	76.3%*	56.1–96.6	9	32.5%*	10.6–54.3
30–39	22	81.8%*	67.5–96.2	11	40.2%*	21.0–59.3
40–49	35	80.7%	68.6–92.9	28	66.0%*	51.3-80.7
≥50	108	93.8%	89.3–98.4	78	68.2%	59.4–77.0
TOTAL	179	87.9%	87.9% 83.3-92.5	123	60.9%	53.9-67.8

Abbreviations: CI, confidence interval. Note: Estimates with a coefficient of variation ≥ 0.30 , a denominator sample size <30, an absolute CI width ≥ 0.30 , or 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 In past 30 days, 100% adherence to ART doses.^b All viral load measurements in the 12 months before the interview documented undetectable or <200 copies/mL.^c Numbers are unweighted.^d Percentages are weighted percentages.^e CIs incorporate weighted percentages.^f People 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 Latinx people might be of any race. Persons are classified in only one race/ethnicity category.

Over half received a syphilis test in 12 months prior to the interview, 49% received a test for

chlamydia, 48% received a test for gonorrhea, and 45% received all three tests (Table 4.6).

4.6. Sexually Transmitted Infection Testing - Medical Monitoring Project, CA, 2020

2020						
	Tot	tal Populat	ion	Sexually Active ^a People Only		
	# ^b	% ^c	95% Cl ^d	# ^b	% ^c	95% Cl ^d
Gonorrhea ^e						
Yes, received test	94	48.1%	41.0–55.2	61	48.8%	39.9–57.7
Chlamydia ^r						
Yes, received test	96	48.9%	41.8–56.0	63	50.1%	41.2–59.0
Syphilis ⁹						
Yes, received test	121	61.4%	54.5–68.3	81	64.4%	55.6–72.9
Gonorrhea, Chlamydia, and Syph	ilis					
Yes, received all 3 tests	88	45.1%	38.0–52.1	58	46.6%	37.7–55.4
Fewer than 3 tests documented	110	54.9%	47.9–62.0	68	53.4%	44.6–62.3
TOTAL	204	100.0%		131	100.0%	

Abbreviations: CI, confidence interval; DFA, direct fluorescent antibody; EIA, enzyme immunoassay; ELISA, enzyme-linked immunoassay; FTA-ABS, fluorescent treponemal antibody absorbed; MHA-TP, microhemagglutination assay for antibody to Treponema pallidum; NAAT, nucleic acid amplification test; RPR, rapid plasma reagin; TP-PA, T. pallidum particle agglutination; TPHA, T. pallidum hemagglutination assay; VDRL, Venereal Disease Research Laboratory. Note: Information on laboratory testing for sexually transmitted diseases was based on medical record abstraction. ^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, EIA, NAAT, or nucleic acid probe. ^f Chlamydia trachomatis testing was defined as a result from culture, DFA, EIA or ELISA, NAAT, or nucleic acid probe. ^g 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.

One or more past-year emergency department visits were reported by 34% of PLWDH (Table 4.7). Twelve percent of PLWDH reported being admitted to the hospital at least once. Eighteen percent of women had been pregnant at least once since being diagnosed with HIV and 82% received a Pap test in the past year (Table 4.8).

4.7. Emergency Department Visits and Hospital Admissions - Medical Monitoring Project, CA, 2020

	Number ^a	Percentage ^b	95% Cl ^c
Number of Visits to Emergency Departme	nt		
0 1 2–4 ≥5 Number of Hospital Admissions	134 39 19 7	66.6% 20.4% 9.3%* 3.8%*	59.9–73.3 14.6–26.1 5.2–13.3 1.0–6.6
0 1 2-4 ≥5	175 18 6 	87.8% 9.4%* 2.9%* 	83.1–92.5 5.1–13.6 0.6–5.2
TOTAL	204	100.0%	

Abbreviation: CI, confidence interval. Note: Estimates with a coefficient of variation \geq 0.30, a denominator sample size <30, an absolute CI width \geq 0.30, or 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.

