

Surveillance and Epidemiology of HIV and AIDS in Los Angeles County

HIV Commission – February 9, 2012

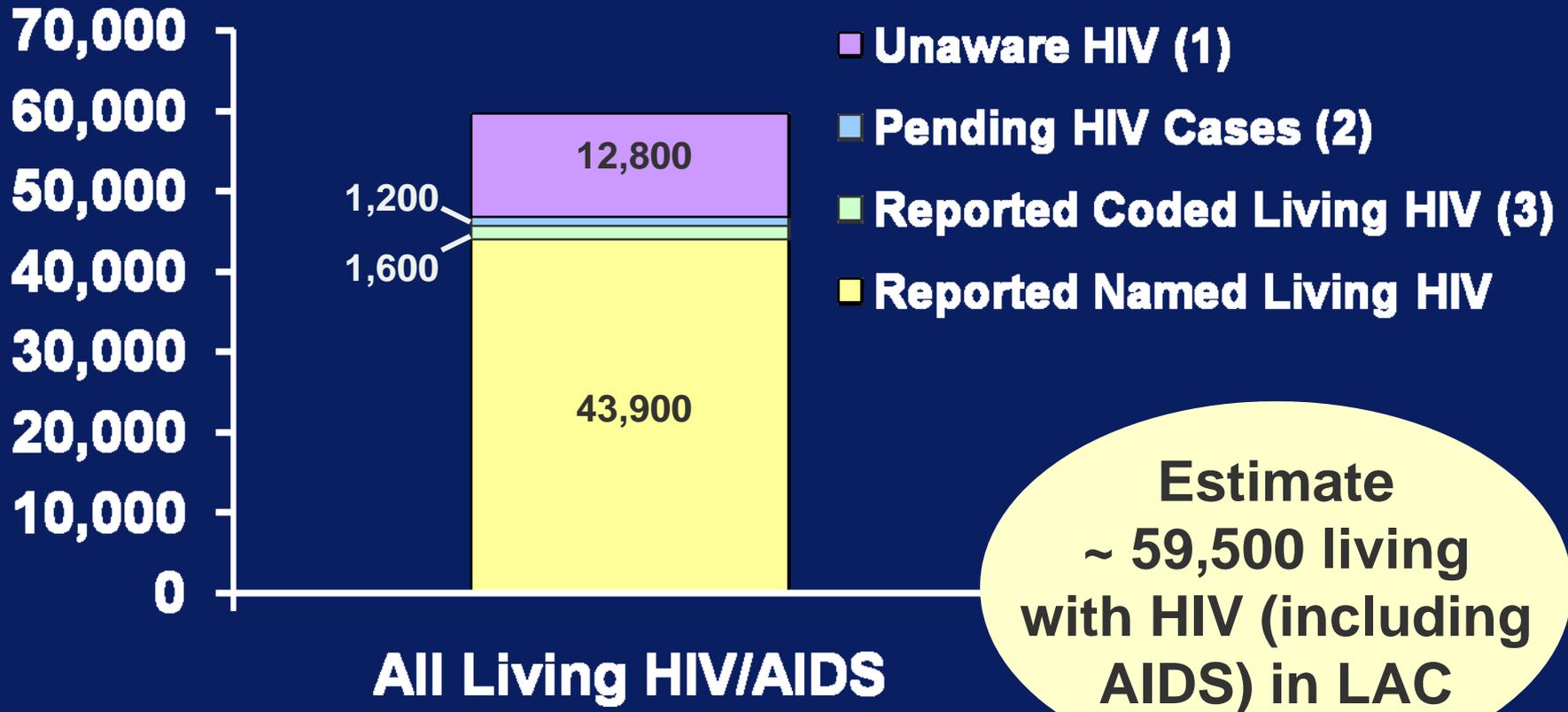
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Los Angeles County Department of Public Health



HIV in L.A. County



2012 Estimated Number of Persons Living with HIV and AIDS in LAC



Source: LAC Division of HIV and STD Programs, reported as of 12/31/2011.

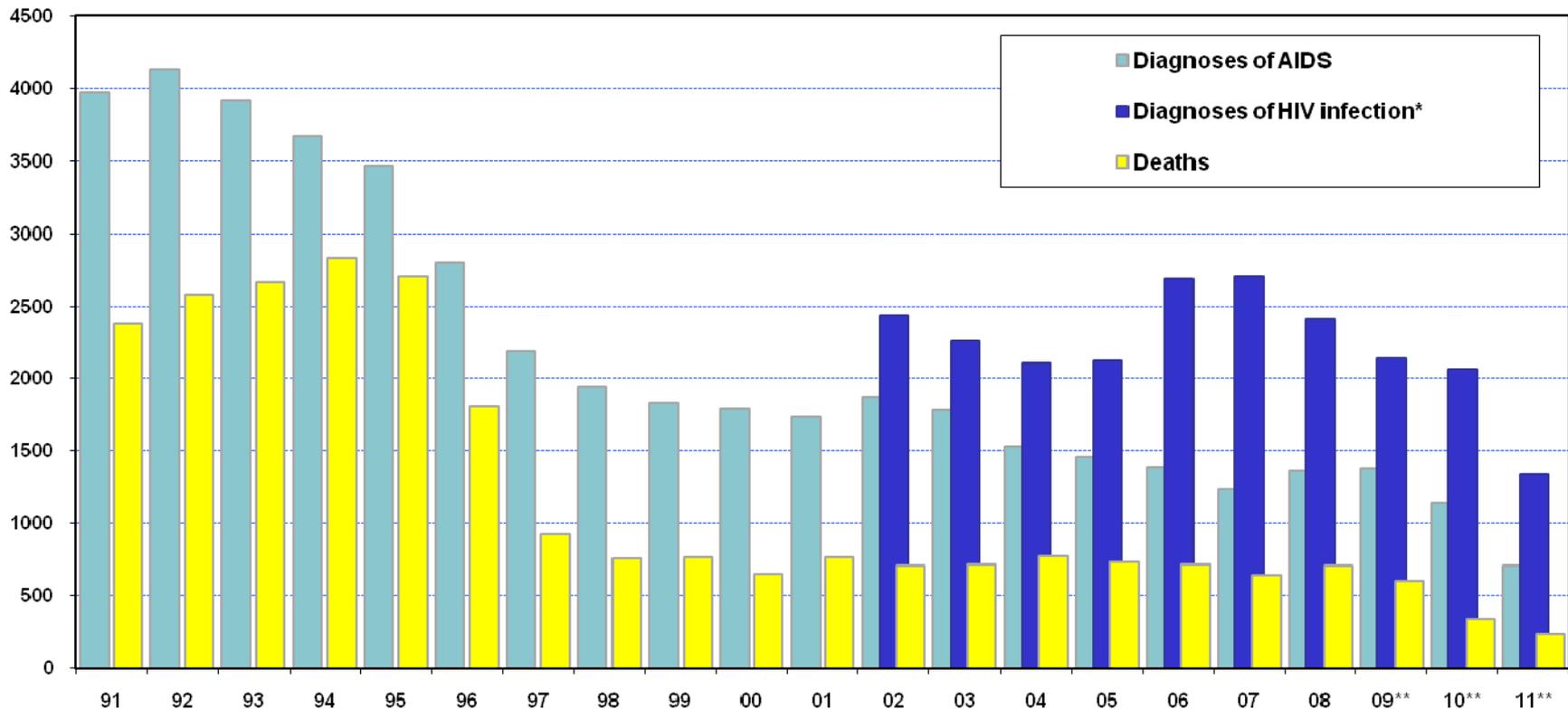
(1) Estimate that 21.5% of HIV+ in LA County are unaware of their infection; modified from CDC estimate.

(2) Of 4,853 notifications pending investigation, estimate half of 2,400 who have detectable VL or confirmatory test to be unduplicated cases.

(3) Out of the 3,200 cases reported as code, half are thought to represent unduplicated cases.



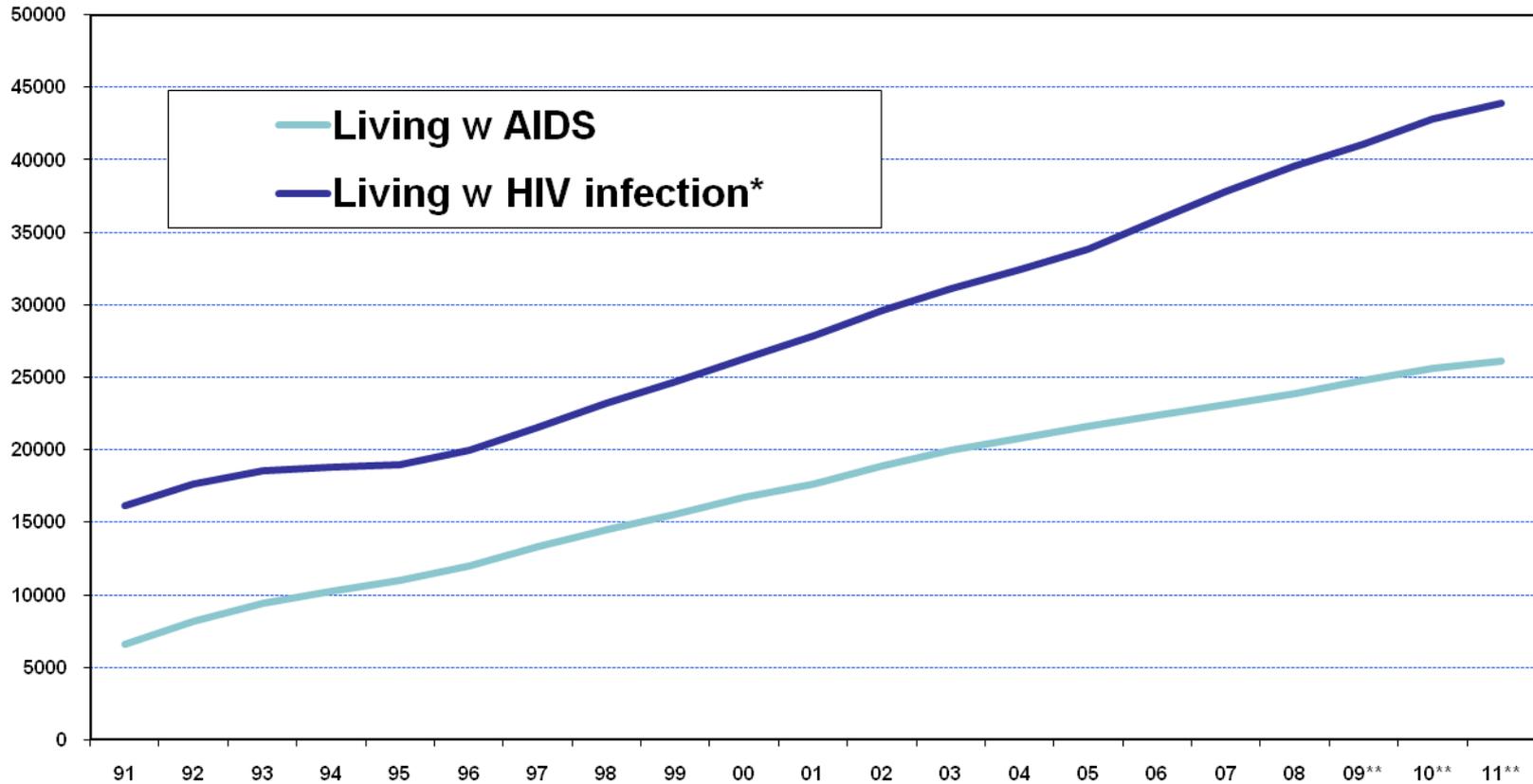
Annual Diagnoses of AIDS, HIV Infection and HIV-related Deaths, LAC 1991-2011



Source: HIV/AIDS Surveillance Summary, data as of December 2011.



Number of Persons Reported Living with HIV Infection and AIDS by Year, LAC, 1991-2011



Source: *HIV/AIDS Surveillance Summary*, data as of December 2011.



Reported Persons living with HIV Infection from *HIV/AIDS Annual Surveillance Summary*

Jurisdiction No. living with HIV/AIDS

U.S. (40 states)

652,294*

California

112,550**

LA County

43,936***

*Reported as of 12/08, CDC. HIV Surveillance Report, Volume 21, 2009.

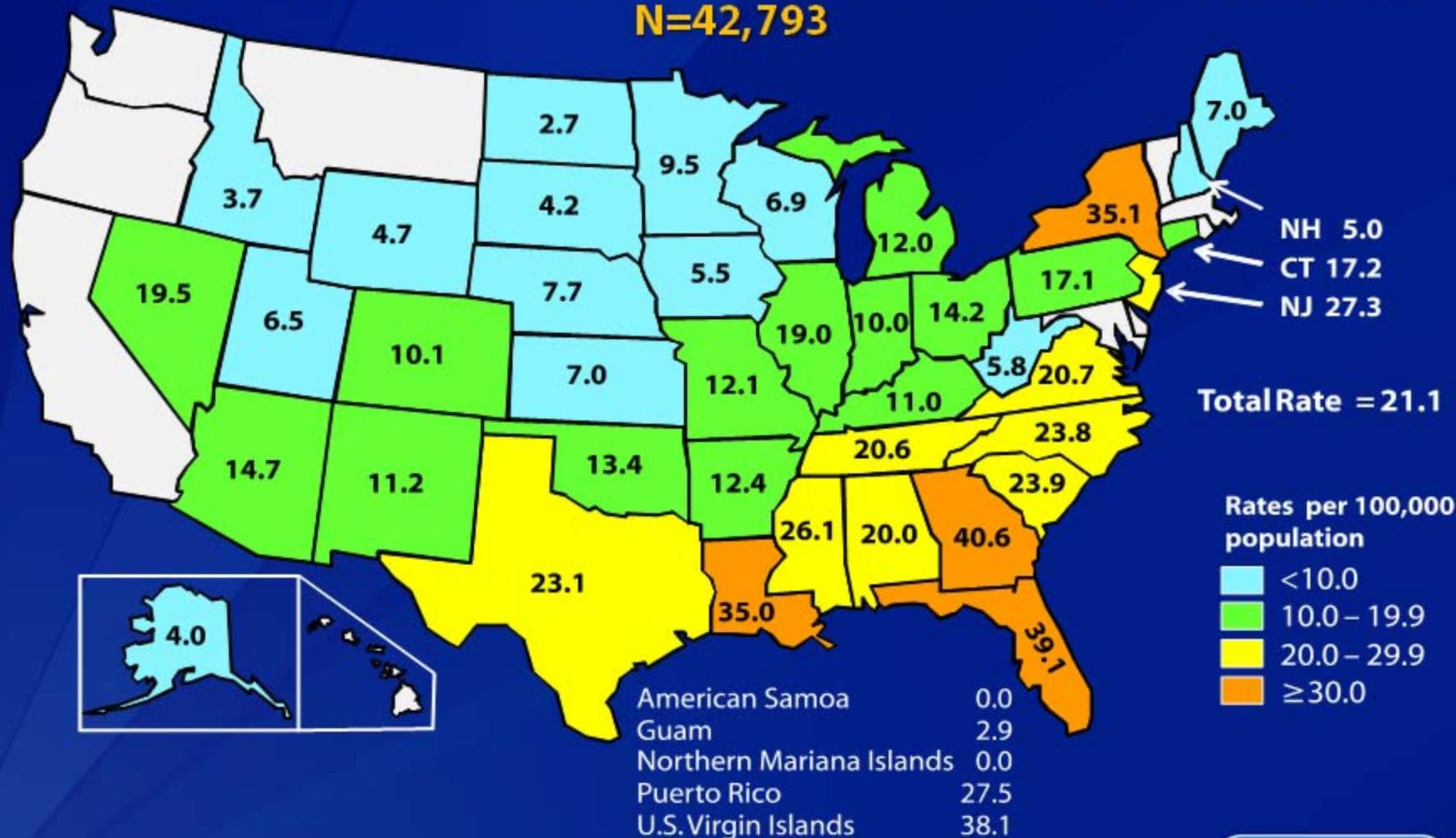
**Reported as of 12/31/11, California Office of AIDS, HIV/AIDS Surveillance Section.

