# ATLAS OF HIV/AIDS IN SAN FRANCISCO 2010

CITY AND COUNTY OF SAN FRANCISCO
DEPARTMENT OF PUBLIC HEALTH
AIDS OFFICE
HIV EPIDEMIOLOGY SECTION

# Atlas of HIV/AIDS in San Francisco 2010

**Second Edition**

City and County of San Francisco
Department of Public Health
AIDS Office
HIV Epidemiology Section

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The Atlas of HIV/AIDS in San Francisco 2010 is available on the internet at:
http://www.sfdph.org/dph/comupg/oprograms/HIVepiSec/HIVepiSecReports.asp

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# List of Maps

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# ACKNOWLEDGEMENTS

This report was prepared by the following staff members of the San Francisco Department of Public Health (SFDPH) HIV Epidemiology Section (names are listed in alphabetic order by last name). Core production team included Miao-Jung Mia Chen, Jennie Chin, Anne Hirozawa, Ling Hsu, Alison Hughes, Annie Vu and Qi Zhi, with Annie Vu being the major contributor. Other contributors included Priscilla Lee Chu, Willi McFarland, Sharon Pipkin, Henry Fisher Raymond, Susan Scheer and Sandy Schwarcz. Photographers: Tom Fitzgerald, Janese Jackson, Belinda Van. Publication of this report would not have been possible without their dedicated work.

We wish to thank all staff in the HIV Epidemiology Section for collecting and managing the HIV surveillance data used in this report. In addition, we wish to thank other SFDPH programs including Sexually Transmitted Disease Control, Tuberculosis Control, Communicable Disease Control, and HIV Health Services for contributing data in the report.

# INTRODUCTION

An axiom of epidemiology is to characterize an infectious disease by person, place and time in order to prioritize the populations most severely affected, target the areas in greatest need of public health action and track the rise and fall of an epidemic. Over three decades, the AIDS Office of the San Francisco Department of Public Health has published surveillance reports largely focused on the characteristics of patients diagnosed with HIV/AIDS (person) each year (time).[1]

The present Atlas, only the second of its kind, is dedicated to "place" by characterizing the HIV/AIDS epidemic across the diversity of neighborhoods in San Francisco. Our rationale for developing this Atlas is that the visual array of data across the geography of our city affords unique perspectives not always evident in conventional tables or line, bar or pie charts. Maps allow the quantitative side of the mind to relate relatively high rates of new infection or disproportionately worse outcomes of disease, for example, to factors in the social, cultural and physical environments largely understood through qualitative information or personal experience. On a concrete plane, maps help guide the placement of prevention services (e.g., the proximity of clean syringes to the populations of injection drug users), direct political mobilization and advocacy (e.g., AIDS mortality by supervisorial districts) or prompt local changes in clinical practice (e.g., where to screen for co-infections with HCV, HBV, or STDs).

Many maps presented in this Atlas drive home the message that the impact of HIV/AIDS is not uniform across San Francisco. The Castro is still home to the largest number of persons newly infected and those long living with HIV/AIDS. Like our city overall, the majority of cases in the Castro are among men who have sex with men. When considering other severely affected populations, such as injection drug users and transgendered persons, the Tenderloin and adjacent Western Addition, South of Market and Mission neighborhoods feature more prominently and coincide with pockets of poverty. The map of heterosexual men and women affected by HIV/AIDS forms an inner city band extending from the above neighborhoods to the southeast quarter, also including the poor neighborhoods of Bayview and Visitation Valley. Shifting from rates of infection to health outcomes, the maps reveal a different story. While the Castro is home to the largest numbers of persons with HIV/AIDS, residents do relatively well on indicators of treatment, survival and slowing disease

1. Recent HIV/AIDS Epidemiology Annual Reports can be found at: http://www.sfdph.org/dph/files/reports/

progression compared to their counterparts in poorer neighborhoods. Several thematic maps explicitly or implicitly explore hypotheses on the relationships between poverty, HIV infection, health outcomes, race/ethnicity and the public health response of our city.

These are not the only themes or hypotheses evident in this second Atlas of HIV/AIDS in San Francisco. We invite the reader to engage in what we believe is the primary aim of this resource – to generate new hypotheses on the causes of HIV/AIDS infection and health outcomes and innovations on how to respond.

San Francisco, 22 January 2013

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# Guide to the Atlas

# Sources of data

This second edition of the Atlas includes HIV/AIDS cases diagnosed in San Francisco and reported to the San Francisco Department of Public Health (SFDPH) by January 5, 2012. We used two addresses to display the HIV case-based surveillance data. The address at time of HIV/AIDS diagnosis was used to display historical HIV progression and among persons diagnosed with HIV/AIDS in 2009-2010. The most recent address was used to display information among San Francisco HIV/AIDS cases who were alive at the end of 2010. We ascertained the most recent address through prospective medical chart reviews and updates from other jurisdictions. During chart review, staff collected the address and date associated with the address at each site the individual received care in the past 18-24 months. Importantly, these updates captured information of persons living cases with HIV/AIDS that who moved out of the city. After medical charts from all health care facilities were reviewed, the most recent address was selected for use.

Information provided in the descriptive overview of San Francisco was compiled from many sources. For example, the zip code and census tract boundaries were from the TIGER®/Line Shapefiles provided on the US Census Bureau site (http://www.census.gov/cgi-bin/geo/shapefiles2010/main). Supervisorial district boundaries were created by the city of San Francisco and downloaded from https://data.sfgov.org/. General demographic estimates for race/ethnicity, age groups, and sex were obtained from the 2010 Census Bureau. Persons living under the federal poverty line were estimated using the 2010 American Community Survey 5 year estimates. Crime activity was assessed from the crime reports released by San Francisco Police Department (https://data.sfgov.org/Public-Safety/Crime-Incidents/snsg-xkfg).

Depending on the theme discussed, this Atlas shows both living HIV/AIDS cases as of December 31, 2010 and cases diagnosed in 2009-2010 displayed as both absolute numbers and as cases per 100,000 in the specified population. The spectrum of HIV care is examined at multiple points from the proportion linked into care within three months to those who achieved viral suppression within 12 months of diagnosis. Mandatory reporting of all HIV-related laboratory tests to the SFDPH and eventual reporting of CD4s helped us analyze these important health care markers. We also include maps of survival after AIDS diagnosis by neighborhood. Several maps depict the number of co-infections with other sexually transmitted diseases (STD), such as chlamydia, gonorrhea, and syphilis, as well as tuberculosis, and viral hepatitis. STD are biological markers for engaging in unprotected sex and may act as facilitators of HIV transmission. STD therefore serve as sentinel events for populations at potentially increased risk for HIV. STD surveillance data originate from

cases reported by public and private clinics and laboratories diagnosing new infections among San Franciscan residents. Reports of STD surveillance data are also available on the SFDPH website (http://www.sfdph.org/dph/files/reports/default.asp). Finally, the locations of HIV testing sites, hospital and Ryan White Care sites, needle exchange program (NEP) sites, AIDS Drug Assistance Program (ADAP) sites, and Narcan training sites were mapped to examine the relationship of HIV prevention and care services with case distribution across the city.

## Definitions of risk populations

In order to be locally relevant, risk populations illustrated in the Atlas correspond to those used by San Francisco HIV/AIDS community planning groups. While it is recognized that persons may engage in multiple risks, we have categorized cases into mutually exclusive groupings consistent with all of our HIV/AIDS surveillance reports. Equally important, it should be noted that not all members of a "risk population" are necessarily at risk for acquiring HIV. The following defines the behavioral risk populations illustrated in this Atlas:

- **Men who have sex with men (MSM)**: Men who report having sex with men regardless of sexual identity (gay, bisexual, straight, etc.)

- **Men who have sex with men and inject drugs (MSM-IDU)**: MSM who also report ever having injected drugs

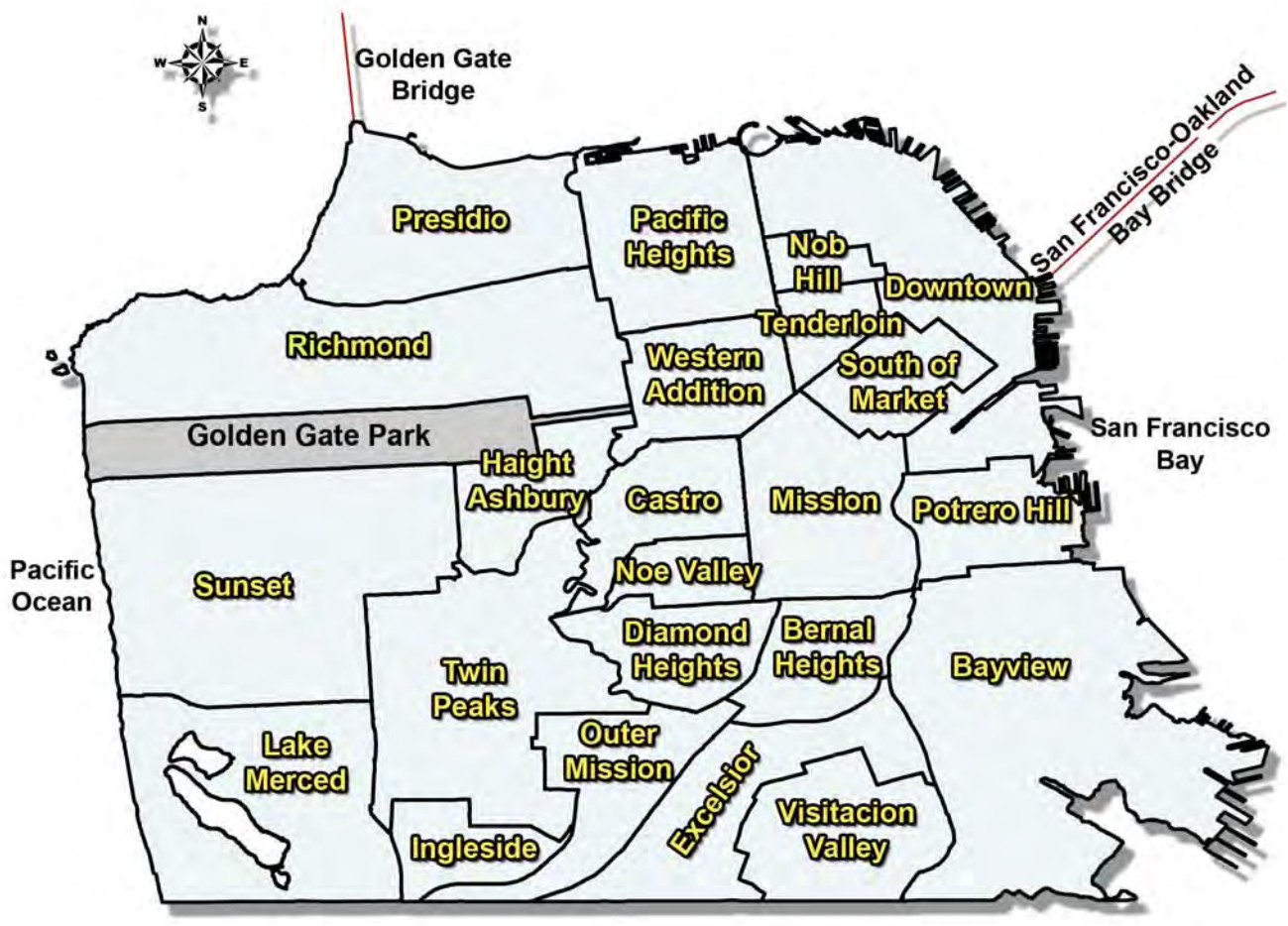
- **Injection drug users (IDU)**: Women who report injecting drugs regardless of sexual orientation or behavior and men who report injecting drugs but not male-male sex

- **Heterosexuals:** Presumptive heterosexual transmission among women who do not inject drugs and men who do not inject drugs and do not report male-male sex

- **Transfemale persons:** Male-to-female transgendered persons regardless of gender reassignment surgery status and gender of their sex partners. Due to the small number of transmale cases, their data are included with transfemales to protect confidentiality

# Neighborhood boundaries

Description of the geography of HIV/AIDS is most meaningful when related to specific neighborhoods as identified by residents. However, the boundaries between neighborhoods are often subjective and fluid. We have chosen to aggregate US census tracts into 22 major neighborhoods guided by history, real estate maps, tourist guide books, and local convention. We attempted to capture boundaries that approximate demographic and cultural similarities. We anticipate that interpretations of San Francisco neighborhood boundaries may differ and change over time.



# Data scales, confidentiality, small numbers

In comparing maps for two populations with very different numbers of HIV/AIDS cases, we are faced with trade offs in the selection of scales. On the one hand, displaying data using the same scale provides a gauge of the relative magnitude of the epidemic between the two populations. On the other hand, reducing or expanding the scale more effectively shows where cases are concentrated for each population ignoring differences in absolute numbers of cases. We have elected to use the same scale when feasible, particularly within the same theme. When necessary, we have changed the scale of certain maps to highlight case clustering that would otherwise not have been observed. Most maps present data using three to five levels.

Several steps have been taken to reduce the likelihood that persons may be correctly or mistakenly identified. Maps for populations with a smaller number of cases are collapsed into fewer levels. The lowest range for the number of cases displayed on the map is 1-10. When the denominator of populations in a geographic area was less than 500 according to the US Census, the data are not shown. For behavioral risk populations where the population size by neighborhood is unknown, the underlying population that is most similar to the group is used to check for the denominator. For example, male population size is checked for the denominator suppression rule (>500) for men who have sex with men. Other measures taken to further safeguard confidentiality include aggregating cases over several years and displaying data by larger geographic area. Most case data are displayed at the neighborhood level. Transfemale cases are displayed in five large geographic areas. The only maps displaying data by census tract are those for historical progression of HIV/AIDS and for overall and male and female living HIV/AIDS cases.

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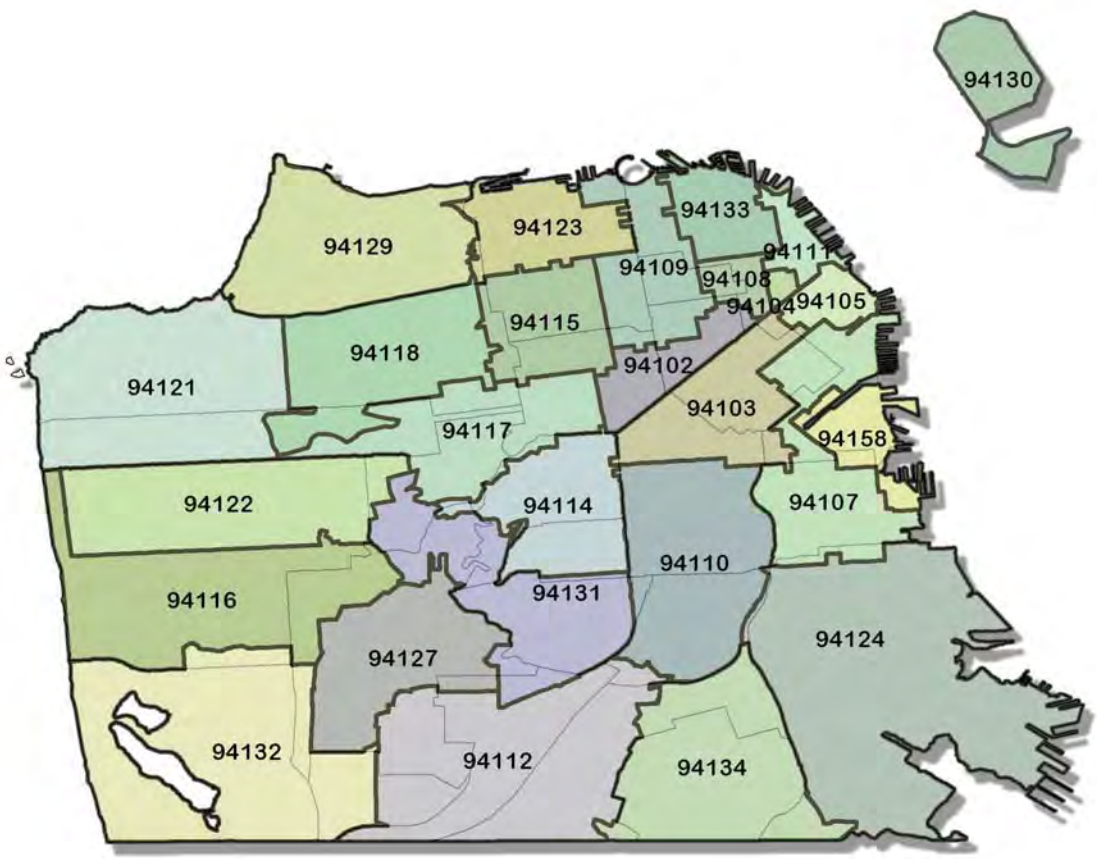
# San Francisco and its Neighborhoods

# Location

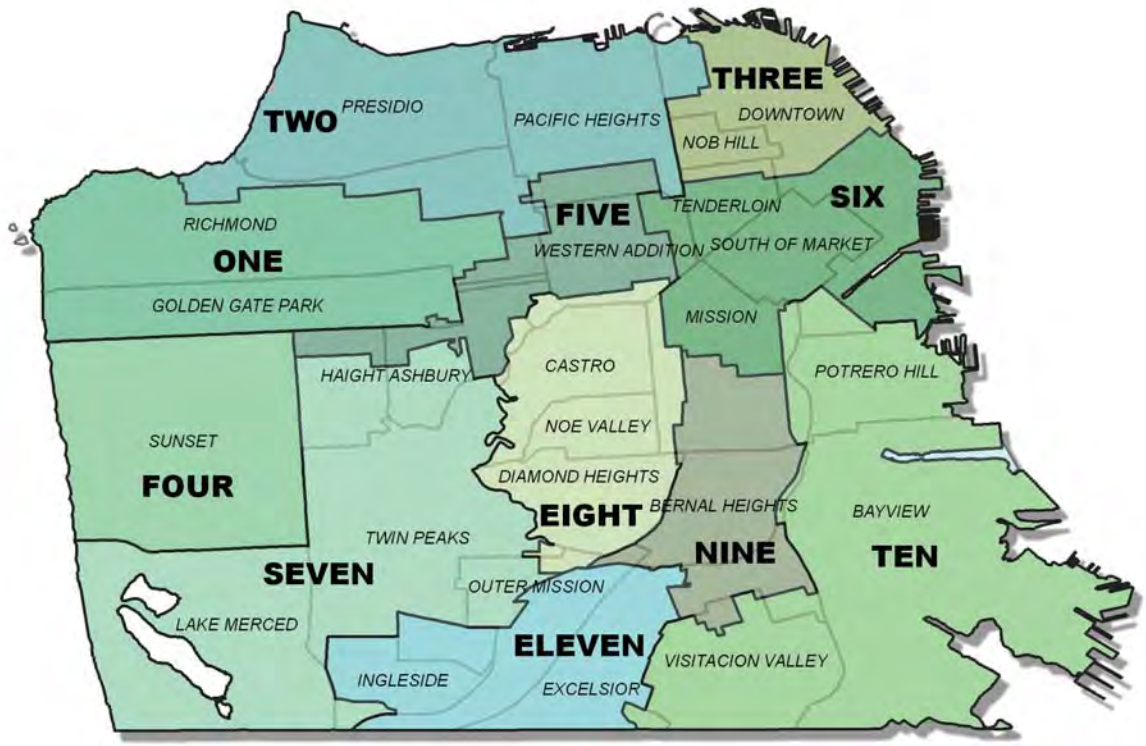

San Francisco's population has grown 3.7% since 2000 and is now composed of 805,235 people. San Francisco sits on 46.87 square miles but squeezes 17,179 persons into each square mile. Treasure Island adds another 525 acres (1.5 square miles) and 2,880 residents. The Golden Gate Bridge connects Marin County to the north and the San Francisco-Oakland Bay Bridge connects Alameda County to the east. San Mateo County borders San Francisco to the south.

# Zip codes



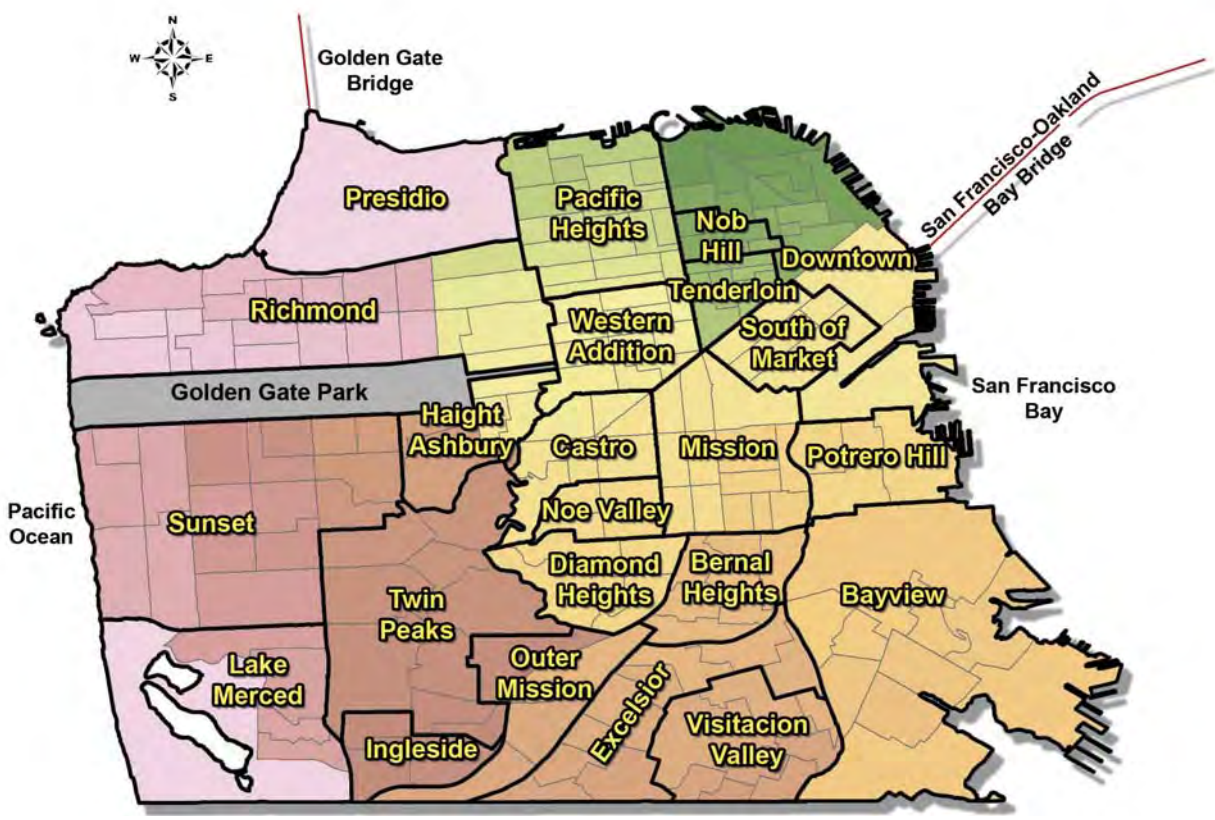

There are 56 zip codes that cover San Francisco. Of these 56 zip codes, 12 are P.O. Box specific, 15 are unique to businesses, and the remaining 29 belong to residential addresses. Zip code and neighborhood boundaries overlap and are not mutually exclusive. The most populated zip code is 94112, covering most of Ingleside, Outer Mission, and Excelsior neighborhoods.

# Supervisorial districts



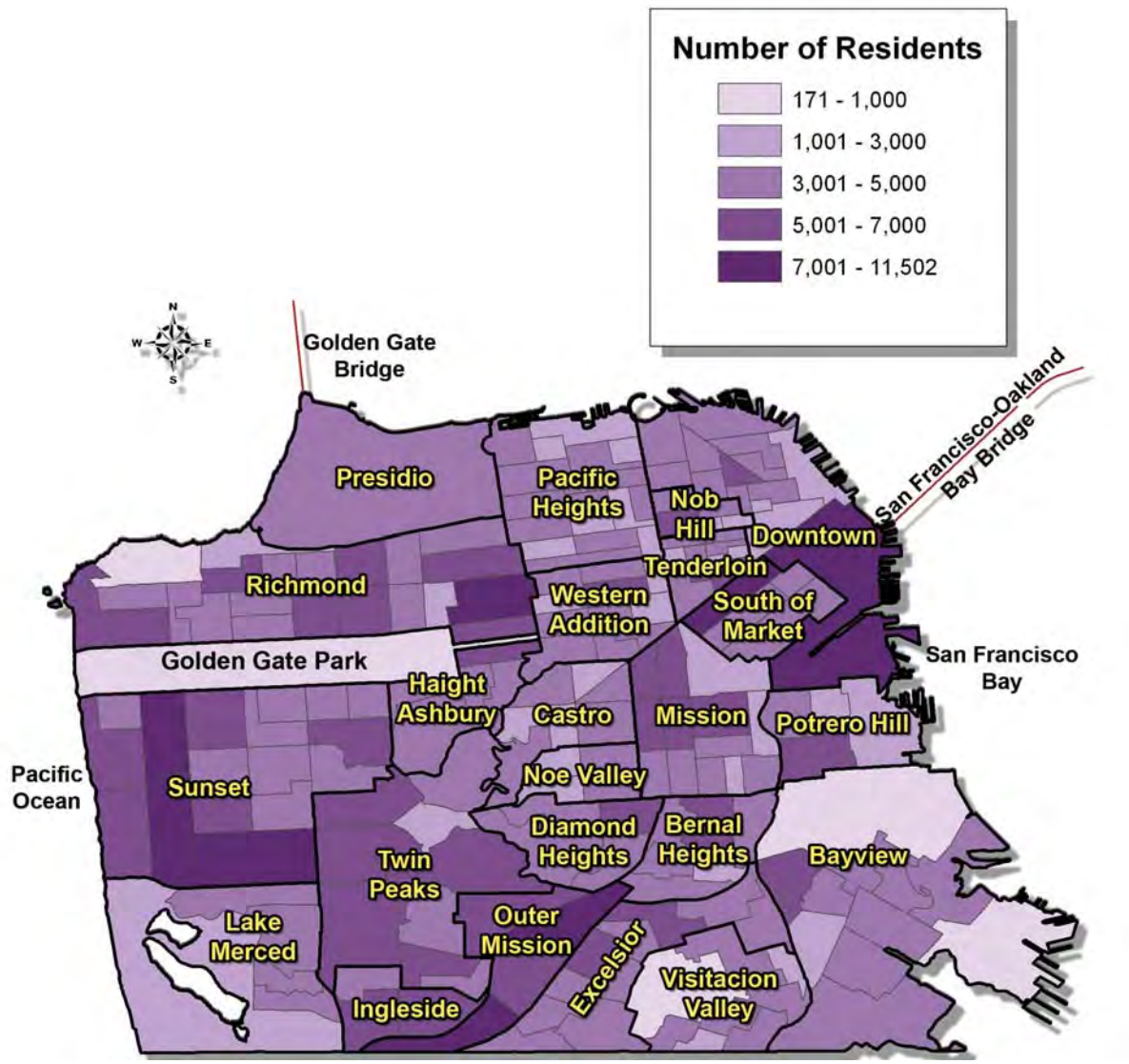

This map shows the eleven supervisorial districts in San Francisco, established by Census 2000 data. These district boundaries aim to have equal numbers of persons represented in each district and are adjusted after each Census release. The new district boundaries based on Census data were approved at the time of the Atlas publication.

# Neighborhoods



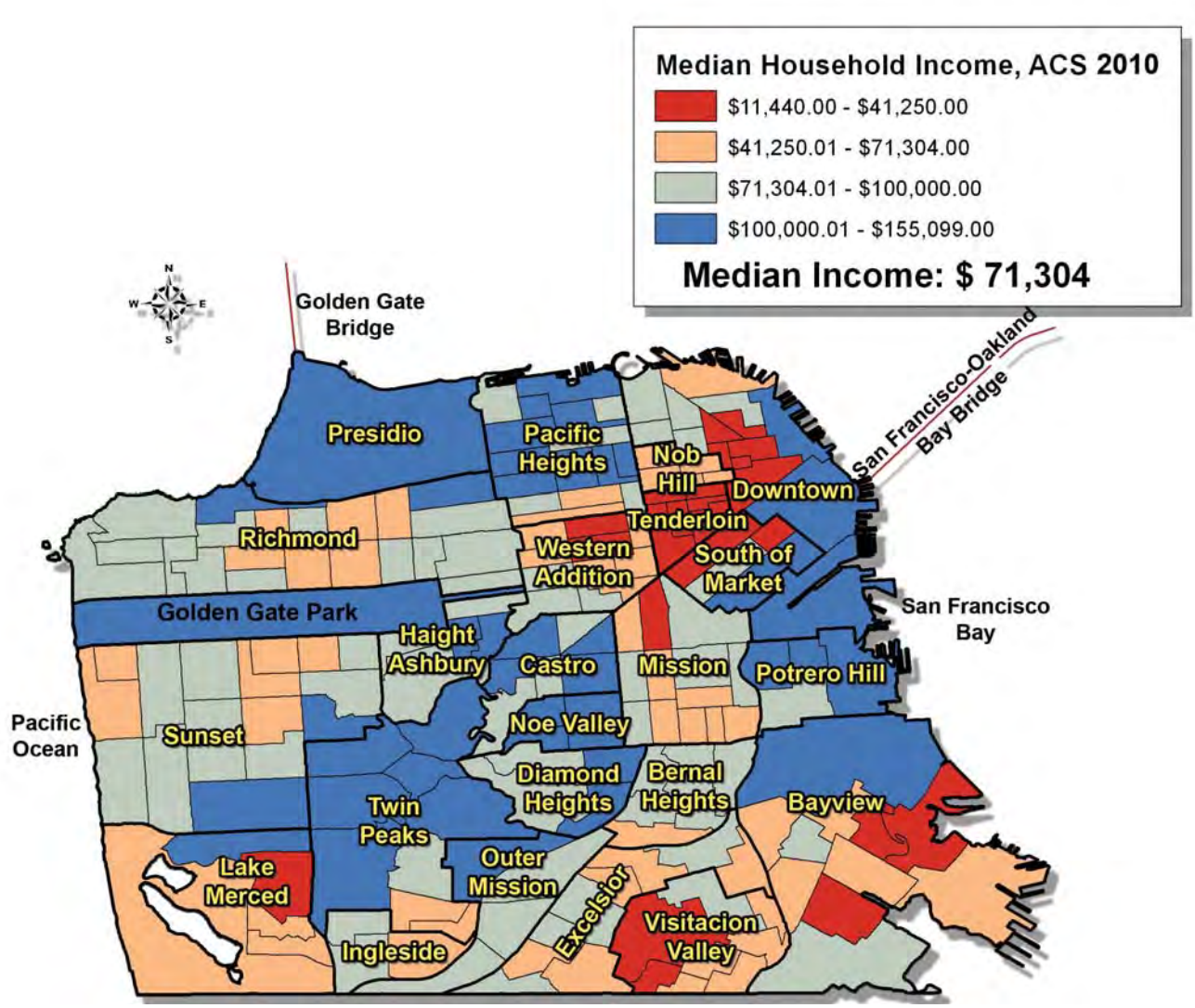

The boundaries between neighborhoods are often subjective and fluid. We have chosen to aggregate US Census tracts into 22 major neighborhoods. Due to the small number of residents in Golden Gate Park and Treasure Island, data for these two neighborhoods are not shown in this Atlas. Characteristics for each of the remaining neighborhoods are detailed later in this section.

# Population



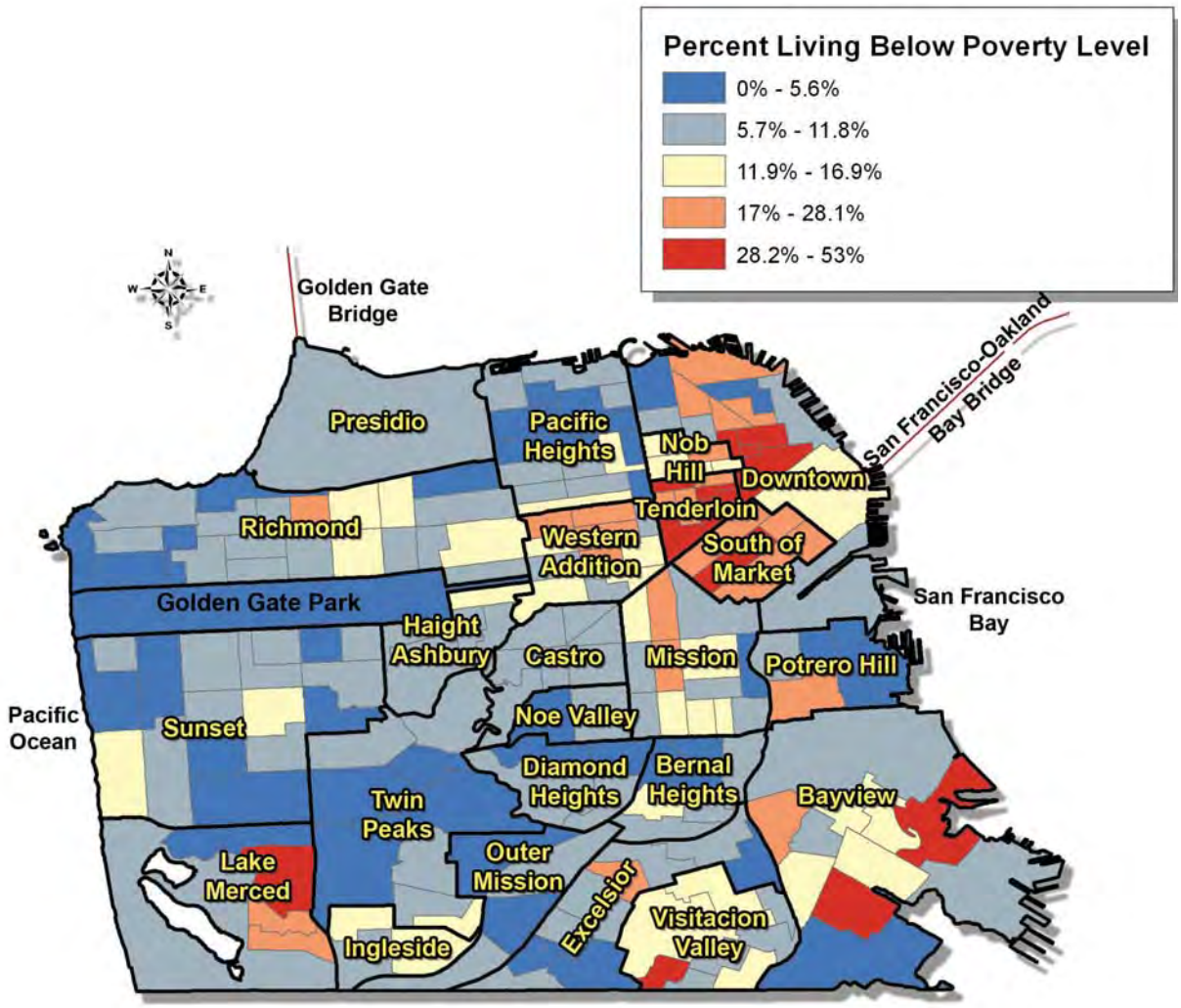

The 2010 Census estimates that there are 805,235 people who live in the City and County of San Francisco. This estimate includes 802,355 in San Francisco (city) and 2,880 on Treasure Island. The most densely populated area is the Downtown neighborhood which lies south of Market. In fact, Downtown has the two most dense census tracts (N=11,502 and N=9,083) in San Francisco due to the real estate boom around Mission Bay and new condominium development around AT&T Ballpark.

# Median household income




The median income in San Francisco according to the 2010 American Community Survey (ACS) is $71,304, which is higher than California ($60,883). The Tenderloin and surrounding neighborhoods have the lowest median household incomes in the city. Twin Peaks, Pacific Heights, and Potrero Hill contain some of the most affluent areas. At the other end, in addition to the Tenderloin and its neighbors, Visitacion Valley, Bayview, and Lake Merced residents have lower incomes in the majority of their neighborhoods.

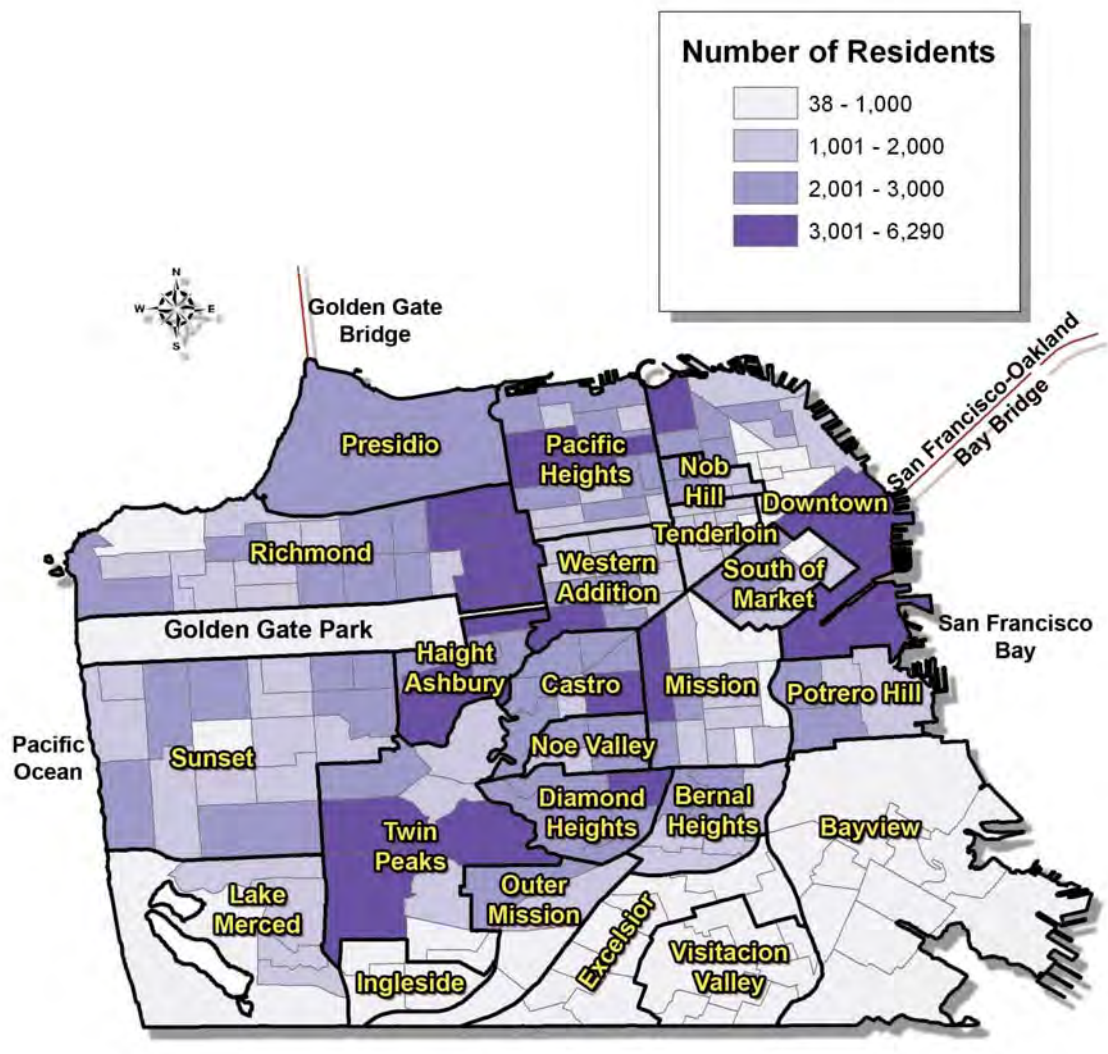
# Poverty level




The 2010 federal poverty thresholds are derived from the size of the family and number of children under 18 years old in a household. http://www.census.gov/hhes/www/poverty/about/overview/measure.html. For example, a family of four that makes less than $22,314 would be defined as impoverished. The American Community Survey estimated the overall rate of people living under the federal poverty level in San Francisco from 2006-2010 was 11.9%, which is slightly lower than California (13.7%) and national estimates (13.8%). The Tenderloin and neighboring areas in Downtown and South of Market displayed high levels of poverty. In addition, the San Francisco State University campus is located in the Lake Merced area and may explain the high percentage of those living under the poverty level.

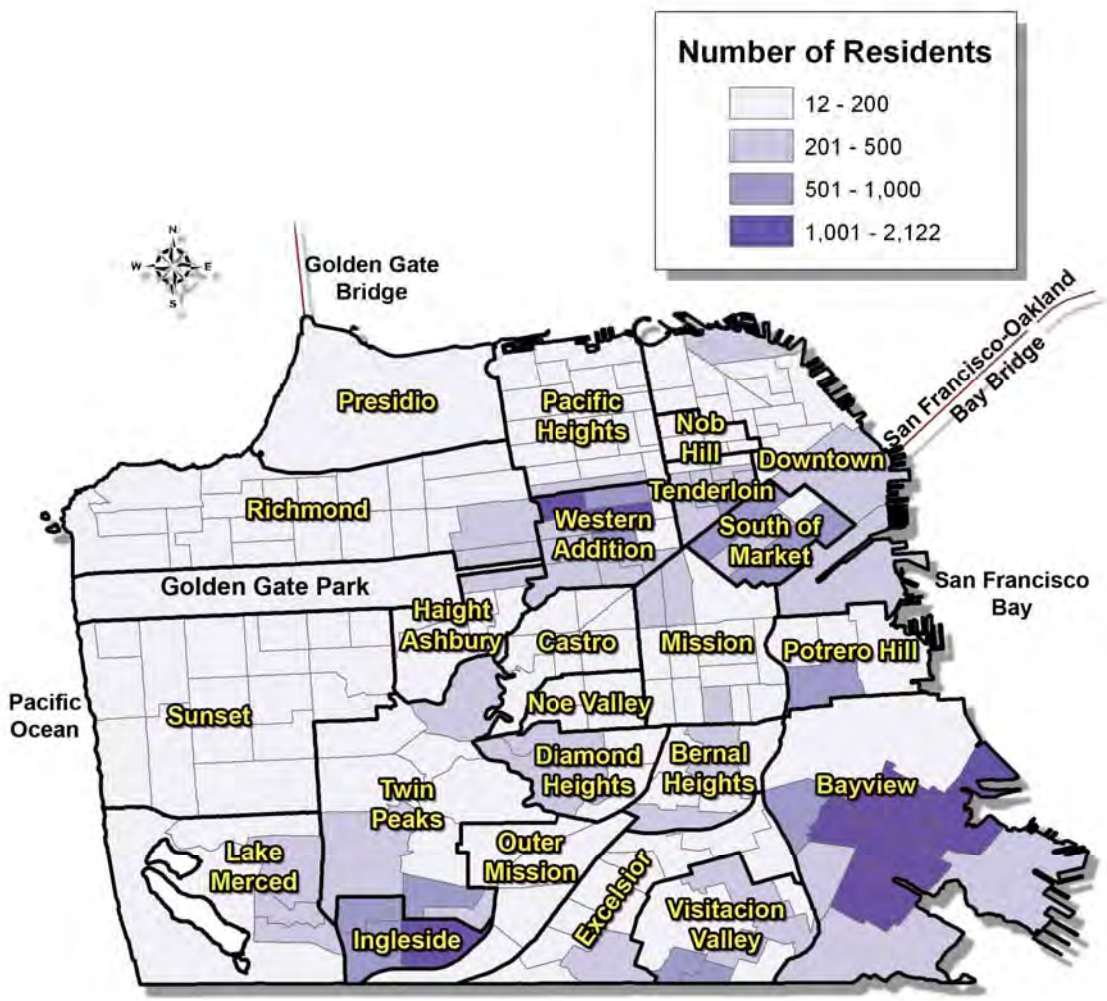
# Race/ethnicity

## Whites



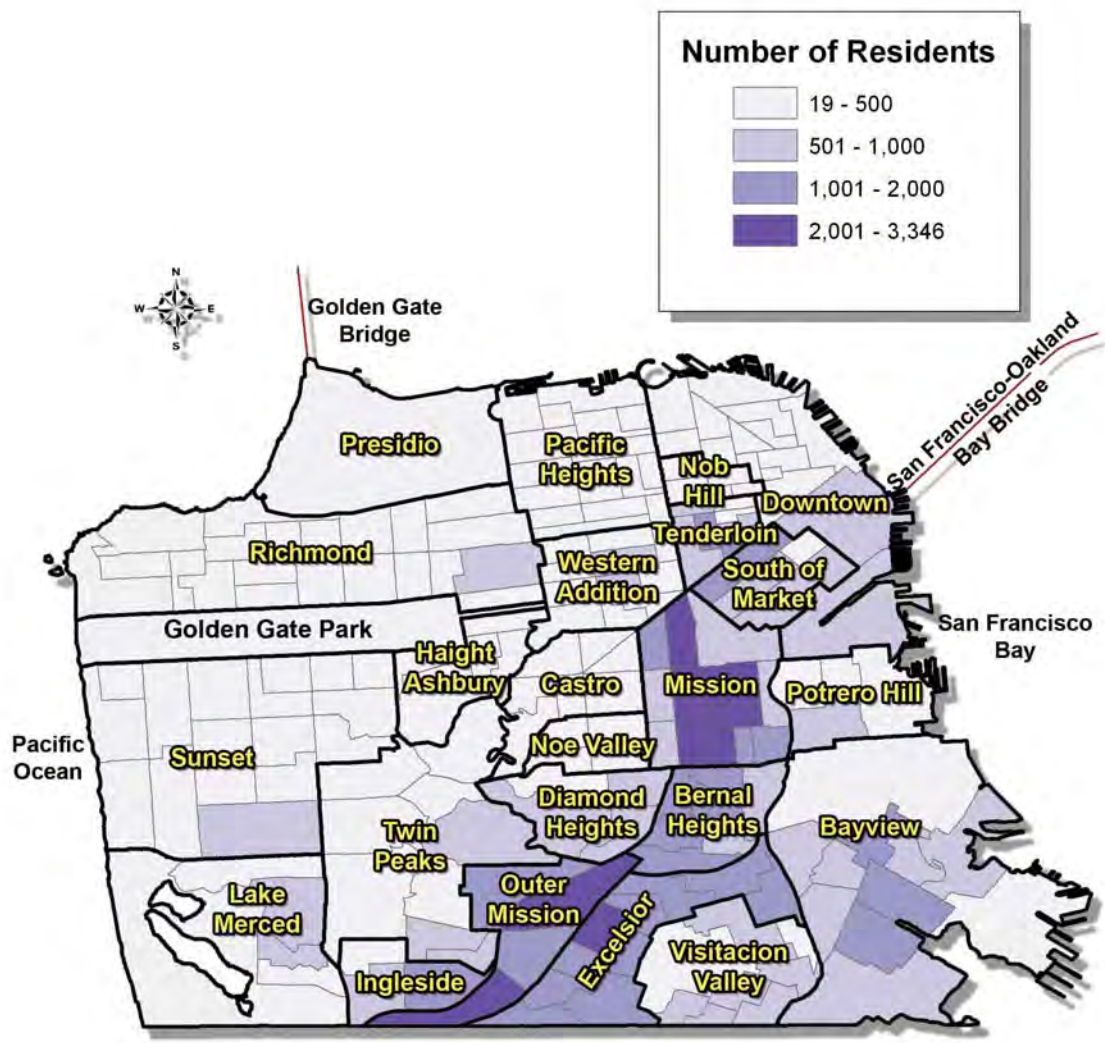

There were 337,451 non-Hispanic white persons in San Francisco (42%) which is slightly higher than the population of California residents who are white (39.7%). Neighborhoods with a high density of non-Hispanic whites are the Twin Peaks, Downtown, and Pacific Heights/Richmond districts. The highest number of whites resided in the Downtown tract along the Embarcadero (N=6,290). Neighborhoods in the southern parts of the city had the lowest number of whites with all census tracts in Bayview, Visitacion Valley, and Excelsior having less than 1,000 whites.

# African Americans



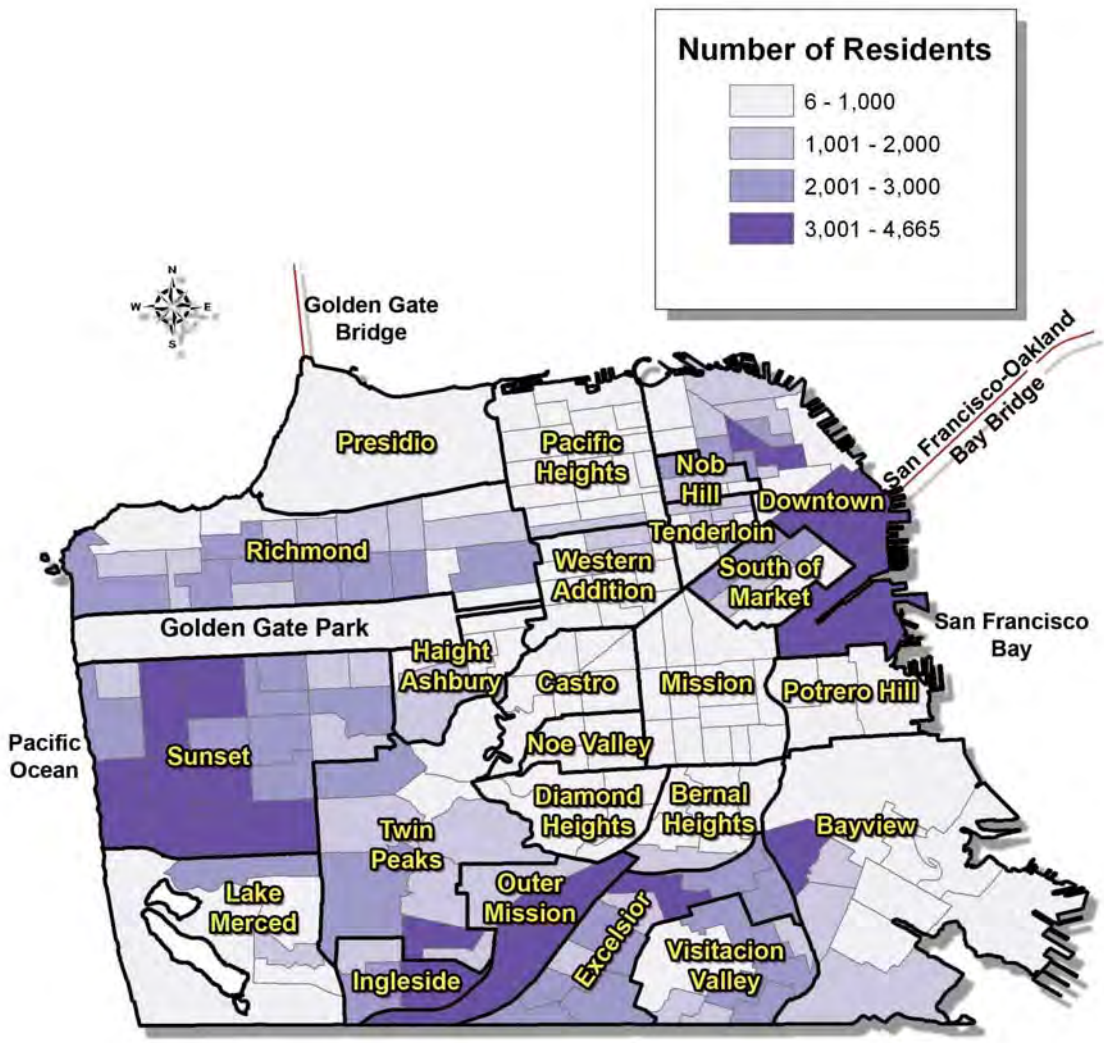

African Americans make up 6.3% of San Francisco population with a total of 48,870 persons. This proportion is comparable to California where African Americans comprise 6.6% of the population. Only nine census tracts in San Francisco had more than 1,000 African Americans. Although most of the city had less than 500 African Americans in a census tract, African Americans were concentrated in the Bayview, Western Addition, and the Ingleside neighborhoods.

# Latinos




Latinos comprise 15.1% San Francisco's population, less than half of the proportion seen in California (38.1%). Overall, most of the Latino community resided in the southeast portion of the city. The majority of the 121,774 Latinos living in San Francisco resided in a contiguous corridor that contained the Mission, Bernal Heights, Outer Mission, Excelsior, and the Ingleside neighborhoods.

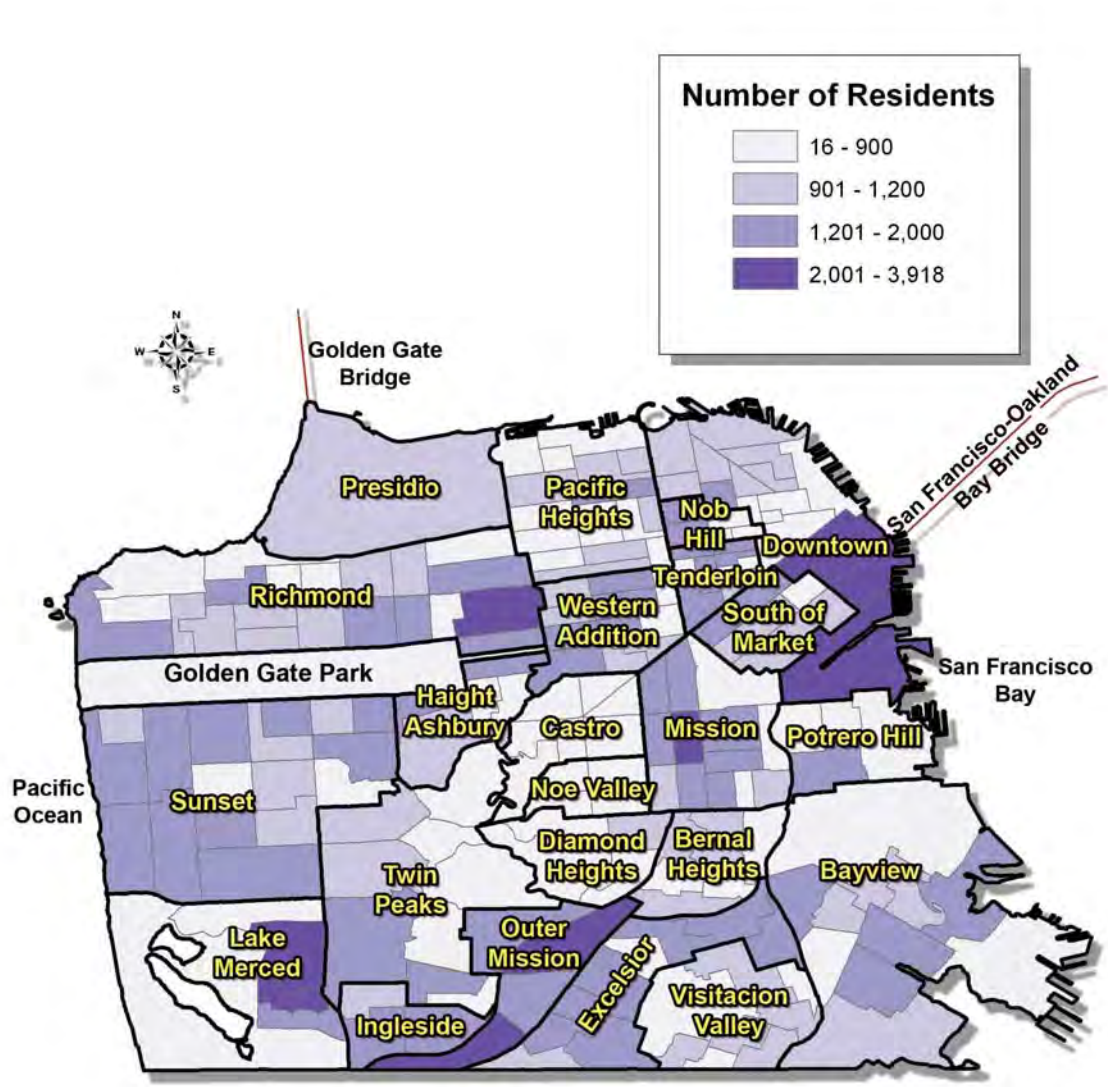
# Asians/Pacific Islanders




In contrast to the Latino population, Asian Americans were overrepresented (33.7%) in San Francisco compared to California where Asian Americans account for 13.6% of the population. Asians totaled 271,274 persons and were largely residing in the Sunset, Downtown, and Ingleside, and Outer Mission neighborhoods.

