

HIV IN ALAMEDA COUNTY, 2022-2024

Alameda County Public
Health Department

HIV Epidemiology &
Surveillance Unit

HIV in Alameda County, 2022-2024

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HIV Epidemiology and Surveillance Unit

Division of Communicable Disease Control and Prevention

Alameda County Public Health Department

Alameda County Public Health Department

Director	Kimi Watkins-Tartt
Health Officer	Nicholas J. Moss, MD, MPH
Deputy Director	George Ayala, PsyD

Division of Communicable Disease Control and Prevention

Director	Darlene Fujii, RD, EdM
Deputy Director	Donata Nilsen, MPH, DrPH, CEMS
STD/HIV Controller	Eileen F. Dunne, MD, MPH, FIDSA
Director of Epidemiology and Surveillance Section	Emily Yette, PhD, MPH

HIV Epidemiology and Surveillance Unit

Director	Daniel Allgeier, MPH
Epidemiologist	Gabriella Cleary, MPH
Public Health Investigators	Oliver Heitkamp Maria Hernandez Liana Ceja



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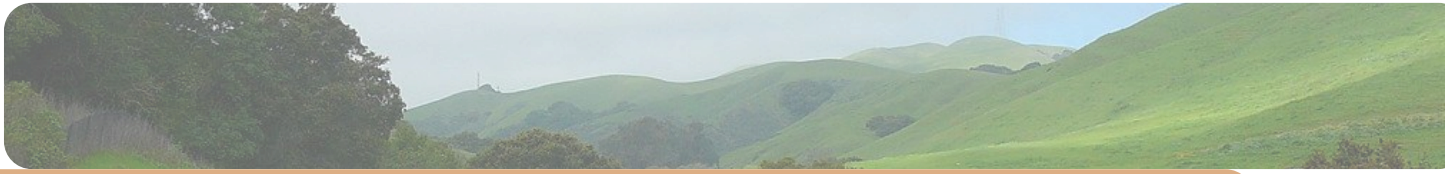
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Alameda County Public Health Department
HIV Epidemiology and Surveillance Unit
1100 San Leandro Blvd, 3rd Floor
San Leandro, CA 94577
Phone: (510) 268-2372
Fax: (510) 208-1278
Email: Daniel.Allgeier@acgov.org



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Background

Overview of this Report

This report is based on human immunodeficiency virus (HIV) case surveillance in Alameda County. It summarizes data on HIV in 5 chapters as described below.

1. **Background:** This includes basic definitions and a description of the geographic area included in this report.
2. **New Diagnoses:** This chapter describes patterns of HIV diagnosis in Alameda County, characterizing those who were recently diagnosed according to demographic factors, risk factors, and stage of disease.
3. **People Living with HIV:** The next chapter of the report describes the characteristics of all people known to be living with HIV disease (PLHIV) in Alameda County. This chapter describes the total burden of HIV disease in the county and how it varies by demographic factors as well as by geography. It also describes changes in mortality rates (deaths) over time among those ever diagnosed with Acquired Immune Deficiency Syndrome (AIDS).
4. **The Continuum of HIV Care:** This chapter presents the continuum of HIV care in Alameda County. Modern medical treatments for HIV can halt the progression of the disease and prevent its spread, but not all persons living with HIV receive effective treatment. The continuum of HIV care (also known as the “HIV care cascade”) is a framework that presents different indicators of engagement in HIV care among PLHIV, including linkage to care, retention in care, and viral suppression.
5. **Appendix:** The last chapter provides relevant technical information regarding data analysis, disease surveillance, and limitations of the data.

HIV/AIDS

HIV attacks the immune system, weakening it over time such that people living with HIV become increasingly susceptible to opportunistic infections and other medical conditions. The most advanced stage of infection, when the immune system is weakest, is called AIDS. Medical treatments can inhibit HIV’s ability to replicate and greatly improve the patient’s health, but the human body cannot eliminate HIV. HIV is typically transmitted through sex, contaminated needles, or from birthing parent to fetus during pregnancy.

Definitions Used in this Report

Stages of HIV Infection

For surveillance purposes, HIV disease progression is classified into 4 stages, from acute infection (Stage 0) to AIDS (Stage 3). In this report, we use “HIV” to refer to HIV disease at any stage (including Stage 3/AIDS) and AIDS to refer specifically to Stage 3 HIV. We use the acronym “PLHIV” to refer to all people living with HIV disease, regardless of stage.

Case Definition

All reported HIV cases must meet the Centers for Disease Control and Prevention (CDC) case definition based on laboratory or clinical criteria.¹ Clinical criteria include a medical provider diagnosis and evidence of HIV treatment, unexplained low CD4 count, or opportunistic infection. The full criteria may be found at <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6303a1.htm>.

Transmission Category

For surveillance purposes, each reported HIV case must be classified according to their risk factors for acquiring HIV. Cases with multiple risk factors are assigned a transmission category, the risk factor most likely to have resulted in HIV transmission according to a hierarchy developed by the CDC. In this context, “heterosexual contact” refers to sexual contact with a partner of the opposite sex with a known risk factor for HIV. In some cases, partners’ risk factors are unknown, leaving some heterosexual cases without known HIV risk factors. Such cases are assigned to the “unknown” transmission category. The only exception is when a case’s sex at birth is female, and she reported sex with males, in which case she is presumed to have been infected through heterosexual contact in accordance with CDC-accepted guidance set by the Council of State and Territorial Epidemiologists.²

Demographics

Demographic data in this report are based on investigations of medical records. Although the transgender community is highly impacted by HIV, data on current gender identity are not consistently captured in medical records. For this reason, analyses are presented for individuals assigned sex at birth as well as those with a known current gender.

Data from racial/ethnic groups with very small numbers may rely on statistics from state-level reports, providing more statistically rigorous data, although not necessarily an accurate representation of Alameda County. Asian and Pacific Islander people have historically been combined into a single category in previous reports, but were disaggregated where possible in this report. American Indians and Alaskan Natives (AI/AN) are also shown where possible, and reference state-level data where necessary. Those identifying with multiple races are combined along with those of unknown race into another group (“Other/Unk”). Analyses that are broken out by subgroup (e.g., race/ethnicity) are presented along with the overall group total (e.g., all races) for comparison.

Geographic Area

Residential addresses are geocoded to census tract and city/Census-designated place. Region and neighborhood boundaries established by the Alameda County Community Assessment, Planning, and Evaluation (CAPE) unit based on census tract aggregates are used. These geographic areas are shown in Figures 1.1 and 1.2.

Figure 1.1: Regions of Alameda County

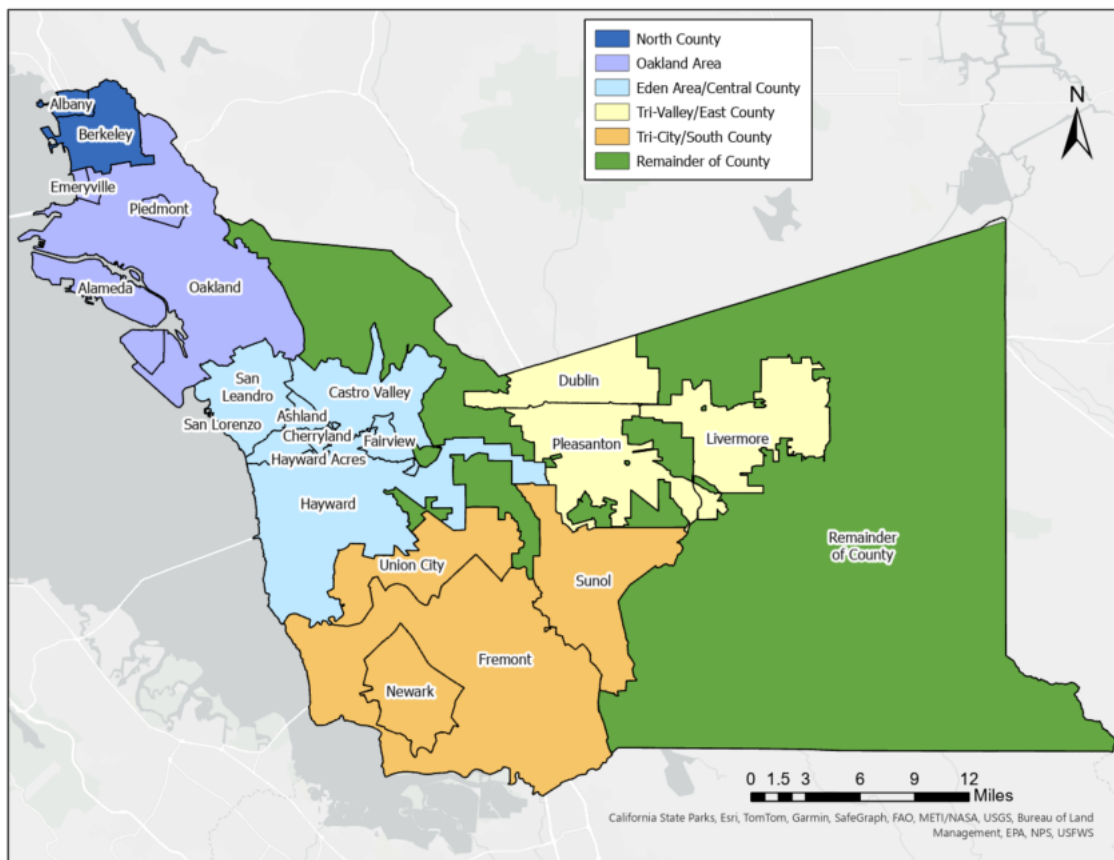
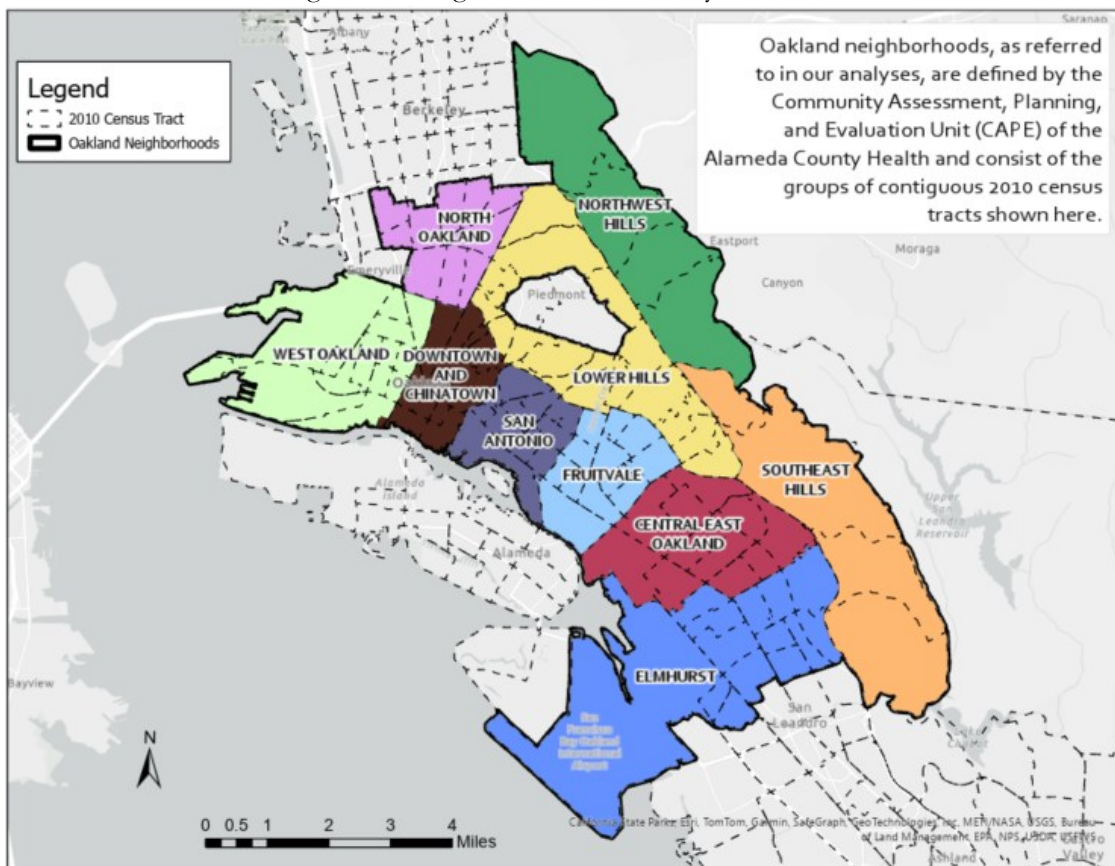
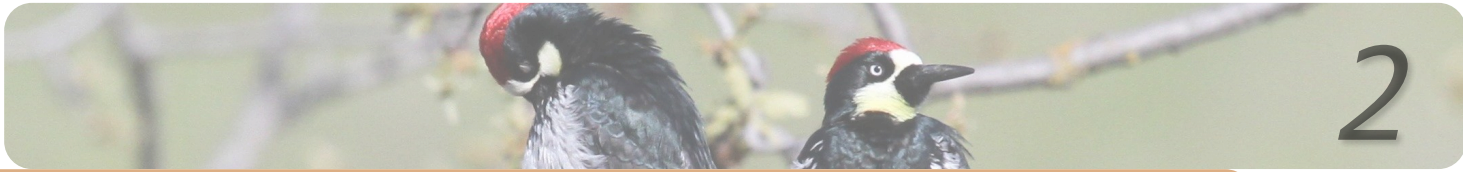


Figure 1.2: Neighborhoods in the City of Oakland





New Diagnoses

The Alameda County Public Health Department (ACPHD) monitors the HIV epidemic through mandated reports of new diagnoses and laboratory results. Estimating the true incidence rate of new HIV transmissions is complex due to the variable time interval between when a person becomes infected and when their infection is diagnosed. However, surveillance data reliably describe all new HIV diagnoses and diagnosis rates. In 2023, there were an estimated 39,201 new diagnoses of HIV in the United States (US) for an overall diagnosis rate of 13.7 per 100,000 people.³ The rate of new diagnoses among males (22.5 per 100,000) was over 4 times the rate among females (5.1 per 100,000). Some of the highest rates for people 13 years of age and older were observed among those aged 25 to 34 years (31.3 per 100,000), as well as among African American and Latinx individuals (41.9 and 25.2 per 100,000), and in the American South and West (18.4 and 12.1 per 100,000). Male-to-male sexual contact (MMSC), including those who inject drugs, accounted for 70% of all new diagnoses.³

In California, there were an estimated 4,948 new diagnoses, resulting in an overall statewide rate of 12.3 diagnoses per 100,000 people in 2023.⁴ In Alameda County, the average annual diagnosis rate calculated over the 3-year period from 2022 to 2024 was 11.7 diagnoses per 100,000 people.

America's HIV Epidemic Analysis Dashboard (AHEAD) displays HIV data and goals for 57 priority areas, including Alameda County. AHEAD tracks national and jurisdictional progress for six Ending the HIV Epidemic (EHE) indicators that aim to reduce new HIV infections in the US by 75% in five years and by 90% in 10 years. According to the dashboard, Alameda County's knowledge of status – the estimated percentage of people with HIV who have received an HIV diagnosis – was 90.1% [CI 82.5-99.3] in 2022.⁵

This chapter describes HIV in Alameda County by examining the characteristics of new diagnoses, new diagnosis rates, and the timeliness of diagnoses by demographic characteristics.

Characteristics of New Diagnoses

Since HIV became reportable by name in California in 2006, between 160 and 300 new cases of HIV disease have been reported each year among Alameda County residents, with 186 new diagnoses reported in the most recent year, 2024. In 2020, there were 166 new diagnoses of HIV in the county. The substantial drop in the number of newly diagnosed cases in 2020 can be largely attributed to the impact of the COVID-19 pandemic. Seeking medical testing as well as routine testing outreach activities was limited due to shelter-in-place orders and social distancing. It is probable that many new cases of HIV went undiagnosed in 2020. Social restrictions may have also reduced the number of high-risk sexual interactions between casual partners, possibly resulting in fewer transmissions. Additionally, reduced case reporting capability during the pandemic could have contributed to the apparent decline in cases. Numerous publications are substantiating the role of decreased access and decreased HIV testing during the COVID-19 pandemic that likely contributed to the decreases in new HIV diagnoses.^{6,7}

Figure 2.1: New HIV Diagnosed by Year, Alameda County, 2008-2024

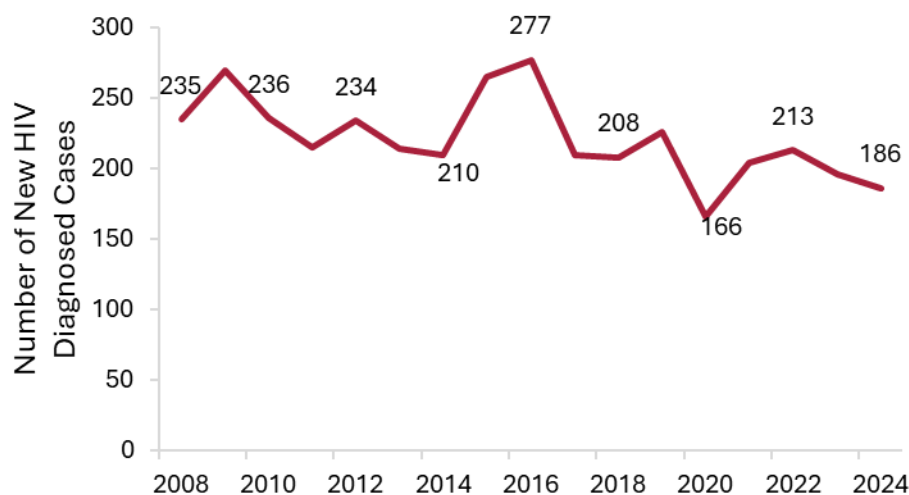
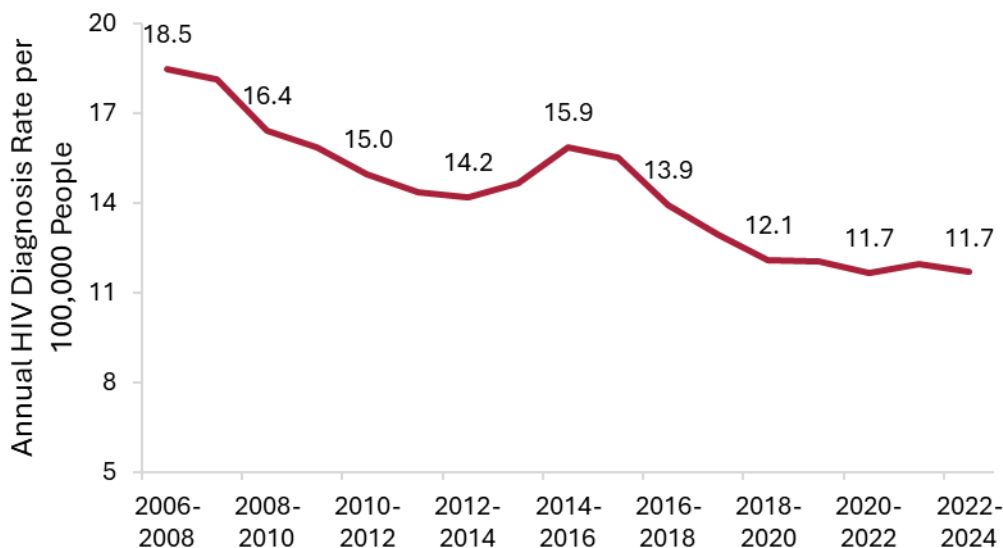


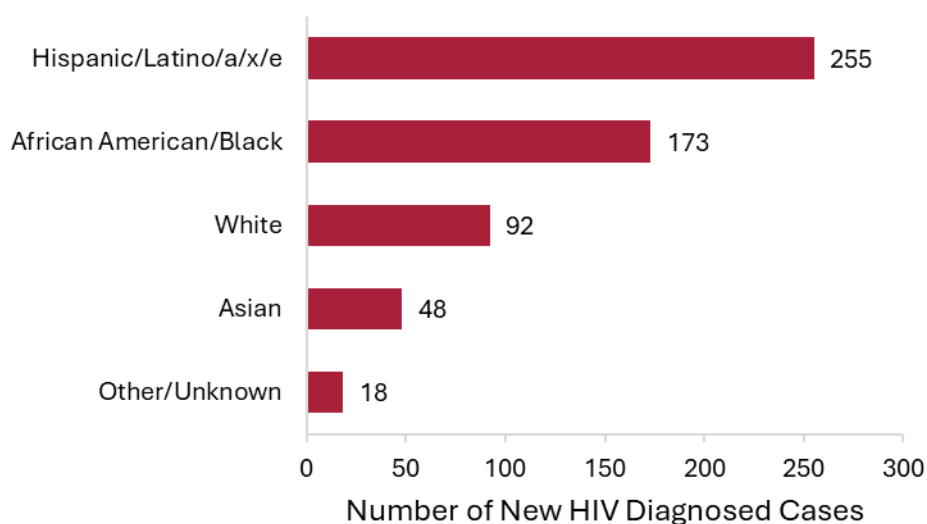
Figure 2.2: HIV Diagnosis Rates by 3-year Period, Alameda County, 2006-2024



Diagnosis rates are not equivalent to HIV incidence rates. Trends in diagnosis rates may reflect changes in HIV incidence over time, but may also reflect changes in HIV testing practices, access to care, stigma, and other barriers to testing. For example, HIV incidence could decrease while HIV diagnosis rates increase if more HIV-unaware persons are tested and diagnosed. Due to the relatively small number of diagnoses occurring in Alameda County in any given year, annual diagnosis rates are statistically unstable.

Diagnosis rates were calculated using new case counts over 3 years to accrue large enough numbers to calculate statistically stable rates. The rate of new diagnoses across Alameda County has been steadily decreasing by an average annual change of -2.95%, starting at 18.5 per 100,000 people in 2006-2008 to 11.7 per 100,000 people in 2022-2024.

Figure 2.3: New HIV Diagnosed by Race/Ethnicity, Alameda County, 2022-2024



* American Indian/Alaska Native and Pacific Islander not included due to small numbers

When broken down by race/ethnicity, the largest number of new cases were among Latinx people, representing 42.9% of new cases, a shift from previous years, where African American people have historically represented the largest group of new diagnoses. In the 2018-2020 report, Latinx and African American people were each 33.9% of new diagnoses, and in 2015-2017 they were 26.9% and 38.2%, respectively. Pacific Islander and American Indian/Alaskan Native people both had fewer than 10 new cases, and as a result, exact counts are excluded from the graph above for privacy reasons. Of the racial/ethnic groups with greater than 10 new cases, Asian people continue to have the fewest new diagnoses despite making up a large portion of Alameda County's population. The category Other/Unknown includes those who identify as Other, Unknown, or Multiracial.

Figure 2.4: Percent of New HIV Diagnosed (Number) by Race/Ethnicity, Alameda County, 2022-2024

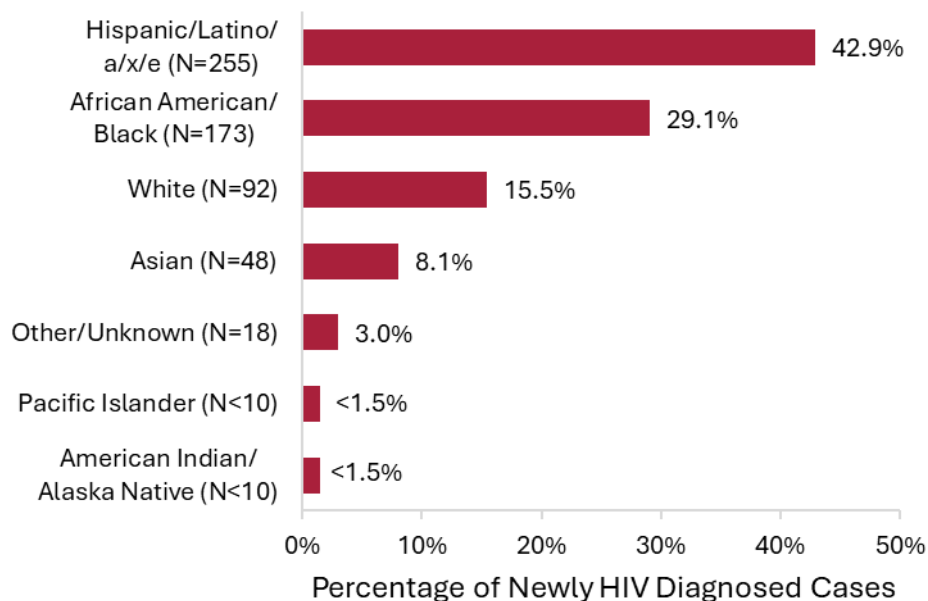
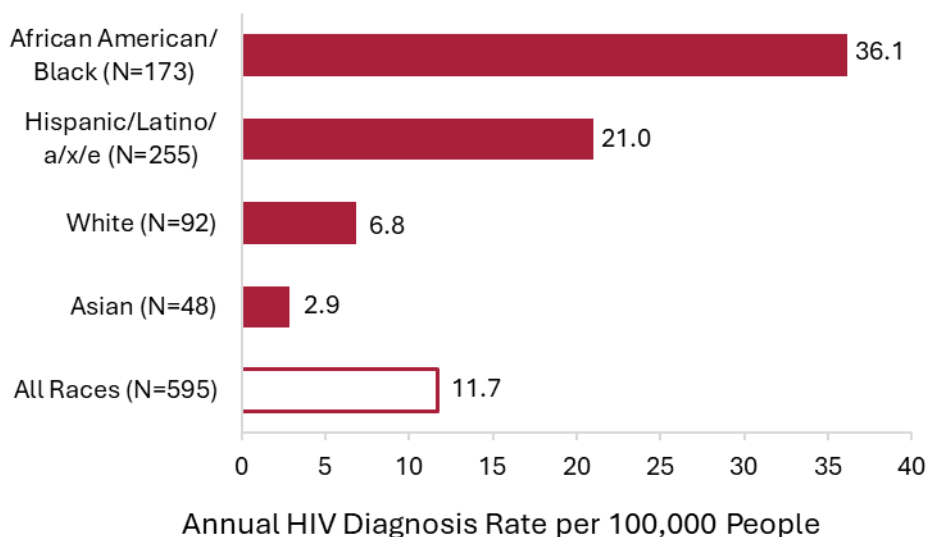


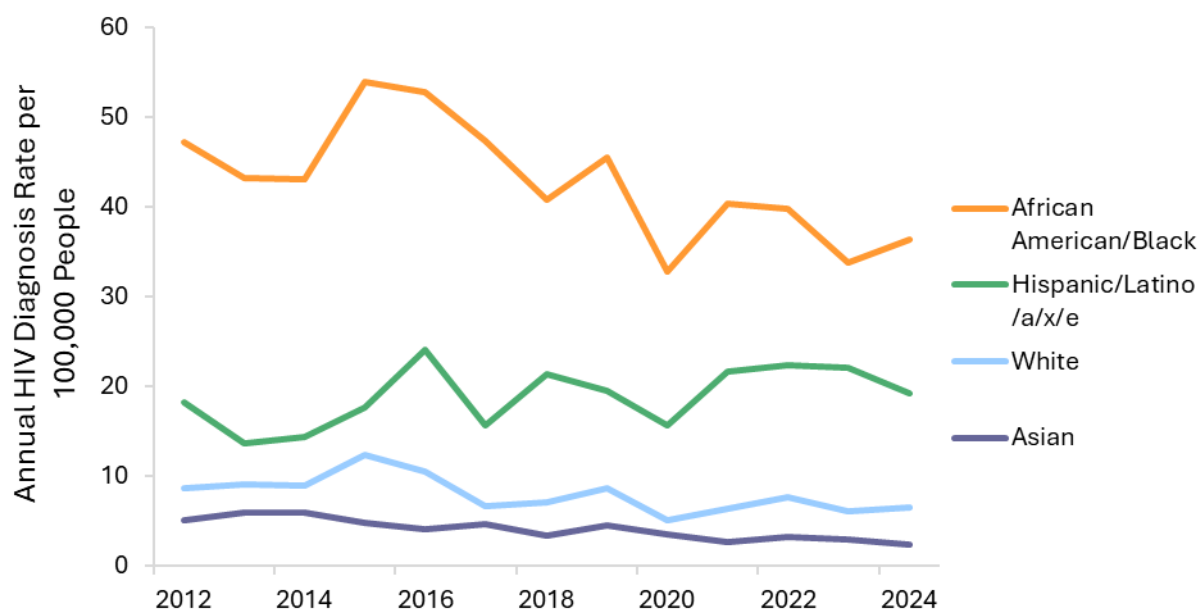
Figure 2.5: HIV Diagnosis Rates by Race/Ethnicity, Alameda County, 2022-2024



* American Indian/Alaska Native and Pacific Islander not included due to small numbers

Despite having the second highest number of new diagnoses, African American people continue to have the highest rate of new diagnoses in Alameda County, with 36.1 new diagnoses per 100,000 people, a rate 5.3 times higher than that of White residents and over 10 times higher than that of Asian residents. The number of new cases among Pacific Islander and American Indian/Alaskan Native people is very small and therefore does not provide reliable statistical strength for displaying precise rates. For some context in 2023, the California diagnosis rate for American Indians/Alaskan Natives was 9.1 per 100,000 people, and for Pacific Islander people the diagnosis rate was 11.0 per 100,000 people. However, direct comparisons to Alameda County rates should be avoided because the experience of those ethnic groups in Alameda County may differ from those living throughout the state of California.

