## Status of the HIV/AIDS Epidemic San Francisco

### Applied Research, Community Health, Epidemiology and Surveillance Branch

Presented to HIV Health Services Planning Council July 2015



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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**

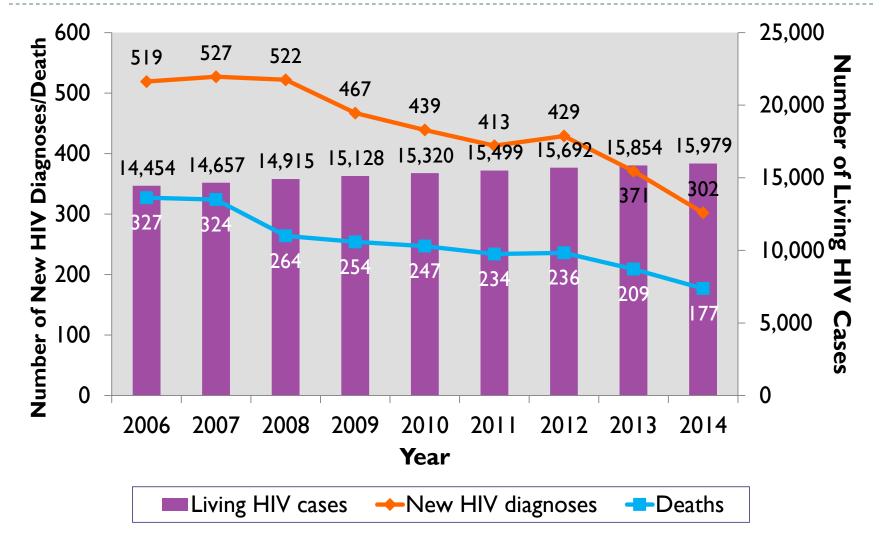
## Predominately active system

- 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



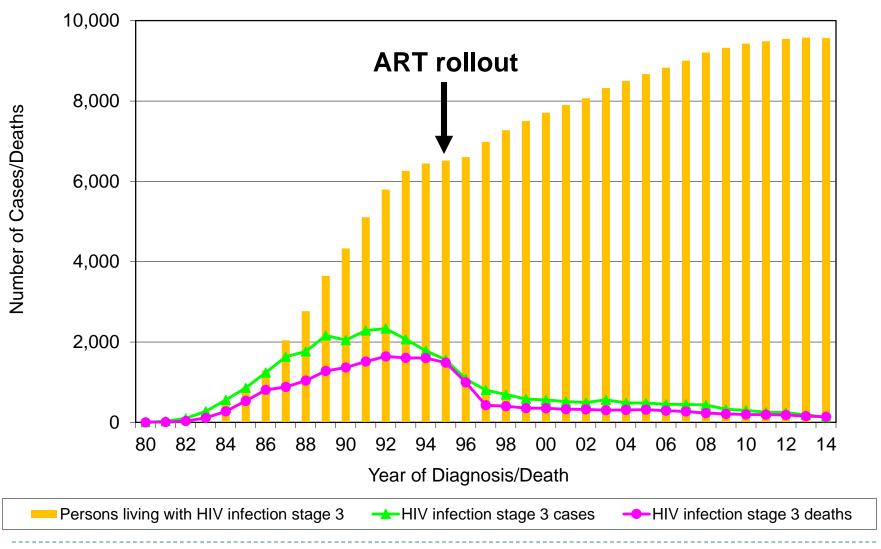
## Characteristics of Persons Living with HIV, December 31, 2014 and ,2006, 2014 New Diagnoses

	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%

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

	PLWH (N=15,979)		HIV D 2006 (N		HIV DX in 2014 (N=302	
	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 <b>9</b> %
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