4.8. Gynecological Care and Reproductive Health Among Women - Medical Monitoring Project, CA, 2020

Monitoring 110ject, CA, 2020			
	Number ^a	Percentage ^b	95% Cl ^c
Papanicolaou (Pap) Test, Past 12 Months			
Yes	21	72.7%*	54.7–90.8
No	7	27.3%*	9.2–45.3
Pregnant Since HIV Diagnosis			
Yes	6	18.2%*	4.5-32.0
No	22	81.8%*	68.0–95.5
TOTAL	30	100.0%	

Abbreviation: CI, confidence interval. Note. Measures are self-reported. ^a Numbers are unweighted. ^b Percentages are weighted percentages. ^c CIs incorporate weighted percentages.

5. Mental Health and Substance Use

Ten percent of PLWDH had Patient Health Questionnaire 8-item scale (PHQ-8) scores (range 0-24) consistent with moderate or severe depression (score \geq 10) and 15% had Generalized Anxiety Disorder 7-item scale (GAD-7) scores (range 0-21) consistent with moderate or severe anxiety (Table 5.1).

5.1. Depression and Anxiety - Medical Monitoring Project, CA, 2020							
	Number ^a	Percentage ^b	95% Cl ^c				
Moderate or Severe Depression (PHQ-8 score \geq 10)							
Yes	19	9.7%*	5.5–13.9				
No	178	90.3%	86.1–94.5				
Anxiety ^d							
Severe anxiety	17	8.5%*	4.6–12.5				
Moderate anxiety	13	6.2%*	2.9–9.5				
Mild anxiety	10	5.1%*	2.0-8.2				
No anxiety	159	80.2%	74.6-85.8				
TOTAL	204	100.0%					

Abbreviations: CI, confidence interval; DSM-IV, Diagnostic and Statistical Manual of Mental Disorders, 4th edition; GAD-7, Generalized Anxiety Disorder 7-item Scale; PHQ-8, Patient Health Questionnaire. ^a Numbers are unweighted. ^b Percentages are weighted percentages. ^c CIs incorporate weighted percentages. ^d 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 10–14; and "mild anxiety" was defined as having a score of 5–9.

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Eighteen percent of PLWDH were current cigarette smokers, with 13% reporting daily

cigarette smoking (Table 5.2). While 27% had ever used electronic cigarettes, just 5% of PLWDH

5.2. Tobacco and Electronic Cigarette Use - Medical Monitoring Project, CA, 2020

2020			
	Number ^a	Percentage ^b	95% Cl ^c
Smoked ≥100 Cigarettes (lifetime)			
Yes	85	43.7%	36.6–50.7
No	114	56.3%	49.3–63.4
Cigarette Smoking Status			
Current smoker	36	17.8%	12.4–23.2
Former smoker	49	25.9%	19.6-32.2
Never smoked	114	56.3%	49.3–63.4
Frequency of Current Cigarette Smoking	-		
Less than monthly	5	2.5%*	0.3-4.6
Monthly	<5 obs. <5 obs.	0.4%*	0.0–1.2 0.0–3.4
Weekly Daily	<3 0bs. 27	1.6%* 13.3%*	0.0-3.4 8.5-18.1
Never ^d	163	82.2%	76.8–87.6
Smoked ≥50 Cigars, Cigarillos, or Little Fi			, 010 0110
Yes	29	14.9%*	9.8–19.9
No	169	85.1%	80.1–90.2
Cigars, Cigarillos, or Little Filtered Cigars	Smoking Status		
Current smoker	13	6.7%*	3.1–10.3
Former smoker	16	8.1%*	4.3–12.0
Never smoked	169	85.1%	80.1–90.2
Frequency of Current Cigars, Cigarillos, o	r Little Filtered Cige	ars Smoking	
Rarely	5	2.6%*	0.3–4.8
Some days	<5 obs.	1.1%*	0.0–2.6
Daily	6	3.0%*	0.6–5.5
Never ^d	185	93.3%	89.7–96.9
Electronic Cigarette Smoking Status			
Used electronic cigarettes in the past 30 days	9	4.8%*	1.7–7.8
Used electronic cigarettes, but not in the past 30 days	47	22.5%	16.7–28.3
Never used electronic cigarettes	143	72.7%	66.5–79.0
TOTAL	204	100.0%	

Abbreviation: CI, confidence interval. Note: Estimates with a coefficient of variation ≥ 0.30 , a denominator sample size < 30, an absolute CI width ≥ 0.30 , or 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 Never includes never smoked and former smoker.

reported electronic cigarette use in the past 30 days. Seven percent of PLWDH reported daily alcohol use and 16% reported binge drinking in the past 30 days (Table 5.3).