Figure 2.6: HIV Diagnosis Rates by Year and Race/Ethnicity, Alameda County, 2012-2024



* American Indian/Alaska Native and Pacific Islander not included due to small numbers

The new diagnosis rate among African American people has been declining since 2006, with an average annual change of -3.5%, driving the county-wide decline in diagnosis rates. The decline is even more dramatic among African American people assigned female at birth, with an average annual change of -5.0%. The largest relative decline was among Asian people assigned male at birth, with an average annual decline of -8.1%, though given the smaller number of Asian people diagnosed with HIV, the decline among African American people contributed more to reducing the burden of HIV in Alameda County. In contrast, new diagnosis rates among Latinx people assigned female at birth increased an average of 5.7% annually between 2012 and 2024, with Latinx residents assigned male at birth increasing, but not at a statistically significant rate. This trend among Latinx people, while noticed over the last few years, has only recently become statistically significant. Rates for Pacific Islander and American Indian/Alaskan Native people were not included due to small counts and unstable rates. Across the state of California, new HIV diagnosis rates for Pacific Islander people went from 12.8 per 100,000 people in 2012 to 11.0 per 100,000 people in 2023, and for American Indians/Alaskan Natives, the diagnosis rate went from 10.3 per 100,000 people to 9.1 per 100,000 people.

Figure 2.7: New HIV Diagnosed by Sex at Birth, Alameda County, 2022-2024

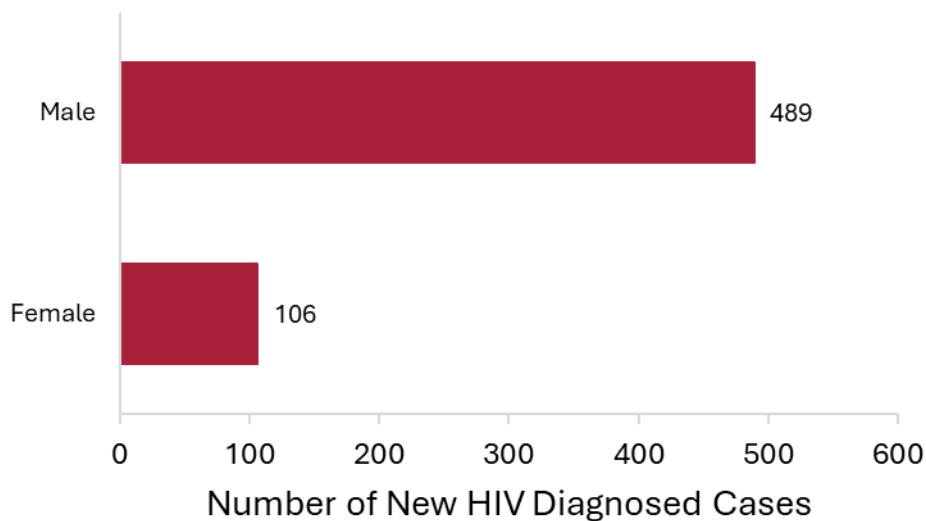
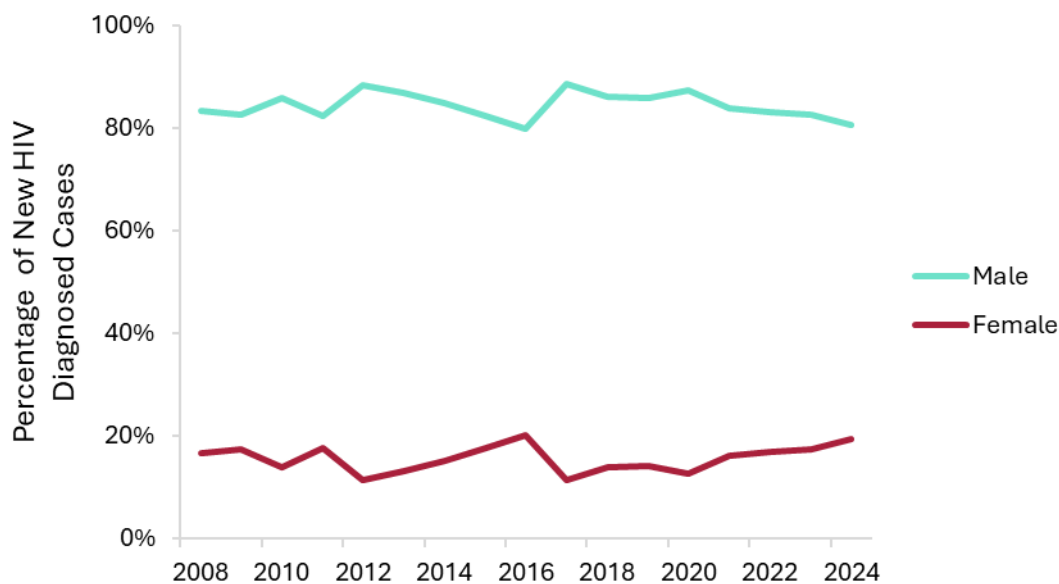


Figure 2.8: Percent of New HIV Diagnosed by Year and Sex at Birth, Alameda County, 2008-2024



Note: "Sex" here refers to sex assigned at birth.

People assigned male at birth make up more than 4 out of 5 new diagnoses. This disparity has remained relatively steady over the past 15 years. The new diagnosis rate among people assigned male at birth is over 4 times the rate of people assigned female at birth, though both rates have been decreasing over time (see figure 2.10).

Figure 2.9: HIV Diagnosis Rates by Sex at Birth, Alameda County, 2022-2024

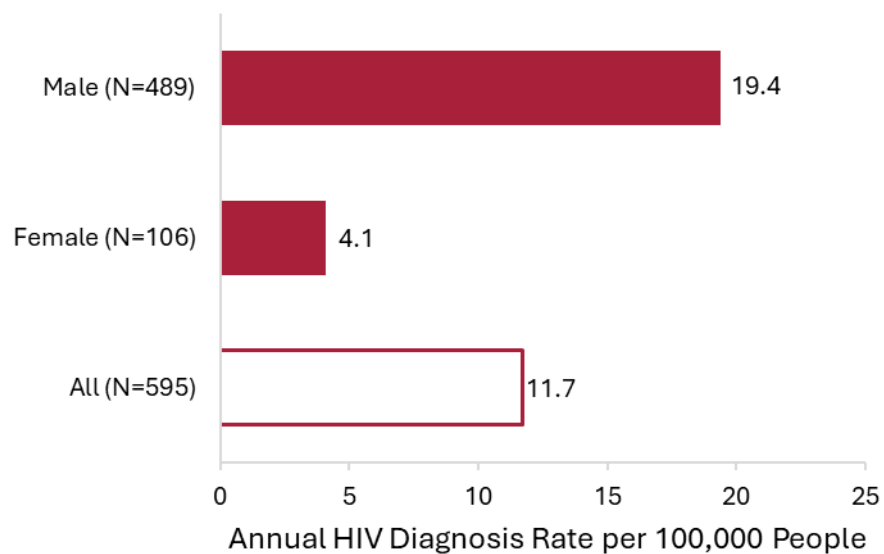


Figure 2.10: HIV Diagnosis Rates by Year and Sex at Birth, Alameda County, 2006-2024

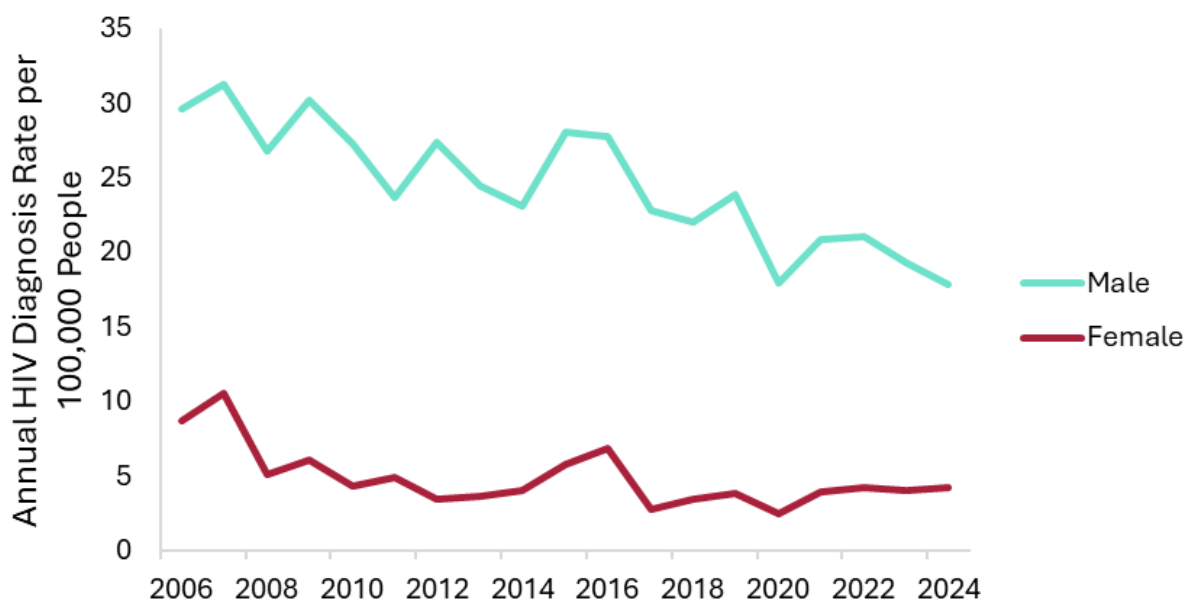
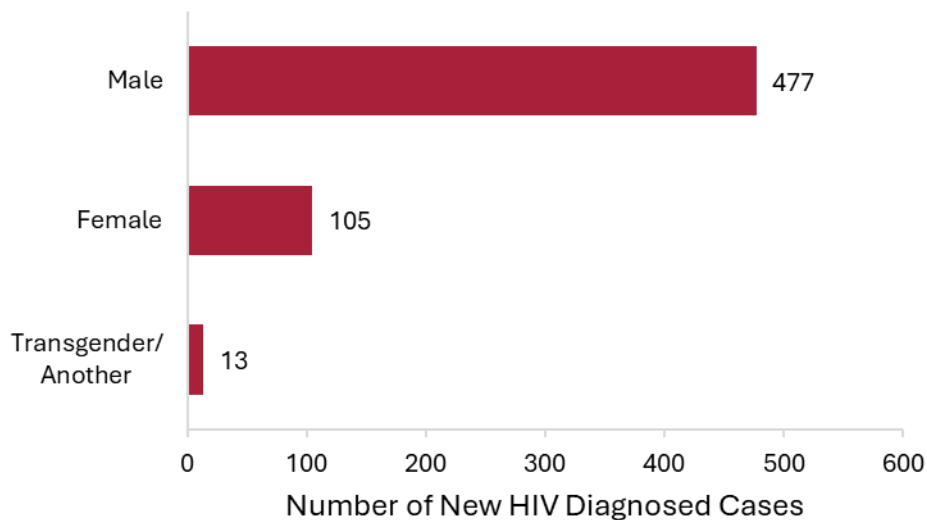


Figure 2.11: New HIV Diagnosed by Current Gender, Alameda County, 2022-2024



Data for current gender has historically been inaccurate and continues to be flawed, likely undercounting the number of transgender individuals being reported, but the data collection has been improving, and state and local jurisdictions make a greater effort to accurately represent people’s gender identity. In the figures describing current gender, transgender individuals were grouped with other non-binary gender identities as well as with individuals believed to be transgender, but not confirmed from demographic information reported in lab records. Between 2022-2024, 2.2% of new diagnoses were among transgender individuals, a majority of which were transgender women.

Figure 2.12: Percent of New HIV Diagnosed by Current Gender, Alameda County, 2022-2024

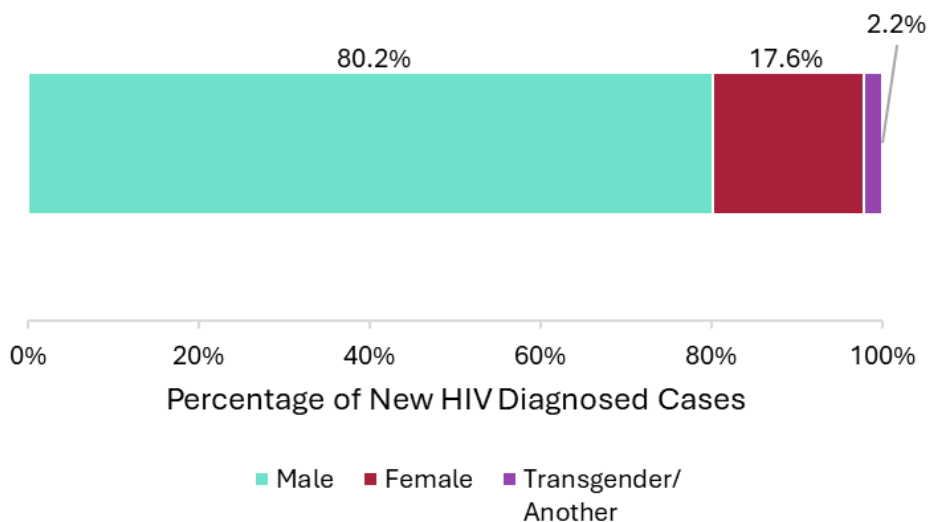


Figure 2.13: New HIV Diagnosed by Age Group at Diagnosis, Alameda County, 2022-2024

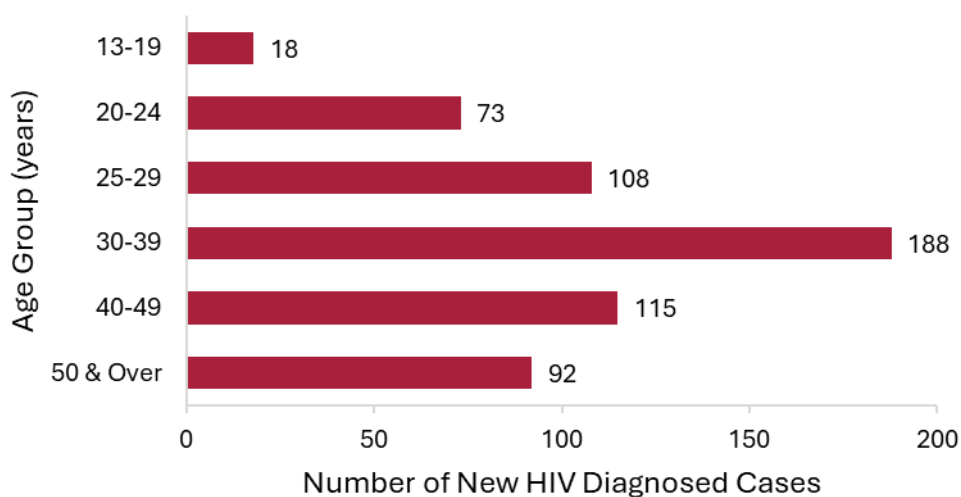
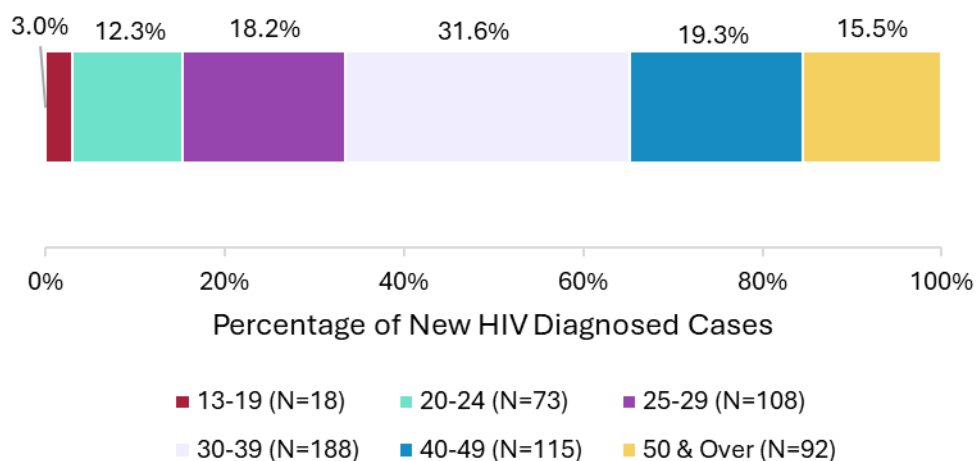


Figure 2.14: Percent of New HIV Diagnosed by Age Group, Alameda County, 2022-2024



Nearly 2/3 of new diagnoses were among those younger than 40 years of age, with the largest group between 30-39 years. The median age of new diagnoses was 34 years, and the average age was 36.4 years. The highest diagnosis rate was among those 25-29 years of age, with 30.9 per 100,000 people, more than twice the county-wide rate.

Figure 2.15: HIV Diagnosis Rate by Age Group at Diagnosis, Alameda County, 2022-2024

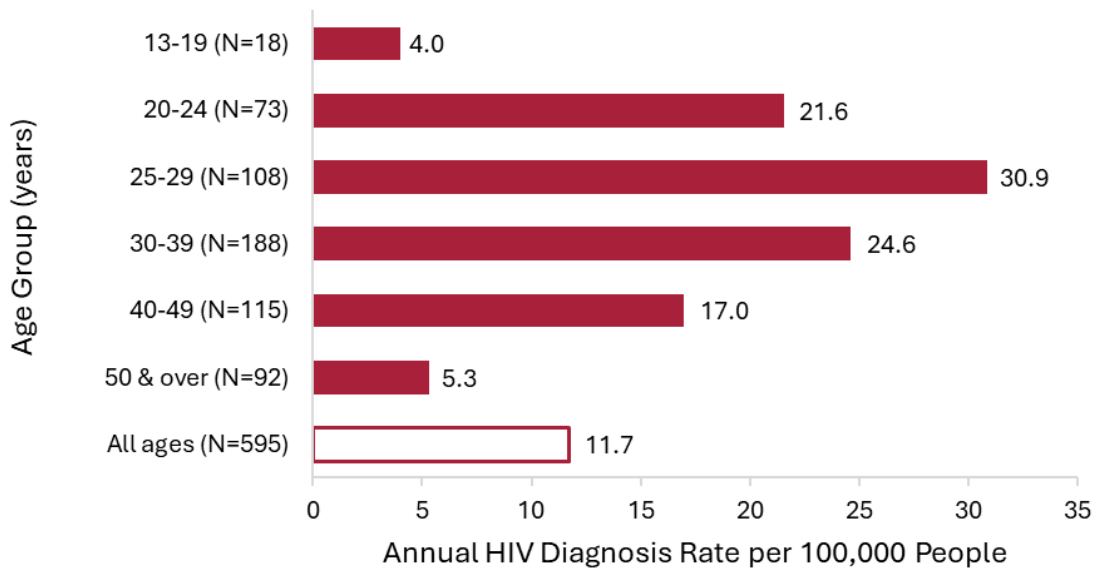
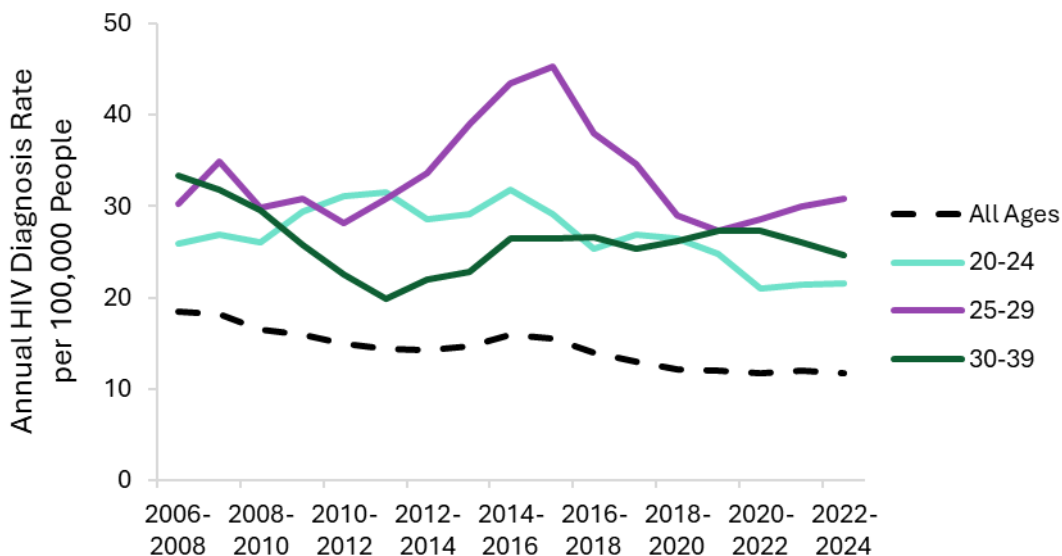
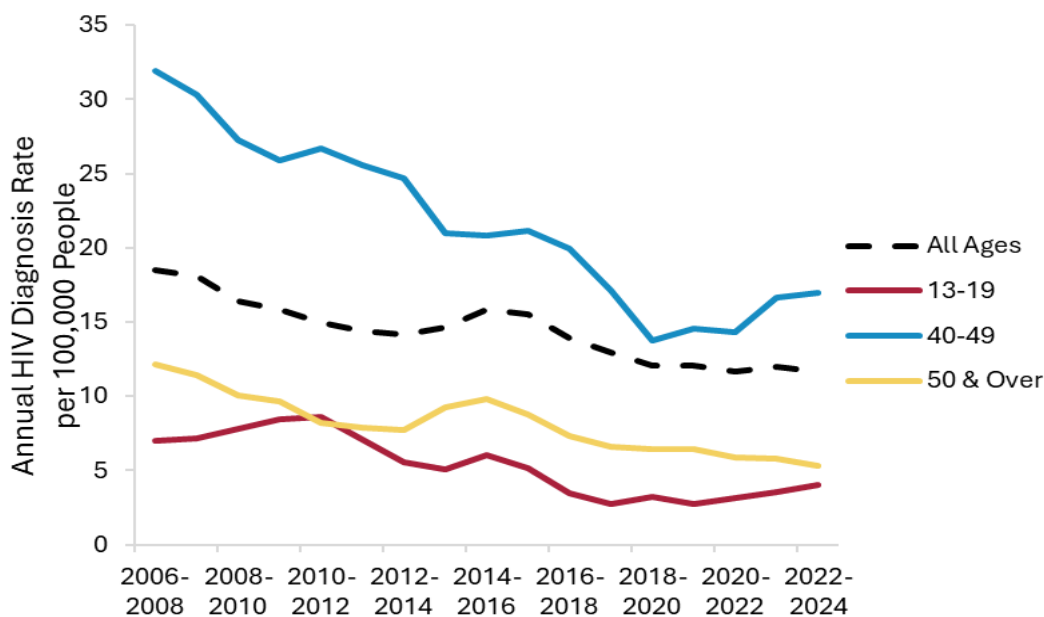


Figure 2.16: HIV Diagnosis Rate by Year and Age Group at Diagnosis (Highest), Alameda County, 2006-2024



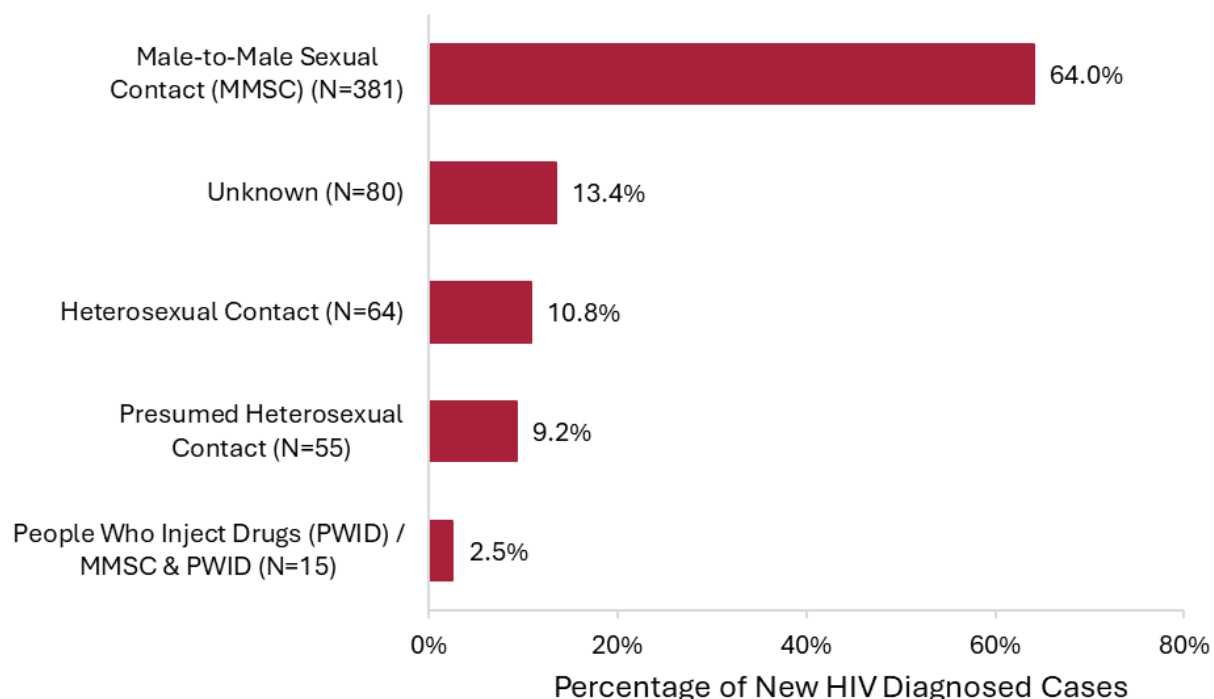
Diagnosis rates by age over time were split across two graphs to avoid the scale of the higher rates obscuring the trends among the lower rates. The age groups with the higher rates include 20-24 years, 25-29 years, and 30-39 years. None of those groups have seen a significant change over time, despite the overall trend going down.