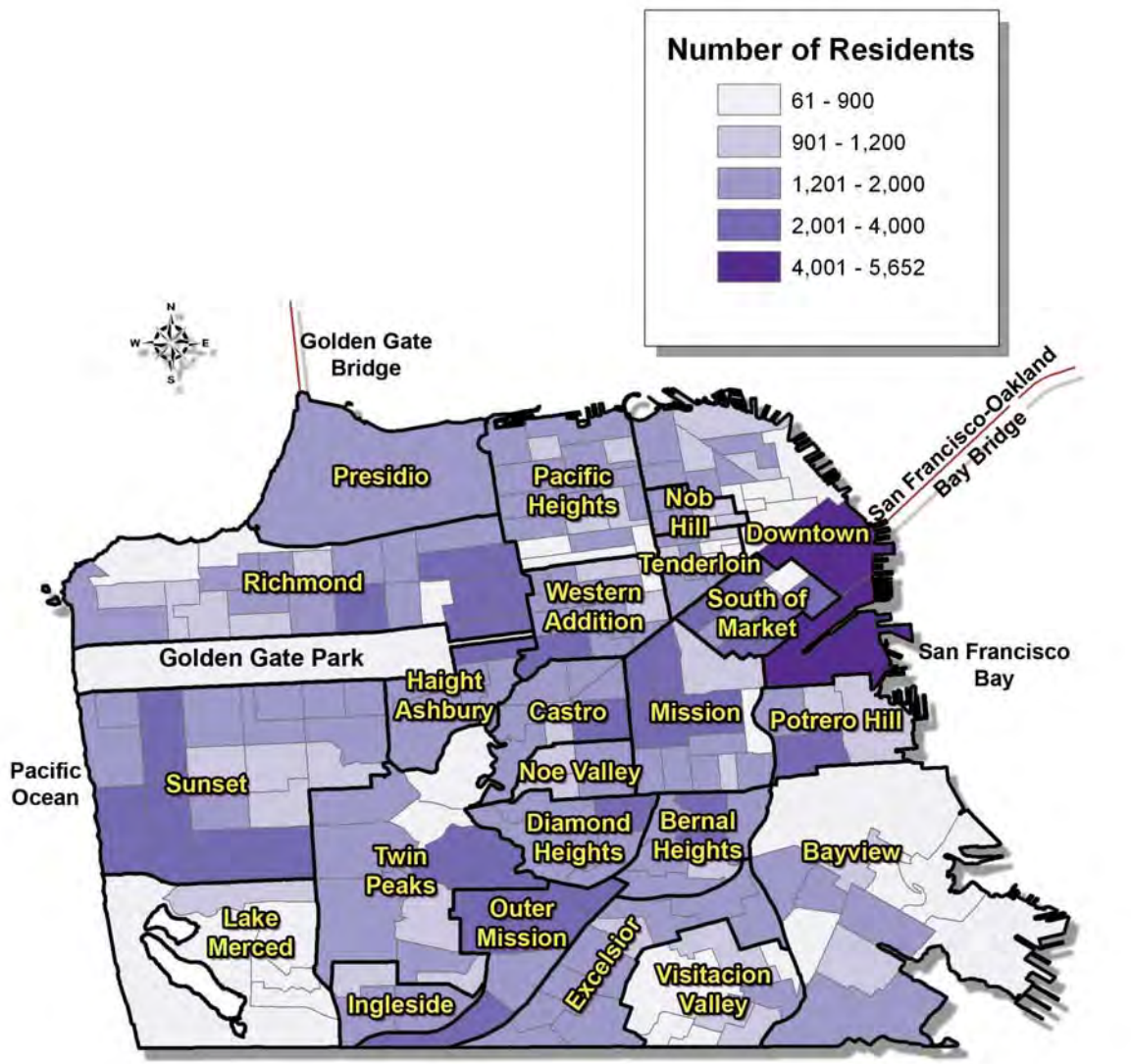
# Age

## 10-29 years old



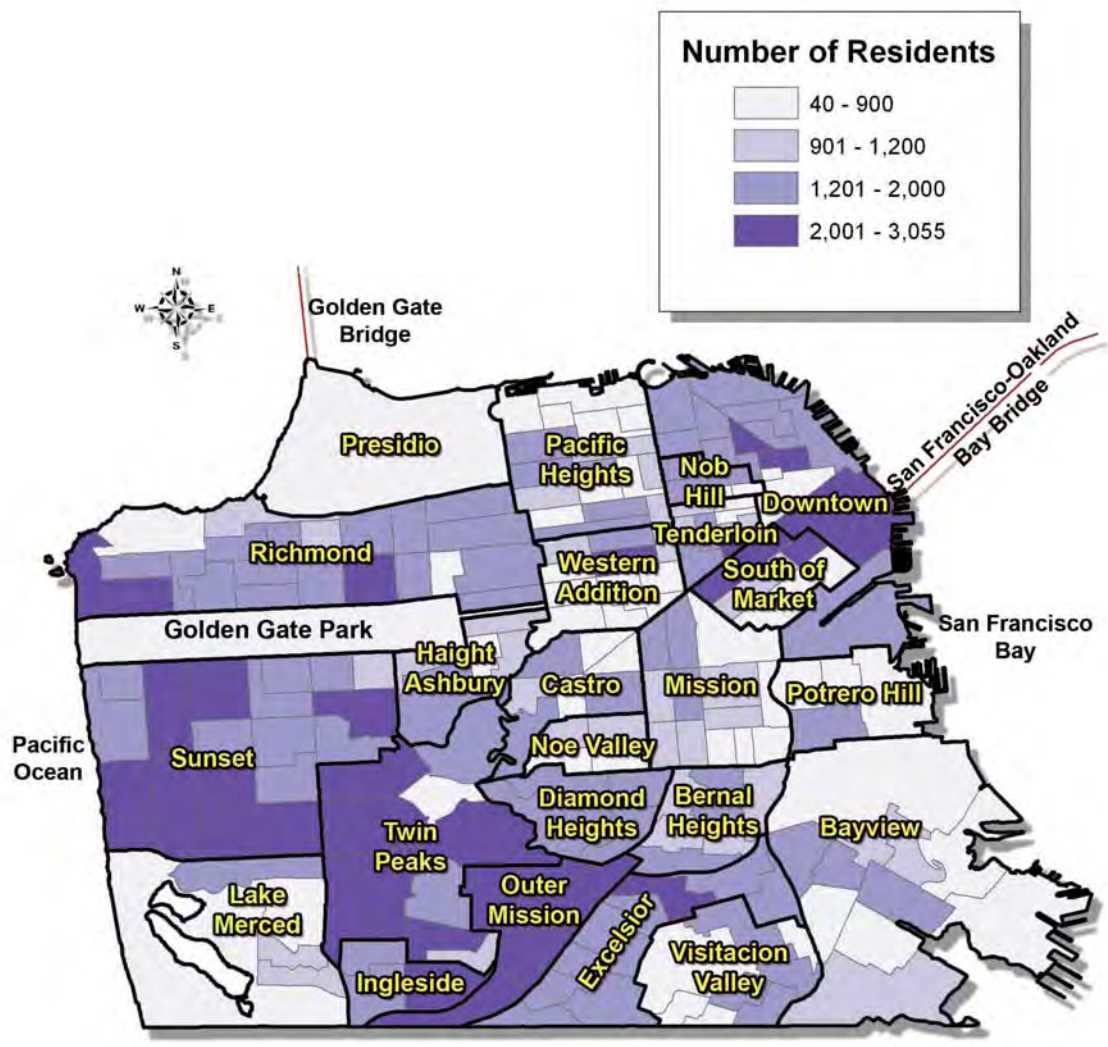

The Downtown, Lake Merced and Western Addition had the highest numbers of young adults. However, some of the most dense census tracts also coincide with the two universities in the city as University of San Francisco is in the southeast portion of the Richmond district and San Francisco State University is located in the eastern part of the Lake Merced district. In addition, the southern portion of Downtown is in the up-and-coming area that is close to AT&T Ballpark and attracts younger persons with the rapidly growing number of new condominiums.

# 30-49 years old




The median age in San Francisco is 38.5 years old. This map illustrates that persons aged 30-49 years reside in a large number of neighborhoods. The two most populated census tracts for persons aged 30-49 years were located in Downtown along the southern half of the waterfront on the Embarcadero. The most populated tract (N=5,652) was at least twice as concentrated as the third tract, which highlights how dense Downtown has become among persons in this age group.

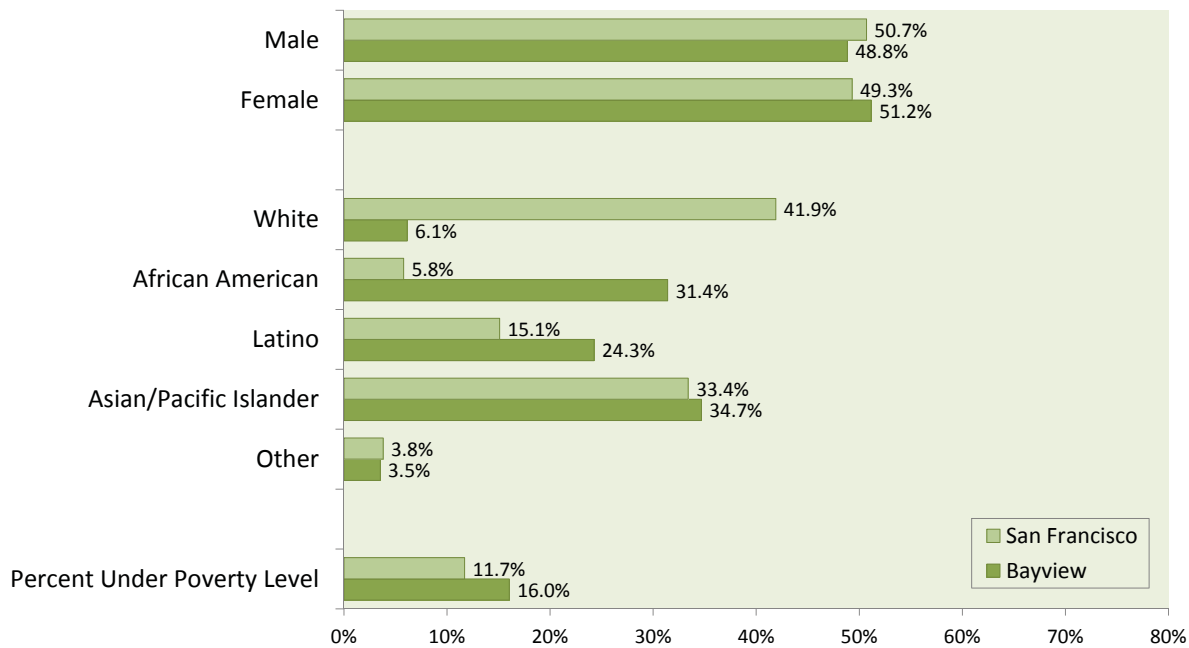
## 50 years and above

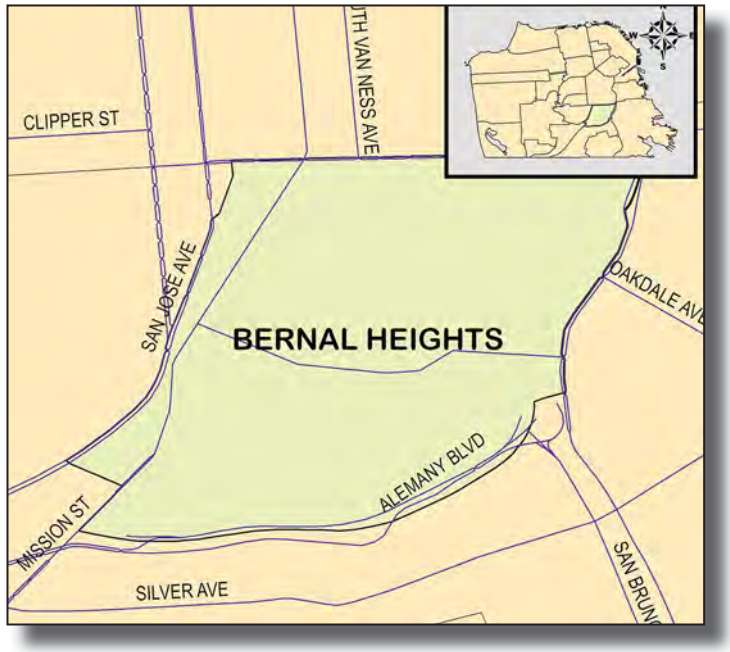



Those aged 50 years and older were mainly residents on the western half of the city, especially in the Sunset, Twin Peaks and Outer Mission neighborhoods. The tract bordering Outer Sunset and Lake Merced had the highest number of 50 year olds with 3,055.

# BAYVIEW

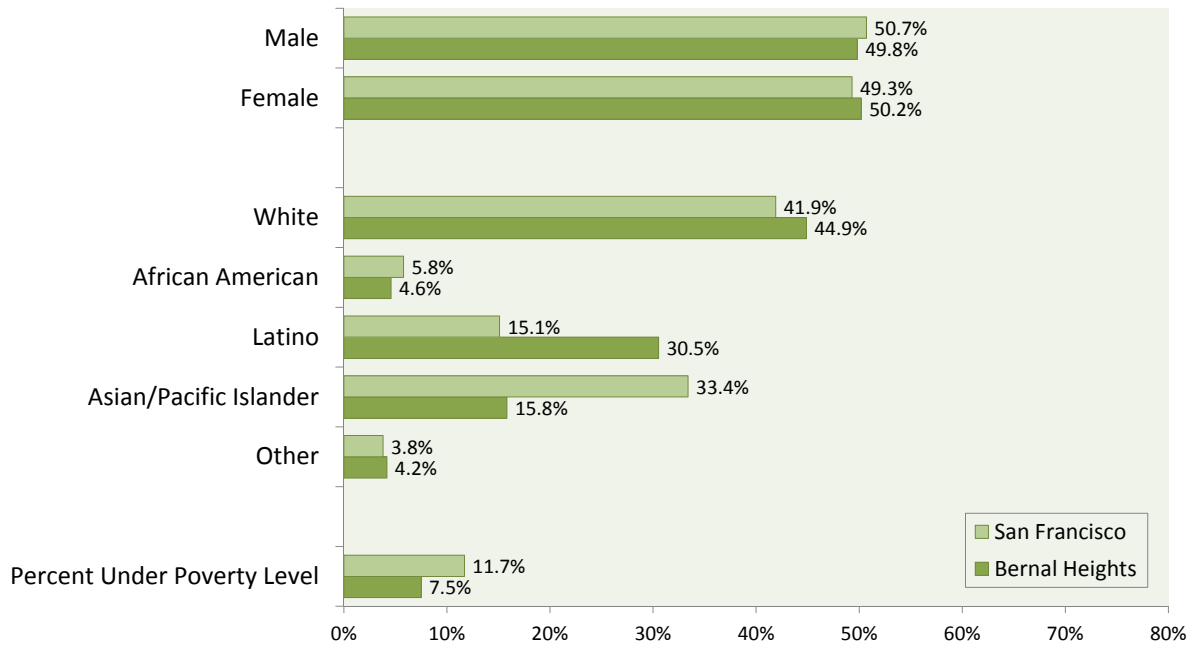

| | |
|---|---|
| **Population** | **35,894** |
| **Gender** | |
| Male | 17,531 |
| Female | 18,363 |
| **Race/Ethnicity** | |
| White | 2,199 |
| African American | 11,271 |
| Latino | 8,711 |
| Asian/Pacific Islander | 12,450 |
| Other | 1,263 |
| **Median age** | **35.1** |
| **Median income** | **$60,854.9** |



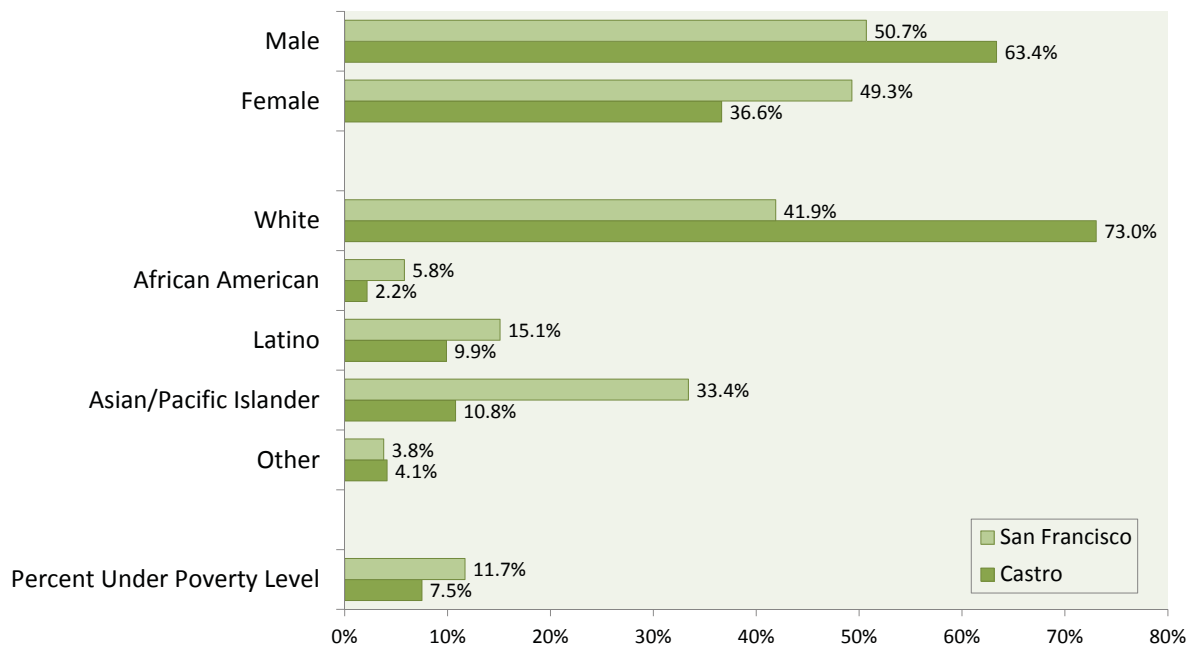

# BERNAL HEIGHTS

| | |
|---|---|
| **Population** | **23,391** |
| **Gender** | |
| Male | 11,651 |
| Female | 11,740 |
| **Race/Ethnicity** | |
| White | 10,497 |
| African American | 1,073 |
| Latino | 7,142 |
| Asian/Pacific Islander | 3,701 |
| Other | 978 |
| **Median age** | **38.9** |
| **Median income** | **$85,157.7** |

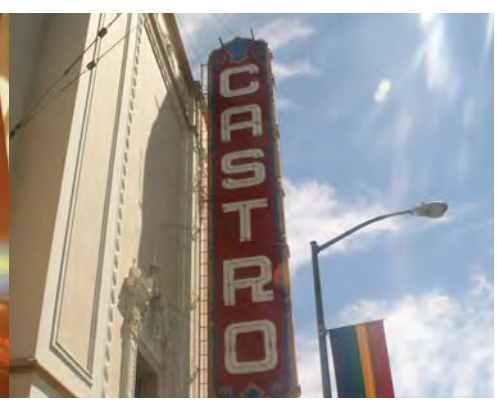


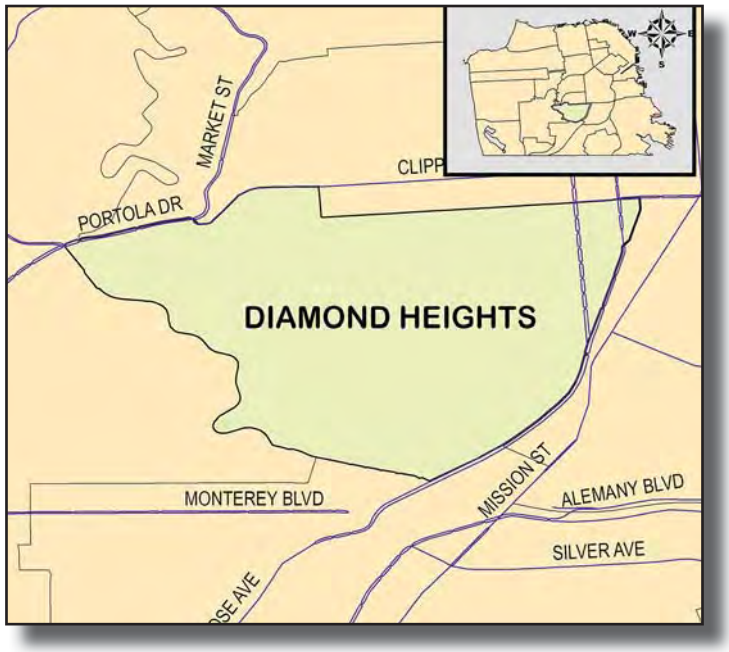

# CASTRO


| | |
|---|---|
| **Population** | **23,784** |
| **Gender** | |
| Male | 15,069 |
| Female | 8,715 |
| **Race/Ethnicity** | |
| White | 17,371 |
| African American | 518 |
| Latino | 2,351 |
| Asian/Pacific Islander | 2,562 |
| Other | 982 |
| **Median age** | **41.3** |
| **Median income** | **$96,502.4** |



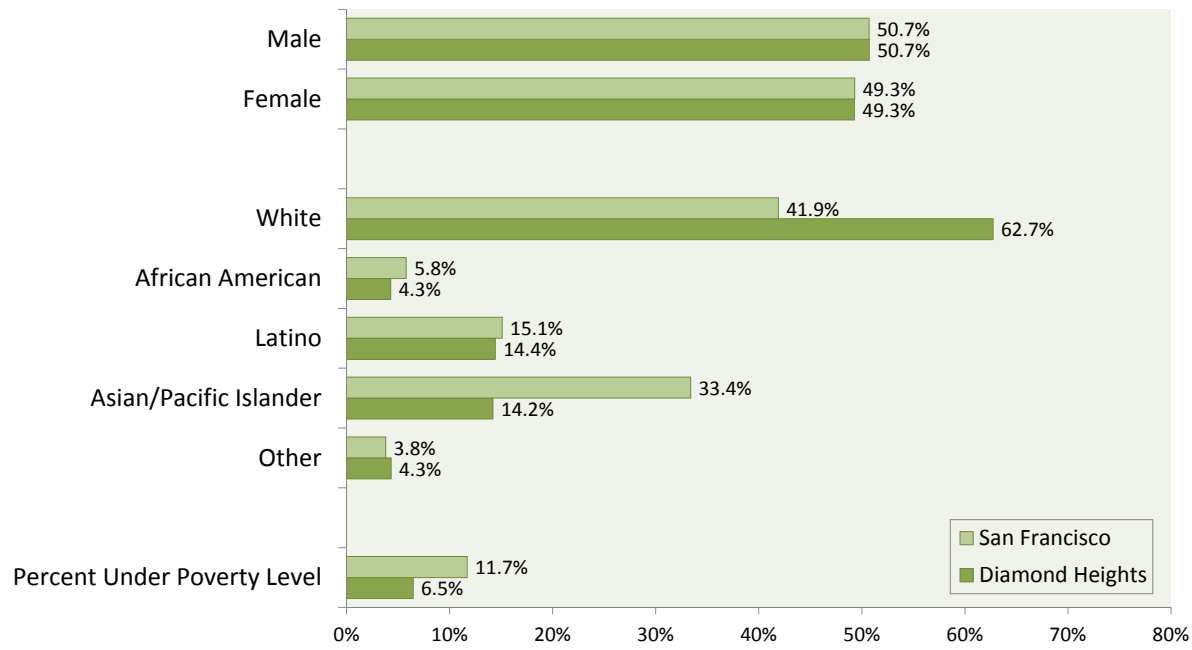






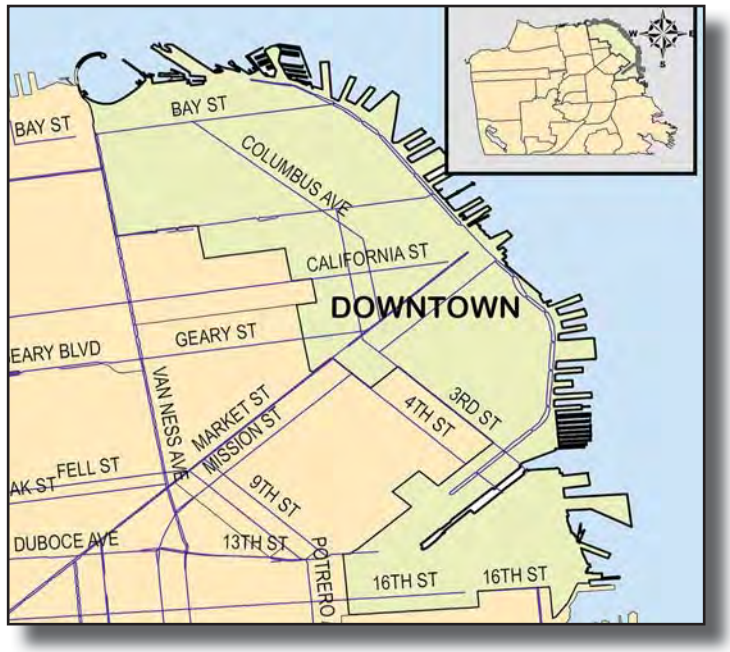

# DIAMOND HEIGHTS

| | |
|---|---|
| **Population** | **16,720** |
| **Gender** | |
| Male | 8,480 |
| Female | 8,240 |
| **Race/Ethnicity** | |
| White | 10,489 |
| African American | 718 |
| Latino | 2,414 |
| Asian/Pacific Islander | 2,375 |
| Other | 724 |
| **Median age** | **42.0** |
| **Median income** | **$98,082.8** |

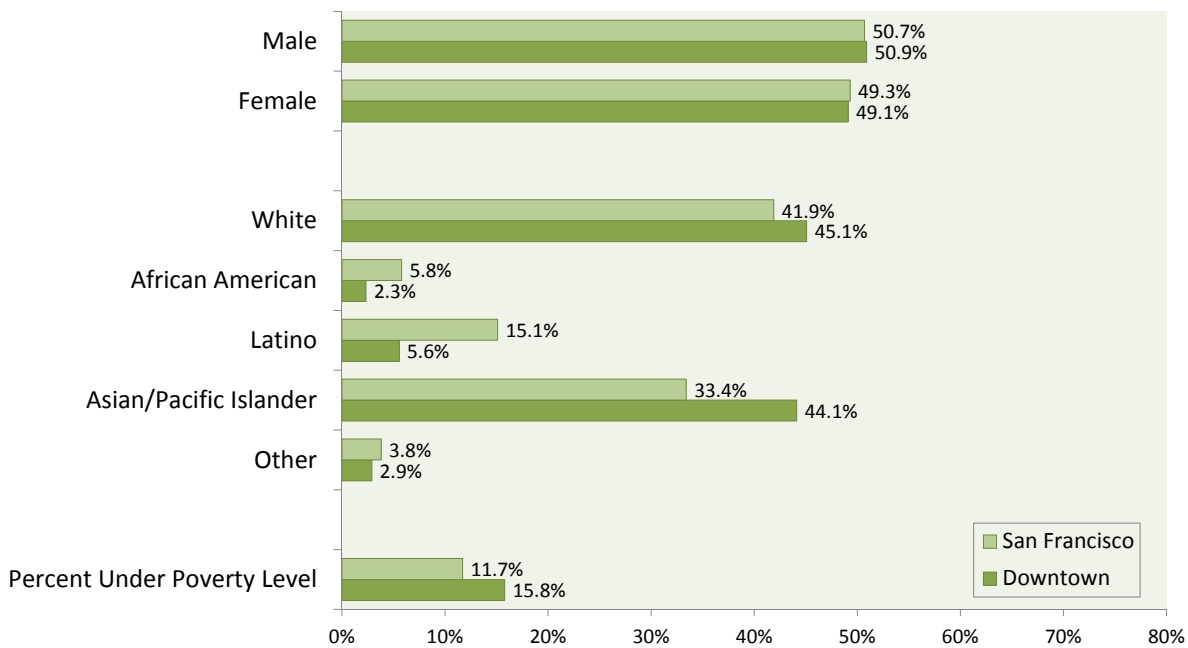


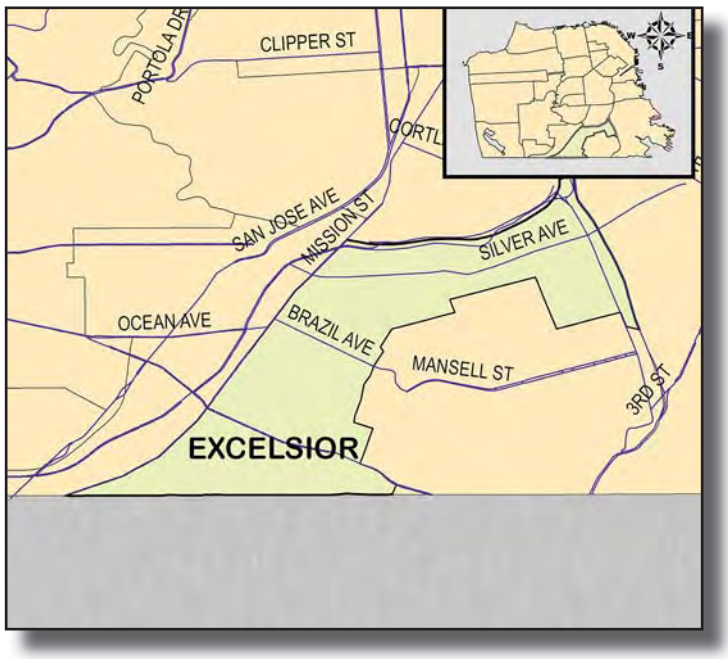


# DOWNTOWN



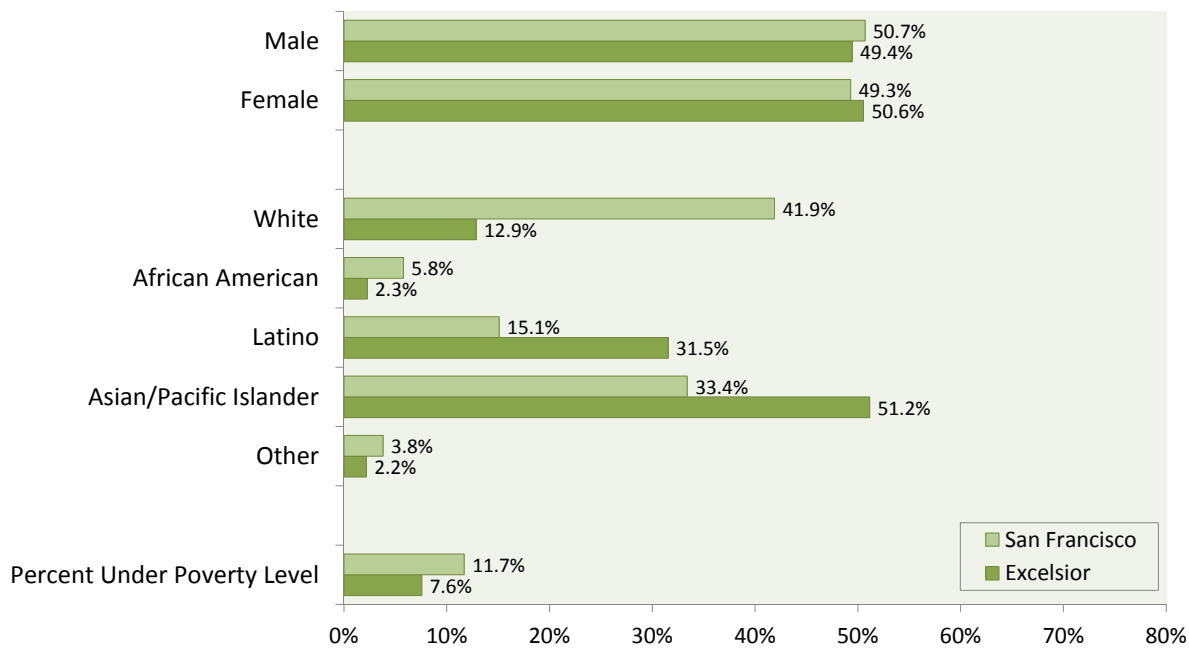

| | |
|---|---|
| **Population** | 68,666 |
| **Gender** | |
| Male | 34,951 |
| Female | 33,715 |
| **Race/Ethnicity** | |
| White | 30,957 |
| African American | 1,605 |
| Latino | 3,813 |
| Asian/Pacific Islander | 30,297 |
| Other | 1,994 |
| **Median age** | 43.3 |
| **Median income** | $63,593.6 |



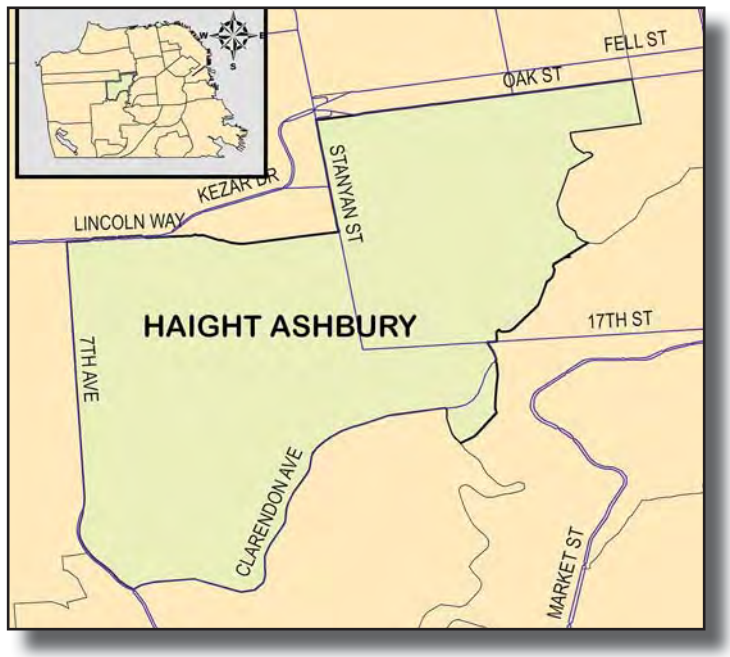




# EXCELSIOR

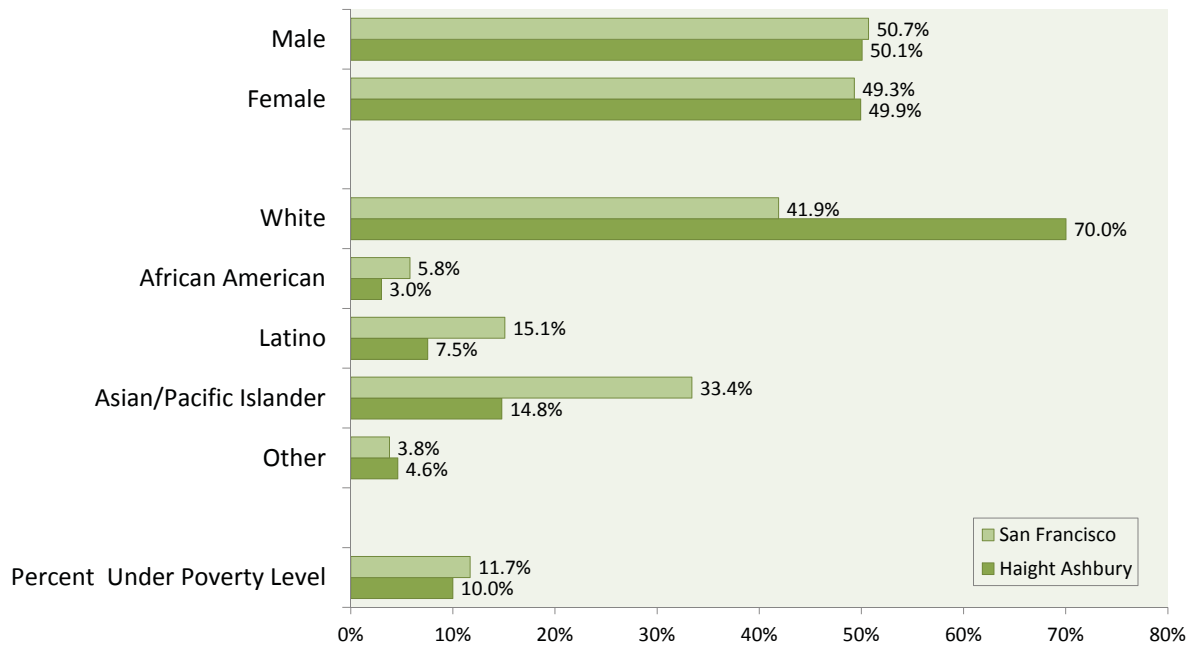
| | |
|---|---|
| **Population** | **48,119** |
| **Gender** | |
| Male | 23,792 |
| Female | 24,327 |
| **Race/Ethnicity** | |
| White | 6,186 |
| African American | 1,089 |
| Latino | 15,178 |
| Asian/Pacific Islander | 24,615 |
| Other | 1,051 |
| **Median age** | **40.3** |
| **Median income** | **$69,667.6** |



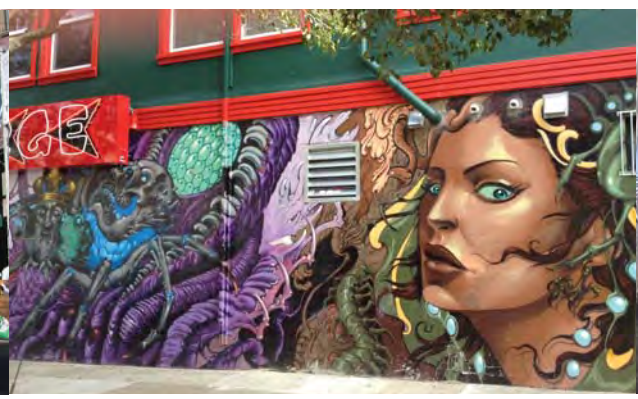

# HAIGHT ASHBURY




| | |
|---|---|
| **Population** | **21,135** |
| **Gender** | |
| Male | 10,582 |
| Female | 10,553 |
| **Race/Ethnicity** | |
| White | 14,802 |
| African American | 638 |
| Latino | 1,593 |
| Asian/Pacific Islander | 3,128 |
| Other | 974 |
| **Median age** | **35.4** |
| **Median income** | **$94,683.2** |

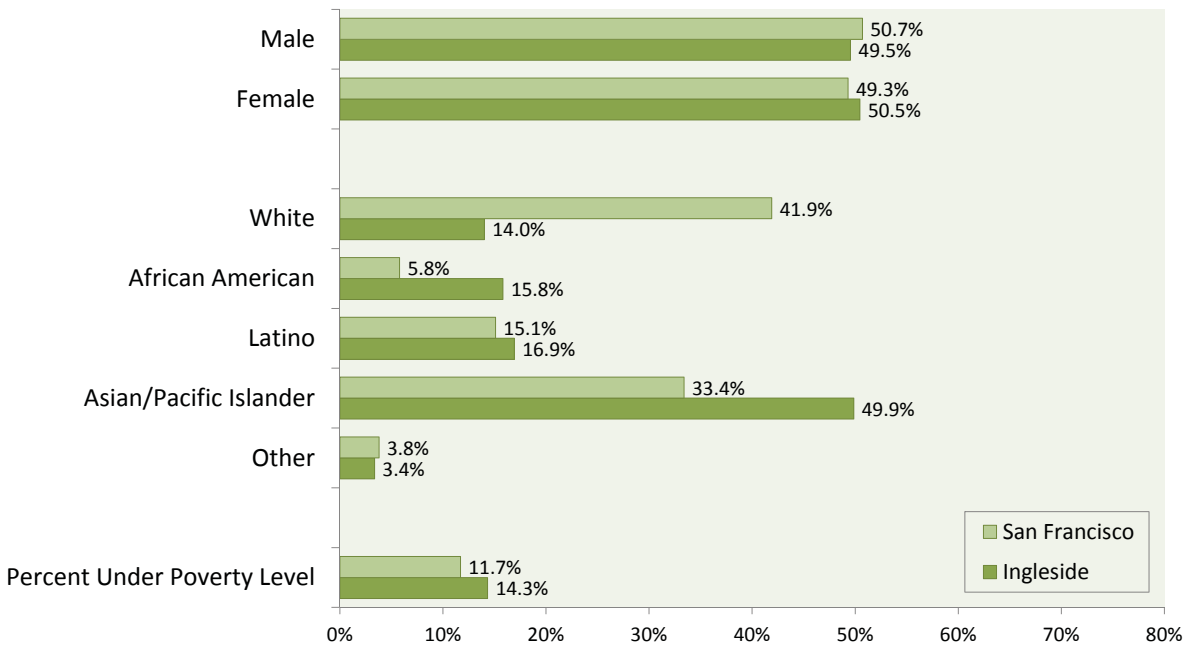







# INGLESIDE

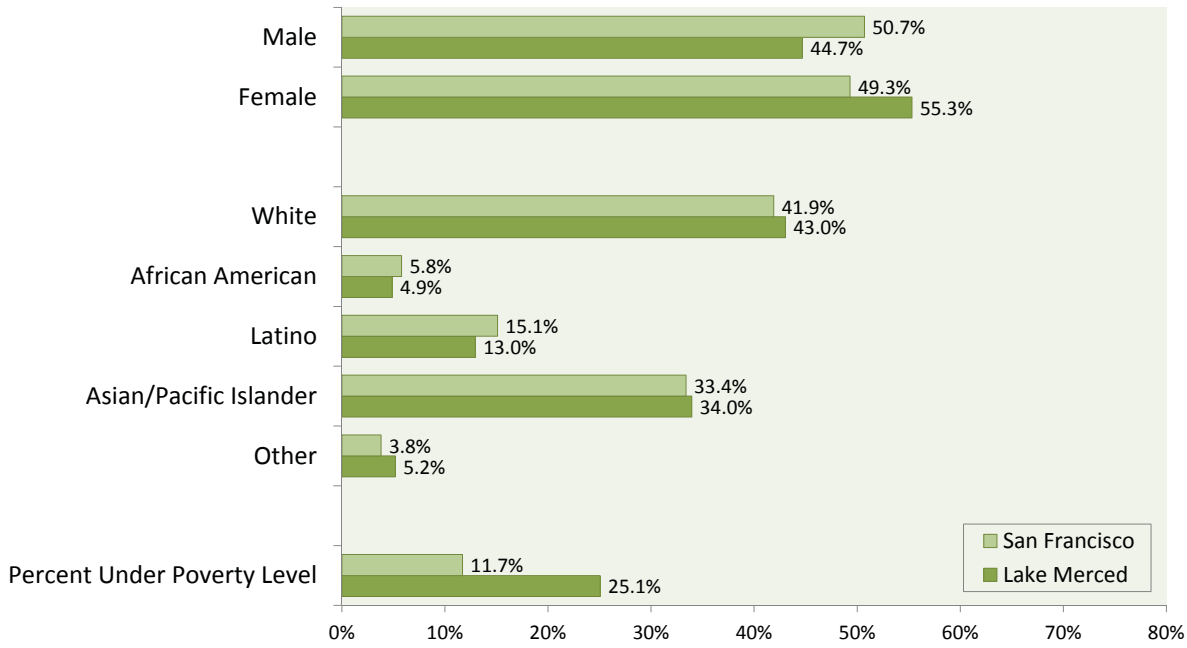
| | |
|---|---|
| **Population** | **15,997** |
| **Gender** | |
| Male | 7,925 |
| Female | 8,072 |
| **Race/Ethnicity** | |
| White | 2,244 |
| African American | 2,530 |
| Latino | 2,708 |
| Asian/Pacific Islander | 7,976 |
| Other | 539 |
| **Median age** | **38.5** |
| **Median income** | **$70,220.7** |





# LAKE MERCED

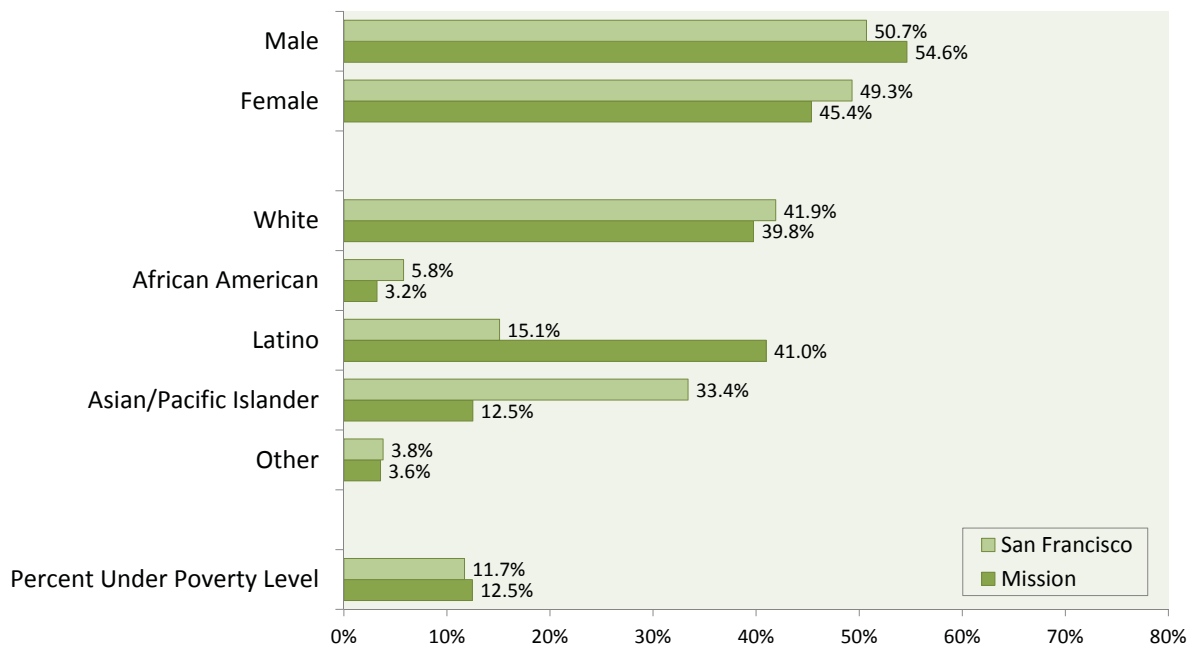

| | |
|---|---|
| **Population** | **16,633** |
| **Gender** | |
| Male | 7,433 |
| Female | 9,200 |
| **Race/Ethnicity** | |
| White | 7,158 |
| African American | 810 |
| Latino | 2,154 |
| Asian/Pacific Islander | 5,647 |
| Other | 864 |
| **Median age** | **32.3** |
| **Median income** | **$62,629.8** |






# MISSION

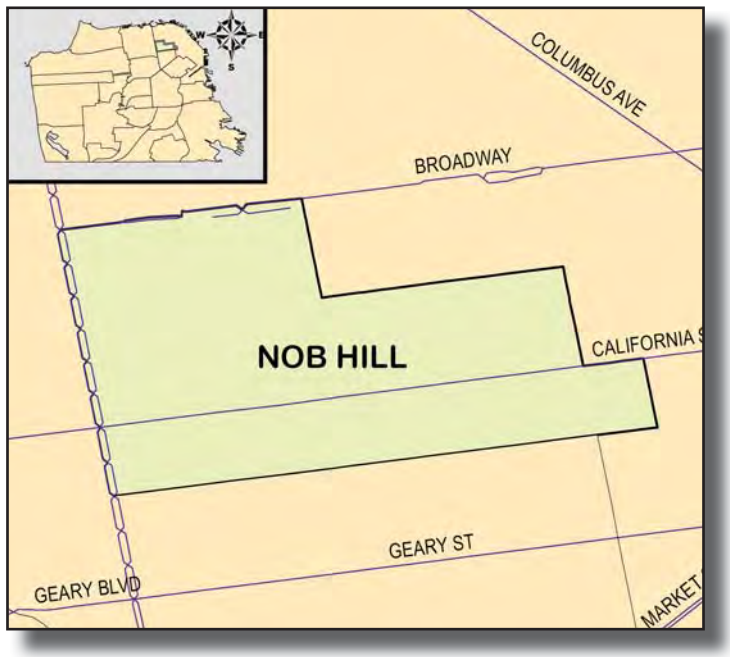

| | |
|---|---|
| **Population** | **57,298** |
| **Gender** | |
| Male | 31,306 |
| Female | 25,992 |
| **Race/Ethnicity** | |
| White | 22,777 |
| African American | 1,839 |
| Latino | 23,475 |
| Asian/Pacific Islander | 7,171 |
| Other | 2,036 |
| **Median age** | **35.2** |
| **Median income** | **$67,871.5** |

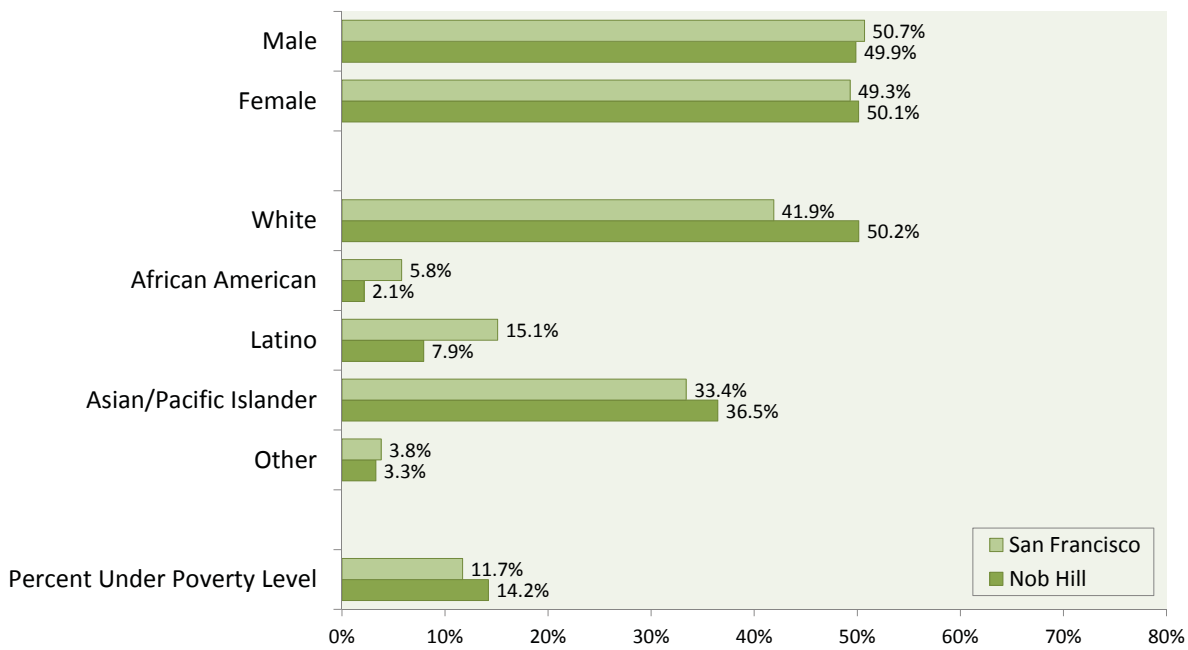


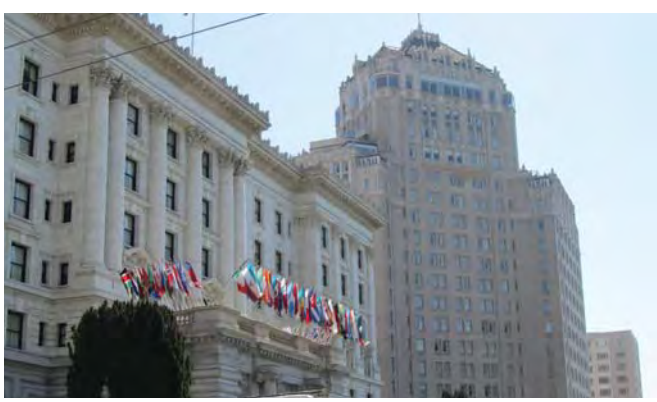


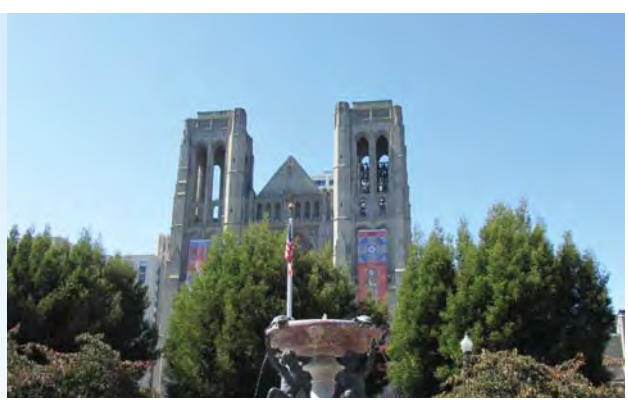
# NOB HILL

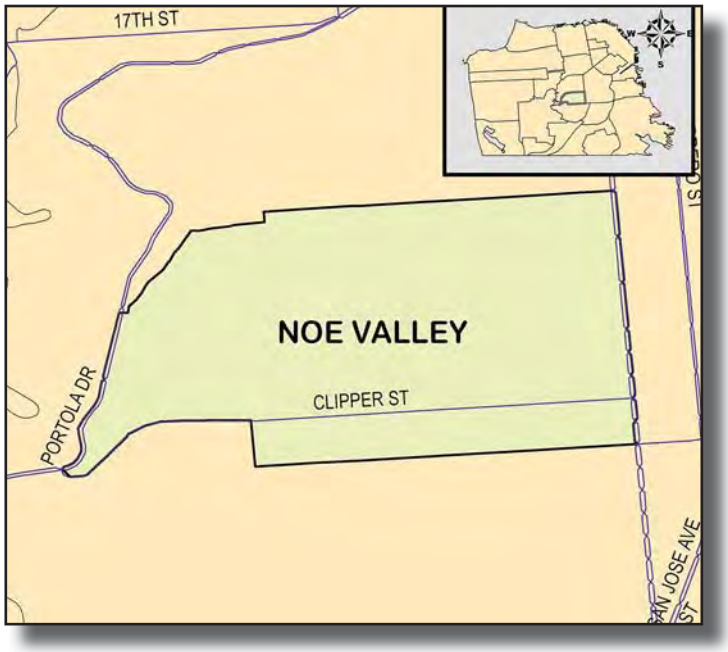
| | |
|---|---|
| **Population** | **18,283** |
| **Gender** | |
| Male | 9,117 |
| Female | 9,166 |
| **Race/Ethnicity** | |
| White | 9,169 |
| African American | 393 |
| Latino | 1,451 |
| Asian/Pacific Islander | 6,667 |
| Other | 603 |
| **Median age** | **37.6** |
| **Median income** | **$55,157.4** |



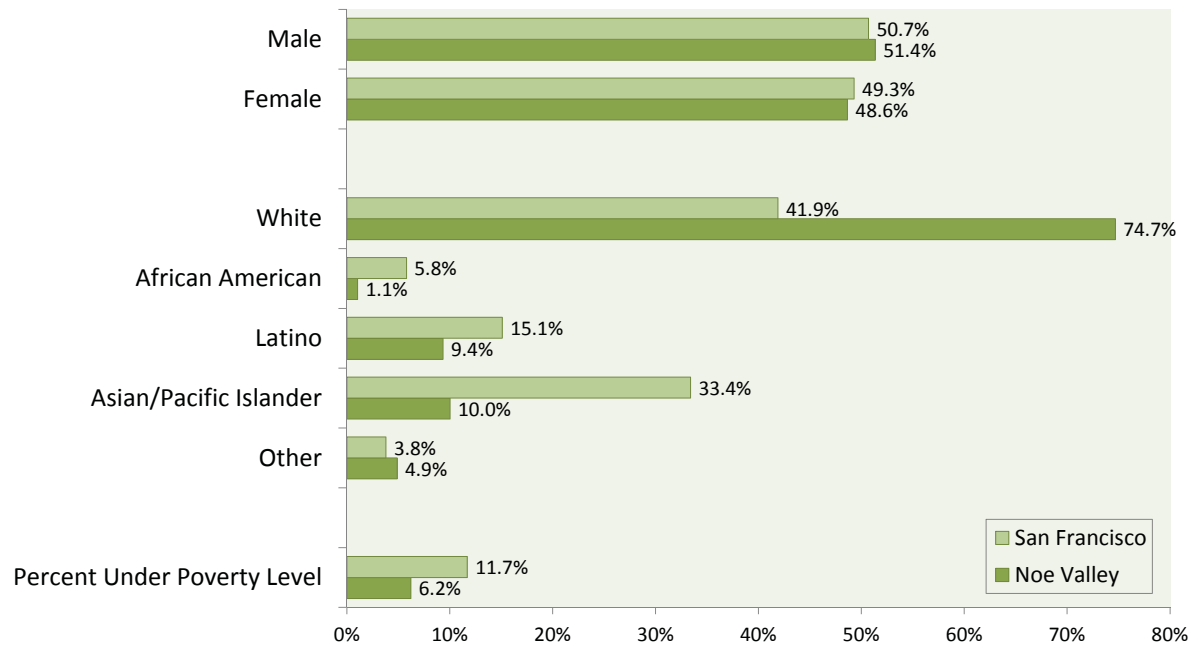



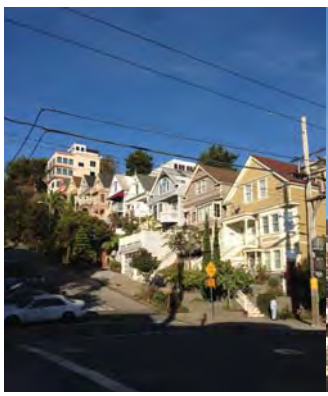
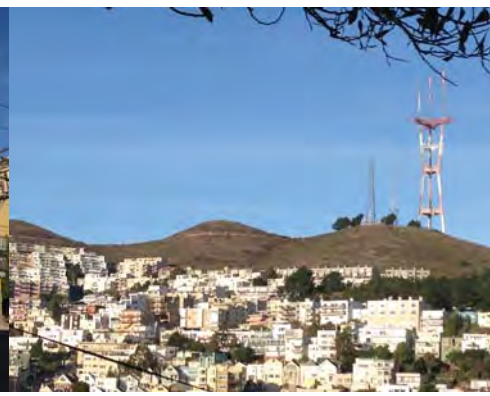




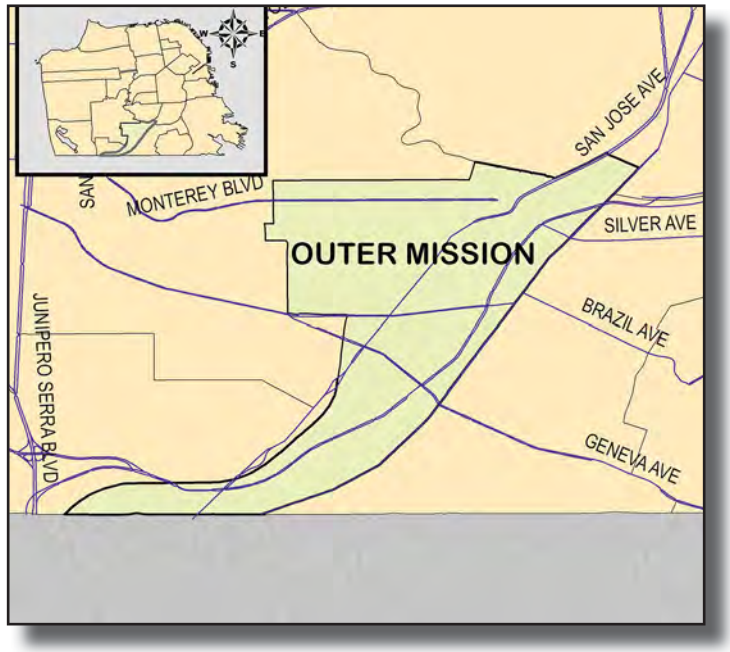

# NOE VALLEY

| | |
|---|---|
| **Population** | **12,370** |
| **Gender** | |
| Male | 6,352 |
| Female | 6,018 |
| **Race/Ethnicity** | |
| White | 9,239 |
| African American | 130 |
| Latino | 1,157 |
| Asian/Pacific Islander | 1,240 |
| Other | 604 |
| **Median age** | **39.4** |
| **Median income** | **$111,351.8** |

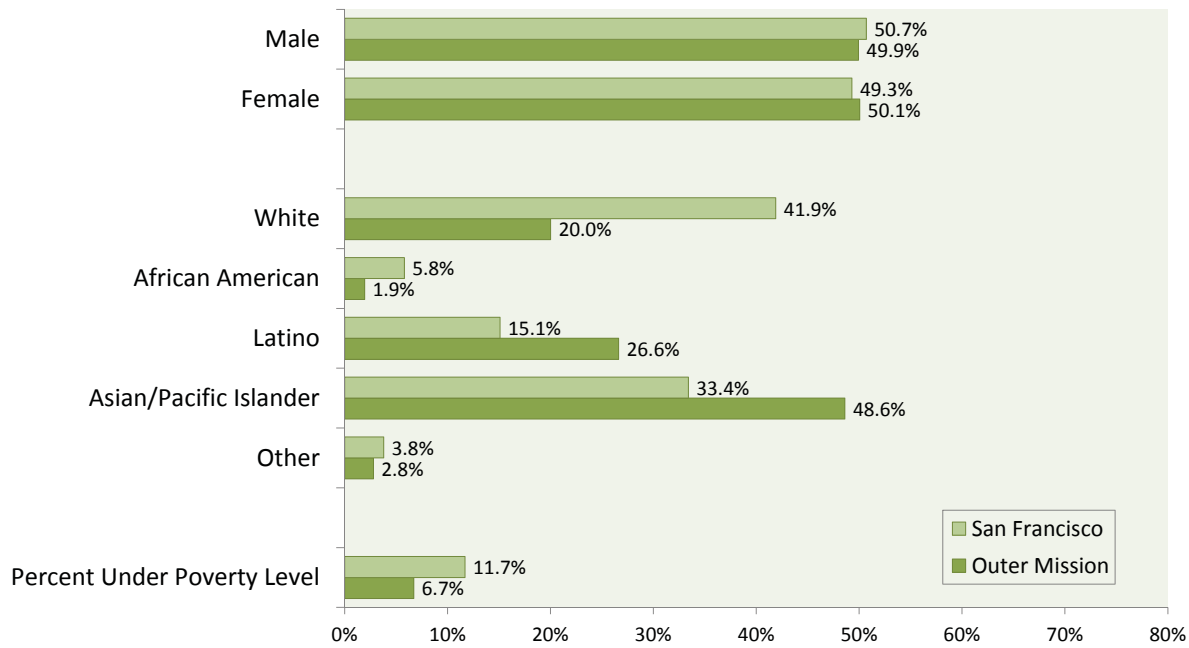


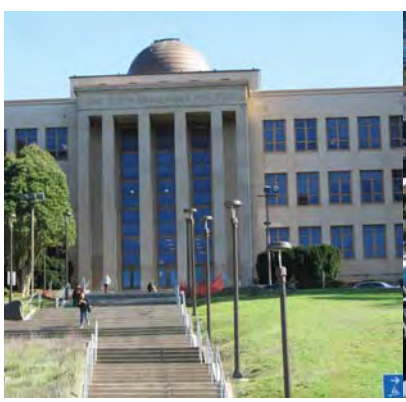




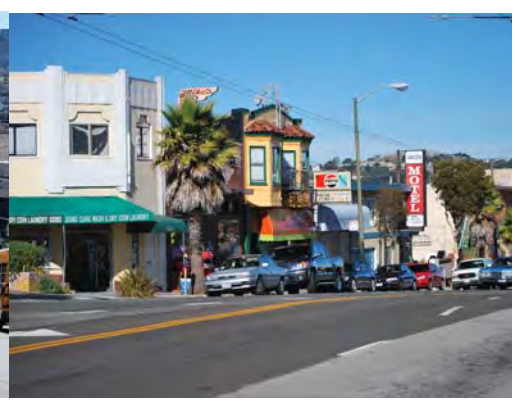
# OUTER MISSION




| | |
|---|---|
| **Population** | **29,038** |
| **Gender** | |
| Male | 14,500 |
| Female | 14,538 |
| **Race/Ethnicity** | |
| White | 5,811 |
| African American | 566 |
| Latino | 7,732 |
| Asian/Pacific Islander | 14,117 |
| Other | 812 |
| **Median age** | **40.4** |
| **Median income** | **$84,233.3** |