***Reported as of 12/31/11.



Rates of Diagnoses of HIV Infection among Adults and Adolescents, 2009—40 states and 5 U.S. Dependent Areas

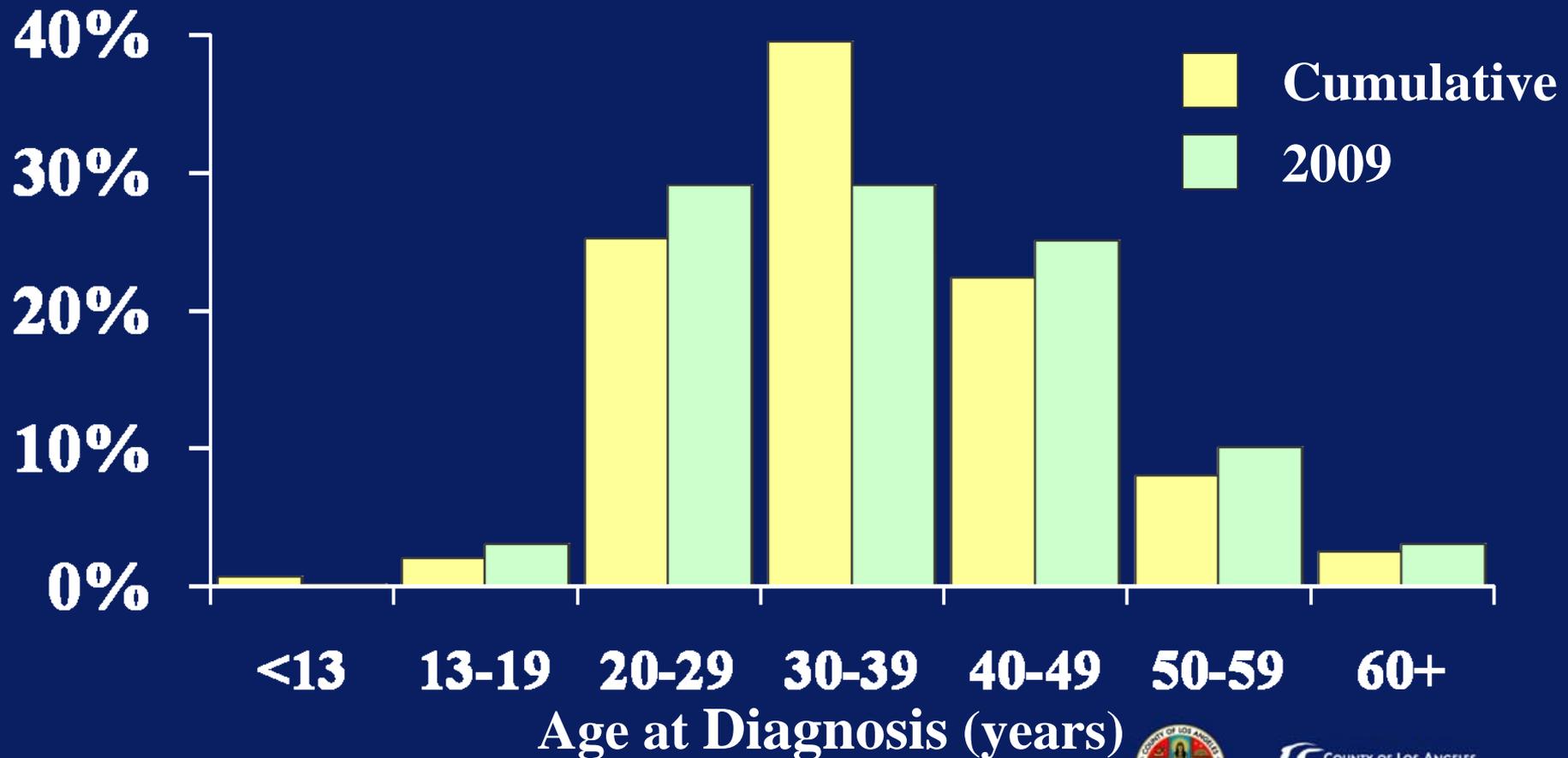
N=42,793



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.



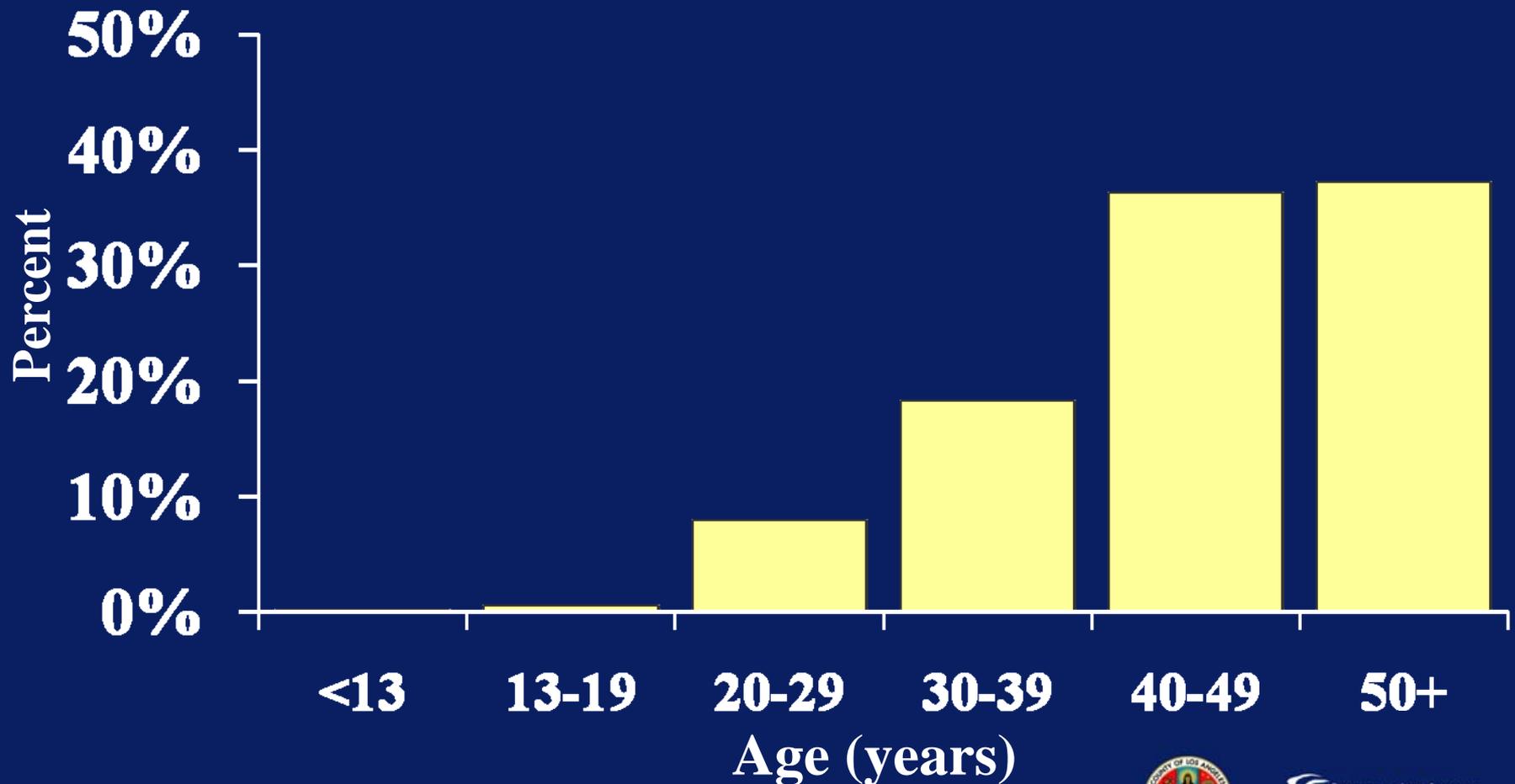
Comparison of Cumulative HIV/AIDS Cases (n=77,866) and Cases Diagnosed in 2009 (n=2,137), by Age at Diagnosis – LA County



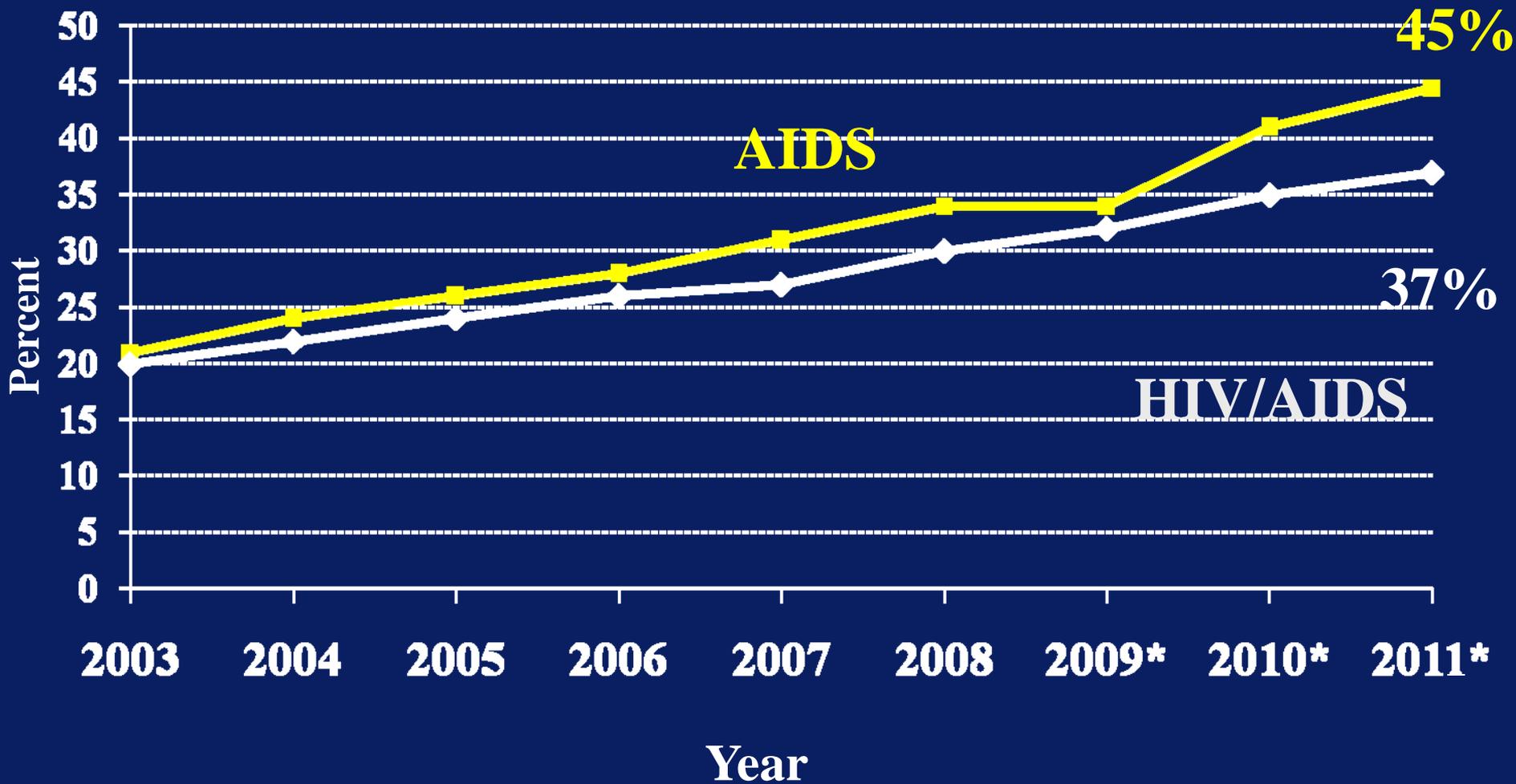
Source: HIV/AIDS Surveillance Summary, data as of December 2011.



Current Age of Persons Living with HIV in LAC (n=43,902)



Percent Persons Living with AIDS and HIV Whose Current Age is 50+ Years – by Year, LAC, 2003-11

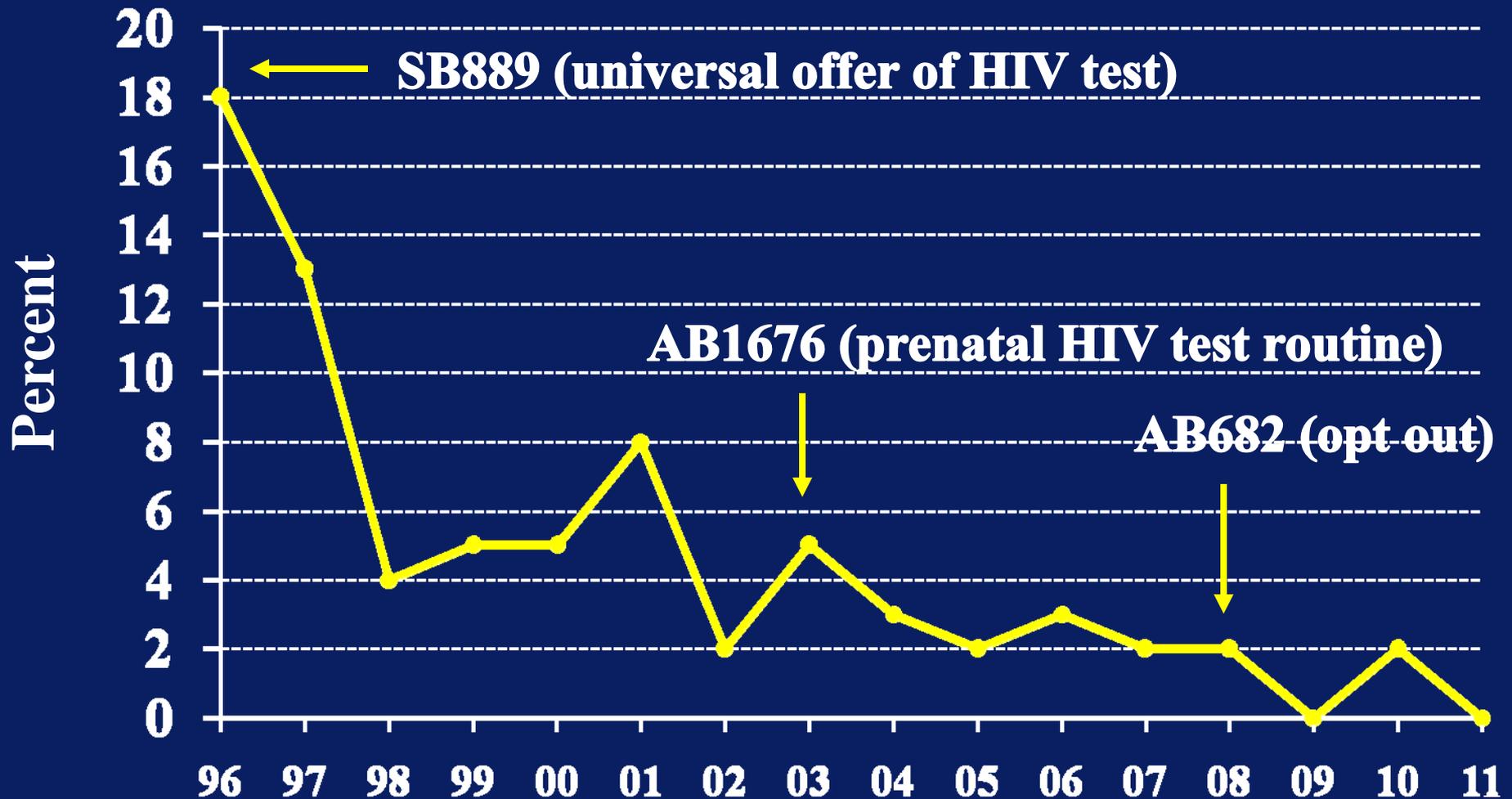


* Data provisional due to reporting delay.



Source: HIV/AIDS Surveillance Summary, data as of December 2011.