5.3. Alcohol Use - Medical Monitoring Project, CA, 2020						
	Numberª	Percentage ^b	95% Cl ^c			
Any Alcohol Use ^d						
Yes	127	63.8%	57.0–70.6			
No	72	36.2%	29.4–43.0			
Frequency of Alcohol Use						
Daily	14	6.5%*	3.1–9.9			
Weekly	40	20.2%	14.4–25.9			
Monthly	24	12.4%*	7.6–17.1			
Less than monthly	49	24.7%	18.6–30.9			
Never	72	36.2%	29.4–43.0			
Binge Drinking, Past 30 Days ^e						
Yes	33	15.9%	10.8–21.0			
No	165	84.1%	79.0–89.2			
TOTAL	204	100.0%				

Abbreviation: CI, confidence interval. ^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 \geq 5 alcoholic beverages in a single sitting (\geq 4 for women) during the 30 days before the interview.

In regard to non-injected substance use in the 12 months prior to the interview, 12% reported using methamphetamine, 12% amyl nitrite or

poppers, 7% cocaine, 7% prescription tranquilizers, and 6% club drugs such as ecstasy (Table 5.4).

5.4. Non-Injection Drug Use - Medical Monitoring Project, CA, 2020					
	Number ^a	Percentage ^b	95% Cl ^c		
Use of Any Non-Injection Drugs ^d					
Yes	78	38.7%	31.7-45.6		
No	119	61.3%	54.4–68.3		
Non-Injection Drugs Used ^d :					
Marijuana Yes	67	22 70/	26.9–40.4		
No	128	33.7% 66.3%	20.9–40.4 59.6–73.1		
Crack					
Yes	<5 obs.	0.4%*	0.0-1.1		
No	195	99.6%	98.9–100.0		
Cocaine that is smoked or snorted	14	C 00/*	3.2–10.4		
Yes No	14 182	6.8%* 93.2%	89.6–96.8		
Methamphetamine (e.g., crystal meth,	, tina, crank, ice)	1			
Yes	22	11.7%*	7.0–16.4		
No	174	88.3%	83.6–93.0		
Amphetamine (e.g., speed, bennies, up	-				
Yes No	7 188	3.8%* 96.2%	1.0–6.5 93.5–99.0		
Club drugs (e.g., Ecstasy or X, ketamin	e or Special K, GHB				
Yes	12	6.2%*	2.7–9.6		
No	184	93.8%	90.4–97.3		
Amyl nitrite (poppers)					
Yes	24 171	12.2%*	7.5-16.9		
No Prescription opioids (e.g., oxycodone,		87.8%	83.1–92.5		
Yes	6	3.0%*	0.6–5.4		
No	190	97.0%	94.6-99.4		
Prescription tranquilizers (e.g., Valiun	n, Ativan, Xanax, de	owners, nerve pills)e		
Yes	12	6.6%*	2.9–10.3		
No	184	93.4%	89.7–97.1		
TOTAL	204	100.0%			

Abbreviations: CI, confidence interval; GHB, gamma hydroxybutyrate. Note: Persons could report taking more than 1 noninjection drug. Estimates with a coefficient of variation \geq 0.30, a denominator sample size <30, an absolute CI width \geq 0.30, or 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 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.

Five percent of PLWDH reported injecting drugs without a prescription in the past year, most

commonly methamphetamine (4%) (Table 5.5).