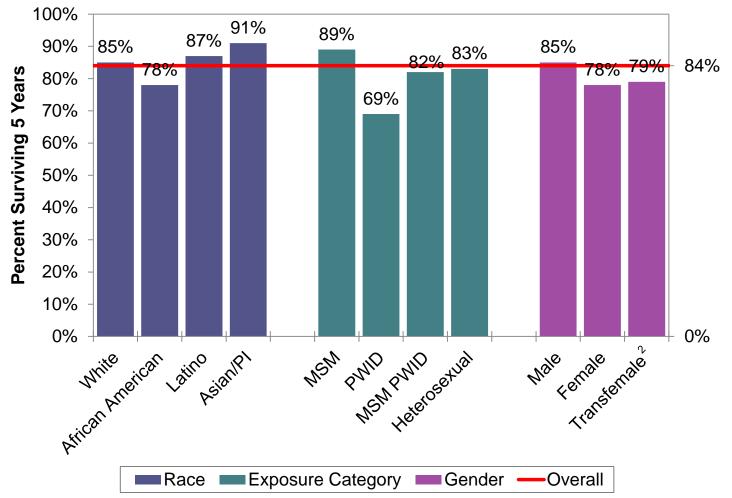
Underlying Cause of Death	2005-2008 N=1,242	2009-2012 N=943	
	Number (%)	Number (%)	
HIV	676 (54.4%)	413 (43.8%)	
Non-AIDS cancer	132 (10.6%)	128 (13.6%)	
Drug overdose	77 ( 6.2%)	104 (11.0%)	
Heart disease	95 ( 7.6%)	82 ( 8.7%)	
Suicide	48 ( 3.9%)	38 ( 4.0%)	
Liver disease	27 ( 2.2%)	22 ( 2.3%)	

\*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 probability<sup>1</sup> 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.

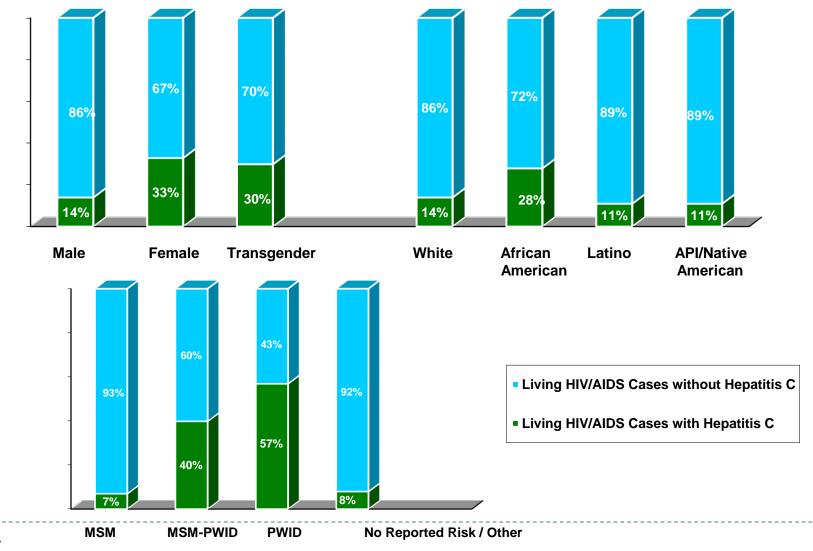
2 Transfemale data include all transgender cases. Transmale data are not released separately due to potential small population size.

#### **Characteristics of Persons Living with HIV Seen in**

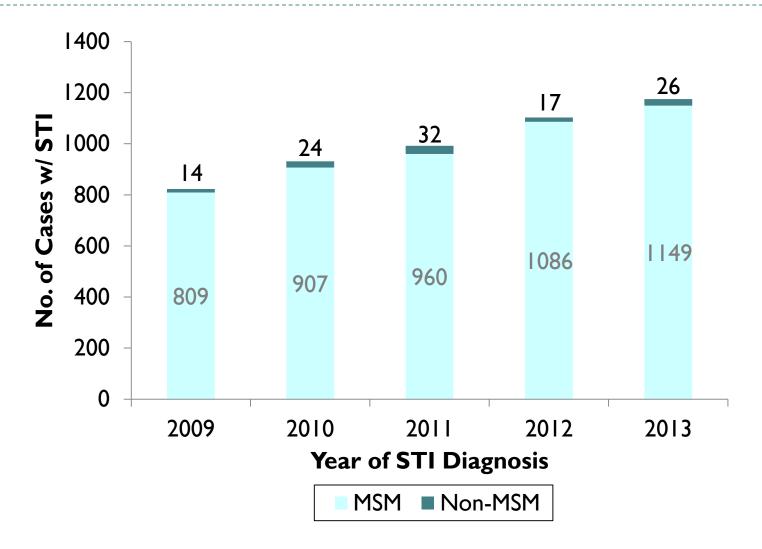
#### San Francisco Jails, as of December 2014

