Status of the HIV/AIDS Epidemic San Francisco

Applied Research, Community Health, Epidemiology and Surveillance Branch

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HIV/AIDS Surveillance System

- HIV and AIDS (HIV infection stage 3) mandate reporting to local health department
- Residence at HIV/AIDS diagnosis
- Dual reporting system
- April 2006: HIV reporting regulations include all confirmed HIV and HIV viral loads
- January 2009: CD4 counts reportable

HIV/AIDS Surveillance System

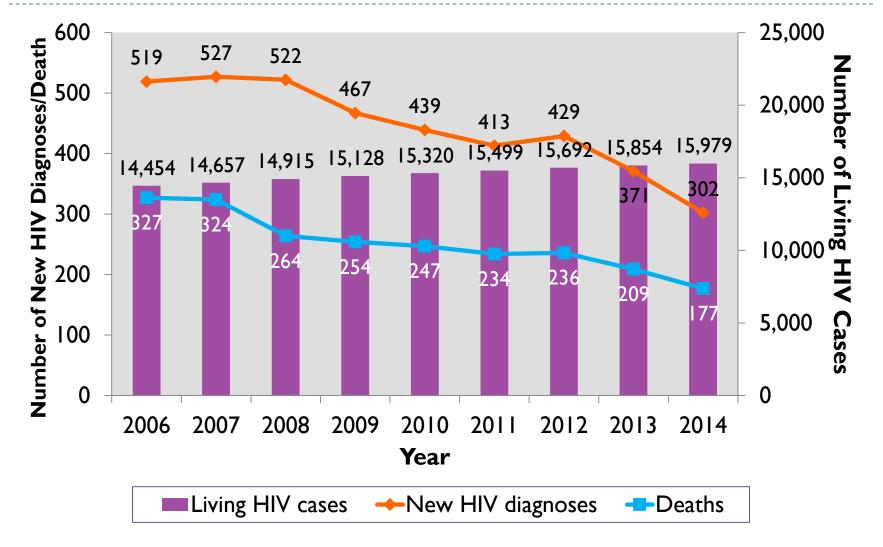
Predominately active system

- Health department staff visit medical facilities, use a variety of data sources (e.g. lab and pathology reports, ICD codes), review medical records and complete case report form
- Collect follow up information through routine reporting of lab test results and periodic reviews of medical records
- Obtain mortality status through review of local death certificates, other health departments, and match with the National Death Index

Measures of Disease Frequency

- Prevalence the number of people with a particular condition in a defined population at a specified time (includes old and new cases)
- Incidence the occurrence of NEW cases of disease in a defined population over a specified period of time

New HIV diagnoses, deaths and prevalence, 2006-2014 San Francisco



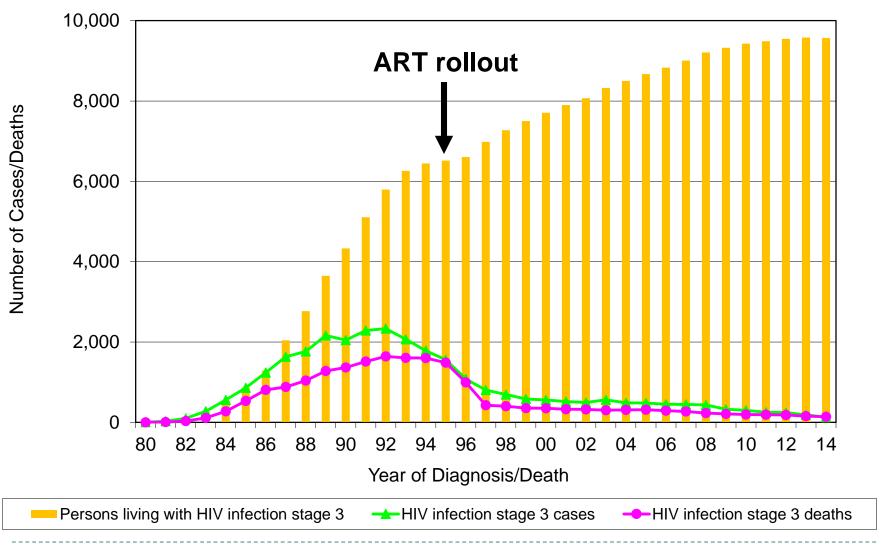
Characteristics of Persons Living with HIV, December 31, 2014 and ,2006, 2014 New Diagnoses

| | PLWH (N=15,979) | | HIV DX in 2006 (N=519) | | HIV DX in 2014 (N=302) | |
|---|-----------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| | Number | % | Number | % | Number | % |
| <mark>Gender</mark> Male Female Transgender | 14,722 901 356 | 92% 6% 2% | 469 36 14 | 90% 7% 3% | 282 14 6 | 93% 5% 2% |
| Risk MSM MSM PWID PWID Heterosexual Other/Unidentified | 11,787 2,423 951 526 | 74% 15% 6% 3% 2% | 365 81 39 24 10 | 70% 16% 8% 5% 2% | 226 34 19 8 15 | 75% 11% 6% 3% 5% |