5.5. Injection Drug Use - Medical Monitoring Project, CA, 2020						
	Number ^a	Percentage ^b	95% Cl ^c			
Use of Any Injection Drugs						
Yes No	9 189	4.6%* 95.4%	1.6–7.6 92.4–98.4			
Injection Drugs Used:						
Cocaine						
Yes No	<5 obs. 197	0.5%* 99.5%	0.0–1.5 98.5–100.0			
Heroin						
Yes No	 198	 100.0%	 100.0-100.0			
Heroin and cocaine (speedball)						
Yes No	 198	 100.0%	 100.0-100.0			
Methamphetamine (e.g., crystal meth,	tina, crank, ice)					
Yes No	8 190	4.1%* 95.9%	1.3–6.9 93.1–98.7			
Amphetamine (e.g., speed, bennies, up	opers)					
Yes No	<5 obs. 197	0.5%* 99.5%	0.0–1.6 98.4–100.0			
Prescription opioids (e.g., OxyContin,	oxycodone, hydrod	odone)				
Yes No	<5 obs. 197	0.5%* 99.5%	0.0–1.6 98.4–100.0			
TOTAL	204	100.0%				

Abbreviation: CI, confidence interval. Note: Persons could report taking more than 1 injection drug. Estimates with a coefficient of variation \geq 0.30, a denominator sample size <30, an absolute CI width \geq 0.30, or 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.

6. Sexual Behavior

About 68% of men and 59% of women living with diagnosed HIV had engaged in vaginal or anal

sex in the 12 months prior to the interview (Table 6.1). Sexually active men who had sex with men

6.1. Sexual Behavior Among Cisgender Men and Women - Medical Monitoring Project, CA, 2020 Men Women %^b #a %^b #a 95% Cl^c **95% Cl**^c **Engaged in Anal Sex with Men:** Receptive 77 Yes 46.4% 38.7-54.2 <5 obs. 5.9%* 0.0-13.9 45.8-61.3 No 88 53.6% 27 94.1%* 86.1-100.0 Insertive 74 37.0-52.3 Yes 44.6% 91 47.6-63.0 No 55.4% **Engaged in Anal Sex with Women** Yes ___ 100.0% 100-100.0 No 144 **Engaged in Vaginal Sex** Yes 20 11.8%* 6.8-16.8 18 58.8%* 39.6-78.1 No 145 88.2% 83.2-93.2 11 41.2%* 21.9-60.4 **Engaged in Vaginal or Anal Sex** 67.7% 112 60.4-74.9 39.6-78.1 Yes 18 58.8%* 53 25.1-39.6 41.2%* 21.9-60.4 No 32.3% 11 TOTAL 172 100.0% 30 100.0%

Abbreviations: CI, confidence interval. Note: Estimates with a coefficient of variation \geq 0.30, a denominator sample size <30, an absolute CI width \geq 0.30, or 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.

(MSM) had a median of 2 sex partners in the previous year (range 1-99) (Table 6.2) and 11% engaged in any high-risk sex. Among MSM, 71% reported having sex while sustainably virally suppressed and 39% reported having condomless sex with at least one HIV-negative partner who was on pre-exposure prophylaxis (PrEP) (Table 6.3). Men who had sex only with women (MSW) and women who had sex with men (WSM) had a median of 1 sex partner in the previous year (range 1-2 among MSW, 1-2 among WSM) (Table 6.2). Seventy percent of WSM, and 69% of MSW reported sex in the previous year while sustainably virally suppressed (Table 6.3).

6.2. Number (Average, Median, Range) of Vaginal or Anal Sex Partners 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, CA, 2020