	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%

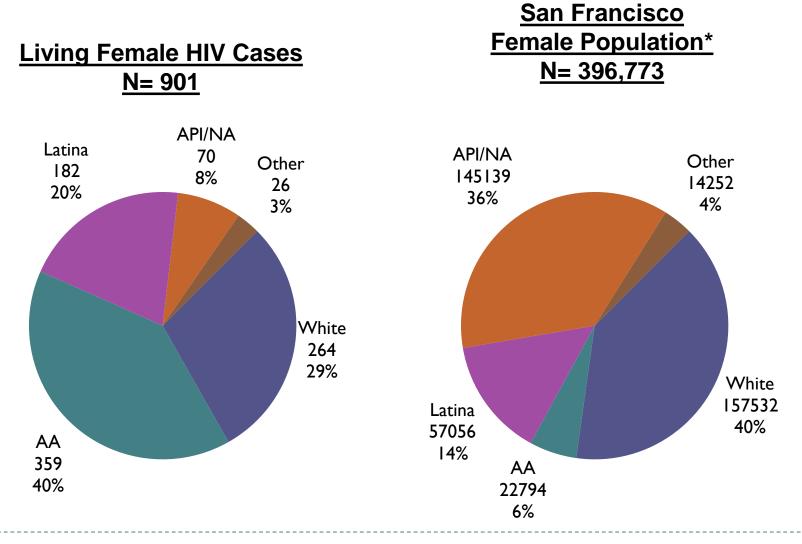
## Living HIV Cases Co-Infected with Hepatitis C, as of December 31, 2014



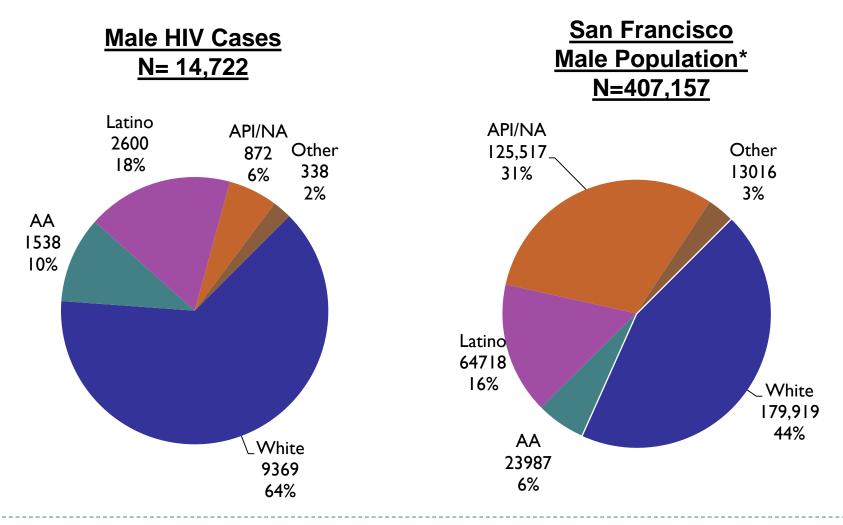
# Number of HIV cases diagnosed with an STI by year of STI diagnosis, 2009-2013, San Francisco



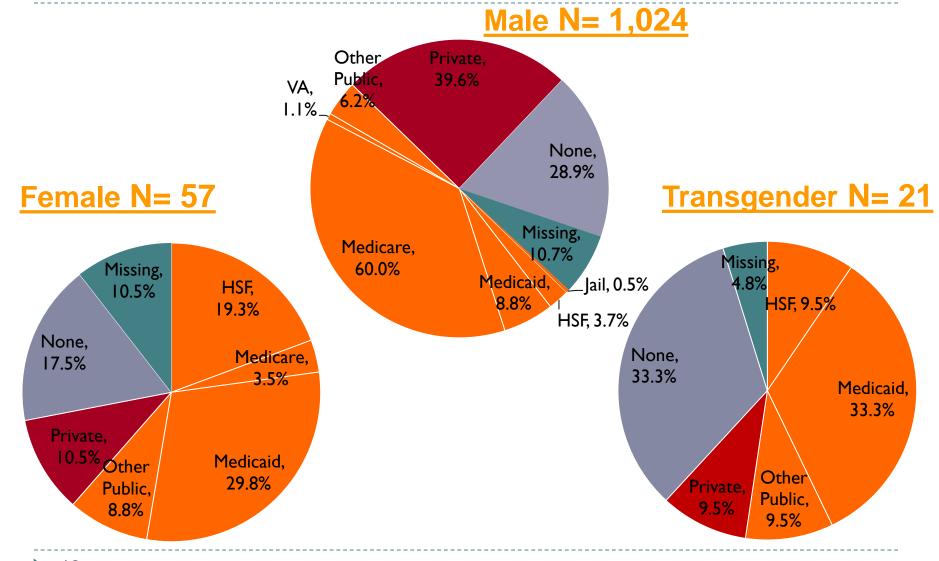
#### Race/Ethnicity of Female Living with HIV Compared to the General Population of San Francisco, December 31, 2014