Figure 2.17: HIV Diagnosis Rate by Year and Age Group at Diagnosis (Lowest), Alameda County, 2006-2024



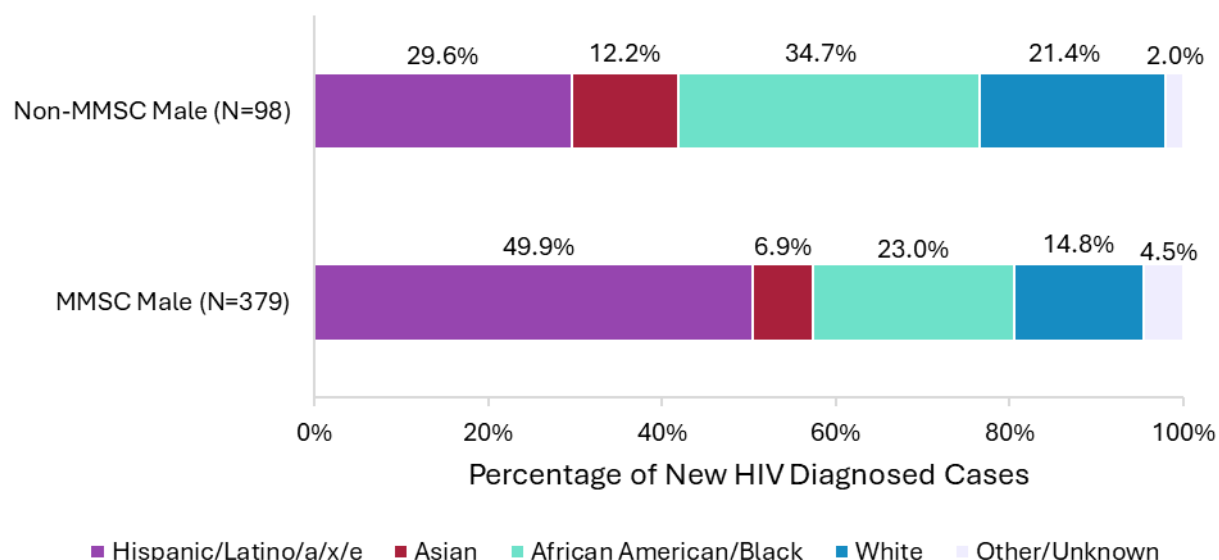
The age groups with the lower rates include 13-19 years, 40-49 years, and 50 years and over. All three have seen declining trends in diagnosis rates since 2006, with average annual changes of -5.6%, -4.5%, and -4.6%, respectively.

Figure 2.18: Percent of New HIV Diagnosed by Transmission Category, Alameda County, 2022-2024



Sixty-four percent of new diagnoses over the 3-year period of 2022 to 2024 were likely acquired during male-to-male sexual contact (MMSC). The category “Heterosexual Contact” indicates that the person had sexual contact with someone of a different sex with known HIV risk factors, whereas “Presumed Heterosexual Contact” indicates that a person who is female at birth had a male sex partner with an unknown HIV risk status and no other likely exposures. The transmission category people who inject drugs (PWID) was combined with MMSC & PWID to create a large enough group to avoid being excluded for small numbers.

Figure 2.19: New HIV Diagnosed by Transmission Category and Race/Ethnicity, Alameda County, 2022-2024



* American Indian/Alaska Native and Pacific Islander not included due to small numbers

Comparing racial/ethnic differences among men who identified as having male-to-male sexual contact versus men who did not, Latinx men were overrepresented among those who engaged in male-to-male sexual contact (49.9% of MMSC versus 29.6% of not), and African American men were underrepresented (23% MMSC versus 34.7% of not). When looking at age differences, younger age groups were more represented among MMSC than older age groups.

Figure 2.20: New HIV Diagnosed by Transmission Category and Age Group, Alameda County, 2022-2024

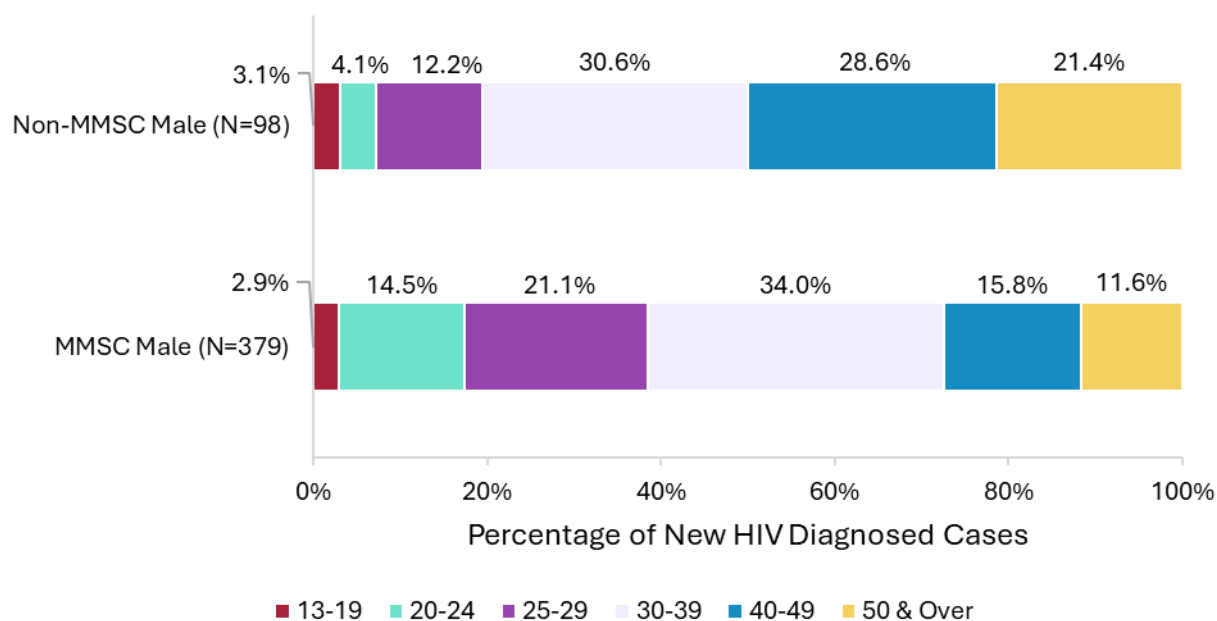
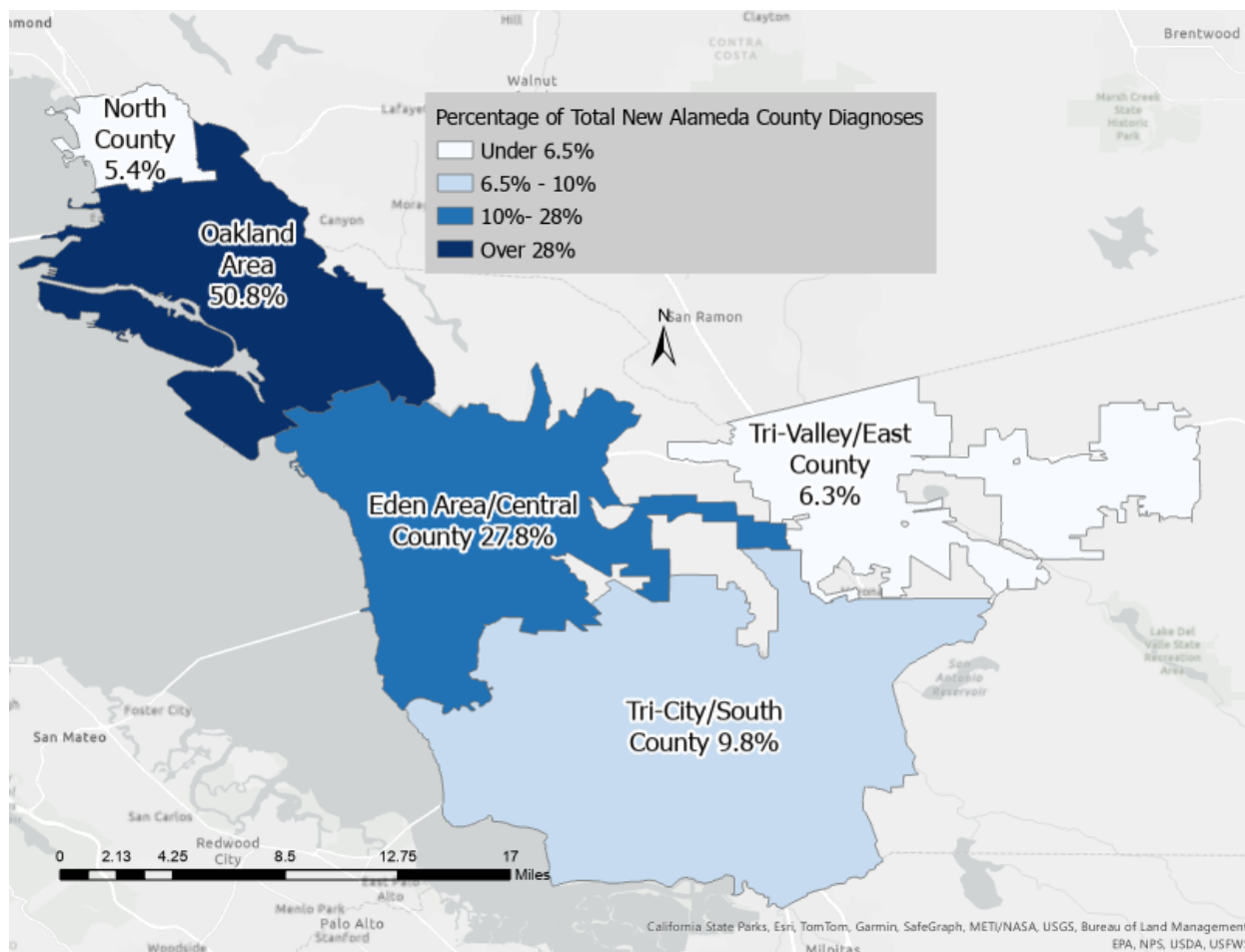
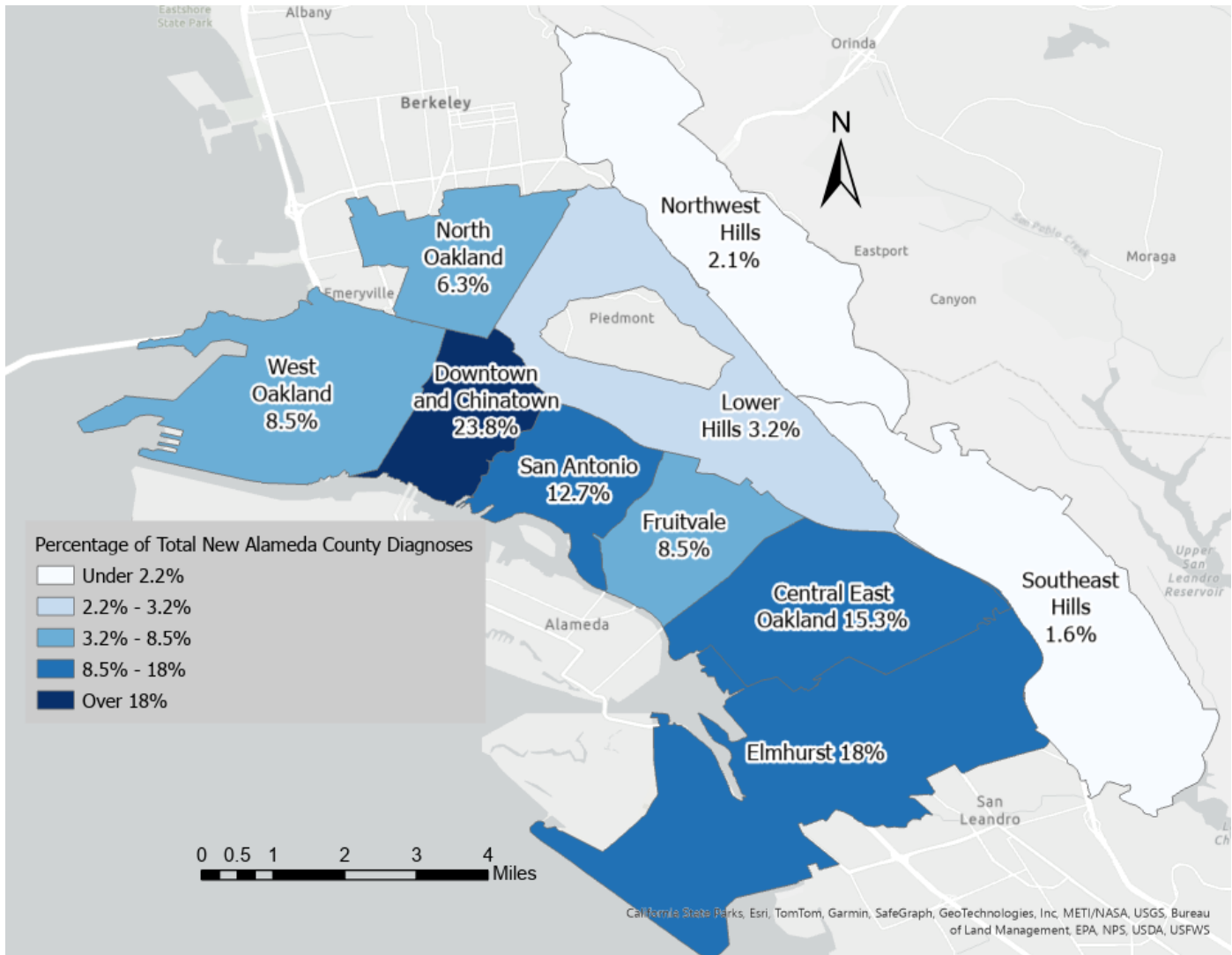


Figure 2.21: Geographic Distribution of New HIV Cases by Residence at HIV Diagnosis, Alameda County, 2022-2024



New diagnoses of HIV were most concentrated in the Oakland area and central county regions (as defined in Figure 1.1 on page 4). This distribution mirrors the major population centers in the county and can help guide the distribution of services for HIV care and prevention.

Figure 2.22: Geographic Distribution of New HIV Cases by Residence at HIV Diagnosis, Oakland, and Surrounding Area, 2022-2024



The highest concentration of new cases in the Oakland area was in Downtown/Chinatown and Elmhurst in East Oakland. The Oakland Hills had the lowest concentration in the region.

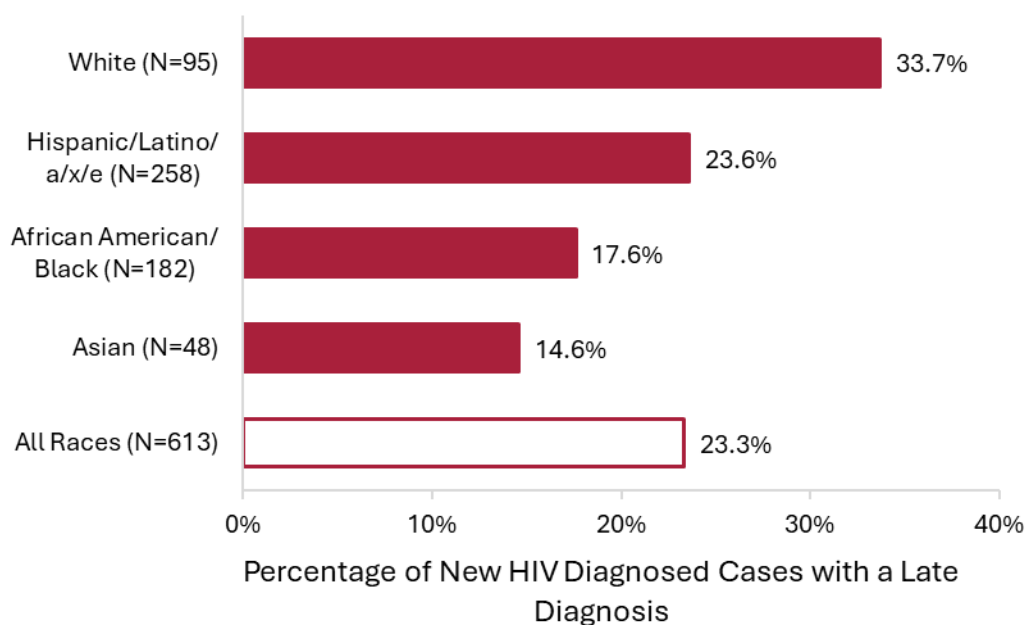
Timeliness of Diagnosis

Diagnosis of HIV early in the course of infection is an important component of effective HIV prevention and treatment because when highly active antiviral medications are given early, there is a reduction in both the risk of transmission to others and the poor health outcomes that can result from HIV.

Late Diagnosis

A key indicator of late HIV diagnosis is the time to progression to AIDS (stage 3 HIV infection). A diagnosis is deemed late if AIDS is diagnosed at the same time as a person's initial HIV diagnosis or if the person progresses to AIDS within one year of the initial HIV diagnosis. The analyses presented in this section are for the years 2021 to 2023 in order to provide a full year of data following diagnosis. Apparent differences should be interpreted with caution due to the small numbers of diagnoses seen in some subgroups, resulting in statistical instability.

Figure 2.23: Late Diagnosis by Race/Ethnicity, Alameda County, 2021-2023



* American Indian/Alaska Native and Pacific Islander not included due to small numbers

Late diagnosis percentages were highest among White residents, with 33.7% of new cases converting to AIDS within one year of initial diagnosis. The lowest percentage was among Asian people at 14.6%. Late diagnosis percentages were higher among people assigned male at birth (24.5%) compared to female at birth (17.5%).

Figure 2.24: Late Diagnosis by Sex at Birth, Alameda County, 2021-2023

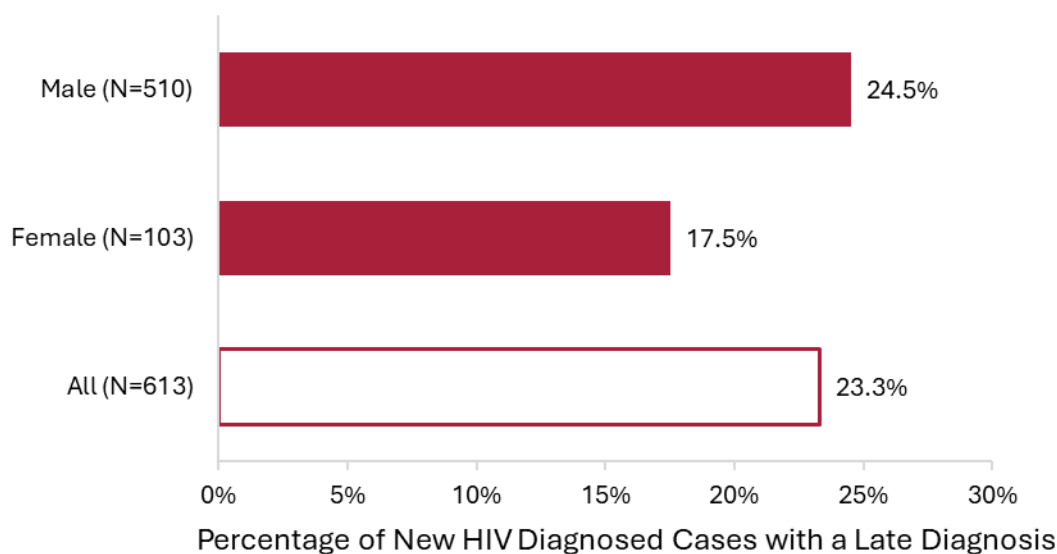
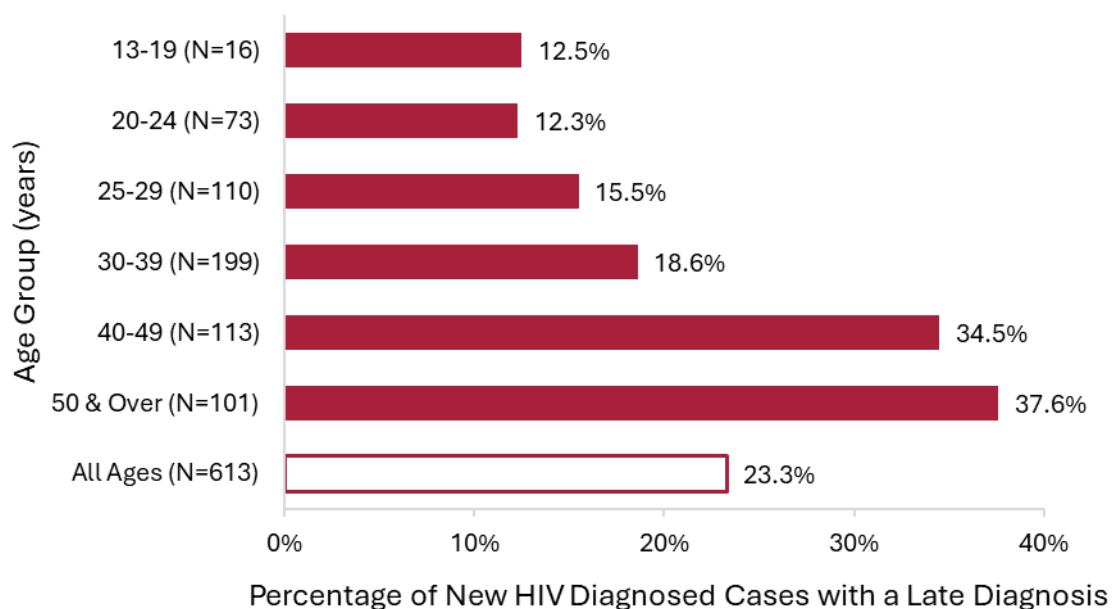
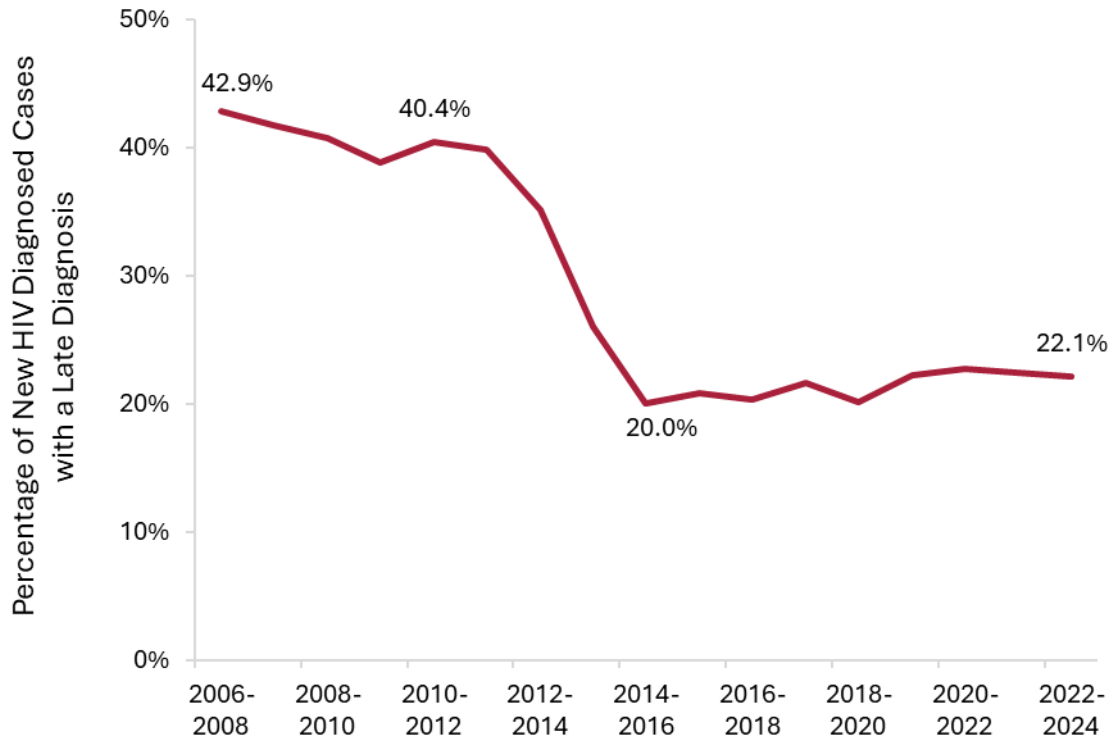


Figure 2.25: Late Diagnosis by Age Group, Alameda County, 2021-2023



By age, older age groups experienced higher percentages of late diagnosis than younger age groups, ranging from 12.3% among those aged 20-24 years to 37.6% among those 50 years and older. This makes intuitive sense, given that more time would likely have passed since the transmission event occurred if a person is older. Late diagnosis implies the person was not tested earlier, indicating the need for more widespread, low-barrier HIV testing and linkage to care.

Figure 2.26: Late Diagnosis by Year, Alameda County, 2006-2024



The percentage of diagnoses that were late diagnoses has declined since 2006, when it was over 40%, to now 22.1%. After a relatively steep decline, rates have plateaued just above 20% for the past several years.

People Living with HIV

In the United States, there were an estimated 1,132,739 persons aged 13 years or older living with diagnosed HIV at the end of 2023 for an overall prevalence of 394.5 per 100,000 people. People who identified as men made up 77% of all PLHIV. The highest percentages by age, race/ethnicity, and region of residence were among those aged 55 to 64 (26% of all PLHIV), African American people (39%), and persons residing in the South (46%).³ At year-end 2023, California had an estimated 143,254 PLHIV for a statewide prevalence of 355.0 per 100,000 people.⁸ At year-end 2024 in Alameda County, the prevalence of HIV was 359.8 per 100,000 people.

This chapter examines the prevalence, or the proportion of people living in Alameda County who have been diagnosed with HIV, reflecting the overall burden of HIV in the population. Data presented do not include PLHIV with undiagnosed infection but include all those with diagnosed HIV (including newly diagnosed), regardless of the stage of HIV infection. First, characteristics of PLHIV in the county are presented. Then, the prevalence of HIV disease in different subpopulations, followed by the mortality (deaths) among PLHIV ever diagnosed with AIDS, and finally characteristics of coinfection with HIV and Hepatitis C Virus (HCV).

Characteristics of People Living with HIV

At the end of 2024, there were an estimated 6,205 people living with HIV in Alameda County.

As with the distribution by birth sex among new diagnoses of HIV, people living with HIV in Alameda County at year-end 2024 were predominantly male (83.3%). This distribution has remained relatively constant since 2010.