Percent Perinatal HIV Transmission by Birth Year, LA County, 1996 – 2011

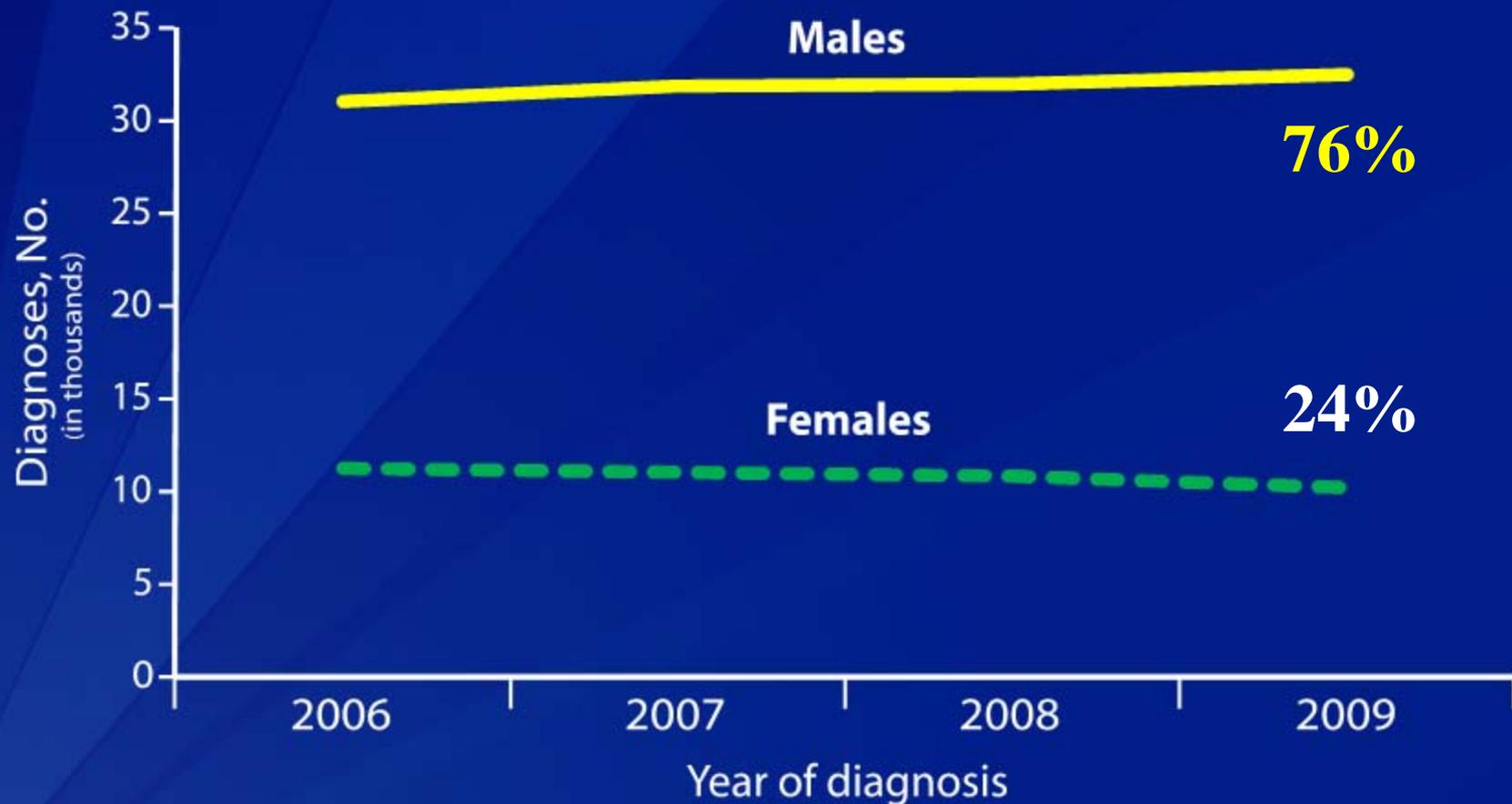


Source: HIV Epidemiology Program, LAC-
DPH; data as of Dec 31, 2011

Year of Birth



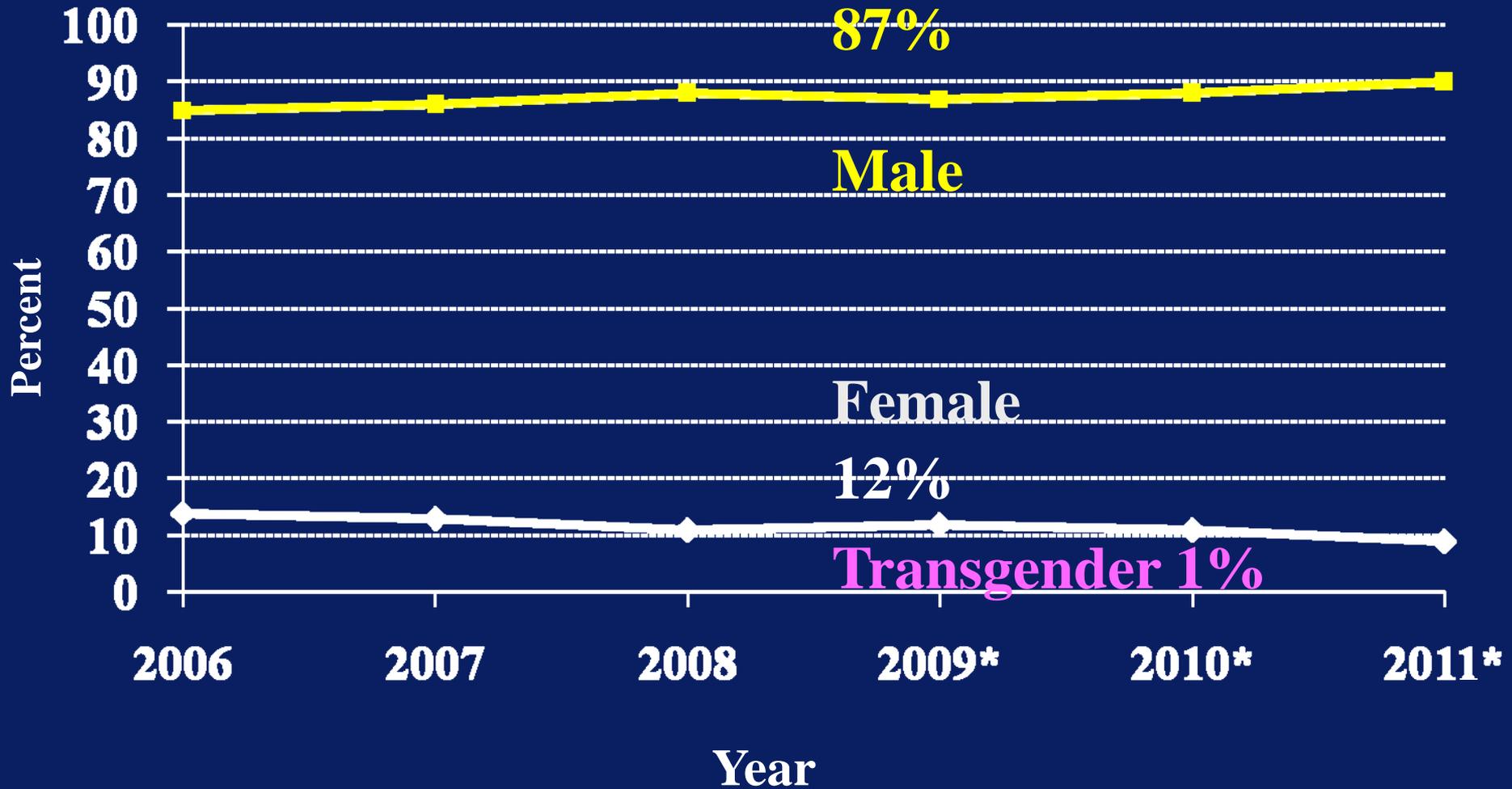
Diagnoses of HIV Infection among Adults and Adolescents, by Sex, 2006–2009—40 States and 5 U.S. Dependent Areas



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.



Percent Persons Diagnosed with HIV by Gender and Year, LAC, 2006-11

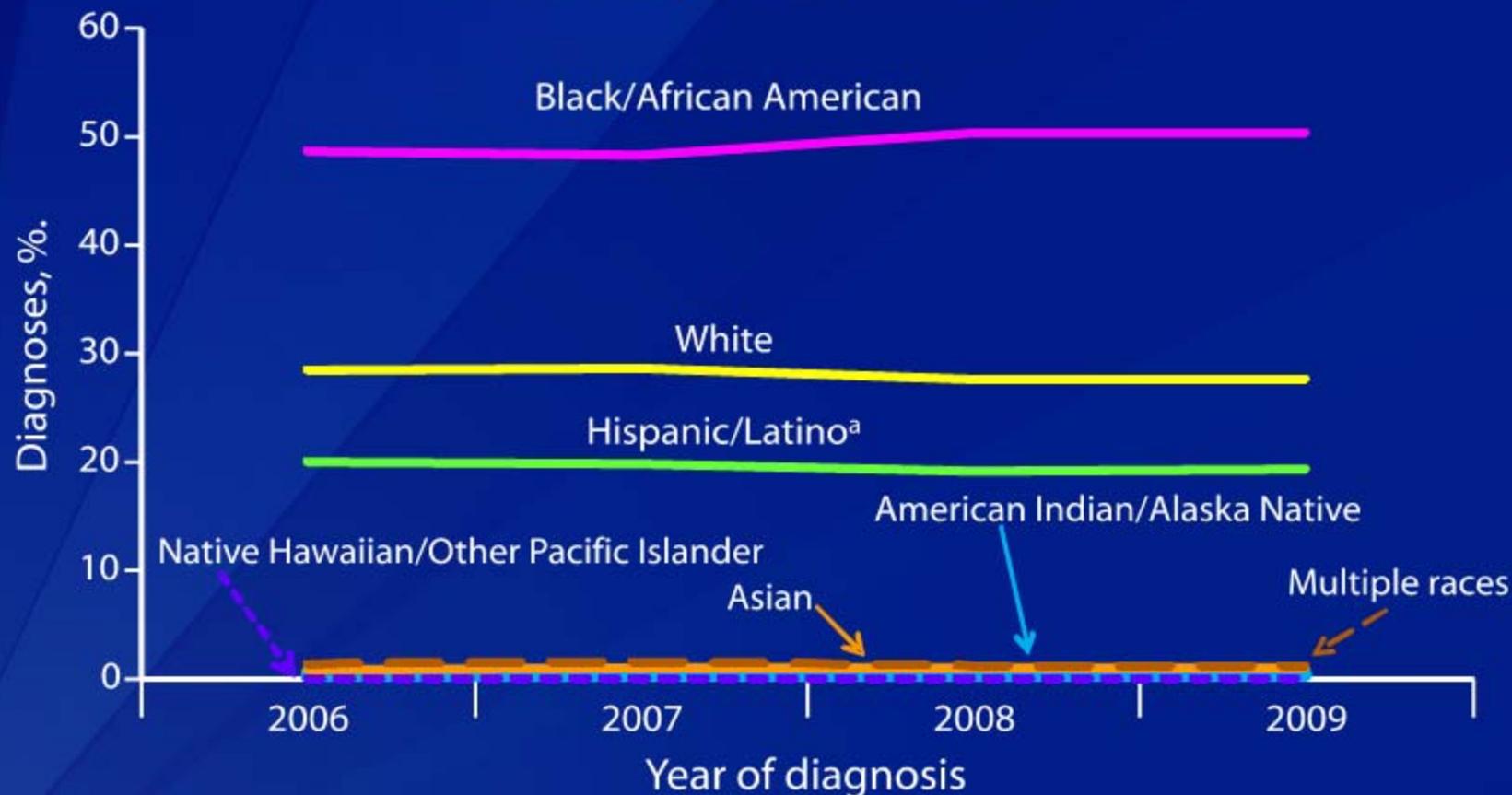


* Data provisional due to reporting delay.



Source: HIV/AIDS Surveillance Summary, data as of December 2011.

Diagnoses of HIV Infection among Adults and Adolescents, by Race/Ethnicity, 2006–2009—40 States and 5 U.S. Dependent Areas

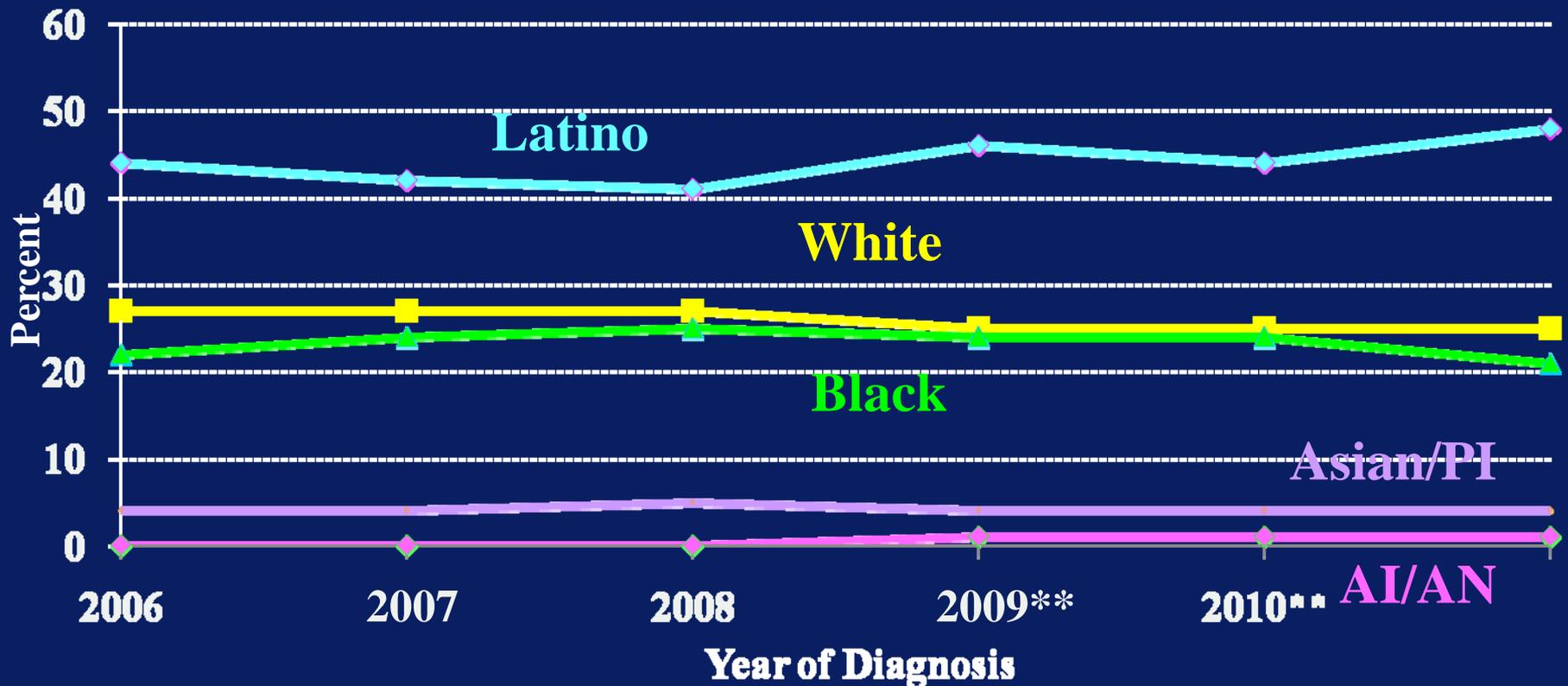


Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.

^a Hispanics/Latinos can be of any race.



Percent of HIV Diagnoses Among Adults/Adolescents, by Race/Ethnicity* and Year of HIV Diagnosis LAC, 2006-2011



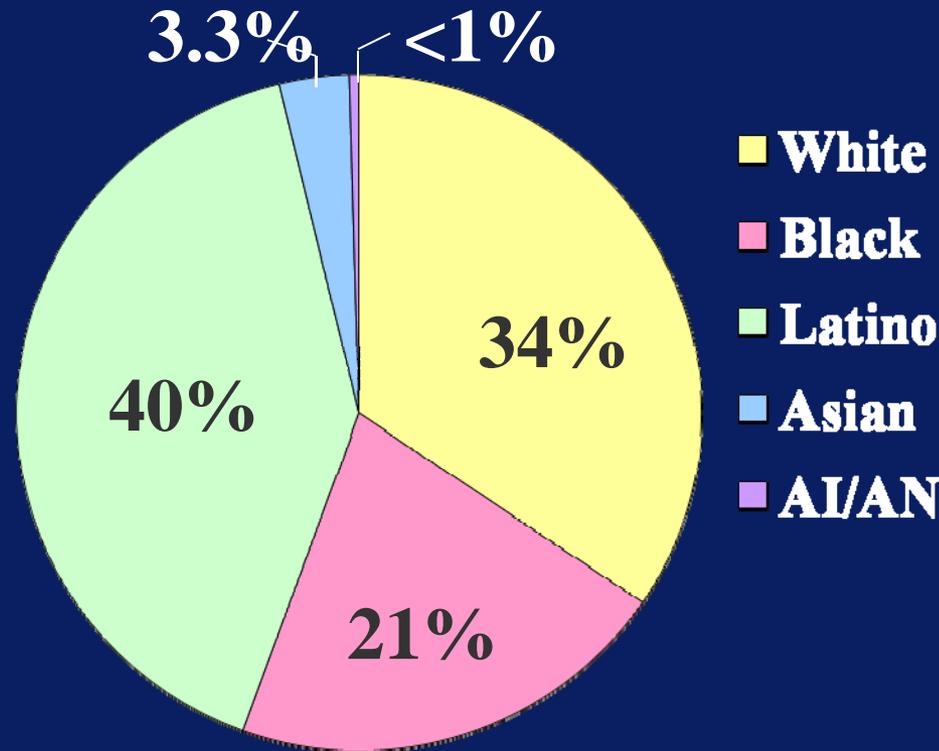
** Data provisional due to reporting delay.