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|------------------|--------------------|--------------------------------|------------------|------------------|--------------------------|--------------|
| | Number | % | Number | % | Number | % |
| Race/Ethnicity | | | | | | |
| White | 9,708 | 61% | 278 | 54% | 136 | 45% |
| African American | 2,014 | 13% | 75 | 14% | 33 | 11% |
| Latino | 2,894 | 18% | 113 | 22% | 82 | 27% |
| API/Native Amer. | 986 | 7% | 36 | 7% | 39 | 13% |
| | | Current Age (as of 12/2014) | | Age at Diagnosis | | |
| < 30 years | 582 | 3% | 128 | 25% | 87 | 2 9 % |
| 30-39 years | 1,837 | 12% | 175 | 34% | 91 | 30% |
| 40-49 years | 4,358 | 27% | 143 | 28% | 73 | 24% |
| 50-59 years | 5.806 | 36% | 56 | 11% | 38 | 13% |
| 60-64 years | ١,860 | 12% | 10 | 2% | 12 | 4% |
| 65+ years | 1,536 | 10% | 7 | ١% | I | < % |

HIV infection stage 3 cases, deaths, and prevalence, 1980-2014, San Francisco



Residence of Death Among Persons with HIV Infection deceased 2005-2012

| Residence of Death County | 2005-2008 N=1,263 | 2009-2012 N=970 |
|------------------------------|----------------------|--------------------|
| | Number (%) | Number (%) |
| San Francisco | 807 (64%) | 600 (62%) |
| Other | 177 (14%) | 182 (19%) |
| Missing | 279 (22%) | 188 (19%) |
| | | |
| | | |

Underlying Causes of Death Among Persons with HIV Infection*, 2005-2012

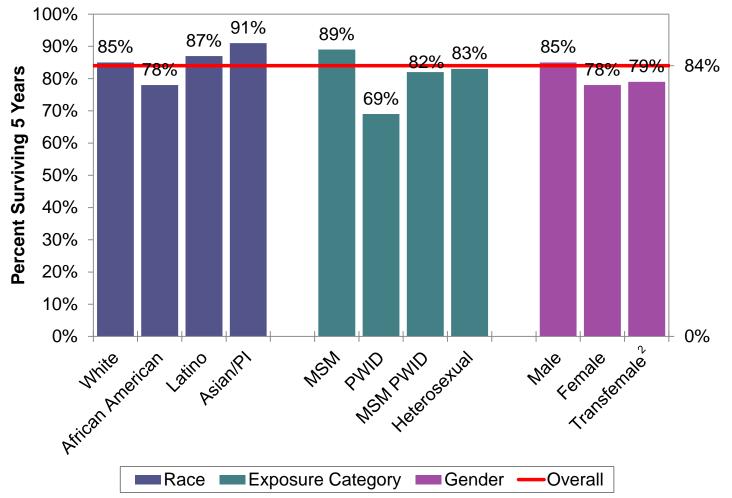
| Underlying Cause of Death | 2005-2008 N=1,242 | 2009-2012 N=943 | |
|------------------------------|----------------------|--------------------|--|
| | Number (%) | Number (%) | |
| HIV | 676 (54.4%) | 413 (43.8%) | |
| Non-AIDS cancer | 132 (10.6%) | 128 (13.6%) | |
| Drug overdose | 77 (6.2%) | 104 (11.0%) | |
| Heart disease | 95 (7.6%) | 82 (8.7%) | |
| Suicide | 48 (3.9%) | 38 (4.0%) | |
| Liver disease | 27 (2.2%) | 22 (2.3%) | |

*Deceased cases that lack cause of death information not represented in this table.