Figure 3.1: PLHIV by Sex at Birth, Alameda County, Year-End 2024

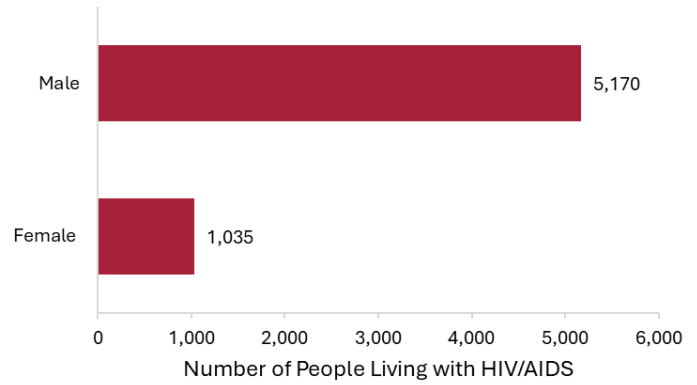


Figure 3.2: HIV Prevalence Rates by Year and Sex at Birth, Alameda County, Year-End 2024

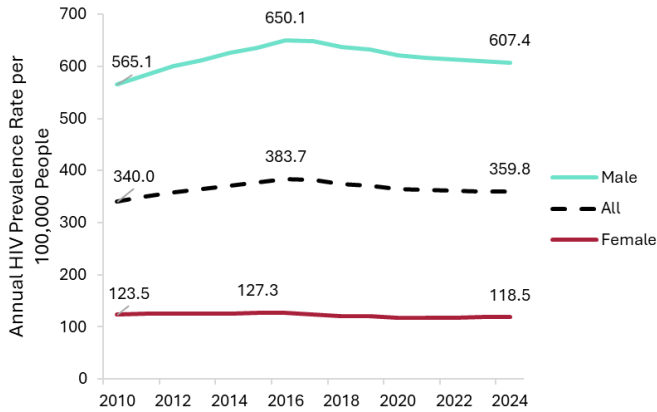
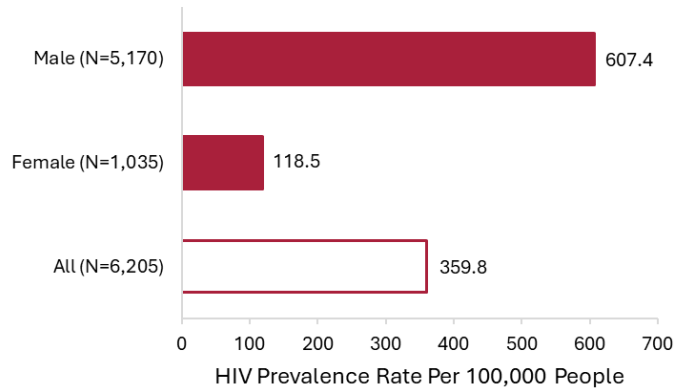


Figure 3.3: HIV Prevalence Rates by Sex at Birth, Alameda County, Year-End 2024



The prevalence rate among people assigned male at birth is over five times as high as those assigned female at birth. While the rate among men has increased since 2010, the rate among women has remained roughly the same.

Figure 3.4: PLHIV by Current Gender, Alameda County, Year-End 2024

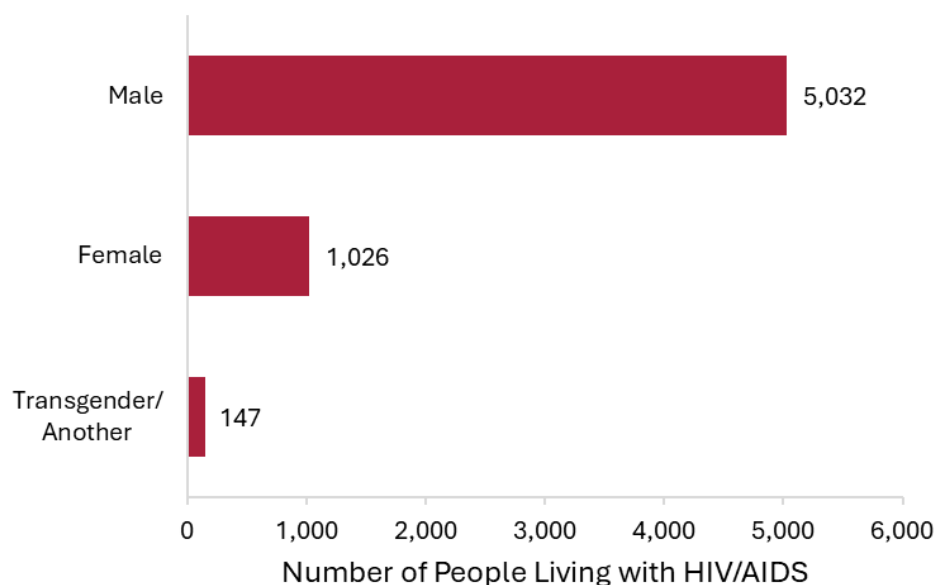
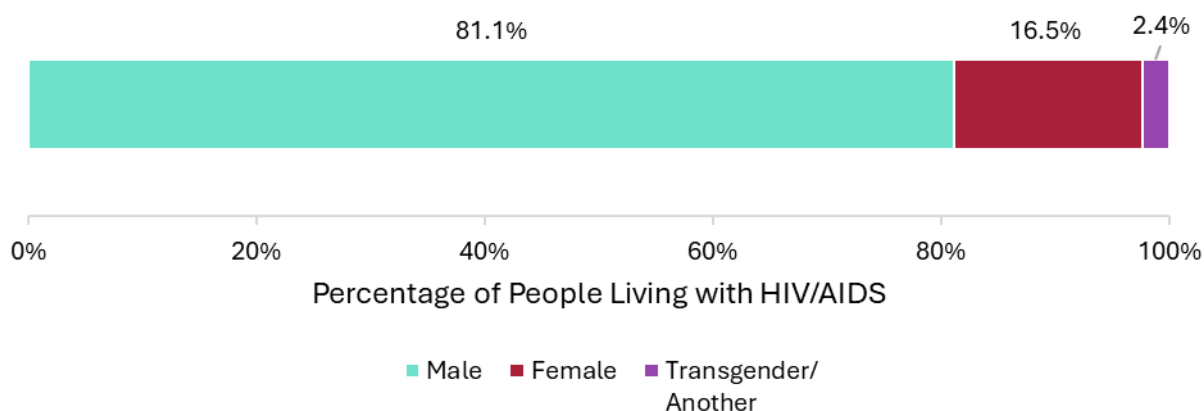


Figure 3.5: Percentage of PLHIV by Current Gender, Alameda County, Year-End 2024



As stated earlier, data regarding gender identity has been difficult to reliably collect and analyze. It is likely that the number of people living with HIV identifying as transgender or non-binary is undercounted; however, greater effort has been made in recent years to improve reporting of current gender. Even with the correct count, a prevalence rate cannot be calculated due to a lack of denominators. With those caveats in mind, an estimated 2.4% of people living with HIV were identified as transgender or another non-binary gender identity.

The largest percentages of people living with HIV by race/ethnicity in Alameda County were African American (35.7%), Latinx (26.5%), or White (25.2%). Asian (6.3%), Pacific Islander (0.4%), and American Indian/Alaskan Native people (0.2%) made up much smaller percentages of people living with HIV in Alameda County.

Figure 3.6: PLHIV by Race/Ethnicity, Alameda County, Year-End 2024

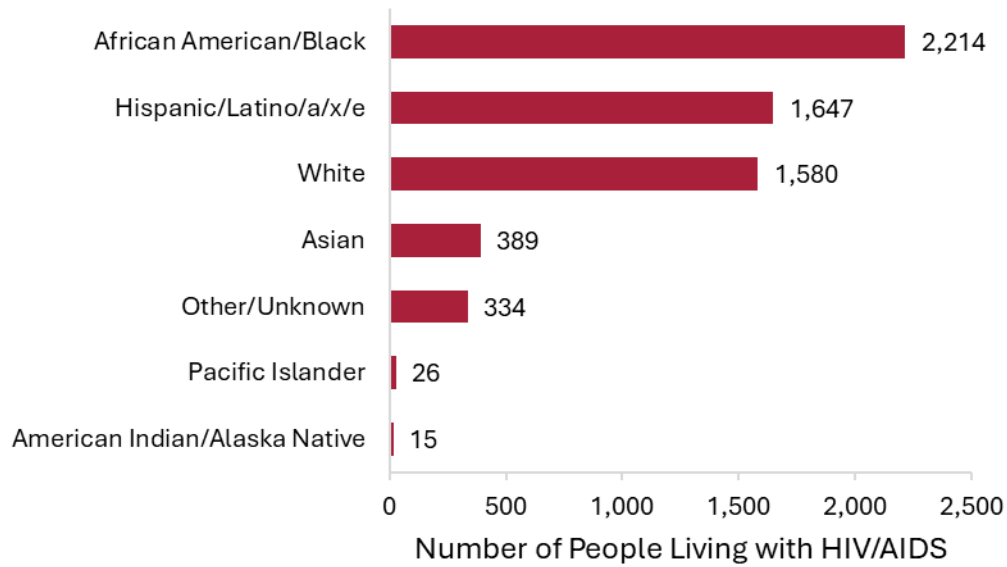


Figure 3.7: Percentage of PLHIV by Race/Ethnicity, Alameda County, Year-End 2024

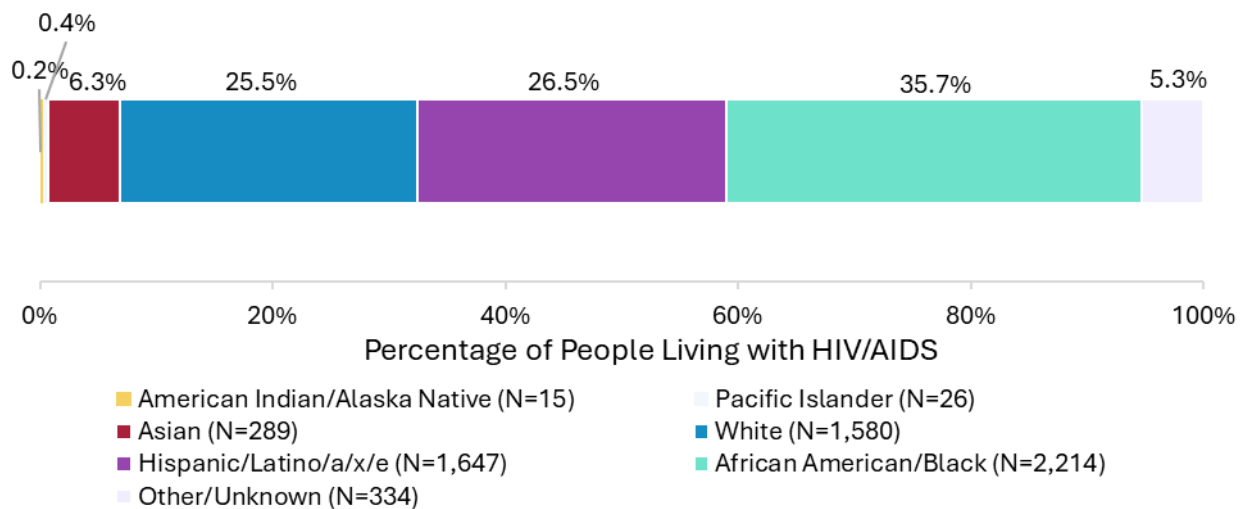


Figure 3.8: HIV Prevalence Rates by Race/Ethnicity, Alameda County, Year-End 2024

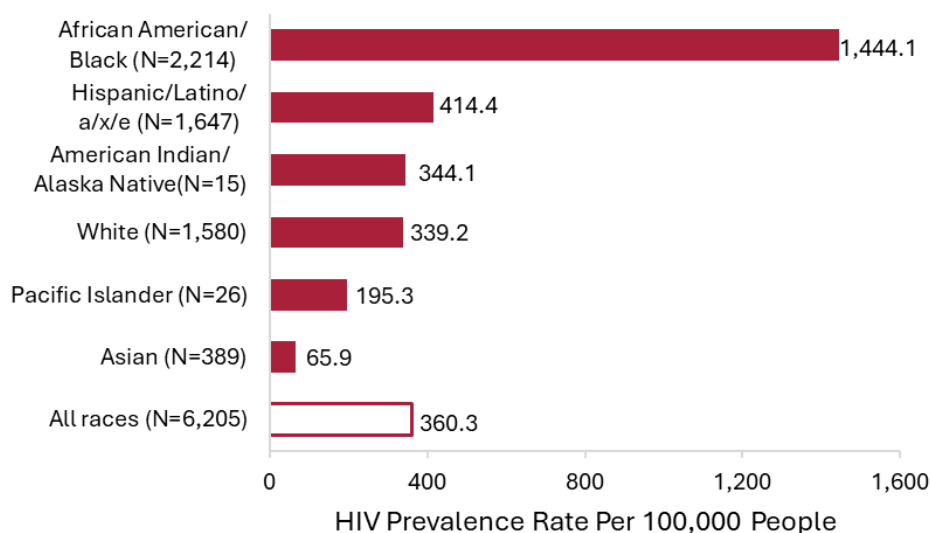
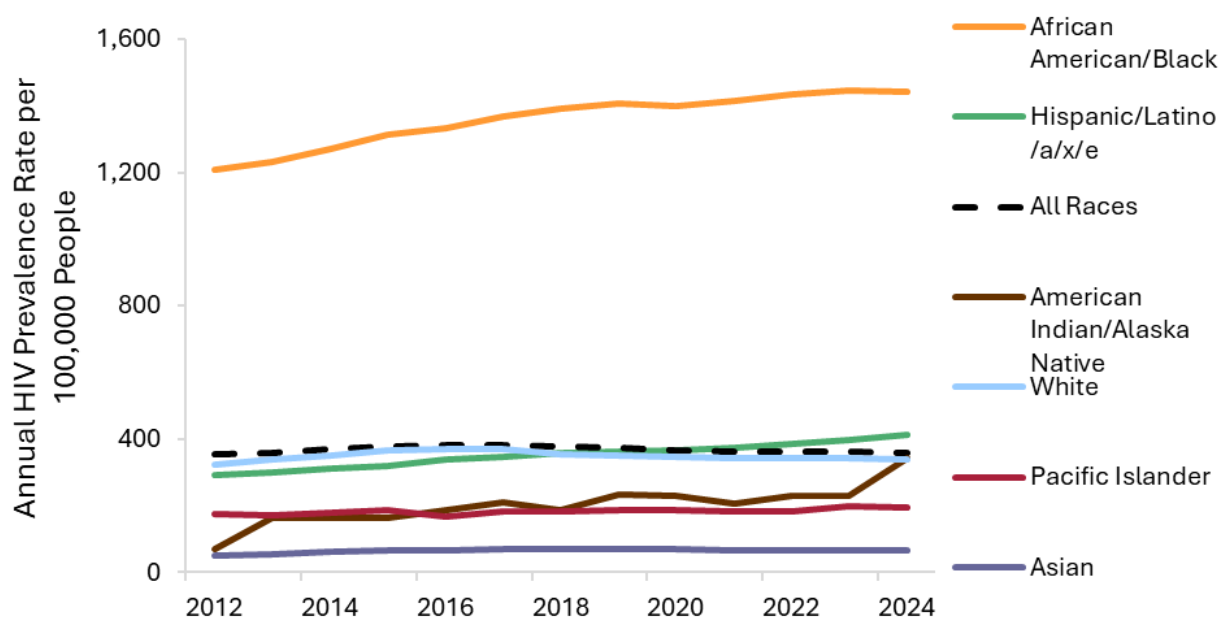


Figure 3.9: HIV Prevalence Rates by Race/Ethnicity and Year, Alameda County, 2012-2024



African American people (1,444.1 per 100,000) had a prevalence rate 3.3 times as high as the next most impacted racial/ethnic group, Latinx people (414.4 per 100,000). Prevalence was lowest among Asian (65.9 per 100,000) and Pacific Islander people (195.3 per 100,000). It is worth noting that while the prevalence rate continues to increase among African American people, the diagnosis rate continues to fall. This is related to life expectancy for those living with HIV improving over time due to effective medication.

Figure 3.10: PLHIV by Age Group, Alameda County, Year-End 2024

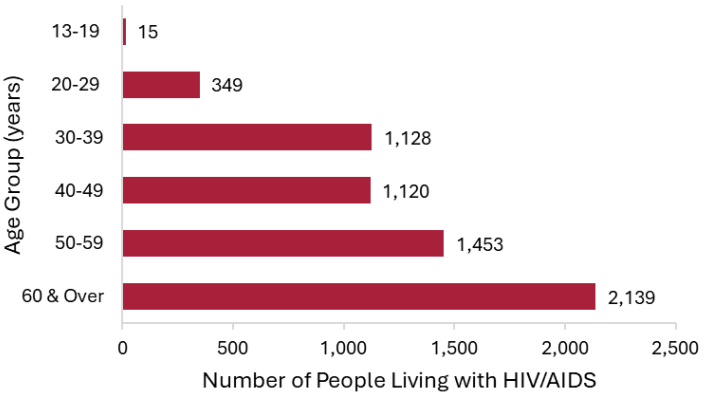


Figure 3.11: HIV Prevalence Rates by Age Group, Alameda County, Year-End 2024

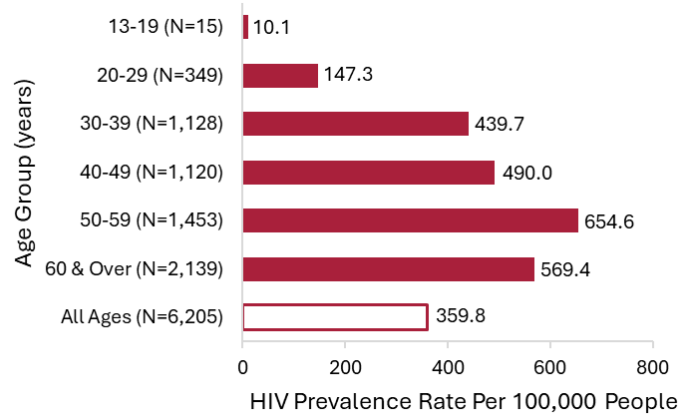
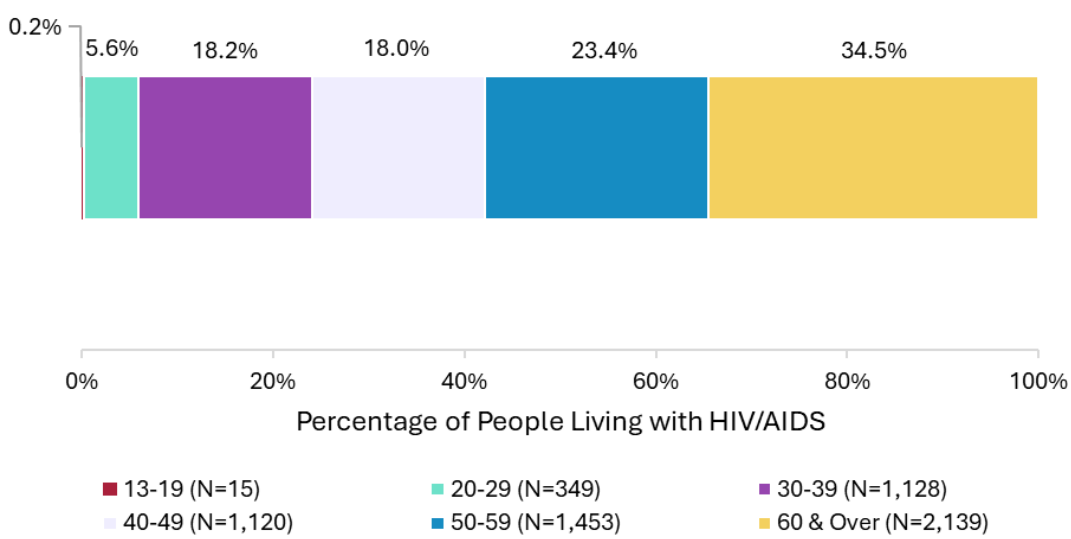


Figure 3.12: Age Group Distribution of PLHIV, Alameda County, Year-End 2024



Over half of the people living with HIV are 50 years and older in Alameda County (57.9%). Fewer than a quarter were in their 30s or younger (24%). The median age was 53, and the mean was 50.9 in 2024.

Figure 3.13: HIV Prevalence Rates by Age Group and Year, Alameda County, 2010-2024 (Younger Cohorts)

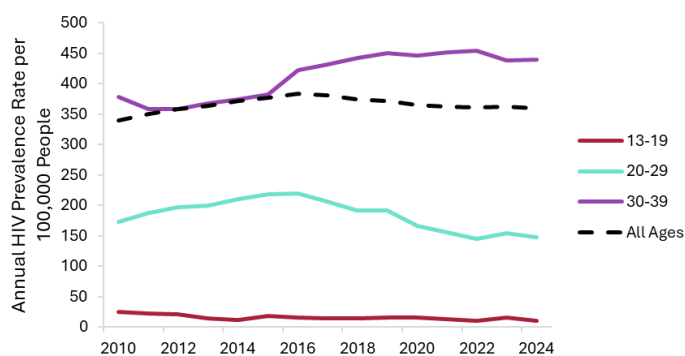
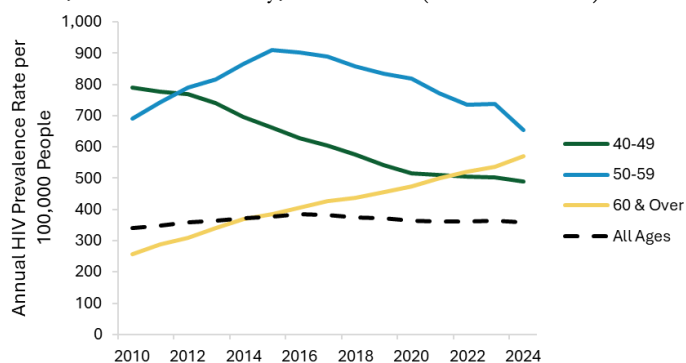


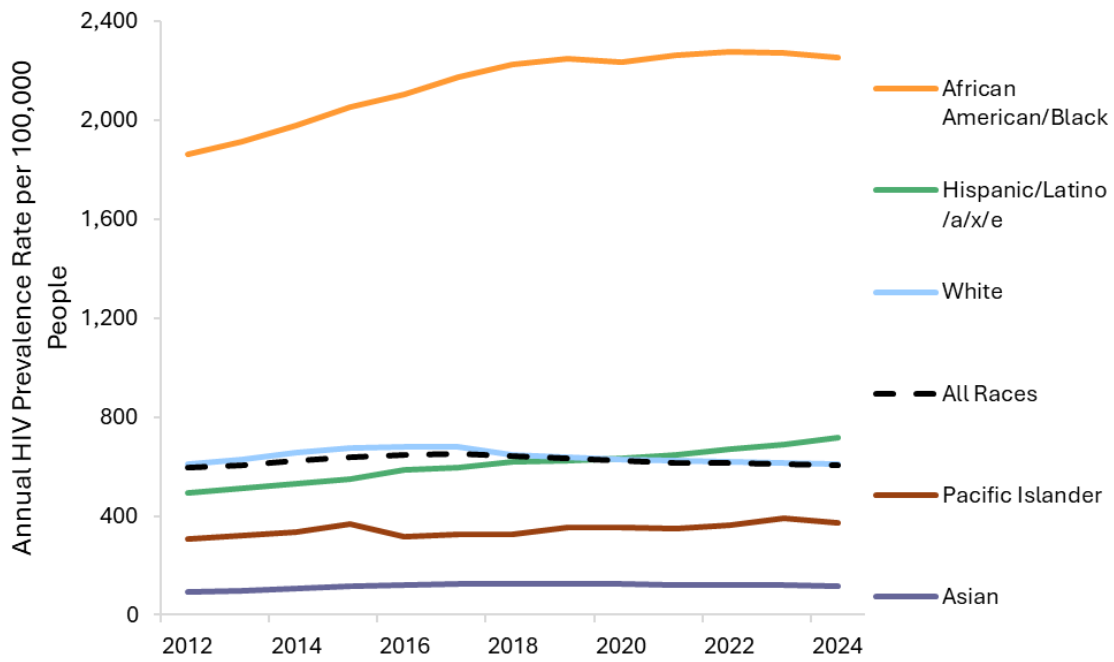
Figure 3.14: HIV Prevalence Rates by Age Group and Year, Alameda County, 2010-2024 (Older Cohorts)



Prevalence rates have been increasing among those aged 60 years and over and 30-39 years. Prevalence decreased among those aged 40-49 years from 781.2 per 100,000 people in 2012 to 484.6 per 100,000 in 2024. Of course, individuals will age into older cohorts as time passes. HIV prevalence was higher in each successive age group, ranging from 10.1 per 100,000 youth aged 13 to 19 to a high of 654.6 per 100,000 people aged 50 to 59 years. The number of children aged 0 to 12 living with HIV was too low to estimate a statistically reliable prevalence rate. The increasing prevalence of HIV with age is consistent with the greatly improved survival of people living with HIV in the post-antiretroviral therapy era.

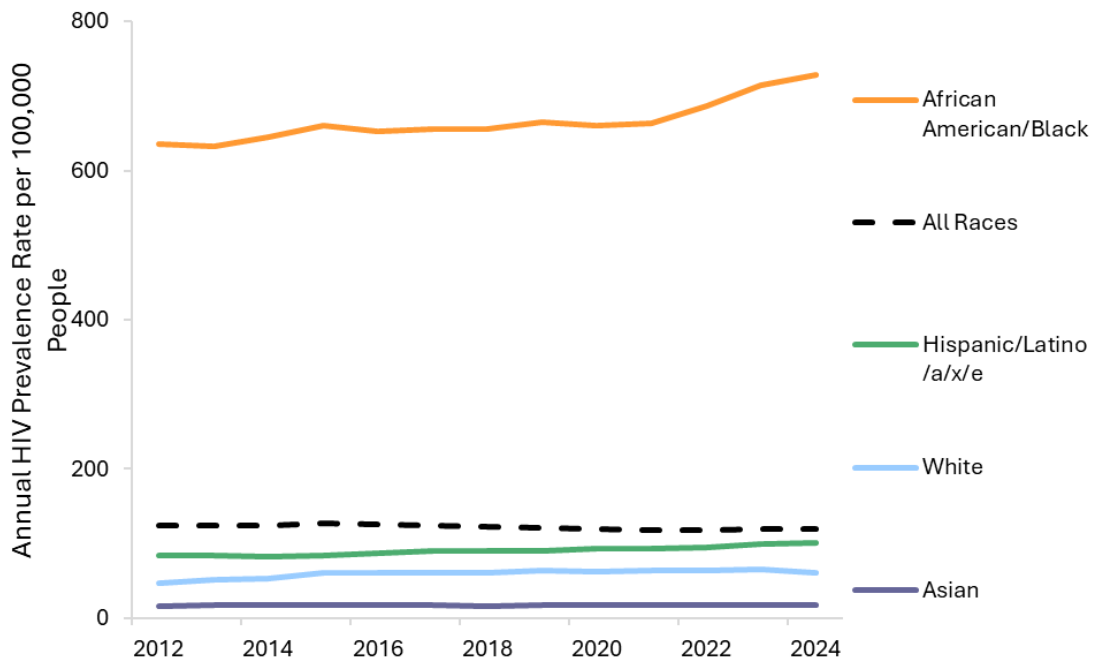
On a relative scale, disparities in prevalence rates by race/ethnicity were more pronounced among females than males. While prevalence was more than three times higher among African American males (2,252.1 per 100,000) compared to White males (611.9 per 100,000), it was almost 12 times higher among African American females (729.0 per 100,000) compared to White females (61.1 per 100,000) (see figures 3.15 and 3.16).