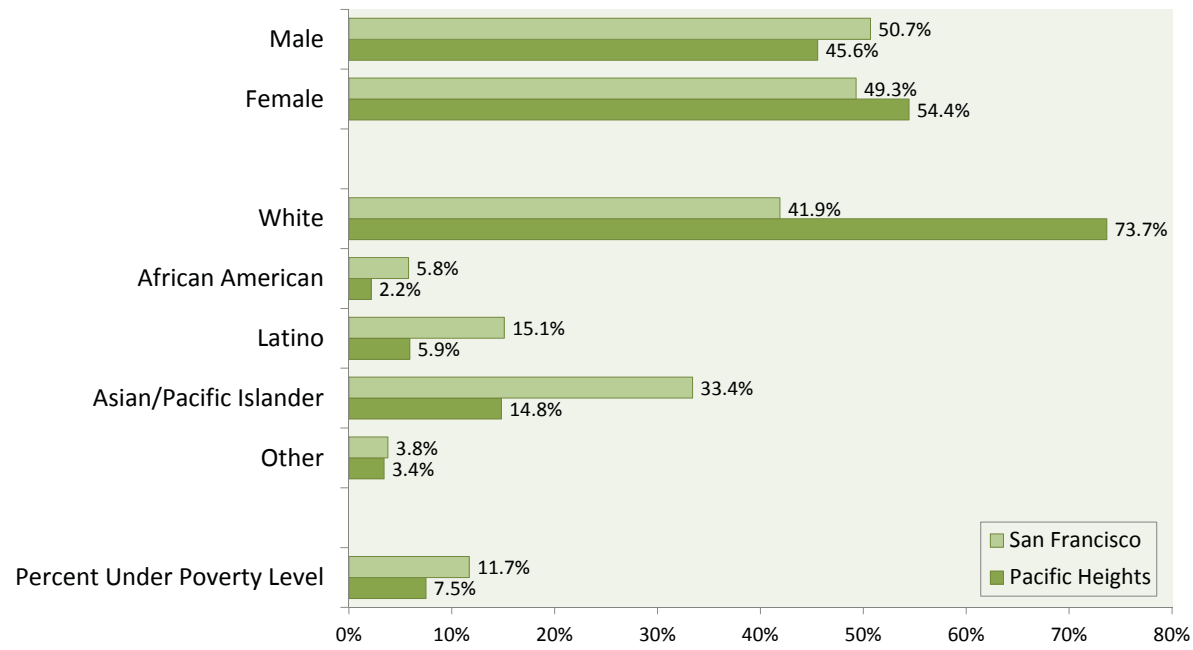




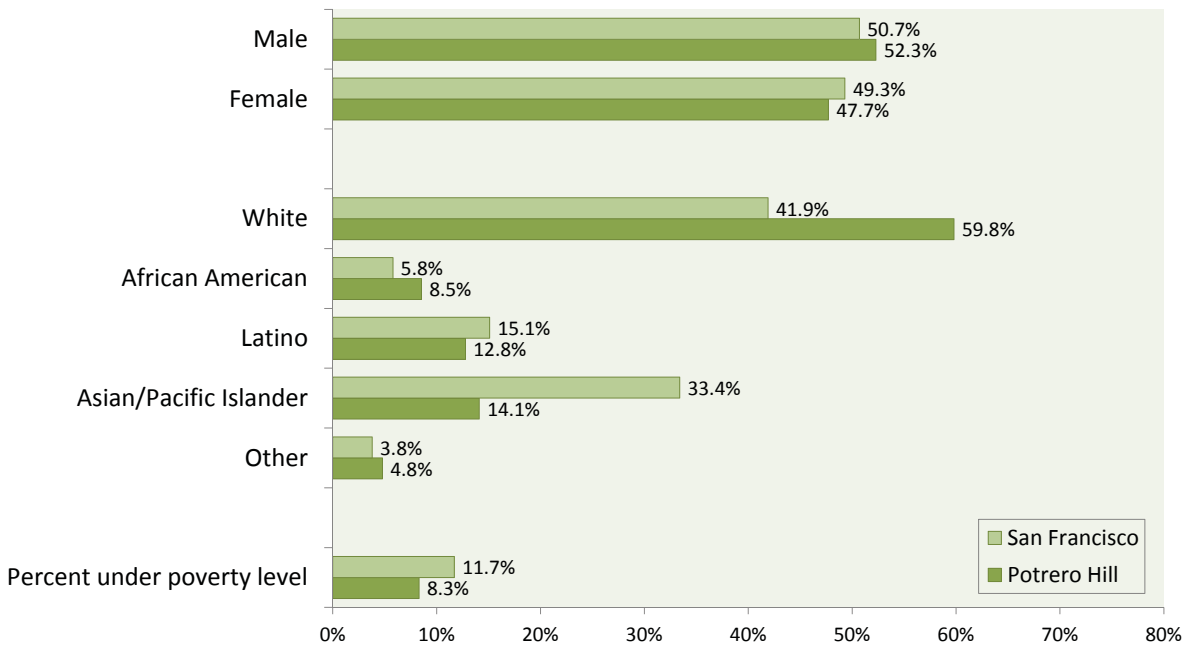

# PACIFIC HEIGHTS

| | |
|---|---|
| **Population** | **51,655** |
| **Gender** | |
| Male | 23,536 |
| Female | 28,119 |
| **Race/Ethnicity** | |
| White | 38,047 |
| African American | 1,117 |
| Latino | 3,062 |
| Asian/Pacific Islander | 7,659 |
| Other | 1,770 |
| **Median age** | **37.4** |
| **Median income** | **$98,924.2** |




# POTRERO HILL

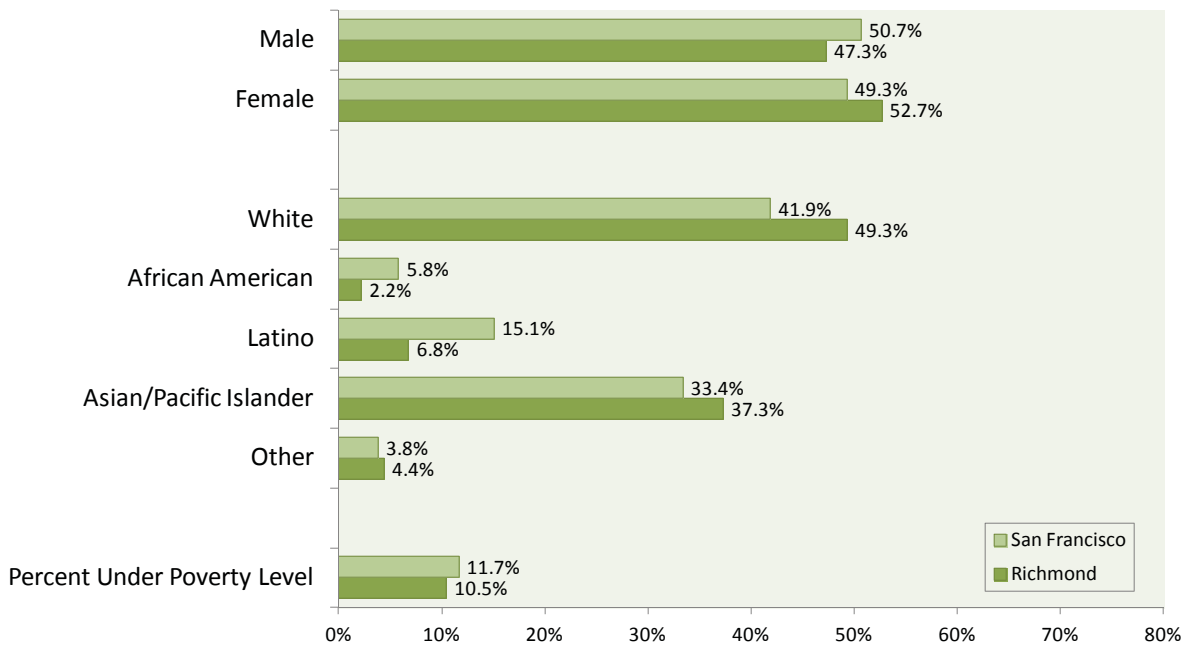
| | |
|---|---|
| **Population** | **12,111** |
| **Gender** | |
| Male | 6,333 |
| Female | 5,778 |
| **Race/Ethnicity** | |
| White | 7,242 |
| African American | 1,034 |
| Latino | 1,547 |
| Asian/Pacific Islander | 1,708 |
| Other | 580 |
| **Median age** | **37.5** |
| **Median income** | **$114,409.5** |



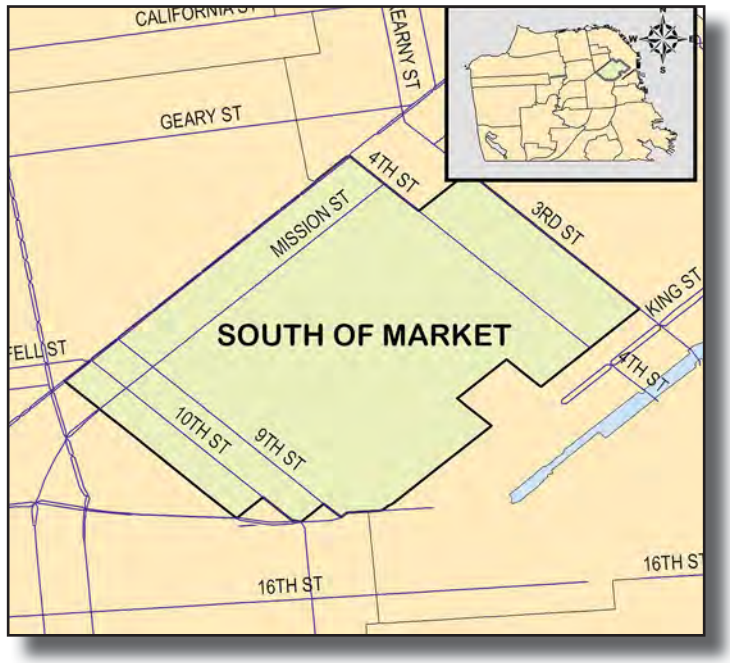

# RICHMOND

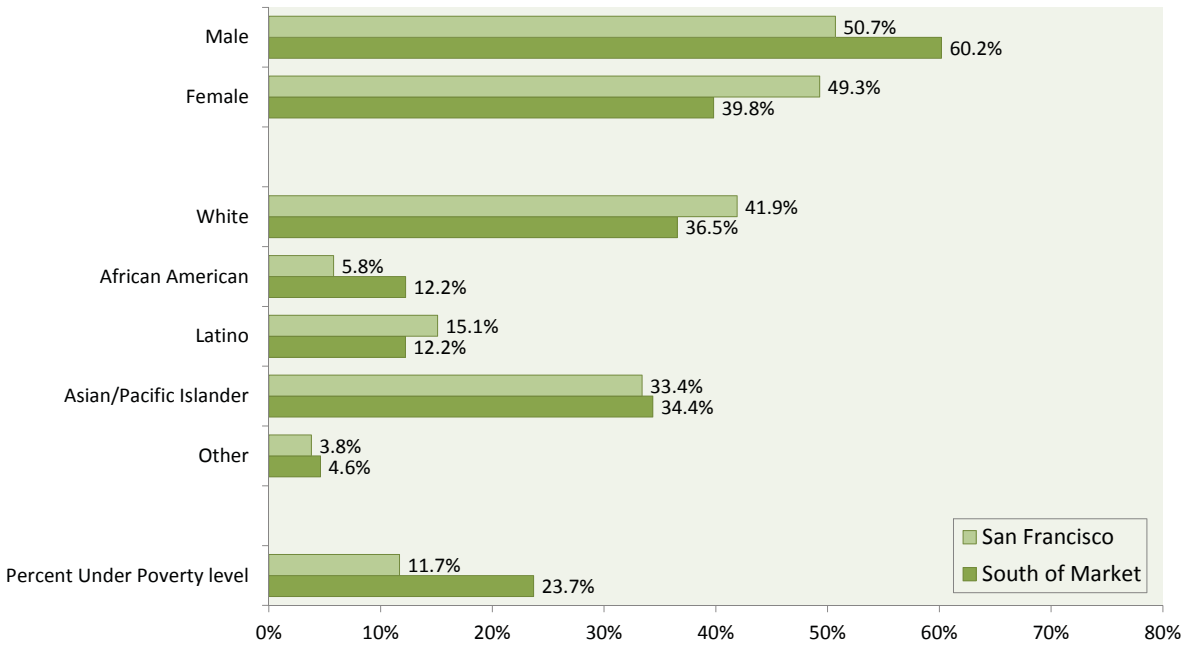
| | |
|---|---|
| **Population** | **92,089** |
| **Gender** | |
| Male | 43,557 |
| Female | 48,532 |
| **Race/Ethnicity** | |
| White | 45,431 |
| African American | 2,011 |
| Latino | 6,239 |
| Asian/Pacific Islander | 34,373 |
| Other | 4,035 |
| **Median age** | **40.8** |
| **Median income** | **$82,074.2** |

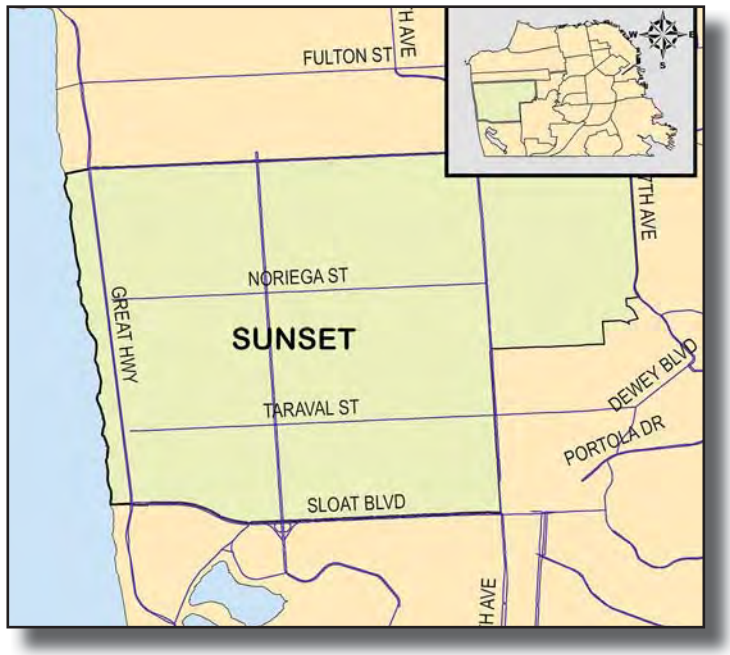



# SOUTH OF MARKET

| | |
|---|---|
| **Population** | **19,866** |
| **Gender** | |
| Male | 11,958 |
| Female | 7,908 |
| **Race/Ethnicity** | |
| White | 7,261 |
| African American | 2,431 |
| Latino | 2,428 |
| Asian/Pacific Islander | 6,827 |
| Other | 919 |
| **Median age** | **46.7** |
| **Median income** | **$60,488.3** |

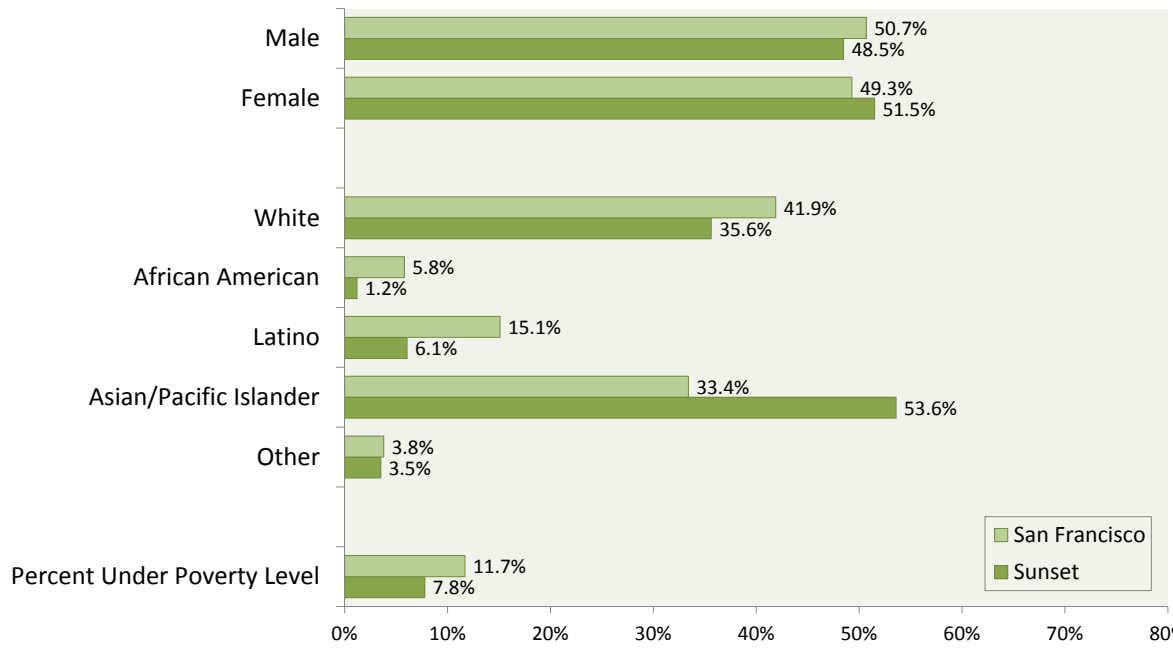


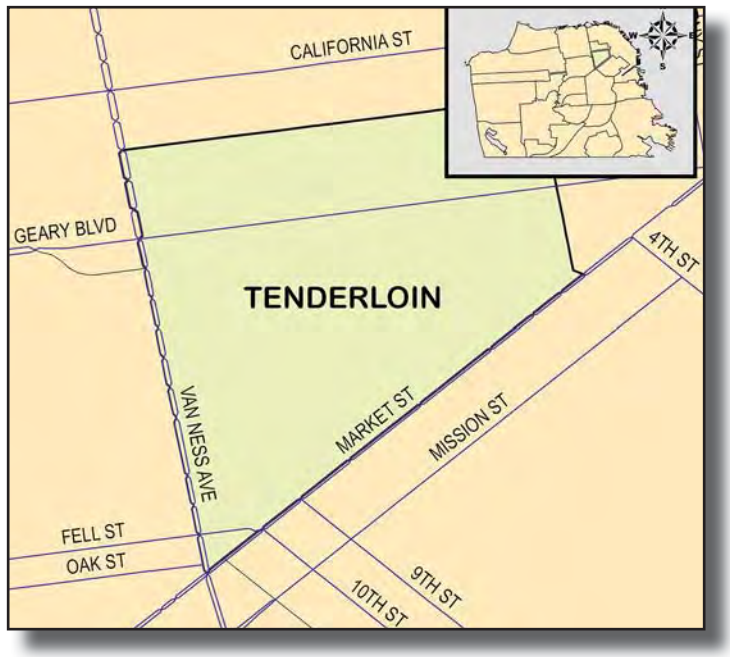

# SUNSET

| | |
|---|---|
| **Population** | **89,034** |
| **Gender** | |
| Male | 43,177 |
| Female | 45,857 |
| **Race/Ethnicity** | |
| White | 31,716 |
| African American | 1,074 |
| Latino | 5,404 |
| Asian/Pacific Islander | 47,713 |
| Other | 3,127 |
| **Median age** | **41.0** |
| **Median income** | **$80,332.1** |

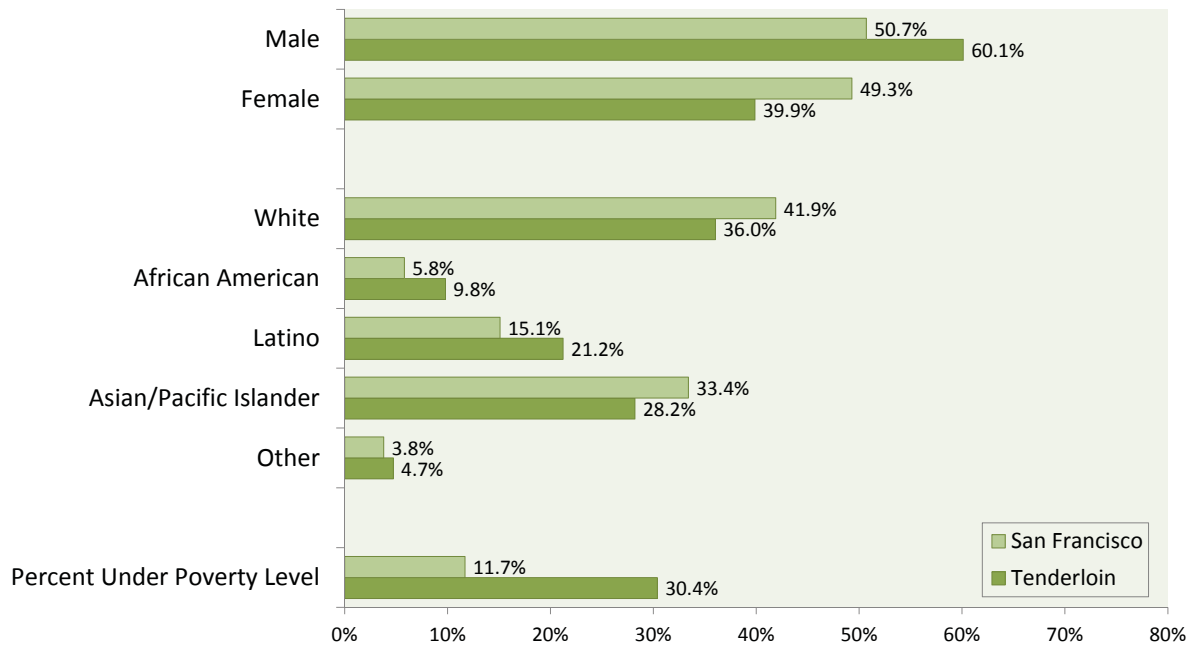


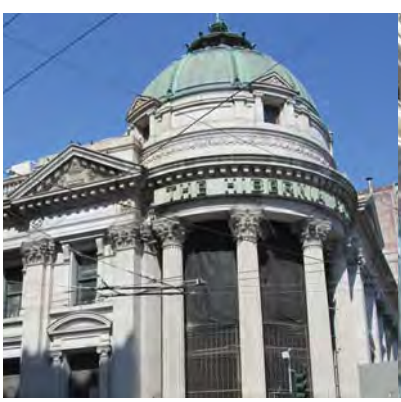


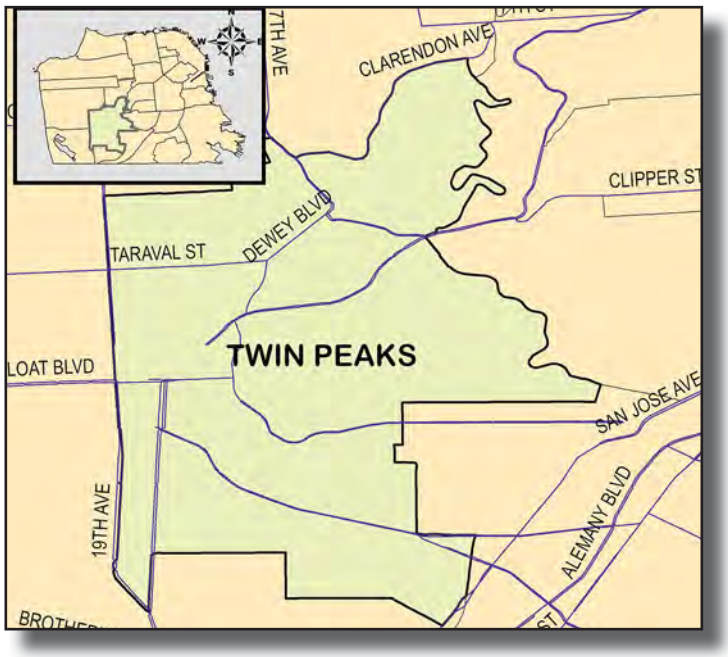
# TENDERLOIN




| | |
|---|---|
| **Population** | **39,231** |
| Gender | |
| Male | 23,586 |
| Female | 15,645 |
| **Race/Ethnicity** | |
| White | 14,136 |
| African American | 3,844 |
| Latino | 8,330 |
| Asian/Pacific Islander | 11,067 |
| Other | 1,854 |
| **Median age** | **39.3** |
| **Median income** | **$21,856.2** |

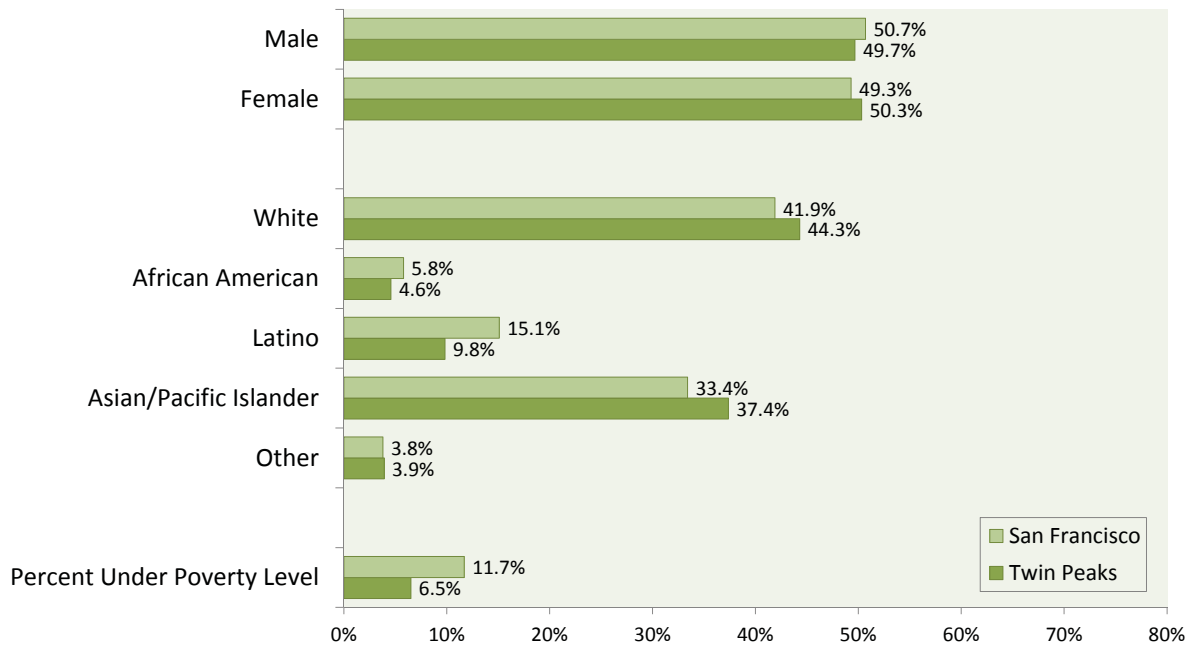



# TWIN PEAKS

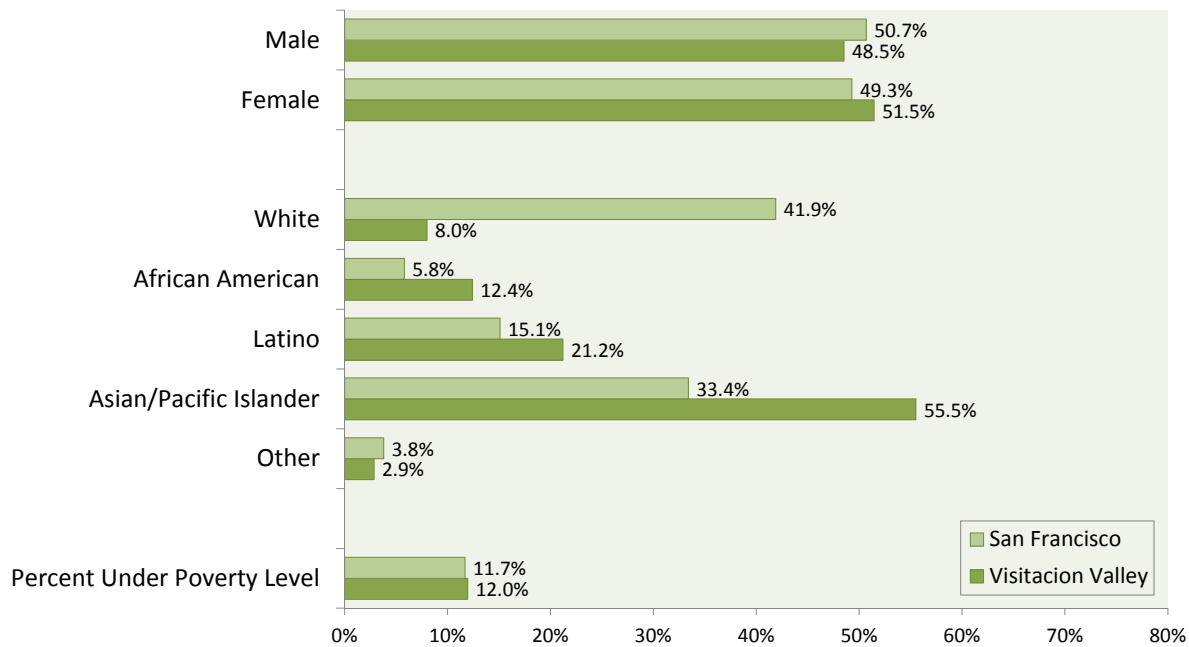
| | |
|---|---|
| **Population** | **41,762** |
| **Gender** | |
| Male | 20,745 |
| Female | 21,017 |
| **Race/Ethnicity** | |
| White | 18,502 |
| African American | 1,912 |
| Latino | 4,107 |
| Asian/Pacific Islander | 15,604 |
| Other | 1,637 |
| **Median age** | **44.9** |
| **Median income** | **$110,114.8** |





# VISITACION VALLEY


| | |
|---|---|
| **Population** | **25,387** |
| **Gender** | |
| Male | 12,322 |
| Female | 13,065 |
| **Race/Ethnicity** | |
| White | 2,032 |
| African American | 3,152 |
| Latino | 5,386 |
| Asian/Pacific Islander | 14,092 |
| Other | 725 |
| **Median age** | **39.0** |
| **Median income** | **$46,607.5** |

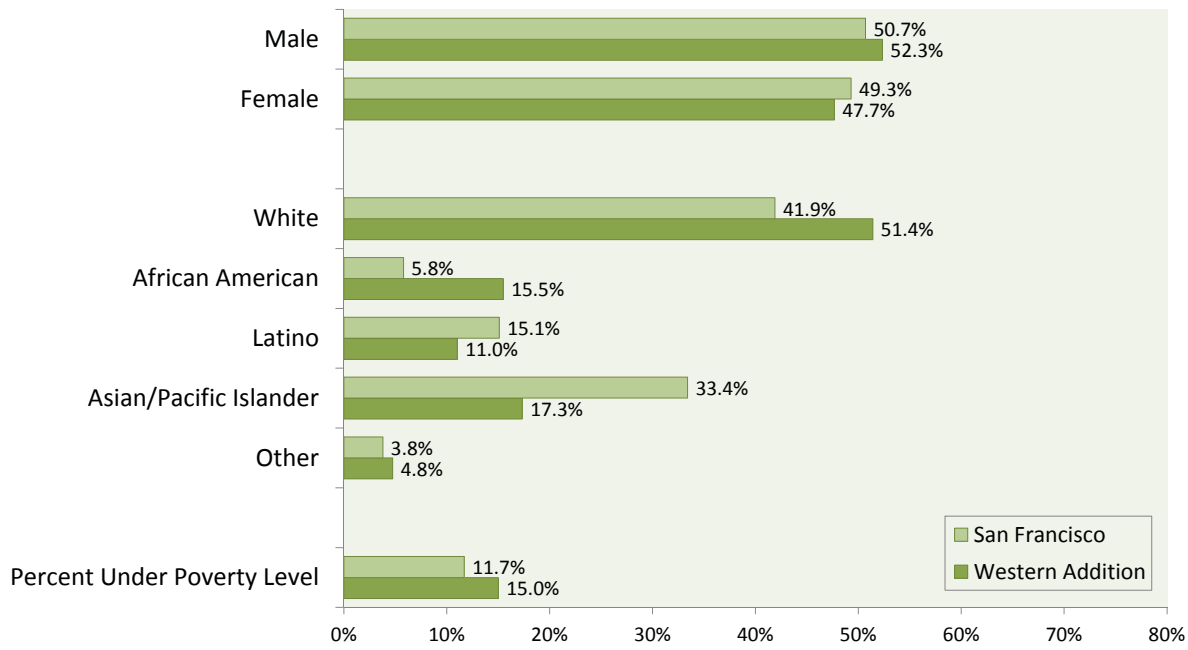






# WESTERN ADDITION

| | |
|---|---|
| **Population** | **40,486** |
| **Gender** | |
| Male | 21,192 |
| Female | 19,294 |
| **Race/Ethnicity** | |
| White | 20,813 |
| African American | 6,272 |
| Latino | 4,460 |
| Asian/Pacific Islander | 7,017 |
| Other | 1,924 |
| **Median age** | **36.8** |
| **Median income** | **$58,075.3** |

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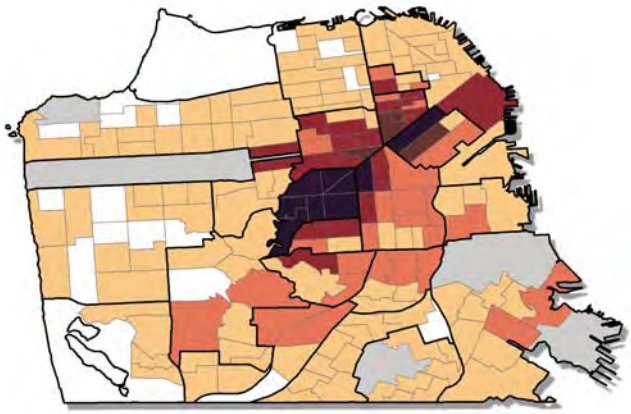
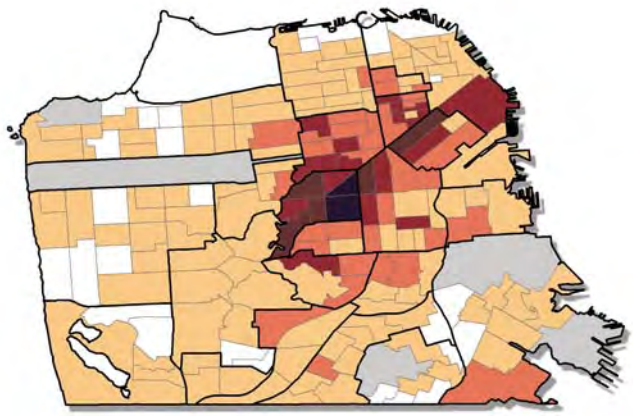
# Historical Progression of the HIV/AIDS Epidemic

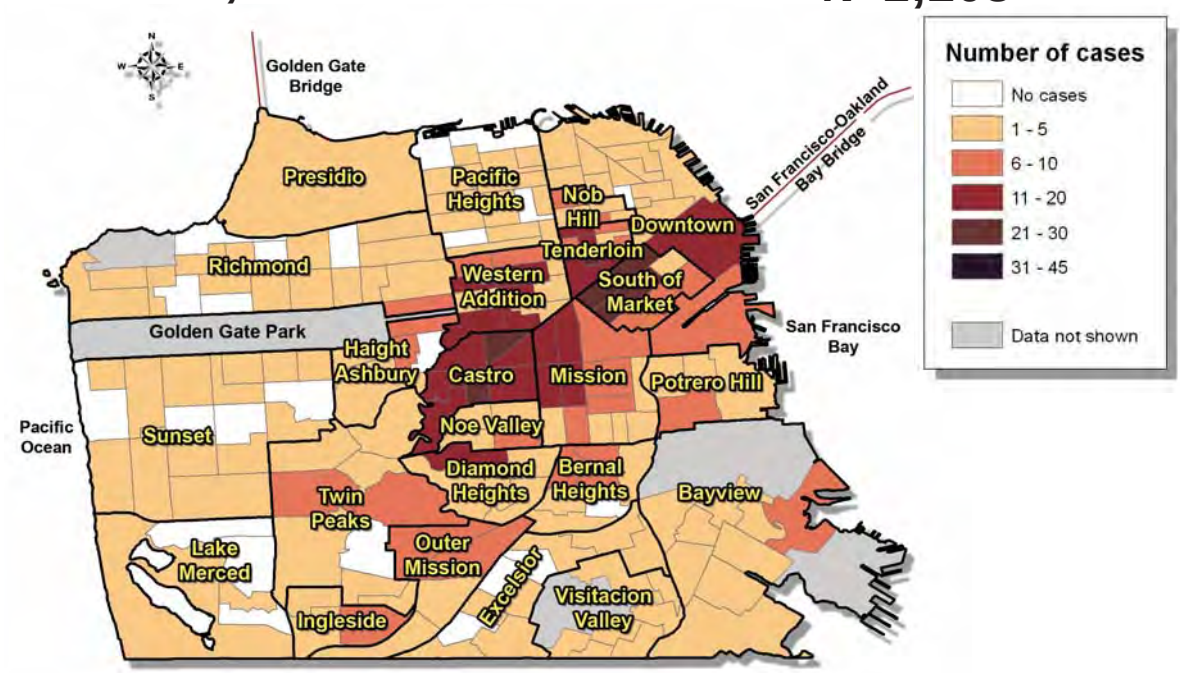
# HIV diagnoses



**2003-2004**
**N=1,494**

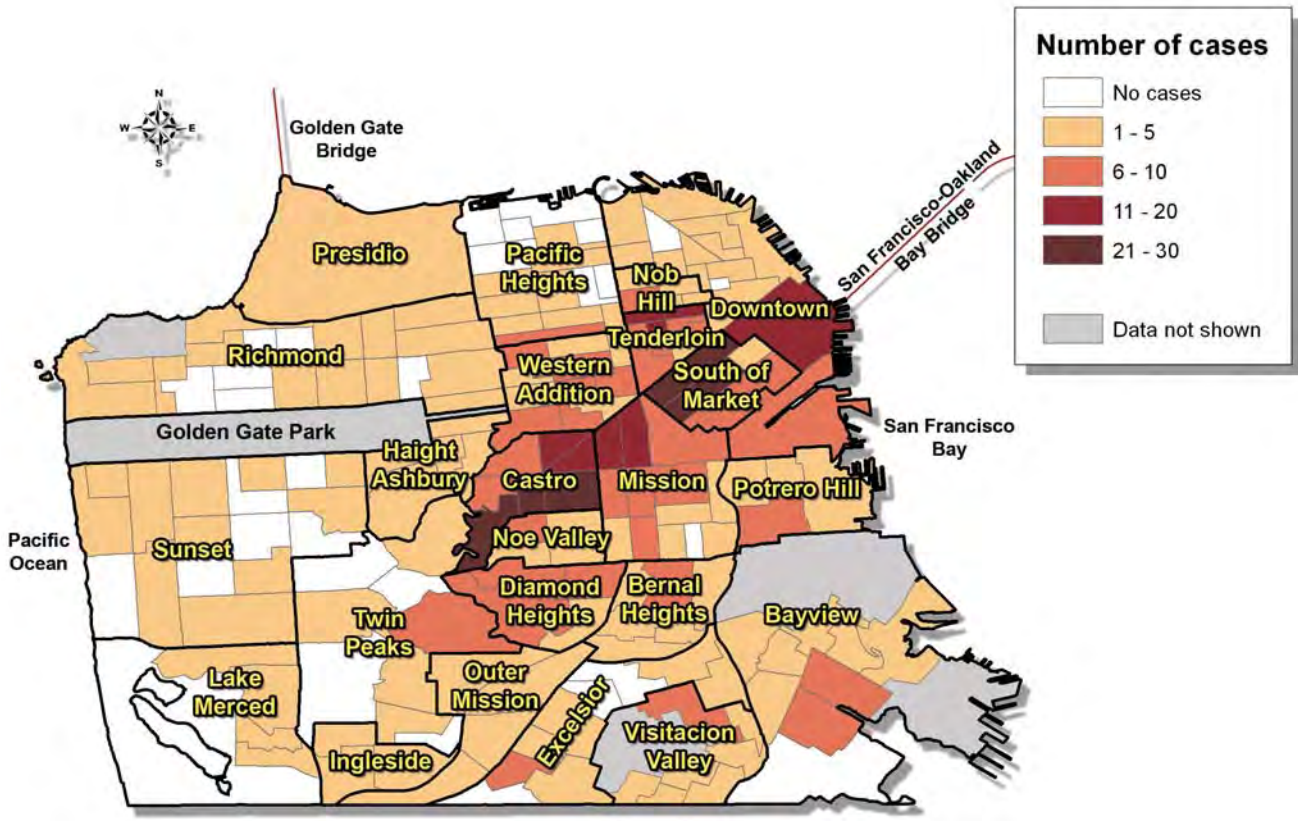


**2005-2006**
**N=1,208**




**2007-2008**
**N=1,129**

These four maps show the geographic distribution of new HIV diagnoses among San Francisco residents by census tract during two-year intervals from 2003 through 2010. The number of new HIV diagnoses steadily declined over the past eight years. The 35% decline in new HIV diagnoses between 2003-2004 and 2009-2010 is notable and may reflect the success of ongoing prevention efforts in San Francisco.




**2009-2010**
**N=970**

In San Francisco, the areas with larger numbers of new HIV diagnoses in 2009-2010 include the Castro (N=111), Tenderloin (N=88), Mission (N=80), Western Addition (N=68), and South of Market (N=53) neighborhoods. New HIV diagnoses among San Francisco residents have shifted geographically over time. During 2003-2004, 16% of new HIV diagnoses occurred among persons residing in the Castro neighborhood, the original "epicenter" of the HIV epidemic in San Francisco. By 2009-2010, the proportion of HIV diagnoses among Castro residents had decreased to 11%. The proportion of new HIV diagnoses among Bayview residents increased slightly from 2% to 4% between the time periods 2003-2004 to 2009-2010. Persons who were homeless at time of HIV diagnosis increased from 9% of new HIV diagnoses in 2003-2004 to 12% in 2009-2010; they are included in the total number of HIV diagnoses but have not been mapped.

The maps reflect census tract at time of HIV diagnosis whenever available. For San Francisco residents who had a missing census tract at time of HIV diagnosis but a non-missing census tract at time of AIDS diagnosis, we used the latter for mapping purposes.

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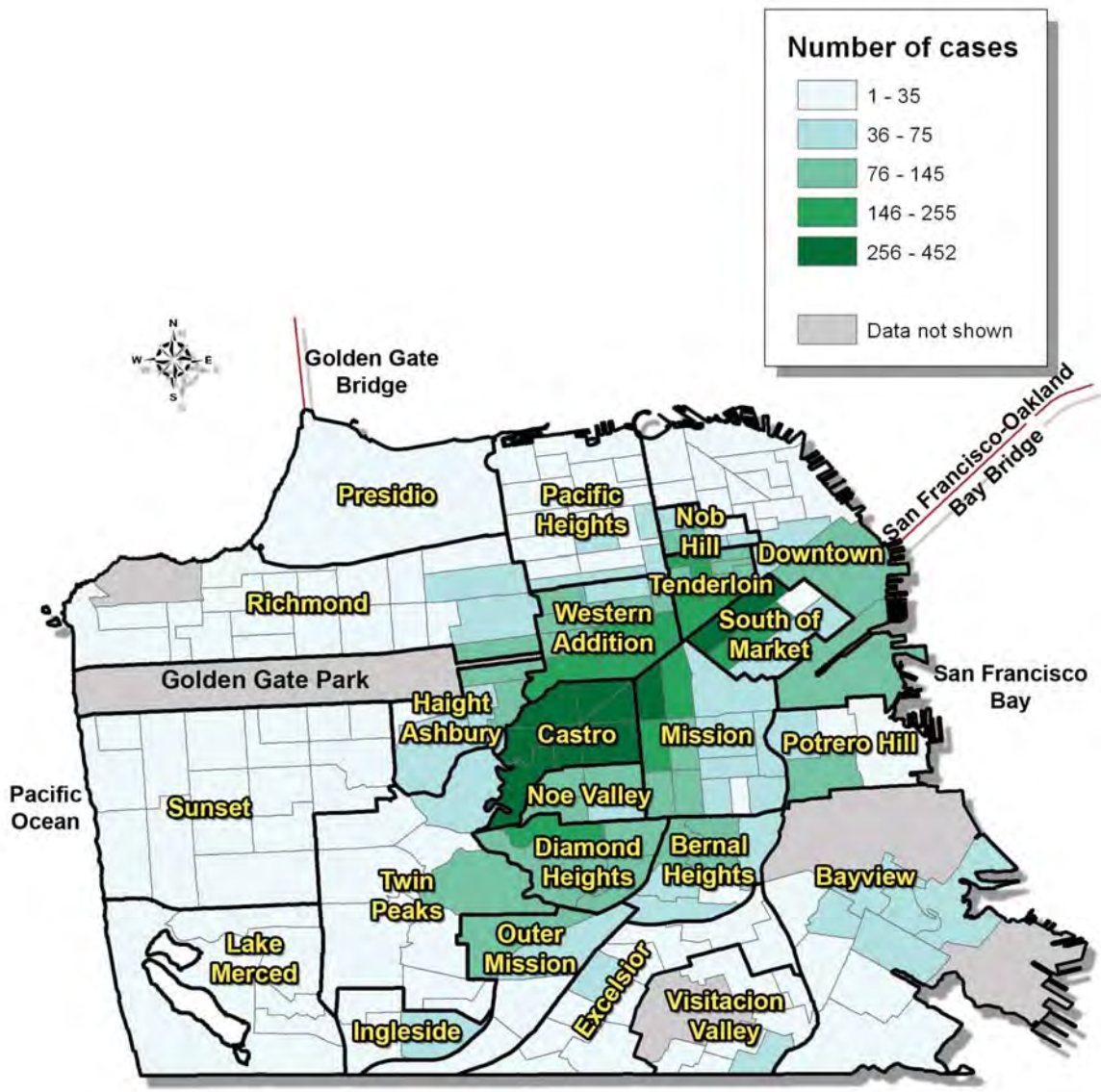
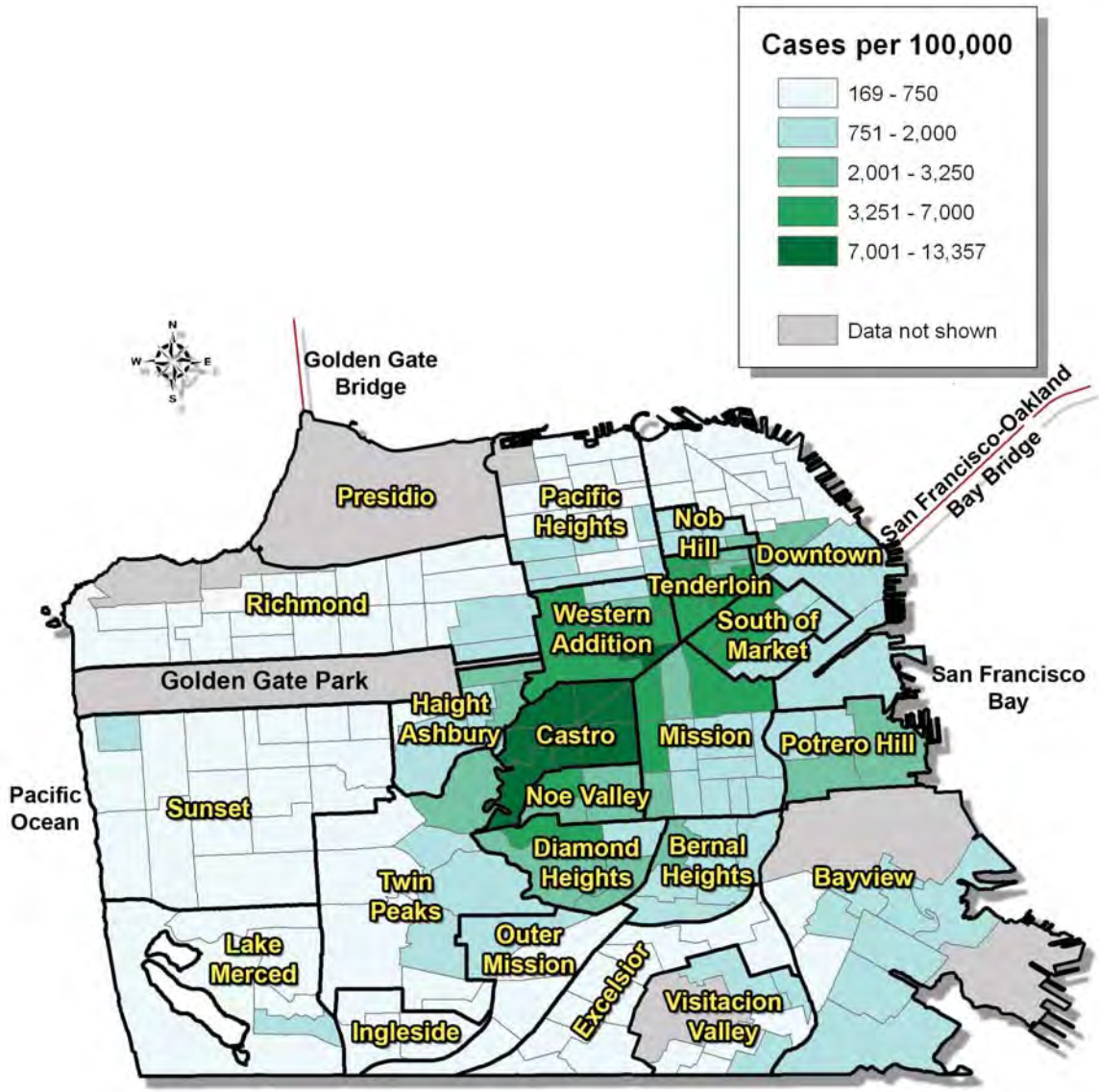
# LIVING HIV/AIDS CASES

# Persons living with HIV/AIDS, 2010




There were 13,999 living HIV/AIDS cases with a San Francisco address as of December 31, 2010. The most populous census tracts among living HIV/AIDS cases centered around the Castro and its adjacent tracts to the east. All seven census tracts in the Castro were among the most populated, ranging from 278 to 452 cases. The South of Market tract along Market Street also represented 323 living cases. In total, the Castro housed 2,437 cases followed by Western Addition (N=1,649), Tenderloin (N=1,460), and Mission (N=1,347). Five percent of living cases were homeless in San Francisco as of December 31, 2010.

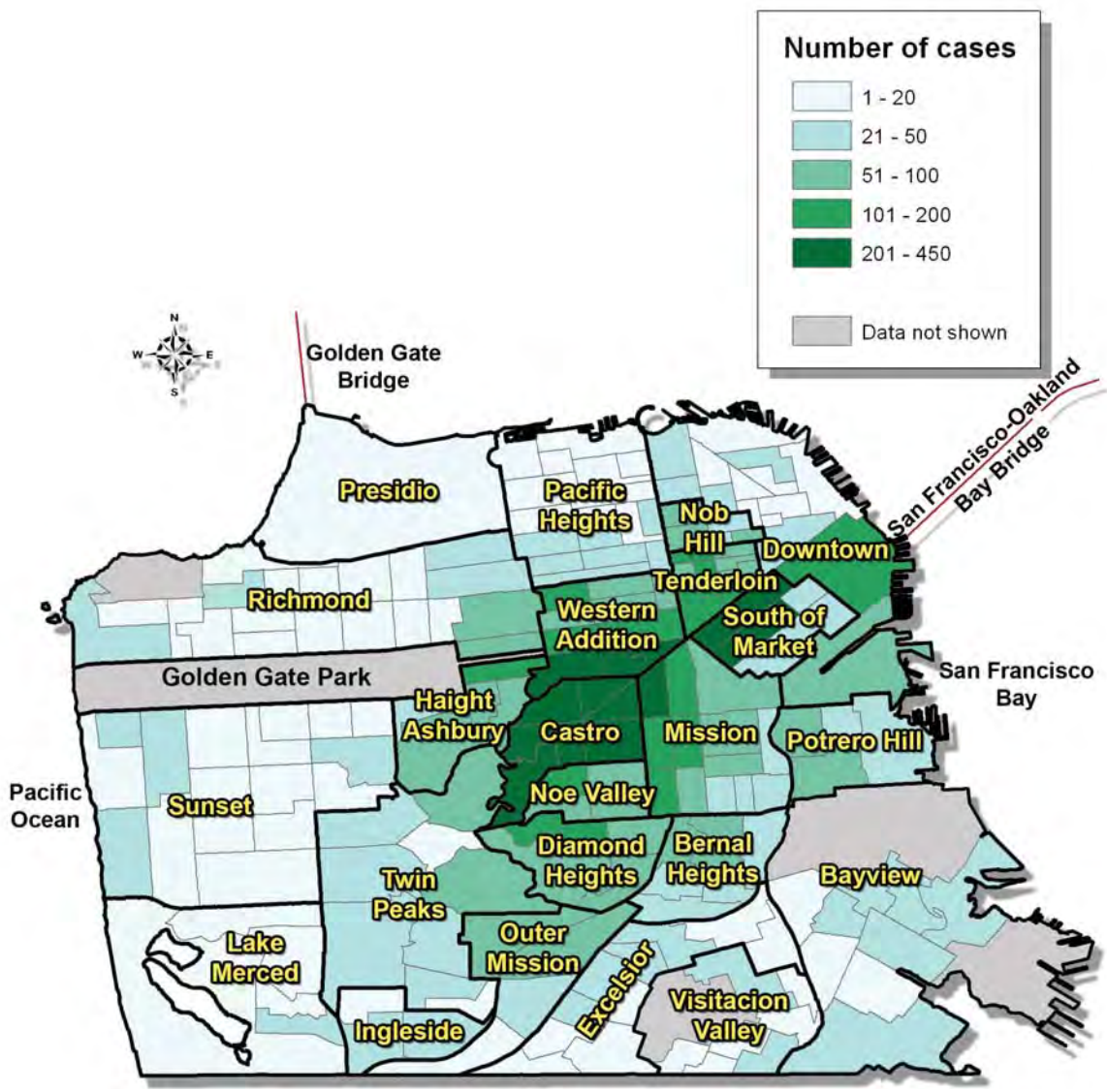
# HIV/AIDS prevalence rates, 2010




The overall HIV/AIDS prevalence rate in San Francisco was 1,739 per 100,000. About one third of the census tracts had rates higher than the overall prevalence rate. Census tracts in the Castro had the highest rates in the city, ranging from 8,982 to 13,357 cases per 100,000, which is at least five times higher than the rest of the city. Census tracts in the Western Addition, Tenderloin, Noe Valley, and Diamond Heights also displayed high prevalence rates.

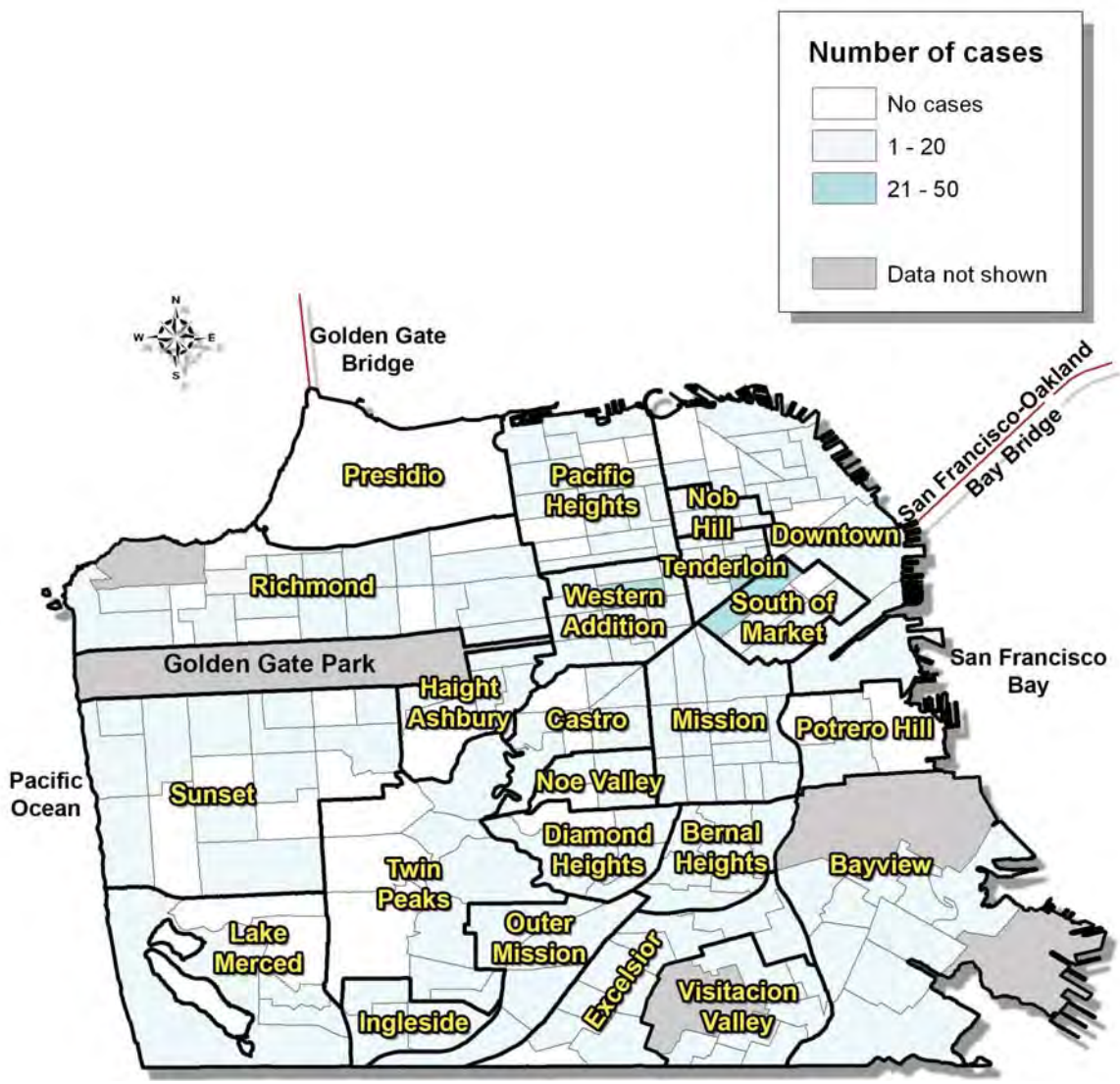
# Persons living with HIV/AIDS by gender

## Males living with HIV/AIDS, 2010




The 13,179 male cases represented 94% of all living cases. The Castro had the highest number of male cases with 2,430 cases. Outside of the Castro, the South of Market census tract along Market street also had a large number of male cases (N=289). There were 616 homeless men living with HIV/AIDS as of December 31, 2010 (not displayed).