Source: HIV/AIDS Surveillance Summary, data as of December 2011.

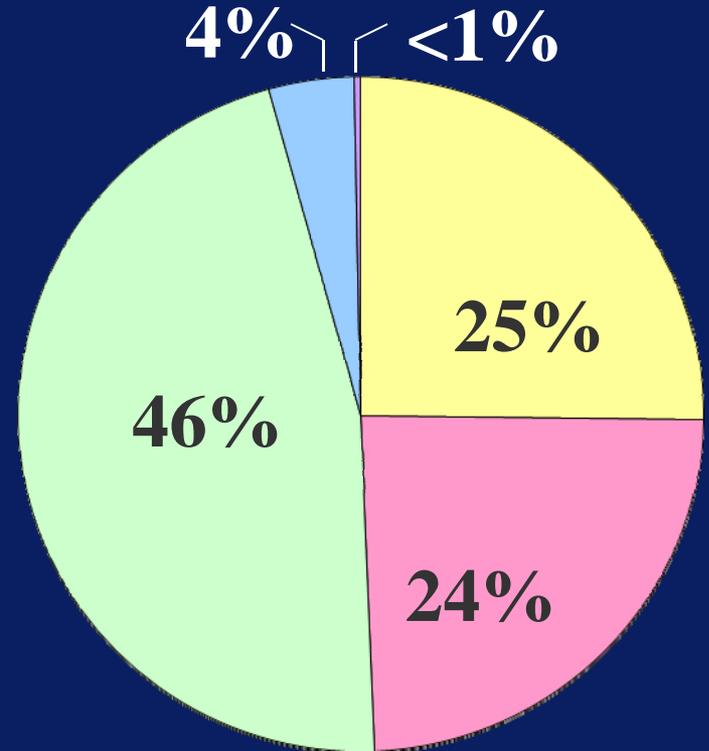


Comparison of Persons Living with HIV with HIV Diagnoses in 2009, by Race/Ethnicity

Living with HIV/AIDS

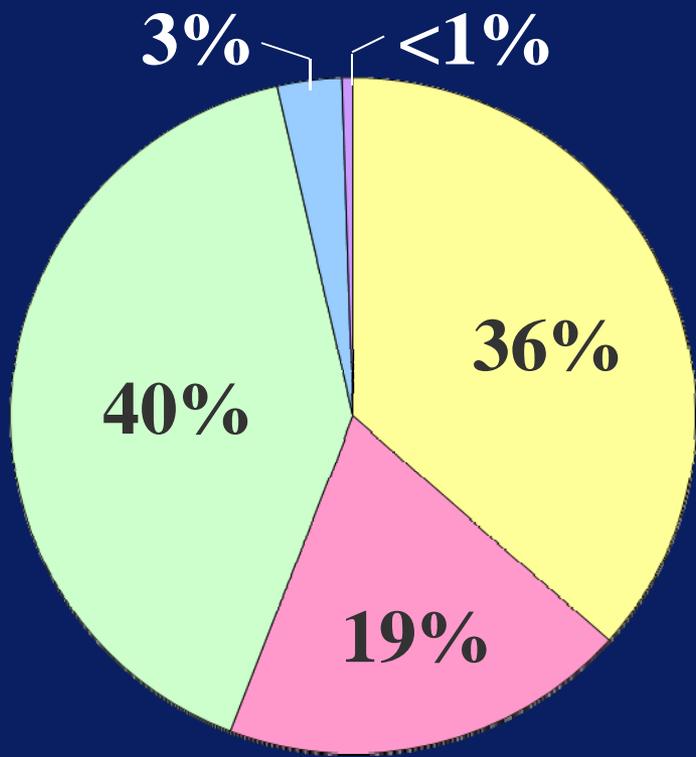


Diagnosed in 2009

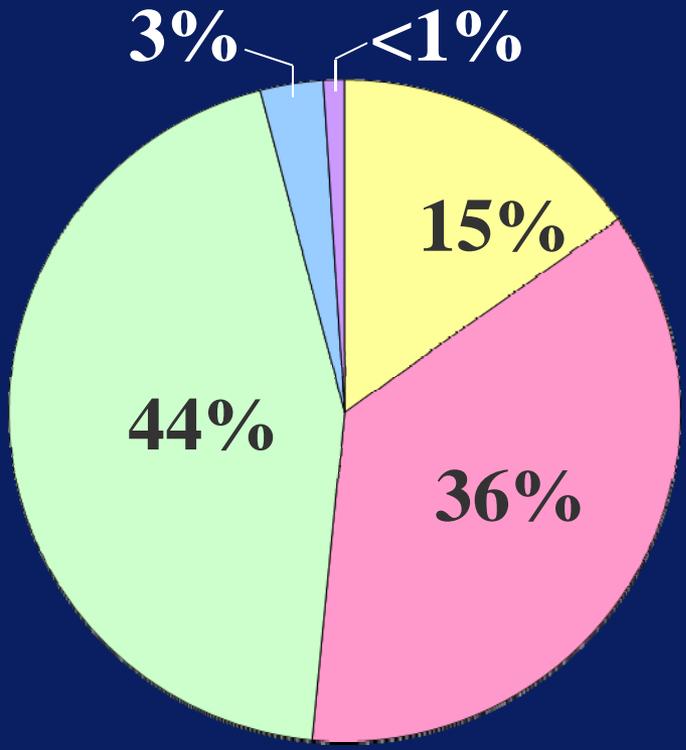


Comparison of Persons Living with HIV, by Gender and Race/Ethnicity, 2010 - LAC

Male (n=38,874)



Female (n=5,062)

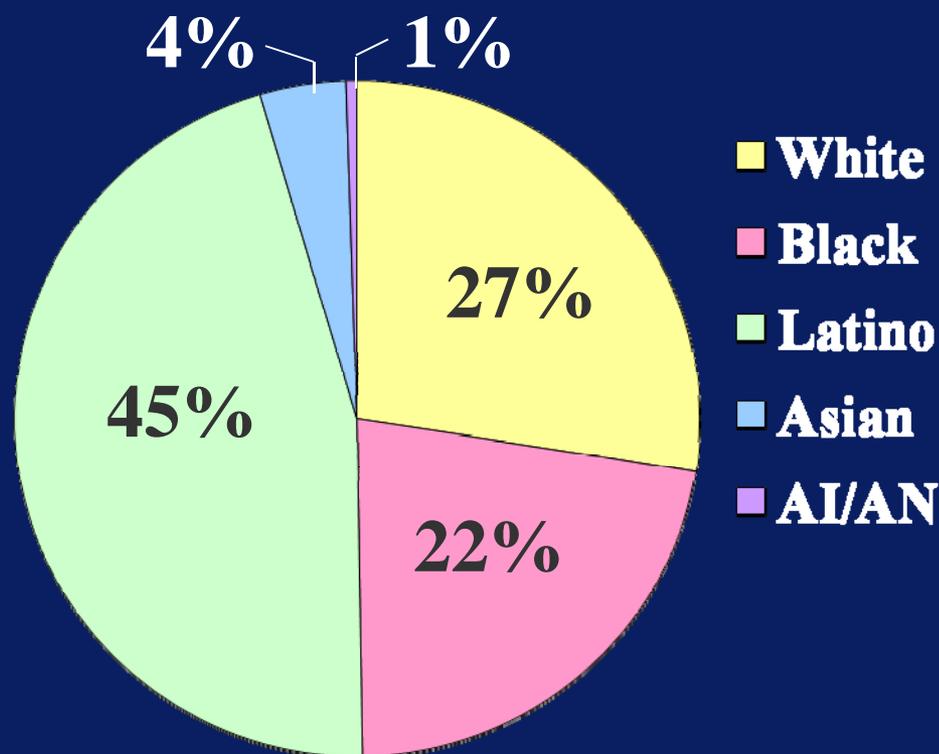


- White
- Black
- Latino
- Asian
- AI/AN

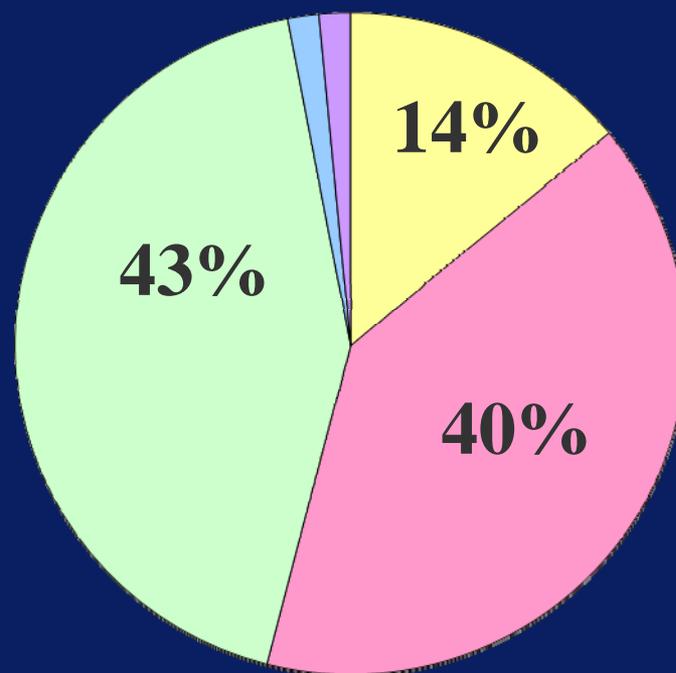


Comparison of Persons Diagnosed with HIV in 2010, by Gender and Race/Ethnicity - LAC

Male (n=1,835)



Female (n=227)*

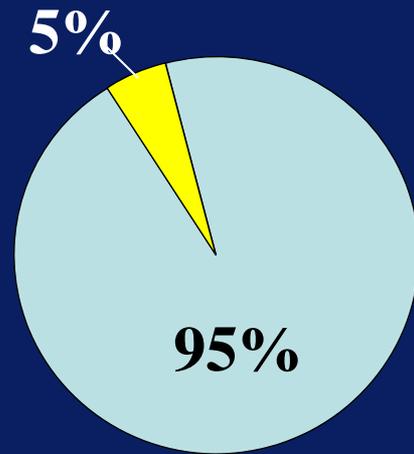


* A/PI and Am. Indian/AK Native each w/ fewer than 5 cases.



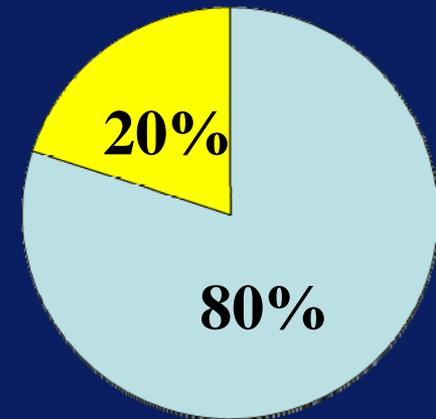
Source: *HIV/AIDS Surveillance Summary*, data as of December 2011.

Proportion of Persons Living with HIV/AIDS by Race/Ethnicity and Sex, LAC 2011



White

Black

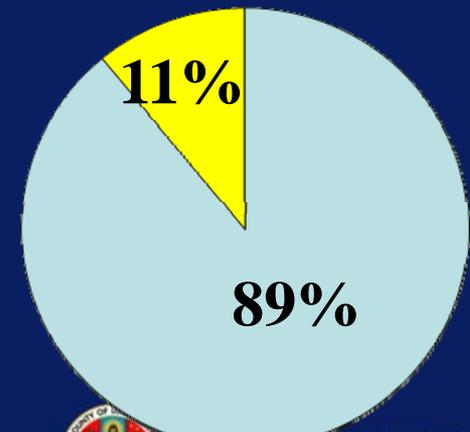
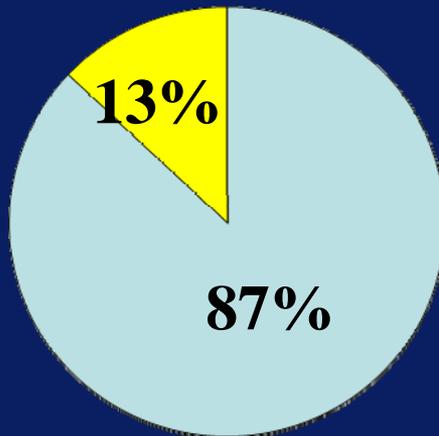