Figure 3.15: HIV Prevalence Rates by Race/Ethnicity and Year for Male Residents, Alameda County, 2012-2024



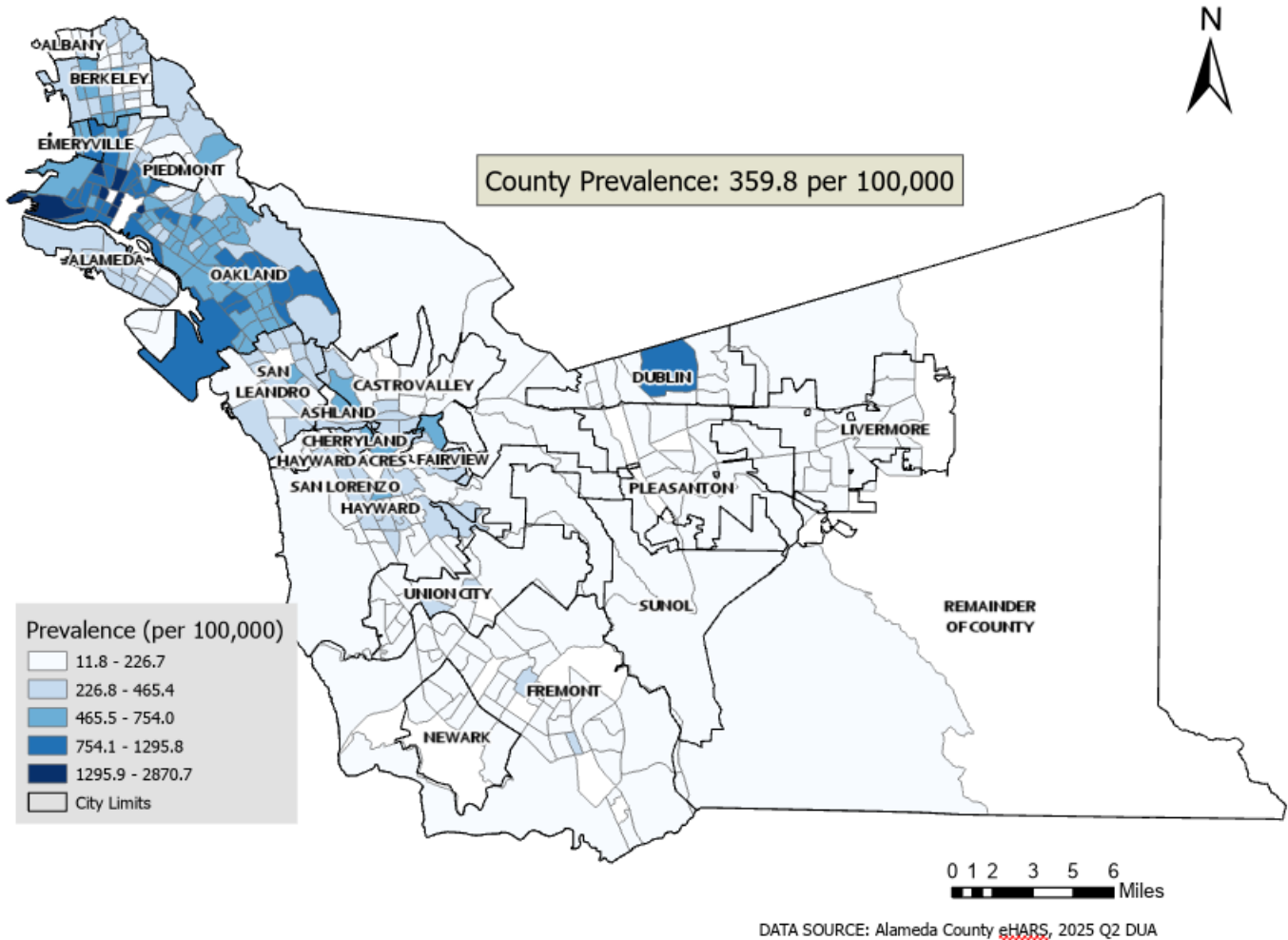
* American Indian/Alaska Native not included due to small numbers

Figure 3.16: HIV Prevalence Rates by Race/Ethnicity and Year for Female Residents, Alameda County, 2012-2024



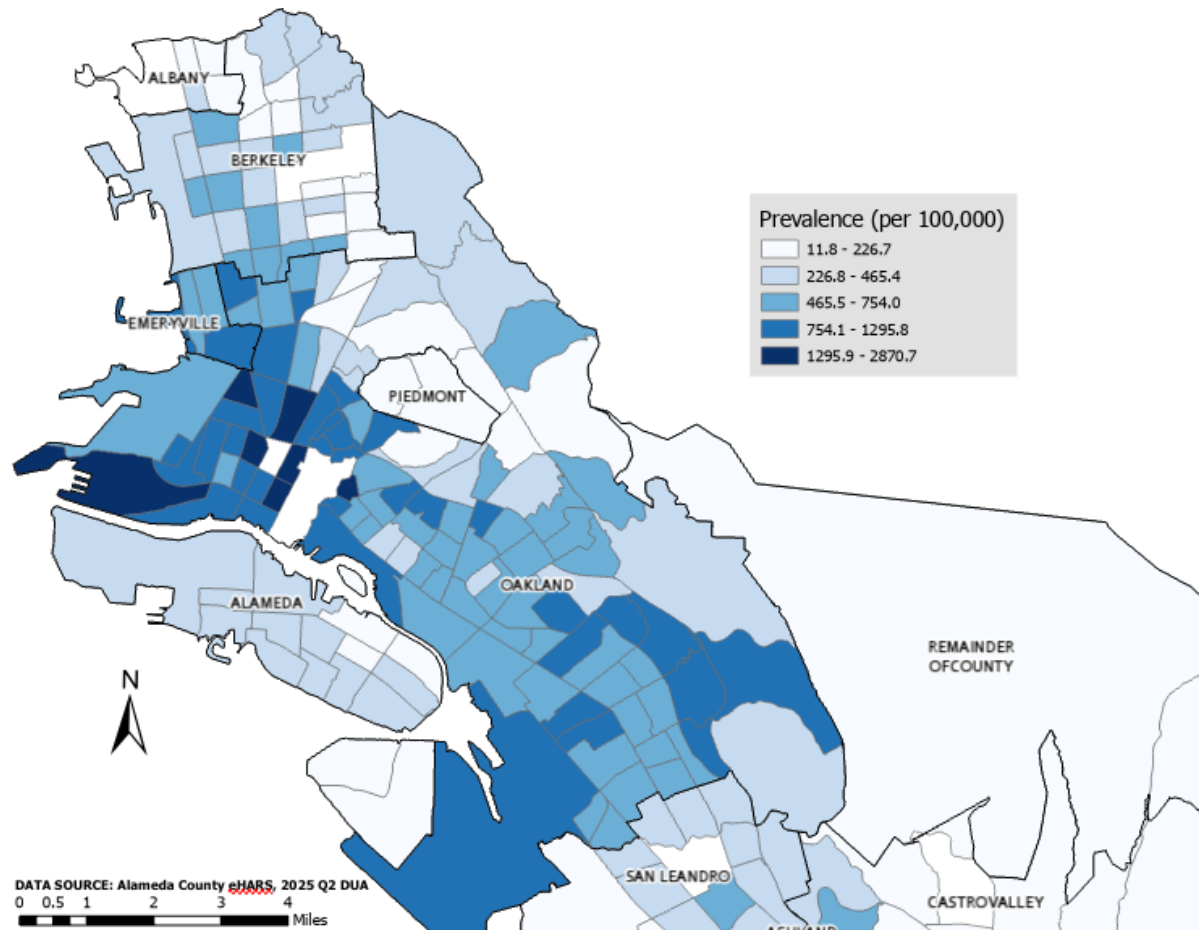
* American Indian/Alaska Native and Pacific Islander not included due to small numbers

Figure 3.17: HIV Prevalence Rates by Census Tract of Residence, Alameda County, Year-End 2024



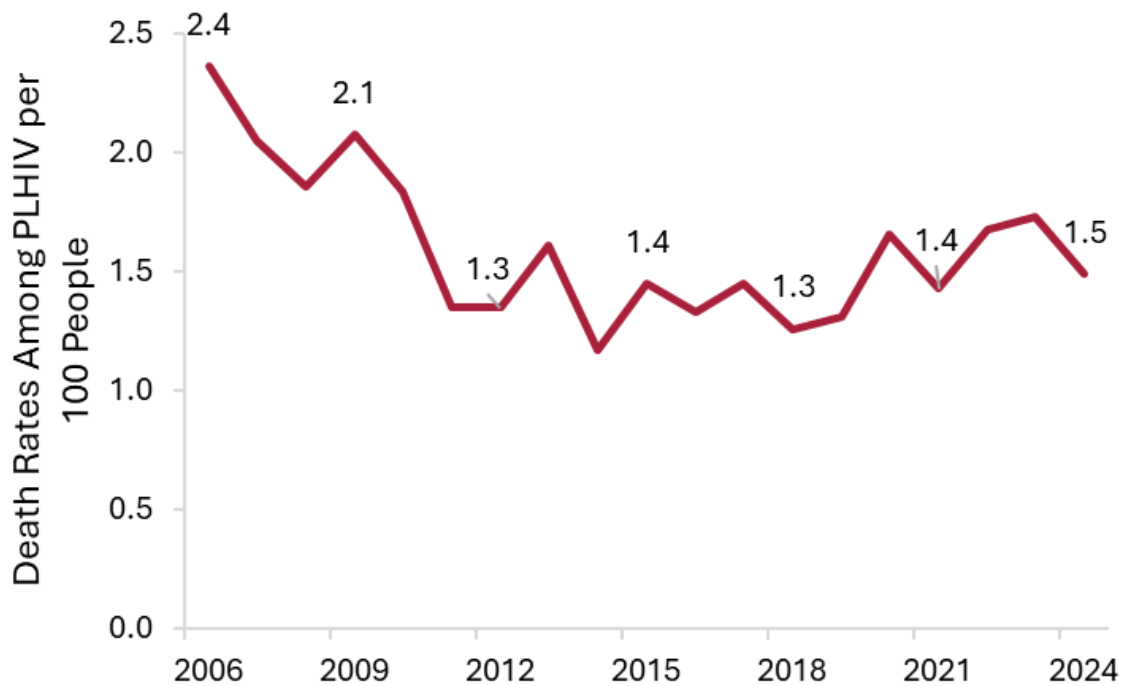
The city of Emeryville had the highest HIV prevalence within Alameda County (1,166.8 per 100,000), followed by Oakland (733.5 per 100,000), San Leandro (406.2 per 100,000), and Berkeley (371.7 per 100,000). Among the Oakland neighborhoods, West Oakland, Downtown, and Chinatown had the highest HIV prevalence, up to 2,870.7 per 100,000, or almost 3% of residents in the highest census tracts.

Figure 3.18: HIV Prevalence Rates by Census Tract of Residence, Oakland and Surrounding Area, Year-End 2024



Deaths Among Alameda County Residents Ever Diagnosed with AIDS

Figure 3.19: Death Rate among PLHIV by Year, Alameda County, 2006-2024



Although HIV infection without AIDS has been reportable by name in California only since 2006, AIDS has been a reportable disease since the early 1980s, allowing examination of long-term trends in death rates among the subset of people living with HIV ever diagnosed with AIDS. In 1985, there were 38.7 deaths (from any cause, whether HIV-related or not) per 100 Alameda County residents ever diagnosed with AIDS. This rate dropped to 7.5 deaths per 100 by 1997 and has declined slowly but steadily since then. In 2024, there were 82 deaths among the 3,683 residents living with AIDS, for a rate of 2.2 deaths per 100 residents living with AIDS. Among all people living with HIV, regardless of AIDS status, the death rate in 2024 was 1.5 per 100,000 people, representing a 37.5% decrease since 2006.

Figure 3.20: Deaths by Year among Alameda County Residents Diagnosed with AIDS, Alameda County, 1984-2024

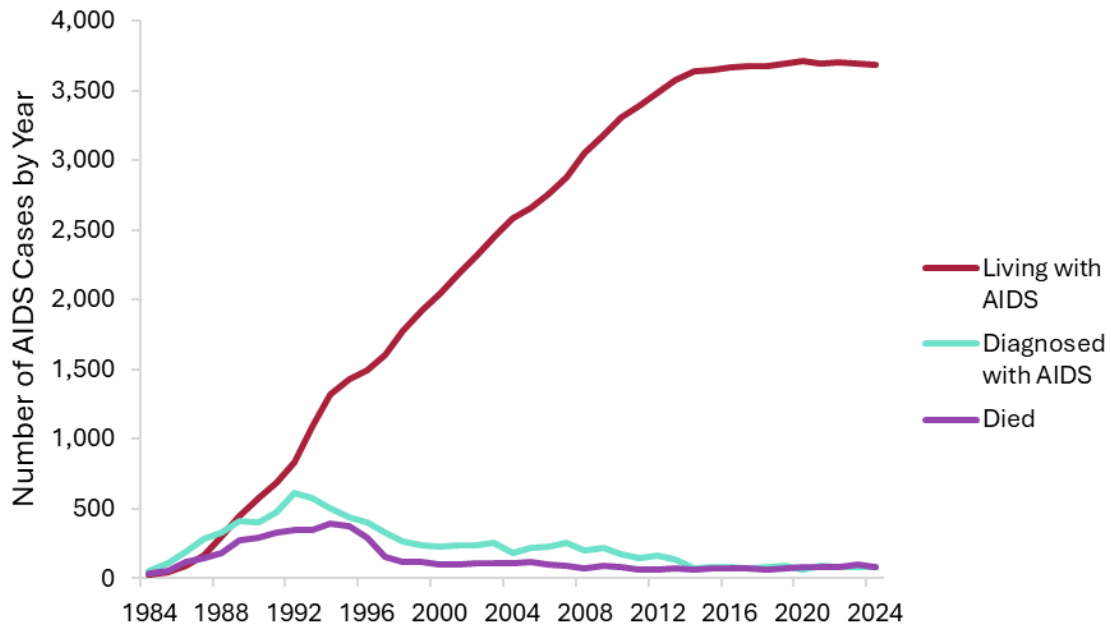
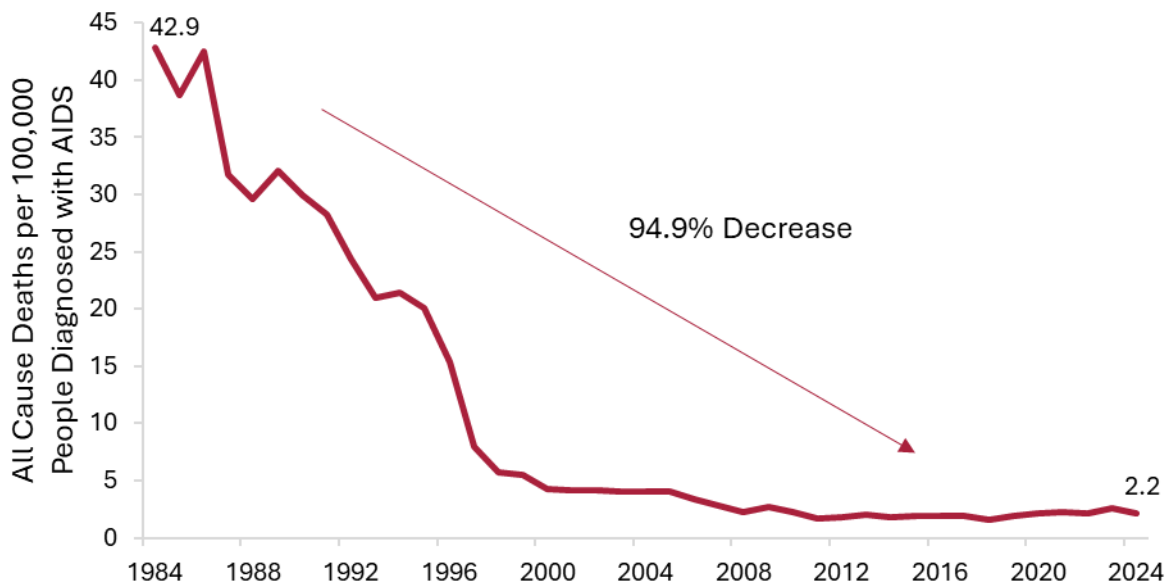


Figure 3.21: Death Rates by Year among Alameda County Residents Diagnosed with AIDS, Alameda County, 1984-2024



Note: Death rates calculated among persons ever diagnosed with AIDS while a resident of Alameda County, regardless of county of residence at death. Deaths in PLHIV without AIDS are not reported here.

HIV-Hepatitis C Coinfection

Hepatitis C virus (HCV) is a pathogen that is passed from person-to-person through contact with infected blood or sexual contact and can lead to liver damage. HCV can be effectively treated and cured with medication. HIV/HCV coinfection occurs when both infections are present in a person at the same time; coinfection can impact a person’s ability to fight HCV and can result in liver damage sooner than if a person had HCV alone. For that reason, it is important to identify coinfecting individuals to get their HCV cured and their HIV infection treated. For this analysis, HCV infections were identified by the presence of a positive HCV ribonucleic acid (RNA) test result in the California Reportable Disease Information Exchange (CalREDIE) Data Distribution Portal in 2015-2024. A case was considered coinfecting if the HIV diagnosis preceded or was simultaneous with the specimen collection date for the positive HCV RNA test. By the end of 2024, there have been approximately 375 people with HIV and HCV coinfection (HIV/HCV) since 2015. It is worth noting that a person coinfecting between 2015 and 2024 may have cured their HCV during that time period or soon after and may no longer be coinfecting with HCV.

Overall, 74.9% of people with HIV/HCV were cis-males and 3.2% were transgender females. Among people living with HIV at year-end 2024, 5.2% of cis-females, 5.0% of trans-females, and 3.3% of cis-males had experienced HIV/HCV coinfection since 2015.

Figure 3.22: Percentage of HCV and HIV Coinfection Cases by Current Gender, Alameda County, Year-end 2024

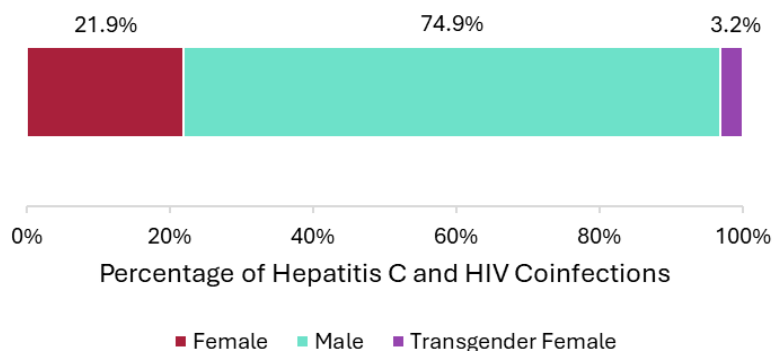


Figure 3.23: Percentage of HIV Cases Coinfecting with HCV Since 2015 by Current Gender, Alameda County, Year-end 2024

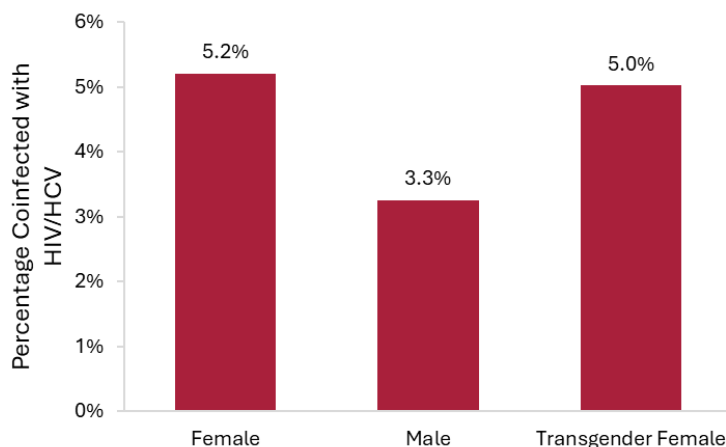


Figure 3.24: Percentage of HCV and HIV Coinfection Cases by Race/Ethnicity, Alameda County, Year-end 2024

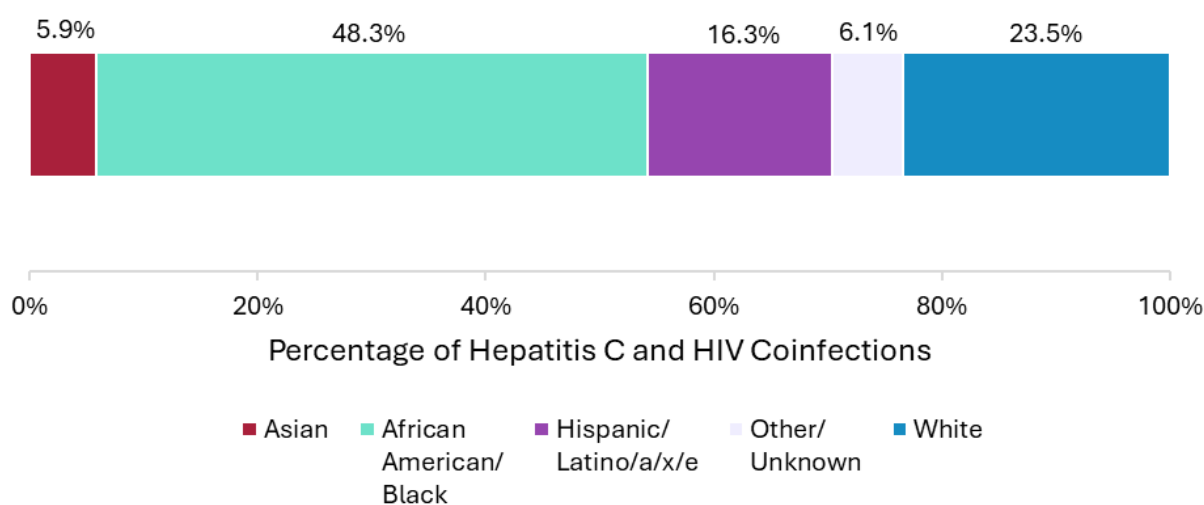
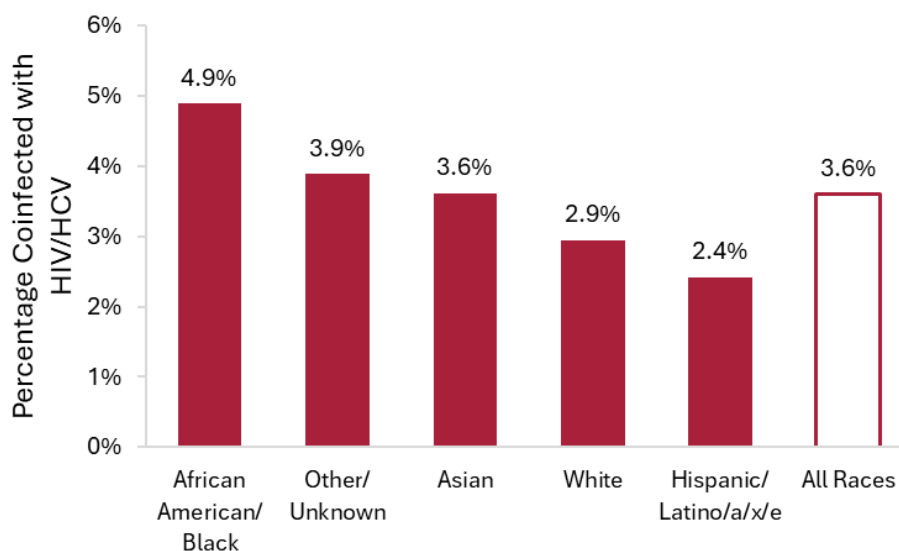


Figure 3.25: Percentage of HIV Cases Coinfected with HCV Since 2015 by Race/Ethnicity, Alameda County, Year-end 2024



* American Indian/Alaska Native and Pacific Islander not included due to small numbers

While African American people make up 35.7% of all people living with HIV, they account for 48.3% of HIV/HCV coinfections and have the highest percent of coinfections among PLHIV at 4.9%. Latinx people, in contrast, were 26.5% of people living with HIV but only 16.3% of coinfections, with the lowest percent of coinfections among all people living with HIV (2.4%).

Figure 3.26: Percentage of HCV and HIV Coinfection Cases by Age Group, Alameda County, Year-end 2024

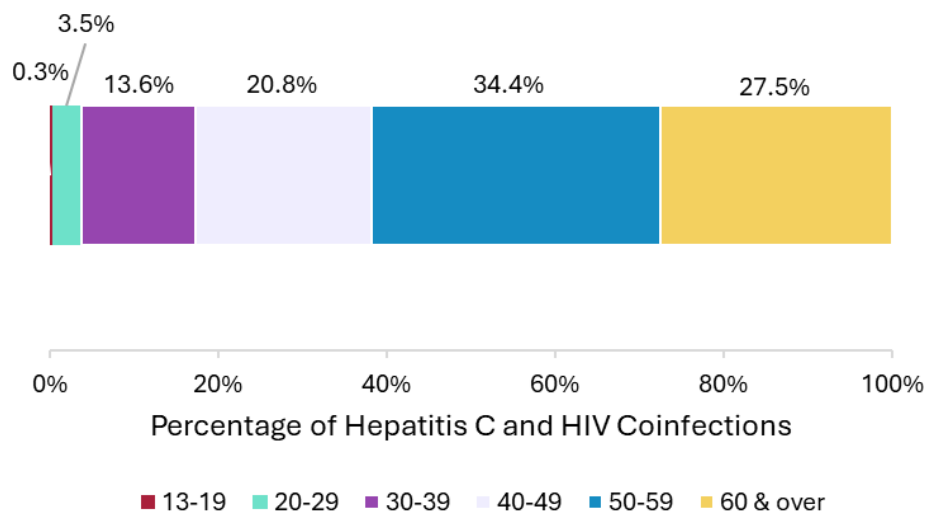
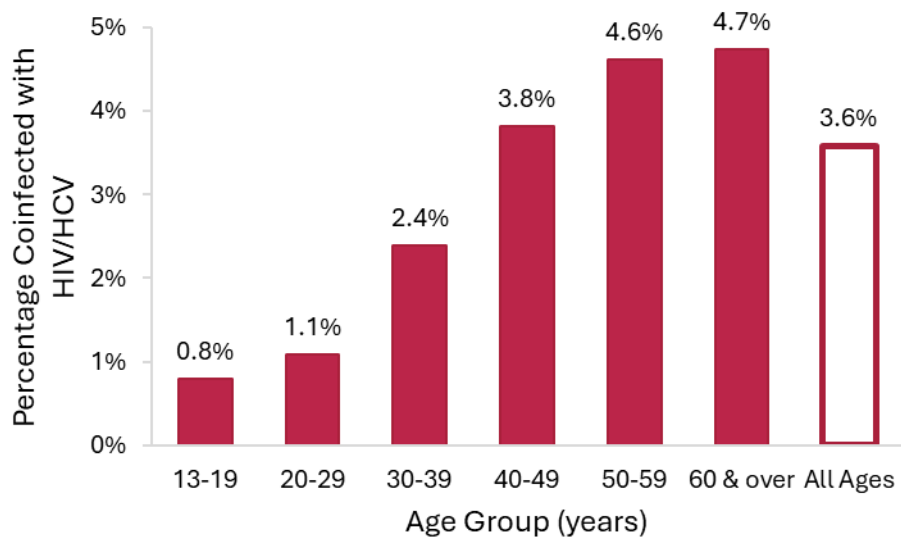


Figure 3.27: Percentage of HIV Cases Coinfected with HCV Since 2015 by Age Group, Alameda County, Year-end 2024



Older age groups were disproportionately affected by HCV, which impacted the age distribution of HIV/HCV coinfections. Most coinfections (61.9%) were among those aged 50 years and older. Among people living with HIV aged 50 years and older, 4.7% experienced a HCV coinfection, compared to 1.1% among people living with HIV aged 20 to 29 years.