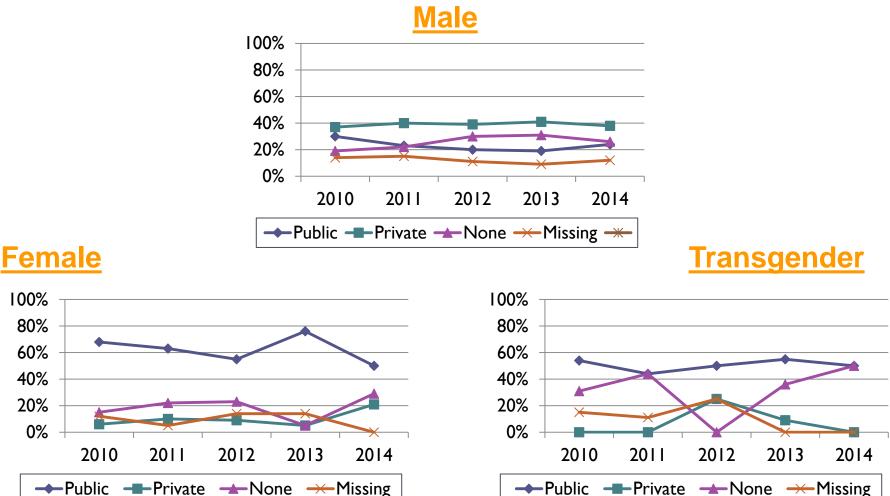
#### Race/Ethnicity of Male Living with HIV Compared to the General Population of San Francisco, December 31, 2014