■ Male

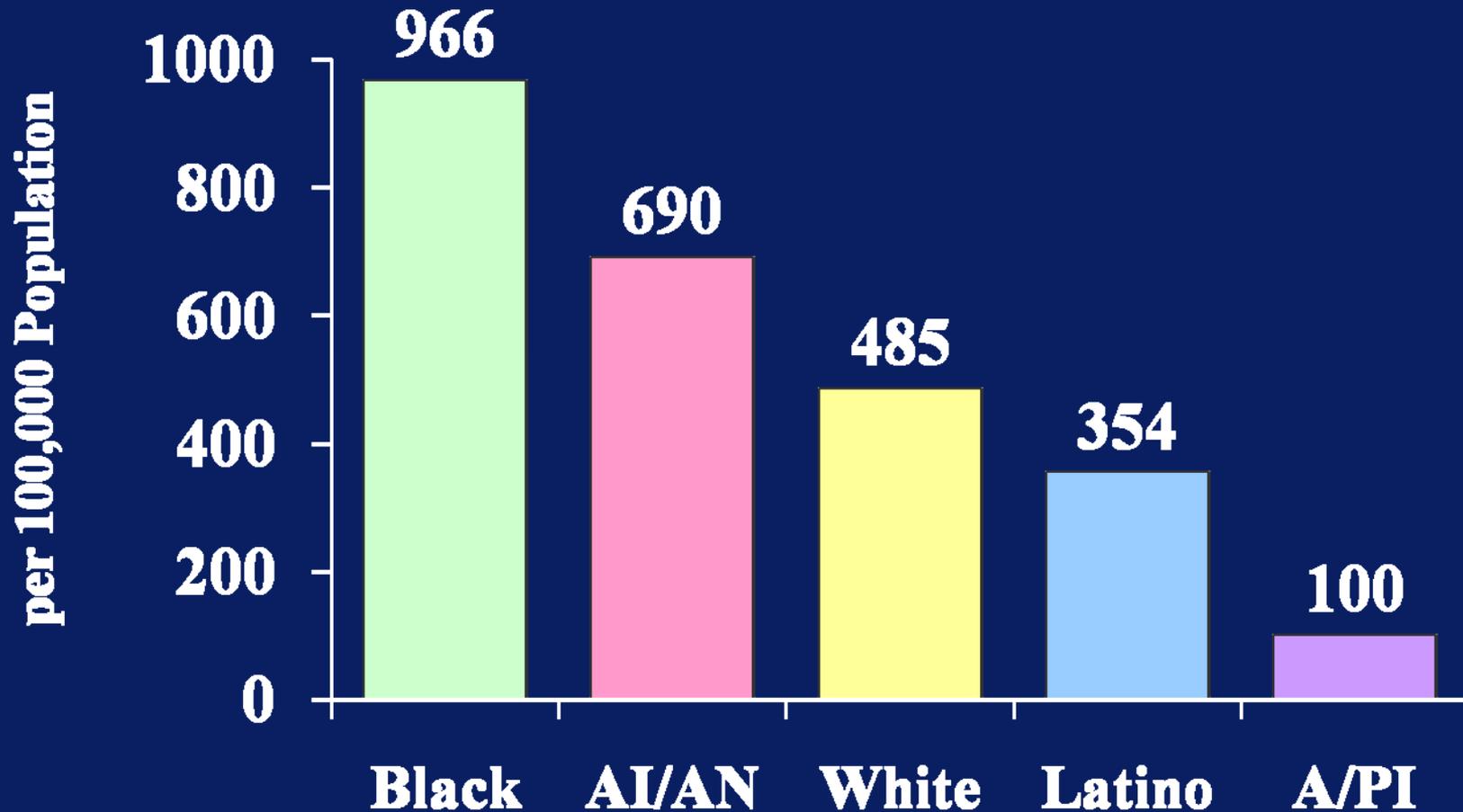
■ Female

Latino

Asian/Pac Isle/Am Ind/AK Native



Persons Living with HIV/AIDS in LAC per 100,000 population* by Race/Ethnicity

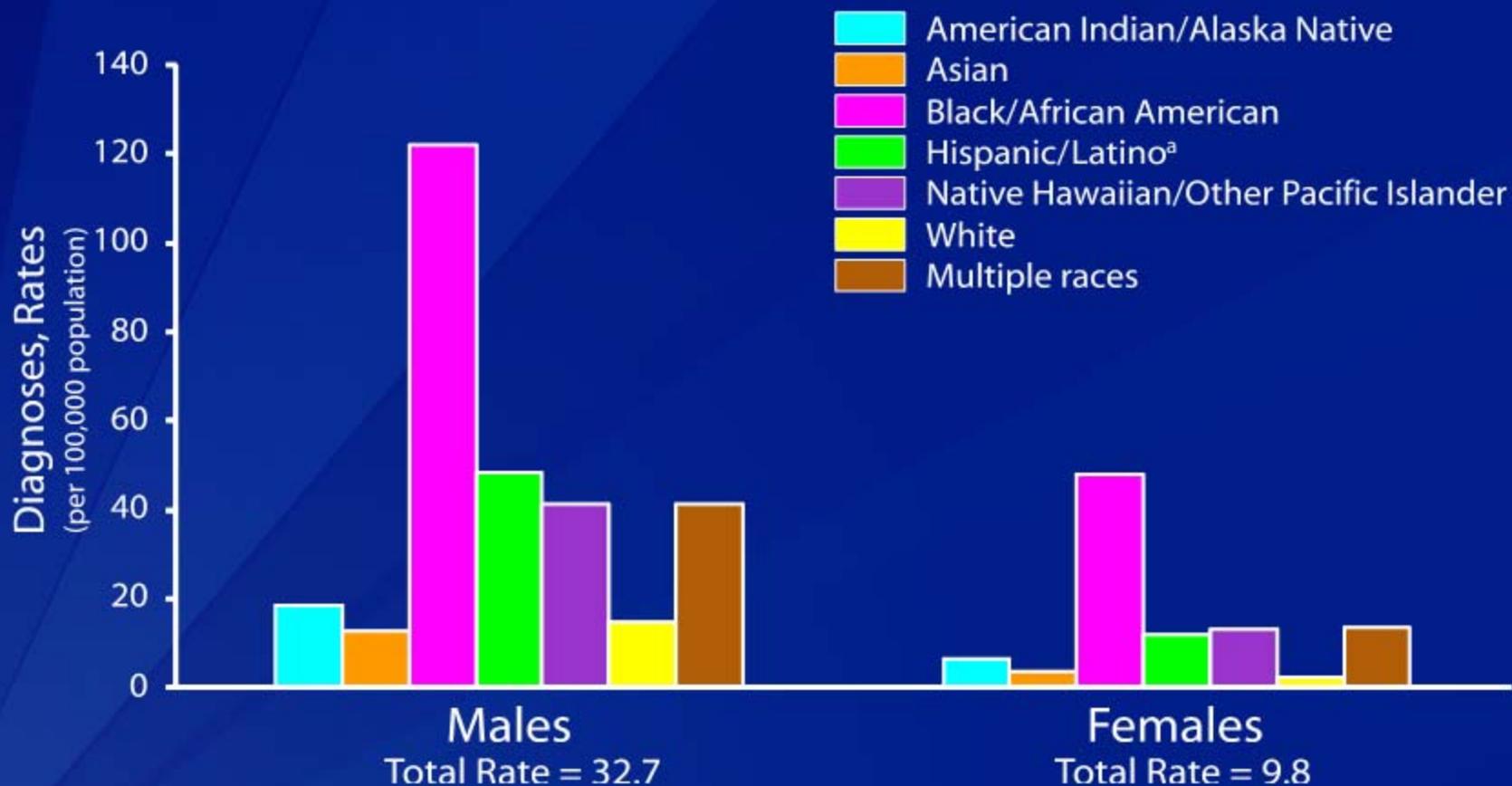


*Sometimes called “Prevalence Rate”; it is really a proportion.



Source: *HIV/AIDS Surveillance Summary*, data as of December 2011.

Estimated Rates of Diagnoses of HIV Infection among Adults and Adolescents, by Sex and Race/Ethnicity, 2009—40 States

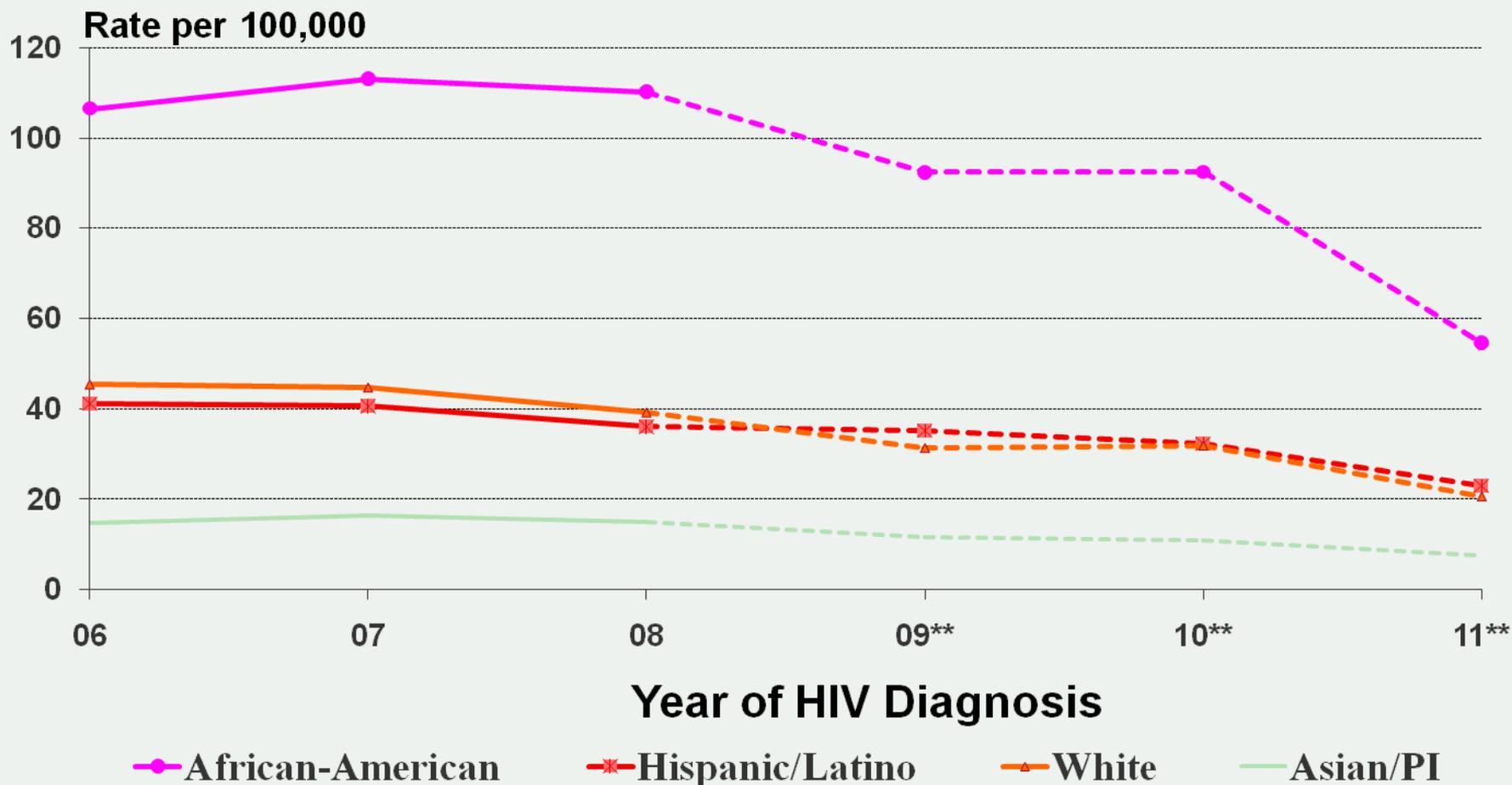


Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.

^a Hispanics/Latinos can be of any race.



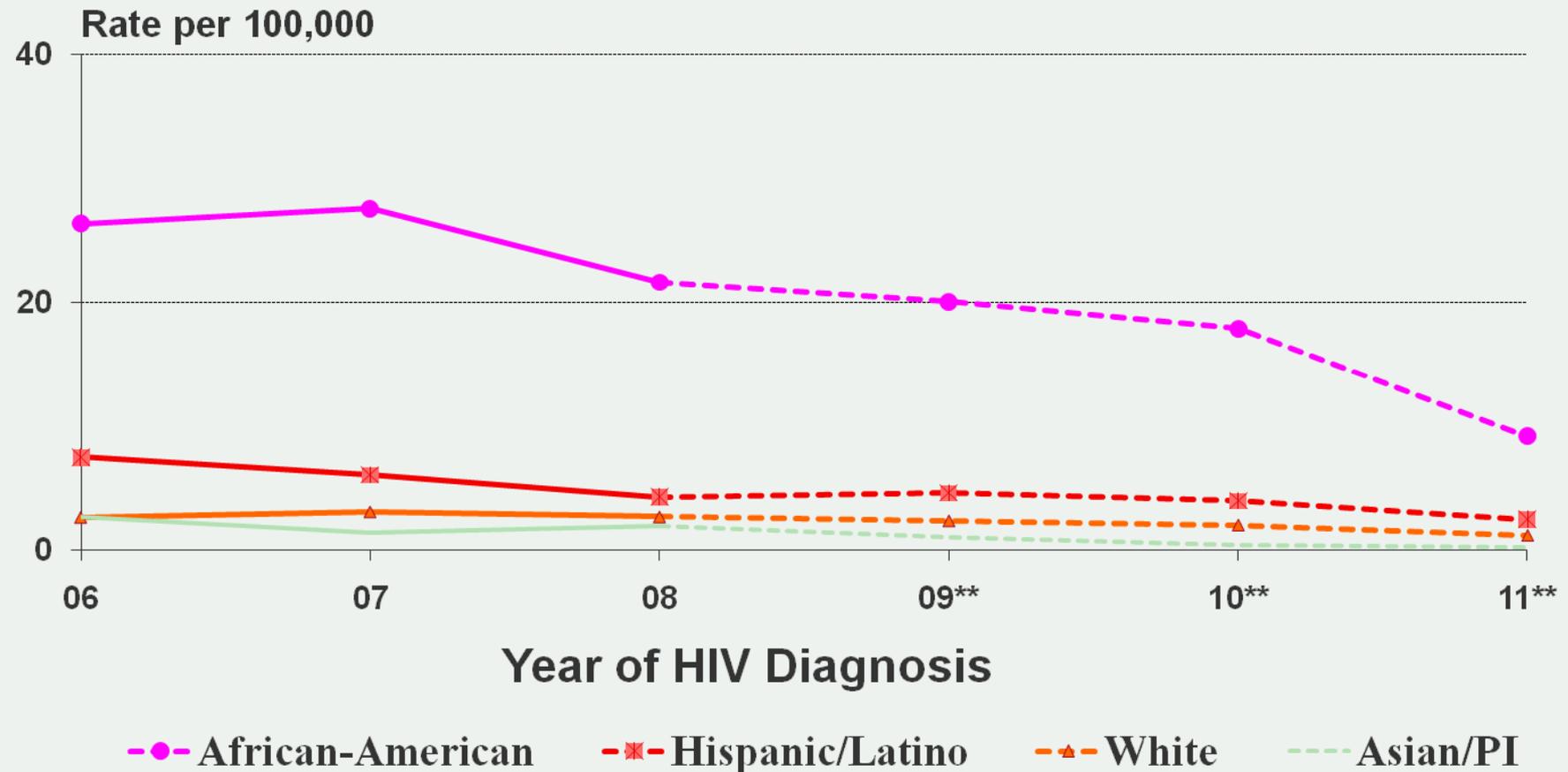
RATES OF HIV DIAGNOSES AMONG MEN BY RACE/ETHNICITY*, LAC, 2006-2011



Source: *HIV/AIDS Surveillance Summary*, data as of December 2011.



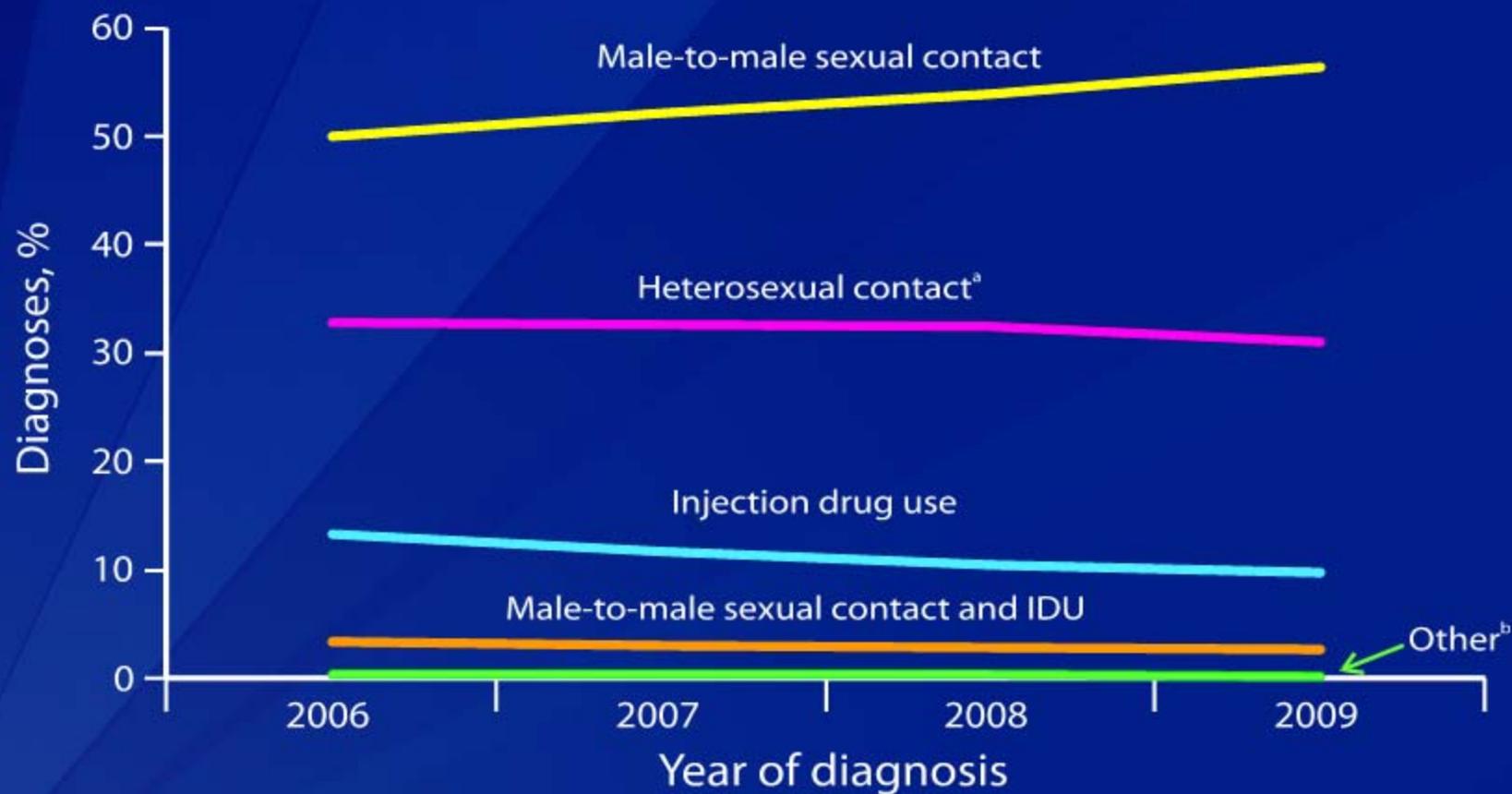
RATES OF HIV DIAGNOSES AMONG WOMEN BY RACE/ETHNICITY*, LAC, 2006-2011



Source: *HIV/AIDS Surveillance Summary*, data as of December 2011.