Figure 3.28: Percentage of PLHIV Coinfected with HCV by Year, Alameda County, Year-end 2024

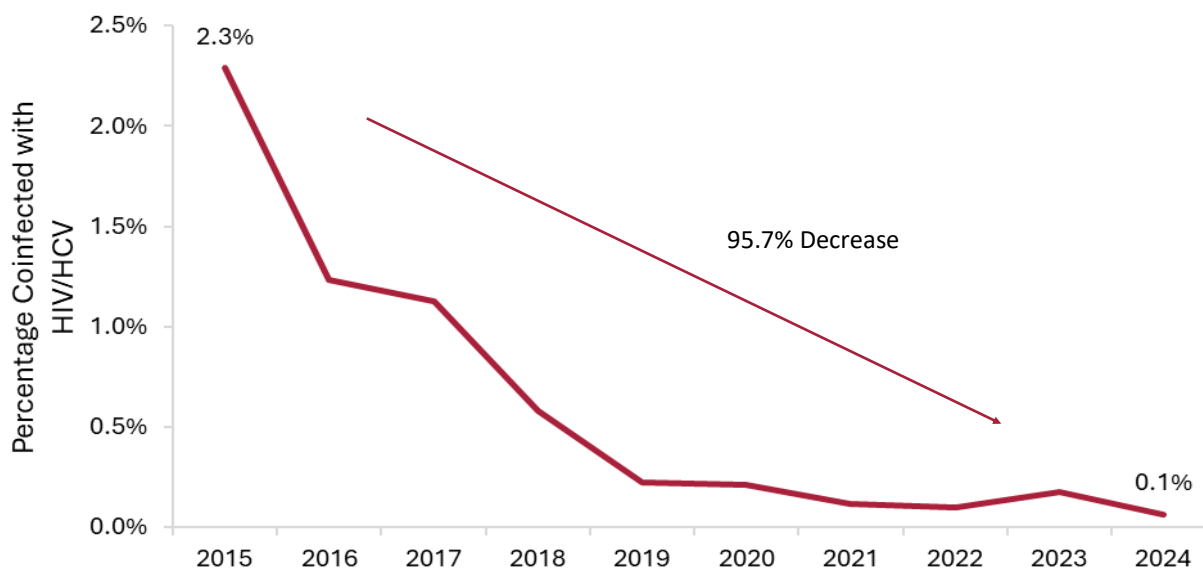


Figure 3.29: Number of HCV and HIV Coinfections by Year, Alameda County, Year-end 2024

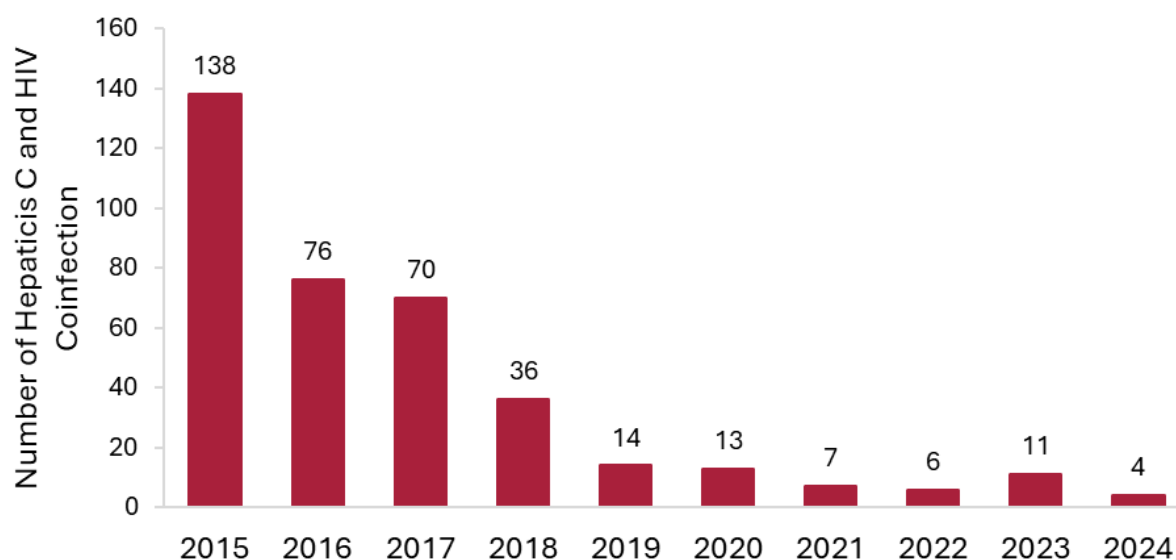


Figure 3.29 shows the number of HCV/HIV coinfections each year as determined by the specimen collection date of a positive HCV RNA test among people living with HIV. Each person is counted only in the first year in which an HCV RNA test was collected and tested positive. HCV/HIV coinfections have declined over time, with 138 in 2015 and 4 in 2024. This may be associated with the development of oral therapies to treat HCV and legislation to make access to treatment more readily available to patients, leading to more people being cured and reducing secondary infections. It could also be due to a shift in the way that people consume drugs, moving away from injecting to smoking, due to syringe service programs providing smoking materials.



Continuum of Care

Antiretroviral therapy (ART), when taken regularly, can suppress HIV, preventing disease progression as well as preventing the transmission of HIV entirely. Thus, ART benefits people living with HIV as well as the larger community. To maximize these benefits, it is crucial that people living with HIV be diagnosed, linked to, and retained in regular HIV care. The prescriptions of antiretroviral treatment, adherence to treatment, and viral suppression are critical for the prevention of HIV transmission. Together, these steps comprise the continuum of HIV care or HIV care cascade: linkage to care, retention in care, and viral suppression.

The CDC's Ending the HIV Epidemic (EHE) initiative aims to achieve 95% of people diagnosed with HIV are linked to care, and 95% of those linked to care are virally suppressed by 2025.⁹ Alameda County previously reported linkage within 90 days; however, data on 30-day linkage is presented in this year's report to reflect timely linkage. This report defines linkage as a viral load or CD4 test conducted on or after the date of diagnosis. Viral load and CD4 lab tests collected at the same time of diagnosis may not indicate connection to a medical home for care and treatment; however, some organizations have rapid linkage programs that connect patients to care on the same day as diagnosis. In this report, linkage percentages for both definitions are reported, defined by whether viral loads and CD4 tests on the date of diagnosis were included or excluded.

Evaluation of care for people living with HIV is shown through two measures: engagement in care—defined as at least one provider visit in a year, and retention—defined as two or more visits at least 90 days apart, as measured by the presence of lab tests such as CD4 and viral load tests.

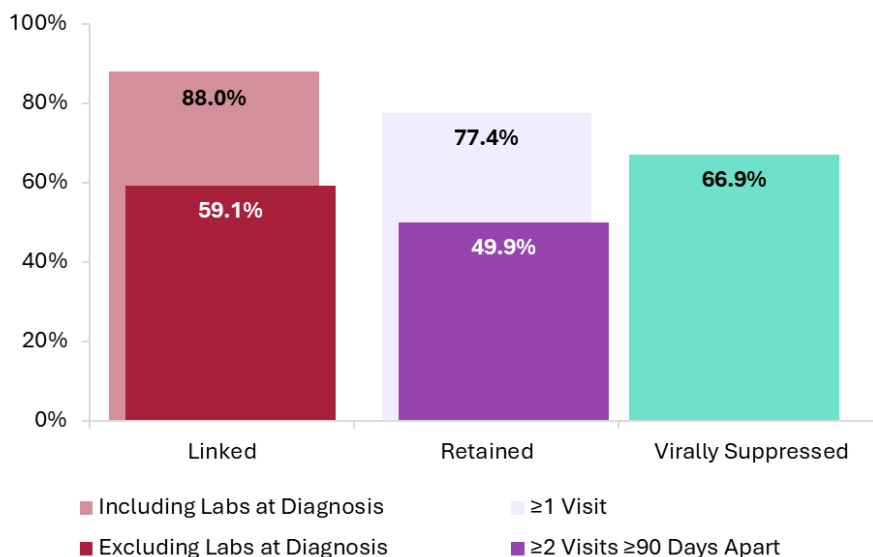
In the United States, the CDC estimated that 82.8% of persons aged 13 and over diagnosed in 2023 were linked to care within one month. Additionally, the CDC estimated that among all PLHIV aged 13 and over alive at year-end 2022, 76.3% received any HIV care and 67.2% were virally suppressed.¹⁰

In California, 84.6% of those diagnosed in 2023 were estimated to have been linked to care within one month.⁴ Among those living with diagnosed HIV in California, 75% were estimated to have received any HIV care in 2023, and 66% were estimated to have been virally suppressed at the last test.⁴

This chapter examines the continuum of HIV care in Alameda County and selects metrics for the Data to Care program. Care outcomes are described by demographics such as race/ethnicity, age, sex at birth, and gender.

The Overall Continuum of Care

Figure 4.1: The Continuum of HIV Care in Alameda County, 2022-2024



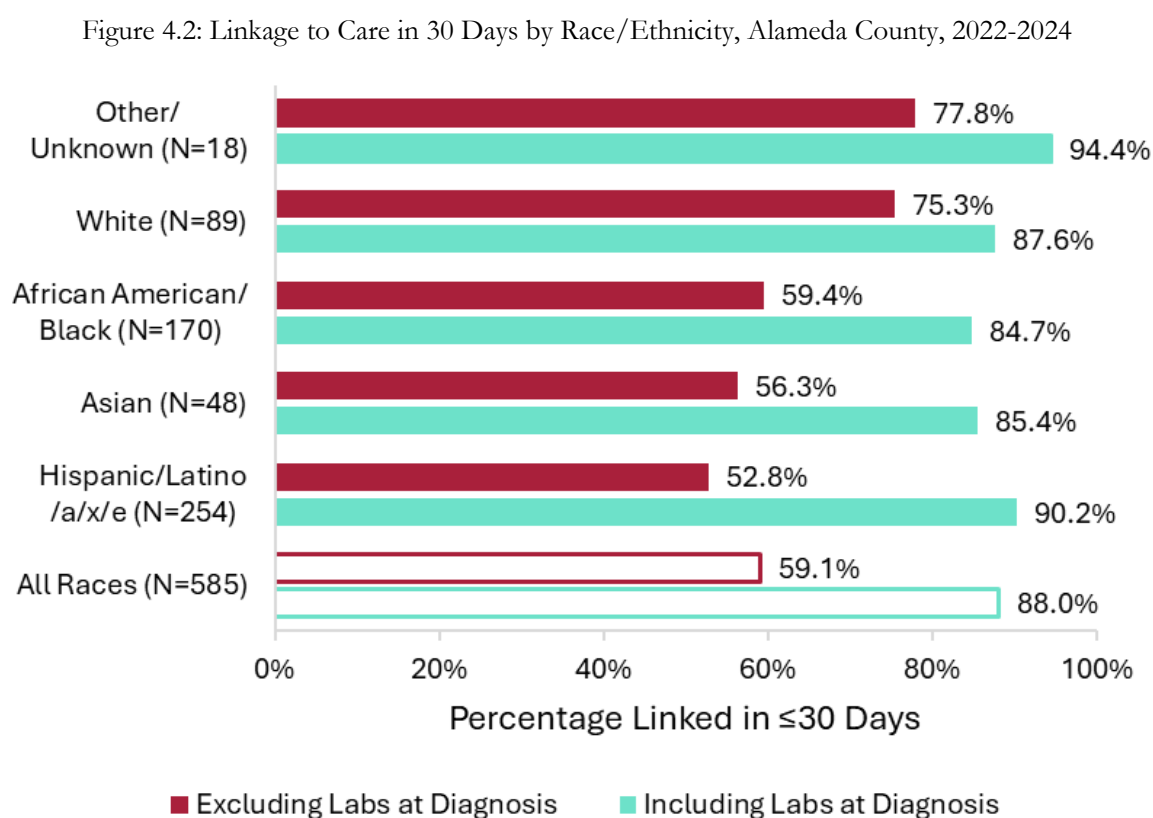
Notes: 1) Of 585 total new diagnoses, 4 died within 30 days and were excluded from analysis.
 2) Of 6,205 PLHIV at year-end 2022, 114 were known to have died and an additional 419 to have moved out of Alameda County in 2023.

In Alameda County, 59.1% of new diagnoses between 2022 and 2024 were linked to care within 30 days if HIV-related labs done on the date of diagnosis were excluded; 88.0% were linked to care if labs done on the date of diagnosis were included. Approximately 49.9% of people living with HIV who resided in Alameda County for the entirety of 2023 had two or more visits 90 or more days apart and were considered retained in care, whereas 77.4% had at least one visit in 2023 and were considered engaged in care; 66.9% were virally suppressed.

Linkage to Care

The following figures are the 30-day linkage to care estimates for Alameda County. Both estimates of linkage to care are presented—one that includes labs done on the date of diagnosis and another that excludes them—providing a range of what might be considered linkage to care.

Latinx had the lowest percentage of linkage with 52.8% compared to 75.3% among White residents. However, when including labs on the day of diagnosis, Latinx had 90.2% linkage compared to Whites with 87.6%.



* American Indian/Alaska Native and Pacific Islander not included due to small numbers

Excluding labs at diagnosis, linkage was lowest among ages 25 to 29 years (51.9%) and highest among 13 to 19 years and 50 years & over at 77.8% and 67.8%, respectively, although the youngest age group only contained 18 individuals. Differences in linkage by sex at birth were lower among women. By gender, linkage was lowest among cis women at 52.9% and highest among transgender individuals at 84.6%.

Figure 4.3: Linkage to Care in 30 Days by Age Group, Alameda County, 2022-2024

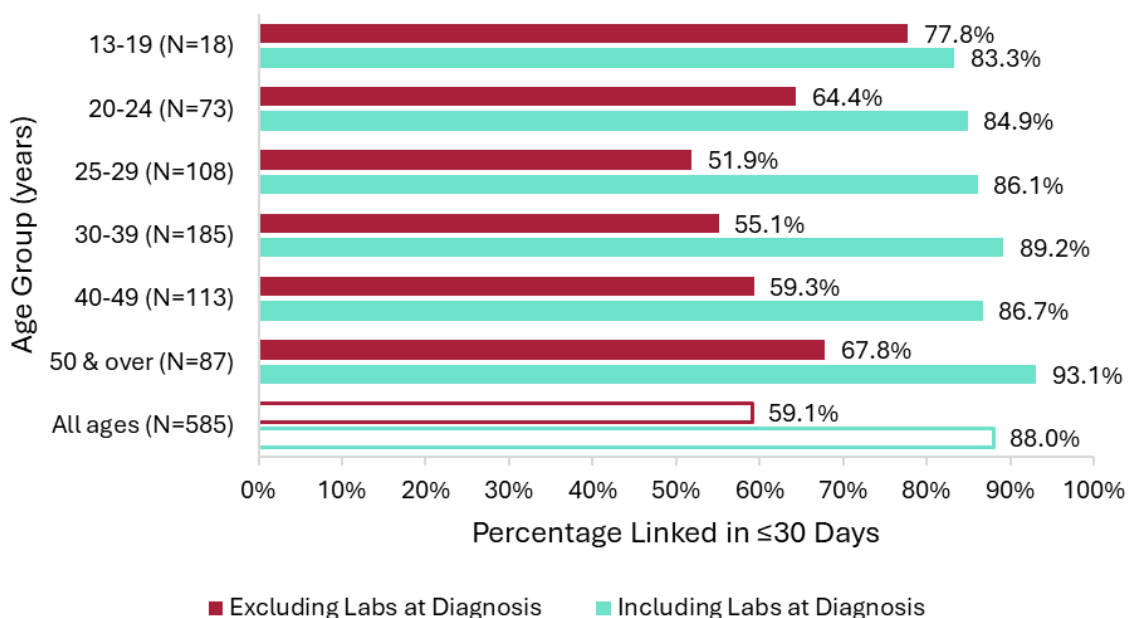


Figure 4.4: Linkage to Care in 30 Days by Sex at Birth, Alameda County, 2022-2024

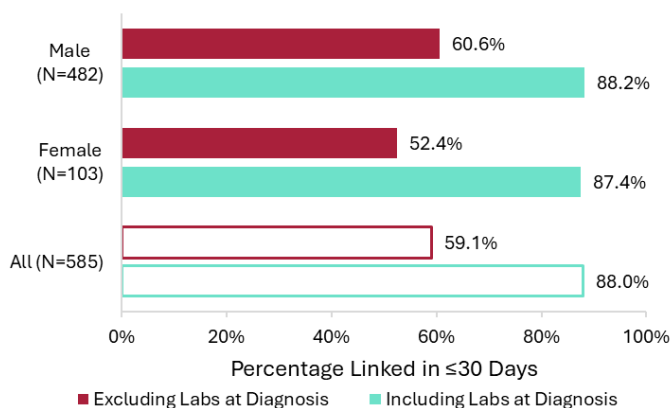


Figure 4.5: Linkage to Care in 30 Days by Current Gender, Alameda County, 2022-2024

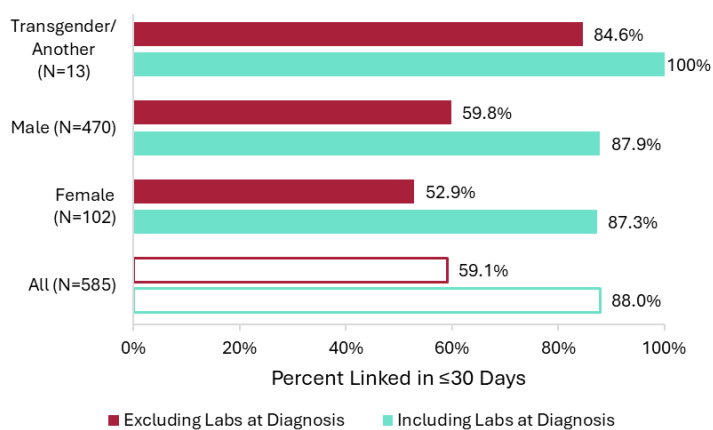
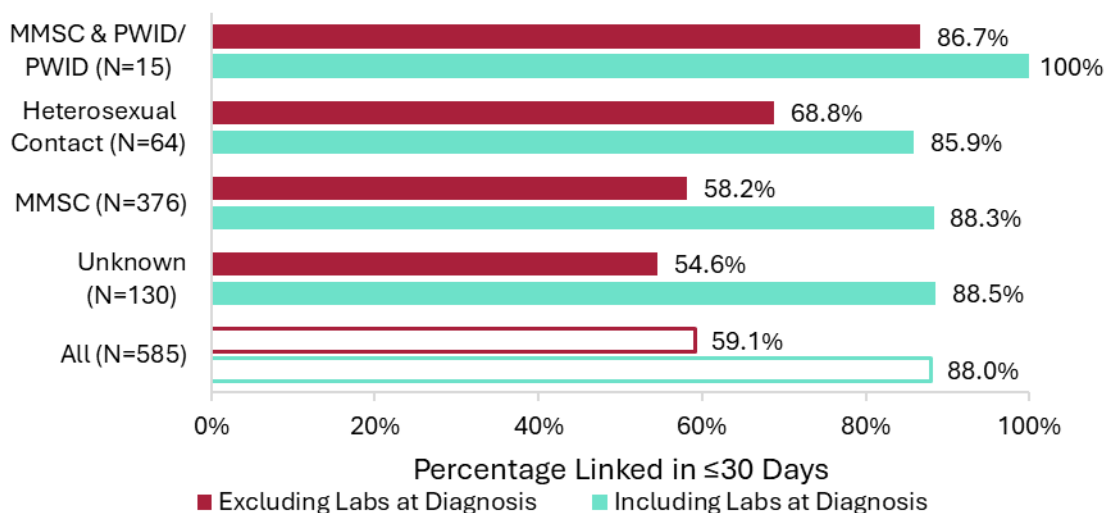


Figure 4.6: Linkage to Care in 30 Days by Transmission Category, Alameda County, 2022-2024



New diagnoses that were identified as MMSC and Unknown transmission had the lowest linkage percentages of 58.2% and 54.6%. The highest percentages were among PWID/MMSC & PWID with 86.7% linkage, though the group had relatively few individuals.

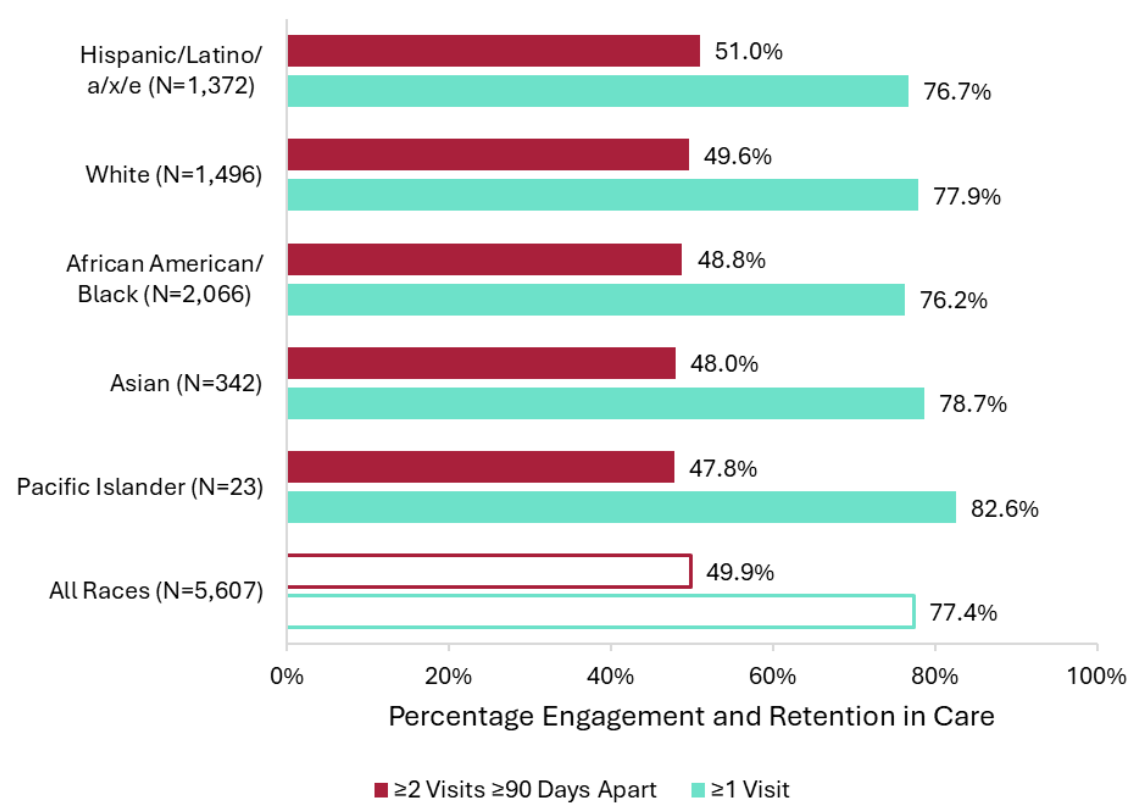
Retention in Care

In 2023, 77.4% of people living with HIV were engaged in care, which is defined as one or more visits to an HIV care provider as indicated by a new lab result. This differs from retention, which requires two or more HIV lab results at least 90 days apart in a calendar year. Using this definition, 49.9% of people living with HIV were retained in care. One limitation of these definitions is that some persons may have had a provider visit without any laboratory tests. People living with HIV who were known to have died or moved out of the jurisdiction in 2023 were excluded from all analyses of retention in care.

In 2023, 49.9% of people living with HIV were retained in care, i.e., had two or more visits 90 or more days apart. Percentages of retention in HIV care were highest among Latinx (51.0%) and White (49.6%) people living with HIV in 2023. The lowest percentage retention in care was among Pacific Islander people living with HIV, in which 47.8% of people were retained in care.

People living with HIV aged 30 to 49 years of age at the end of 2023 had the lowest percentages of retention in care among all age groups. Retention was highest among those aged 13 to 19 years of age and 60 years and over; however, the number of people living with HIV aged 13 to 19 years of age was small. People living with HIV assigned male at birth had higher percentages of retention than those assigned female at birth. When stratifying by gender, transgender people living with HIV had the highest percentage retained in care.

Figure 4.7: Engagement and Retention in Care by Race/Ethnicity, Alameda County, 2023



* American Indian/Alaska Native not included due to small numbers

Figure 4.8: Engagement and Retention in Care by Age Group, Alameda County, 2023

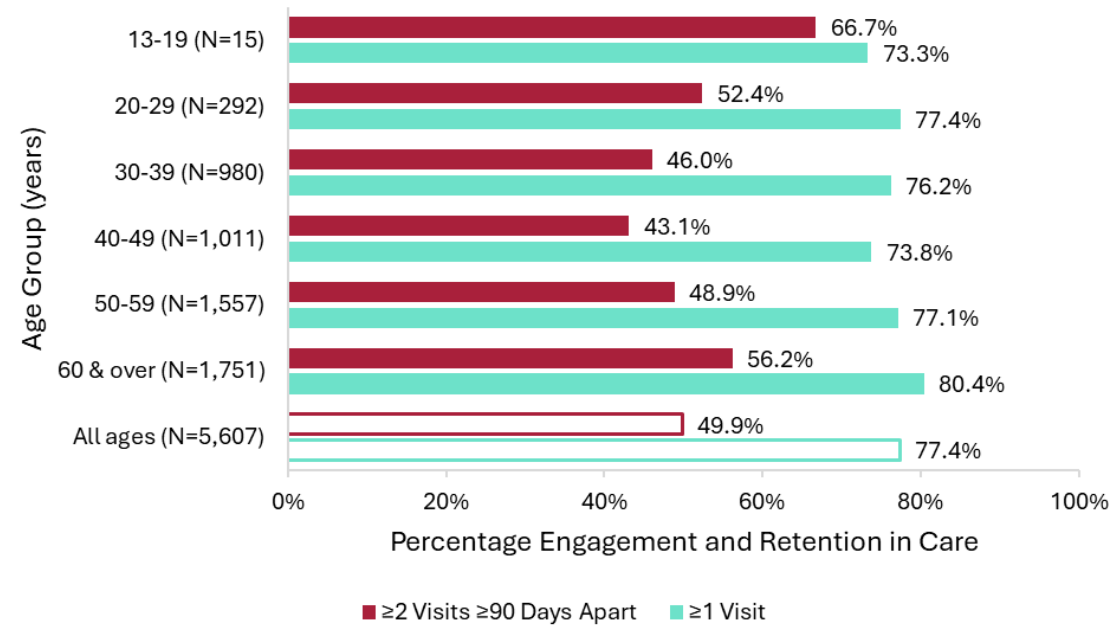


Figure 4.9: Engagement and Retention in Care by Sex at Birth, Alameda County, 2023

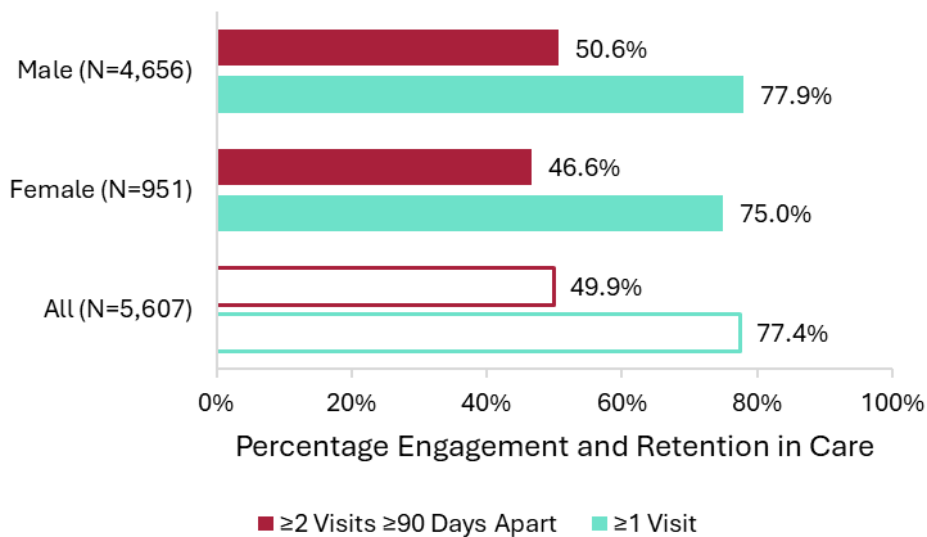
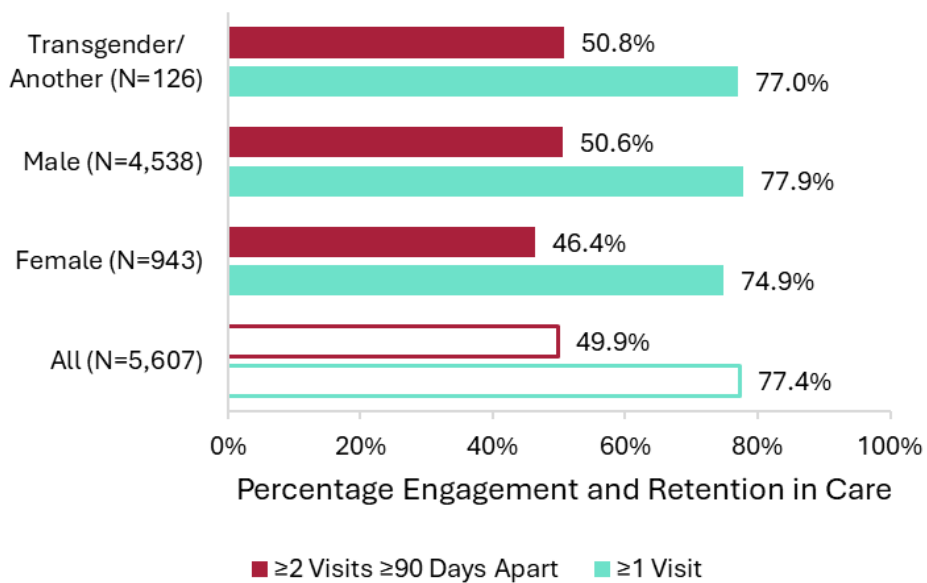


Figure 4.10: Engagement and Retention in Care by Current Gender, Alameda County, 2023



The highest percentages retained in care were recorded in the county's northern region including Oakland, Berkeley, Alameda, and Emeryville. It is worth noting that the number of people living with HIV in the south county is much lower and therefore proportions are prone to larger shifts based on just a few individuals. Within Oakland, the lowest percentages retained in care are in North Oakland, the Northwest Hills, and the San Antonio/Fruitvale neighborhoods.