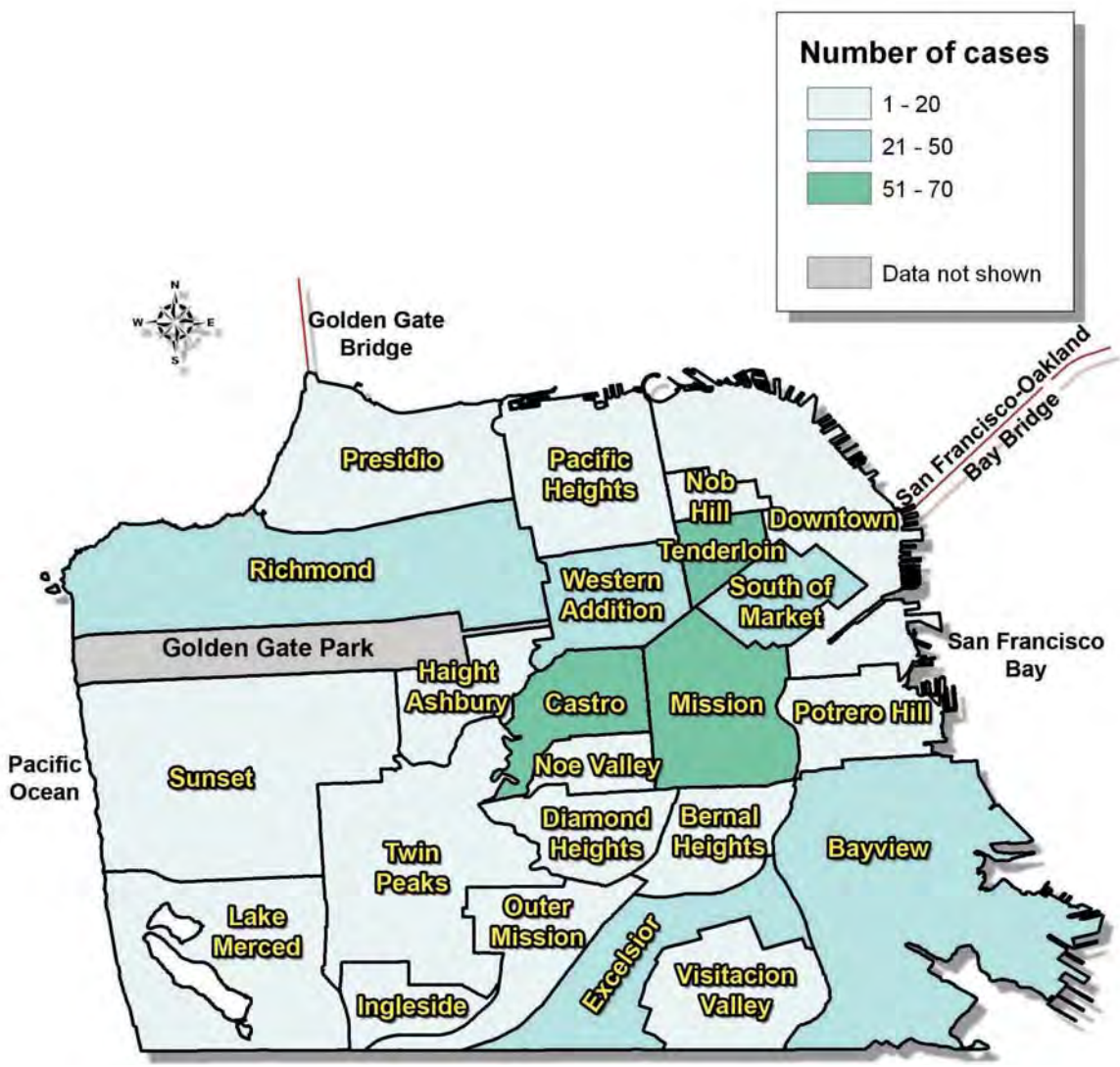
# Females living with HIV/AIDS, 2010




The 820 living female cases were evenly distributed throughout the city. Overall, the Tenderloin, Bayview, and Western Addition neighborhoods had the most female cases. The four census tracts with more than 20 living female cases were located in the Tenderloin, South of Market, and Western Addition neighborhoods. Unlike the male cases, there were census tracts with zero female cases scattered around the city from Twin Peaks, Richmond, Downtown, and Potrero Hill. Homeless women accounted for 10% of all living female cases (not displayed).

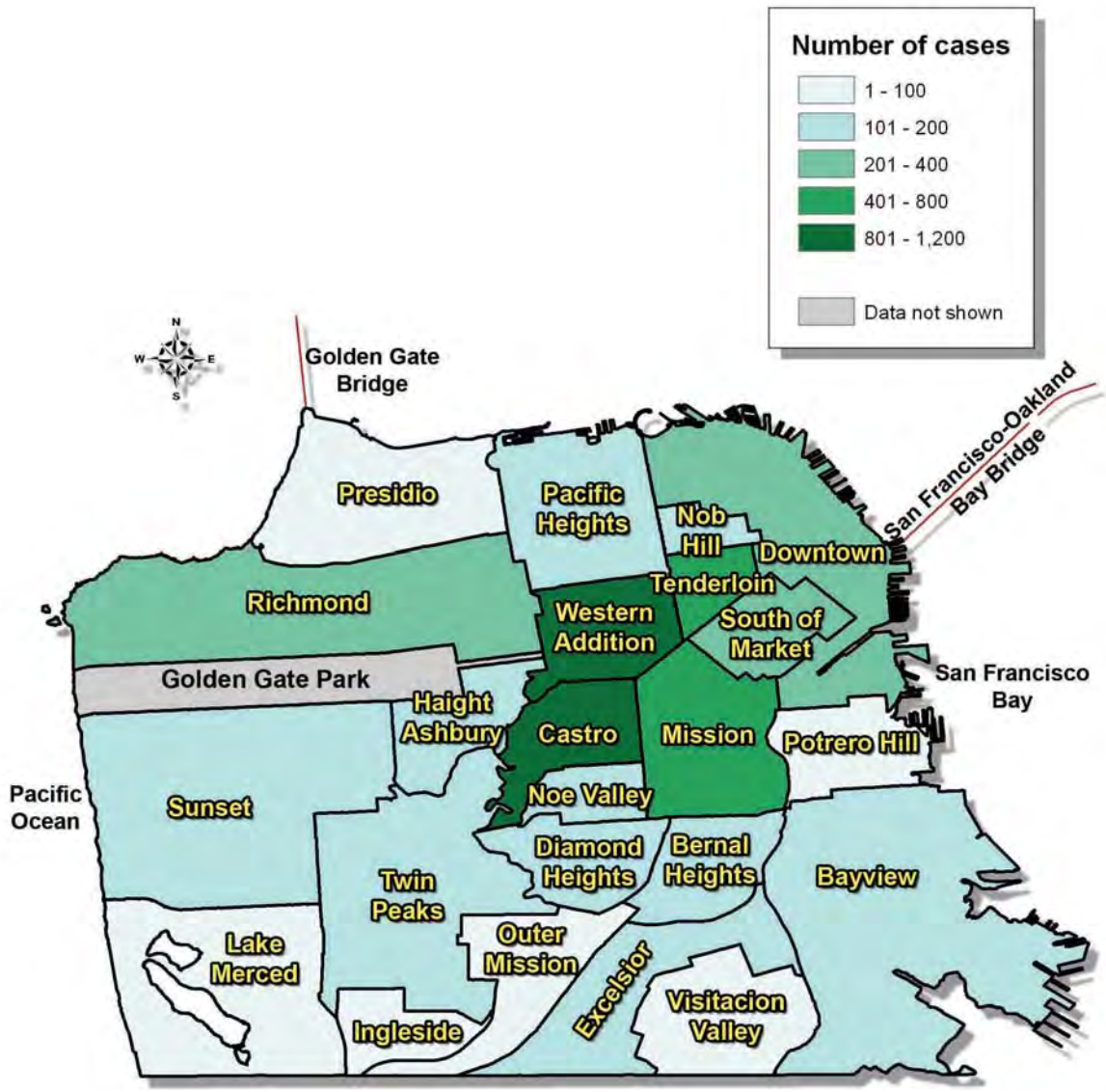
# Persons living with HIV/AIDS by age group

## Persons aged 13-29 years living with HIV/AIDS, 2010



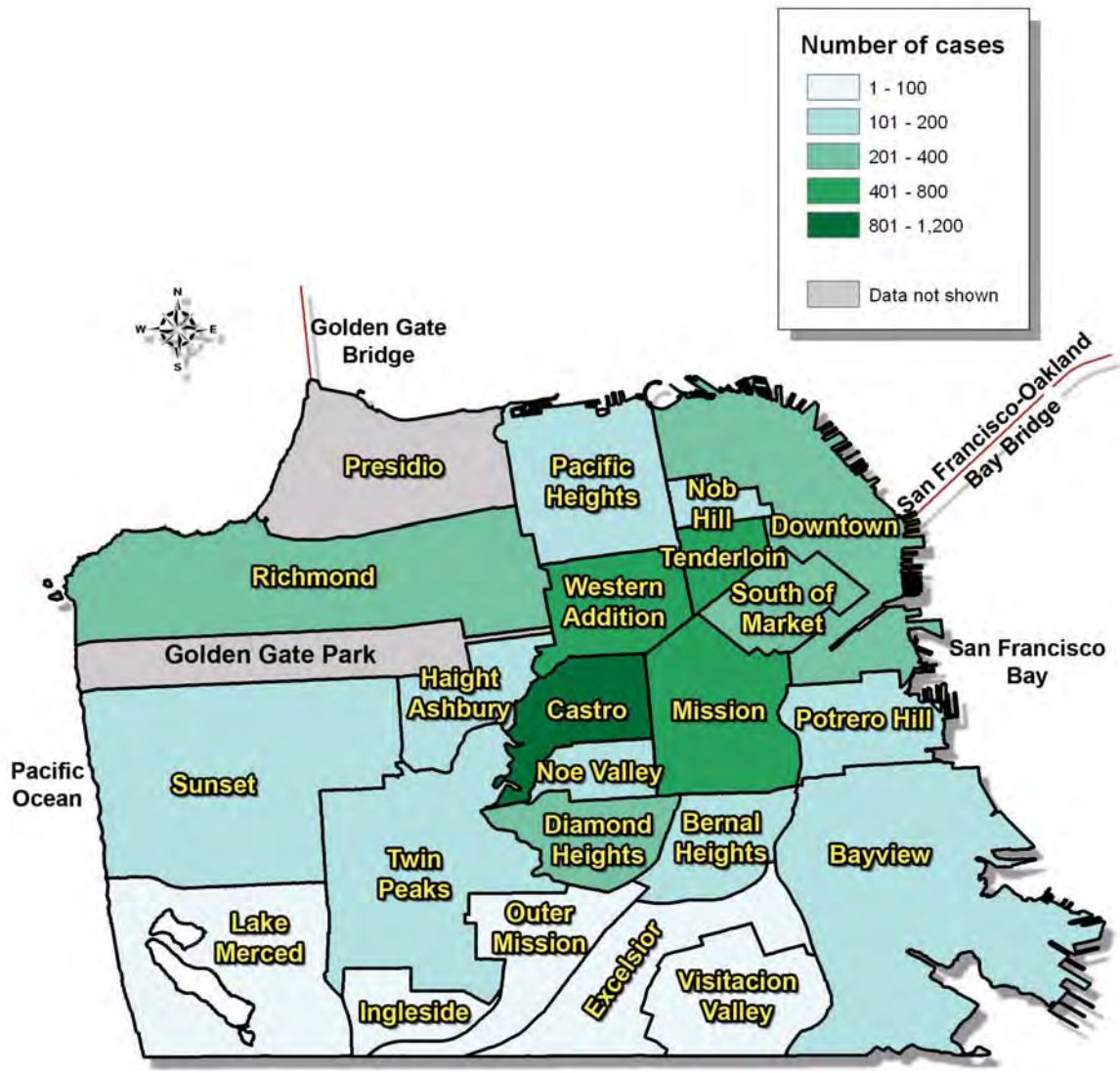

Those aged 13-29 years old comprised under 5% of all living HIV/AIDS cases in San Francisco (N=627). More than half of the neighborhoods had less than 20 cases aged 13-29 years. The highest numbers of youths were in the Castro (N=70), Tenderloin (N=65), and Mission (N=58). Homeless youth represented another 11% (N=69) of the living cases aged 13-29 years (not displayed).

# Persons aged 30-49 years living with HIV/AIDS, 2010




There were 7,124 living cases aged 30-49 years (51% of the total living cases) at the end of 2010. A greater number of persons living with HIV/AIDS were observed in the Castro and its neighboring areas to the north and east. Castro had the largest number of cases (N=1,193) that accounted for 17% of all living cases aged 30-49 years. Western Addition (N=802) and Tenderloin (N=798) each represented another 11% of cases. The Mission also contributed large numbers while most of the southern half of the city had fewer than 200 cases in its neighborhoods. The homeless accounted for 410 living cases aged 30-40 years (not displayed).

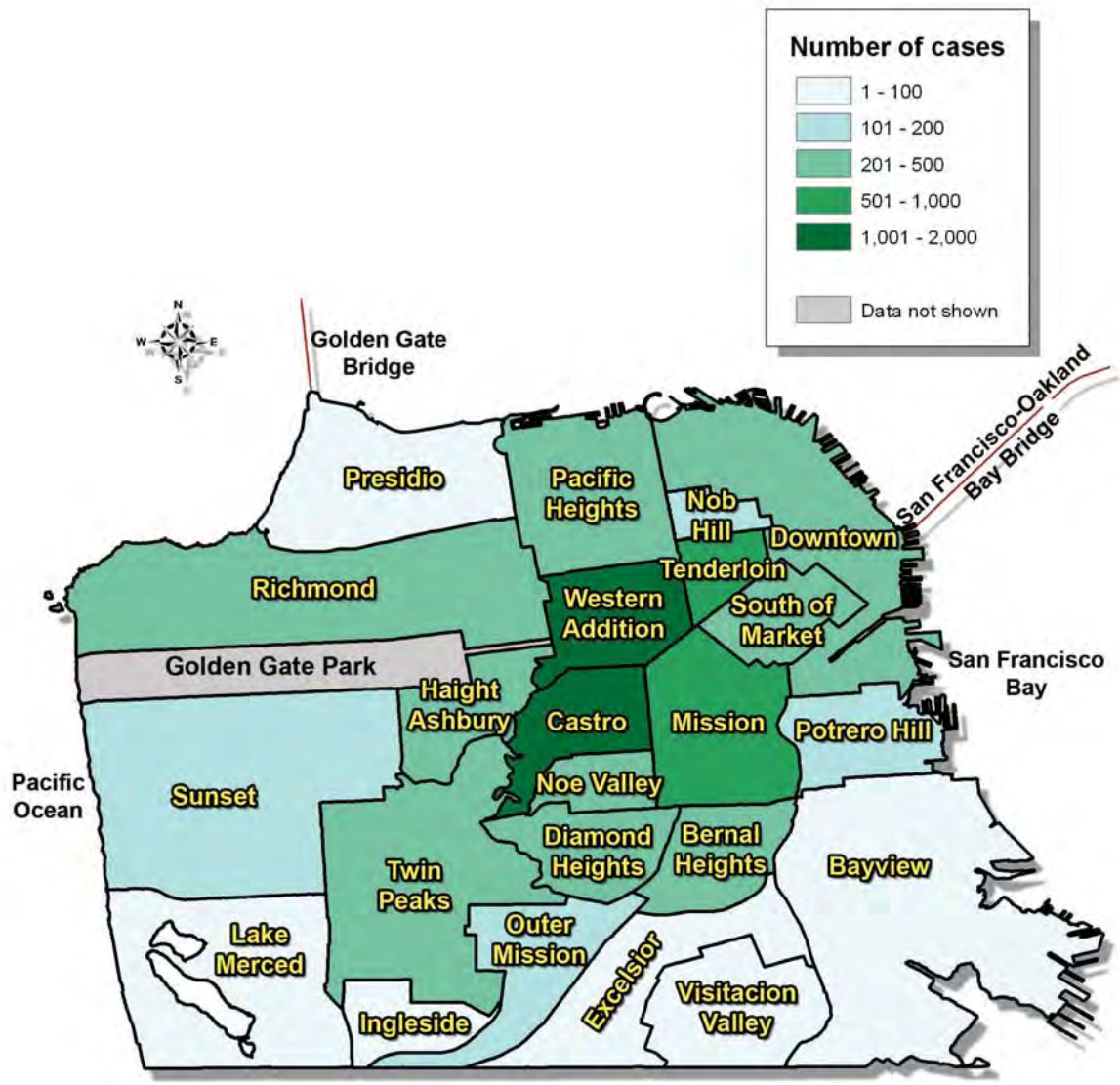
# Persons aged 50 years and above living with HIV/AIDS, 2010




The distribution of the 6,243 cases aged above 50 years was similar to that of cases aged 30-49 years. The highest numbers were found in the Castro (N=1,174), followed by the eastern neighborhoods Western Addition (N=800), and the Tenderloin (N=597). In addition, there were 217 homeless cases aged 50 years and older (not displayed).

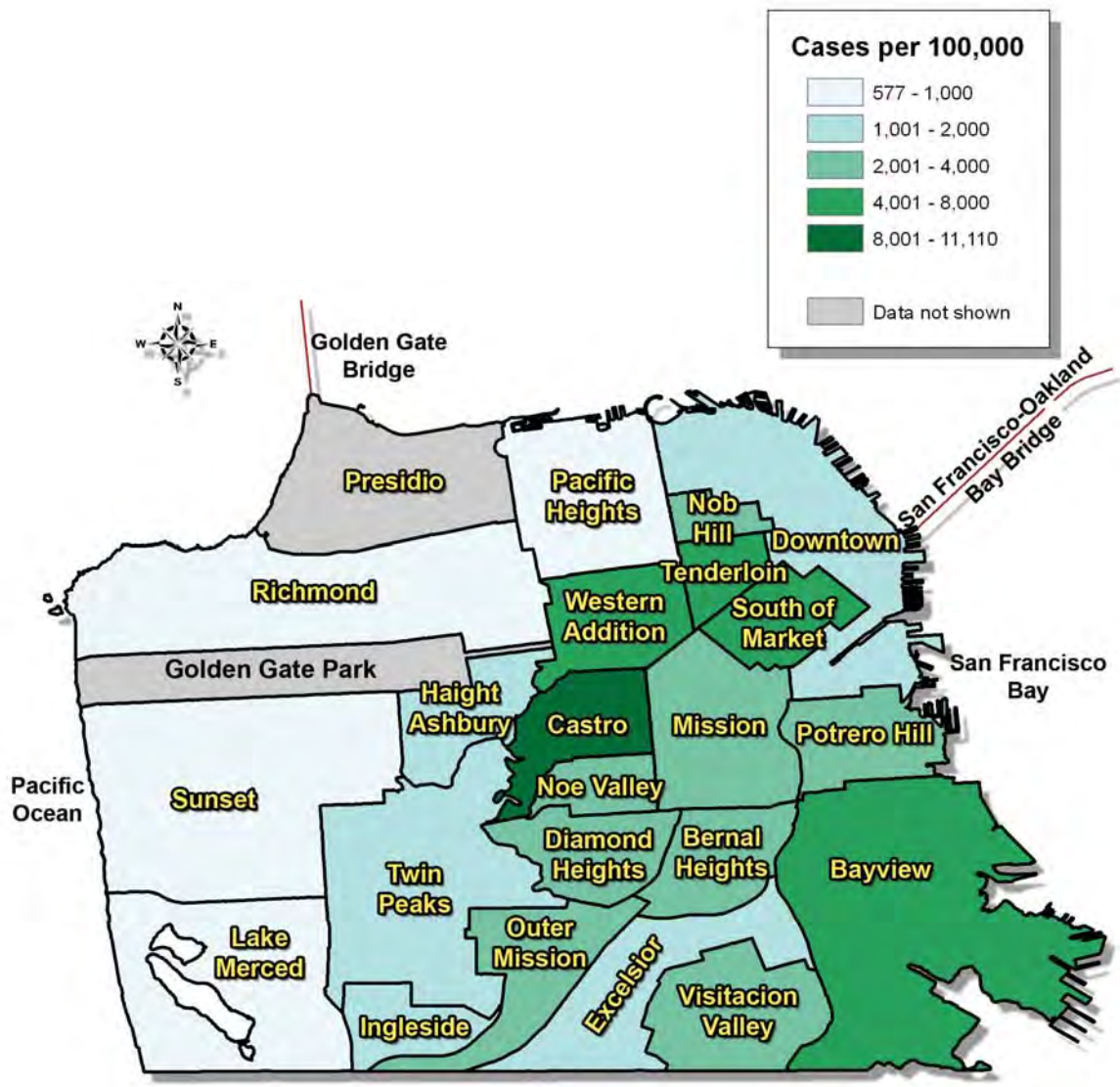
# Persons living with HIV/AIDS by race/ethnicity

## Whites living with HIV/AIDS, 2010



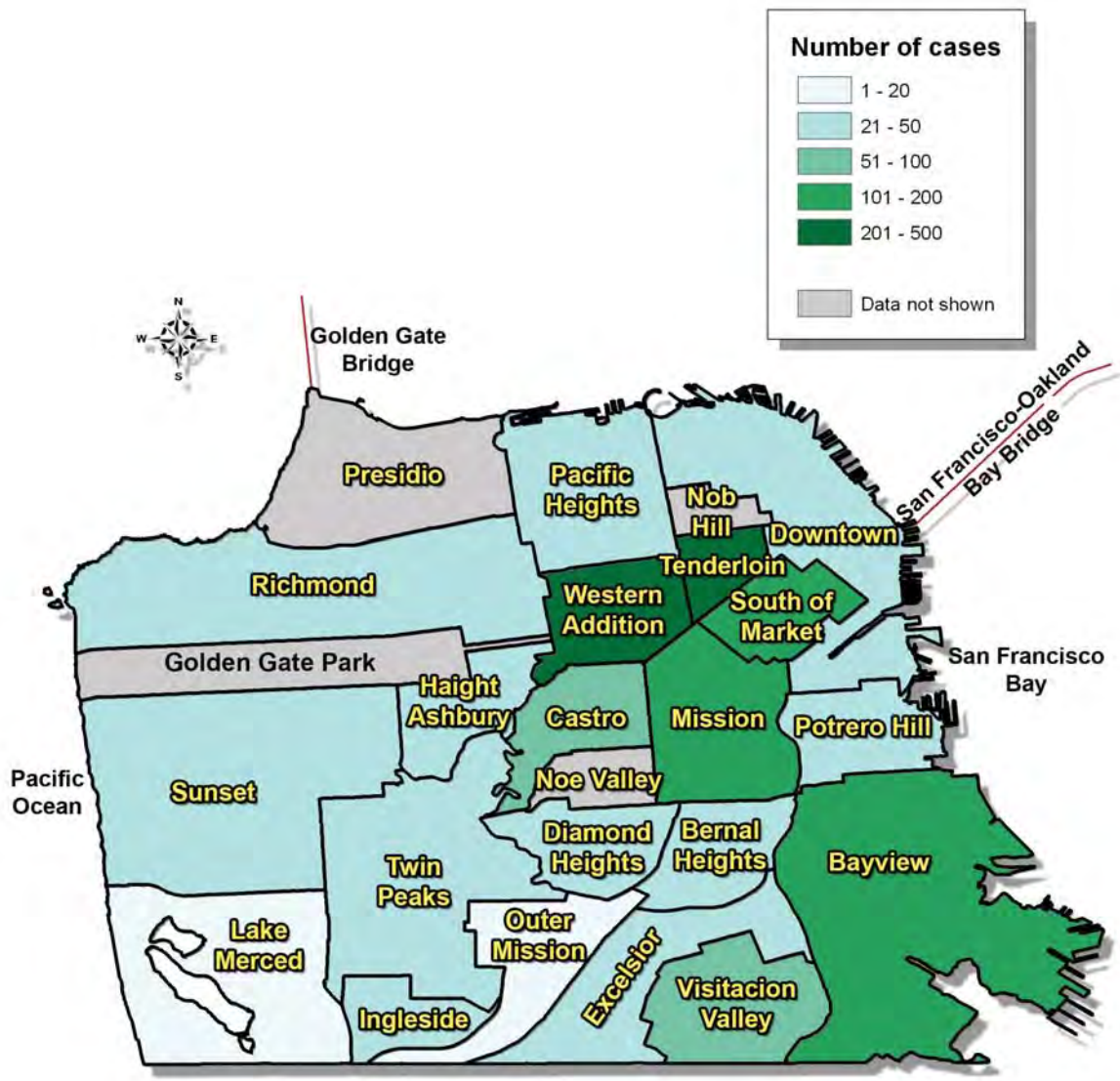

Non-Hispanic whites made up 62% of the living cases (N=8,730). The Castro contained 22% of the living white cases (N=1,930) followed by the Western Addition with its 1,076 cases. Many of the neighborhoods were densely populated with white cases, except for the southern neighborhoods such as Lake Merced, Ingleside, Excelsior, and Visitacion Valley. Four percent of the white HIV/AIDS cases were homeless as of the end of 2010 (not displayed).

# HIV/AIDS prevalence rates among whites, 2010



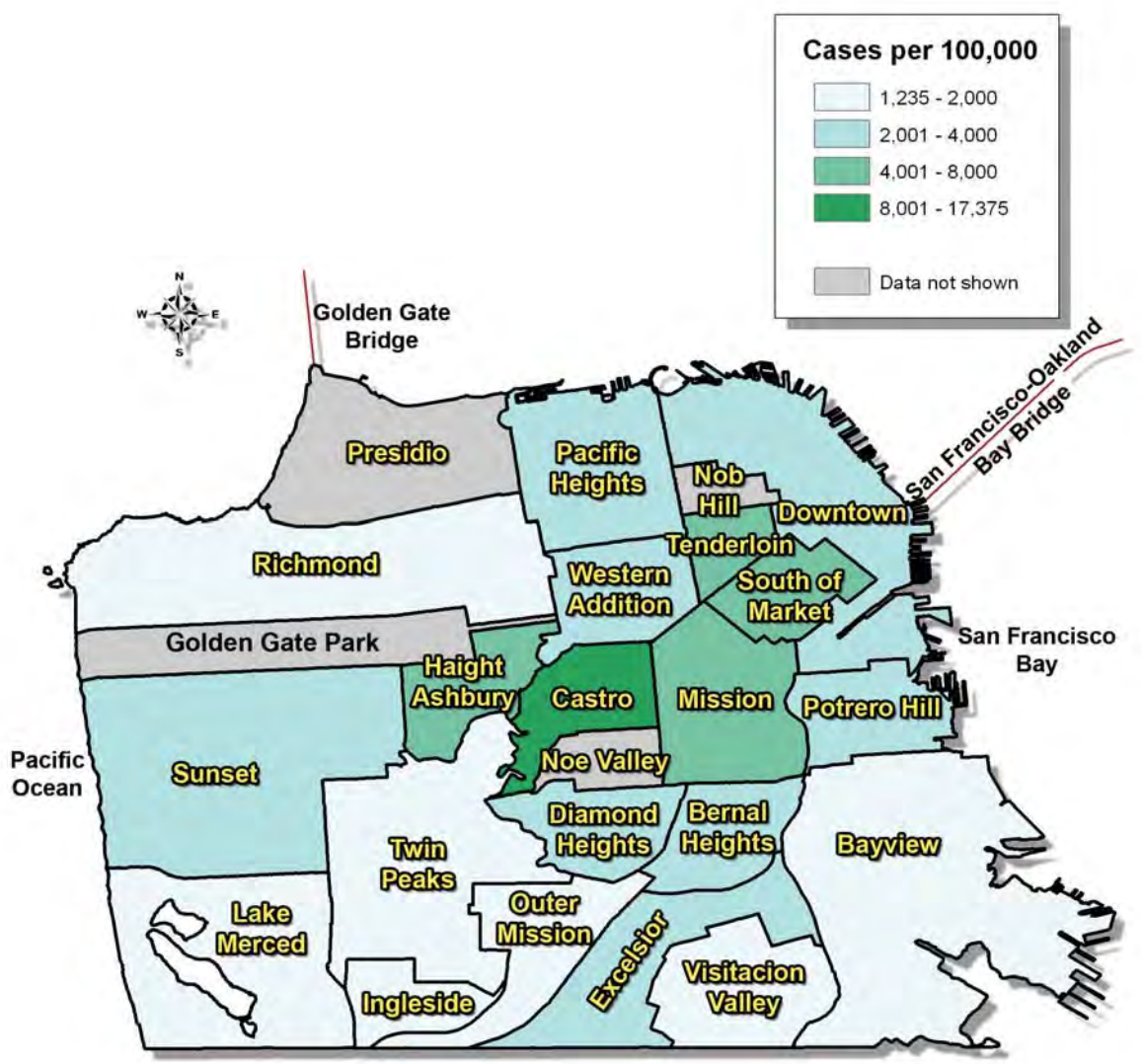

The overall HIV/AIDS prevalence rate among whites in San Francisco was 2,587 per 100,000. The highest rate was in the Castro neighborhood, with prevalence rate of 11,110 per 100,000. Tenderloin and Wester Addition also had high prevalence rate (5,362 per 100,000 and 5,170 per 100,000, respectively). In total, eight neighborhoods had prevalence rates higher than the overall rate (listed in descending order): Castro, Tenderloin, Western Addition, South of Market, Bayview, Mission, Diamond Heights, and Noe Valley. Lower prevalence rates among whites were found in the northern and western parts of the city.

# African Americans living with HIV/AIDS, 2010



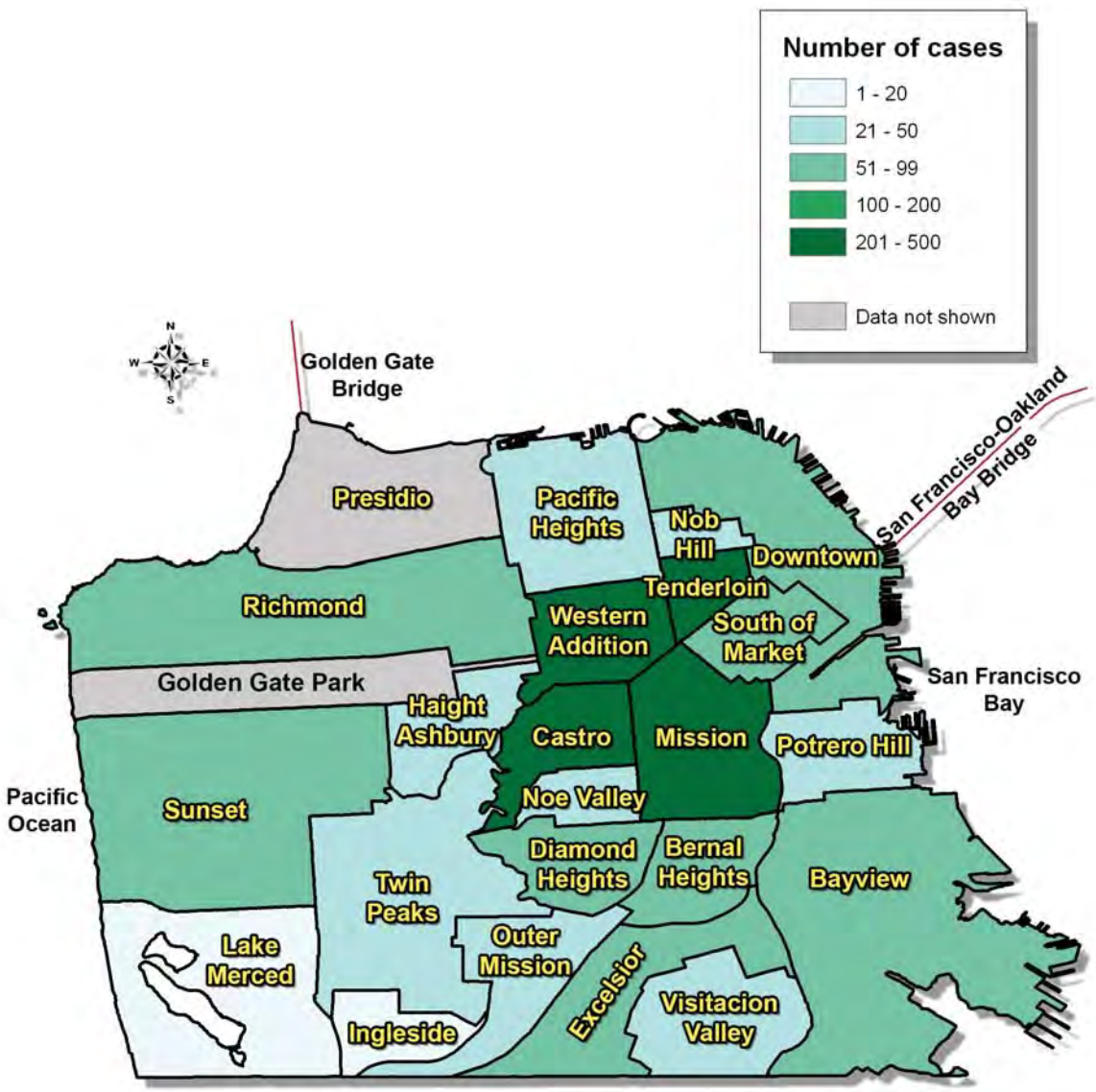

African Americans accounted for 13% of living HIV/AIDS cases in San Francisco at the end of 2010. Many of the 1,867 African American cases lived in the Tenderloin and Western Addition (N=300 and N=249, respectively). Across Market Street, the Mission and South of Market neighborhoods also had high numbers of African American cases (N=110 and N=134, respectively) as did Bayview (N=192). There were 226 homeless African American cases at the end of 2010 (not displayed).

# HIV/AIDS prevalence rates among African Americans, 2010



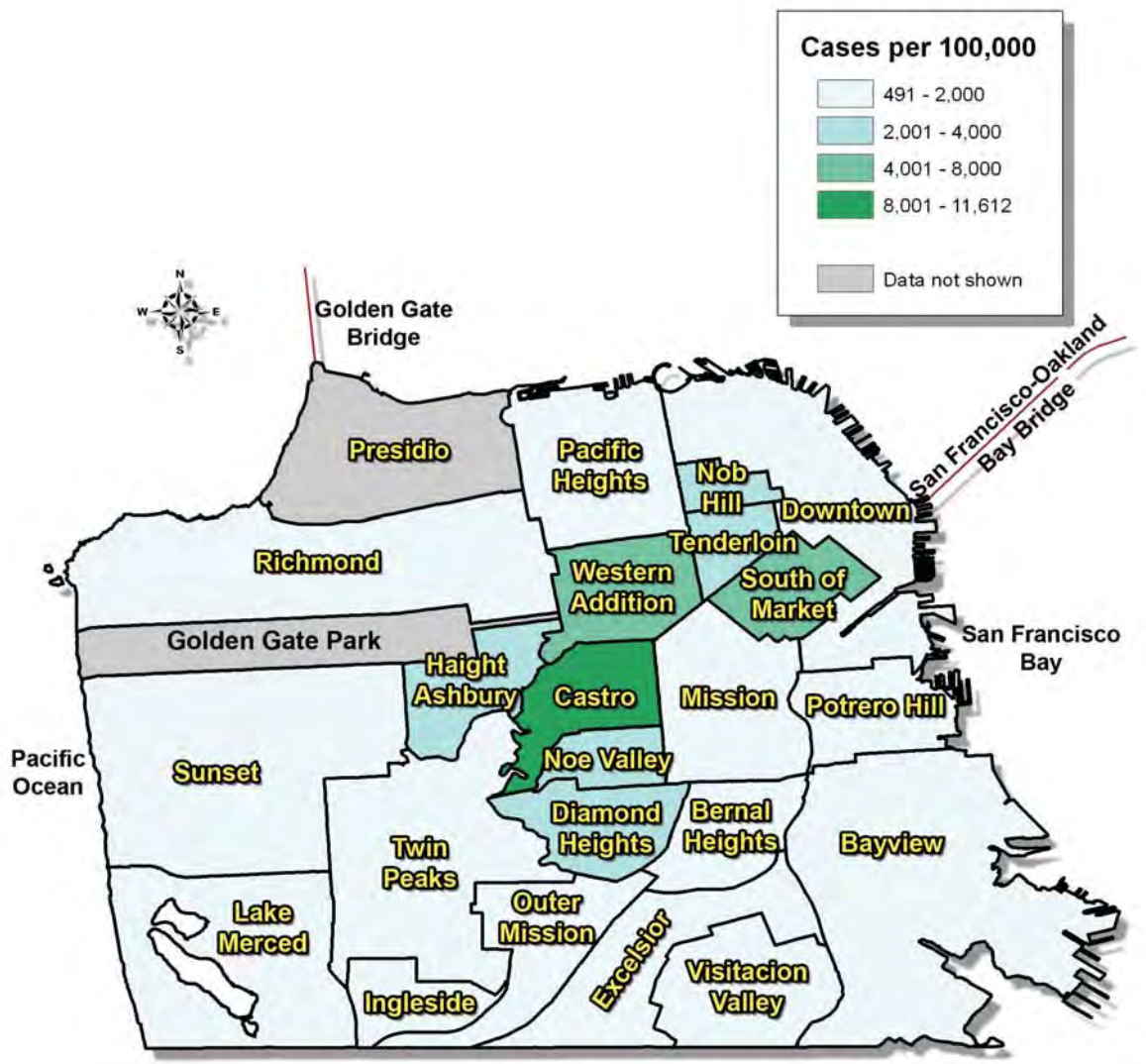

The overall HIV/AIDS prevalence rate among African Americans was 3,820 per 100,000. The highest rate was in the Castro neighborhood (17,375 per 100,000), which is more than four times the overall rate. In total, five neighborhoods had prevalence rates higher than the overall and are listed in descending order: Castro, Tenderloin, Mission, South of Market, and Haight Ashbury neighborhoods. Note that Noe Valley and Nob Hill have African American populations less than 500; rates calculated from such small populations may be misleading and were not shown.

# Latinos living with HIV/AIDS, 2010



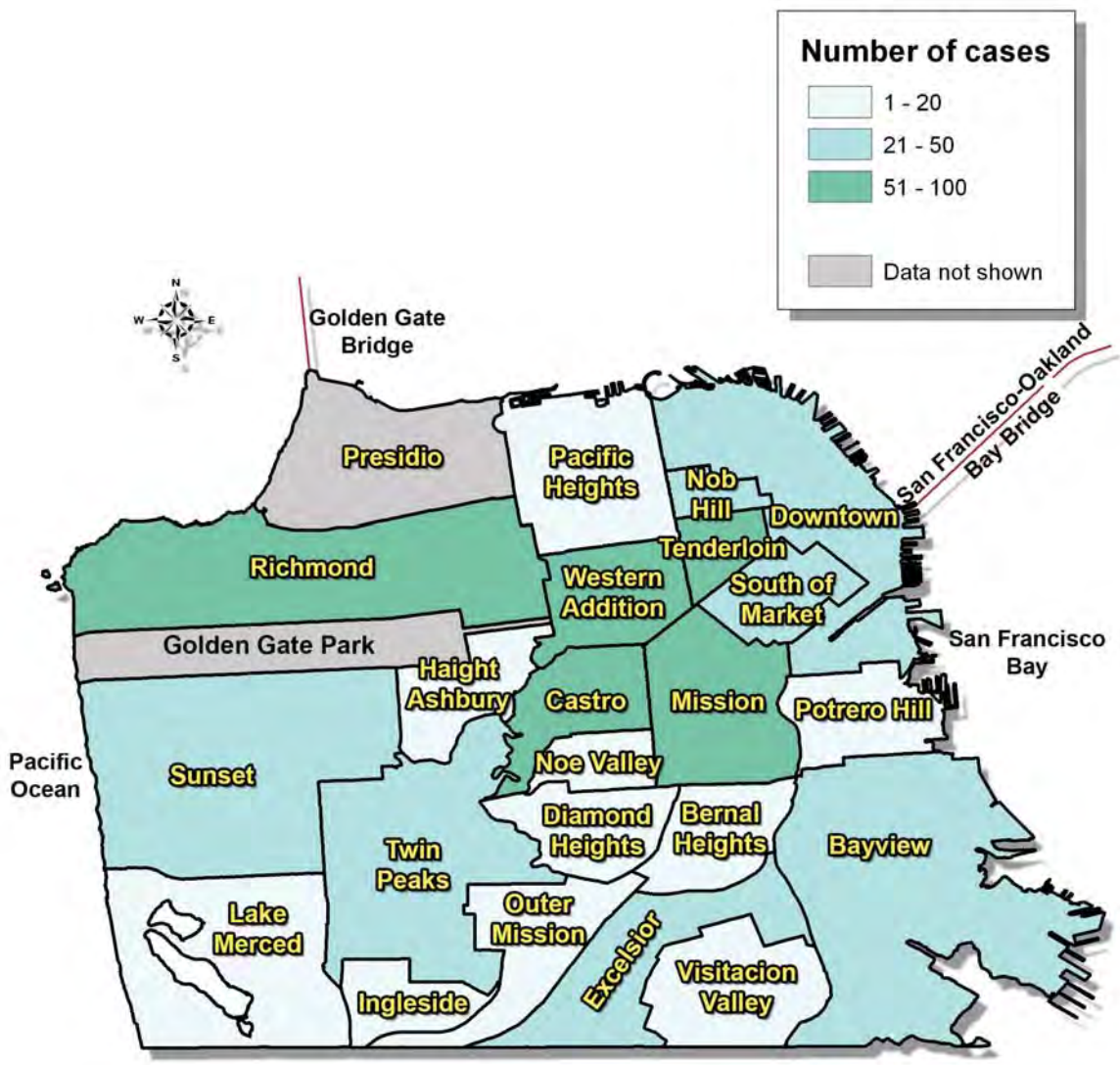

Latinos accounted for 17% of living HIV/AIDS cases in San Francisco at the end of 2010. The 2,359 Latino HIV/AIDS cases were mainly located in the central parts of the city with higher numbers of cases in the Mission (N=408), Tenderloin (N=276), and Castro (N=273). About 5% (N=111) of Latino cases were homeless (not displayed).

# HIV/AIDS prevalence rates among Latinos, 2010



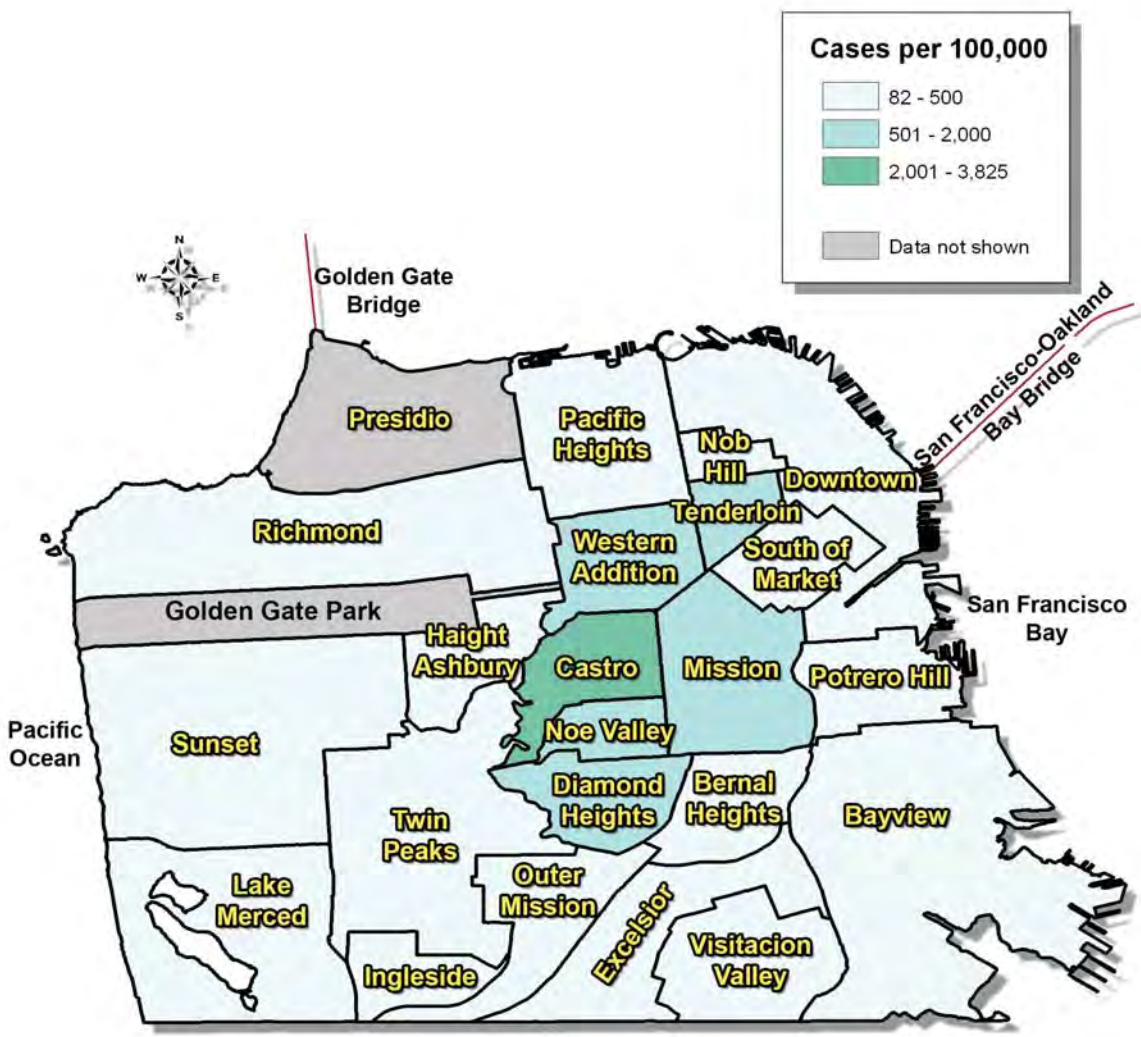

The overall HIV/AIDS prevalence rate among Latinos was 1,937 per 100,000 with higher rates concentrated in the city's geographic center. The Castro had the highest rate with almost six times the rate compared to the overall HIV/AIDS prevalence rate for the city among Latinos (11,612 per 100,000), followed by Western Addition with nearly half the prevalence rate (5,291 per 100,000). In total, nine neighborhoods had higher rates than the overall prevalence rate and are listed in descending order: Castro, Western Addition, South of Market, Nob Hill, Tenderloin, Diamond Heights, Noe Valley, Haight Ashbury, and Downtown.

# Asians/Pacific Islanders living with HIV/AIDS, 2010




Asians/Pacific Islanders accounted for 5% of living HIV/AIDS cases in San Francisco at the end of 2010. The 746 living Asian HIV/AIDS cases were distributed throughout the city. The Tenderloin and the Castro each represent 13% of all living Asian cases with 99 and 98 cases, respectively. The Mission and Western Addition trailed with 64 and 60 cases. The homeless population accounted for just 3% or 22 cases among Asians/Pacific Islanders (not displayed).

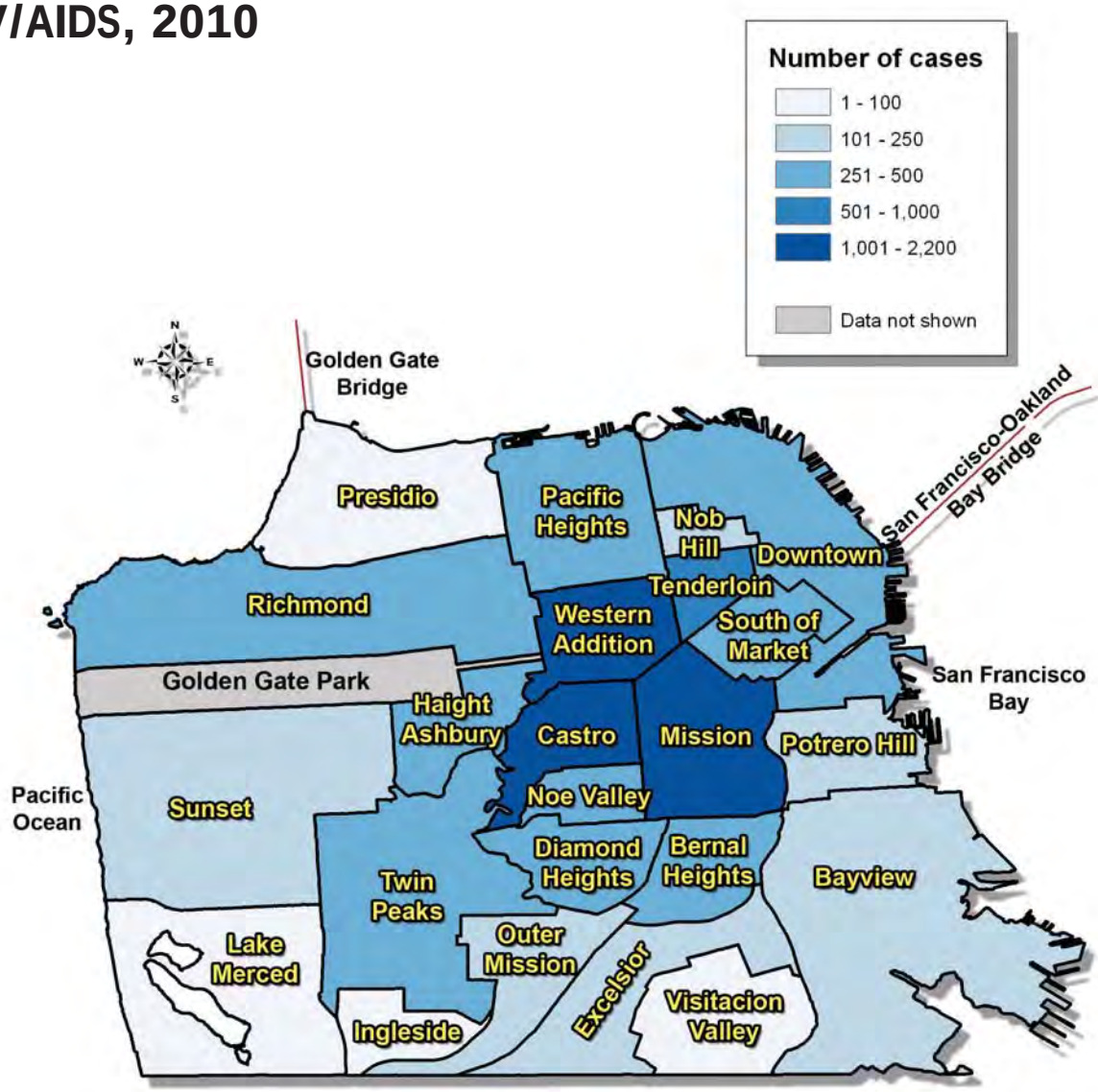
# HIV/AIDS prevalence rates among Asians/Pacific Islanders, 2010




The overall HIV/AIDS prevalence rate among Asians and Pacific Islanders in San Francisco was 275 per 100,000. The Castro neighborhood exhibited the highest prevalence rate (3,825 per 100,000), but its rate is highly influenced by the smaller Asian population size. In fact, all neighborhoods except the Castro had HIV/AIDS prevalence rates were lower than the overall San Francisco rate of 1,739 per 100,000.

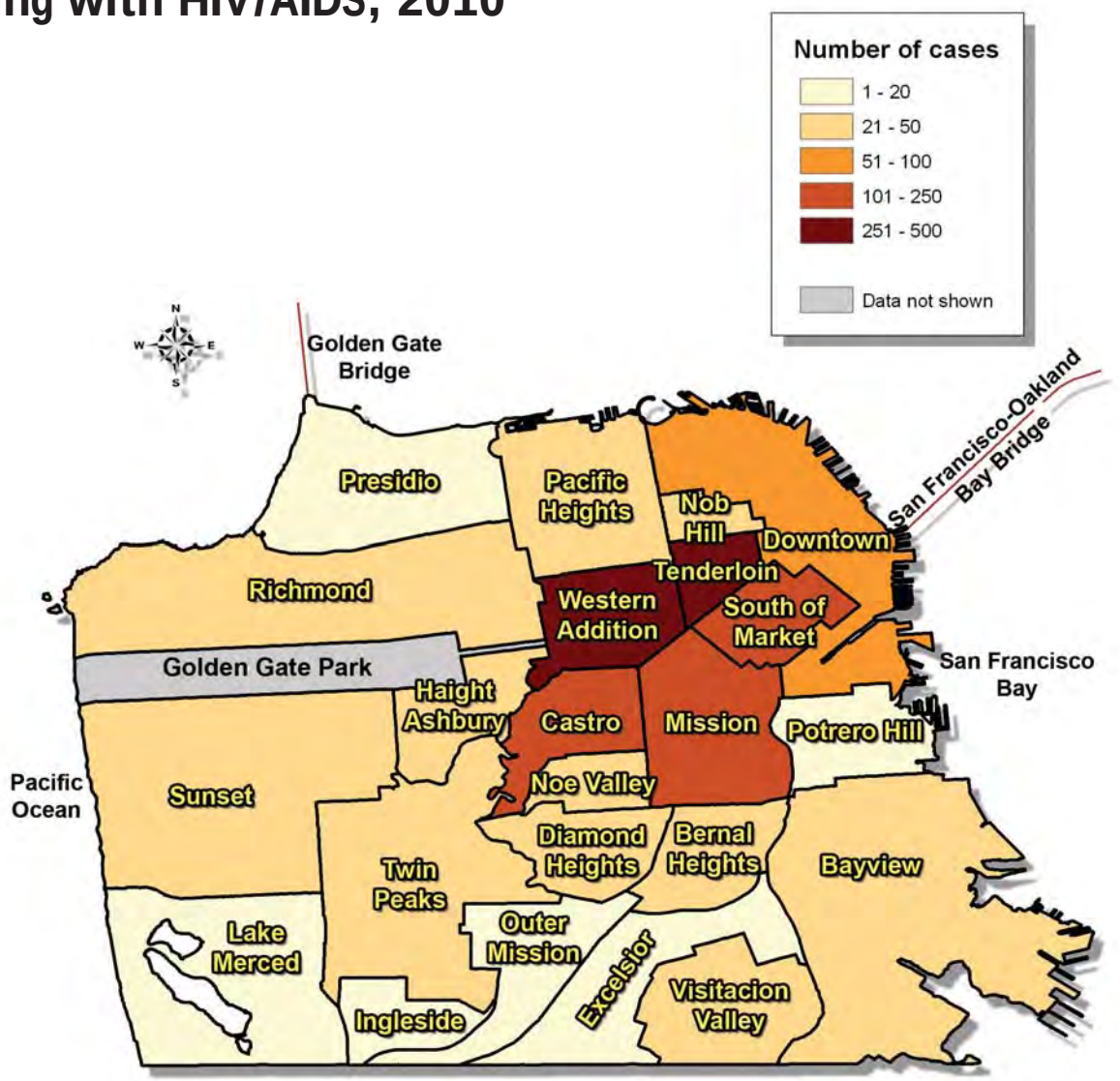
# Persons living with HIV/AIDS by exposure category

## Men who have sex with men (MSM) living with HIV/AIDS, 2010



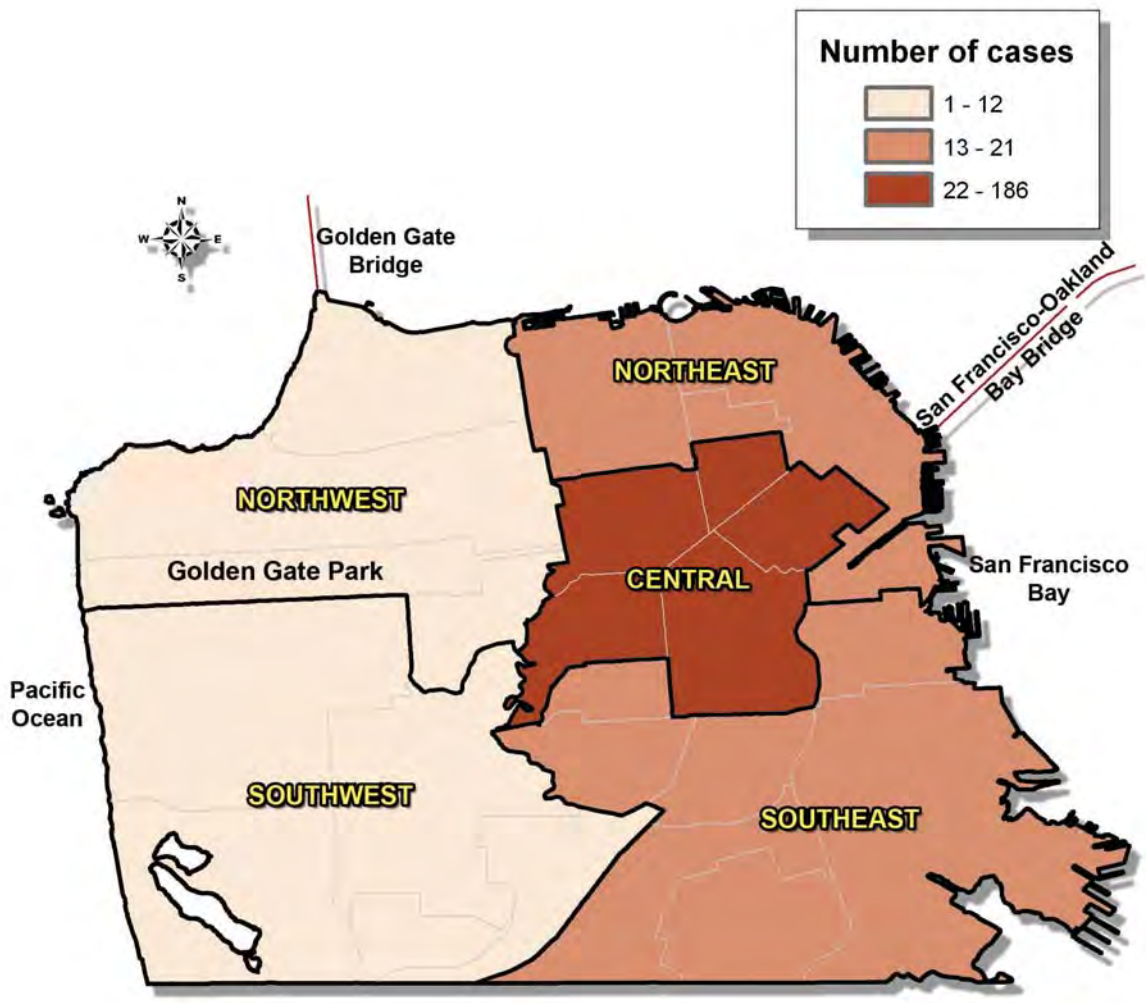

MSM comprised 73% (N=10,185) of living HIV/AIDS cases in San Francisco. The Castro contained the highest number of MSM cases with 2,169 (21%) of the living cases among MSM, which was twice as many as resided in the Western Addition (N=1,195) or the Mission (N=1,028). The number of HIV/AIDS cases among MSM was substantial throughout most of the city. The homeless population constituted only 214 cases (2%) among MSM (not displayed).