Diagnoses of HIV Infection among Adults and Adolescents, by Transmission Category, 2006–2009—40 States and 5 U.S. Dependent Areas



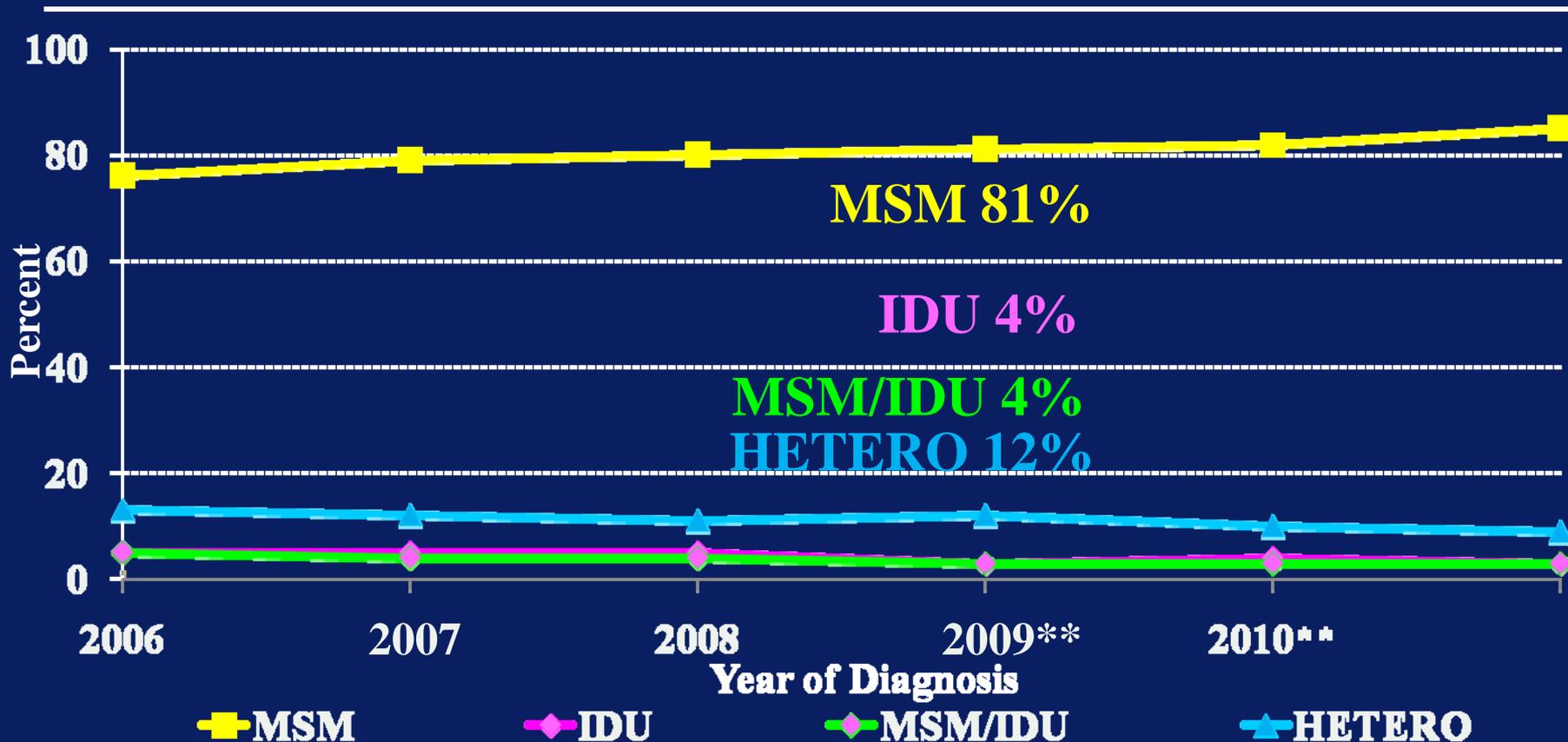
Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays and missing risk-factor information, but not for incomplete reporting.

^a Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

^b Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.



Percent of HIV Diagnoses Among Adults/Adolescents, by Transmission Category* and Year of HIV Diagnosis, Los Angeles County, 2006-2011



* Persons with an undetermined transmission category are assigned a risk factor using multiple imputation (MI) methods (see technical notes in HIV/AIDS Surveillance Summary). Other risks include hemophilia or coagulation disorder, transfusion recipient, perinatal exposure, and confirmed other risk.

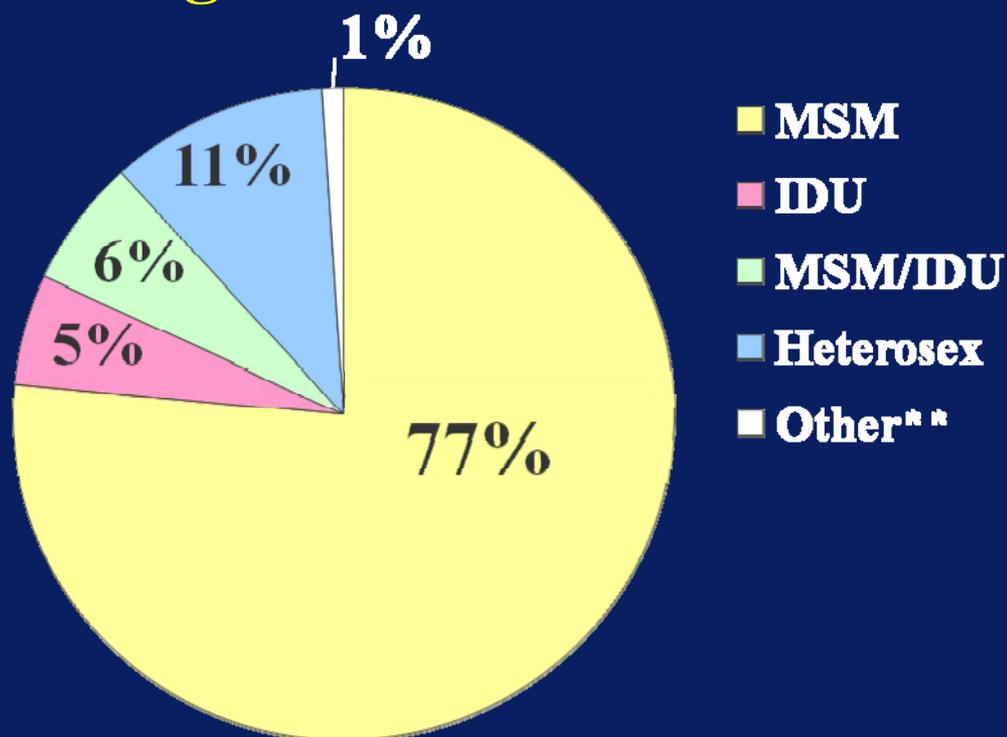
** Data are provisional due to reporting delay.



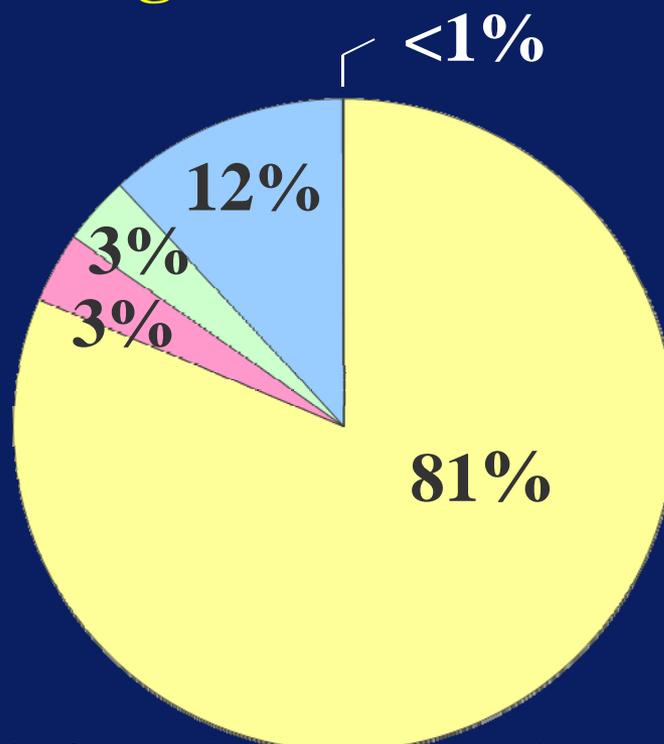
Source: HIV/AIDS Surveillance Summary, data as of December 2011.

Comparison of Persons living with HIV/AIDS and HIV/AIDS Diagnoses in 2009, by Transmission Category*

Living with HIV/AIDS



Diagnosed in 2009



*Persons with an undetermined transmission category are assigned a risk factor using multiple imputation (MI) methods (see technical notes in HIV/AIDS Surveillance Summary).

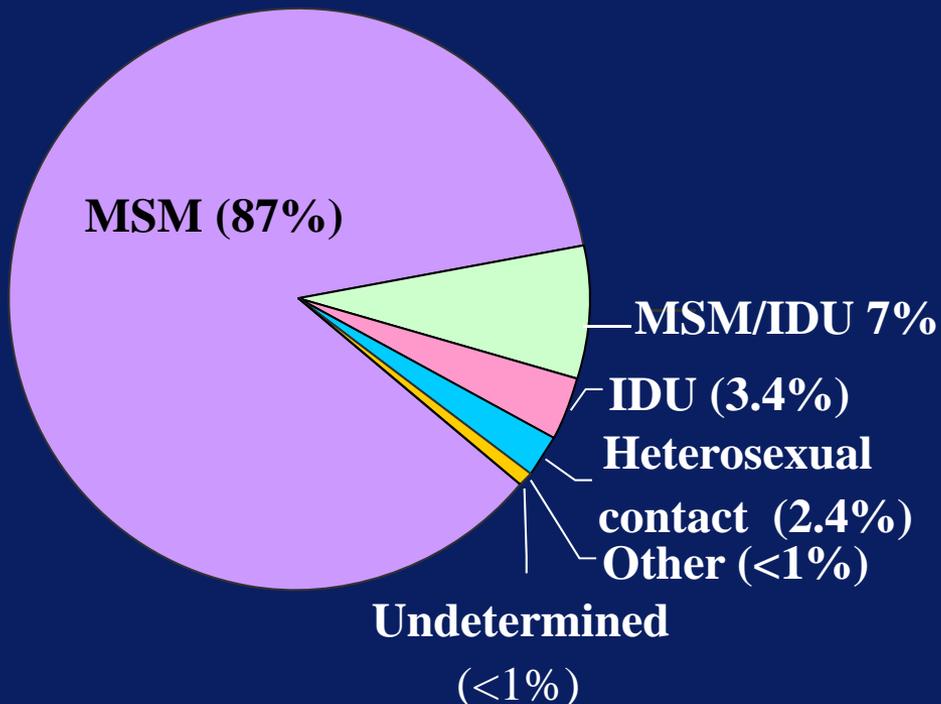
**Other risks include hemophilia or coagulation disorder, transfusion recipient, and perinatal exposure.

Source: HIV/AIDS Surveillance Summary, data as of December 2011.

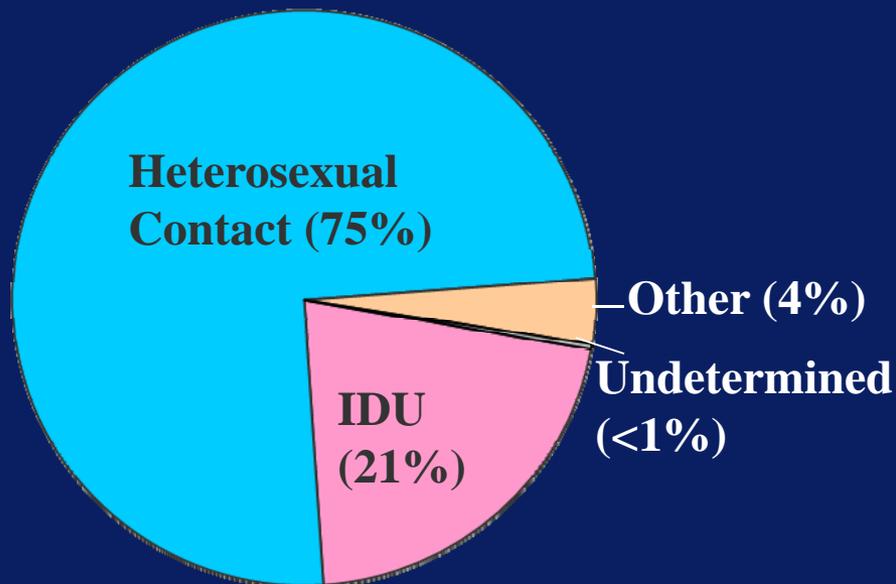


Transmission Category* for Persons Living with HIV/AIDS**, by Gender in Los Angeles County

Male (n=37,421)



Female (n=4,943)

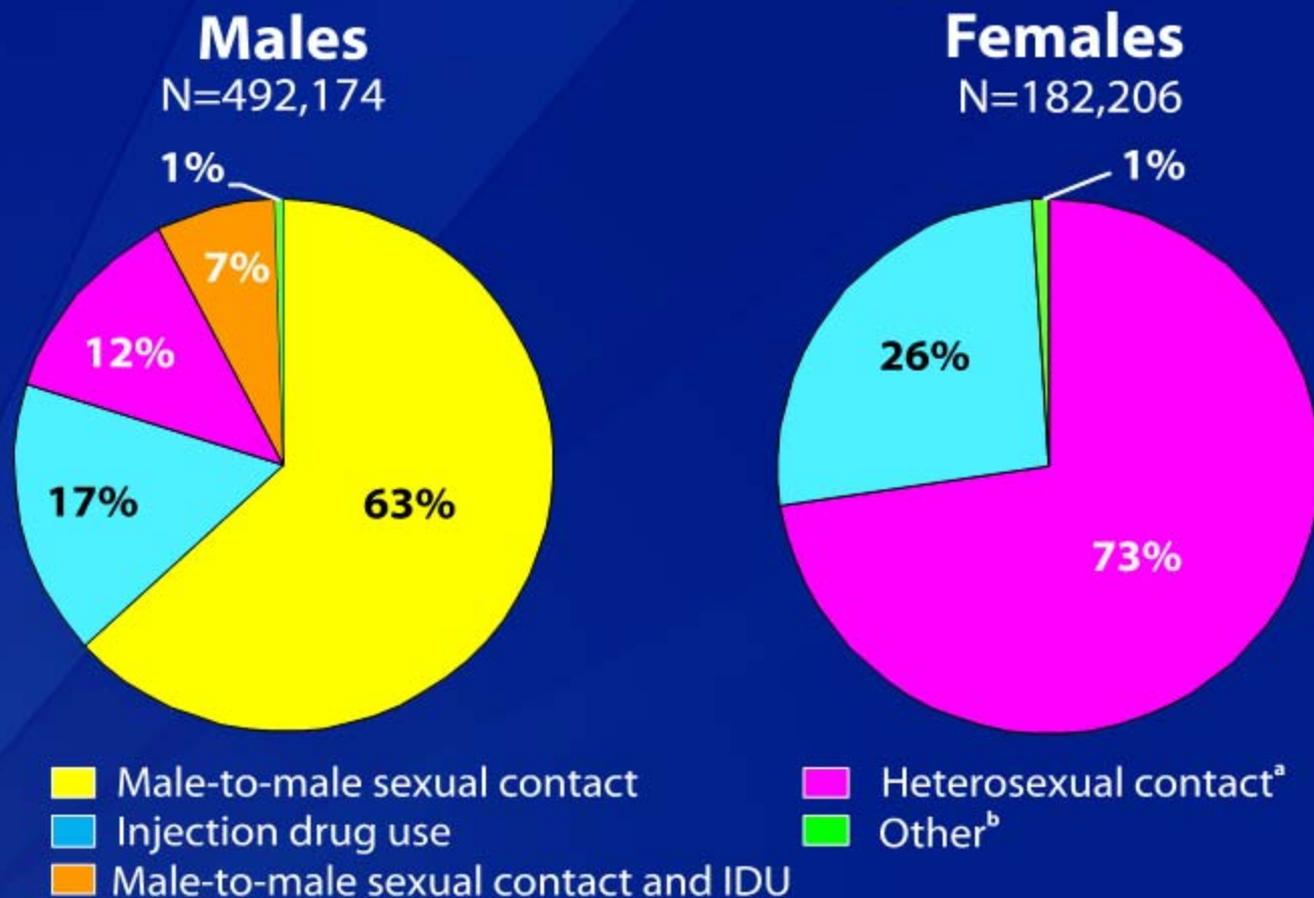


* Persons with an undetermined transmission category are assigned a risk factor using multiple imputation (MI) methods. Other risks include hemophilia or coagulation disorder, transfusion recipient, perinatal exposure and confirmed other risk.

** Data are provisional due to reporting delay.



Adults and Adolescents Living with a Diagnosis of HIV Infection, by Sex and Transmission Category, year-end 2008—40 States and 5 U.S. Dependent Areas



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays and missing risk-factor information, but not for incomplete reporting.