	M	Women	
	MSM ^a	MS₩ ^b	WSM ^c
Mean	9	1	1
Median	2	1	1
Range	1-99	1-2	1-2

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

6.3. 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, CA, 2020 100.0%* 100.0-100.0 18 100.0%* 100.0-100.0 36.9-83.0 47.3-92.9 0.0-14.8 85.2-100.0 ł ł 7.1-52.7 17.0-63.1 11.6-58.4 41.6-88.4 95% CI^c ł PERCENTAGES OF SEXUALLY ACTIVE PERSONS WHO USED A PREVENTION STRATEGY WITH AT LEAST 1 PARTNER: WSM 59.9%* 35.0%* 70.1%* 29.9%* 40.1%* 95.0%* 65.0%* 100.0% ł 5.0%* ۹% 28 ł L 13 17 12 28 <5 obs. Ь 10 9 ∞ e# 10 100.0%* 100.0-100.0 0.0-30.4 39.1-98.0 15.9-85.8 2.0-60.9 ł 54.3-100.0 83.7-100.0 14.2-84.1 69.6-100.0 0.0-16.3 0.0-45.7 95% Cl^c 79.6%* **MSW** 5.6%* 94.4%* 89.4%* 68.6%* 50.8%* 49.2%* 20.4%* 100.0% 10.6%* 31.4%* ł ۹% 18 <5 obs. δ <5 obs. ∞ 3 <5 obs. ł <5 obs. <5 obs. <5 obs. e# Engaged in Any High-Risk Sex (Among Sexually Active Persons)^d 7.7-21.5 39.1-58.9 5.5-15.7 20.1–38.0 36.3-56.0 44.0-63.7 84.3-94.5 78.5-92.3 62.0-79.9 41.1-60.9 29.6-48.9 51.1-70.4 95% Cl^c i 89.4% 71.0% 14.6%* 85.4% 29.0% 53.9% 46.1% 60.8% 49.0% 51.0% **MSM** 39.2% 100.0% 10.6%* ۹% Sex While Sustainably Virally Suppressed^e 10 10 124 Condomless Sex with a Partner on PrEP^s 30 4 142 86 72 54 48 62 50 52 e# Sex with an HIV Positive Partner^h Engaged in Any High-Risk Sex^d Condom-Protected Sex^f TOTAL

2

Yes

Yes

°N N

Р

Yes

Yes

° N

Yes

2

Yes

2

Abbreviations: CI, confidence interval; PrEP, pre-exposure prophylaxis. Note: 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 people only, or men who had sex with transgender people only. Estimates with a coefficient of variation ≥ 0.30 , a denominator sample size <30, an absolute CI width ≥ 0.30 , or an absolute CI width ≥ 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 five 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 five 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 five most recent partners and was reported by the HIV-positive partner. ^h Sex with at least 1 HIV-positive partner.

7. Intimate Partner Violence and Sexual Violence

Twenty-eight percent of PLWDH reported having ever experienced intimate partner violence and 6% experienced it in the past 12 months. Twenty-one percent reported having ever experienced sexual violence and 1% experienced it in the past 12 months.

7.1. Intimate Partner Violence and Sexual Violence - Medical Monitoring Project, CA. 2020

C/1, 2020								
	Number ^a	Percentage ^b	95% Cl ^c					
Was ever slapped, punched, shoved, kicked, choked or otherwise physically hurt by a romantic or sexual partner								
Yes No	55 141	27.8% 72.2%	21.4–34.2 65.8–78.6					
Was slapped, punched, shoved, kicked, choked or otherwise physically hurt by a romantic or sexual partner, past 12 months								
Yes No	11 185	5.5%* 94.5%	2.2–8.7 91.3–97.8					
Was ever threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex								
Yes No	41 153	20.9% 79.1%	15.1–26.6 73.4–84.9					
Was threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex, past 12 months								
Yes No	<5 obs. 192	1.0%* 99.0%	0.0–2.3 97.7–100.0					
TOTAL	204	100.0%						

Abbreviation: CI, confidence interval. Note: Estimates with a coefficient of variation ≥ 0.30 , a denominator sample size <30, an absolute CI width ≥ 0.30 , or 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.

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8. Met and Unmet Ancillary Service Needs

The highest rate of unmet need for ancillary services among PLWDH was seen in dental care, with 23% reporting needing but not getting this service in the 12 months prior to the interview. Eleven percent needed but did not receive mental health services, 9% percent needed but did not receive food assistance (Supplemental Nutrition Assistance Program or the Special Supplemental Nutrition Program for Women, Infants, and Children), and 8% needed but did not receive HIV case management services. Seven percent needed but did not receive shelter or housing services or HIV peer group support. Five percent needed but did not receive meal or food services, or patient navigation services.

Rates of unmet need were generally higher among PLWDH whose scores on the HIV stigma scale were in the top 25% (score ≥ 44.4, range 0-100), indicating high levels of HIV stigma experience. Among PLWDH with high HIV stigma scores, the rate of unmet need was 26% for dental care, 14% for SNAP or WIC, 14% for mental health services, 13% for HIV peer group support, and 13% for shelter or housing services.