# Men who have sex with men and inject drug (MSM-IDU) living with HIV/AIDS, 2010



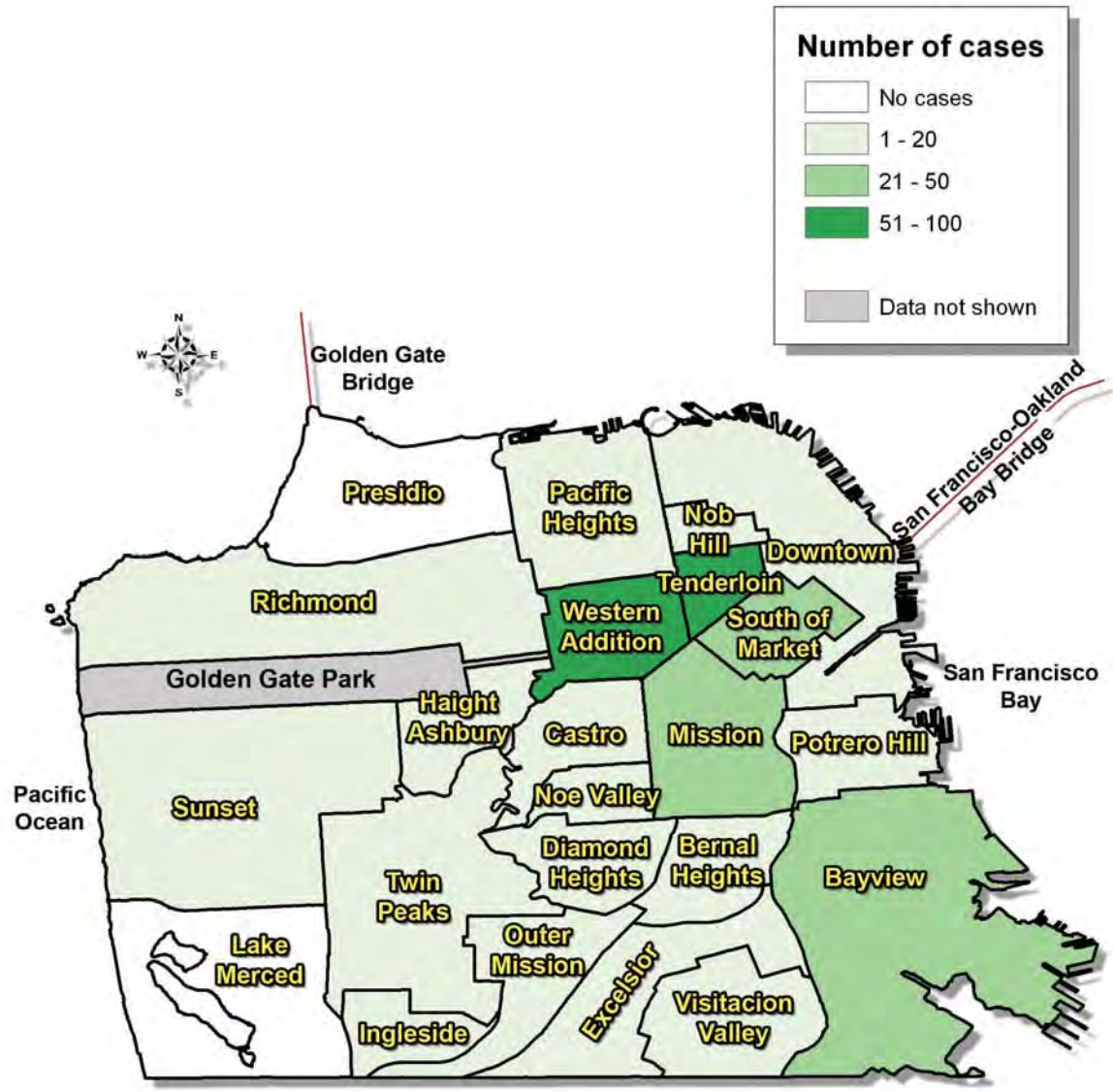

There were 2,075 living male HIV/AIDS cases who had a history of MSM-IDU in San Francisco at the end of 2010, equivalent to 15% of all living HIV/AIDS. In contrast to MSM cases, MSM-IDU cases were concentrated in the Tenderloin and Western Addition neighborhoods. The Tenderloin had the highest number of living MSM-IDU cases with 383 cases (18%). Western Addition followed closely behind with 283 MSM-IDU cases (14%). The homeless population contributed another 235 MSM-IDU cases (not displayed).

# Transfemale persons living with HIV/AIDS, 2010



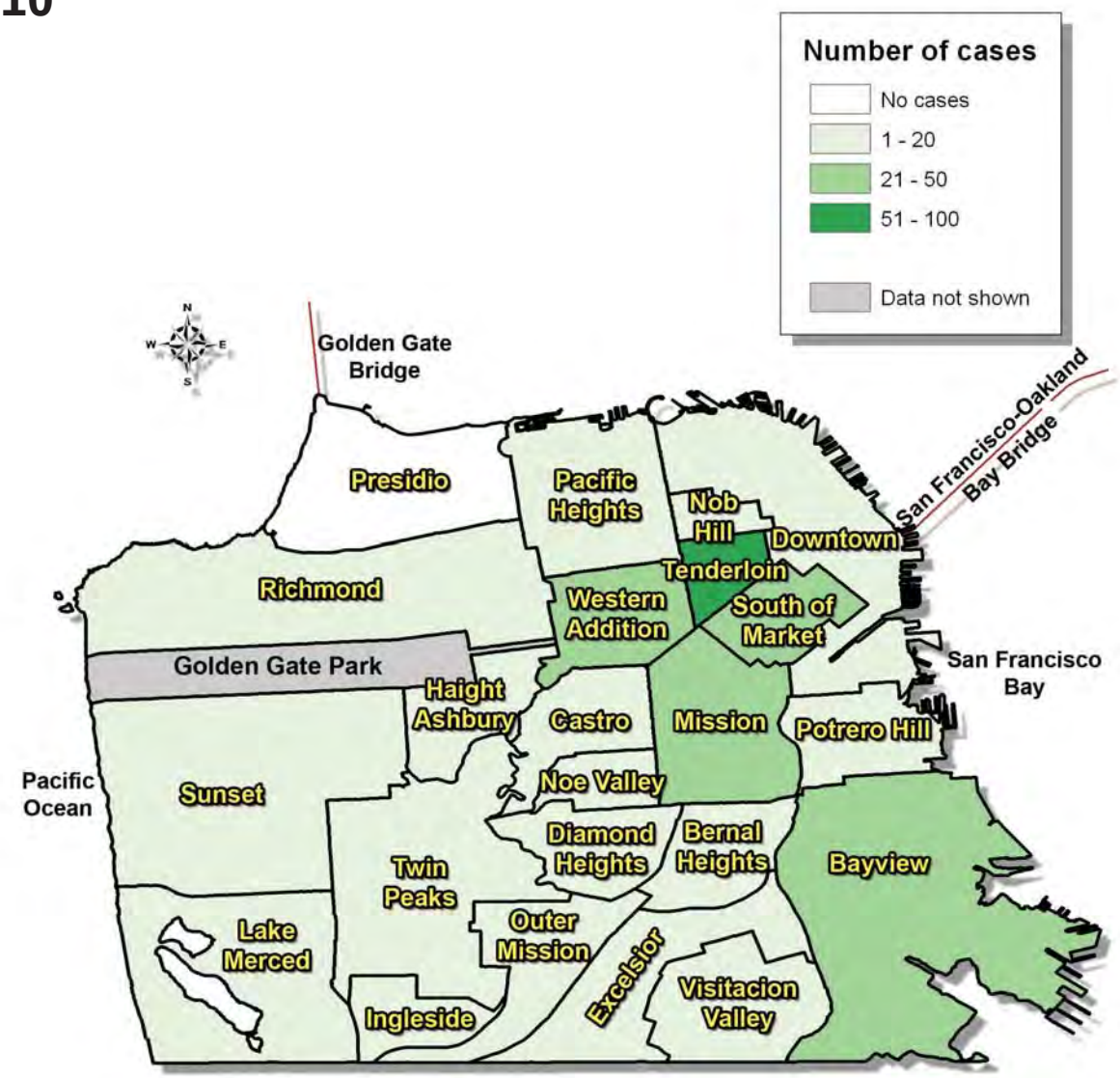

Transfemales accounted for 326 or 2% of the total living HIV/AIDS cases in San Francisco at the end of 2010. About 57% (N=186) of these resided in the central neighborhoods of the Castro, the Mission, Western Addition, the Tenderloin, and South of Market. Few transfemale HIV/AIDS cases lived in the western sections of the city.

# Male injection drug users (IDU) living with HIV/AIDS, 2010



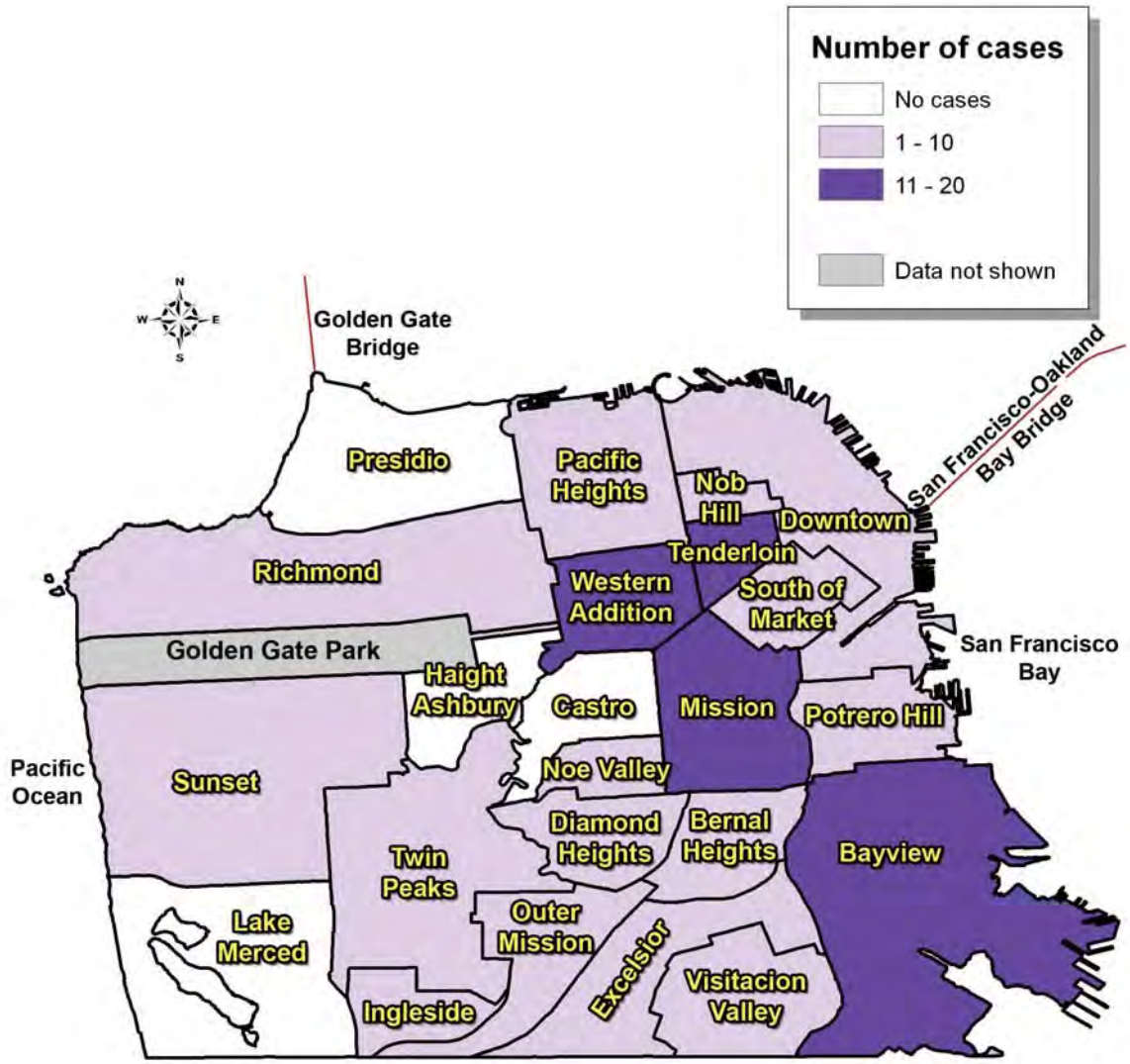

Male IDU accounted for 544 or 56% of the 966 total living IDU cases at the end of 2010. These were largely concentrated in the Tenderloin (N=90) and Western Addition (N=51) neighborhoods. Except for Bayview, the city's western and peripheral neighborhoods housed few male IDU HIV/AIDS cases.

# Female injection drug users (IDU) living with HIV/AIDS, 2010



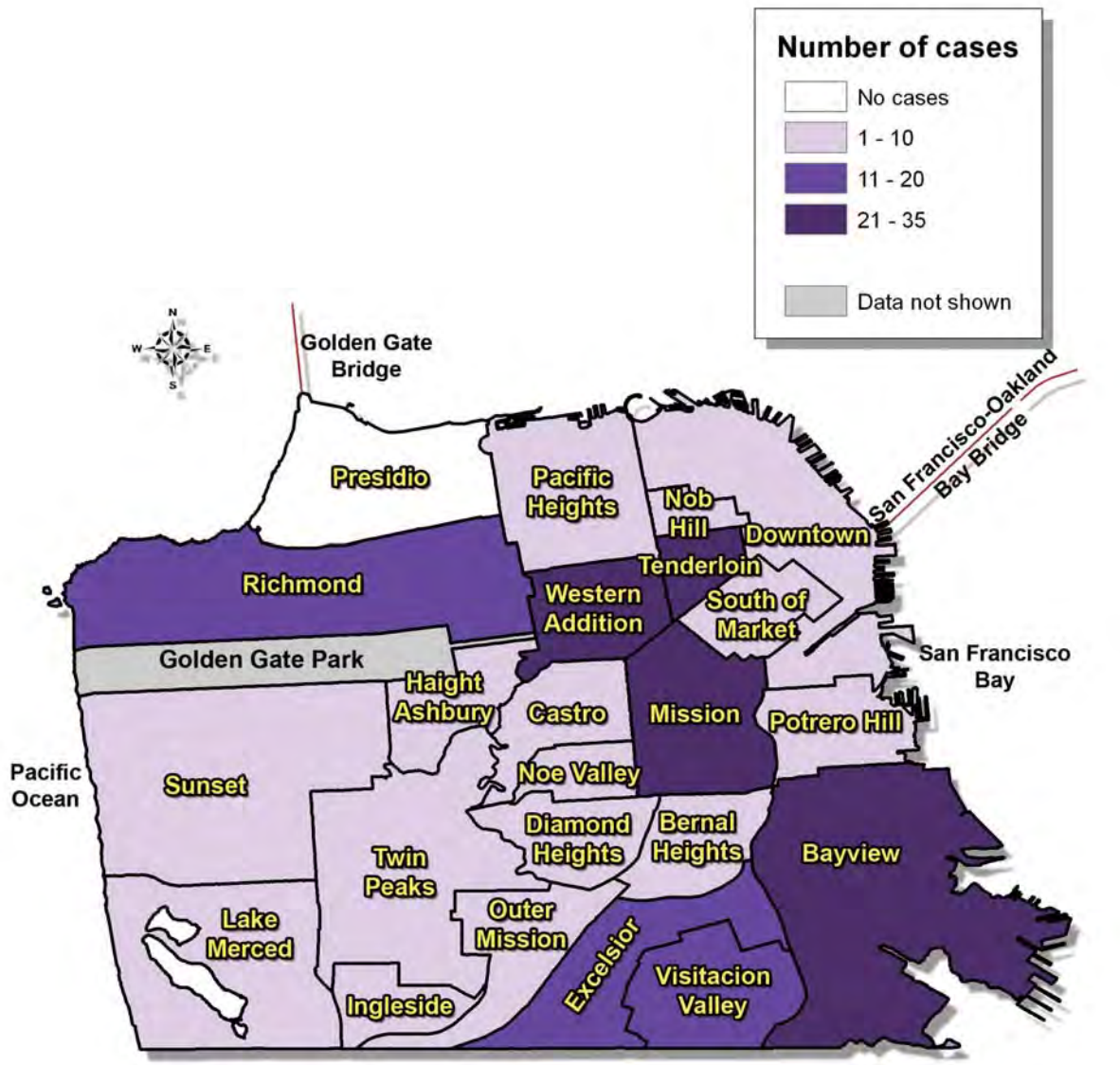

HIV/AIDS cases among female IDU accounted for 422 or 44% of all living IDU cases at the end of 2010. These followed a similar geographic distribution as the male IDU HIV/AIDS cases with the highest number residing in the Tenderloin followed by the Western Addition (N=74 and N=40, respectively).

# Heterosexual males living with HIV/AIDS, 2010




Male heterosexuals accounted for 143 or 1% of living HIV/AIDS cases in San Francisco at the end of 2010. These cases were distributed across most of the city, but the majority resided in the Mission (N=20), followed by Bayview (N=17), Tenderloin (N=15), and Western Addition (N=15). Another 18 cases were homeless (not displayed).

# Heterosexual females living with HIV/AIDS, 2010




Females represented two-third of all heterosexual living HIV/AIDS cases and 2% of all living cases in San Francisco at the end of 2010 (N=284). The Bayview and Western Addition both contained 35 cases each, followed by the Mission (N=31) and the Tenderloin (N=30).

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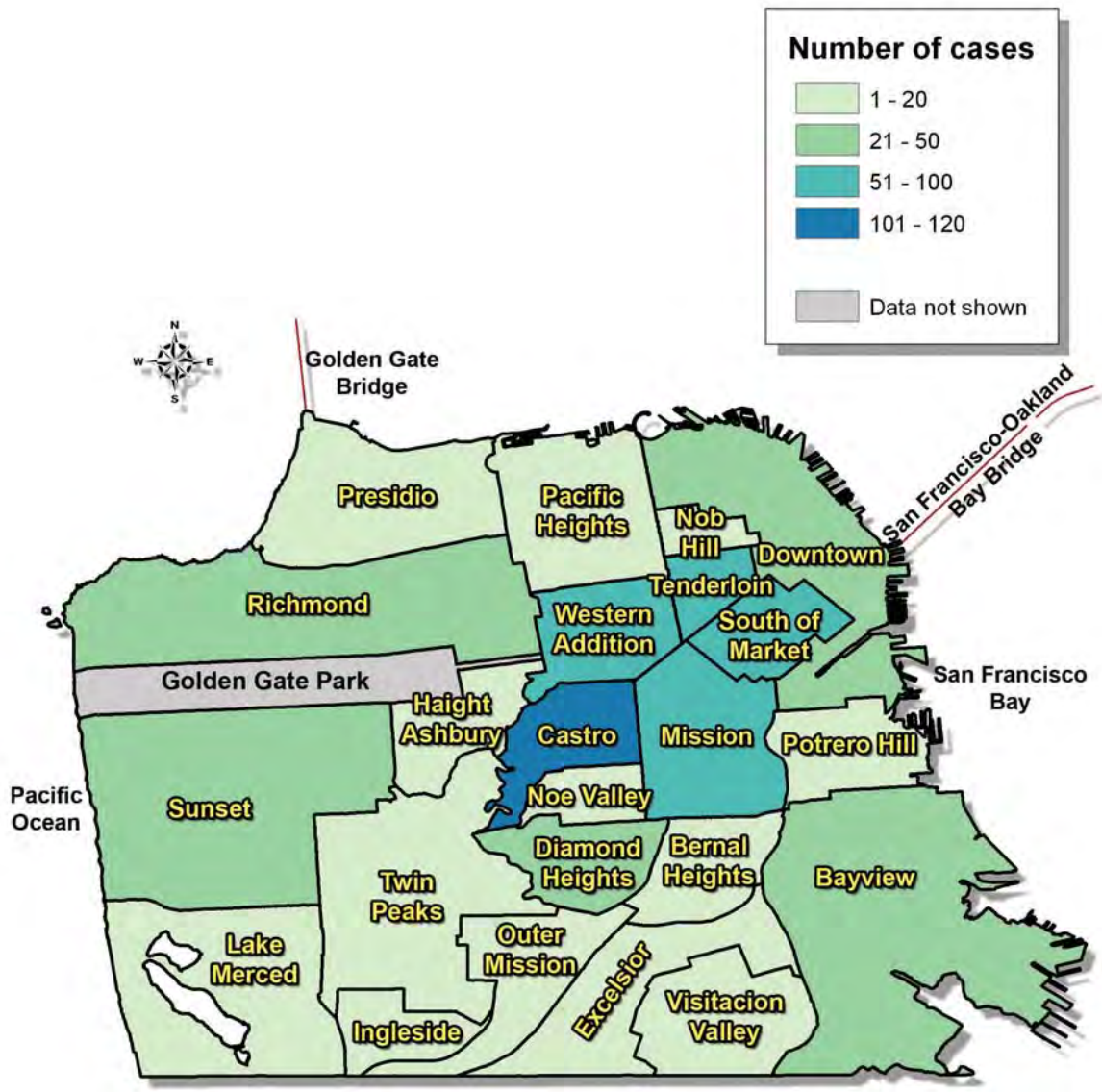
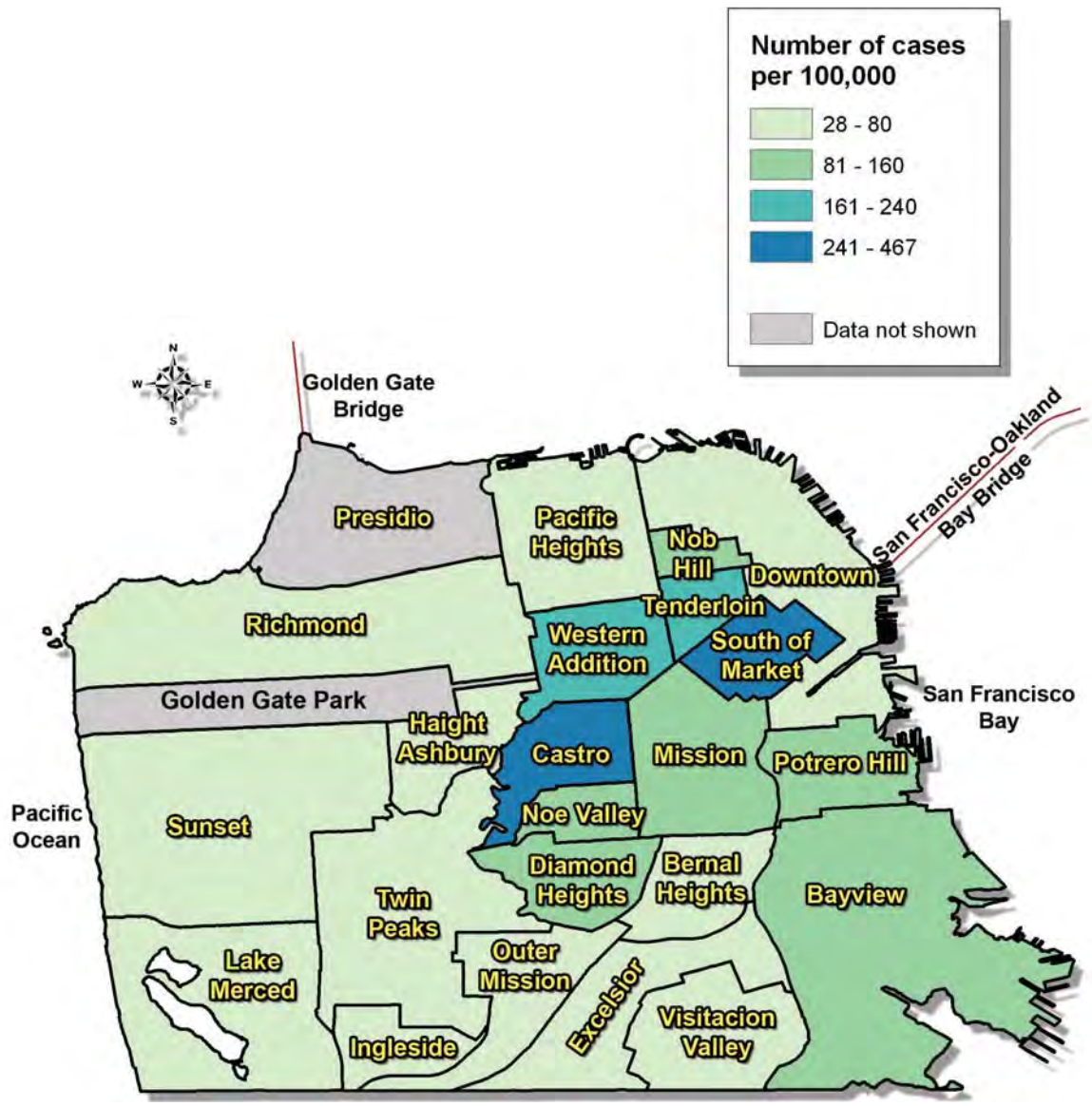
# New HIV Diagnoses

# Persons diagnosed with HIV, 2009-2010




During 2009-2010, there were 970 new HIV/AIDS diagnoses among San Francisco residents. The majority of new cases in San Francisco lived in neighborhoods bordering Market Street, the main arterial street in the city. The neighborhood that housed the largest number of new cases (N=111 or 11%) was the Castro. The Castro was followed by the Tenderloin and the Mission neighborhoods. Some newly diagnosed cases also resided in the peripheral neighborhoods of the city. Those homeless at diagnosis (not displayed) accounted for the largest number of new cases (N=116) than any single neighborhood.

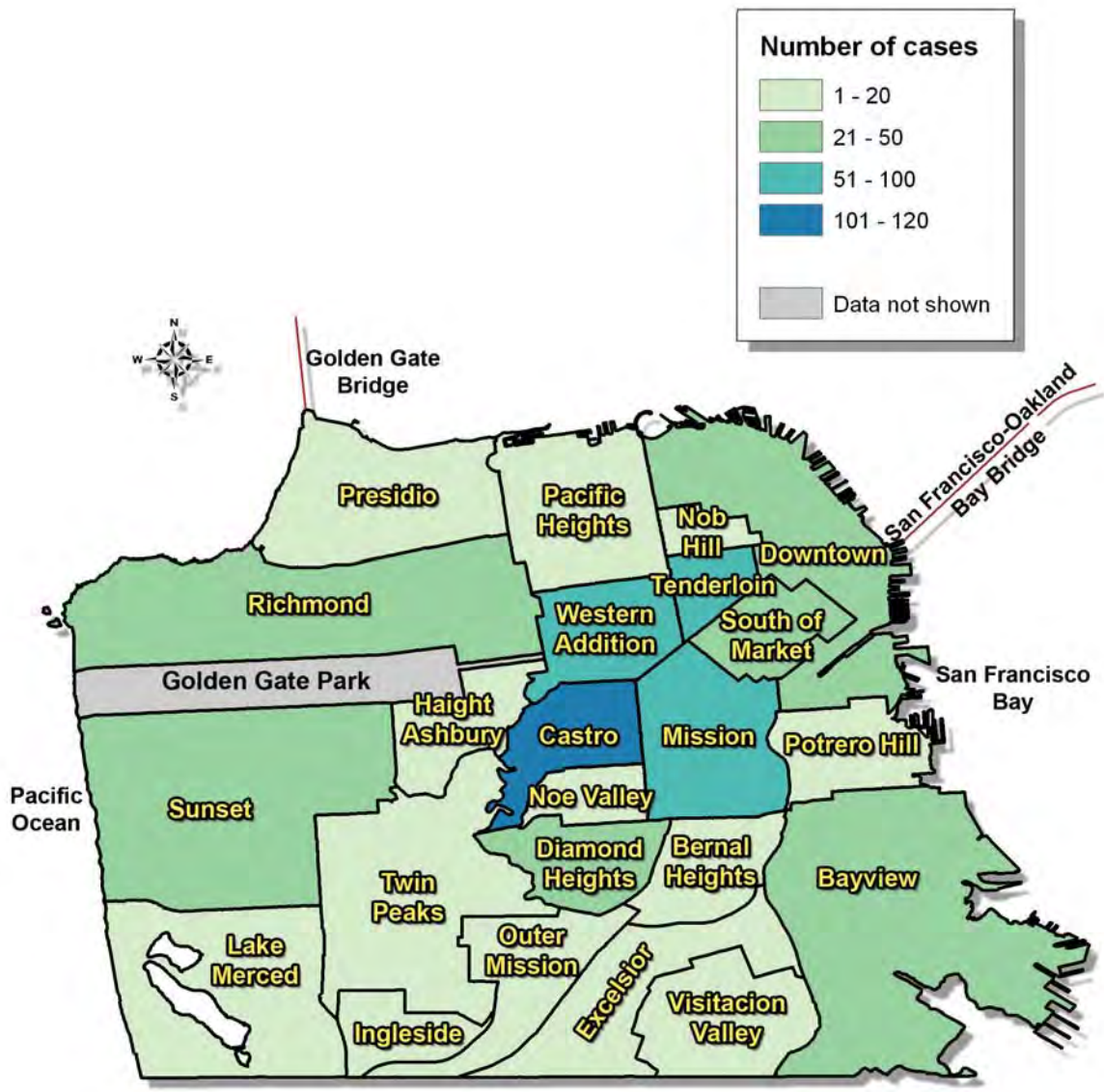
# Rates of new HIV diagnoses, 2009-2010




During 2009-2010, the overall rate of new HIV/AIDS diagnoses was 120 per 100,000. The highest rate of new diagnoses was in the Castro (467 per 100,000) followed by South of Market( 267 per 100,000). New diagnosis rates were low (but not zero) in the western neighborhoods as well as in Downtown and Pacific Heights in the north and in the southern neighborhoods west of Bayview.

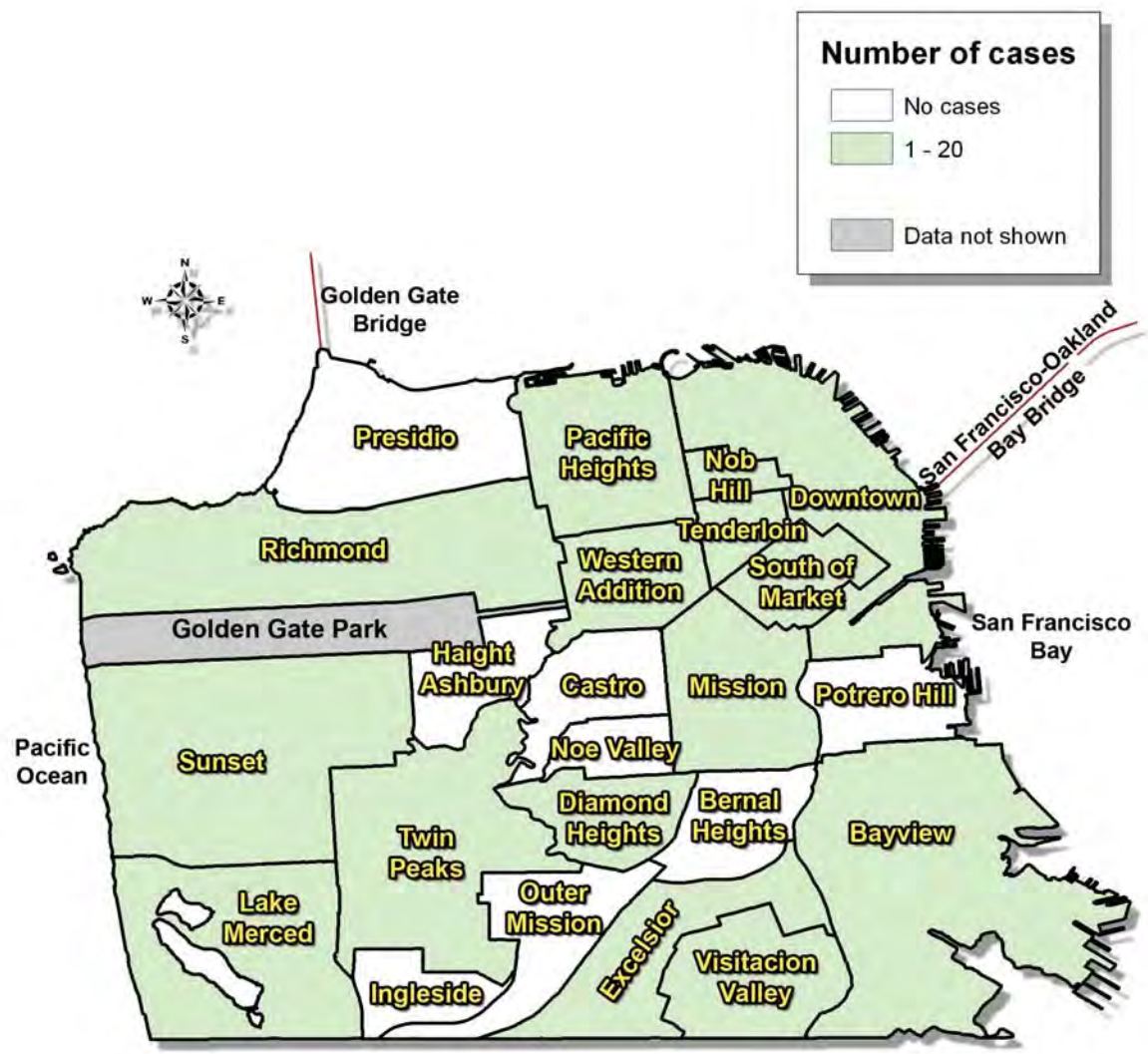
# New HIV diagnoses by gender

## Males diagnosed with HIV, 2009-2010




Out of the 970 newly diagnosed HIV/AIDS cases in San Francisco during 2009-2010, 903 (93%) were male. Similarly to the overall distribution of newly diagnosed cases, the Castro had the highest number of male cases (N=111). The Mission and Tenderloin also had high numbers of newly diagnosed. The southern parts of the city displayed much lower numbers of new cases. The 102 male homeless cases are not displayed on this map (not displayed).

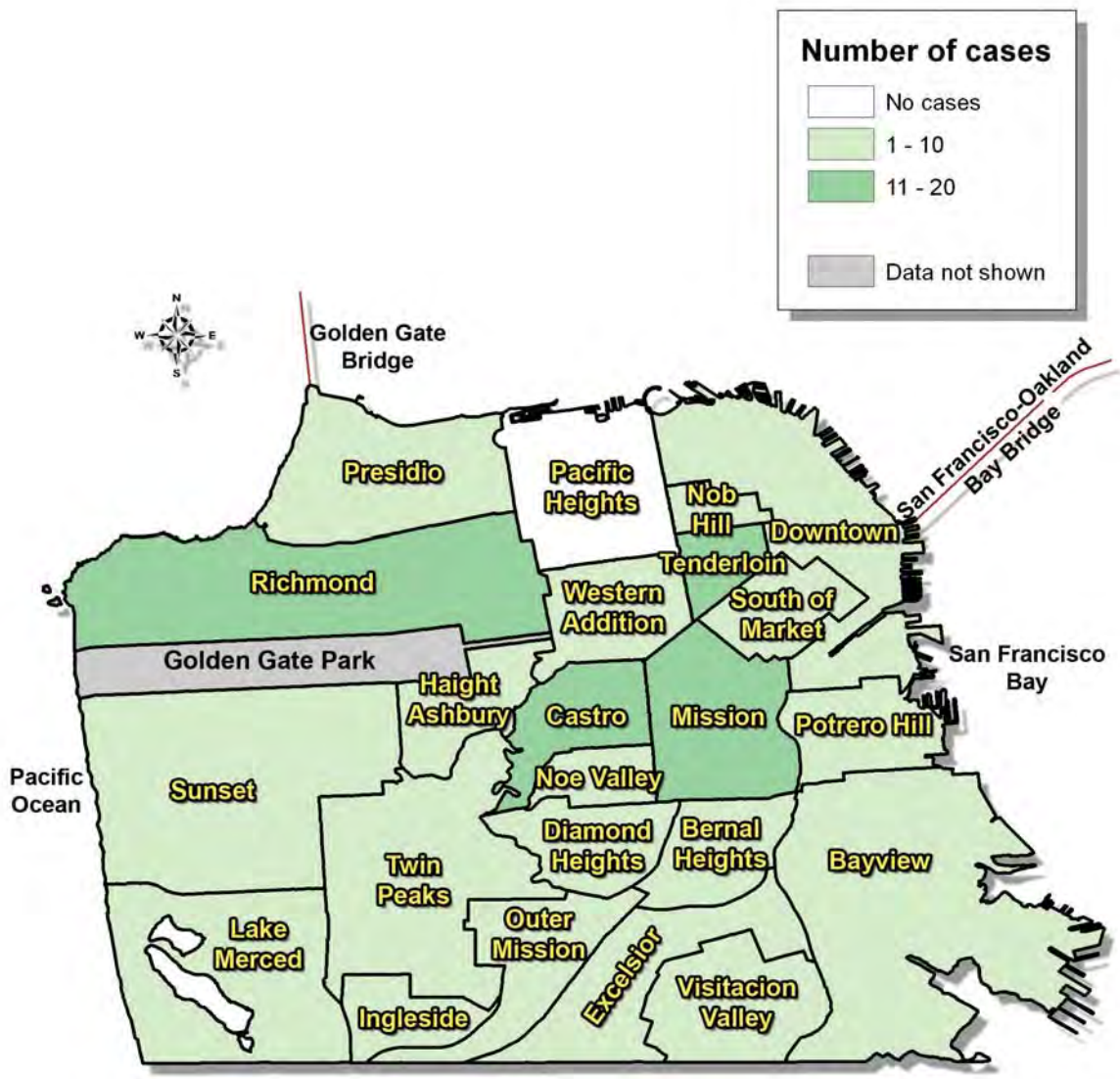
# Females diagnosed with HIV, 2009-2010




The 67 newly diagnosed female HIV/AIDS cases accounted for 7% of the overall number of new HIV/AIDS diagnoses in San Francisco during 2009-2010. These were distributed across most city neighborhoods. The Western Addition and Bayview neighborhoods had the highest numbers of female cases (N=8 and N=7, respectively). Seven neighborhoods had no new cases: Outer Mission, Bernal Heights, Noe Valley, Castro, Haight Ashbury, and Potrero Hill. More new female cases (N=14) were diagnosed among the homeless than among the residents of any single neighborhood (not displayed).

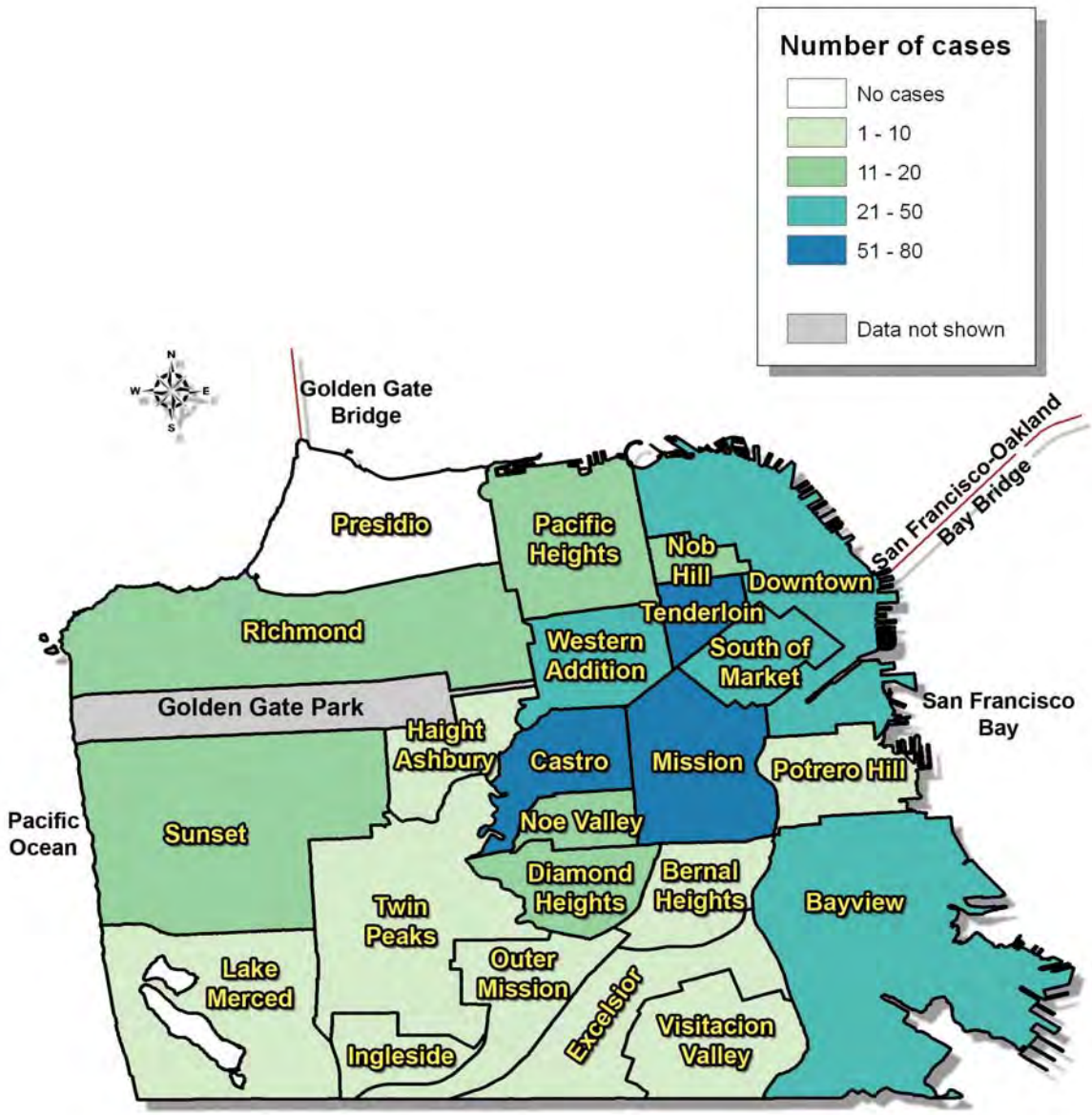
# New HIV diagnoses by age group

## Persons aged 13-29 years diagnosed with HIV, 2009-2010



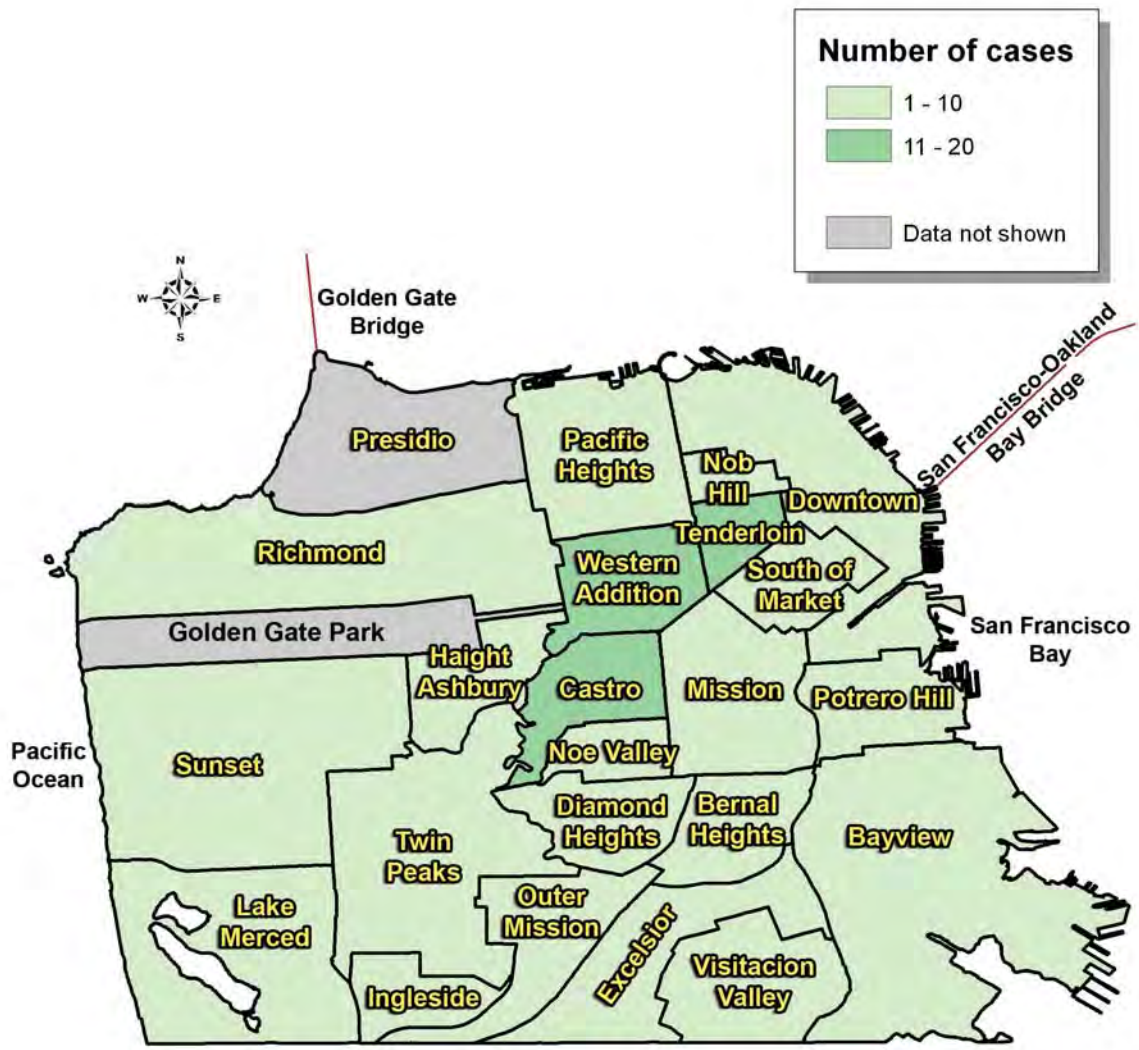

The 215 newly diagnosed HIV/AIDS cases aged 13-29 accounted for about 22% of all newly diagnosed cases in San Francisco during 2009-2010. The Castro and Mission neighborhoods each had 20 new cases among adolescents and young adults. Pacific Heights was the only neighborhood without a new youth HIV/AIDS case. There were more new HIV/AIDS diagnoses among homeless youths (N=33) than among youths residing in any single neighborhood (not displayed).

# Persons aged 30-49 years diagnosed with HIV, 2009-2010




The 582 newly diagnosed HIV/AIDS cases aged 30-49 years comprise 60% of all new diagnoses in 2009-2010, making it the single largest age group. The Castro neighborhood had the highest number of cases in this age group (N=76), followed by the Tenderloin (N=60) and the Mission (N=52) neighborhoods. There were 64 homeless cases diagnosed in this age group (not displayed).

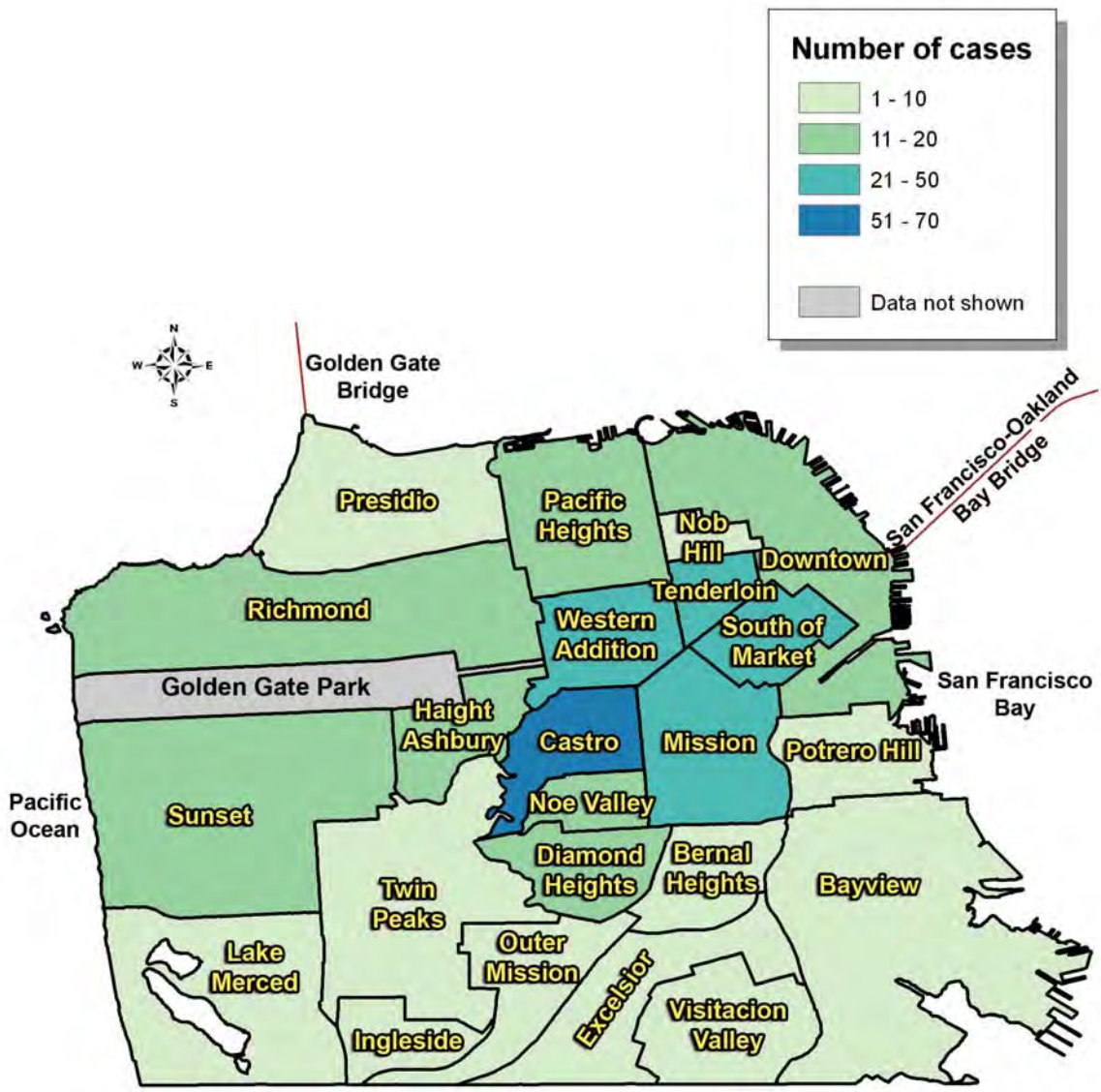
# Persons aged 50 years and above diagnosed with HIV, 2009-2010




Among new HIV/AIDS cases diagnosed in San Francisco during 2009-2010, 173 (18%) were aged 50 years or older at diagnosis. These cases were distributed across all city neighborhoods. The neighborhoods with the largest number of new diagnoses among older adults were Western Addition (N=17), the Castro (N=15), and the Tenderloin (N=14). Homeless cases aged 50 years and over accounted for more cases than any single neighborhood, with 19 cases (not displayed).

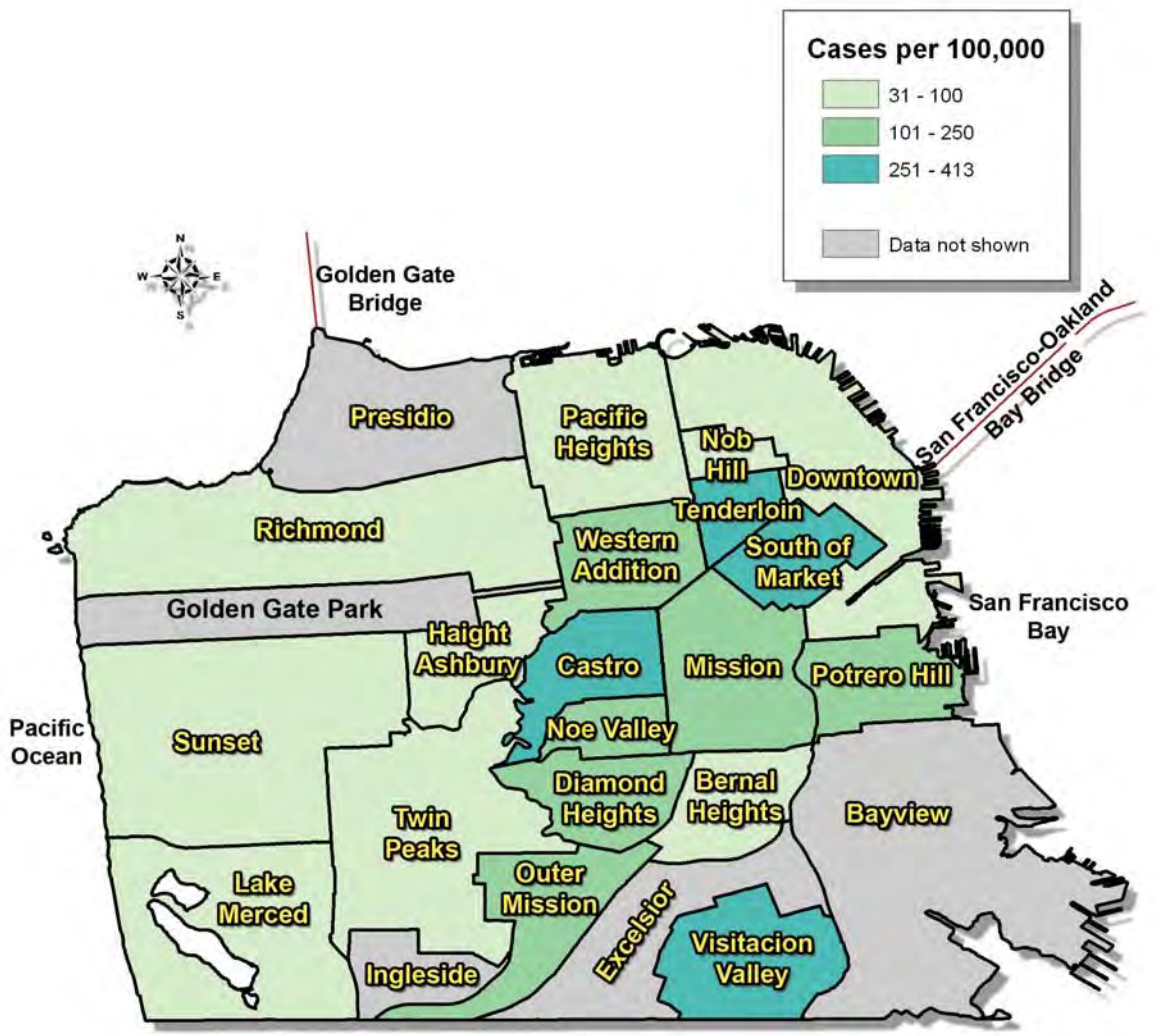
# New HIV diagnoses by race/ethnicity

## Whites diagnosed with HIV, 2009-2010



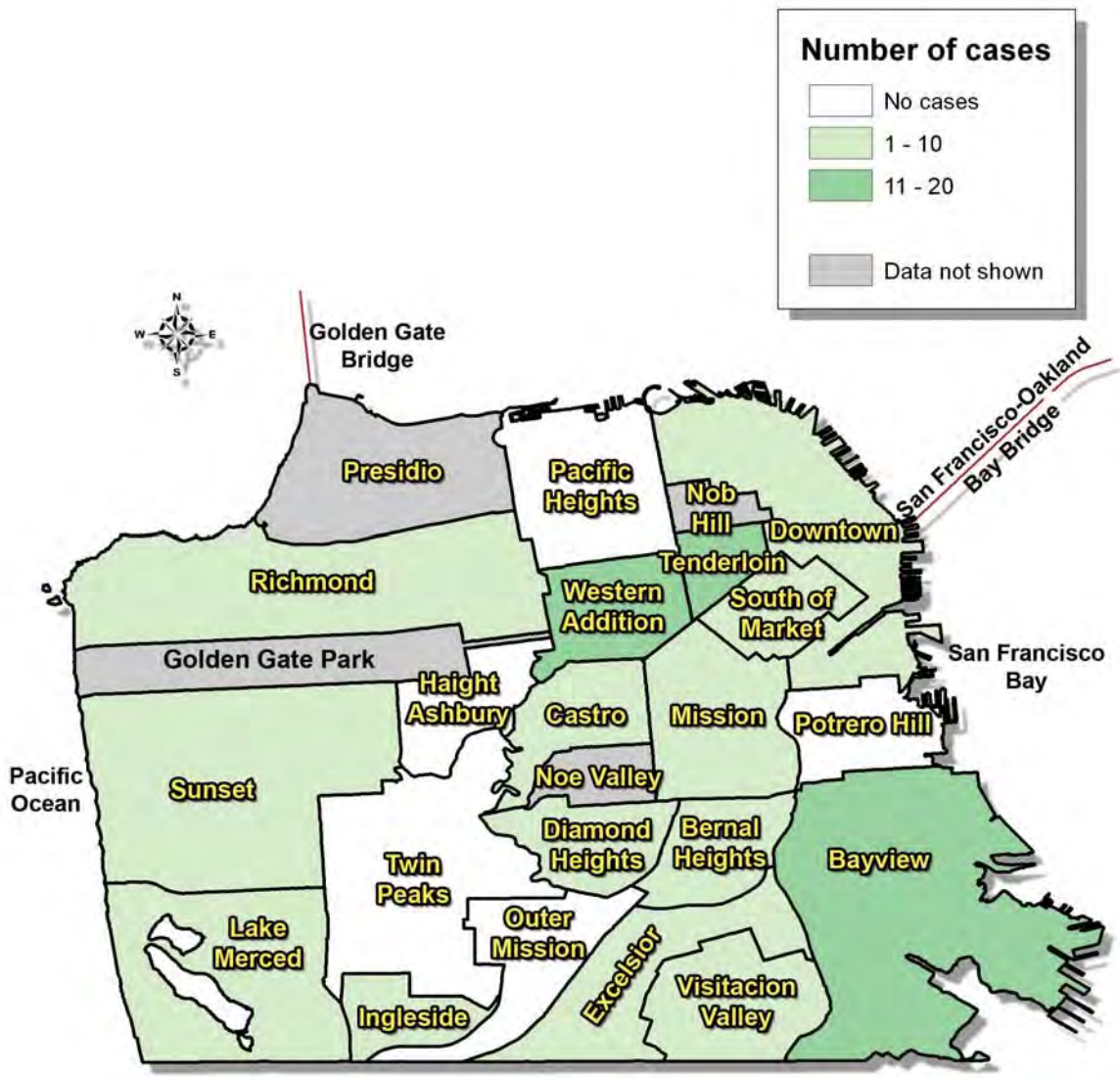

About half of the newly diagnosed San Francisco residents in 2009-2010 were white (N=481). These were distributed across most of the central and northern neighborhoods of the city. Seventy new diagnoses among whites were located in the Castro, 44 in the Tenderloin, and 43 in the Western Addition. There were 46 newly diagnosed cases among homeless whites (not displayed).