^a Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

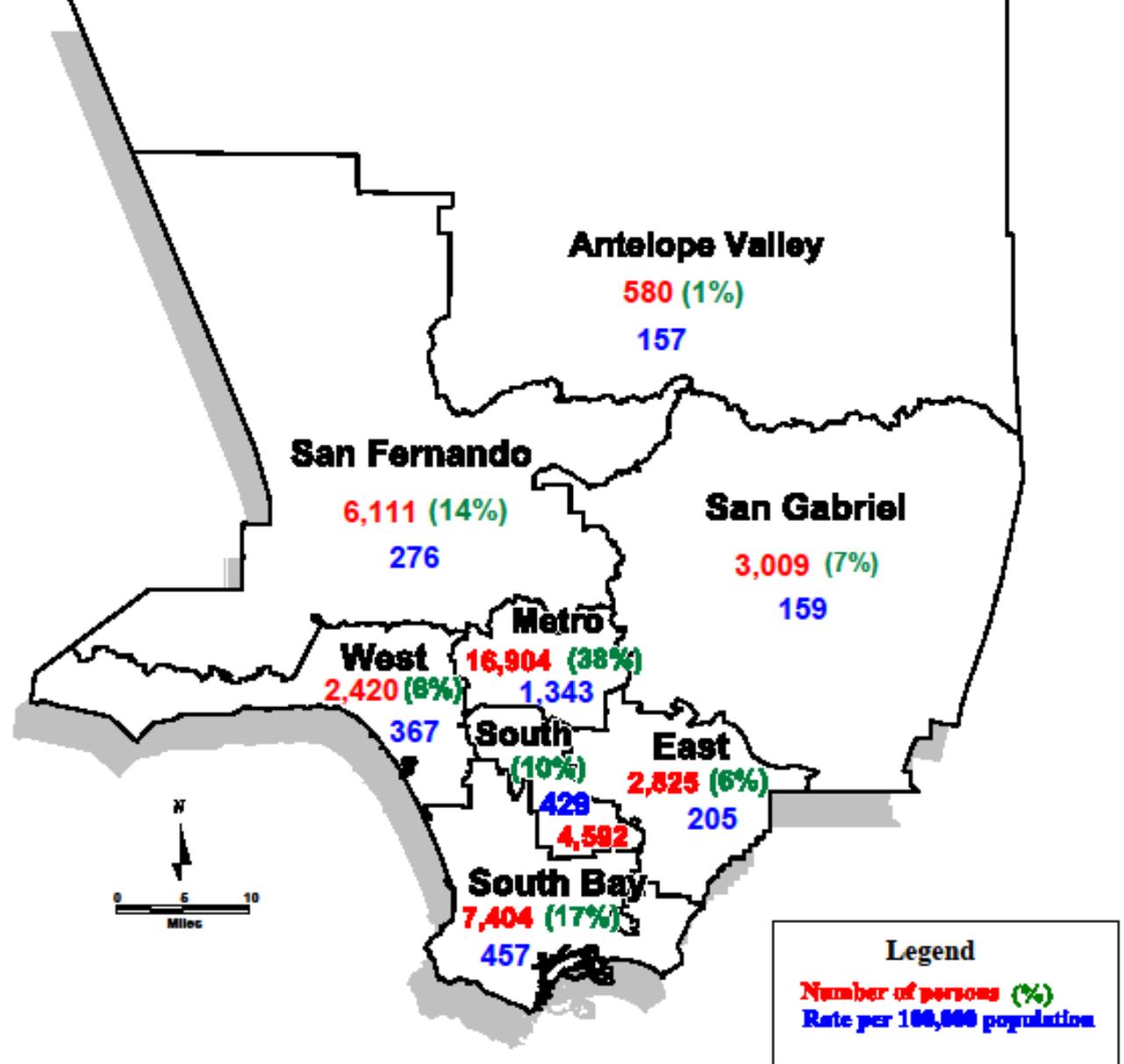
^b Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.



Geographic Distribution of HIV in L.A. County

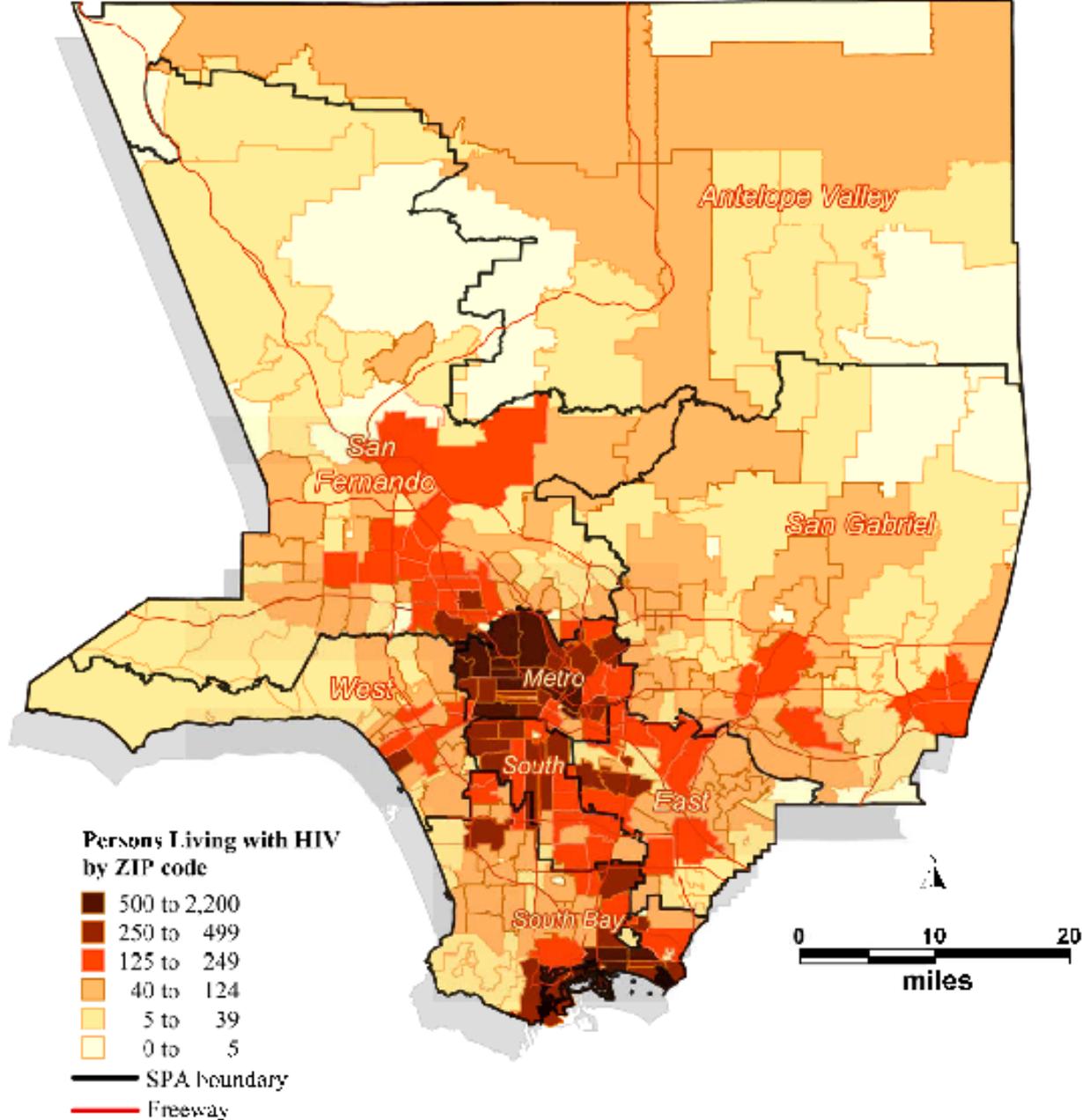


**Number,
Percent and
Rate per
100,000
Population of
Persons Living
with HIV, by
Service
Planning Area
LAC
(N=43,936)**



1. Persons with HIV are based on named reports from April 2006 to December 2011.
2. Rates are based on population estimates (PEPS) for 2010.

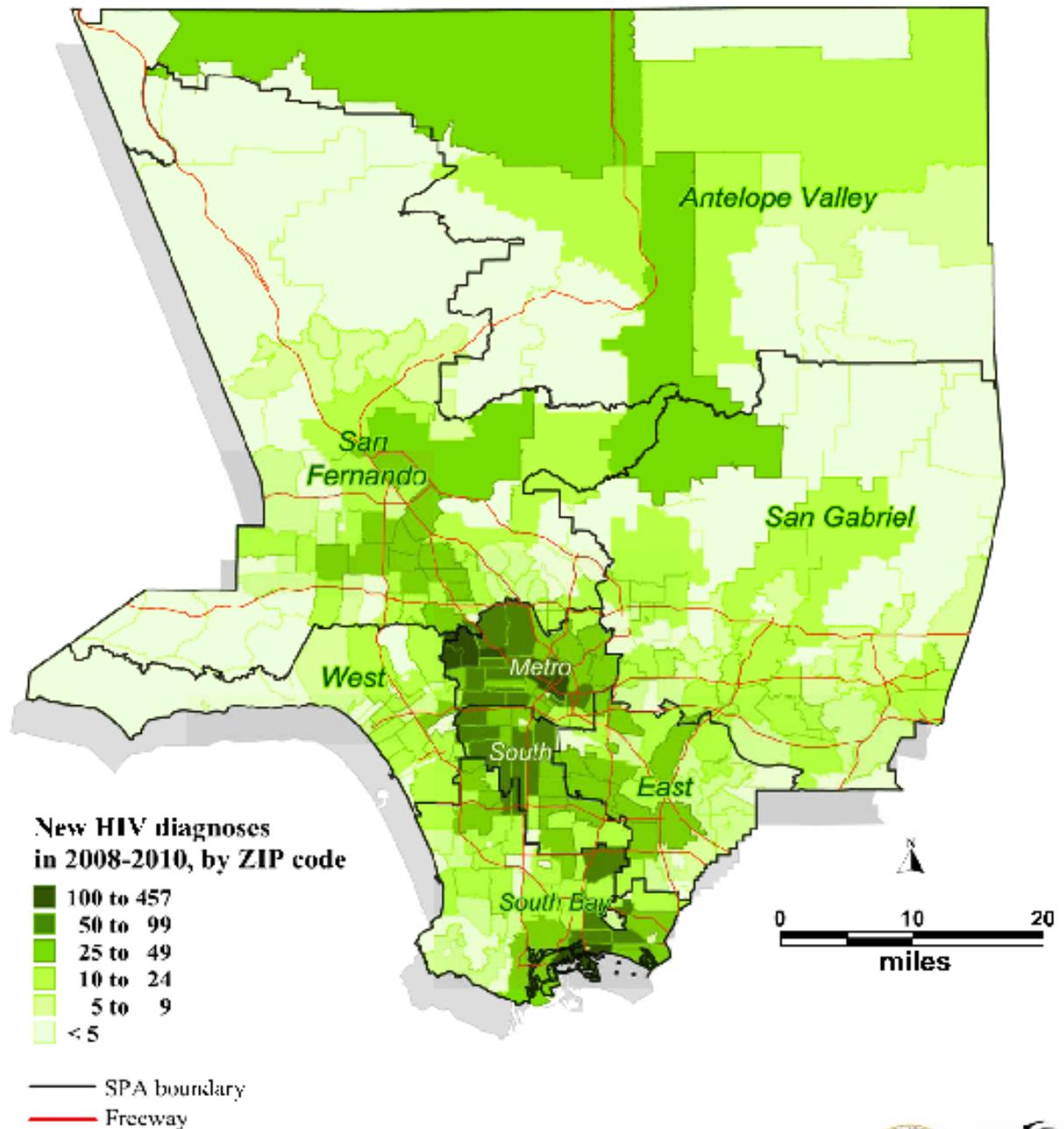
**Persons Living
with HIV per
100,000
Population, by
Zip Code and
Service
Planning Area
in LAC
(N=43,936)**



Data are provisional due to reporting delay. ZIP code information is based on the residence at the time of diagnosis or the most recently reported residential information.



**New HIV
Diagnoses in
2007-2009 by
Zip code and
Service
Planning Area
in LAC
(N=6,612)**



Data are provisional due to reporting delay. ZIP code information is based on the residence at the time of diagnosis.



National GIS Interactive Maps for HIV

- **Atlas:** Interactive tool for accessing HIV, AIDS, chlamydia, gonorrhea, and primary and secondary syphilis data collected by CDC's National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) – can do custom analyses

<http://www.cdc.gov/nchhstp/atlas/>

- **AIDSVu:** Emory University site with new public health tool that makes data on the geography of HIV in the United States, including LA County

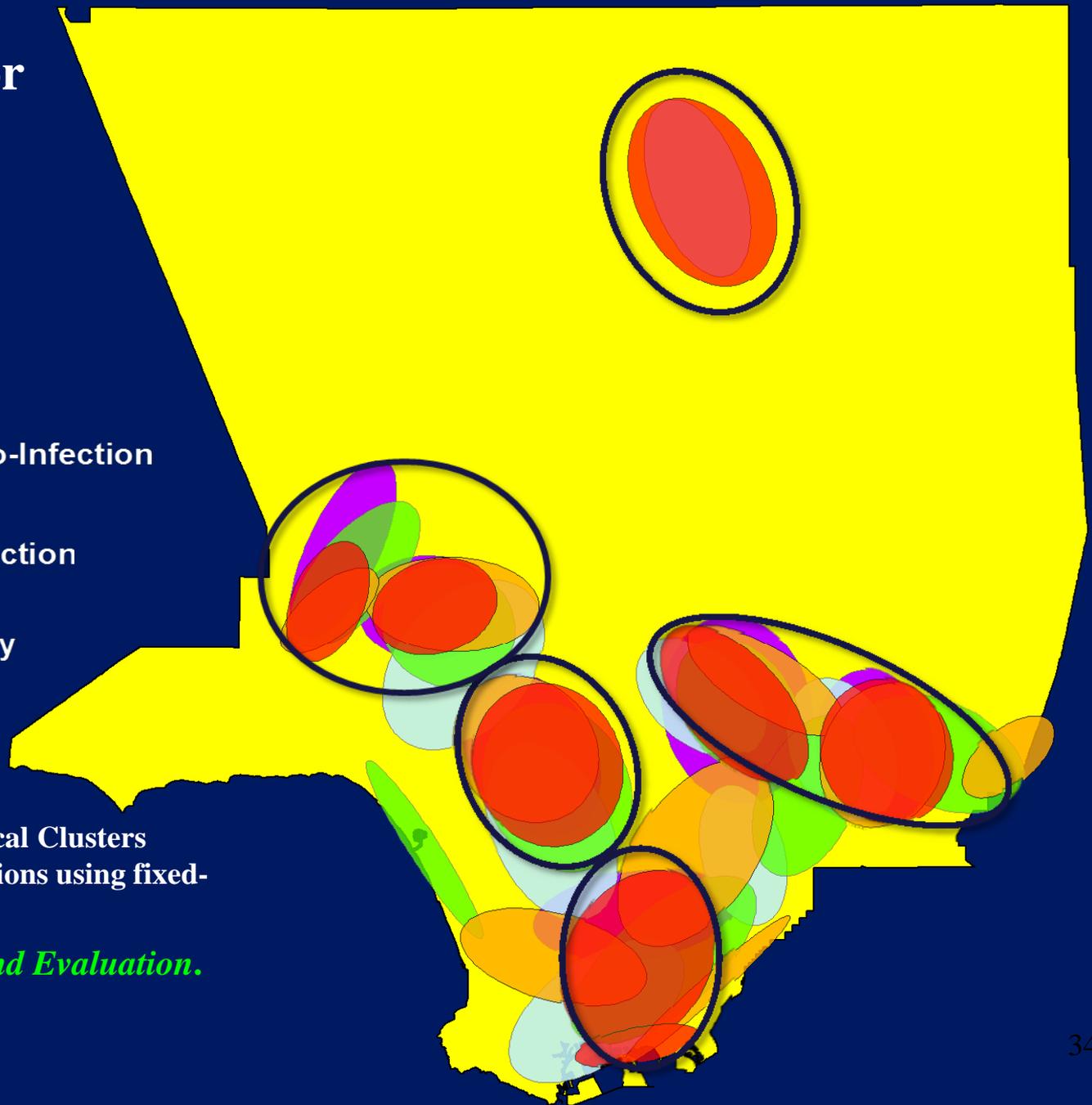
<http://www.aidsvu.org/>



Nearest Neighbor Hierarchical Clustering Summary¹

HIV/STI Clusters

-  HIV Cases
-  Syphilis and HIV co-Infection
-  Syphilis, no HIV
-  GC and HIV co-Infection
-  GC, no HIV
-  Los Angeles County



¹Nearest Neighbor Hierarchical Clusters output at 1.0 standard deviations using fixed-distance band threshold