Underlying Causes of Death by Age Among Persons with HIV Infection, 2009-2012

| | HIV | Non- AIDS cancer | Heart Disease | Drug Overdose | Suicide | Liver Disease |
|----------------------------|----------|------------------------|------------------|------------------|---------|------------------|
| Age at Death (years) | No. (%) | No. (%) | No. (%) | No. (%) | No. (%) | No. (%) |
| 0-29 | 8 (2) | 0 (0) | I (I) | 4 (4) | 0 (0) | 0 (0) |
| 30-39 | 34 (8) | 3 (2) | 4 (5) | 18 (17) | 3 (8) | 2 (9) |
| 40-49 | 118 (29) | 24 (19) | (3) | 37 (36) | 16 (42) | 8 (36) |
| 50-59 | 151 (37) | 46 (39) | 32 (39) | 35 (34) | 12 (32) | 9 (41) |
| 60-64 | 48 (12) | 24 (19) | 15 (18) | 9 (9) | 4 (11) | l (5) |
| 65+ | 54 (13) | 31 (24) | 19 (23) | (<) | 3 (8) | 2 (9) |

Five-year survival probability¹ after Stage 3 HIV for persons diagnosed between 2001 and 2014 by race/ethnicity, exposure category, and gender, San Francisco



1 Calculated from Kaplan-Meier method.

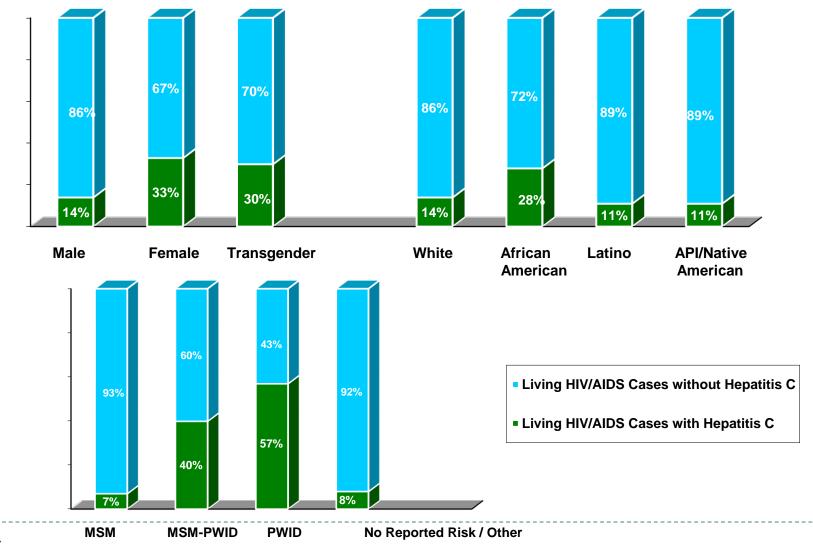
2 Transfemale data include all transgender cases. Transmale data are not released separately due to potential small population size.

Characteristics of Persons Living with HIV Seen in

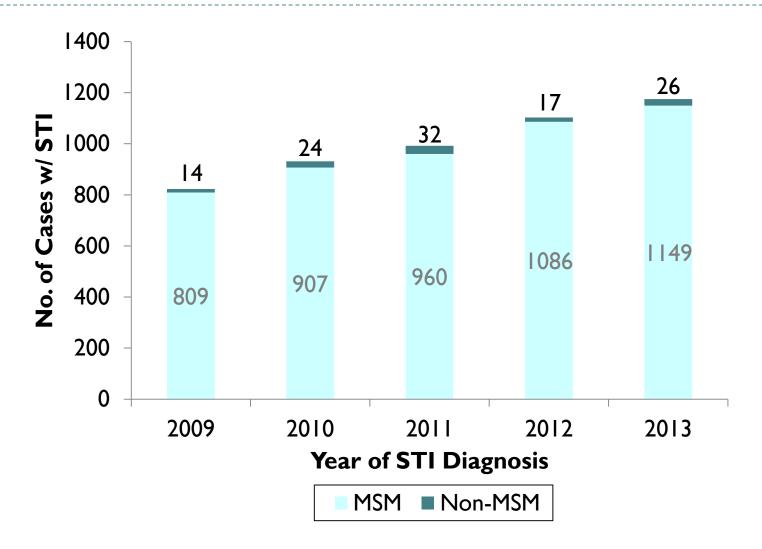
San Francisco Jails, as of December 2014

| | PLWH (N= 15,979) | PLWH with history of jail (N= 1,094) |
|----------------------------|---------------------|---|
| Gender | | |
| Male | 92% | 77% |
| Female | 6% | 15% |
| Transgender | 2% | 8% |
| Race/Ethnicity | | |
| White | 61% | 37% |
| African-American | 13% | 41% |
| Latino | 18% | 16% |
| API/Native American | 7% | 3% |
| Risk | | |
| MSM | 74% | 21% |
| MSM-PWID | 15% | 43% |
| PWID | 6% | 29% |
| Other/ No Reported Risk | 5% | 6% |