# Rates of new HIV diagnoses among whites, 2009-2010



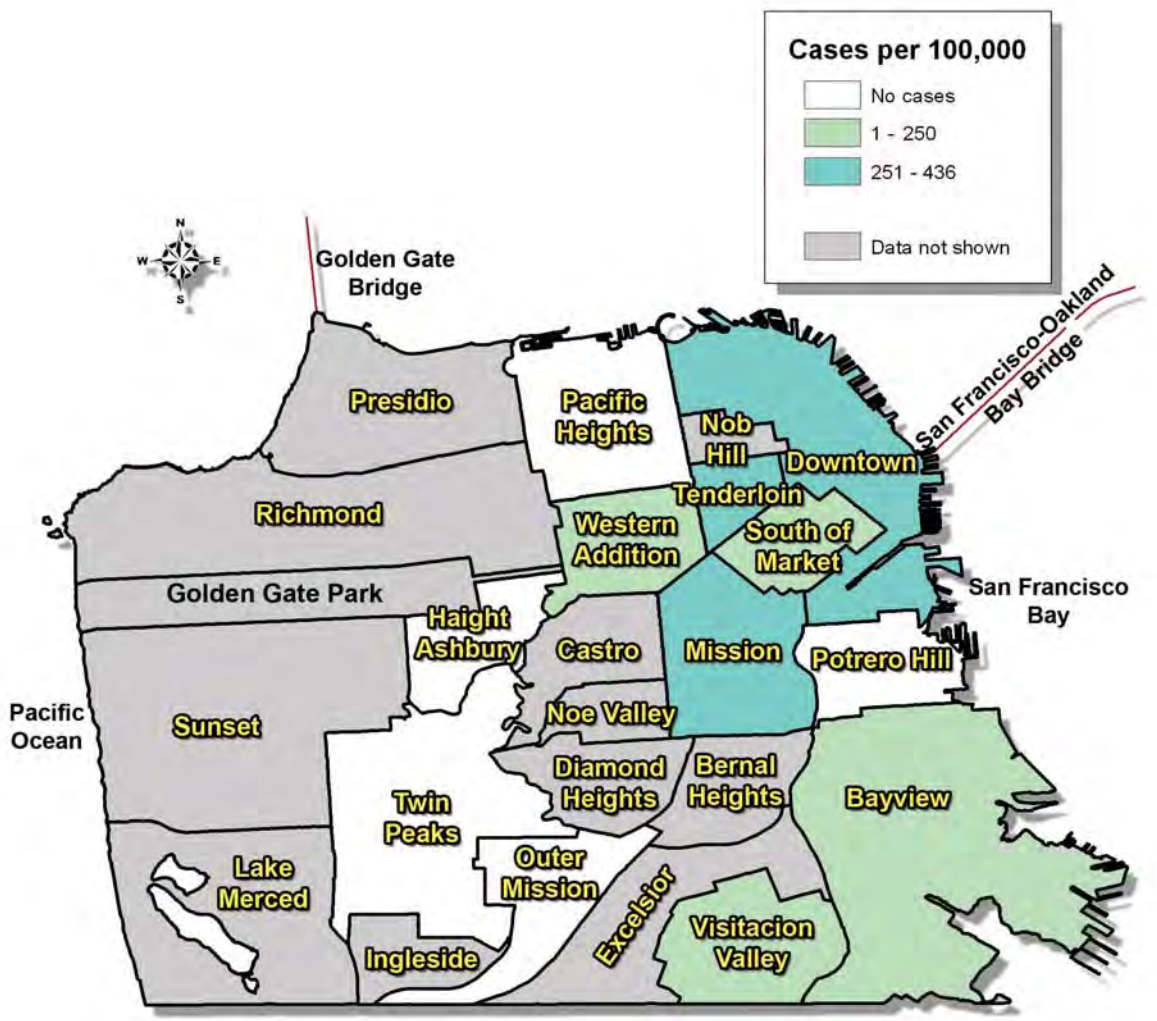

The overall rate of newly diagnosed cases in 2009-2010 among whites was 143 cases per 100,000. South of Market and Castro had the highest rates among whites (413 and 403 cases per 100,000, respectively). The Tenderloin, Visitacion Valley, and Western Addition also had high rates. Rates were not calculated for four neighborhoods because there were less than five cases diagnosed in these neighborhoods would result in unreliable estimates.

# African Americans diagnosed with HIV, 2009-2010



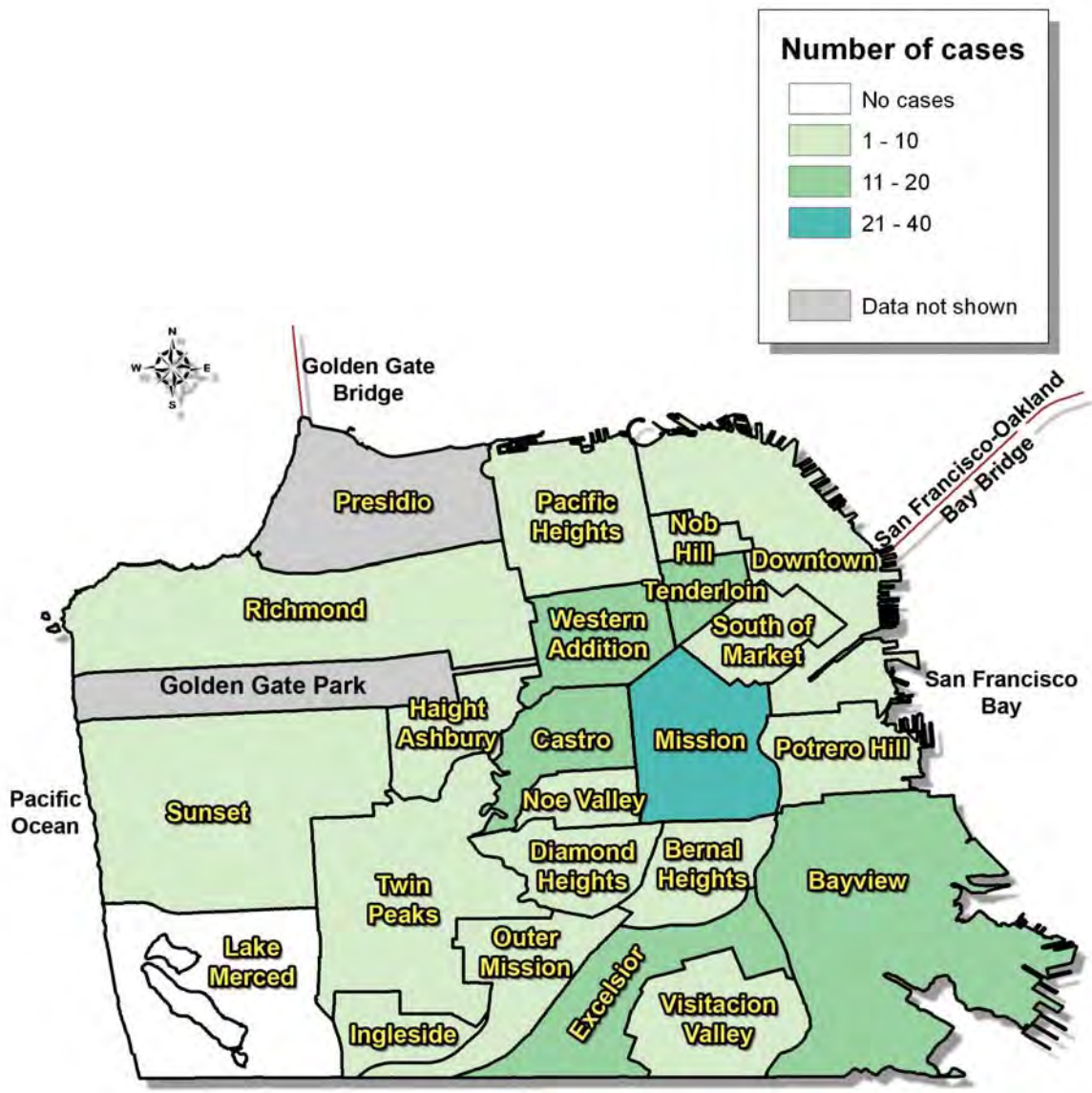

African Americans accounted for 15% of all new diagnoses in San Francisco during 2009-2010 with 144 cases. Newly diagnosed HIV/AIDS cases among African Americans were scattered across many of the city's neighborhoods. The neighborhoods with the highest number of new African American cases were the Bayview (N=17), the Tenderloin (N=12) and the Western Addition (N=11). Six neighborhoods had no new African American cases: Twin Peaks, Outer Mission, Haight Ashbury, Nob Hill, Pacific Heights, and Potrero Hill. There were 35 newly diagnosed cases among homeless African Americans.

# Rates of new HIV diagnoses among African Americans, 2009-2010



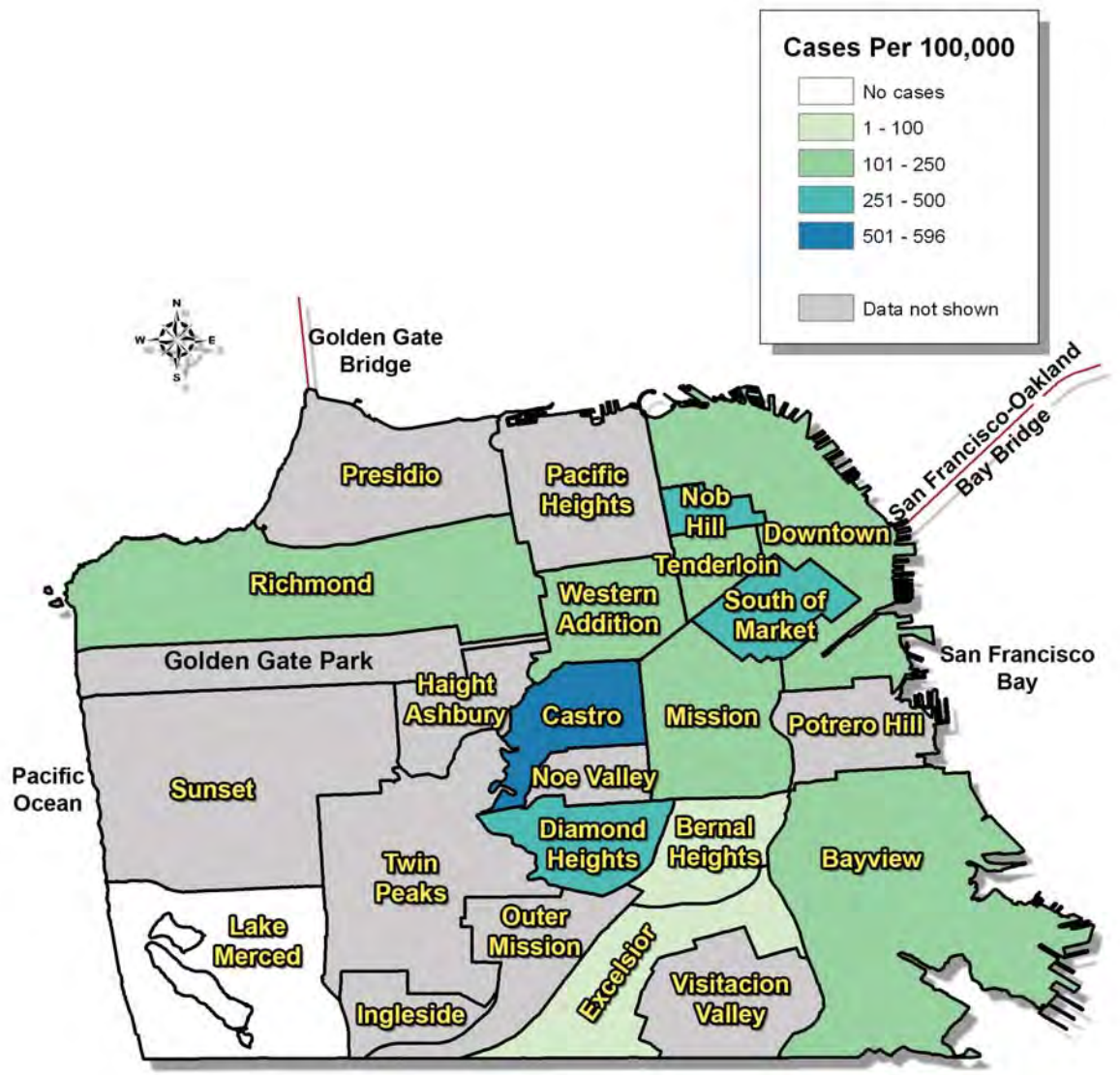

The overall rate of HIV/AIDS diagnoses among African Americans in San Francisco was 295 per 100,000 cases, which is more than twice the rate for whites. The rates of new diagnoses among African Americans were high in many of the city's eastern neighborhoods: Downtown (436 per 100,000), Mission (435 per 100,000), and Tenderloin (312 per 100,000). Rates were not calculated for eleven neighborhoods because there were less than five cases diagnosed in these neighborhoods which would result in unreliable estimates.

## Latinos diagnosed with HIV, 2009-2010



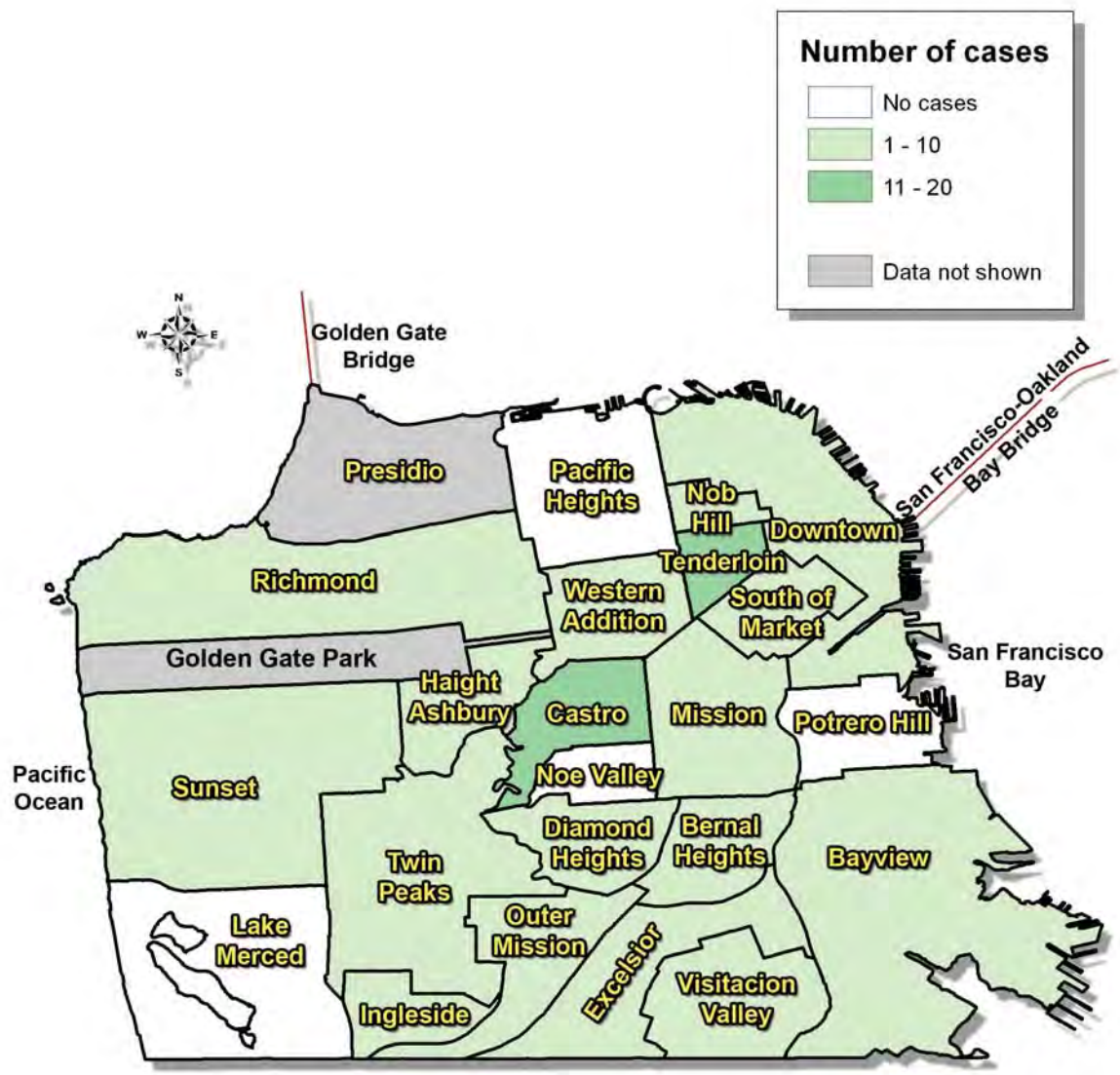

Latinos made up 22% (N=210) of the newly diagnosed cases in 2009-2010, and these were distributed across most San Francisco neighborhoods. The neighborhood with the highest number of new diagnoses among Latinos was the Mission (N=36). The Tenderloin and Castro neighborhoods followed closely with 15 and 14 new diagnoses among Latinos, respectively. Lake Merced was the only neighborhood without a new Latino case. There were 22 newly diagnosed cases among homeless Latinos (not displayed).

# Rates of new HIV diagnoses among Latinos, 2009-2010



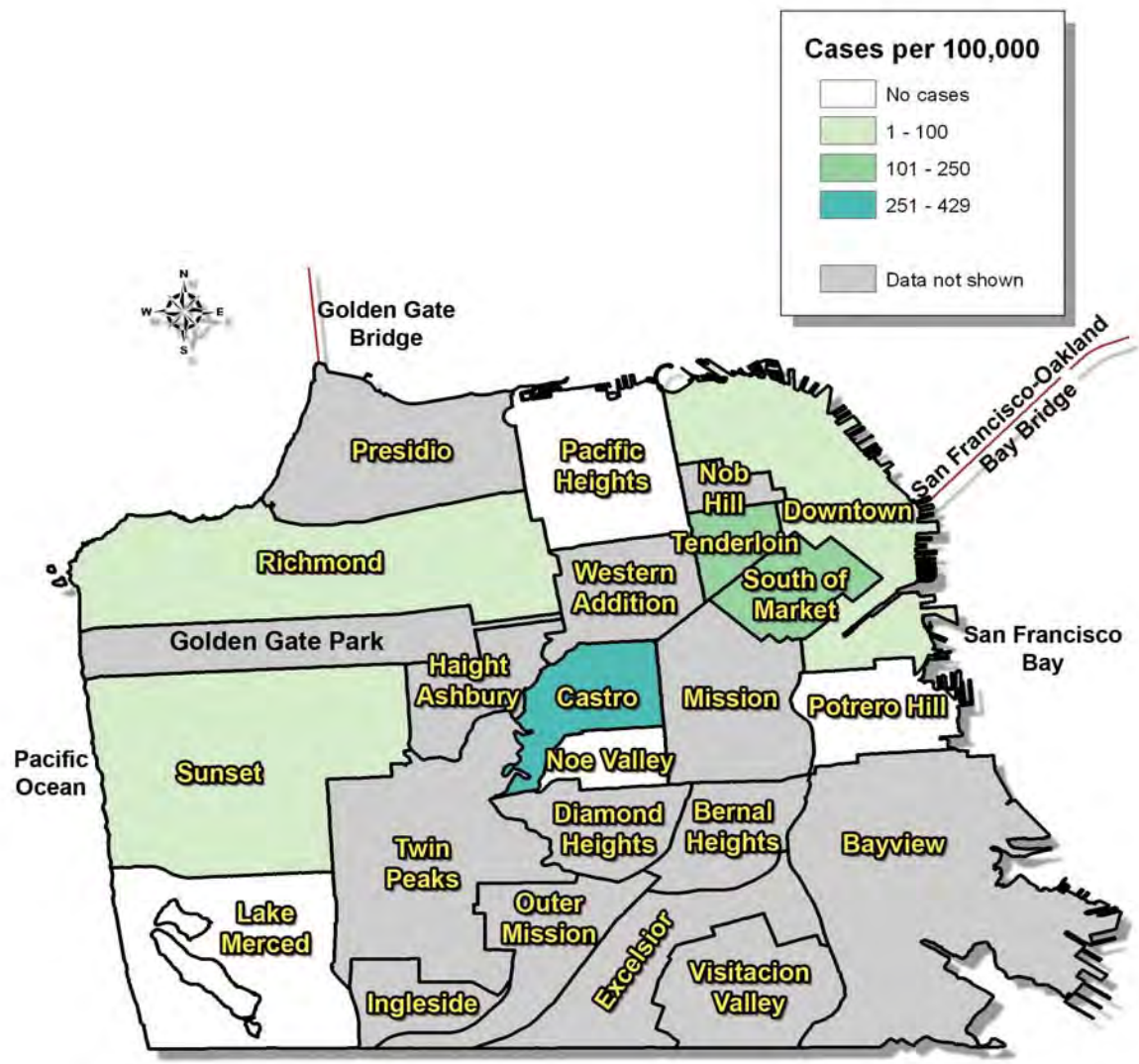

The overall HIV/AIDS diagnosis rate among Latinos was 172 per 100,000. Castro had the highest diagnosis rate among Latinos at 595 per 100,000. In total, seven neighborhoods had higher diagnosis rates for Latinos than the overall rate: Castro, Nob Hill, Diamond Heights, South of Market, Western Addition, Downtown, and the Tenderloin. Rates were not calculated for ten neighborhoods because there were less than five cases diagnosed in these neighborhoods which would result in unreliable estimates.

# Asians/Pacific Islanders diagnosed with HIV, 2009-2010




Asians/Pacific Islanders accounted for 9% (N=92) of all new diagnoses in San Francisco during 2009-2010. Newly diagnosed HIV/AIDS cases among Asians were scattered across many of the city's neighborhoods. The neighborhoods with the highest number of new Asian cases were the Tenderloin (N=13) and the Castro (N=11). Four neighborhoods had no new Asian cases: Pacific Heights, Noe Valley, Potrero Hill, and Lake Merced. There were 10 new HIV/AIDS diagnoses among homeless Asians (not displayed).

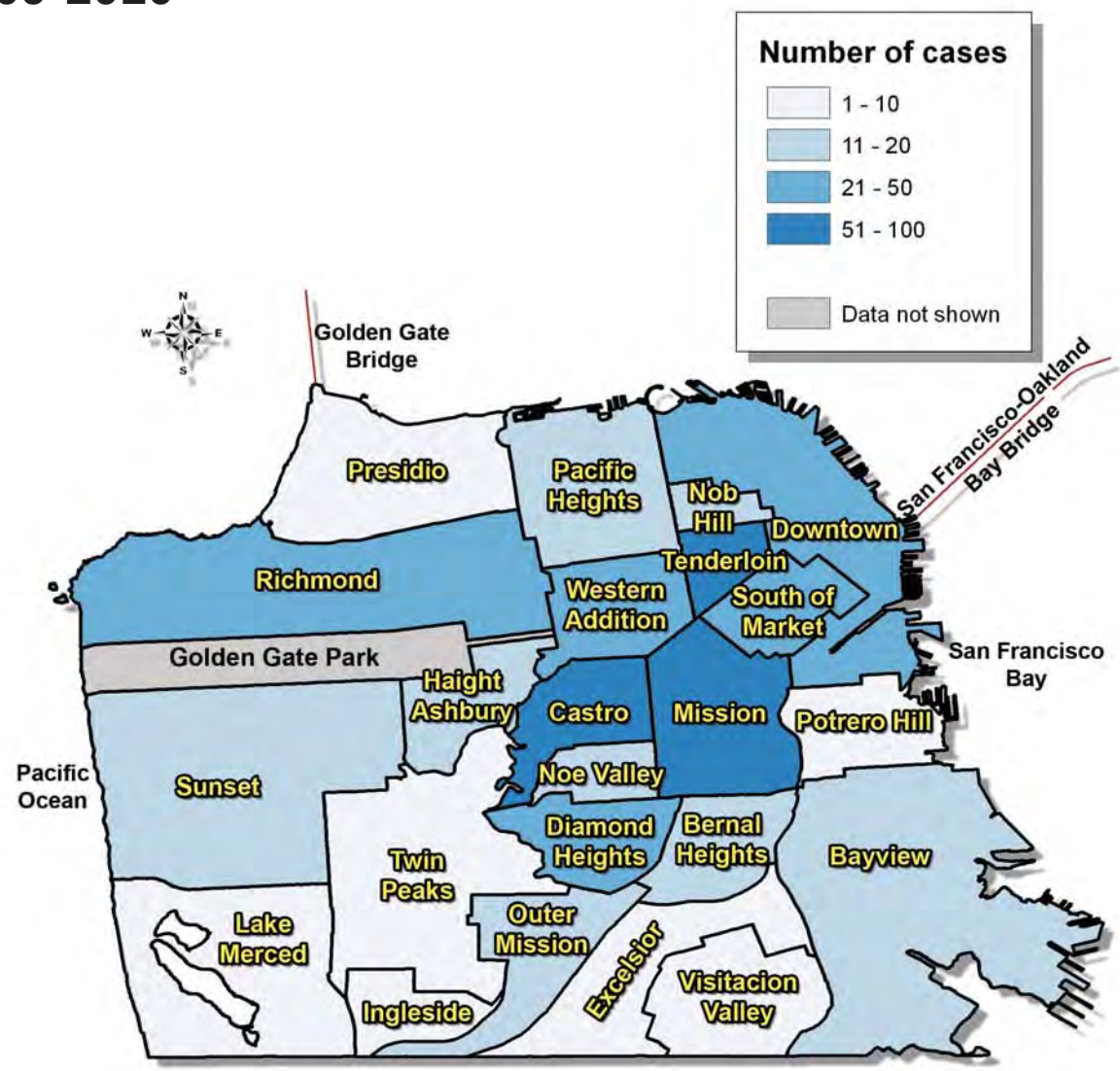
# Rates of new HIV diagnoses among Asians/Pacific Islanders, 2009-2010




The HIV/AIDS diagnosis rate among Asian/Pacific Islanders in San Francisco during 2009-2010 was 34 per 100,000, the lowest among all race/ethnicity groups. The diagnosis rate among Asians was highest in the Castro, at 429 per 100,000, a rate that is over 12 times the overall level. Other neighborhoods with higher diagnosis rates for Asians were the Tenderloin (117 per 100,000) and South of Market (103 per 100,000).

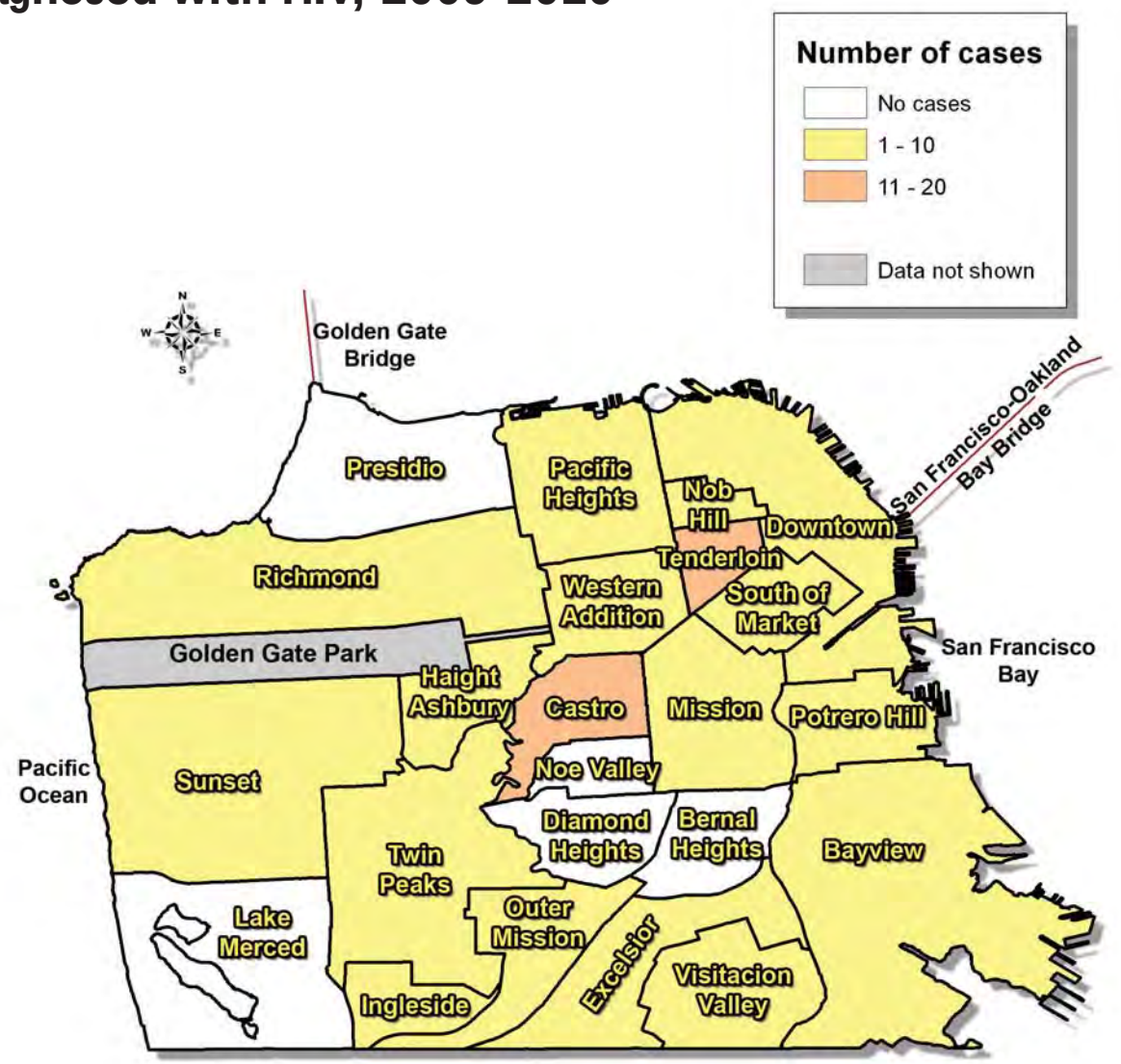
# New HIV diagnoses by exposure category

## Men who have sex with men (MSM) diagnosed with HIV, 2009-2010



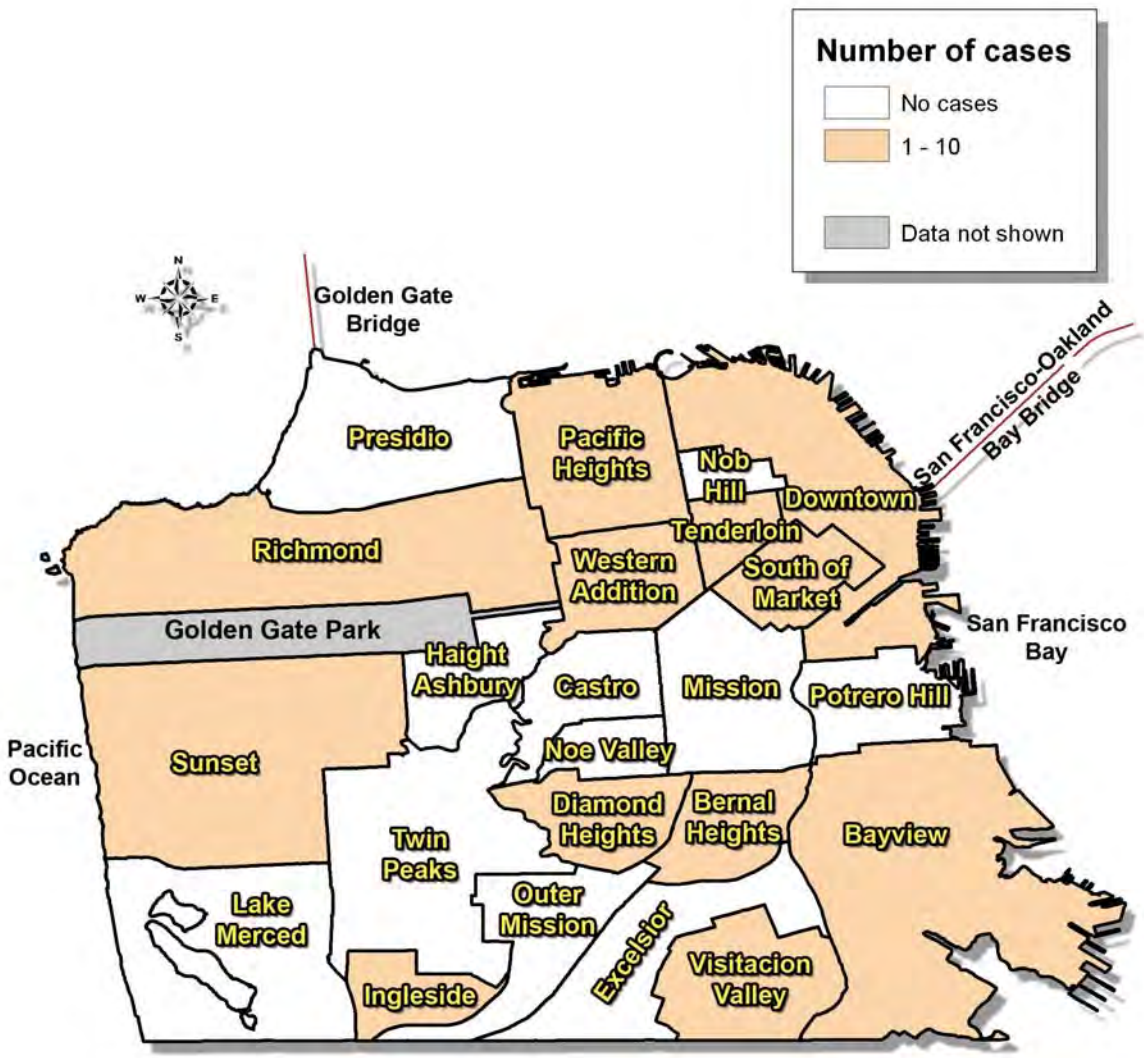

Over 68% of the new San Francisco HIV/AIDS cases were among MSM. Of the 664 new MSM cases, the largest number (N=98) were from the Castro. The Mission and the Tenderloin also contributed a large number of cases (N=65 and N=55, respectively). Newly diagnosed HIV/AIDS cases among homeless MSM numbered 47 (not displayed).

# Men who have sex with men and inject drugs (MSM-IDU) diagnosed with HIV, 2009-2010



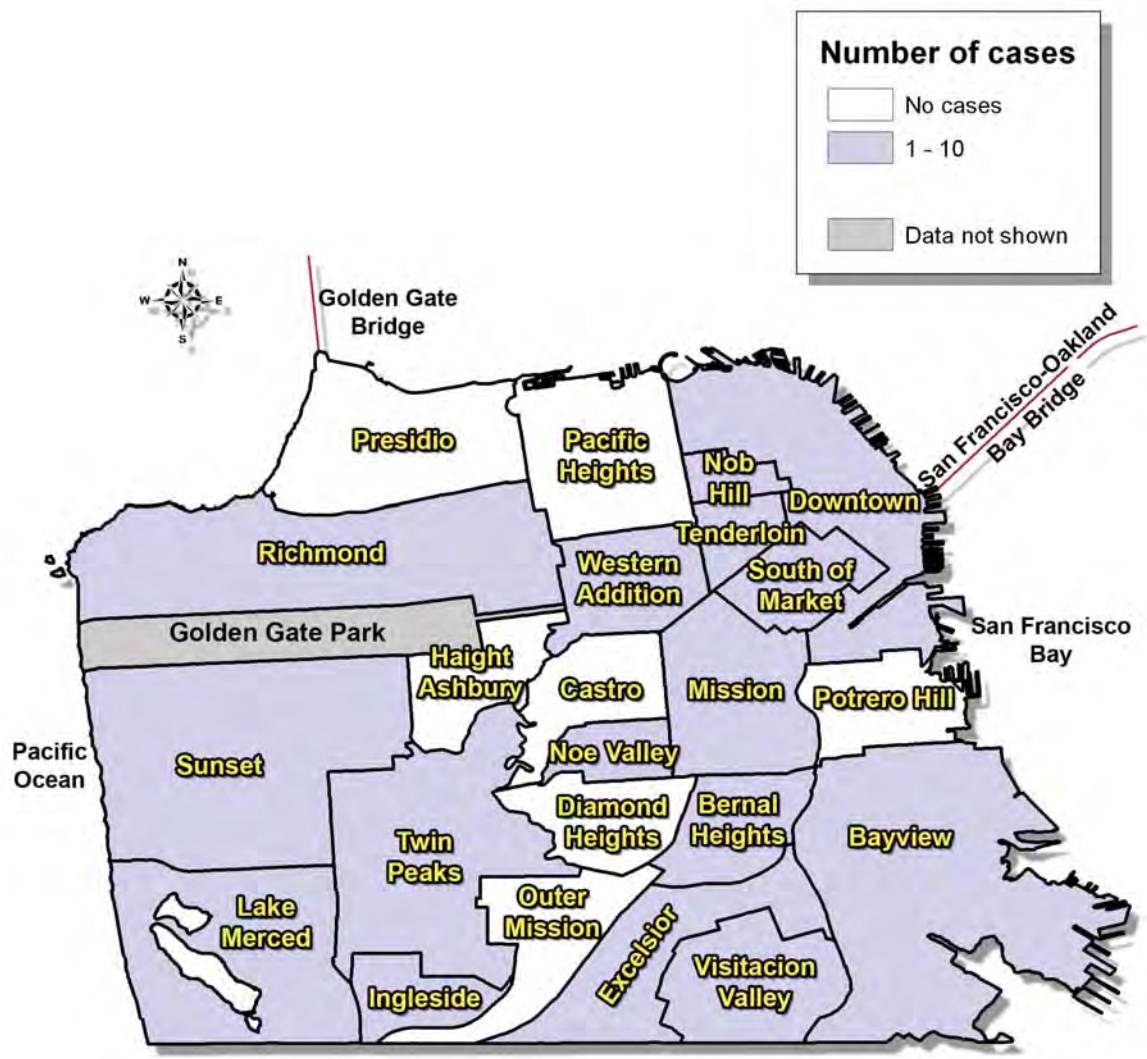

MSM-IDU accounted for 130 (13%) of the newly diagnosed HIV/AIDS cases. These were distributed across most of the city's neighborhoods. The neighborhood with the largest number of new cases diagnosed among MSM-IDU was the Tenderloin, with 20 new cases, twice the number of the next most affected neighborhood, the Castro. Lake Merced, Diamond Heights, Noe Valley, and Bernal Heights neighborhoods had no new MSM-IDU HIV/AIDS cases. Homeless MSM-IDU newly diagnosed during 2009-2010 outnumbered new diagnoses from any single neighborhood (N=29, not displayed).

# Injection drug users (IDU) diagnosed with HIV, 2009-2010




IDU accounted for 63 (6% of) new HIV/AIDS diagnoses during 2009-2010. These were distributed across about half of San Francisco neighborhoods, with the maximum number per neighborhood reaching only 6 new IDU cases. There were 25 newly diagnosed IDU HIV/AIDS cases occurred among the homeless (not displayed).

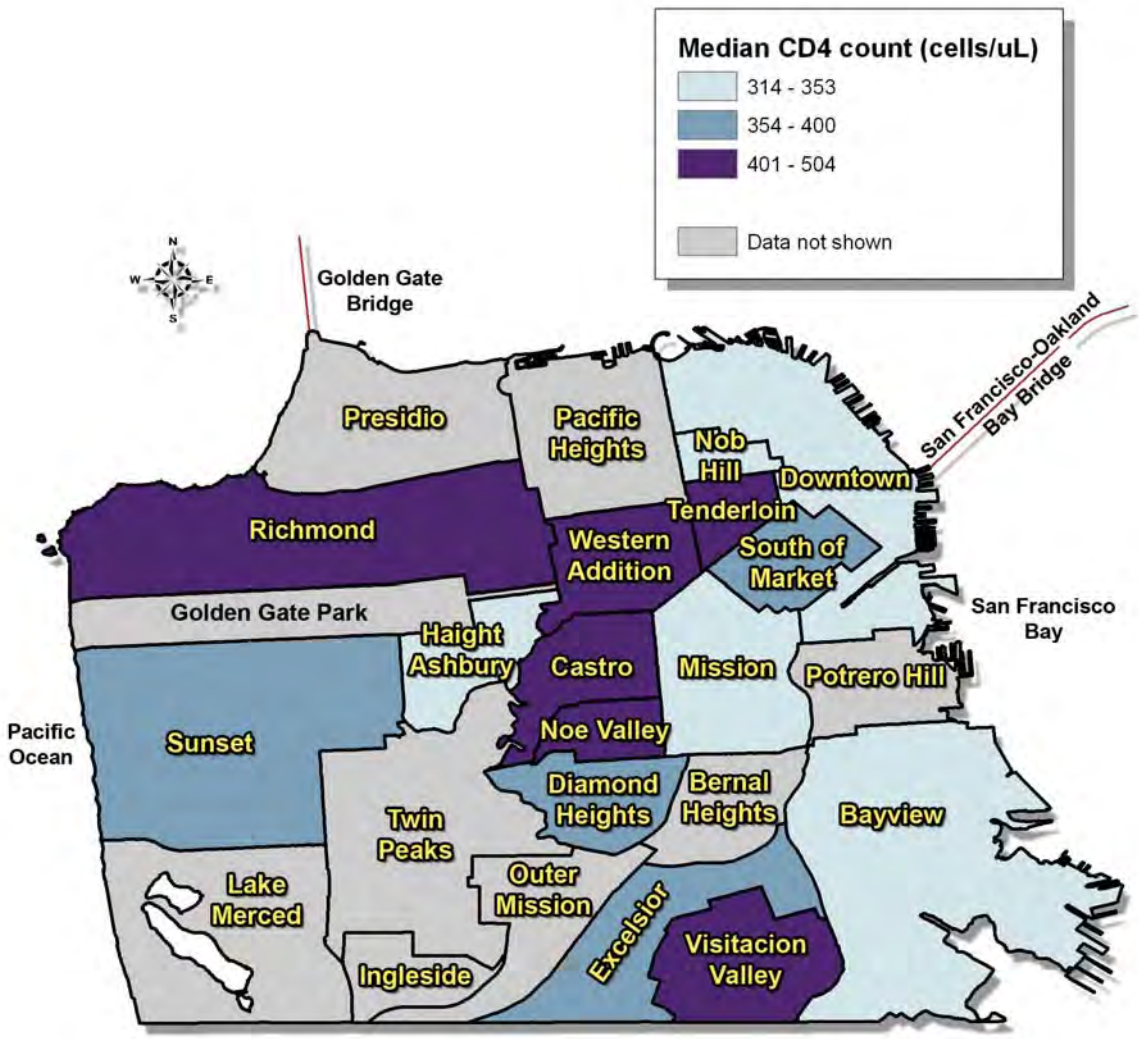
# Heterosexuals diagnosed with HIV, 2009-2010




Fewer than 6% (N=56) of the newly diagnosed cases in San Francisco during 2009-2010 were among heterosexuals. These were distributed across most San Francisco neighborhoods. Bayview had the highest number of heterosexual cases (N=10) followed by the Mission (N=6) and the Western Addition (N=5). New diagnoses among the homeless accounted for seven of these new heterosexual cases (not displayed).

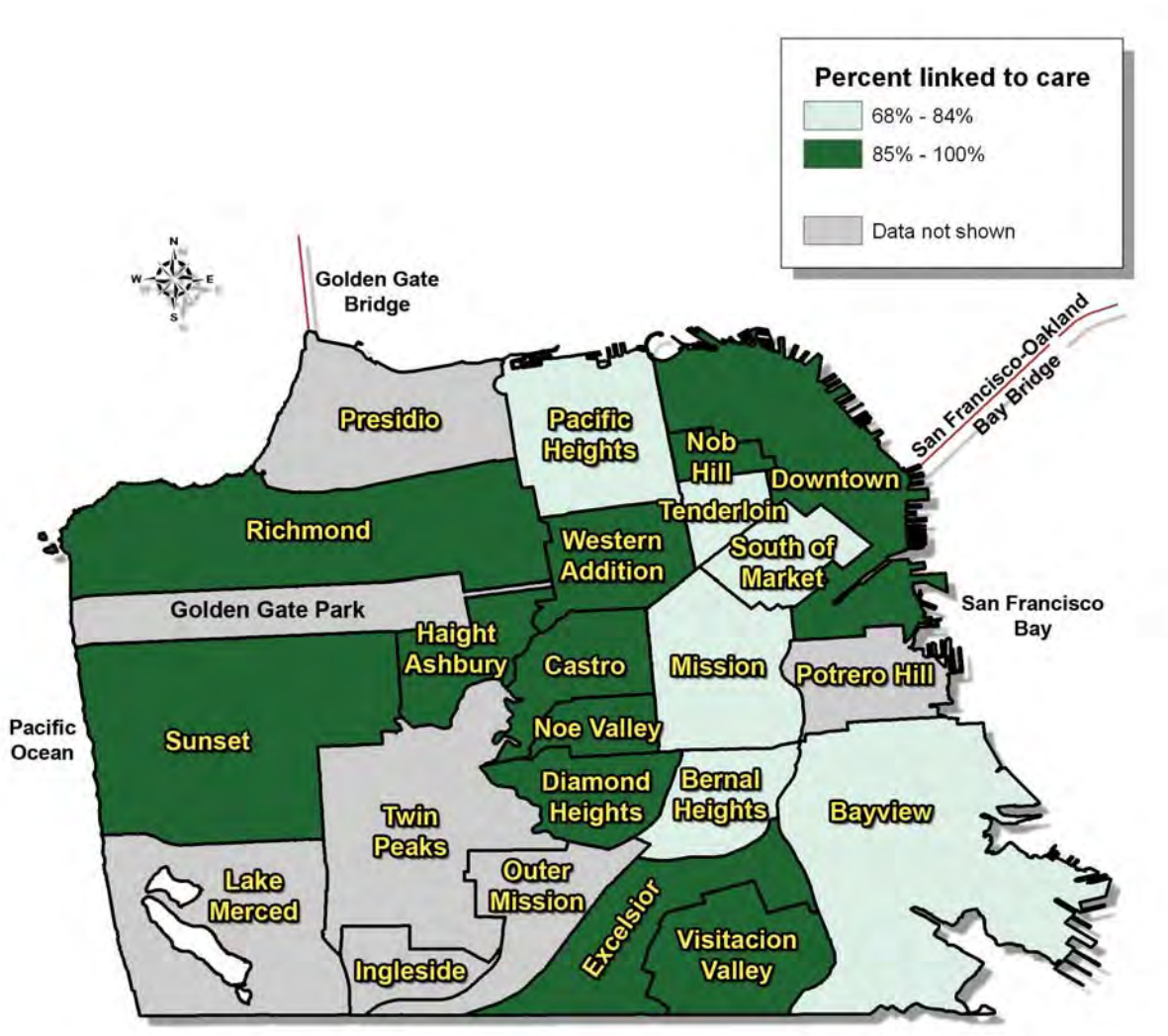
# HIV Care among Persons with HIV/AIDS

# Median CD4 count at time of diagnosis among HIV cases diagnosed in 2009-2010



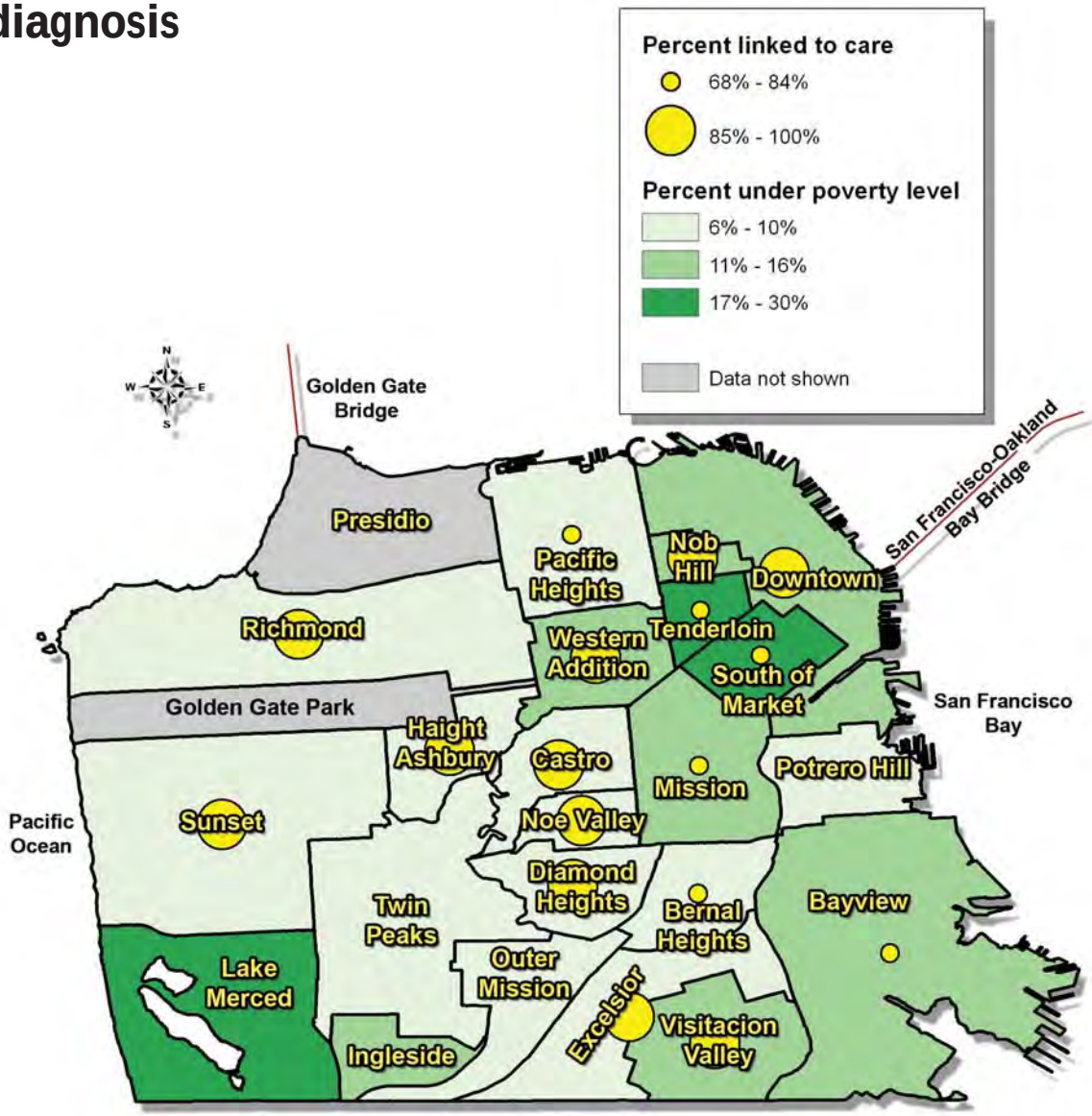

Lower CD4 counts at time of HIV diagnosis generally reflect delays in HIV testing or linkage to care. Neighborhoods with less than 15 cases were excluded from the median CD4 count calculation because the small case number may yield unreliable results. Neighborhoods with lower CD4 count at time of diagnosis include Bayview, Mission, Downtown, Nob Hill, and Haight Ashbury. The median CD4 count was higher for cases who resided in Tenderloin at time of diagnosis (445 cells/uL) and for persons who were homeless at the time of diagnosis (432 cells/uL; not displayed on the map) suggesting the availability and success of HIV testing services in the Tenderloin area and for homeless persons.

# Proportion of HIV cases diagnosed in 2009-2010 who were linked to care within 3 months of diagnosis



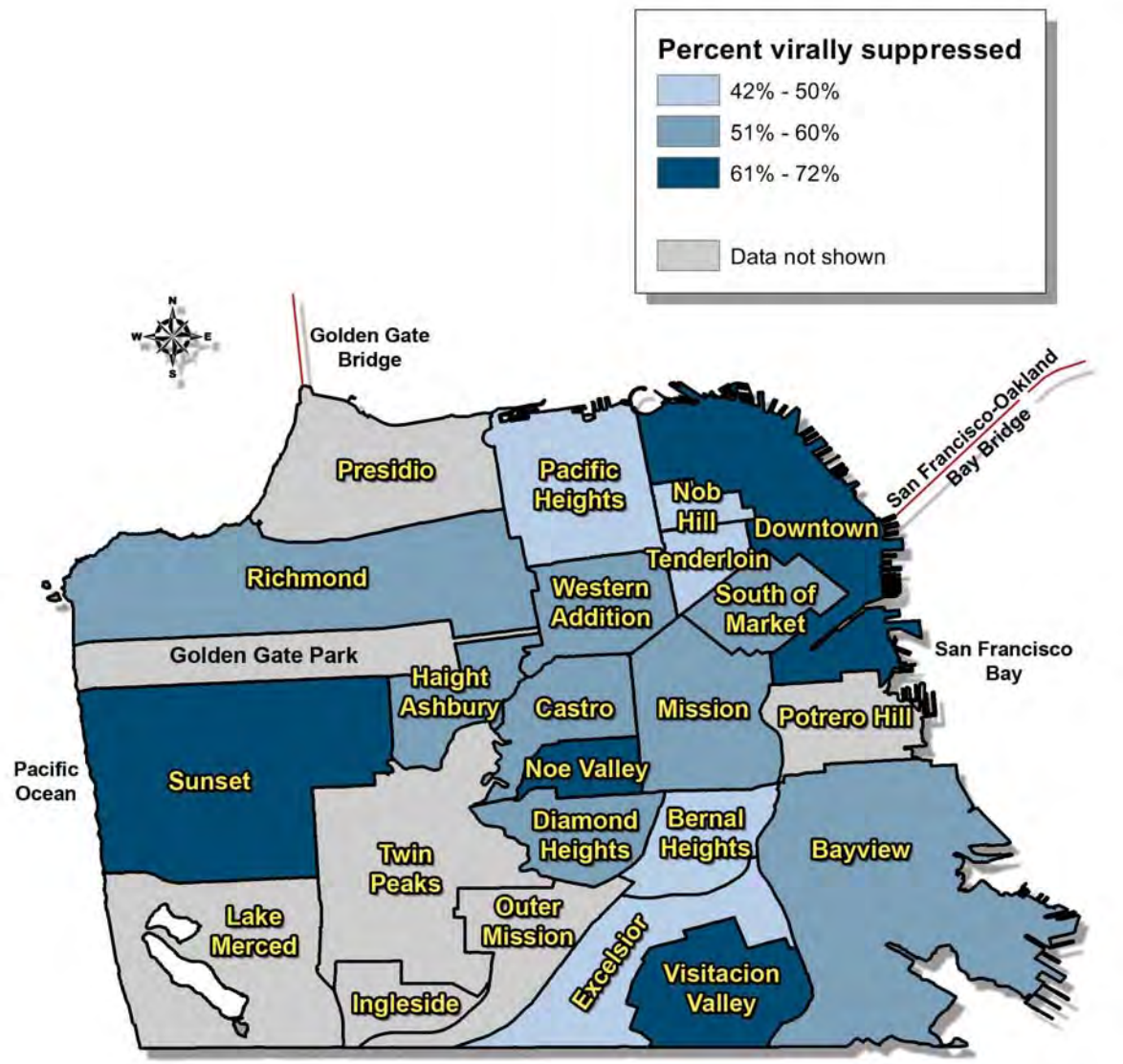

Overall, 84% of persons diagnosed with HIV in 2009-2010 were linked to care within at least three months of diagnosis. Neighborhoods with less than 15 cases were excluded from the care linkage calculation because the small case number may yield unreliable results. Neighborhoods where less than 85% of persons were linked to care within three months of diagnosis include Bayview, Bernal Heights, Mission, South of Market, Tenderloin, and Pacific Heights. One hundred percent of newly diagnosed cases in Haight Ashbury and Visitacion were linked to care within three months, however the case number in these neighborhoods was relatively small (N=16 and N=18, respectively). Eighty-six percent of homeless persons were linked to care within three months after HIV diagnosis (not displayed on the map).

# Proportion of San Francisco residents living under the poverty level and the proportion of HIV cases diagnosed in 2009-2010 who were linked to care within 3 months of diagnosis



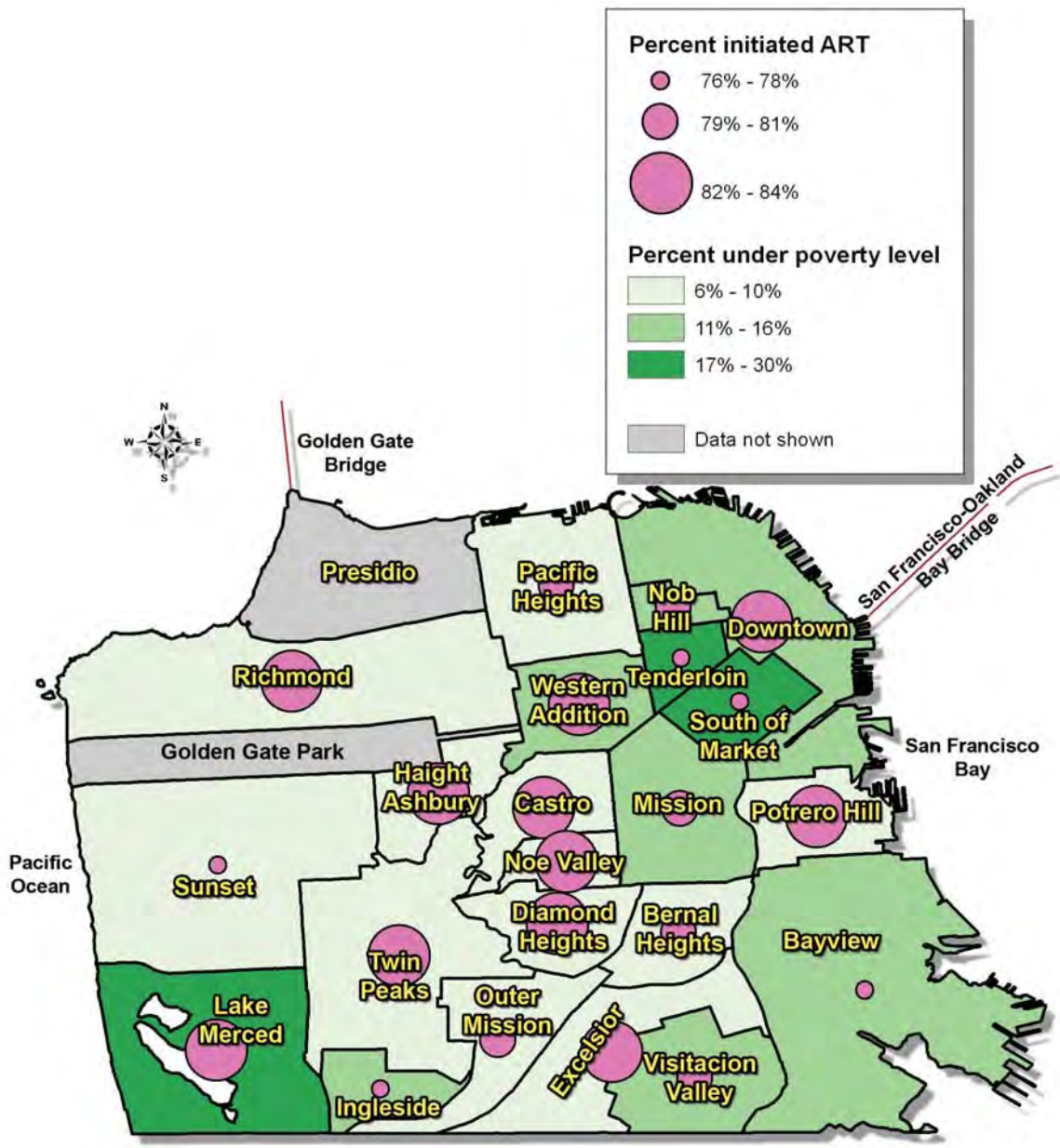

In the Tenderloin, South of Market, Bayview, and Mission districts, more than 10% of the residents were living under the poverty level and less than 85% of HIV cases were linked to care within three months of diagnosis. In contrast, neighborhoods with lower proportions of poverty among residents exhibited higher proportions linked into care with the exception of Bernal Heights and Pacific Heights. In the other neighborhoods where residents living under the poverty level was greater than 11%, greater than 85% of HIV cases were linked into care within three months of diagnosis.