8.1. Met and Unmet Need for Ancillary Services, Overall and by High HIV Stigma Score - Medical Monitoring Project, CA, 2020

	Overall		High HIV Stigma ^a		maª	
Service:	# ^b	% ^c	95% Cl ^d	# ^b	% ^c	95% Cl ^d
Dental Care						
Needed, but did not receive service Received service Did not need, did not receive service	46 123 30	22.7% 62.1% 15.2%	16.7–28.6 55.2–69.0 10.1–20.4	14 34 <5 obs.	26.1%* 67.6% 6.3%*	14.0–38.1 54.7–80.6 0.0–13.2
SNAP or WIC						
Needed, but did not receive service Received service Did not need, did not receive service	18 45 136	9.1%* 22.0% 68.9%	5.0–13.3 16.1–27.8 62.4–75.5	8 18 25	14.2%* 35.1%* 50.7%*	4.8–23.6 21.8–48.4 36.8–64.7
Transportation Assistance						
Needed, but did not receive service Received service Did not need, did not receive service	8 33 158	4.0%* 16.9% 79.1%	1.2–6.8 11.6–22.3 73.3–84.9	5 8 38	10.2%* 16.6%* 73.2%	1.6–18.9 6.0–27.2 60.6–85.7
Mental Health Services						
Needed, but did not receive service Received service Did not need, did not receive service	20 51 126	10.6%* 25.8% 63.6%	6.1–15.1 19.6–32.1 56.7–70.5	7 16 26	14.0%* 32.8%* 53.2%*	4.2–23.8 19.5–46.2 39.0–67.4

8.1. Met and Unmet Need for Ancillary Services, Overall and by High HIV Stigma Score - Medical Monitoring Project, CA, 2020 (cont.)

	Overall		Hig	High HIV Stigma ^a		
Service:	# ^b	% ^c	95% Cl ^d	#b	% ^c	95% Cl ^d
Shelter or Housing Services						
Needed, but did not receive service	14	7.1%*	3.5–10.8	7	12.7%*	3.7–21.8
Received service	28	14.4%*	9.3–19.4	12	24.0%*	12.0–35.9
Did not need, did not receive service	156	78.5%	72.6–84.4	32	63.3%	49.9–76.7
HIV Peer Group Support						
Needed, but did not receive service	13	6.8%*	3.2–10.5	7	13.3%*	3.9–22.7
Received service	20	9.8%*	5.6–13.9	7	13.7%*	4.1–23.3
Did not need, did not receive service	165	83.4%	78.1–88.7	36	72.9%	60.5-85.3
Meal or Food Services ^e						
Needed, but did not receive service	11	5.4%*	2.1-8.6	5	8.3%*	1.1–15.4
Received service	40	20.3%	14.6–26.0	15	30.7%*	17.8–43.8
Did not need, did not receive service	147	74.3%	68.1–80.5	31	61.0%	47.4–74.6
HIV Case Management Services						
Needed, but did not receive service	14	7.6%*	3.7–11.6	<5 obs.	3.5%*	0.0–8.5
Received service	97	49.3%	42.2–56.5	28	56.3%*	42.4–70.3
Did not need, did not receive service	86	43.0%	36.0–50.1	20	40.1%*	26.3–53.9
Patient Navigation Services						
Needed, but did not receive service	10	5.4%*	2.1–8.7	<5 obs.	8.1%*	0.4–15.9
Received service	37	19.2%	13.5–24.9	14	28.7%*	15.9–41.6
Did not need, did not receive service	149	75.4%	69.2–81.7	32	63.1%	49.5–76.8
Medicine Through ADAP						
Needed, but did not receive service	<5 obs.	1.4%*	0.0–3.0	<5 obs.	1.6%*	0.0–4.6
Received service	96	50.7%	43.5–57.9	30	63.7%	49.9–77.4
Did not need, did not receive service	93	47.9%	40.7–55.1	17	34.7%*	21.1–48.4
Drug or Alcohol Counseling or Trea	tment					
Needed, but did not receive service	<5 obs.	1.5%*	0.0–3.2	<5 obs.	3.7%*	0.0–8.8
Received service	10	5.0%*	2.0-8.2	<5 obs.	3.8%*	0.0–9.1
Did not need, did not receive service	185	93.5%	90.0–97.0	47	92.5%	85.3–99.7

8.1. Met and Unmet Need for Ancillary Services, Overall and by High HIV Stigma Score - Medical Monitoring Project, CA, 2020 (cont.)