## 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%

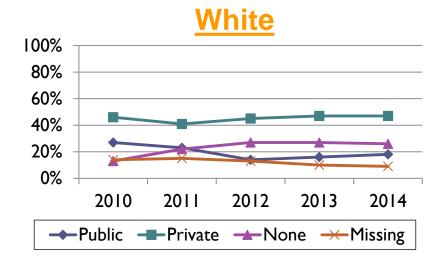
60%

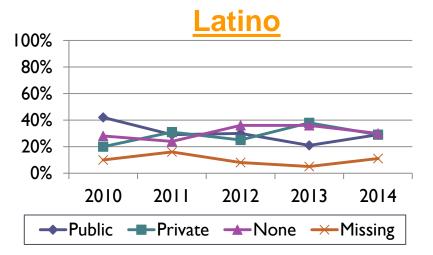
40%

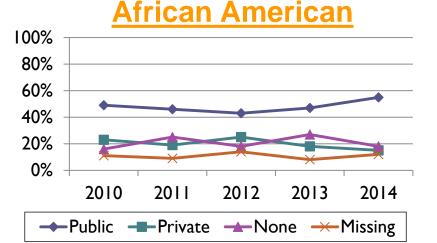
20%

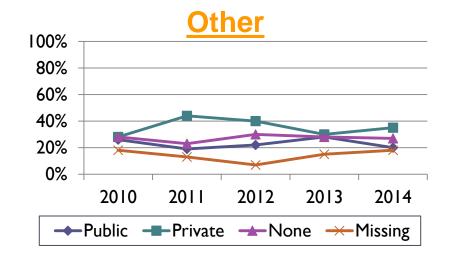
0%

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





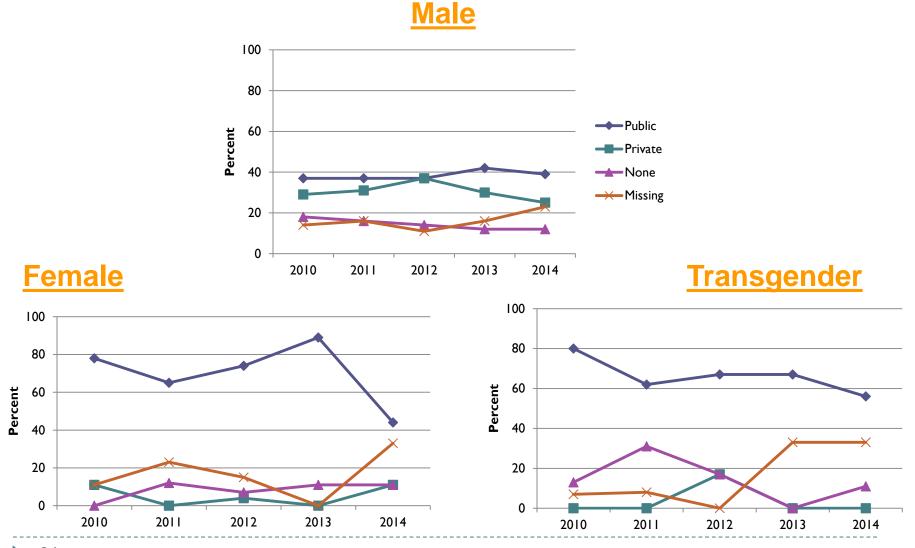




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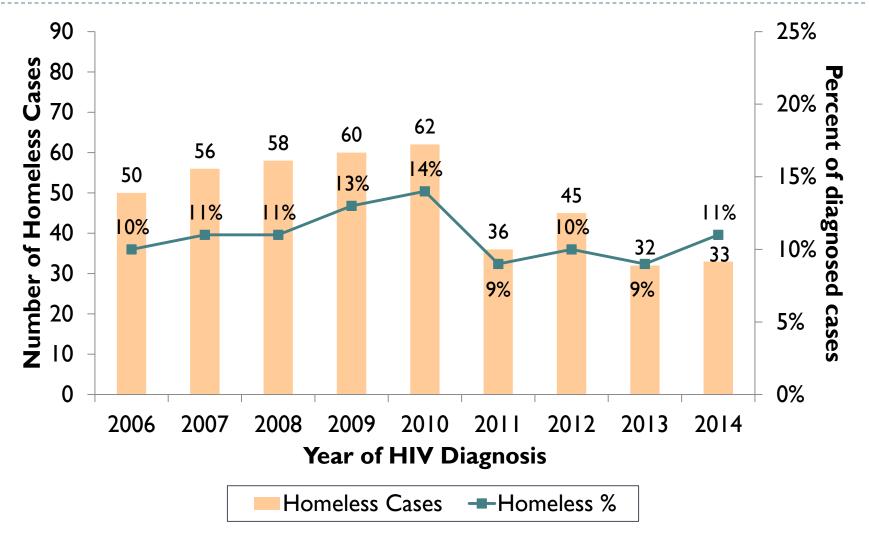
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### Trends in Health Coverage at Time of HIV Stage 3 Diagnosis by Gender, 2010-2014, San Francisco

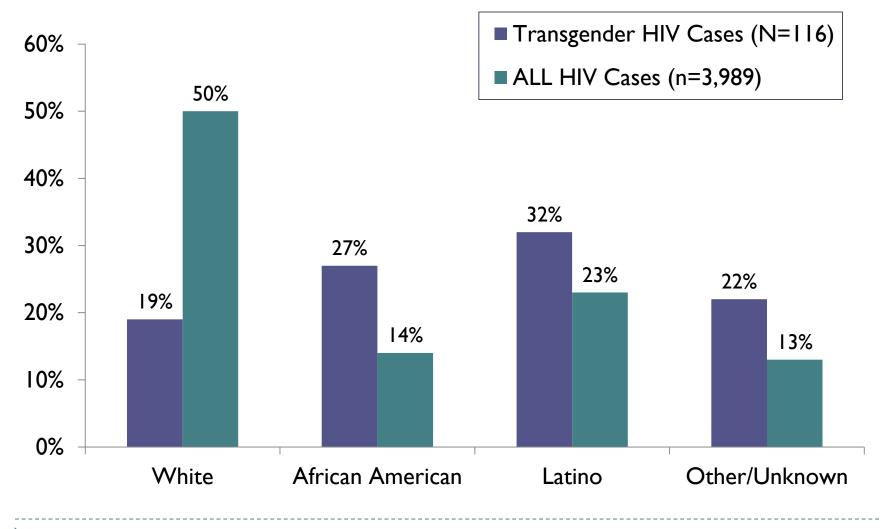


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## Trends in Number and Percent of Diagnosed Cases Homeless at Time of Diagnosis, 2006-2014