# Proportion of HIV cases diagnosed in 2009-2010 who achieved viral suppression within 12 months after HIV diagnosis



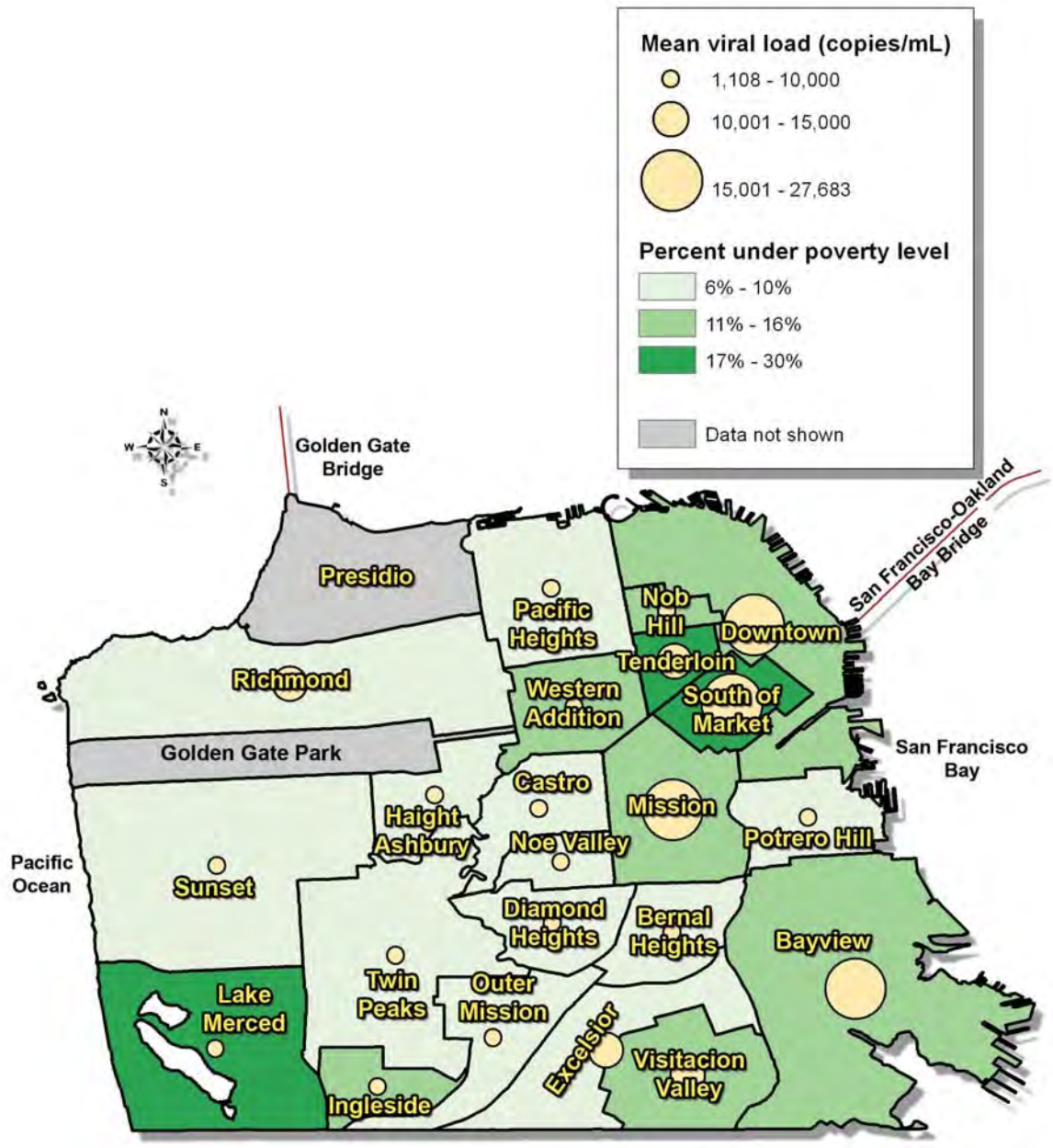

Half of the persons diagnosed with HIV in 2009-2010 were virally suppressed one year after their HIV diagnosis. Neighborhoods with less than 15 cases were excluded from the viral suppression calculation because the small case number may yield unreliable results. Most neighborhoods had more than 50% of their cases virally suppressed within one year of diagnosis. Pacific Heights (42%) had a relatively low proportion of viral suppression compared to other neighborhoods. Homeless persons had the lowest proportion of viral suppression (39%, not displayed on the map).

# Proportion of San Francisco residents living under the poverty level and antiretroviral therapy (ART) use among living HIV/AIDS cases, 2010



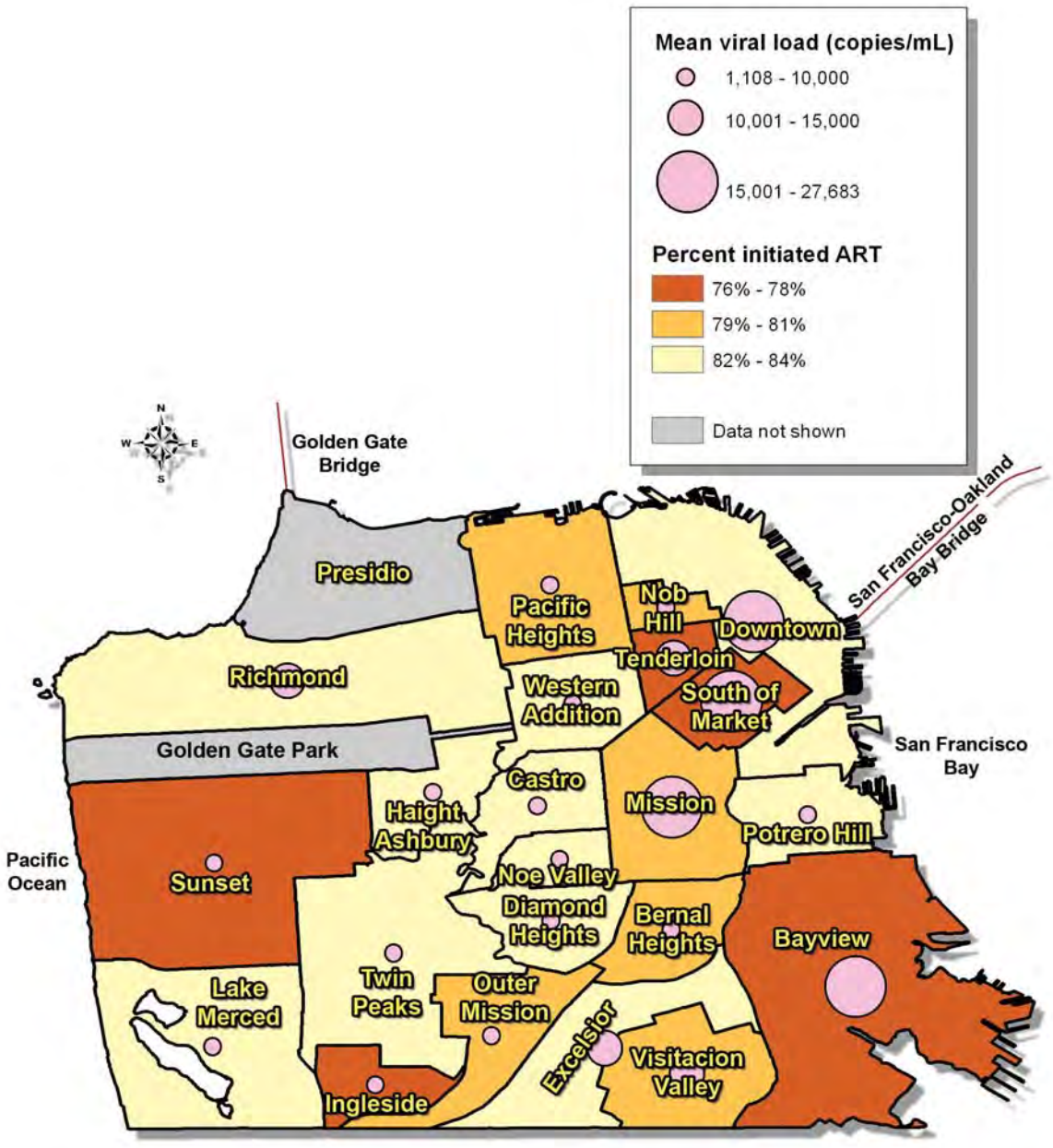

Overall the level of ART use is high in the city. Neighborhoods with slightly lower ART coverage (76%-78%) among their living cases included Tenderloin, South of Market, Bayview, Ingleside, and Sunset. Most of these neighborhoods (except Sunset) also a had higher proportion of residents living below poverty level. ART use among homeless cases was much lower (57%, not displayed on the map).

# Proportion of San Francisco residents living under the poverty level and mean community viral load among living HIV/AIDS cases, 2010




Mean community viral load was defined as the average of the most recent viral load results among cases with lab test results in 2010. The overall level of community viral load was low in the City. Neighborhoods with higher mean community viral load included Downtown, South of Market, Mission, and Bayview. These areas also had higher proportion of residents living below poverty level. Homeless persons had the highest mean viral load of 43,859 copies/mL (not displayed on the map).

# Antiretroviral therapy (ART) use and community viral load among living HIV/AIDS cases, 2010

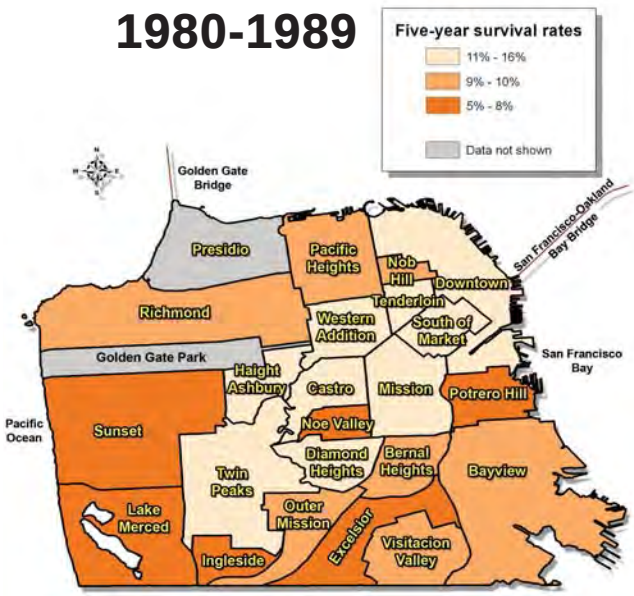



Less than 79% of persons living with HIV/AIDS in the Tenderloin, South of Market, Bayview, Ingleside, and Sunset neighborhoods had initiated ART. With the exception of the Sunset and Ingleside districts, these neighborhoods had higher community viral load.

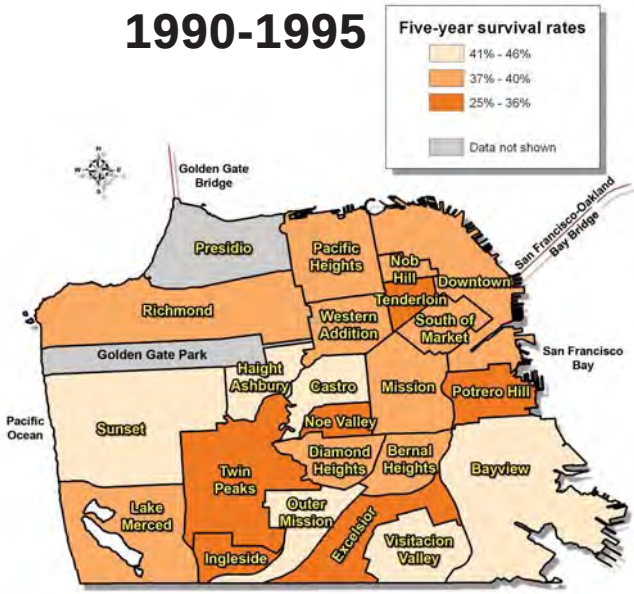
# Five-Year AIDS Survival

# Five-year survival among persons diagnosed with AIDS

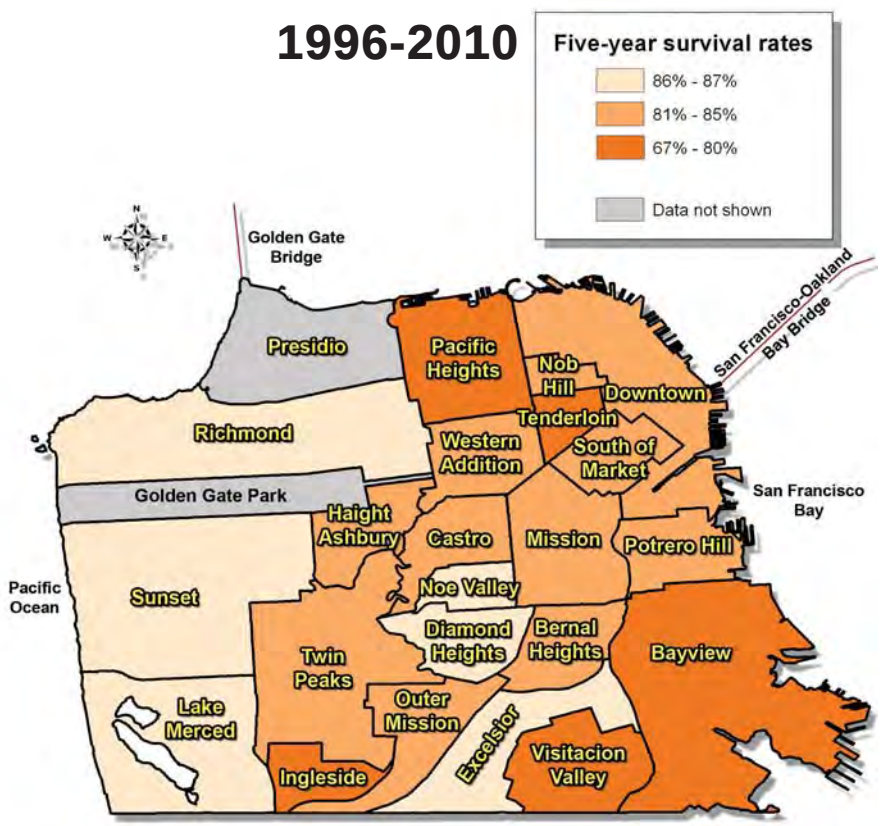
## 1980-1989




## 1990-1995




## 1996-2010



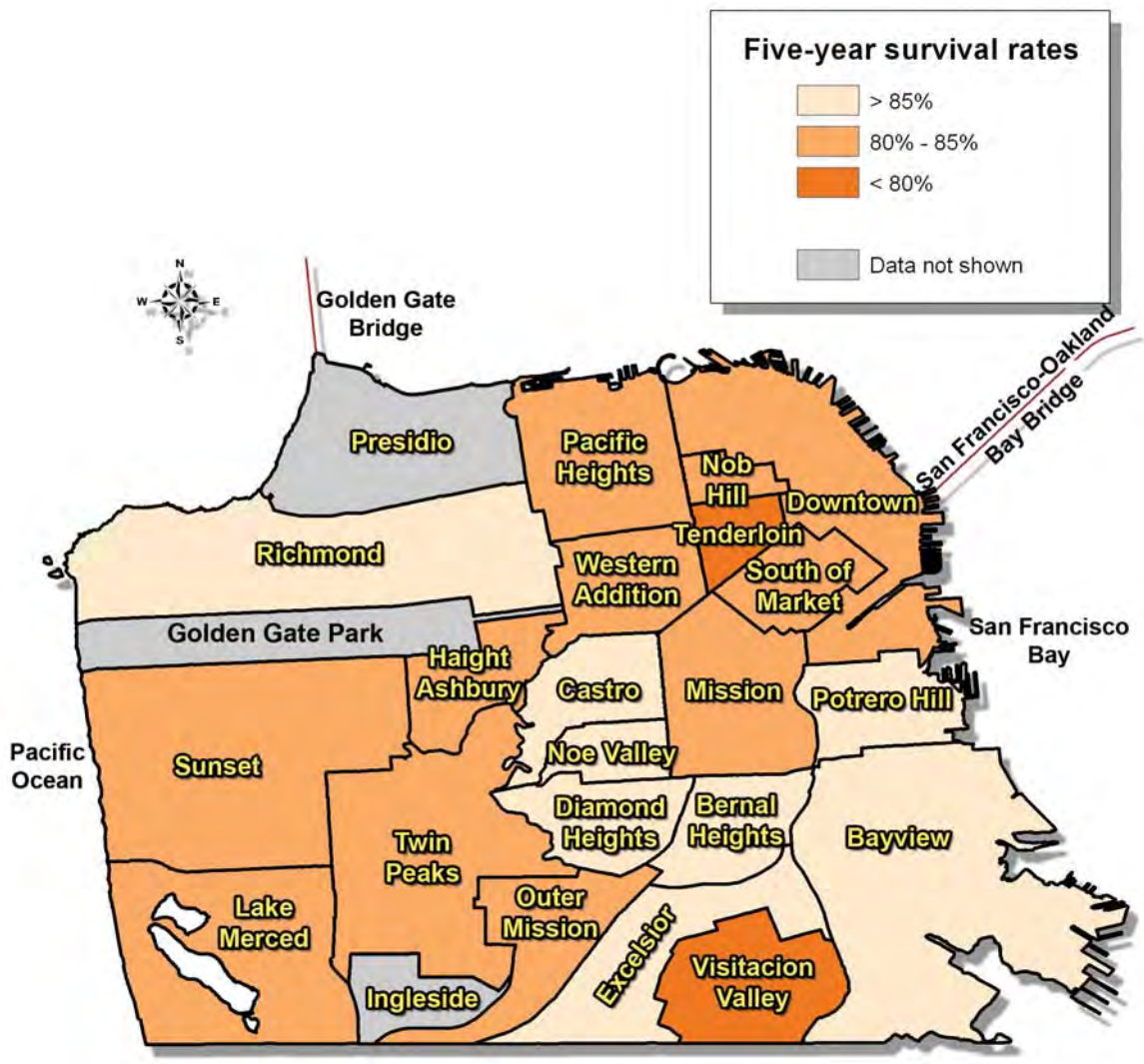
These maps show the geographic distribution of the proportion of persons estimated to survive at least five years after AIDS diagnosis during three time periods: 1980-1989, 1990-1995, and 1996-2010. The three maps illustrate the significant improvement of survival after AIDS over time. Five-year survival was poor during the first 10 years of the AIDS epidemic, which ranged from 5% to 16% among neighborhoods. Survival improved for persons diagnosed between 1990 and 1995 with five-year survival rates ranging from 25% to 46%. With the advent of highly active antiretroviral therapy and its increased availability and widespread use over time, survival greatly improved for persons diagnosed with AIDS between 1996 and 2010. The five-year survival rates ranged from 67% to 87% for persons diagnosed during this time period.

Ingleside neighborhood remained the area with the lowest five-year survival in all three time periods: 5% in 1980-1989, 25% in 1990-1995, and 67% in 1996-2010. Other neighborhoods fared worst during the first decade of epidemic include Potrero Hill, Lake Merced, Noe Valley, and Sunset. During 1996 to 2010, residents diagnosed with AIDS in several less-affluent neighborhoods including Ingleside, Bayview, Tenderloin, and Visitacion Valley, had the worst survival outcomes, which coincided with the lower level of ART usage and higher community viral load (page 99, HIV Care among Persons with HIV/AIDS section). Persons who were homeless at time of AIDS diagnosis during 1996 and 2010 had the low five-year survival rate of 69% (not displayed).

Survival is estimated by Kaplan Meier method, using data on the period from initial AIDS diagnosis to death or to the date a person was last known to be alive. Dates of death were obtained through review of local death certificates, reports from the State Office of AIDS, and matches with the Social Security death files and National Death Index (NDI). The NDI match is complete through 2009. The follow-up information of cases was obtained through retrospective and prospective reviews of laboratory records and medical charts.

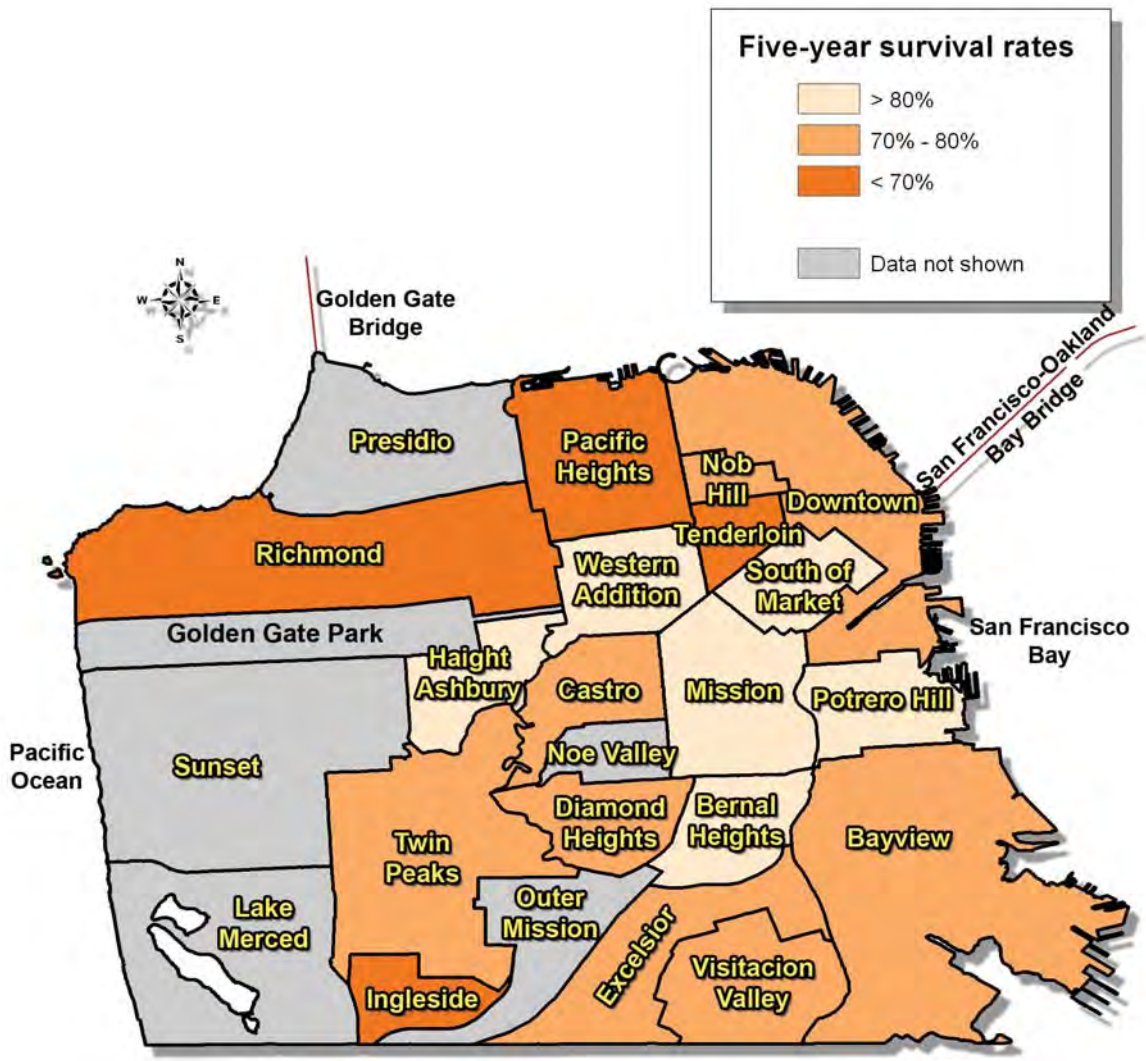
# Five-year AIDS survival by race/ethnicity

## Five-year survival among whites diagnosed with AIDS, 1996-2010



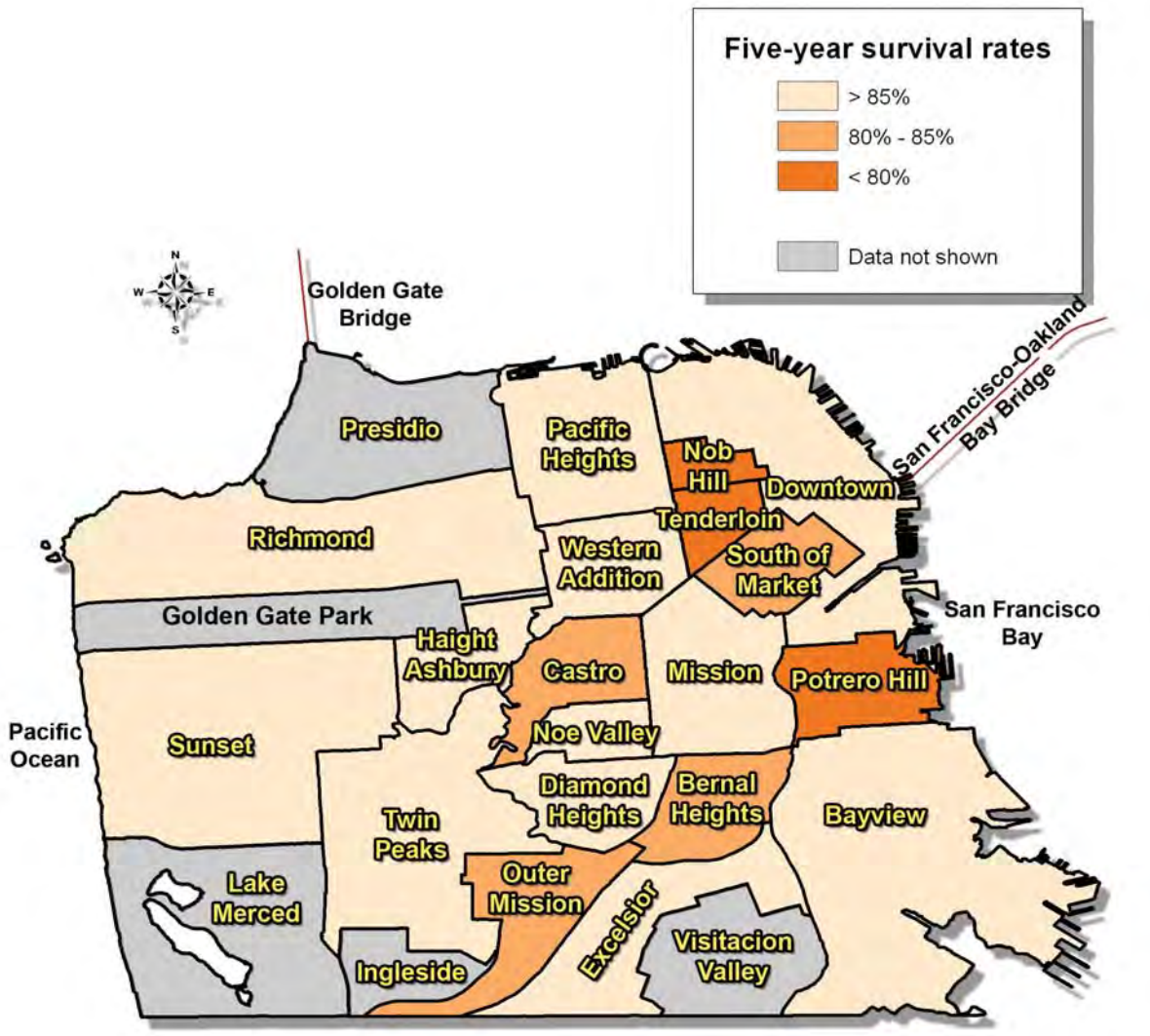

This map shows the geographic distribution of five-year survival among whites diagnosed with AIDS between 1996 and 2010. Neighborhoods with less than 15 whites diagnosed with AIDS were excluded from survival calculation. Whites diagnosed with AIDS in Visitacion Valley had the lowest five-year survival rate (69%), followed by those in Tenderloin with 72%. Whites who were homeless at time of diagnosis fared worst with five-year survival of 67% (not displayed).

# Five-year survival among African Americans diagnosed with AIDS, 1996-2010




This map shows the geographic distribution of five-year survival following AIDS among African Americans diagnosed between 1996 and 2010. Neighborhoods with fewer than 15 African Americans diagnosed with AIDS were excluded from survival calculation. In general, survival was worse for African Americans compared with whites and Latinos. In Pacific Heights, Ingleside, Richmond, and Tenderloin, fewer than 70% of African Americans diagnosed with AIDS survived at least five years after diagnosis. African Americans who were homeless at time of diagnosis had a five-year survival rate of 70% (not displayed).

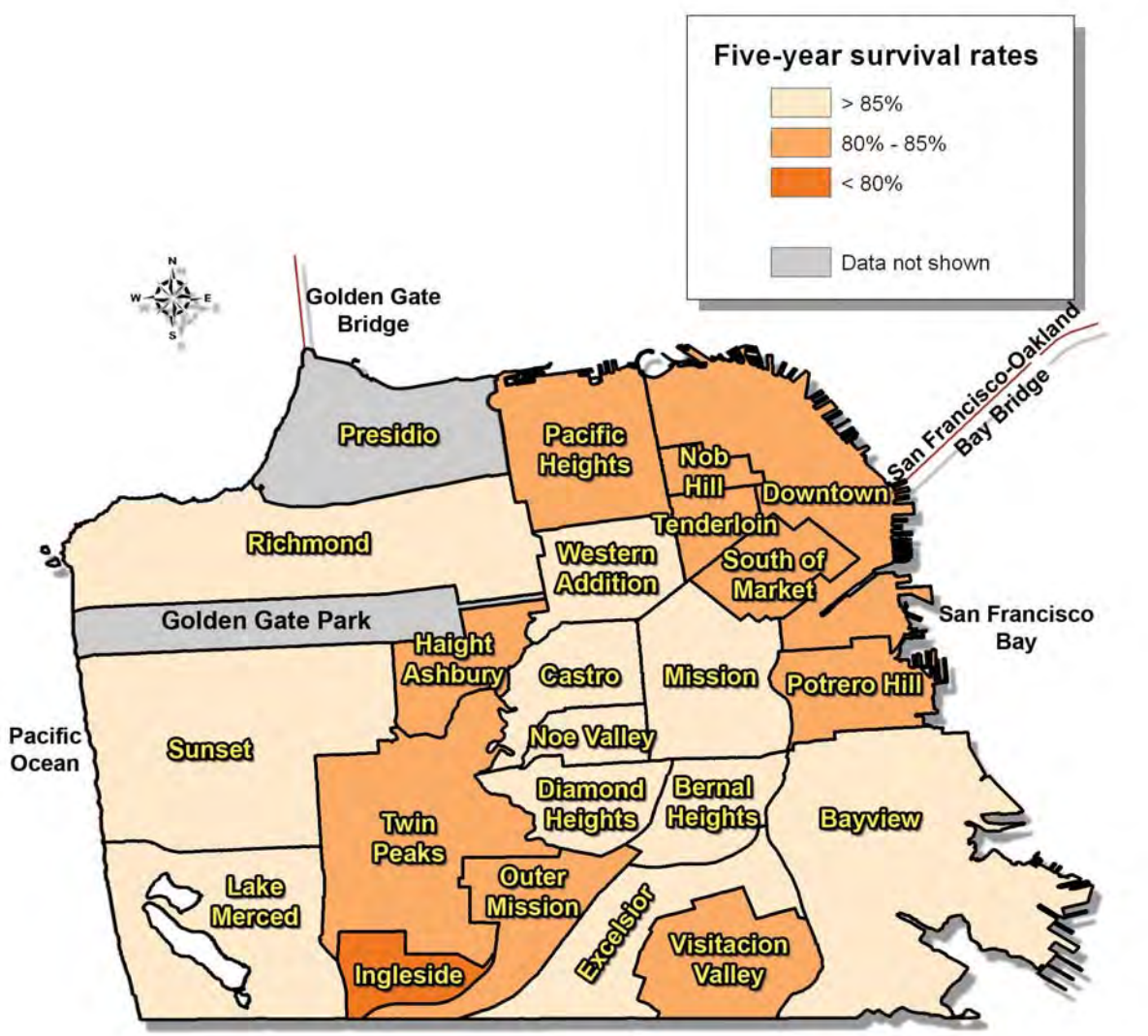
# Five-year survival among Latinos diagnosed with AIDS, 1996-2010




This map shows the geographic distribution of five-year survival following AIDS among Latinos diagnosed between 1996 and 2010. Neighborhoods with less than 15 Latinos diagnosed with AIDS were excluded from survival calculation. Latinos diagnosed with AIDS in Potrero Hill had the lowest five-year survival rate of 66%, followed by those diagnosed in Nob Hill with 75%, and in Tenderloin with 79%. Latinos who were homeless at time of diagnosis had lower five-year survival rate of 71% (not displayed).

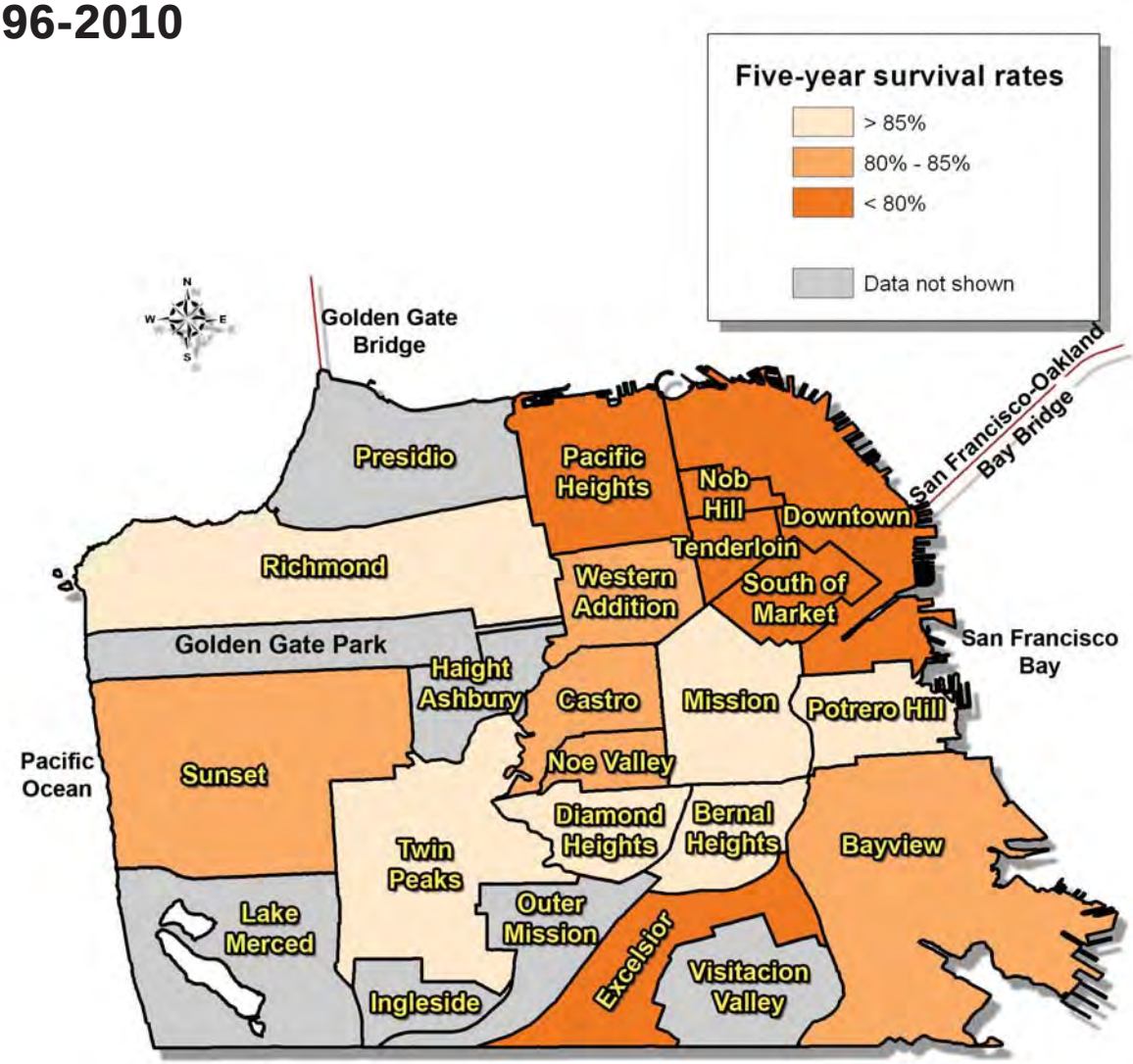
# Five-year AIDS survival by exposure category

## Five-year survival among men who have sex with men (MSM) diagnosed with AIDS, 1996-2010



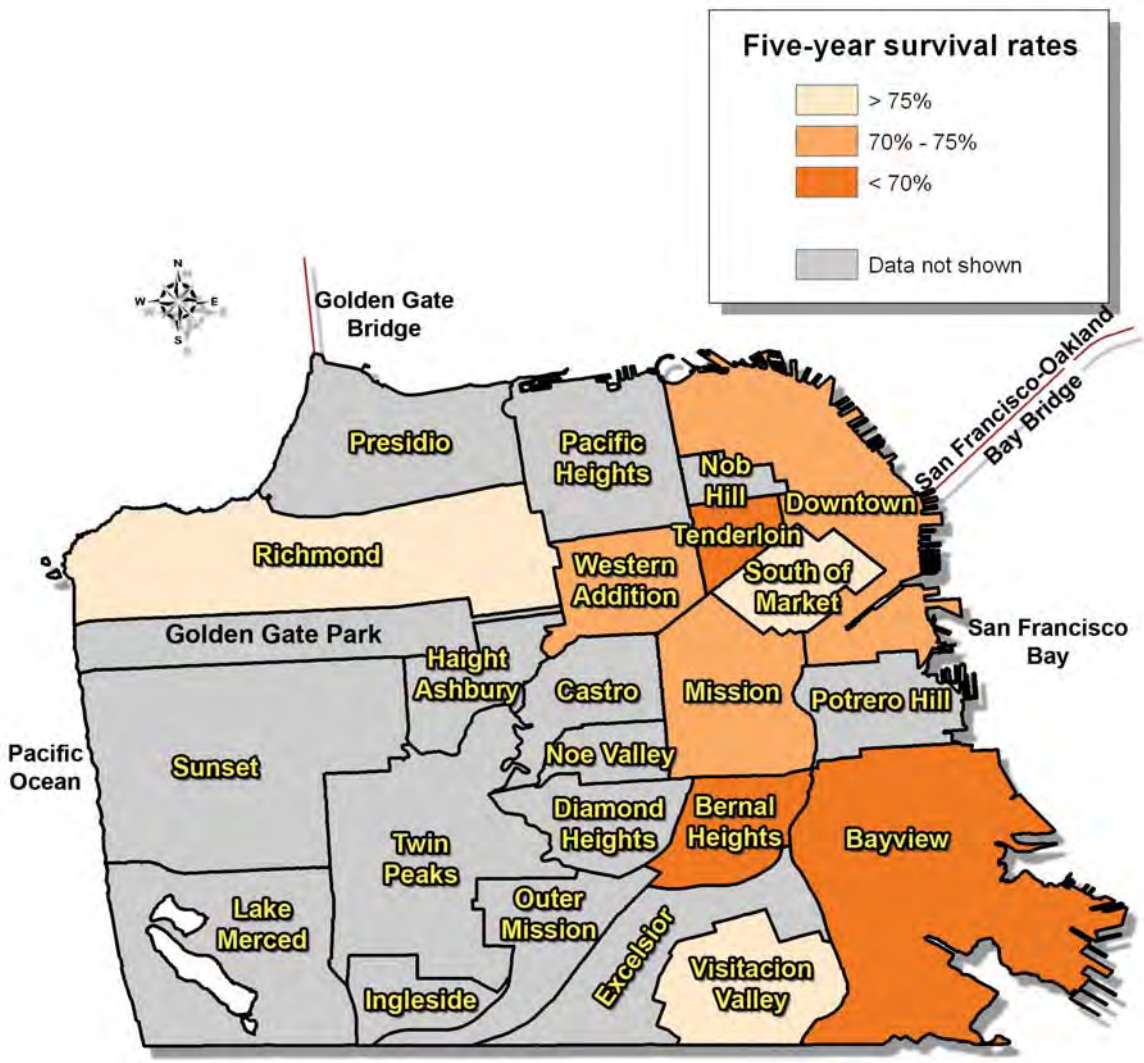

This map shows the geographic distribution of five-year survival following AIDS among MSM diagnosed between 1996 and 2010 by neighborhoods. MSM diagnosed with AIDS in Ingleside had the lowest five-year survival rate of 67%, followed by those diagnosed in Tenderloin where five-year survival rate was 81%. Excelsior neighborhood had most favorable survival outcome (94%). Five-year survival rates ranged between 81% and 89% among the rest of neighborhoods. MSM who were homeless at time of diagnosis had lower five-year survival rate of 78% (not displayed).

# Five-year survival among men who have sex with men and inject drugs (MSM-IDU) diagnosed with AIDS, 1996-2010




This map shows the geographic distribution of five-year survival following AIDS among MSM-IDU diagnosed between 1996 and 2010 by neighborhoods. Neighborhoods with fewer than 15 diagnosed MSM-IDU cases were excluded from survival calculation. Tenderloin and South of Market had the worst survival outcome with five-year survival rates of 69% and 73%, respectively. MSM-IDU who were homeless at time of diagnosis also had lower five-year survival rate of 71% (not displayed).

# Five-year survival among injection drug users (IDU) diagnosed with AIDS, 1996-2010




This map shows the geographic distribution of five-year survival following AIDS among IDU diagnosed between 1996 and 2010 by neighborhoods. A majority of neighborhoods had fewer than 15 diagnosed IDU cases and were excluded from survival calculation. In general, IDU had lower survival than MSM and MSM-IDU. IDU diagnosed with AIDS in Tenderloin had the worst survival with only 55% estimated to survive five years after diagnosis, followed by IDU who were homeless at time of diagnosis whose five-year survival rate was 61%. Other neighborhoods that had lower survival rates are Bernal Heights (64%) and Bayview (66%).

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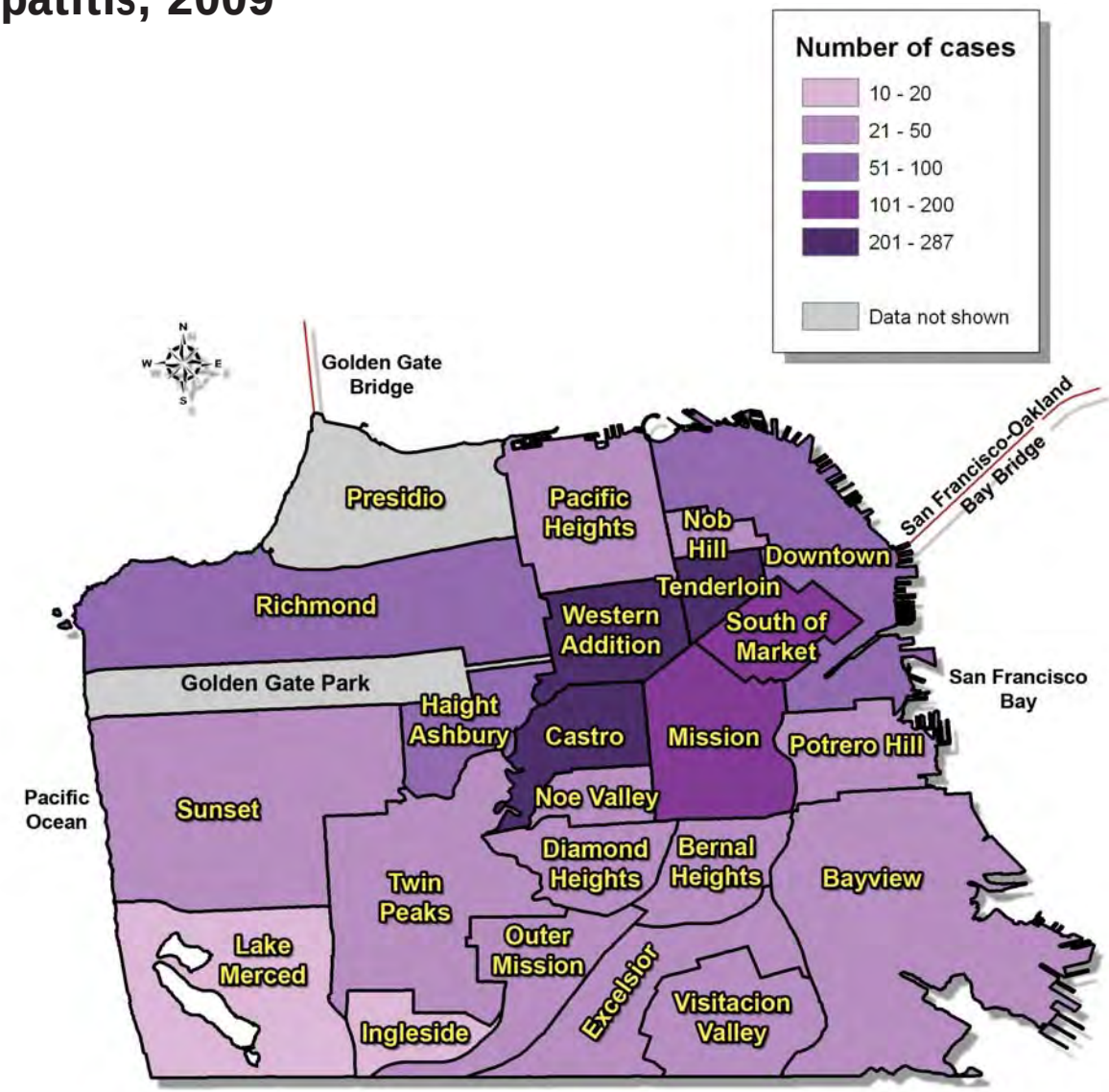
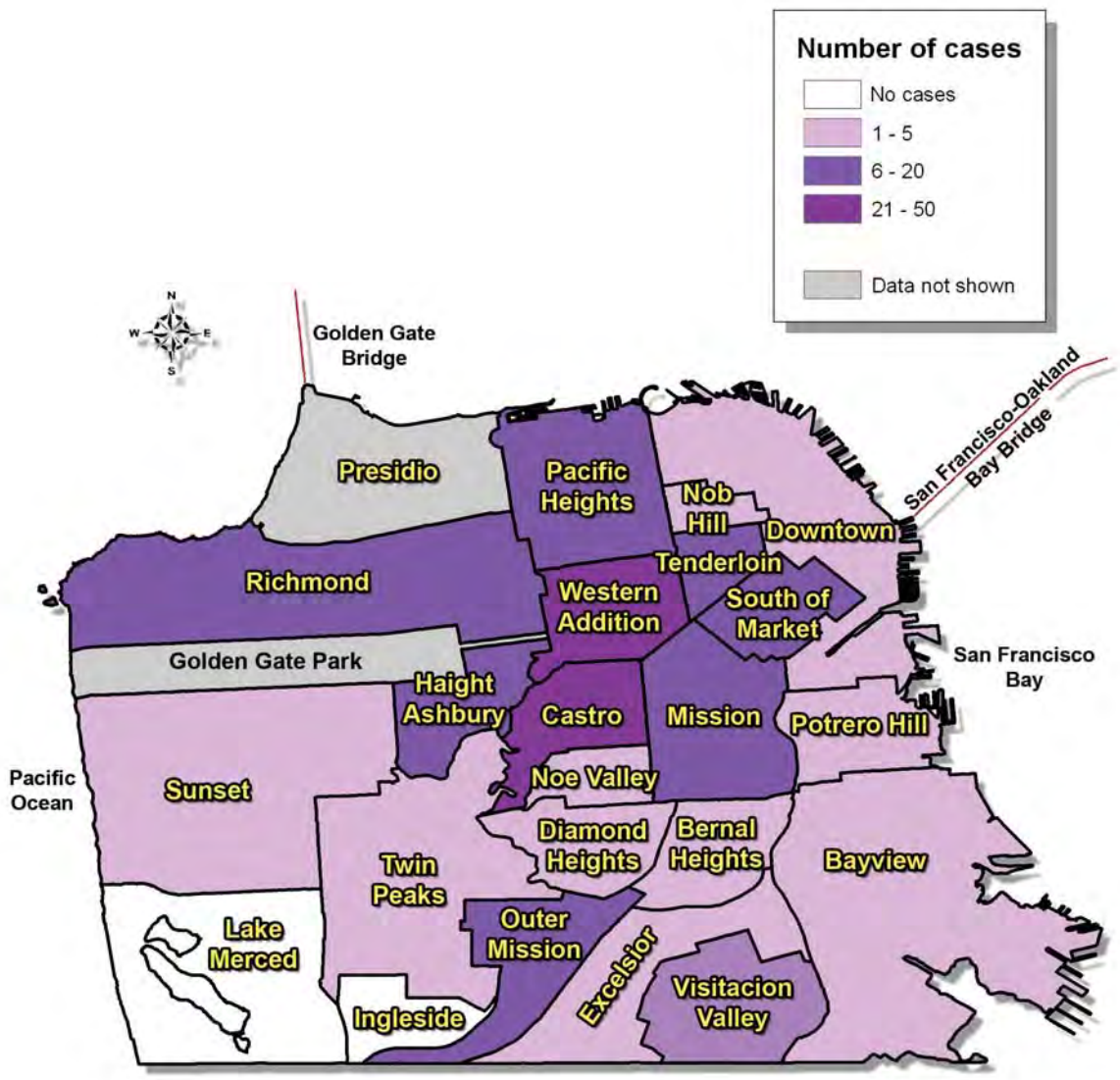
# HIV Co-Infections with Sexually Transmitted Diseases, Tuberculosis and Hepatitis

# Number of living HIV/AIDS cases diagnosed with sexually transmitted diseases, tuberculosis, and hepatitis, 2009



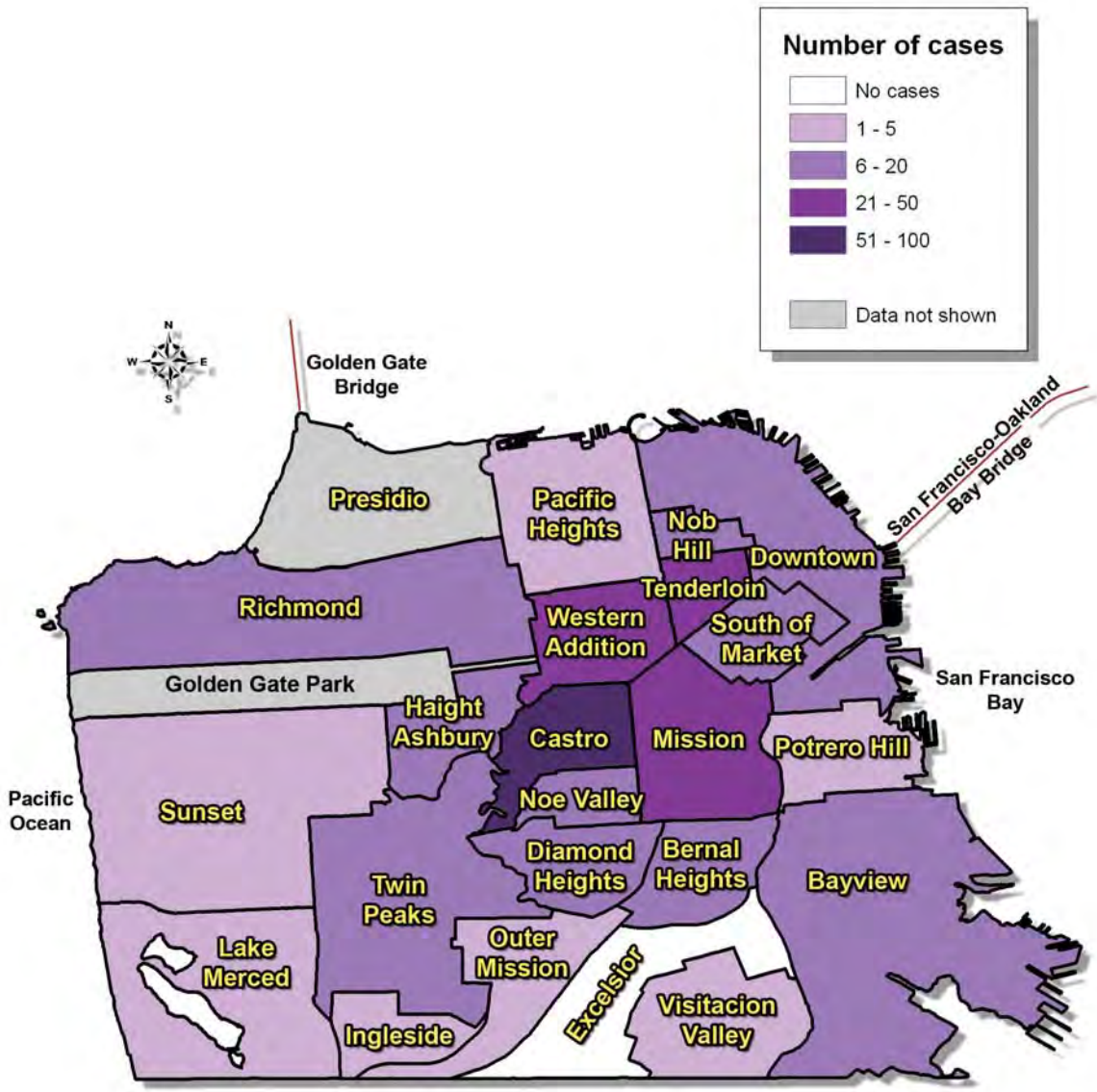

This map shows the geographic distribution of living HIV/AIDS cases with any co-infection by neighborhood as of 2009. Data included cases living in San Francisco at time of HIV/AIDS diagnosis and were living with HIV/AIDS as of December 31, 2009. Co-infections included a diagnosis of syphilis, gonorrhea, or chlamydia in 2009 and tuberculosis ever (latent or active), hepatitis C virus ever (acute or chronic) or chronic hepatitis B virus ever. There were a total of 1,908 HIV-infected cases in San Francisco with at least one other co-infection as of 2009. The neighborhoods with the highest number of living HIV/AIDS cases with at least one co-infection are the Castro (N=287), Tenderloin (N=259) and Western Addition (N=238).

# Number of living HIV/AIDS cases diagnosed with syphilis, 2009



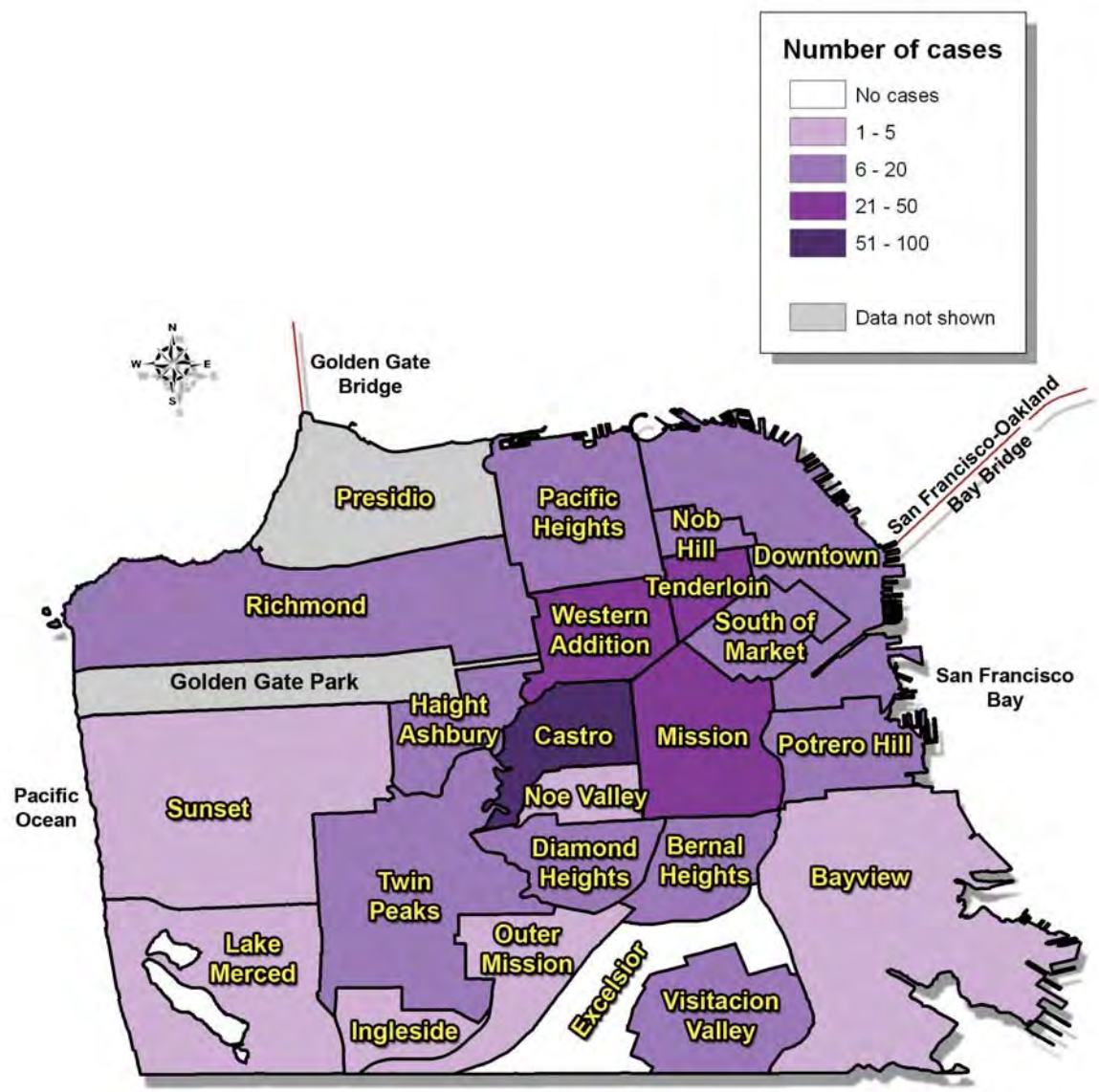

This map shows the geographic distribution of living HIV/AIDS cases with a co-infection of syphilis in 2009. Data included cases living in San Francisco at time of HIV/AIDS diagnosis and were living with HIV/AIDS as of December 31, 2009. There were a total of 196 HIV and syphilis co-infections in San Francisco in 2009. Castro had the largest number of living HIV/AIDS cases co-infected with syphilis (N=41), as well as the Western Addition (N=25) and Mission (N=19) neighborhoods.