Figure 4.11: Retention in Care by City/Place, Alameda County, 2023

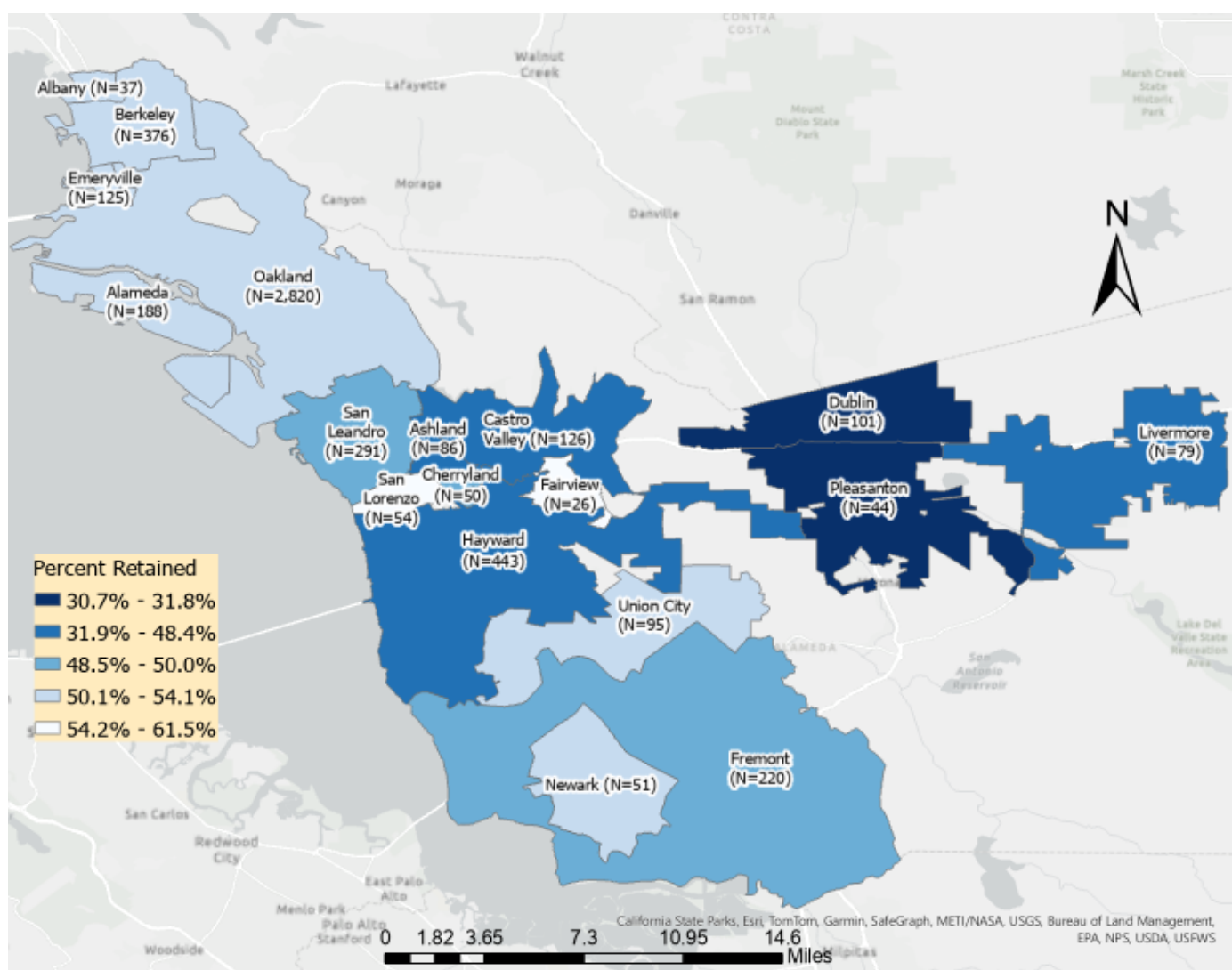


Figure 4.12: Retention in Care by Region, Alameda County, 2023

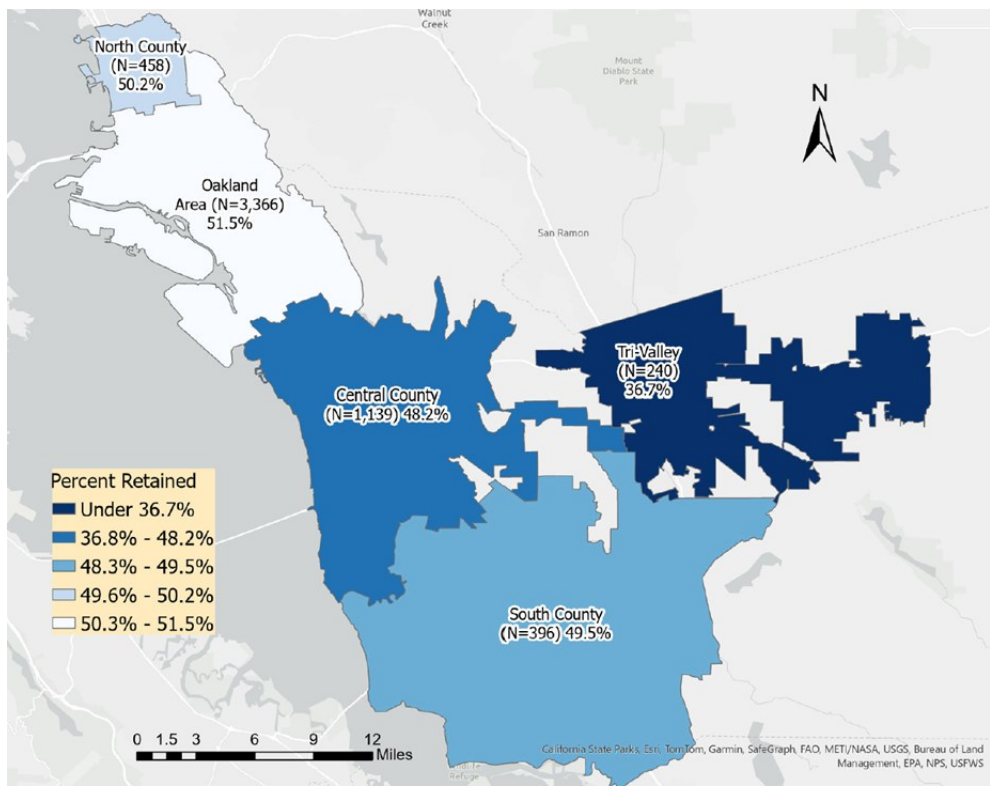
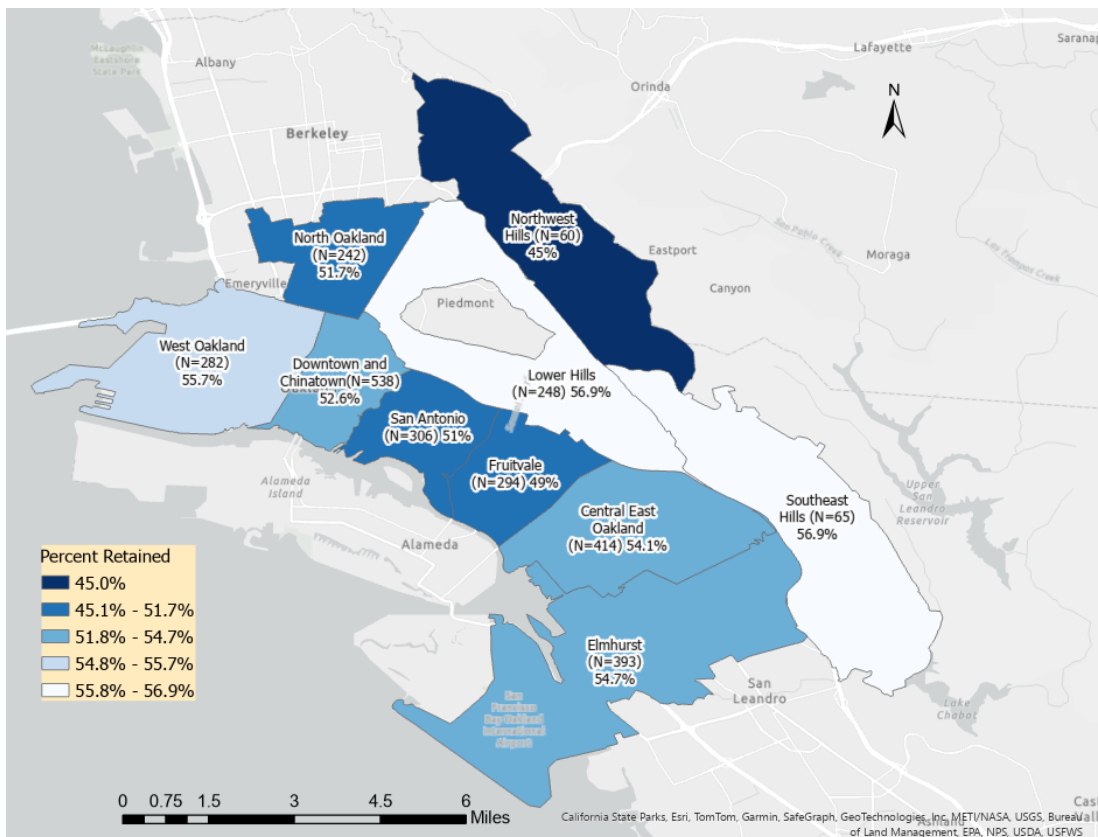


Figure 4.13: Retention in Care by Oakland Neighborhood, Alameda County, 2023



Retention percentages were nearly equivalent between US-born and non-US-born people living with HIV. Engagement was lower among non-US-born people living with HIV. Those born in Oceania had the lowest percent retention, whereas those born in Asia had the highest.

Figure 4.14: Engagement and Retention in Care by Nativity Status, Alameda County, 2023

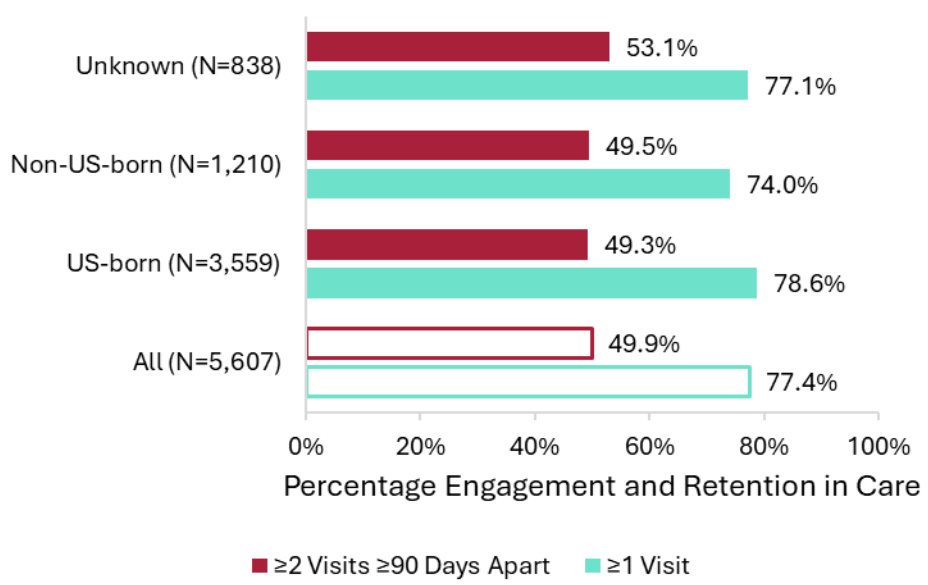
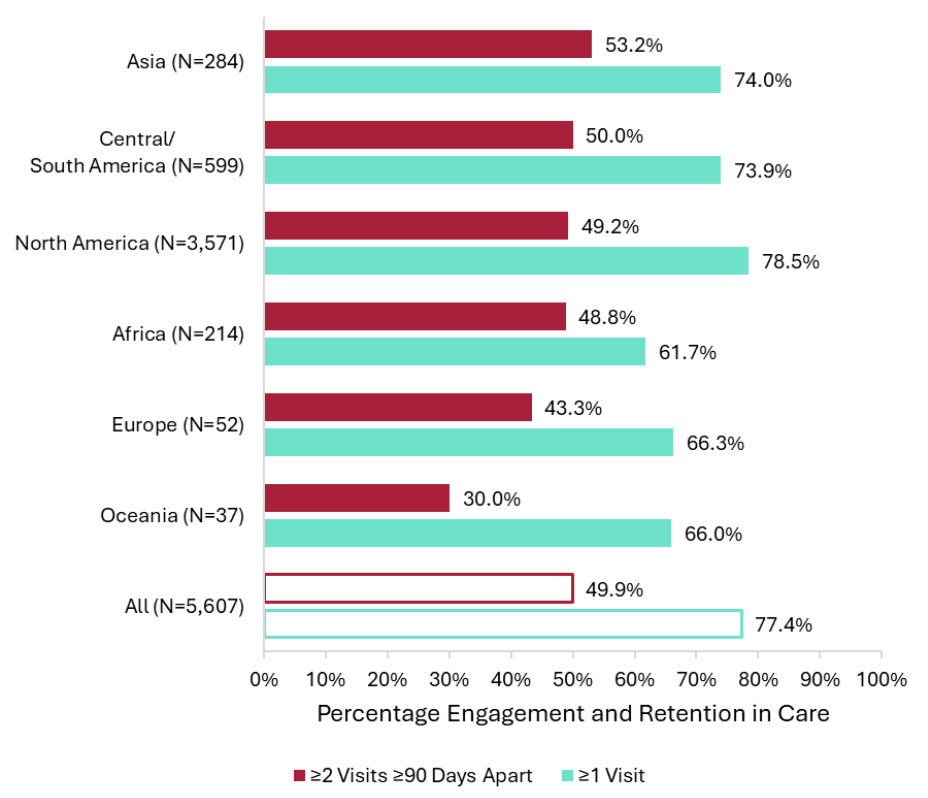


Figure 4.15: Engagement and Retention in Care by Region of Nativity, Alameda County, 2023

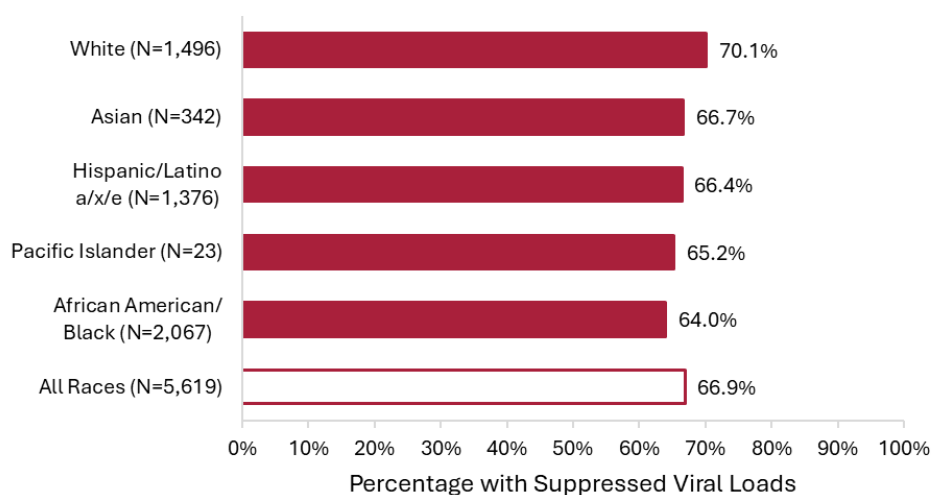


Virologic Status

The final measure along the care continuum is virologic suppression, defined as a viral load of less than 200 copies/mL. For the purposes of these analyses, an undetectable viral load is defined as 75 copies/mL or less because all laboratories within our surveillance systems can detect levels of 75 copies/mL or less. A person whose viral load is undetectable is also virally suppressed, but not everyone who is virally suppressed has an undetectable viral load. People living with HIV who died or moved in 2023 were excluded. Disparities in virologic suppression among people living with HIV in care can suggest possible differences in ART use or access to care.

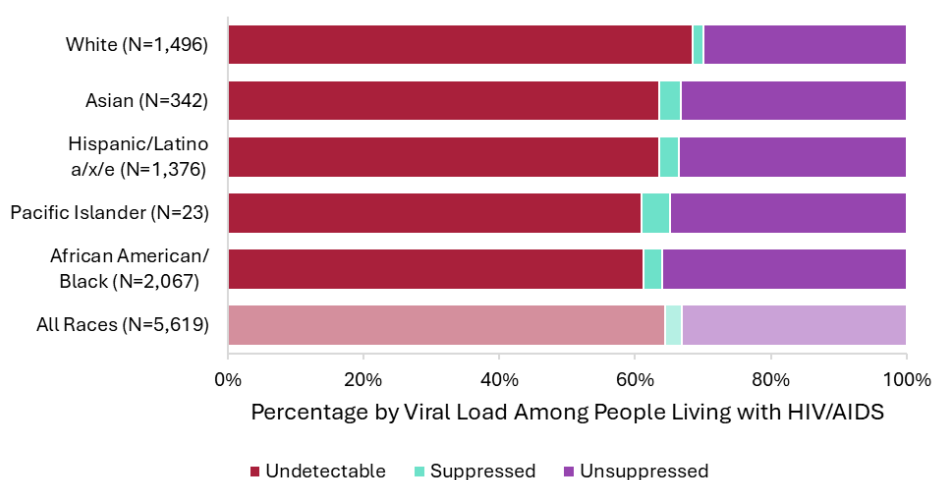
Approximately 66.9% of people living with HIV were virally suppressed at their most recent test in 2023, with the majority being undetectable. In 2023, 70.1% of White people living with HIV were virally suppressed. Viral suppression was 64.0% among African American people. Percentages of viral suppression increased with age, ranging from 60.0% among those ages 13 to 19 years to 72.1% among those ages 60 years and over. Viral suppression was highest among people assigned male at birth as well as cis men.

Figure 4.16: Viral Suppression by Race/Ethnicity, Alameda County, 2023



* American Indian/Alaska Native not included due to small numbers

Figure 4.17: Viral Loads by Race/Ethnicity, Alameda County, 2023



* American Indian/Alaska Native not included due to small numbers

Figure 4.18: Viral Suppression by Age Group, Alameda County, 2023

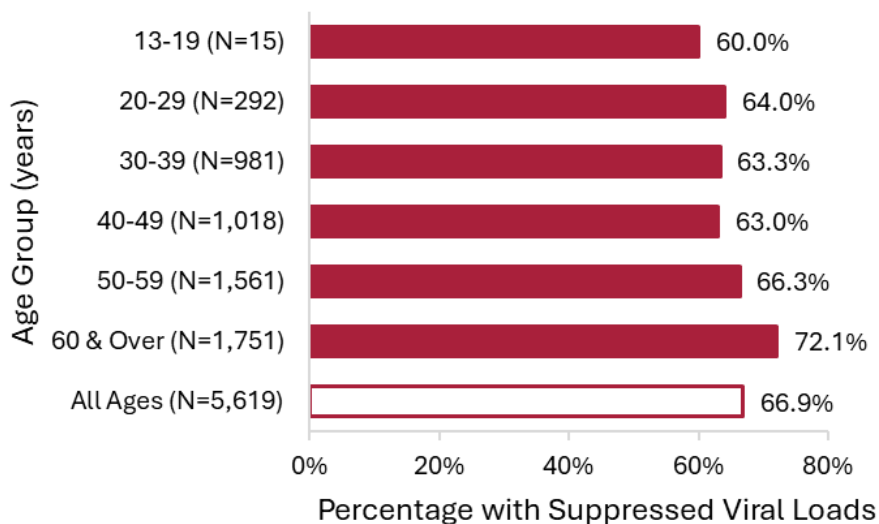


Figure 4.19: Viral Load by Age Group, Alameda County, 2023

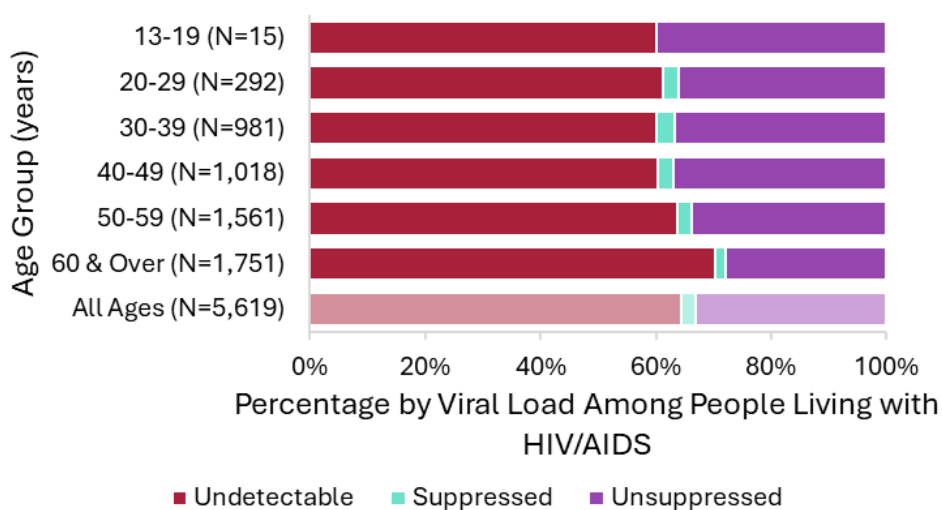


Figure 4.20: Viral Suppression by Sex at Birth, Alameda County, 2023

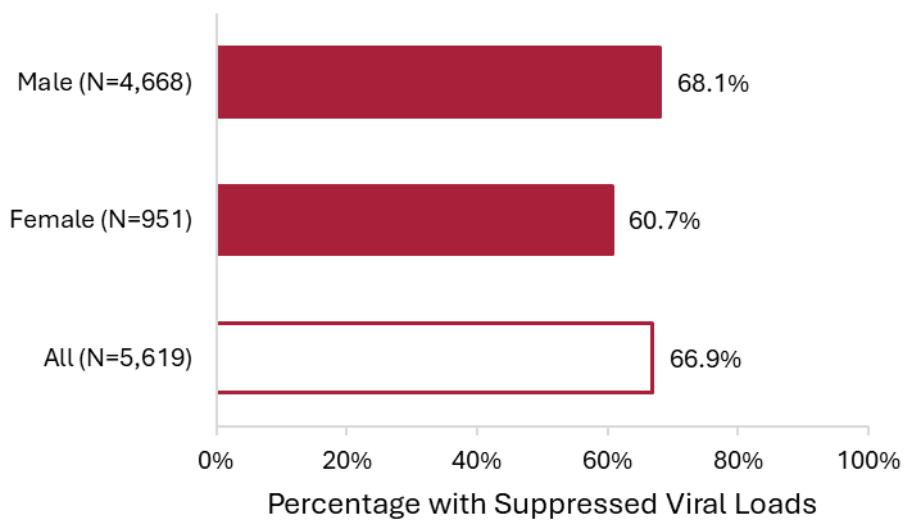
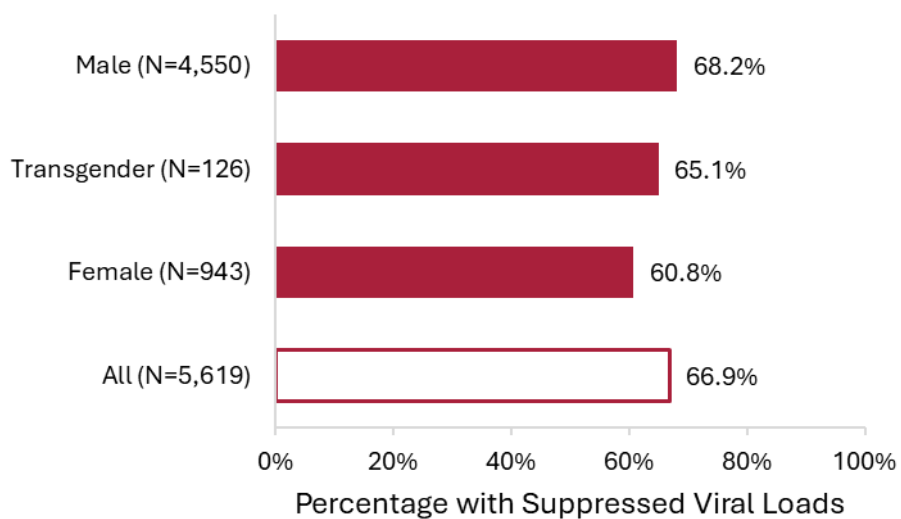


Figure 4.21: Viral Suppression by Current Gender, Alameda County, 2023



Within a city/place, the percentages of people living with HIV who had viral suppression were highest in Fairview, Cherryland and Alameda and lowest in Dublin, Pleasanton, and Fremont. Dublin houses Santa Rita Jail and is impacted by the unique traits of the incarcerated population there such as potentially only being temporary residents of Alameda County and barriers to care and establishing a medical home. In Oakland the lowest suppression percentages were in West Oakland, Fruitvale, and Elmhurst/East Oakland.