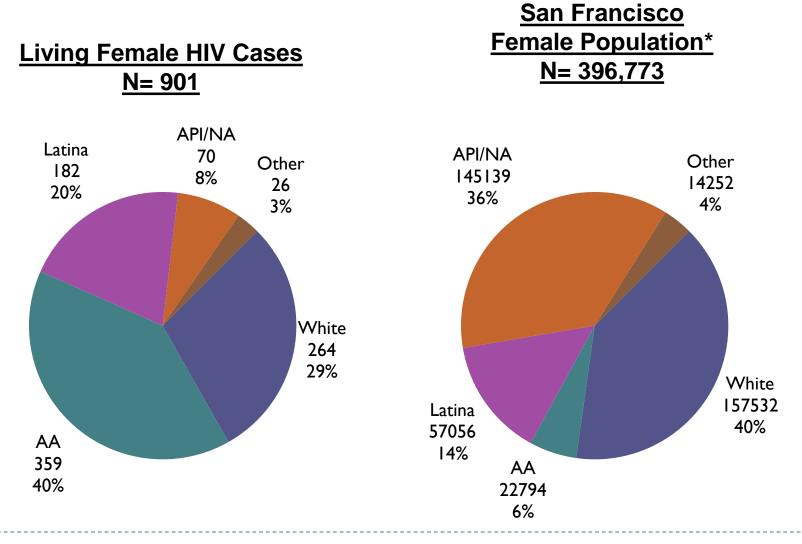
Living HIV Cases Co-Infected with Hepatitis C, as of December 31, 2014



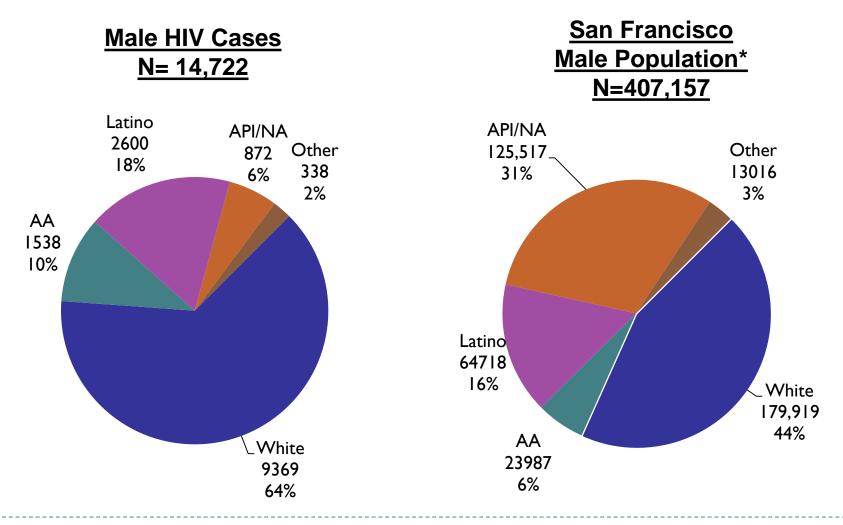
Number of HIV cases diagnosed with an STI by year of STI diagnosis, 2009-2013, San Francisco



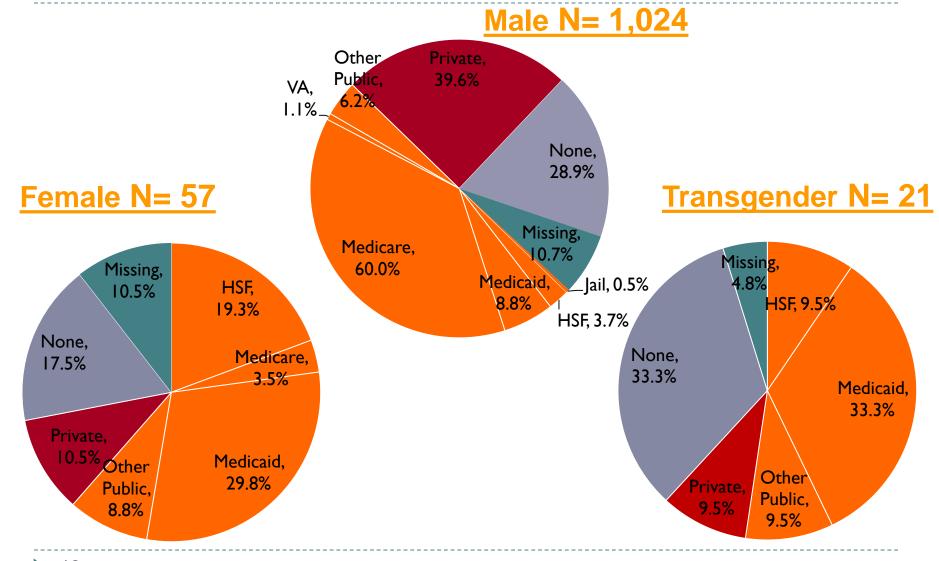
Race/Ethnicity of Female Living with HIV Compared to the General Population of San Francisco, December 31, 2014