# Number of living HIV/AIDS cases diagnosed with gonorrhea, 2009



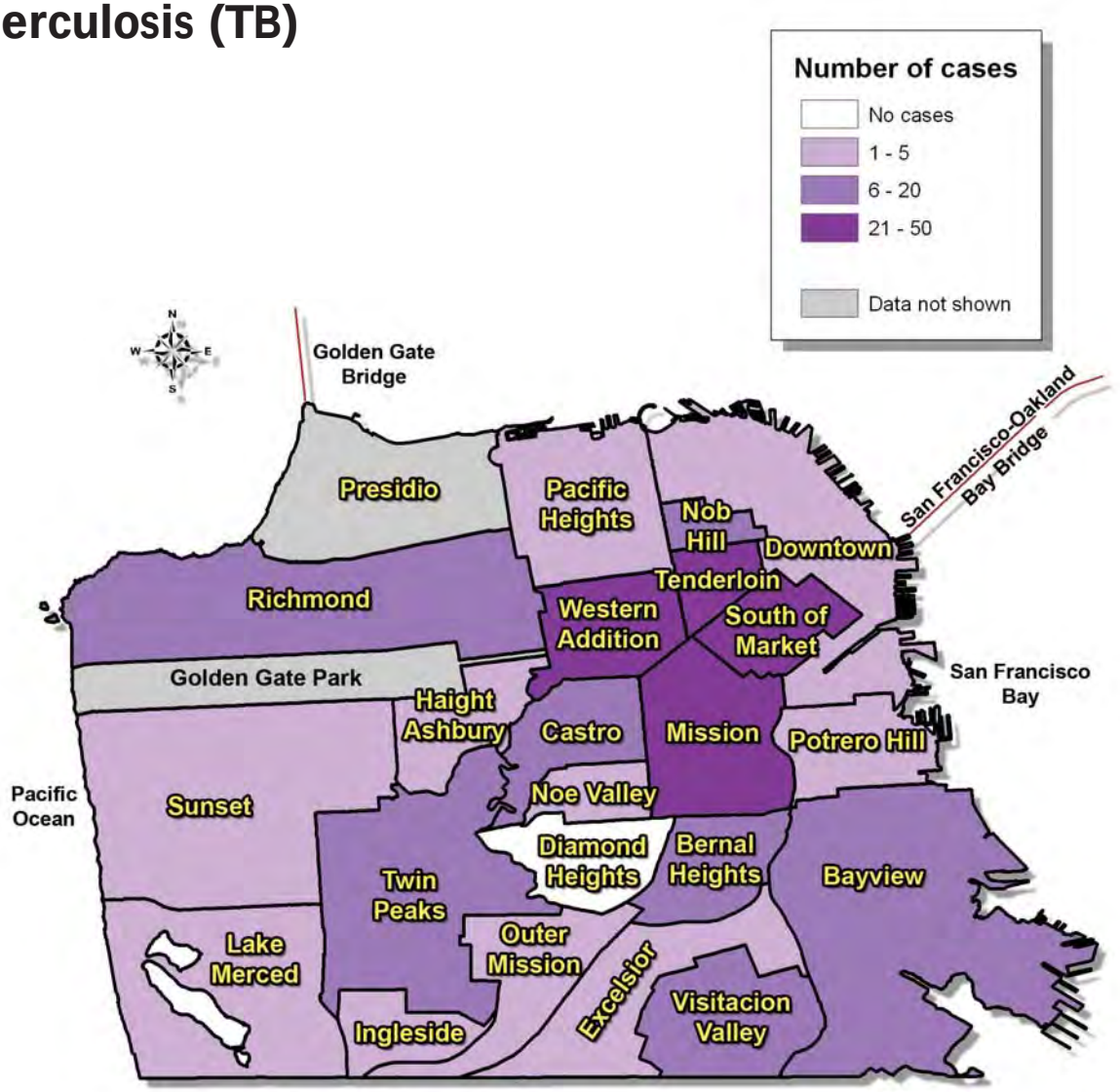

This map shows the geographic distribution of living HIV/AIDS cases with a co-infection of gonorrhea in 2009. Data included cases living in San Francisco at time of HIV/AIDS diagnosis and were living with HIV/AIDS as of December 31, 2009. There were a total of 284 HIV and gonorrhea co-infections in 2009 in San Francisco. Castro had the largest number of living HIV/AIDS cases co-infected with gonorrhea (N=59), while the nearby neighborhoods of Western Addition (N=38), Mission (N=37) and the Tenderloin (N=26) also had high numbers of HIV/AIDS cases co-infected with gonorrhea.

# Number of living HIV/AIDS cases diagnosed with chlamydia, 2009



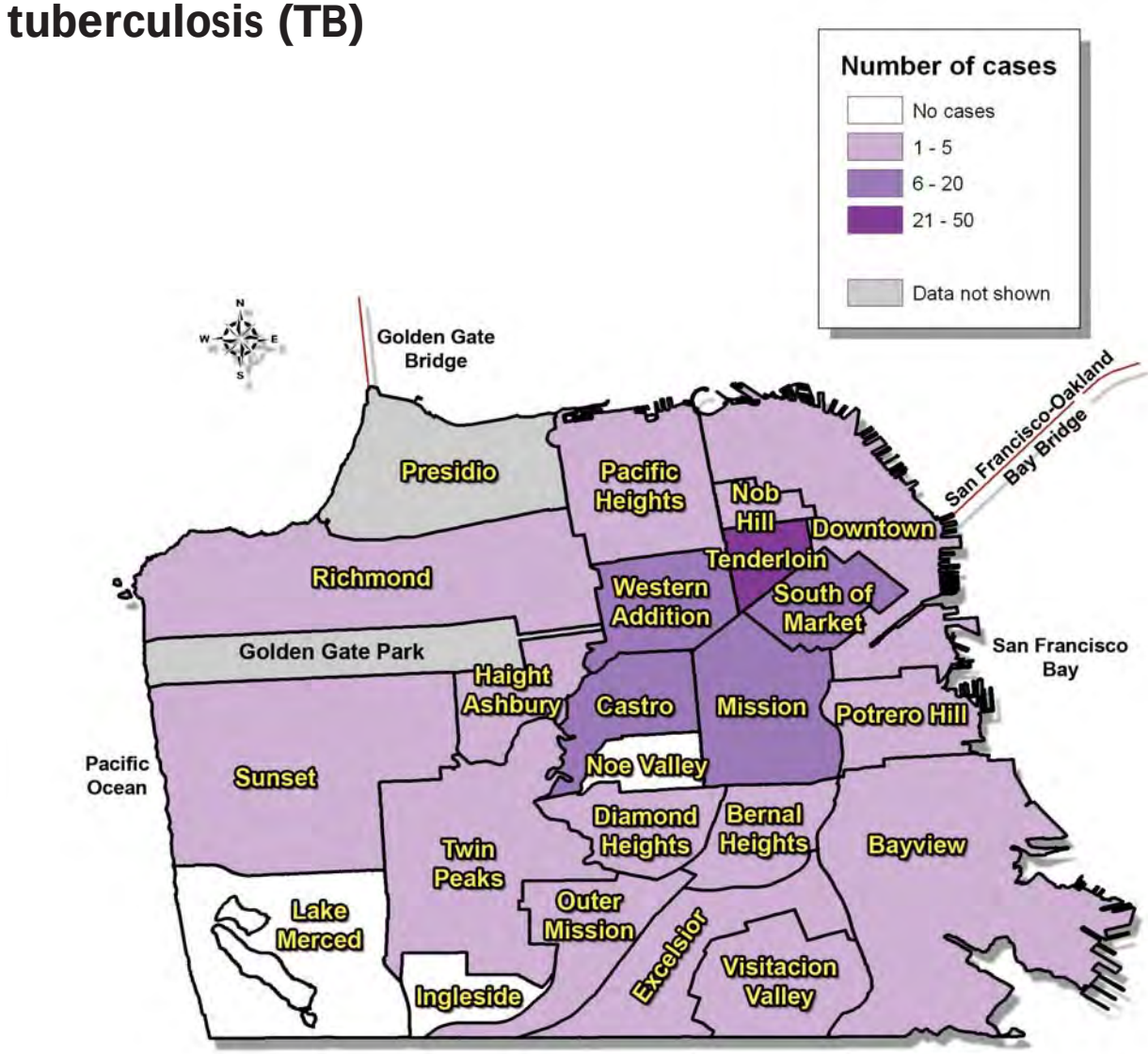

This map shows the geographic distribution of living HIV/AIDS cases with a co-infection of chlamydia in 2009. Data included cases living in San Francisco at time of HIV/AIDS diagnosis and were living with HIV/AIDS as of December 31, 2009. There were a total of 331 HIV and chlamydia co-infections in San Francisco in 2009. Castro had the largest number of living HIV/AIDS cases co-infected with chlamydia (N=68), while the nearby neighborhoods of Mission (N=42), the Tenderloin (N=36) and Western Addition (N=31) also had high numbers of HIV/AIDS cases co-infected with chlamydia.

# Number of living AIDS cases diagnosed with latent tuberculosis (TB)



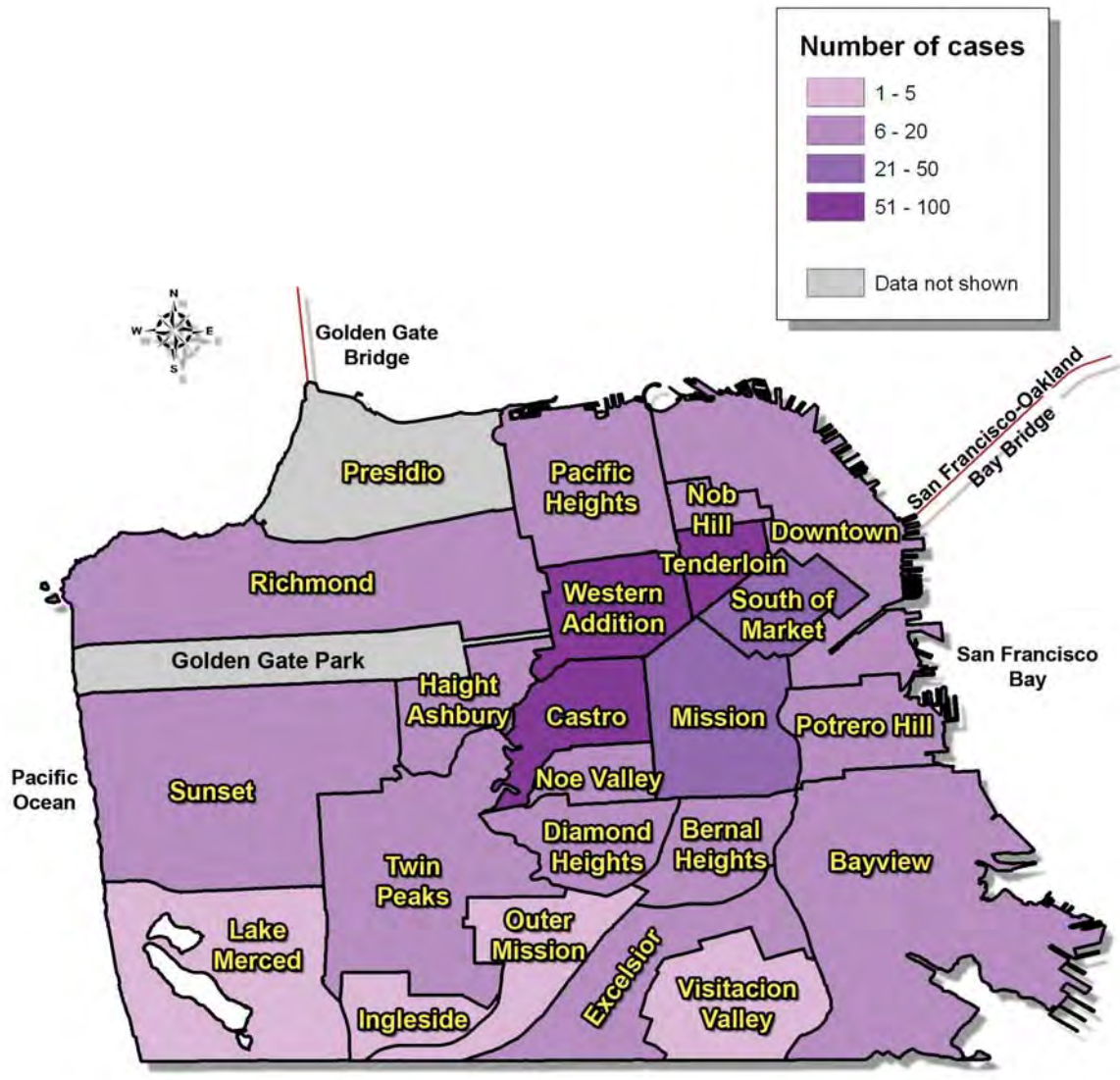

TB is an AIDS defining condition. This map shows the geographic distribution of living AIDS cases that have ever been co-infected with latent TB. Data included cases living in San Francisco at time of HIV/AIDS diagnosis and were living with AIDS as of December 31, 2009. TB co-infection is more likely to occur in HIV-positive individuals that are not taking antiretroviral treatment and not engaged in HIV care. There were 282 latent TB ever and HIV co-infections as of 2009. The neighborhoods of the Tenderloin (N=48) and South of Market (N=36) are lower-income areas with large populations of homeless residents, these are also the neighborhoods most affected by AIDS and latent TB co-infection. Additionally, Mission (N=33), Western Addition (N=29) and homeless cases (N=29, not displayed on the map) were also impacted by latent TB and HIV co-infection.

# Number of living AIDS cases diagnosed with active tuberculosis (TB)



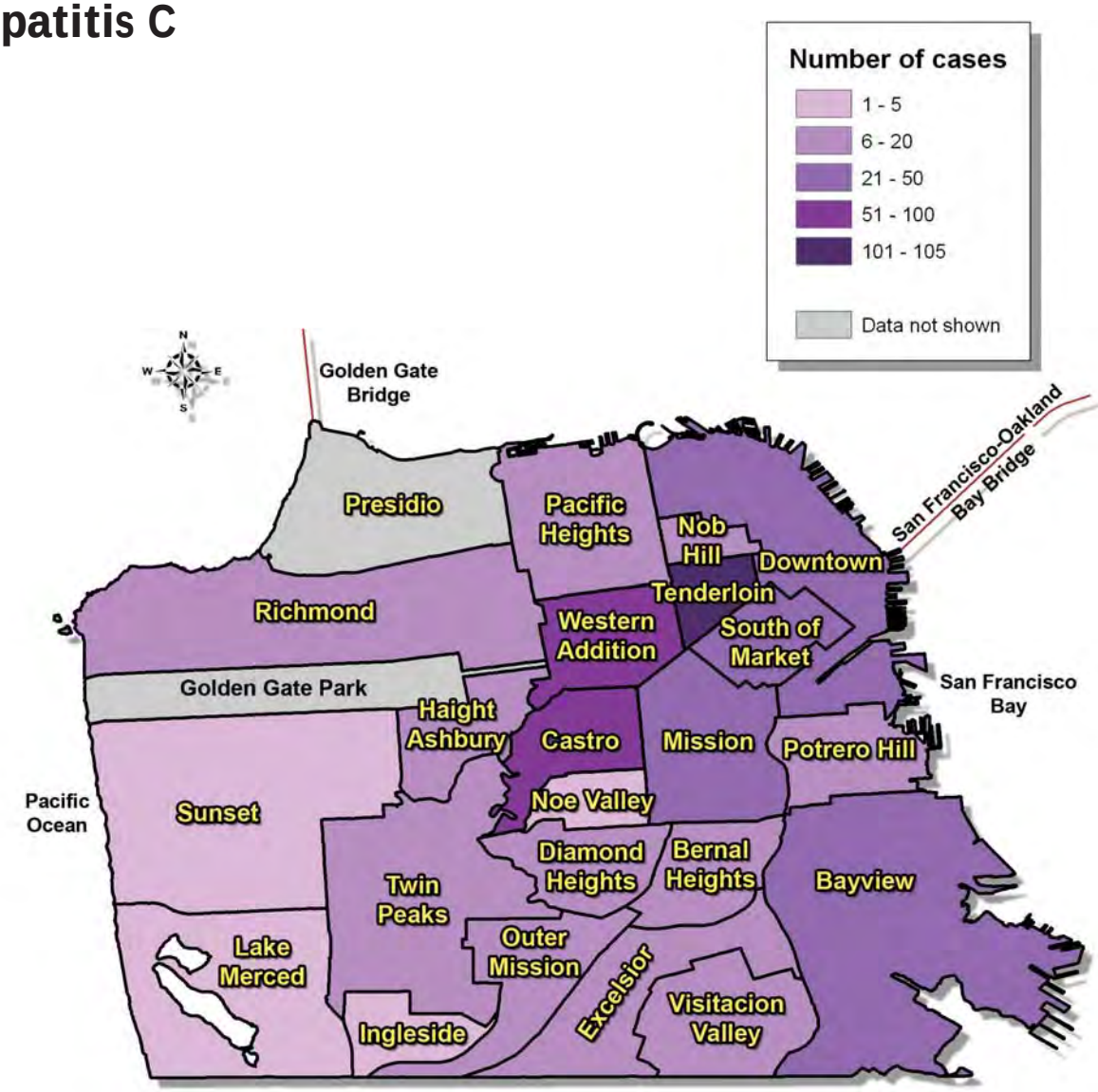

TB is an AIDS defining condition. This map shows the geographic distribution of living AIDS cases that have ever been co-infected with active TB. Data included cases living in San Francisco at time of HIV/AIDS diagnosis and were living with AIDS as of December 31, 2009. There were a total of 120 active TB and HIV co-infections in San Francisco as of 2009. The neighborhoods of the Tenderloin (N=24) and Western Addition (N=17) are lower-income areas with large populations of homeless residents, these were also the neighborhoods most affected by AIDS and active TB co-infection. Additionally, homeless cases without a residential address (N=18, not displayed on the map) had a large burden of active TB and HIV co-infection.

# Number of living HIV/AIDS cases diagnosed with hepatitis B




This map shows the geographic distribution of living HIV/AIDS cases with a co-infection of chronic hepatitis B. Data included cases living in San Francisco at time of HIV/AIDS diagnosis and were living with HIV/AIDS as of December 31, 2009. There were a total of 490 HIV and hepatitis B co-infections in San Francisco as of 2009. Castro (N=96), Western Addition (N=66) and Tenderloin (N=51) had the largest number of living HIV/AIDS cases co-infected with hepatitis B, while the nearby neighborhoods of Mission (N=38) and South of Market (N=24) as well as homeless cases without a residential address (N=34, not displayed on the map) also had high numbers of HIV/AIDS cases co-infected with hepatitis B virus.

# Number of living HIV/AIDS cases diagnosed with hepatitis C




This map shows the geographic distribution of living HIV/AIDS cases with a co-infection of chronic or acute hepatitis C. Data included cases living in San Francisco at time of HIV/AIDS diagnosis and were living with HIV/AIDS as of December 31, 2009. There were 556 hepatitis C and HIV co-infections in San Francisco as of 2009. Tenderloin, the center of the HIV epidemic for injection drug users in San Francisco, had the largest number of living HIV/AIDS cases co-infected with hepatitis C virus (N=105). Additionally, Western Addition (N=75), homeless cases without a residential address (N=64, not displayed on the map) and Castro (N=51) had high numbers of hepatitis C and HIV co-infections.

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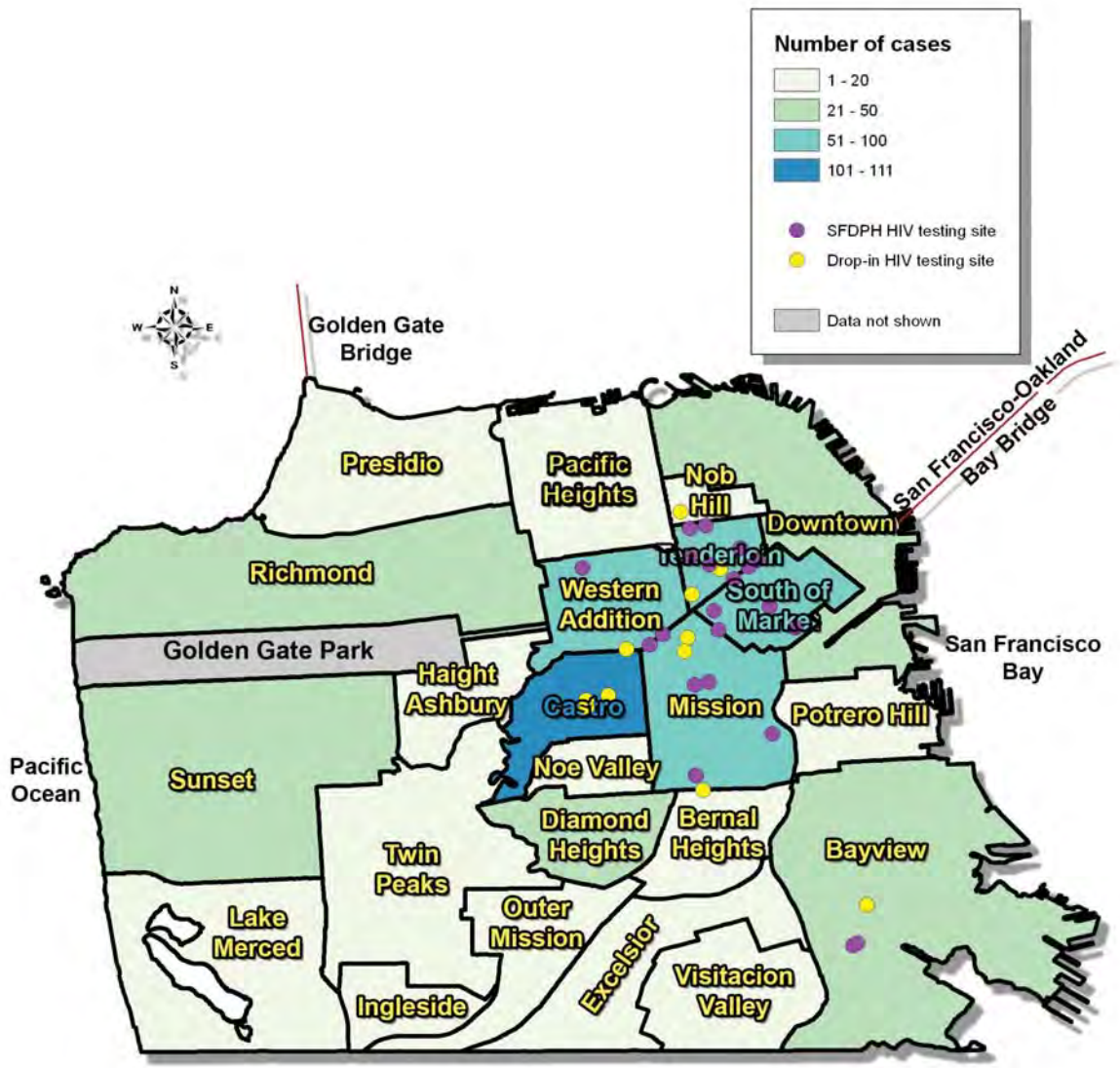
# HIV Care and Prevention Services

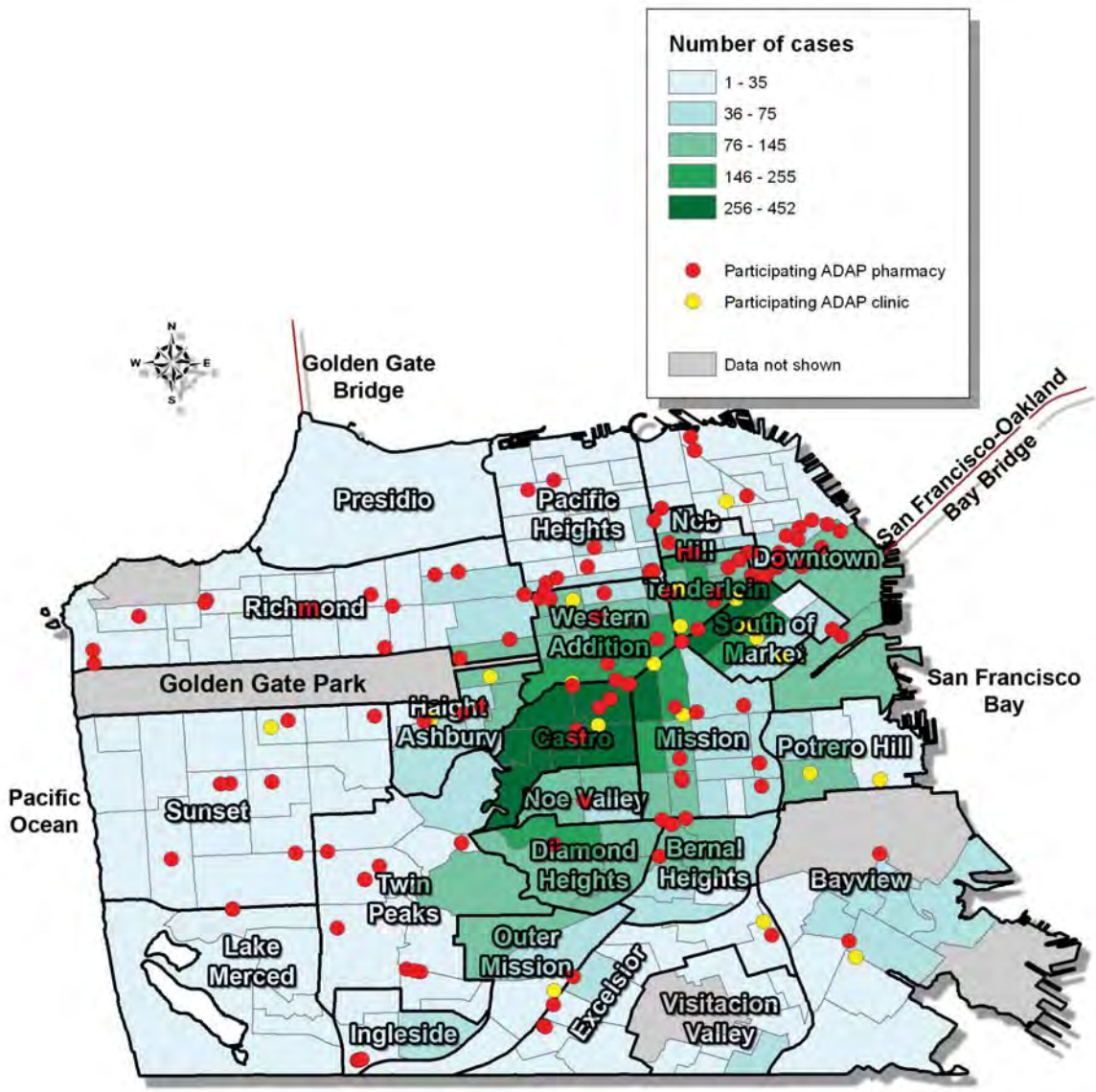
# HIV testing sites and newly diagnosed HIV cases, 2009-2010




This map shows the location of HIV counseling and testing sites (circles) receiving the support from the San Francisco Department of Public Health in relation to the number of persons newly diagnosed with HIV (background colors). The majority of HIV testing sites is located near the highest density of new cases diagnosed, principally in Castro and Tenderloin, and also the Mission. There is a relative paucity of testing sites in the south and west of the city.

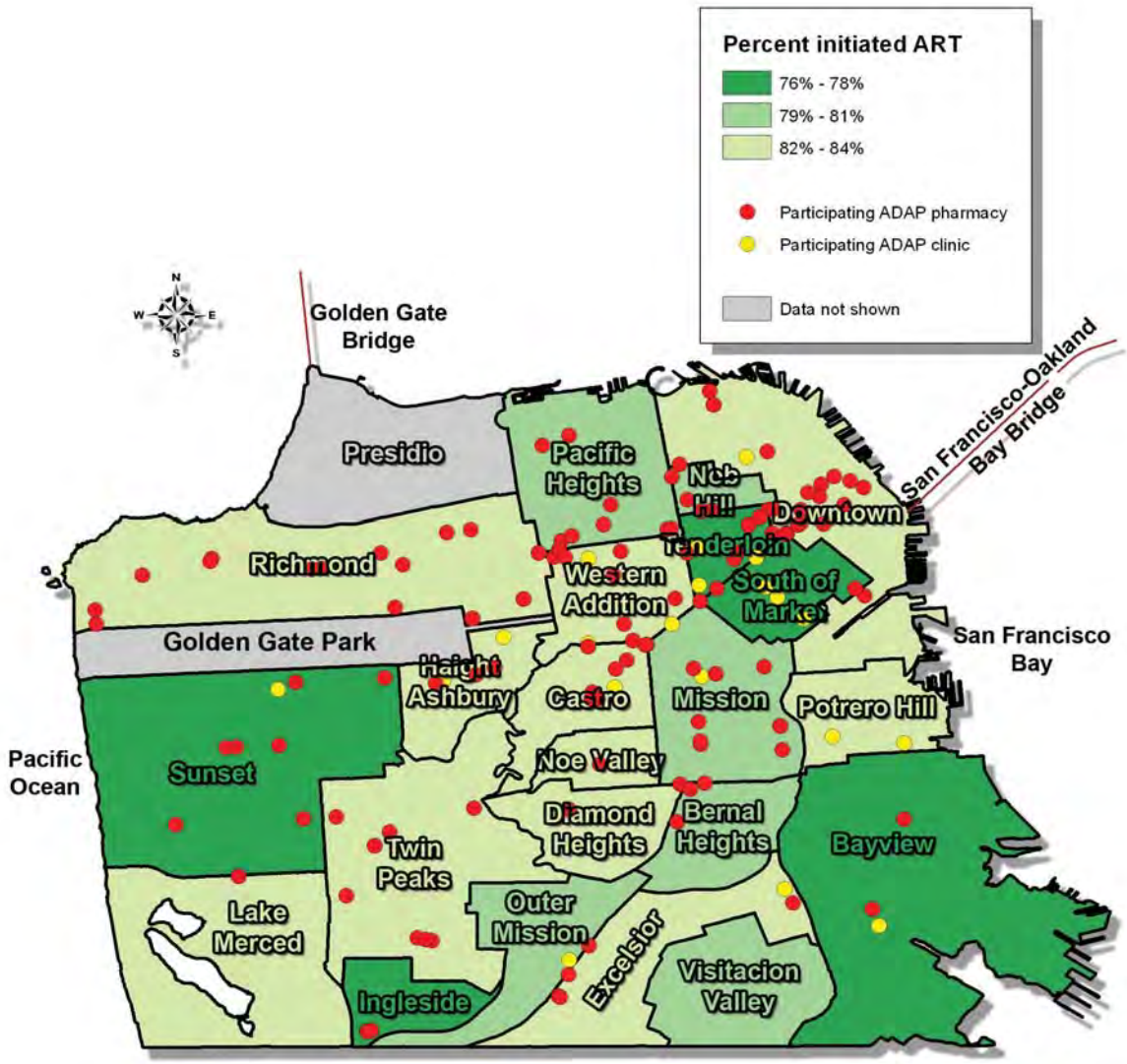
# AIDS Drug Assistance Program (ADAP) sites

## ADAP sites and persons living HIV/AIDS, 2010



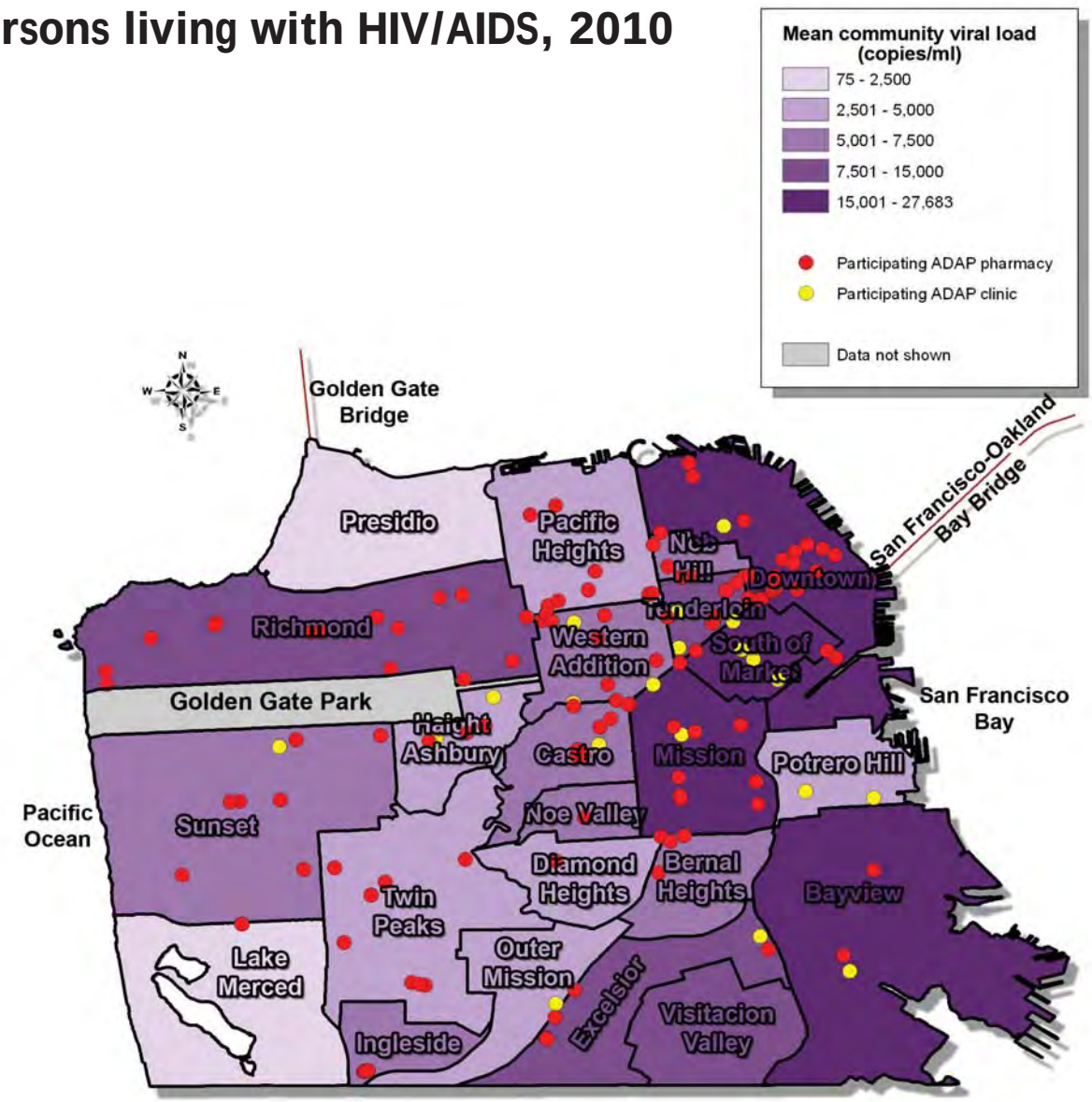

This map shows the locations of pharmacies and clinics (circles) participating in ADAP in relation to the number of persons living with HIV/AIDS in San Francisco (background colors). ADAP sites have widened their dispersion across the city compared to a decade ago, with the majority located in the primary HIV/AIDS epi-center and near the secondary epi-center of the Tenderloin. Of note, there is a relative paucity of ADAP sites located in Diamond Heights and the southeast quadrant of the city where there is higher poverty, concentrations of minority populations (particularly African Americans in Bayview/Hunters Point), and substantial numbers of HIV/AIDS cases among minorities.

# ADAP sites and antiretroviral therapy (ART) use among persons living with HIV/AIDS, 2010




This map shows the location of pharmacies and clinics (circles) participating in ADAP in relation to the proportion of persons living with HIV/AIDS in San Francisco as of December 31, 2010 documented to be using ART (background colors). Two notable patterns are evident. First, the southeast quadrant has lower proportions of persons on ART parallel to fewer ADAP sites. Second, the Tenderloin/South of Market area has lower ART use despite high density of ADAP sites. Taken together, the data suggest geography and other factors affect ART uptake.

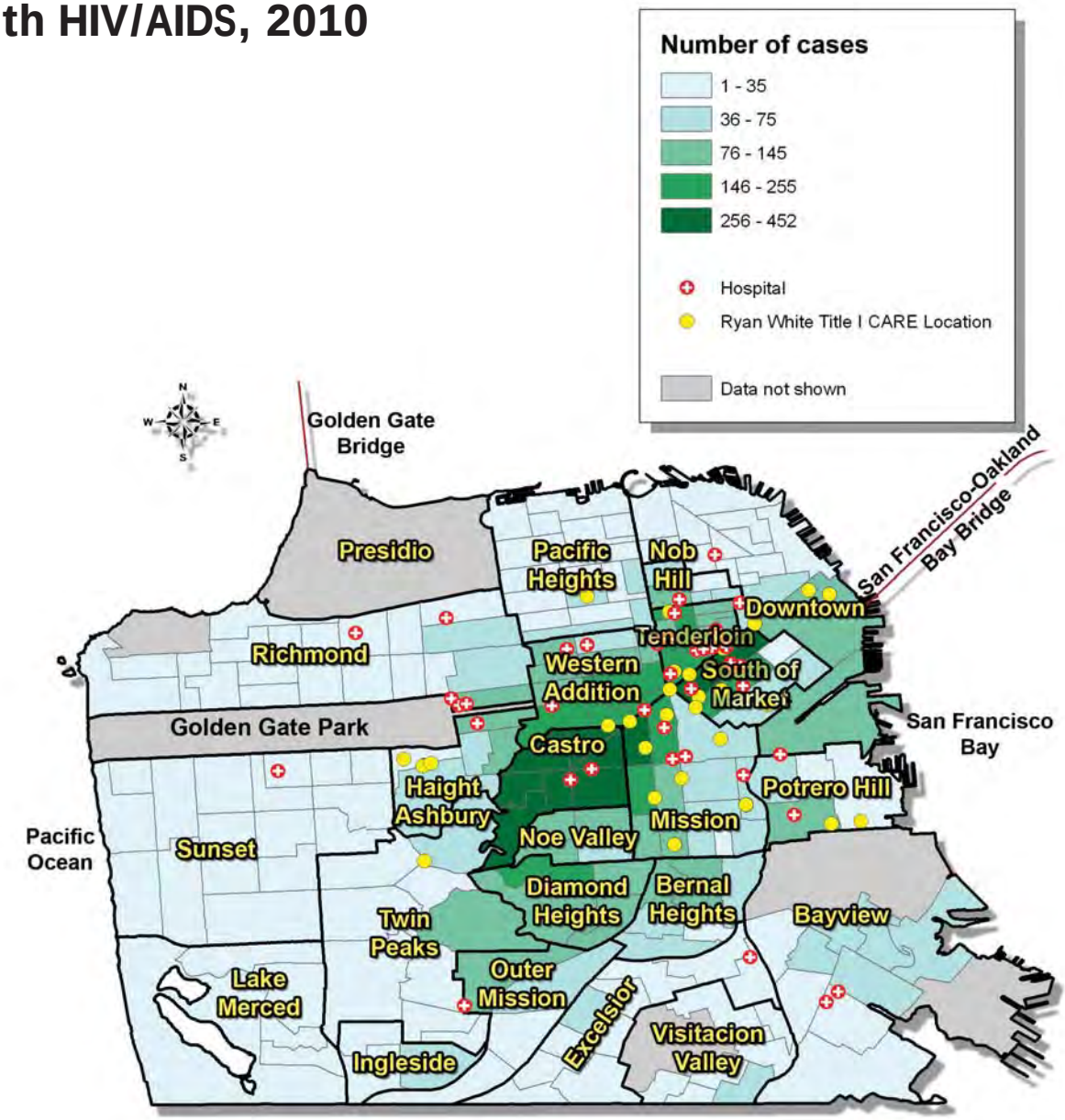
# ADAP sites and mean community viral load (CVL) among persons living with HIV/AIDS, 2010




This map shows the location of pharmacies and clinics (circles) participating in ADAP in relation to the mean CVL in San Francisco (background colors). As predicted by the map showing ART use, mean CVL is relatively higher in the Tenderloin/South of Market and southeast where ART use is relatively lower.

# Hospital and Ryan White Care (RWC) sites

## Hospital and RWC sites and persons living with HIV/AIDS, 2010



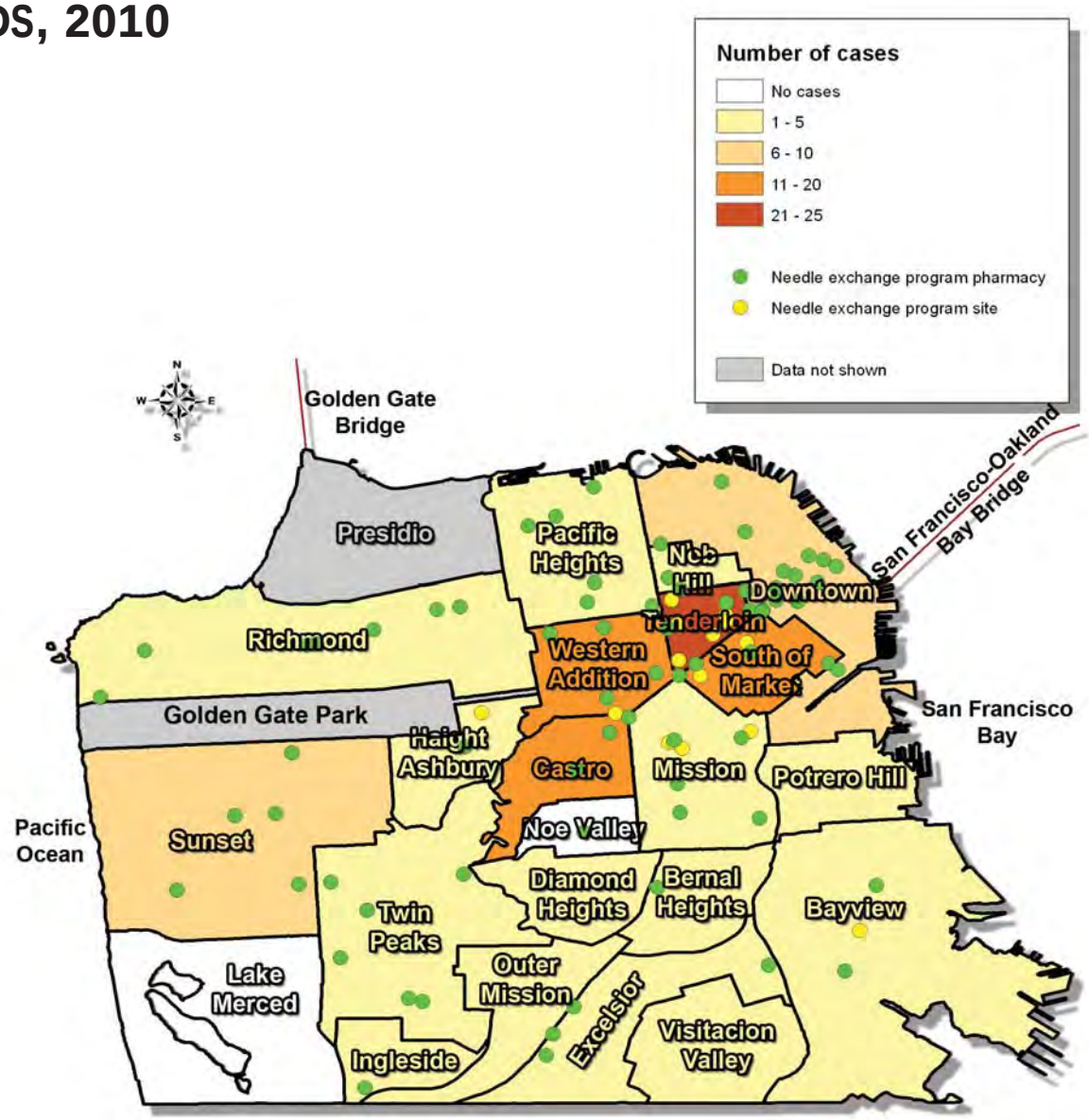

This map shows the location of sites providing HIV-specific care (circles) in relation to the number of persons living with HIV/AIDS in San Francisco (background colors). The majority of HIV care sites are located near the highest concentration of persons living with HIV/AIDS in the Castro, South of Market, and Tenderloin, as well as part of Western Addition and Nob Hill. Poorer areas in the south part of the city including Bayview, Diamond Heights, Outer Mission, and Bernal Heights, are relatively far from HIV care providers.

# Hospital and RWC sites and proportion of persons living with HIV/AIDS who have unmet healthcare needs


This map shows the location of sites providing HIV-specific care (circles) in relation to the proportion of persons living with HIV/AIDS in San Francisco (background colors) as of December 31, 2010 reported to have unmet needs of healthcare services. The majority of HIV care sites are located in the South of Market, Tenderloin and Mission, as well as part of Western Addition and Nob Hill. However, these areas have a higher proportion of persons with unmet needs. There is a relative paucity of care sites located in Sunset, Richmond and Pacific heights where the concentrations of populations with unmet needs are higher.

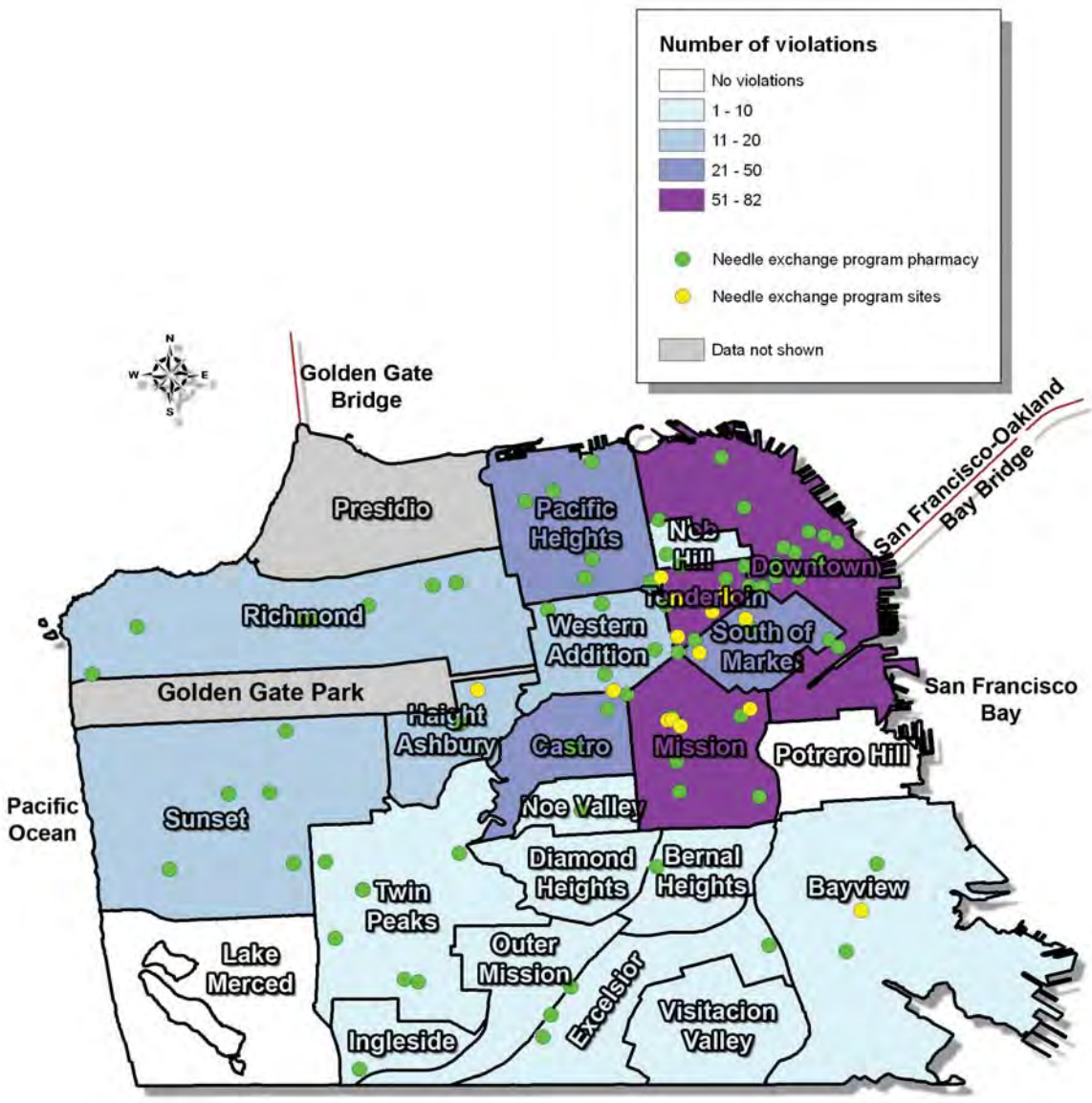
# Needle exchange program (NEP) sites

## NEP sites and injection drug users (IDU) living with HIV/AIDS, 2010




This map shows the locations of pharmacies and clinics (circles) participating in NEP in relation to the number of IDU living with HIV/AIDS (background colors). The inclusion of pharmacies in the program has noticeably increased the number and coverage of clean injecting equipment in the city compared with a decade ago. A high correlation is seen with the majority of NEP sites located in the neighborhoods with the highest concentration of IDU living with HIV/AIDS (Tenderloin, South of Market, and accessible Downtown area). As noted for other prevention services, poorer neighborhoods in the southern quadrants are not as close to NEP sites.

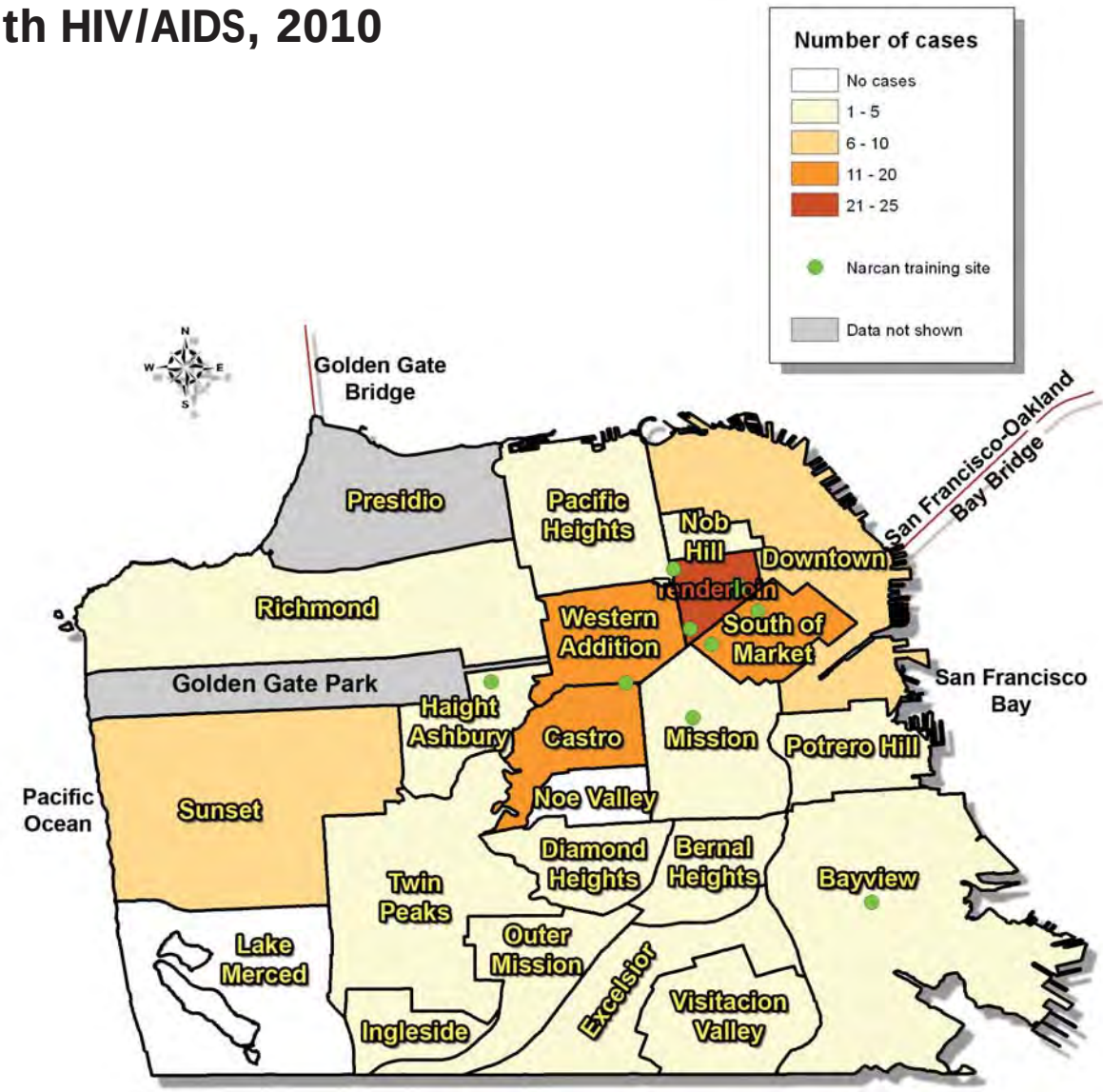
# NEP sites and reports of drug/alcohol violations




This map presents another perspective of the locations of pharmacies and clinics (circles) participating in NEP, with the background color representing the number of drug/alcohol violations reported by the San Francisco police as of July 2012. Most NEP sites are located in the northeast quadrant where most violations were reported. Of note, the drug/alcohol violation reporting data include all types of drug and alcohol violations, not necessary injection drug related, but may provide a geographic indicator complementary to IDU living with HIV/AIDS.

# Narcan training sites

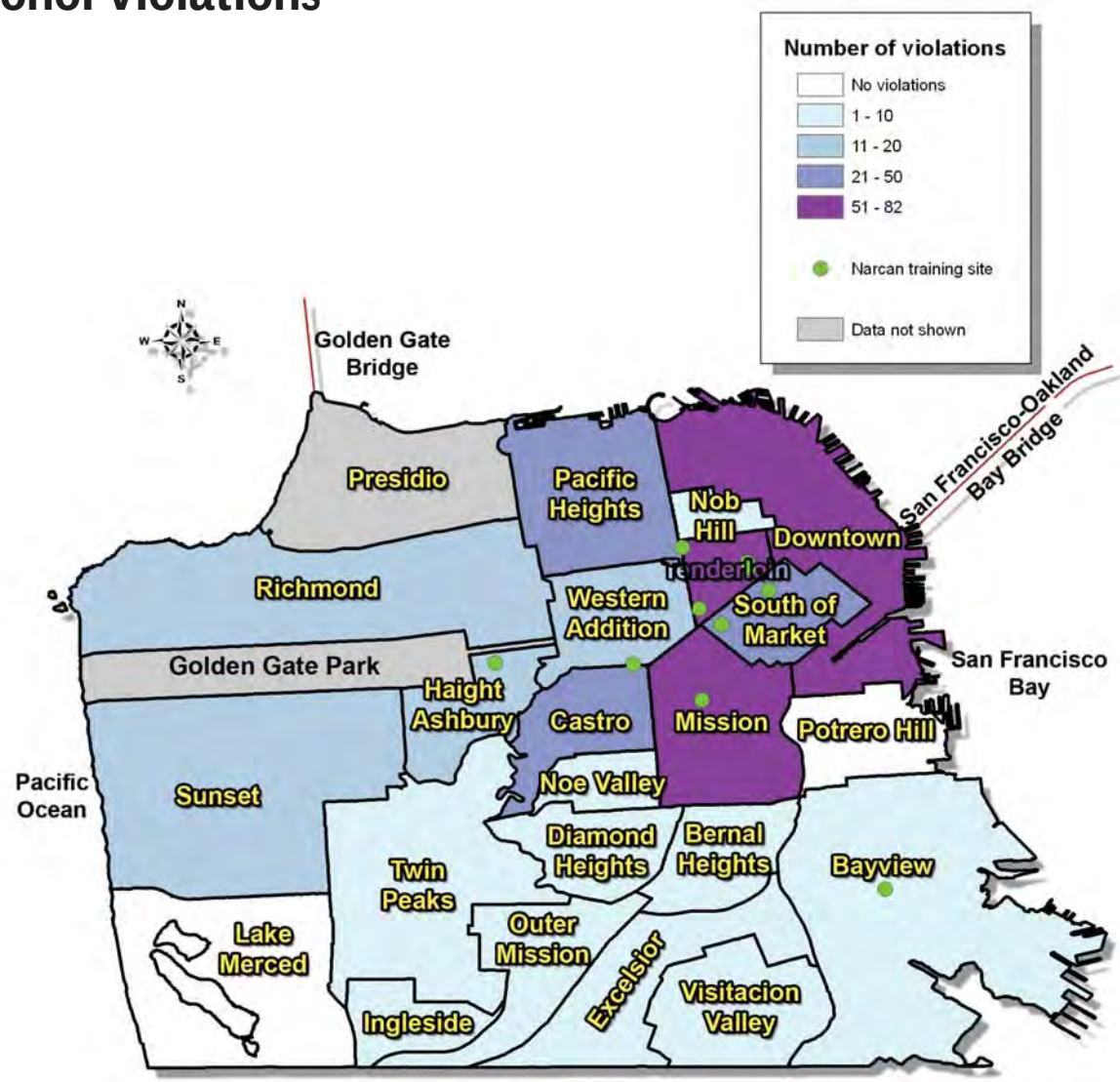
## Narcan training sites and injection drug users (IDU) living with HIV/AIDS, 2010




Narcan (also known as Naloxone) is an emergency drug that reverses the effects of an opioid overdose, such as heroin and morphine. This drug is distributed to IDU, emergency service providers, and friends of IDU. Narcan training sites around the city teach lay people how to properly take the life-saving drug if they or their friends have overdosed.

This map shows the location of Narcan training sites (circles) in relation to the number of IDU living with HIV/AIDS (background colors). Previous research has documented the high concentration of overdose cases occurring within a compact area of the Tenderloin and contiguous South of Market area. The Narcan harm reduction program sites mirror this critical area.

# Narcan training sites and reports of drug/ alcohol violations




This map shows the location of Narcan training sites (circles) in relation to the number of drug/alcohol violations reported to the San Francisco police (background colors) as of July 2012. These data show that Narcan training sites are located in areas with higher numbers of drug/alcohol violations. As noted above, the drug/alcohol violation reporting data are from the San Francisco police data include all types of drug and alcohol violations, not necessary drug overdose. The data were used as a marker for the potential for overdose locations.

CITY AND COUNTY OF SAN FRANCISCO
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