## 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

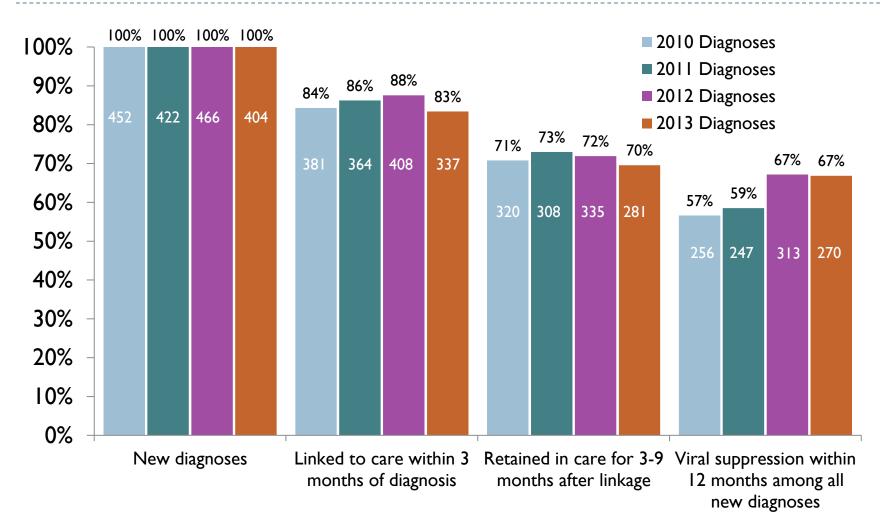
	San Mateo	Marin	San Francisco
Gender			
Male	83.6%	89.3%	92.0%
Female	15.7%	7.6%	5.7%
Transgender	0.7%	2.6%	2.3%
Race/Ethnicity			
White	48.4%	55.2%	61.7%
African-American	12.7%	22.3%	12.9%
Latino	26.9%	18.0%	17.4%
Asian/Pac Islander	9.6%	2.1%	5.3%
Risk			
MSM	59.8%	49.62%	73.3%
MSM-IDU	5.9%	13.3%	15.2%
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

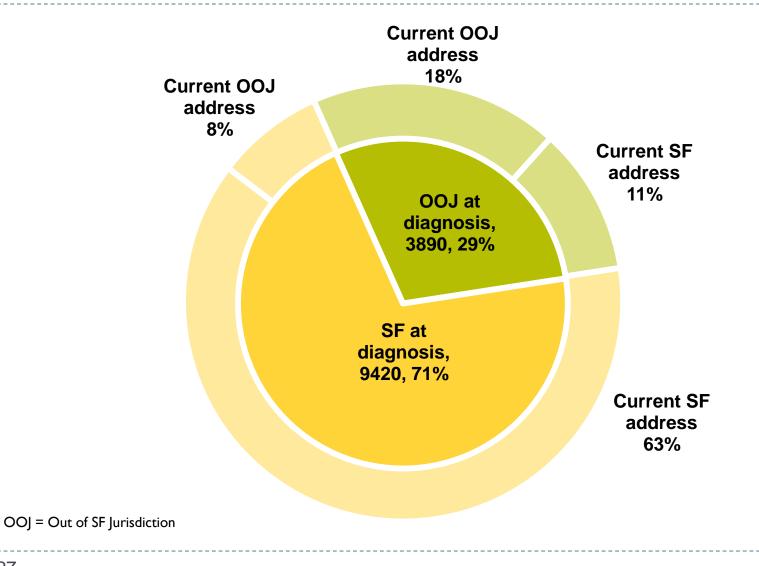
	Total number	Number not in care	Percent not in care
Persons Living with AIDS	12,899	1,128	8.7%
Persons Living with HIV, <u>aware</u>	8,449	1,638	19.4%
Persons Living with HIV/AIDS	21,339	2,766	13.0%