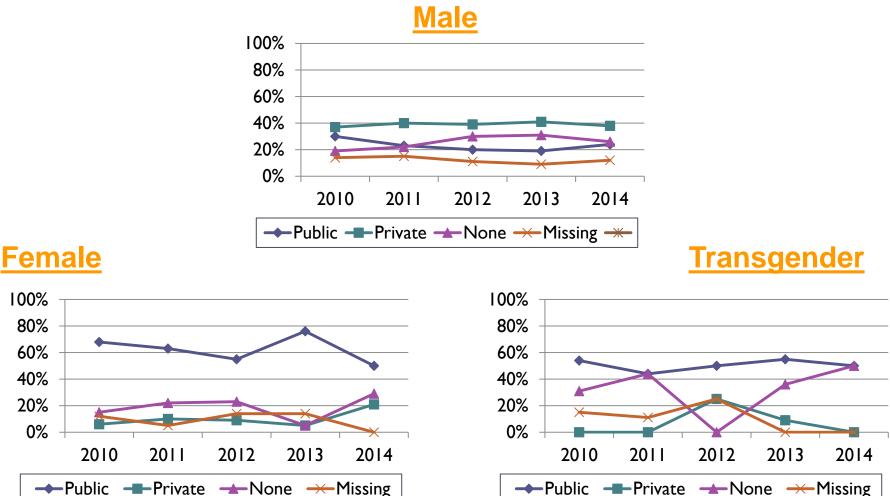
Race/Ethnicity of Male Living with HIV Compared to the General Population of San Francisco, December 31, 2014



HIV Cases by Gender and Health Coverage at Time of Initial HIV Diagnosis, 2012-2014



Trends in Health Coverage at Time of HIV Diagnosis by Gender, 2010-2014, San Francisco



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100%

80%

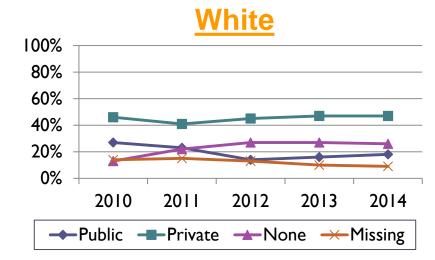
60%

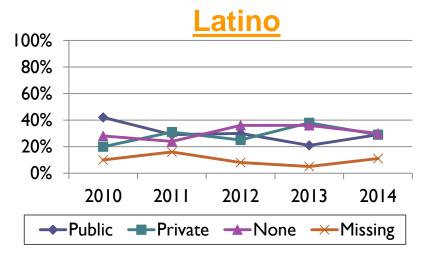
40%

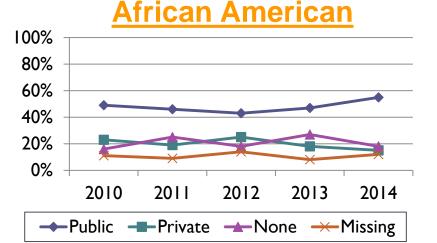
20%

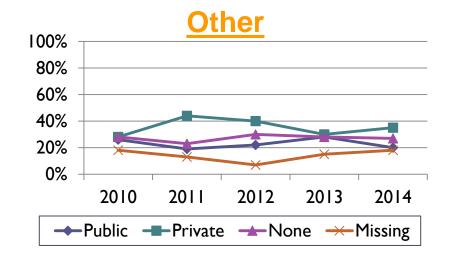
0%

Trends in Health Coverage at Time of HIV Diagnosis by Race/Ethnicity, 2010-2014, San Francisco