	Overall			High HIV Stigma ^a		
Service:	# ^b	% ^c	95% Cl ^d	# ^b	% ^c	95% Cl ^d
Professional HIV Medication Adherence Support Services						
Needed, but did not receive service	<5 obs.	0.5%*	0.0–1.5	<5 obs.	2.0%*	0.0–6.0
Received service	45	22.6%	16.7–28.6	13	26.2%*	13.8–38.6
Did not need, did not receive service	151	76.8%	70.8–82.8	36	71.7%	59.0-84.4
Domestic Violence Services						
Needed, but did not receive service	<5 obs.	0.9%*	0.0–2.1	<5 obs.	3.5%*	0.0-8.3
Received service						
Did not need, did not receive service	197	99.1%	97.9–100.0	49	96.5%	91.7–100.0
TOTAL	204	100.0%		51	100.0%	

Abbreviations: 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 one service. Estimates with a coefficient of variation ≥ 0.30 , a denominator sample size <30, an absolute CI width ≥ 0.30 , or 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 Stigma scores were measured with a ten-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures four dimensions of HIV stigma: personalized stigma, disclosure concerns, negative self-image, and perceived public attitudes about people living with HIV. People were classified as having experienced high levels of HIV stigma if their score on the HIV stigma scale was in the top quartile for the 2015-2017 combined sample (score of ≥ 44.4). ^b Numbers are unweighted. ^c Percentages are weighted percentages. ^d CIs incorporate weighted percentages. ^e Includes services such as soup kitchens, food pantries, food banks, church dinners, or food delivery services.

9. Prevention Services

Forty-one percent of PLWDH reported attending a one-on-one HIV/STD risk-reduction conversation with a physician, nurse, or other health care worker. Forty-one percent reported receiving free condoms in the 12 months prior to the interview. About one quarter (22%) attended a one-on-one HIV/STD risk-reduction conversation with an outreach worker, counselor, or prevention program worker and 10% attended an organized HIV/STD risk-reduction session involving a small group of people.

9.1. Prevention Services - Medical Monitoring Project, CA, 2020								
	Number ^a	Percentage ^b	95% Cl ^c					
One-on-One HIV/STD Risk-Reduction Conversation with Physician, Nurse, or Other Health Care Worker								
Yes No	84 116	41.2% 58.8%	34.2–48.1 51.9–65.8					
One-on-One HIV/STD Risk-Reduction Conversation with Outreach Worker, Counselor, or Prevention Program Worker								
Yes No	43 157	21.5% 78.5%	15.7–27.3 72.7–84.3					
Attended an Organized HIV/STD Risk-Red Involving a Small Group of People	luction Session							
Yes No	20 179	9.6%* 90.4%	5.5–13.8 86.2–94.5					
Received Free Condoms	·							
Yes No	81 119	40.6% 59.4%	33.6–47.5 52.5–66.4					
TOTAL	204	100.0%						

Abbreviation: CI, confidence interval. Note. Persons could report receiving more than one prevention service. ^a Numbers are unweighted. ^b Percentages are weighted percentages. ^c CIs incorporate weighted percentages.

10. HIV Stigma

Scores on the HIV stigma scale ranged from the minimum of zero to the maximum of one hundred (Table 10.1). Women had slightly higher median HIV stigma scores compared to men, but a larger percentage of men had scores in the top quartile (score \geq 44.4). Percentage with scores in the top quartile were higher among bisexual PLWDH compared to lesbian or gay

and heterosexual or straight PLWDH. About 48% of American Indian/Alaska Native PLWDH, 40% of Asian PLWDH, 33% of black/African-American PLWDH, and 25% of Latinx PLWDH had stigma scores in the top quartile compared to 20% of white PLWDH. A higher percentage of those ages 30-39 had HIV stigma scores in the top quartile (51%) compared to those 50 and older (21%).