Figure 4.22: Percentage of Viral Suppression by City/Place, Alameda County, 2023

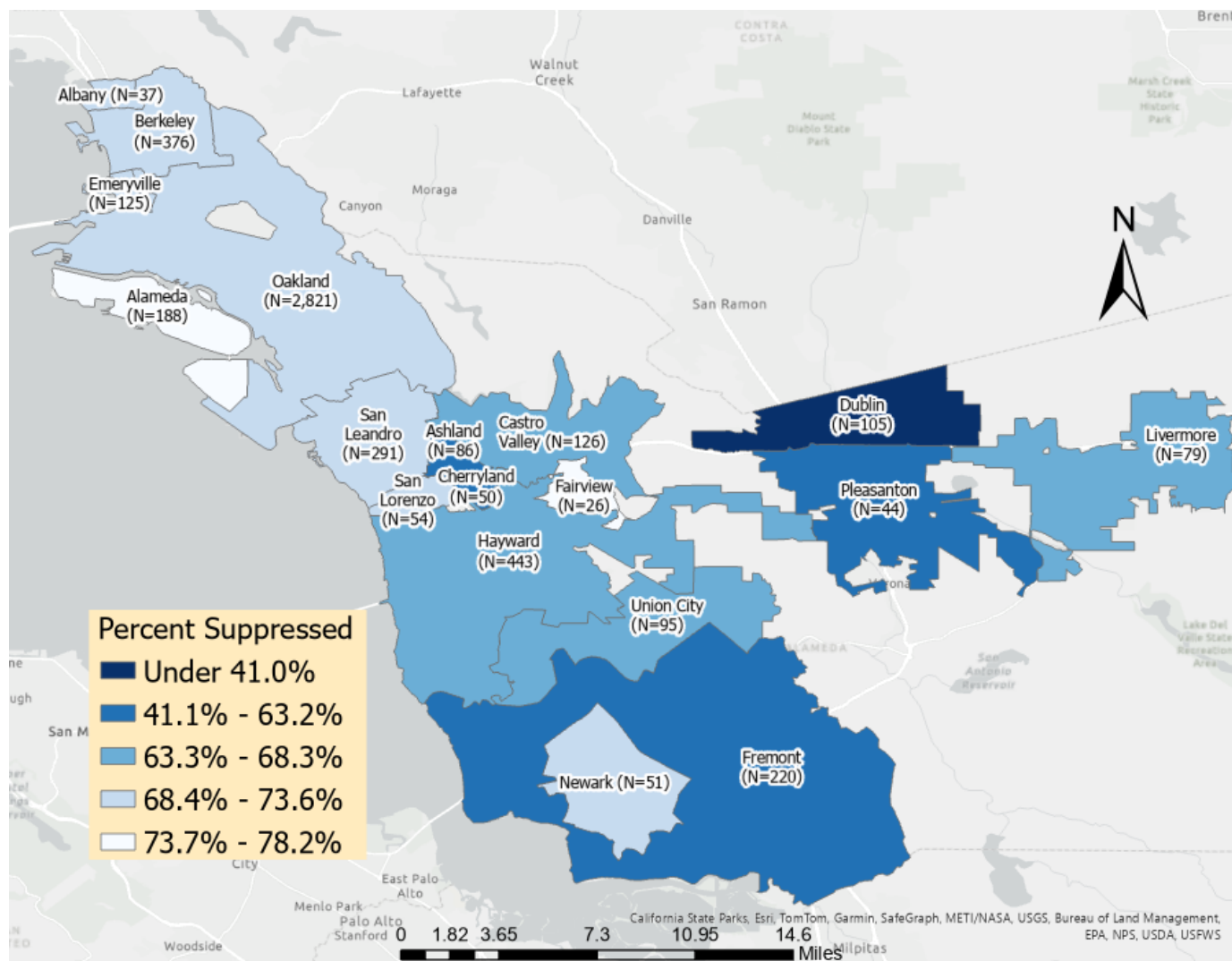


Figure 4.23: Percentage of Viral Suppression by Region, Alameda County, 2023

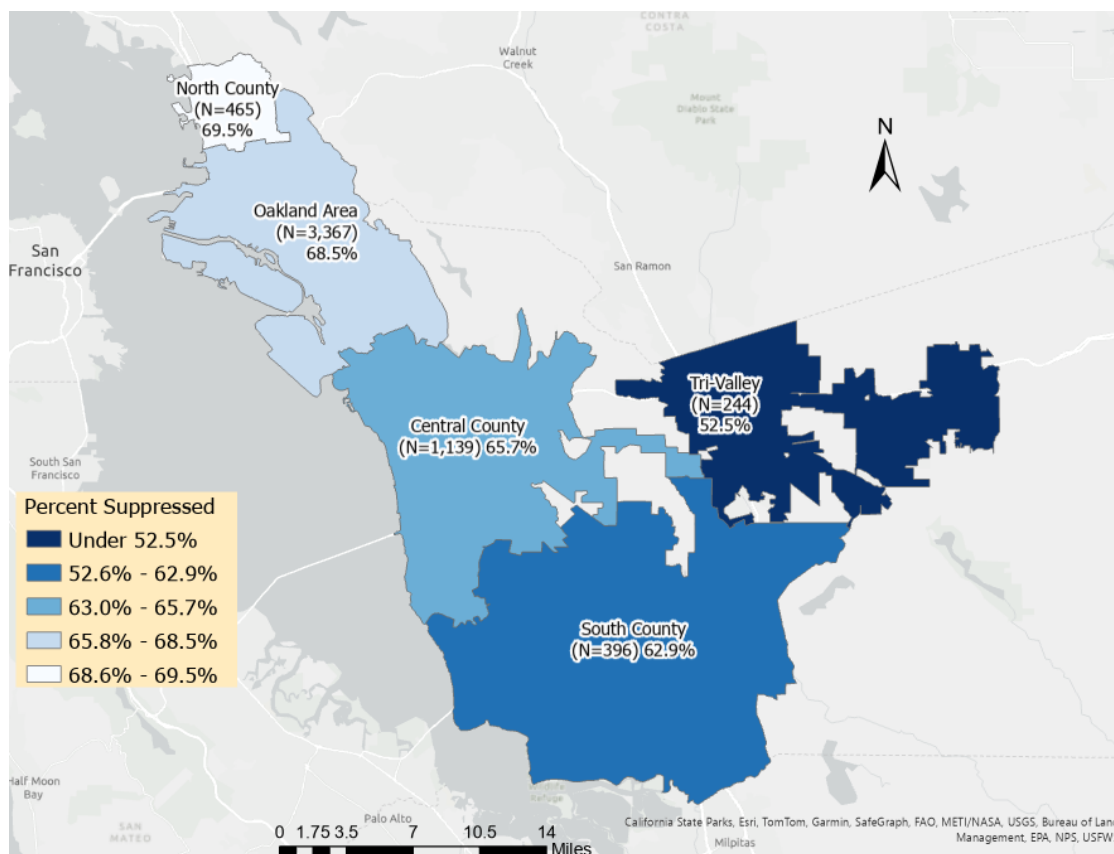
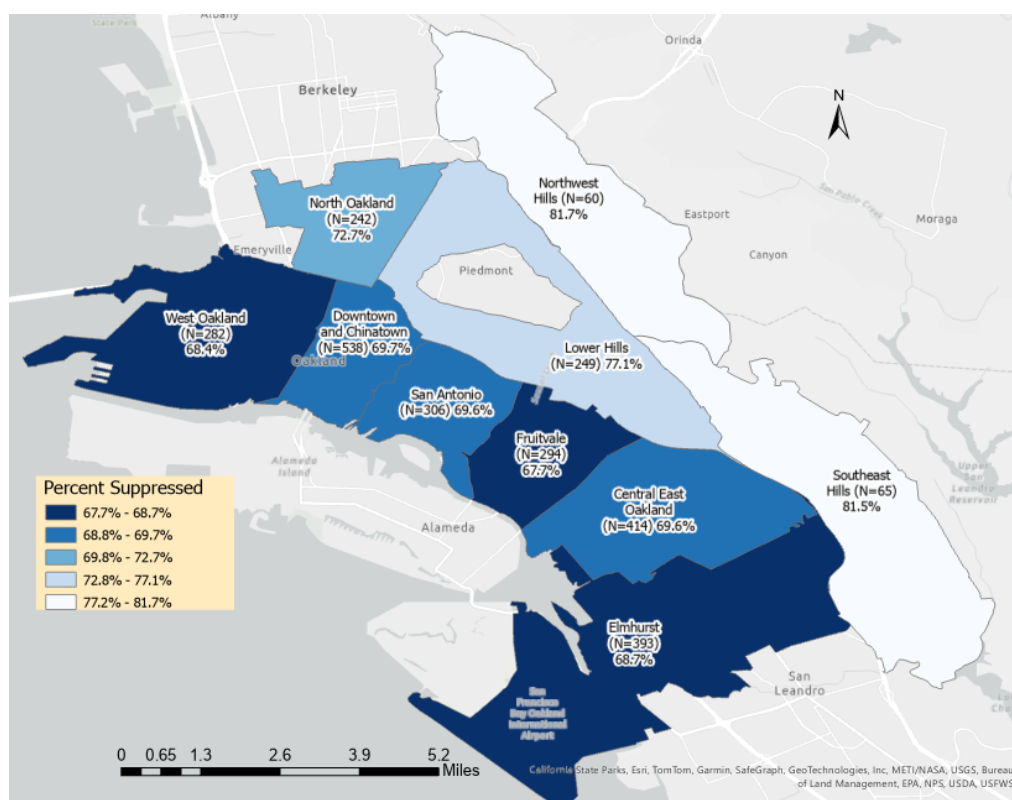
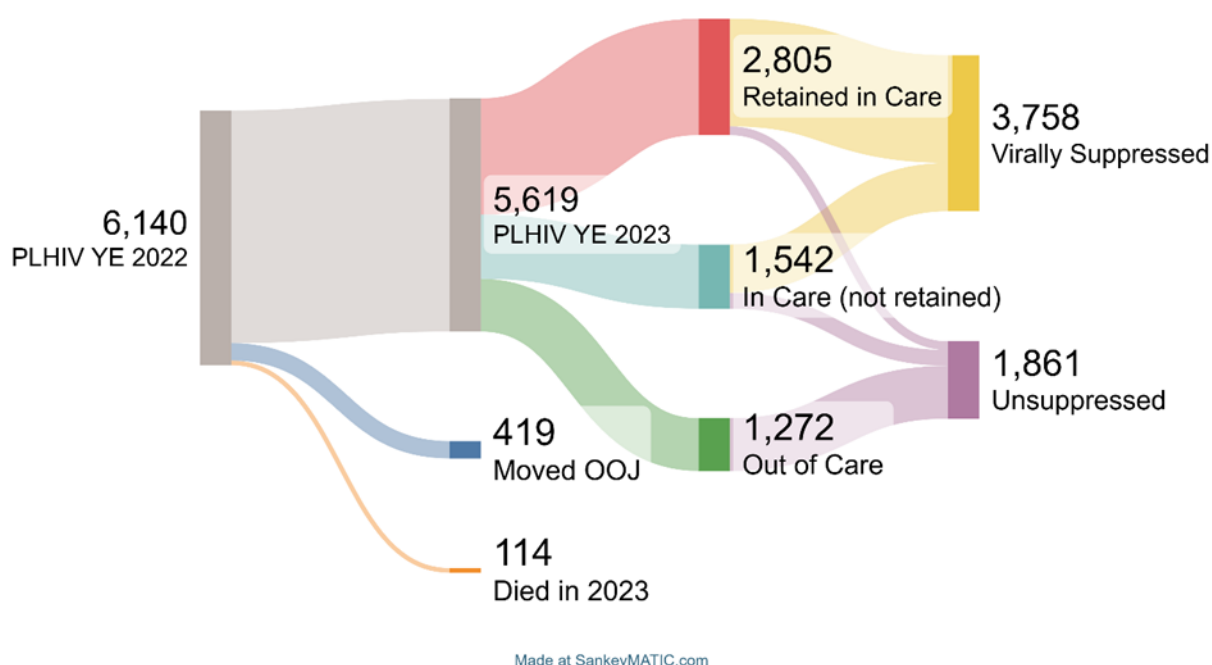


Figure 4.24: Percentage of Viral Suppression by Oakland Neighborhood, Alameda County, 2023



A Sankey diagram is useful for showing how people living with HIV progress through the care continuum and reach viral suppression. The width of each bar is proportional to the number of people living with HIV represented by the identified outcome. At year-end 2022, there were 6,140 persons living with HIV in Alameda County, 5,619 of whom were still living in Alameda County at the end of 2023. The difference is made up of 419 people believed to have moved out of Alameda County and 114 people known to have died. A majority of those living in Alameda County for all of 2023 were either engaged (1,542 people) or retained in care (2,805 people) during 2023 (teal and red), while 1,272 were considered out of care (green). The diagram shows 75.4% of people living with HIV engaged in care, and 92.5% of those retained in care were virally suppressed in 2023 (yellow). All people living with HIV who were considered out of care, i.e., did not have a viral load or CD4 test in 2023, were assumed to be virally unsuppressed. Only 24.6% of people living with HIV engaged in care, and 7.5% of those retained in care were unsuppressed.

Figure 4.25: Progression Through the Continuum of HIV Care Among PLHIV, Alameda County, 2023





Technical Notes

Data Sources

All counts and proportions in this report were calculated using data from the Enhanced HIV/AIDS Reporting System (eHARS). Numerators of rates were also obtained from eHARS; denominators were derived using data from the United States Census (2020)¹¹ and ESRI (2012 and later). Mid-year population estimates for intercensal years prior to 2012 as well as all year-end estimates were obtained through linear interpolation. PLHIV at the end of 2023 were identified from eHARS.

Hepatitis C case data were extracted from the California Reportable Disease Information Exchange (CalREDIE) data distribution portal.

Statistical Analysis

Significance Testing and Statistical Modeling

The statistical significance of associations between categorical variables was tested by Pearson's chi square test or Fisher's exact test, as appropriate. Trend analyses were performed using Join Point¹² to model crude rates as a log-linear function of year separately for each stratum of the categorical variable(s); errors were assumed to have Poisson variance and to be independent. Grid search and the modified Bayesian Information Criterion were used to select the best fitting model from among those with zero to four join points at least 2 years apart between 2007 and 2022 (the second and second-to-last years examined).

Data Suppression Rules

Rates

Rates for subpopulations with fewer than 12 cases are considered to be statistically unreliable and were not presented. In these instances, the relative standard error of the rate exceeds 30%.

Death Ascertainment

Alameda County HIV surveillance officials are notified by the local Office of Vital Registration whenever HIV is documented on a death certificate filed in Alameda County. Additionally, the California Office of AIDS periodically matches state HIV registry data to national death databases such as the National Death Index and the Social Security Administration's Death Master File. PLHIV who died outside of Alameda County and were ever associated with Alameda County or whose HIV was not documented on their death certificate are thus generally captured through this process with some delay.

Reporting Requirements

The representativeness and accuracy of HIV surveillance data depend on the reliable, complete, and timely reporting of data by health care providers and laboratories in accordance with California law.

Health Care Providers

Title 17, Section 2643.5, “HIV Reporting by Health Care Providers,” requires health care providers to report cases of HIV disease (at any stage) to the local health department in the jurisdiction of their practice:

- a) Each health care provider that orders a laboratory test used to identify HIV, a component of HIV, or antibodies to or antigens of HIV shall submit to the laboratory performing the test a pre-printed laboratory requisition form which includes all documentation as specified in 42 CFR 493.1105 (57 FR 7162, Feb. 28, 1992, as amended at 58 FR 5229, Jan. 19, 1993) and adopted in Business and Professions Code, Section 1220.
- b) The person authorized to order the laboratory test shall include the following when submitting information to the laboratory:
 1. Complete name of patient; and
 2. Patient date of birth (2-digit month, 2-digit day, 4-digit year); and
 3. Patient gender (male, female, transgender male-to-female, or transgender female-to-male); and
 4. Date biological specimen was collected; and
 5. Name, address, telephone number of the health care provider and the facility where services were rendered, if different.
- c) Each health care provider shall, within seven calendar days of receipt from a laboratory of a patient's confirmed HIV test or determination by the health care provider of a patient's confirmed HIV test, report the confirmed HIV test to the local Health Officer for the jurisdiction where the health care provider facility is located. The report shall consist of a completed copy of the HIV/AIDS Case Report form.
 1. All reports containing personal information, including HIV/AIDS Case Reports, shall be sent to the local Health Officer or his or her designee by:
 - A. courier service, US Postal Service Express or Registered mail, or other traceable mail;
or
 - B. person-to-person transfer with the local Health Officer or his or her designee.
 2. The health care provider shall not submit reports containing personal information to the local Health Officer or his or her designee by electronic facsimile transmission or by electronic mail or by non-traceable mail.
- d) HIV reporting by name to the local Health Officer, via submission of the HIV/AIDS Case Report, shall not supplant the reporting requirements in Article 1 of this Subchapter when a patient's medical

condition progresses from HIV infection to an Acquired Immunodeficiency Syndrome (AIDS) diagnosis.

- e) A health care provider who receives notification from an out-of-state laboratory of a confirmed HIV test for a California patient shall report the findings to the local Health Officer for the jurisdiction where the health care provider facility is located.
- f) When a health care provider orders multiple HIV-related viral load tests for a patient or receives multiple laboratory reports of a confirmed HIV test, the health care provider shall be required to submit only one HIV/AIDS Case Report, per patient, to the local Health Officer.
- g) Nothing in this Subchapter shall prohibit the local health department from assisting health care providers to report HIV cases.
- h) Information reported pursuant to this Article is acquired in confidence and shall not be disclosed by the health care provider except as authorized by this Article, other state or federal law, or with the written consent of the individual to whom the information pertains or the legal representative of that individual.

Note: Authority cited: Sections 120125, 120130, 120140, 121022, 131080 and 131200, Health and Safety Code. Reference: Sections 1202.5, 1206, 1206.5, 1220, 1241, 1265 and 1281, Business and Professions Code; and Sections 1603.1, 101160, 120175, 120250, 120775, 120885-120895, 120917, 120975, 120980, 121015, 121022, 121025, 121035, 121085, 131051, 131052, 131056 and 131080, Health and Safety Code.

Laboratories

Title 17, Section 2643.10, "HIV Reporting by Laboratories," requires laboratories to report all positive HIV-related laboratory tests to the local health department in the jurisdiction of the ordering provider:

- a) The laboratory director or authorized designee shall, within seven calendar days of determining a confirmed HIV test, report the confirmed HIV test to the Health Officer for the local health jurisdiction where the health care provider facility is located. The report shall include the
 - 1. Complete name of patient; and
 - 2. Patient date of birth (2-digit month, 2-digit day, 4-digit year); and
 - 3. Patient gender (male, female, transgender male-to-female, or transgender female-to-male); and
 - 4. Name, address, and telephone number of the health care provider and the facility that submitted the biological specimen to the laboratory, if different; and
 - 5. Name, address, and telephone number of the laboratory; and
 - 6. Laboratory report number as assigned by the laboratory; and
 - 7. Laboratory results of the test performed; and
 - 8. Date the biological specimen was tested in the laboratory; and
 - 9. Laboratory Clinical Laboratory Improvement Amendments (CLIA) number.
- b)
 - 1. All reports containing personal information, including laboratory reports, shall be sent to the local Health Officer or his or her designee by:
 - A. courier service, US Postal Service Express or Registered mail, or other traceable mail; or
 - B. person-to-person transfer with the local Health Officer or his or her designee.

2. The laboratory shall not submit reports containing personal information to the local Health Officer or his or her designee by electronic facsimile transmission or by electronic mail or by non-traceable mail.
- c) A laboratory that receives incomplete patient data from a health care provider for a biological specimen with a confirmed HIV test, shall contact the submitting health care provider to obtain the information required pursuant to Section 2643.5(b)(1)-(5), prior to reporting the confirmed HIV test to the local Health Officer.
 - d) If a laboratory transfers a biological specimen to another laboratory for testing, the laboratory that first receives the biological specimen from the health care provider shall report confirmed HIV tests to the local Health Officer.
 - e) Laboratories shall not submit reports to the local health department for confirmed HIV tests for patients of an Alternative Testing Site or other anonymous HIV testing program, a blood bank, a plasma center, or for participants of a blinded and/or unlinked seroprevalence study.
 - f) When a California laboratory receives a biological specimen for testing from an out-of-state laboratory or health care provider, the California director of the laboratory shall ensure that a confirmed HIV test is reported to the state health department in the state where the biological specimen originated.
 - g) When a California laboratory receives a report from an out of state laboratory that indicates evidence of a confirmed HIV test for a California patient, the California laboratory shall notify the local Health Officer and health care provider in the same manner as if the findings had been made by the California laboratory.
 - h) Information reported pursuant to this Article is acquired in confidence and shall not be disclosed by the laboratory except as authorized by this Article, other state or federal law, or with the written consent of the individual to whom the information pertains or the legal representative of the individual.

Note: Authority cited: Section 1224, Business and Professions Code; and Sections 120125, 120130, 120140, 121022, 131080 and 131200, Health and Safety Code. Reference: Sections 1206, 1206.5, 1209, 1220, 1241, 1265, 1281 and 1288, Business and Professions Code; and Sections 101150, 120175, 120775, 120885-120895, 120975, 120980, 121022, 121025, 121035, 131051, 131052, 131056 and 131080, Health and Safety Code.

Surveillance in Alameda County

California Code of Regulations (CCR) Title 17, Section 2643.5 requires all health care providers (HCP) to report all cases of HIV disease they encounter in their clinical practice to the county/local health jurisdiction in which the encounter occurs. Additionally, CCR Title 17, Section 2643.10 requires all commercial laboratories to report all positive HIV-related laboratory tests they conduct to the local health jurisdiction of the HCP who ordered the test, providing an additional means by which local health departments may learn of a case of HIV disease.

In November 2015, California adopted the Electronic Laboratory Reporting (ELR) system for laboratories performing HIV testing. HIV test results delivered through ELR meet the statutory and regulatory reporting requirements for HIV test results. HIV-related laboratory results are submitted to the California Department of Public Health (CDPH) and routed to Alameda County for investigation. Establishment of ELR resulted in major changes in the local processing and management of laboratory results for HIV surveillance. Reported labs are checked against a local database to identify cases not previously reported. Potential new cases are investigated by trained field staff, who contact the office of the HCP that ordered the laboratory test(s) or submitted the lab report and complete a case report using information abstracted from the patient's medical record and obtained from the HCP. For adult cases, standardized case report forms are completed and submitted in CalREDIE—the secure CDPH system for electronic disease reporting and surveillance. Hard copies of the Adult Case Report Form have largely been replaced by entry into CalREDIE, but are sometimes used by HCPs to notify the local health jurisdiction. All case reports submitted to CDPH are routinely de-identified and transmitted to CDC. When cases reported by different states appear to be the same person, CDC notifies the appropriate states to contact each other directly and determine whether the cases are duplicates.

Security and Confidentiality of Data

In accordance with the county's data use and disclosure agreement with CDPH, all data collected while conducting HIV surveillance are used solely for public health purposes. Additionally, administrative, technical, and physical safeguards are in place to ensure the security and confidentiality of these data. All paper records are stored in locked file cabinets in an office with restricted access.

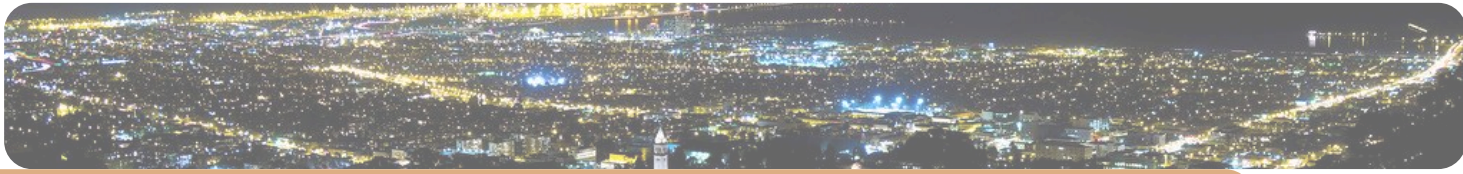
Limitations of Surveillance Data and of County Analysis

A major strength of HIV surveillance data is that it captures and reflects the entire population of HIV diagnosed individuals. HIV surveillance data are not without their limitations however, which restrict the analyses that can be done. These limitations include:

- **Data quality:** Public health investigators extract required information from medical records for HIV reporting. Some information, such as risk factors or identification as transgender may not have been available in the medical record, elicited from the patient by the HCP, or adequately described.
- **Data quantity:** In small subpopulations, the number of new diagnoses or people living with HIV was not large enough to allow certain analyses. Statistical analyses based on small numbers may result in unstable estimates which can be misleading.
- **Timeliness of reporting:** Surveillance data are the product of a long process triggered by a visit to a HCP by an HIV-infected individual and culminating in the entry of case data into the statewide HIV surveillance database at the California Department of Public Health. Intermediate steps include, but are not limited to, laboratory testing, submission of case reports and lab results to the local health department, and investigation of each report. Data preparation, analysis and interpretation take additional time.
- **History of reporting laws:** The laws mandating the reporting of HIV-related laboratory test results and of cases of HIV disease at its different stages have changed over time, and this impacts our ability to characterize the epidemic at different points in the past. Although AIDS has been reportable since 1983, HIV disease at its earlier stages was not reportable until mid-2002 and even then only by a non-name code. More reliable, name-based data on non-AIDS HIV cases became mandated in 2006, and HIV-related labs became reportable in California in 2009. Consequently, most of analyses are limited to 2006 and later, and analyses relying on laboratory reporting are limited to 2010 and later.
- **Diagnosis date assigned to non-US-born cases:** A small number of non-US-born people living with HIV may have been initially diagnosed with HIV in another country before arriving in the US, but due to the absence of verified information on date of initial diagnosis, their diagnosis date in the surveillance data reflects the earliest date of HIV diagnosis in the US. As a consequence, new diagnoses and late diagnoses may be overestimated in our data, especially among certain racial/ethnic groups.

Acknowledgement

We dedicate this report to the community living with HIV, and serving and supporting people living with HIV.



Bibliography

1. [Centers for Disease Control and Prevention. Revised Surveillance Case Definition for HIV Infection -- United States, 2014, April 2014.](#)
2. Eve Mokotoff, Lucia V. Torian, Monica Olkowski, James T. Murphy, Dena Bensen, Maree Kay Parisi, and Jennifer Chase. Positions statements 2007: [Heterosexual HIV transmission classification, 2007.](#)
3. [Centers for Disease Control and Prevention. HIV Diagnoses, Deaths, and Prevalence: 2025 Update.](#) April 2025.
4. [California Department of Public Health. HIV/AIDS Epidemiology and Health Disparities in California 2023. August 2025.](#)
5. [Centers for Disease Control and Prevention. Core indicators for monitoring the Ending the HIV Epidemic initiative: National HIV Surveillance System data reported through December 2023.](#)
6. Moitra E, Tao J, Olsen J, Shearer RD, Wood BR, Busch AM, LaPlante A, Baker JV, Chan PA. Impact of the COVID-19 pandemic on HIV testing rates across four geographically diverse urban centres in the United States: An observational study. *Lancet Reg Health Am.* 2022 Mar;7:100159. doi: 10.1016/j.lana.2021.100159. Epub 2021 Dec 23. PMID: 34961858; PMCID: PMC8695134.
7. Goodreau SM, Delaney KP, Zhu W, Smith DK, Mann LM, Sanchez TH, Hamilton DT, Hoover KW. Impacts of COVID-19 on sexual behaviors, HIV prevention and care among men who have sex with men: A comparison of New York City and Metropolitan Atlanta. *PLoS One.* 2023 Mar 21;18(3):e0282503. doi: 10.1371/journal.pone.0282503. PMID: 36943832; PMCID: PMC10030006.
8. [California Department of Public Health. California HIV Surveillance Report — 2023.](#) April 2025.
9. [America's HIV Epidemic Analysis Dashboard. America's HIV epidemic dashboard: An interactive tool to inform and explore HIV epidemic data.](#) 2025.
10. [Centers for Disease Control and Prevention. National HIV prevention and care objectives: 2025 update.](#) June 2025.
11. [U.S. Census Bureau \(2020\). American Community Survey 5-year estimates.](#)
12. Joinpoint Regression Program, Version 4.6.0.0 - April 2018; Statistical Methodology and Applications Branch, Surveillance Research Program, National Cancer Institute.
13. [LA County Department of Public Health. Adult HIV/AIDS Case Report Form.](#) May 2013.
14. [California Department of Public Health. Pediatric HIV/AIDS Confidential Case Report.](#) January 2019. .

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Alameda County Public
Health Department
1100 San Leandro Blvd, 3rd Floor
San Leandro, CA 94577