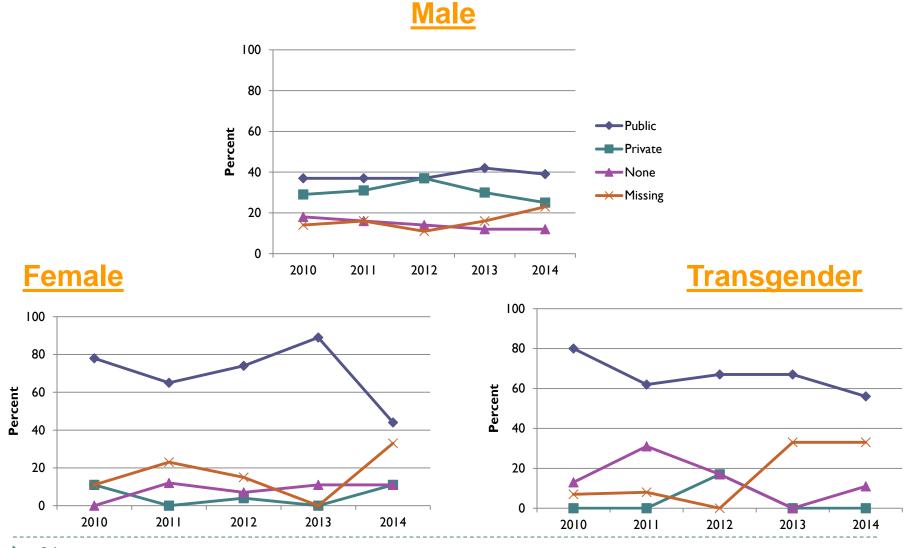






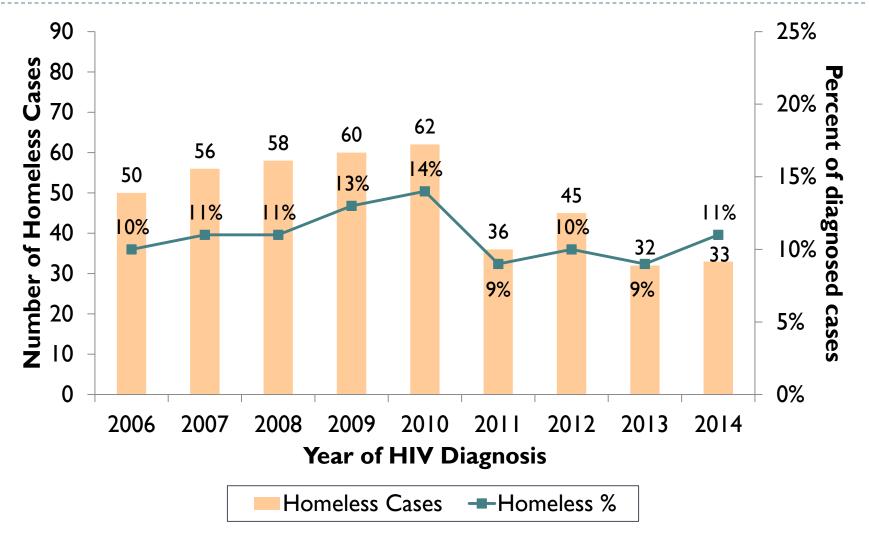
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Trends in Health Coverage at Time of HIV Stage 3 Diagnosis by Gender, 2010-2014, San Francisco

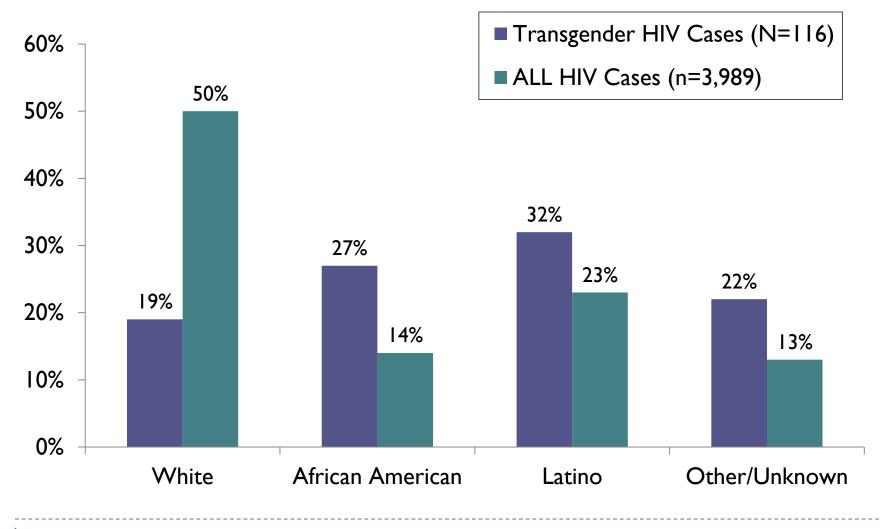


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Trends in Number and Percent of Diagnosed Cases Homeless at Time of Diagnosis, 2006-2014



Characteristics of Transgender and HIV Cases, Diagnosed 2006-2014



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Characteristics of People Living with HIV/AIDS, San Francisco EMA as of 12/31/13