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

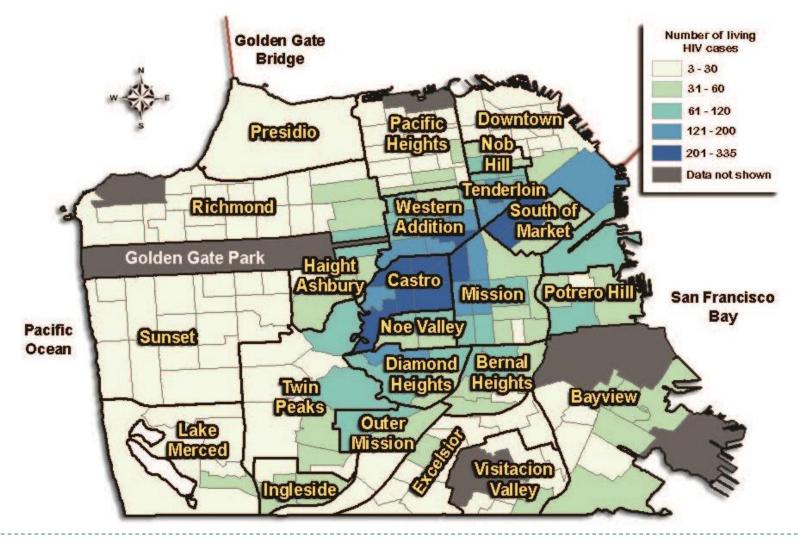
# Continuum of HIV care among persons diagnosed with HIV, 2010-2013, San Francisco



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

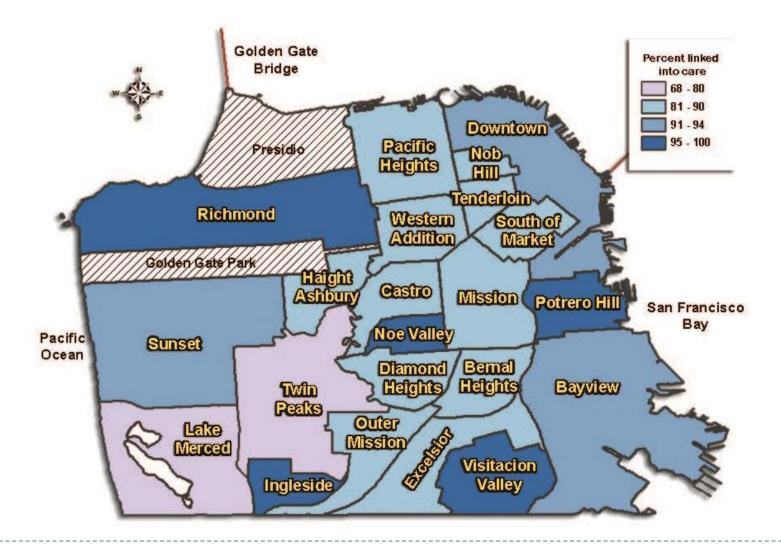


# Geographic distribution of person living with HIV, 2014

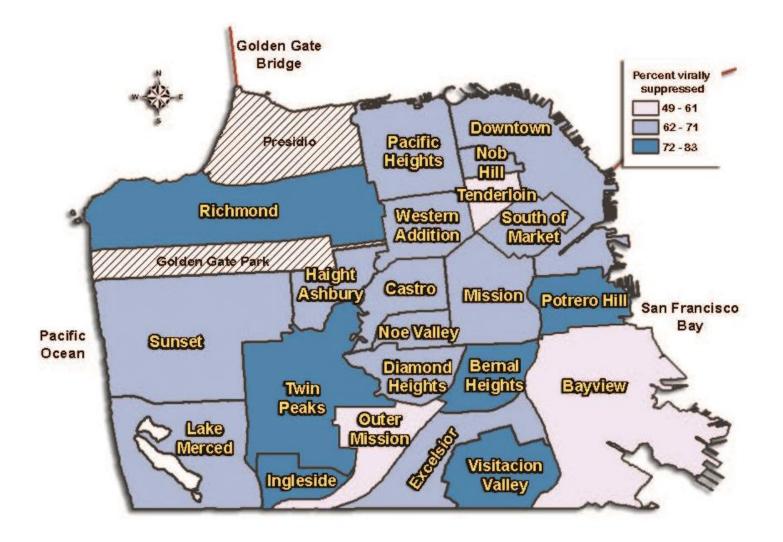


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Geographic distribution of proportion of HIV cases diagnosed in 2010-2013 who were linked to care within 3 months of diagnosis



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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