10.1. HIV Stigma by Selected Characteristics - Medical Monitoring Project, CA, 2020

	HIV Stigma [®] Score		Hig	gma⁵	
	Median Score	Interquartile Range	#c	% ^d	95% Cl ^e
Gender					
Male	25.7	14.7-45.3	43	25.3%	18.7–31.9
Female	28.8	18.4-40.7	7	20.0%*	6.2–33.9
Transgender	10.0*	10.0-45.7	<5 obs.	41.4%*	0.0–100.0
Sexual Orientation					
Lesbian or gay	23.4	13.8-41.2	28	23.1%*	15.5–30.7
Heterosexual or straight	28.6	17.6-41.1	11	19.6%*	8.8–30.4
Bisexual	26.3*	17.0-60.3	8	46.5%*	22.0–70.9
Other	17.8*	11.4-44.2	<5 obs.	34.6%*	0.0–73.3
Race/Ethnicity					
American Indian/Alaska Native	47.5*	47.5-47.5	<5 obs.	47.8%*	0.0–100.0
Asian	34.8*	16.1-52.4	<5 obs.	39.7%*	9.1–70.2
Black/African American	33.4*	22.9-53.7	8	33.0%*	14.1–51.8
Latinx	27.7	15.6-43.7	21	24.5%*	15.2–33.8
Native Hawaiian/Other Pacific Islander	42.5*	42.5-42.5			
White	22.1	13.1-38.6	14	20.2%*	10.6–29.9
Multiple races	17.7*	8.0-28.5	<5 obs.	20.3%*	0.0–41.7

2020 (cont.)						
	Median HIV	High HIV Stigma ^b				
	Median Score	#c	% ^d	95% Cl°		
Age at Time of Interview (yr)						
18–29	18.2*	13.2-33.4	<5 obs.	17.7%*	0.0–36.0	
30–39	44.3*	23.8-60.1	14	51.0%*	31.9–70.2	
40–49	24.7	15.9-40.9	10	22.4%*	9.9–34.9	
≥50	25.4	13.5-40.5	24	20.8%*	13.3–28.4	
OVERALL	26.4	14.9-44.4	51			

10.1. HIV Stigma by Selected Characteristics - Medical Monitoring Project, CA,

Abbreviations: CI, confidence interval. ^a Stigma scores were measured with a ten-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures four dimensions of HIV stigma: personalized stigma, disclosure concerns, negative self-image, and perceived public attitudes about people living with HIV. Estimates with a coefficient of variation ≥ 0.30 , a denominator sample size <30, an absolute CI width ≥0.30, or 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.^b People were classified as having experienced high levels of HIV stigma if their score on the HIV stigma scale was in the top quartile for the 2015-2017 combined sample (score of \geq 44.4). ^c Numbers are unweighted. ^d Percentages are weighted percentages. ^e Cls incorporate weighted percentages.

References

- 1. Centers for Disease Control and Prevention. Behavioral and Clinical Characteristics of Persons with Diagnosed HIV Infection—Medical Monitoring Project, United States, 2018 Cycle (June 2018–May 2019). HIV Surveillance Special Report 25. Revised edition. https://www.cdc.gov/hiv/pdf/ library/reports/surveillance/cdc-hiv-surveillance-special-report-number-25.pdf. Published May 2020. Accessed September 20, 2021.
- **2.** Office of National AIDS Policy. National HIV/AIDS Strategy for the United States, Updated to 2020. https://files.hiv.gov/s3fs-public/nhas-update.pdf. Published July 2015. Accessed April 21, 2020.
- **3.** Office of National AIDS Policy. National HIV/AIDS Strategy for the United States, Updated to 2020: Indicator Supplement. https://files.hiv.gov/s3fs-public/nhas-indicators-supplement-dec-2016.pdf. Published December 2016. Accessed April 21, 2020.
- 4. California Department of Public Health, Office of AIDS. Laying a Foundation for Getting to Zero: California's Integrated HIV Surveillance, Prevention, and Care Plan. https://www.cdph.ca.gov/ Programs/CID/DOA/CDPH%20Document%20Library/IP_2016_Final_ADA.pdf. Published September 2016. Accessed April 21, 2020.
- 5. California Department of Public Health, Office of AIDS. California HIV Surveillance Report 2020. https://www.cdph.ca.gov/Programs/CID/DOA/CDPH%20Document%20Library/ California_HIV_Surveillance_Report2020_ADA.pdf. Accessed July 5, 2022.



California Department of Public Health Office of AIDS MS 7700 P.O. Box 997426 Sacramento, CA 95899-74726 www.cdph.ca.gov/Programs/CID/DOA