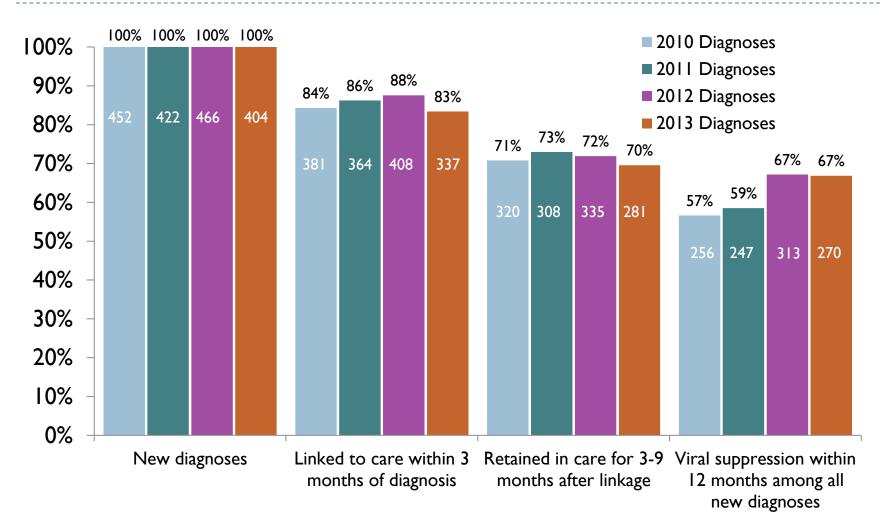
| | San Mateo | Marin | San Francisco |
|---|--------------|------------|----------------|
| Gender | | | |
| Male | 83.6% | 89.3% | 92.0% |
| Female | 15.7% | 7.6% | 5.7% |
| Transgender | 0.7% | 2.6% | 2.3% |
| Race/Ethnicity | | | |
| White | 48.4% | 55.2% | 61.7% |
| African-American | 12.7% | 22.3% | 12.9% |
| Latino | 26.9% | 18.0% | 17.4% |
| Asian/Pac Islander | 9.6% | 2.1% | 5.3% |
| Risk | | | |
| MSM | 59.8% | 49.62% | 73.3% |
| MSM-IDU | 5.9% | 13.3% | 15.2% |
| IDU | 10.5% | 18.5% | 6.3% |
| Heterosexual | 11.9% | 10.5% | 3.2% |
| Total Known Persons Living with HIV/AIDS | 1,538 (8.4%) | 896 (4.9%) | 15,898 (86.7%) |

Estimated Number and Percent of PLWH/A Not in Care San Francisco <u>EMA</u>, July 1, 2012 - June 30, 2013

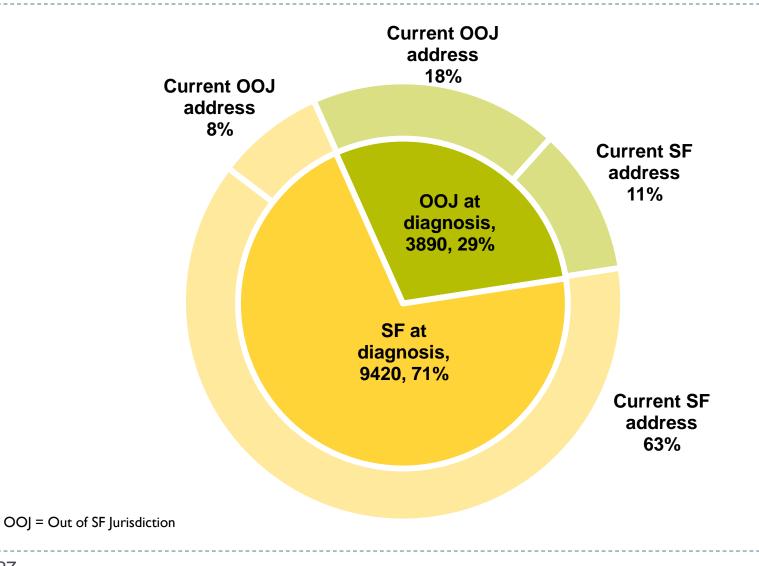
| | Total number | Number not in care | Percent not in care |
|--|-----------------|-----------------------|------------------------|
| Persons Living with AIDS | 12,899 | 1,128 | 8.7% |
| Persons Living with HIV, <u>aware</u> | 8,449 | 1,638 | 19.4% |
| Persons Living with HIV/AIDS | 21,339 | 2,766 | 13.0% |

* Care markers: CD4 and viral load testing or receiving antiretroviral therapy.
** Data sources: lab reporting, medical record review, MediCal data, ADAP, ARIES.