Source: *DHSP Research and Evaluation.*



HIV/STI Cluster Areas

HIV Cases, 2009

1.3%

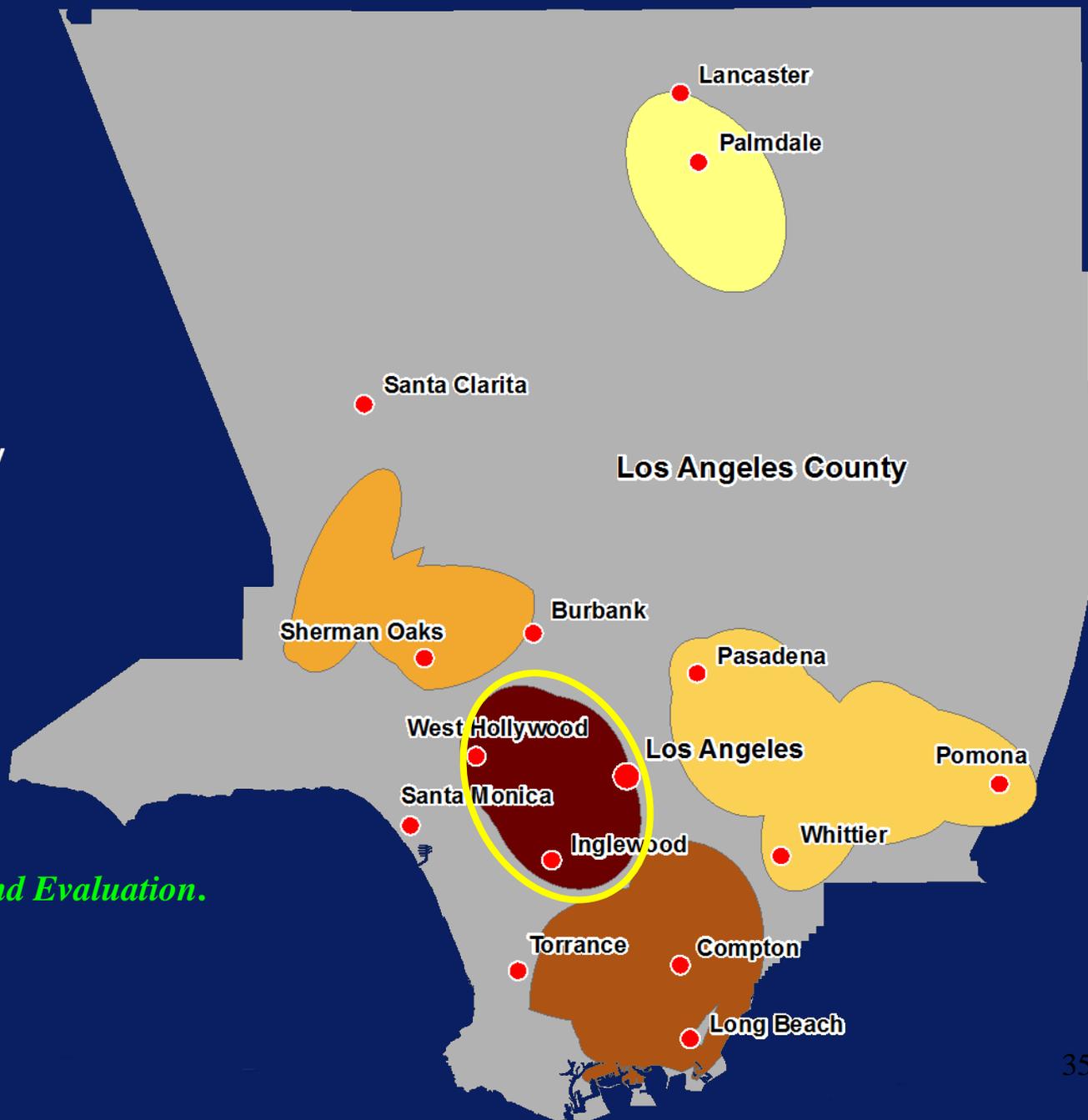
6.6%

9.2%

18.4%

46.3%

Los Angeles County

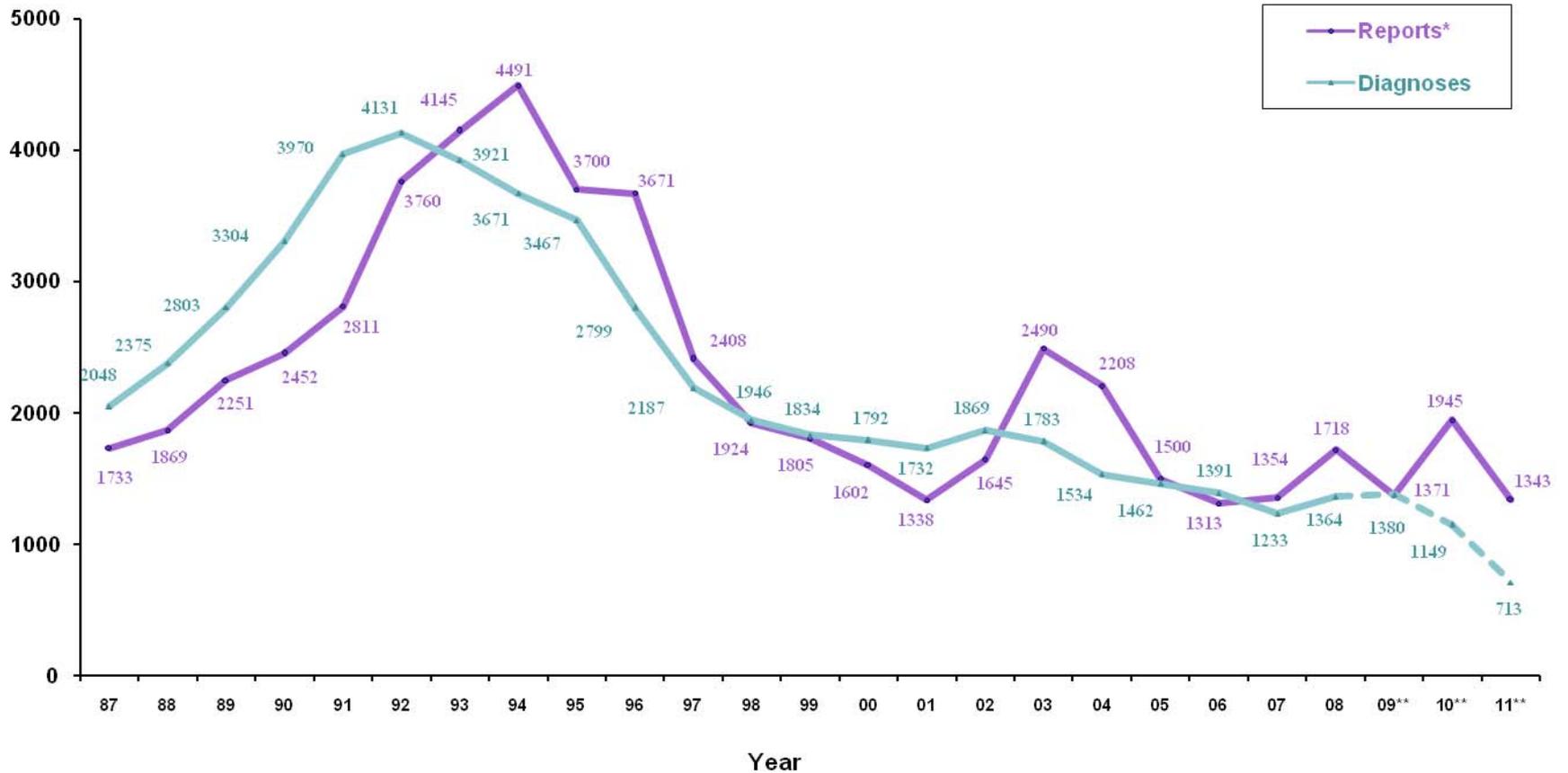


Source: DHSP Research and Evaluation.

AIDS in L.A. County



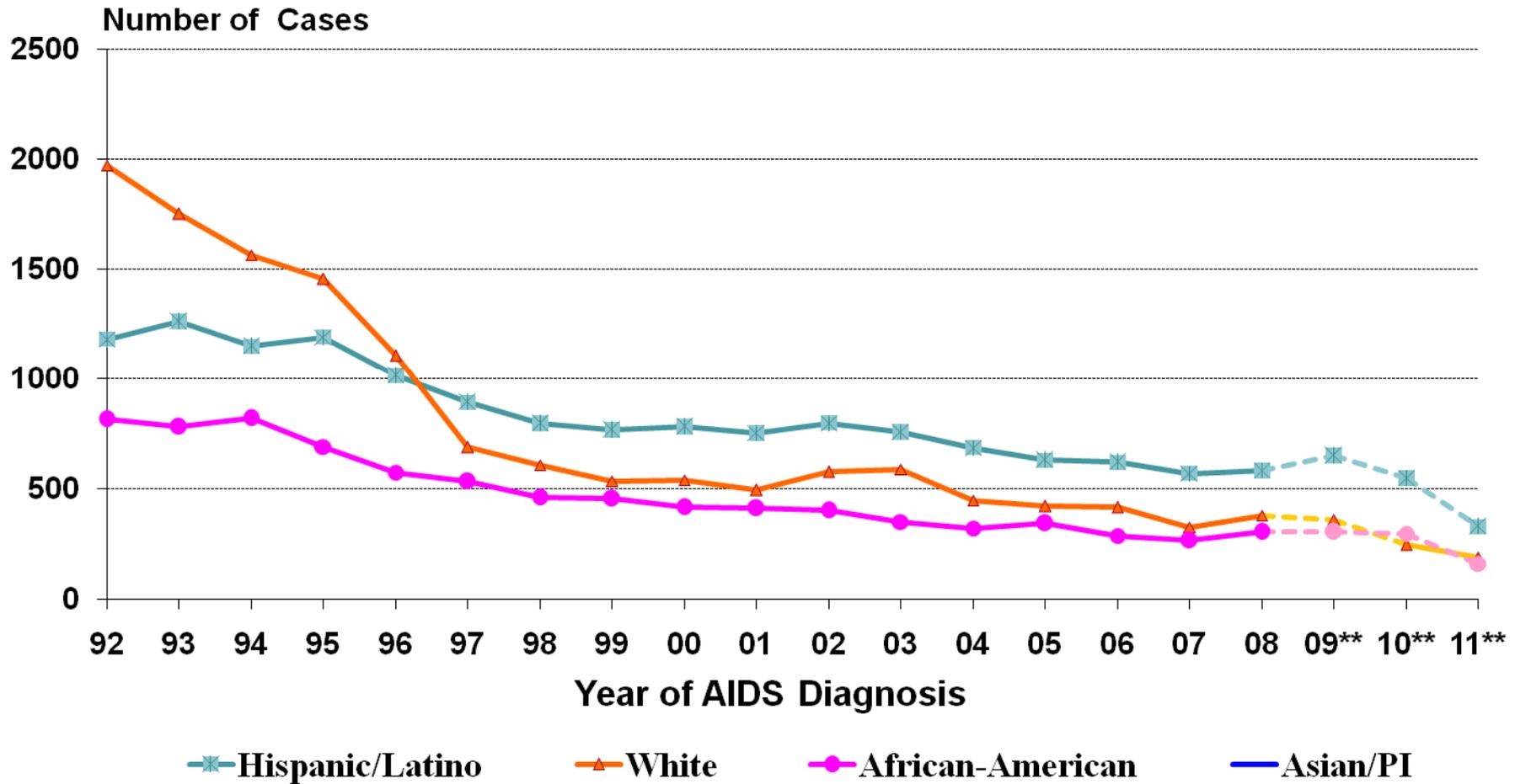
Annual Number of AIDS diagnoses and AIDS reports in 1986-2011, LA County



Source: HIV/AIDS Surveillance Summary, data as of December 2011.



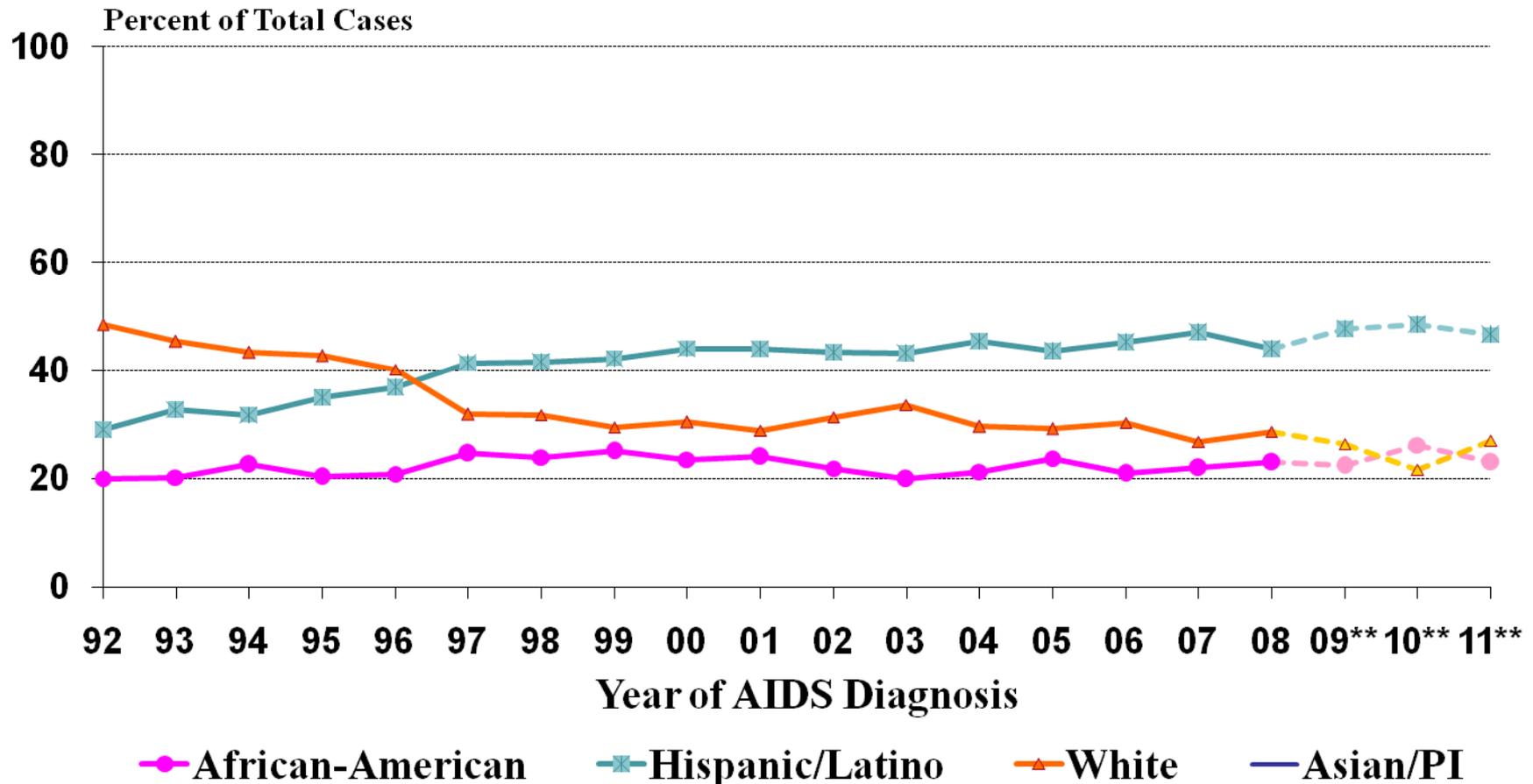
Number of AIDS Diagnoses among Adults/Adolescents by Race/Ethnicity and Year of Diagnosis, LAC, 1992-2011



Source: HIV/AIDS Surveillance Summary, data as of December 2011.



Proportion of AIDS Diagnoses among Adults/Adolescents by Race/Ethnicity and Year of Diagnosis, LAC, 1992-2011



Source: HIV/AIDS Surveillance Summary, data as of December 2011.



Surveillance Issues



Surveillance Issues

- **HIV Registry considered mature, but still with backlog of cases to investigate – meeting timeliness and completeness requirements of CDC grantor**
- **Completed transfer of I-HARS databases to PHIS**
- **Completed transfer of eHARS to State Office of AIDS**
- **New CDC FOA for CY2013 for surveillance will concentrate funds into core surveillance and be more aligned with HIV prevalence, should include new funding for electronic laboratory reporting**



Continuing Areas of Focus

- **Surveillance data used to evaluate National HIV/AIDS Strategy objectives**
- **Geographic presentation and analysis of data**
- **Need to increase electronic lab and case reporting capacity**
- **Ability to use HIV Surveillance Data for Public Health purposes – PS, linking to care, lost to care, viral load suppression**



HIV/AIDS Case Definition Consultation

- **AIDS case defining conditions – the role OIs**
- **Staging system for HIV in adults/adolescents**
- **Pediatric case definition and staging system**
- **Physician-documented diagnosis**
- **Acute and subacute HIV infection**
- **New testing algorithms to confirm HIV infection**
- **HIV-2**



Contact Information

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Phone: (213) 351 – 8190

For HIV Statistics and to Report a Case:
<http://www.publichealth.lacounty.gov/hiv/>