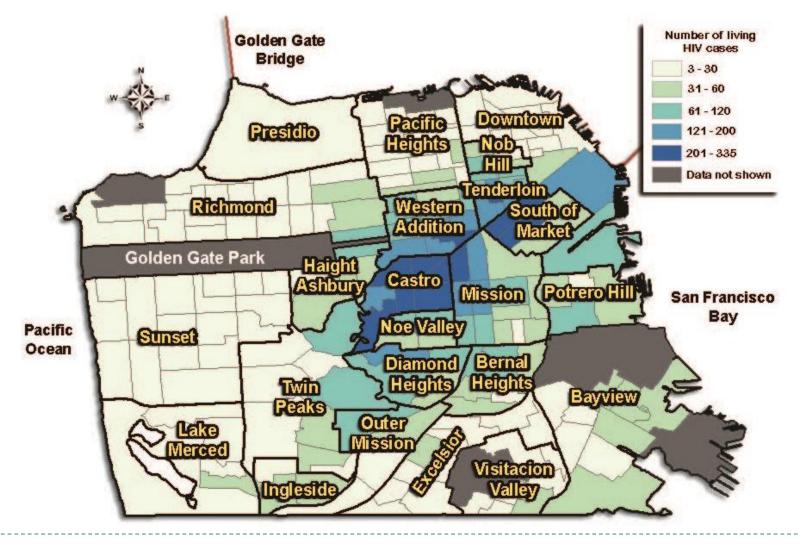
Continuum of HIV care among persons diagnosed with HIV, 2010-2013, San Francisco



Persons living with HIV who received care in SF by residence at diagnosis and current residence status, 2014

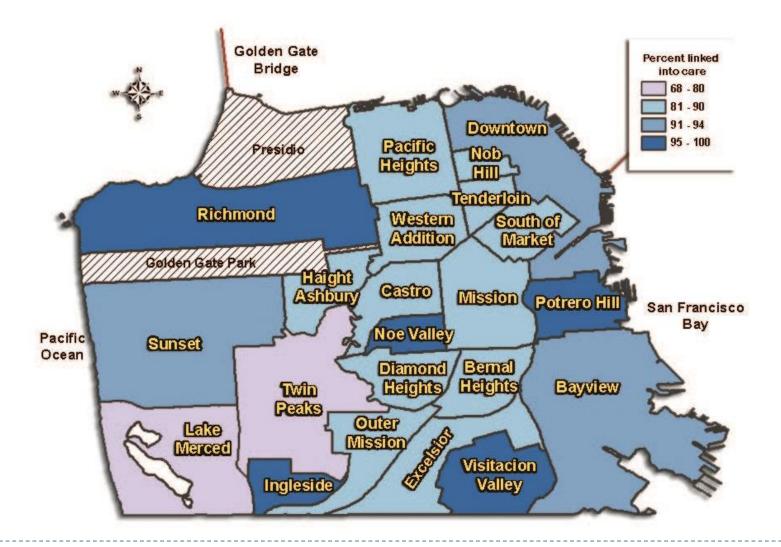


Geographic distribution of person living with HIV, 2014

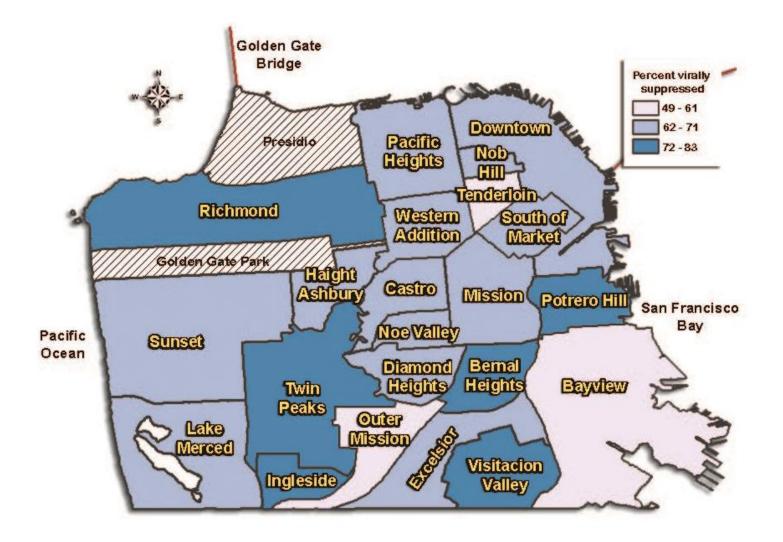


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Geographic distribution of proportion of HIV cases diagnosed in 2010-2013 who were linked to care within 3 months of diagnosis



Geographic distribution of proportion of HIV cases diagnosed in 2010-2013 who achieved viral suppression within 12 months of diagnosis



Geographic distribution of proportion of living HIV cases diagnosed through 2012 who achieved viral suppression in 2013



QUESTIONS?

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