

STDs among Men who Have Sex  
with Men (MSM),  
San Francisco 2007—2012

Applied Research, Community Health  
Epidemiology, and Surveillance (ARCHES)  
Population Health Division  
San Francisco Department of Public Health

## Executive Summary

- 2012 Morbidity Rates among MSM\* (per 100,000)
  - Early Syphilis 1,230.0
  - Gonorrhea 2,905.0
  - Chlamydia 2,741.1
- 2012 Morbidity Rates among Heterosexual Males (per 100,000)
  - Early Syphilis 10.8
  - Gonorrhea 106.8
  - Chlamydia 317.3

\* Estimate of 64,681 MSM San Francisco Residents from 2011 HIV Consensus Estimate

## STDs among MSM in San Francisco, 2012

- For MSM
  - 1 out of 79 was infected with early syphilis
  - 1 out of 34 was infected with gonorrhea
  - 1 out of 36 was infected with chlamydia
- For Heterosexual Men
  - 1 out of 9,285 was infected with early syphilis
  - 1 out of 936 was infected with gonorrhea
  - 1 out of 315 was infected with chlamydia

## MSM are disproportionately burdened by STDs

- For San Francisco in 2012, compared to heterosexual males, MSM are at significantly higher risk of early syphilis, gonorrhea, and chlamydia
  - Risk of early syphilis is **117.0** times higher in MSM compared to heterosexual males
  - Risk of gonorrhea is **8.6** times higher in MSM compared to heterosexual males
  - Risk of chlamydia is **27.2** times higher in MSM compared to heterosexual males

# City Wide MSM STD Morbidity

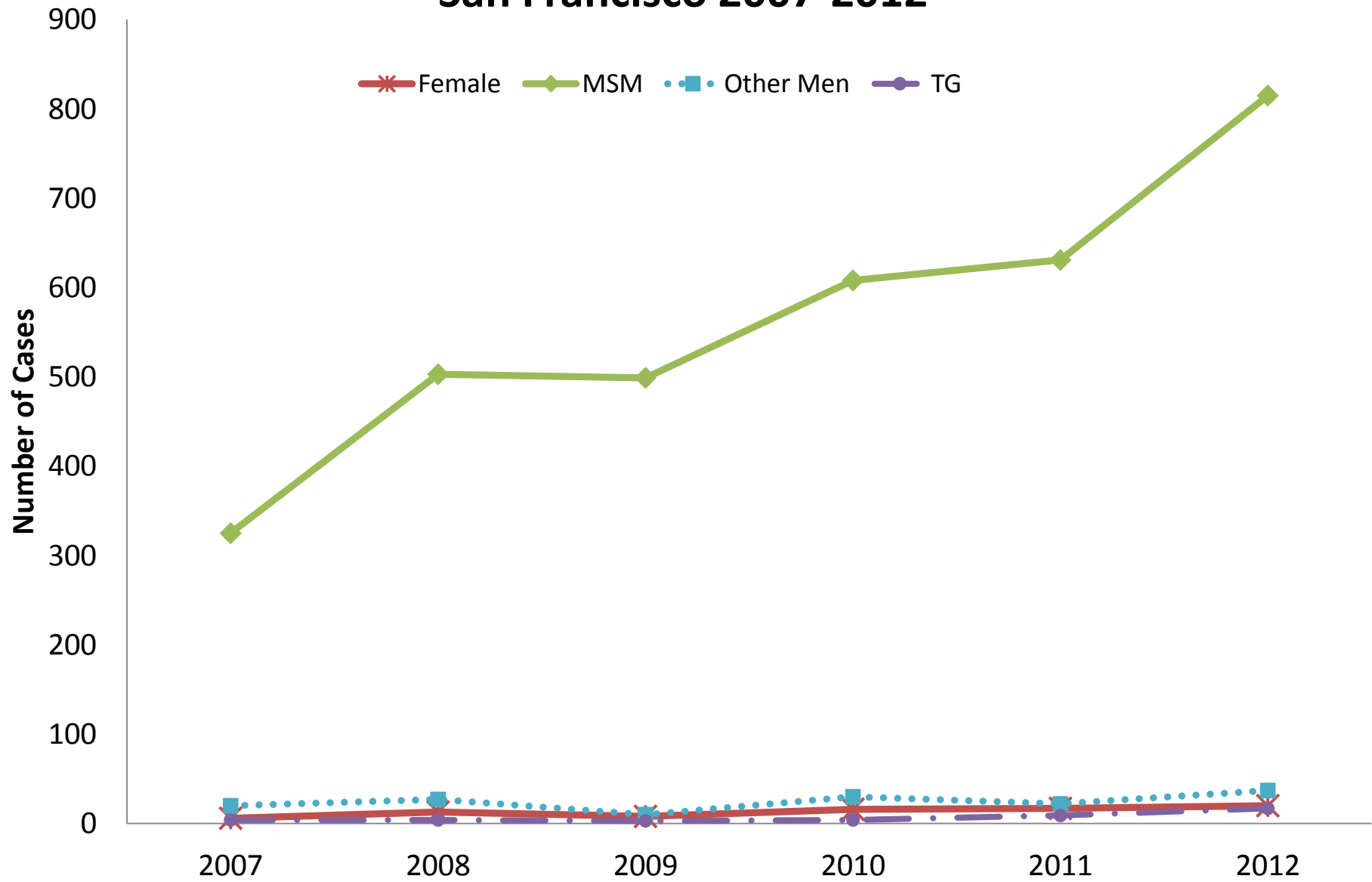
# MSM in San Francisco

- U.S. Census does not collect gender of partners or sexual identity, so no solid estimate of the number of MSM in San Francisco is available
- SF HIV Consensus Process
  - Modified Delphi Model that examines a variety of data points and makes an informed, best guess.
  - Population estimates made using the Multiplier Method (UNAIDS, 2003) in which a population-based study collects information on a service used by the population during a given period.
  - Using the total number served by that service in the same period, an estimate of total population size can be calculated. Using these two data sources, the multiplier method provides a population size estimate by the formula:  $N = n / p$ , where  $N$  is the MSM population size, given by  $n$  as the number of MSM using a particular service in a specified time period and  $p$  as the proportion of MSM reporting using the particular service in the time-period collected in a population survey.
- 2011 HIV Consensus Estimate: 64,681 MSM reside in San Francisco

# Notes about Data Included in Supplement – Morbidity

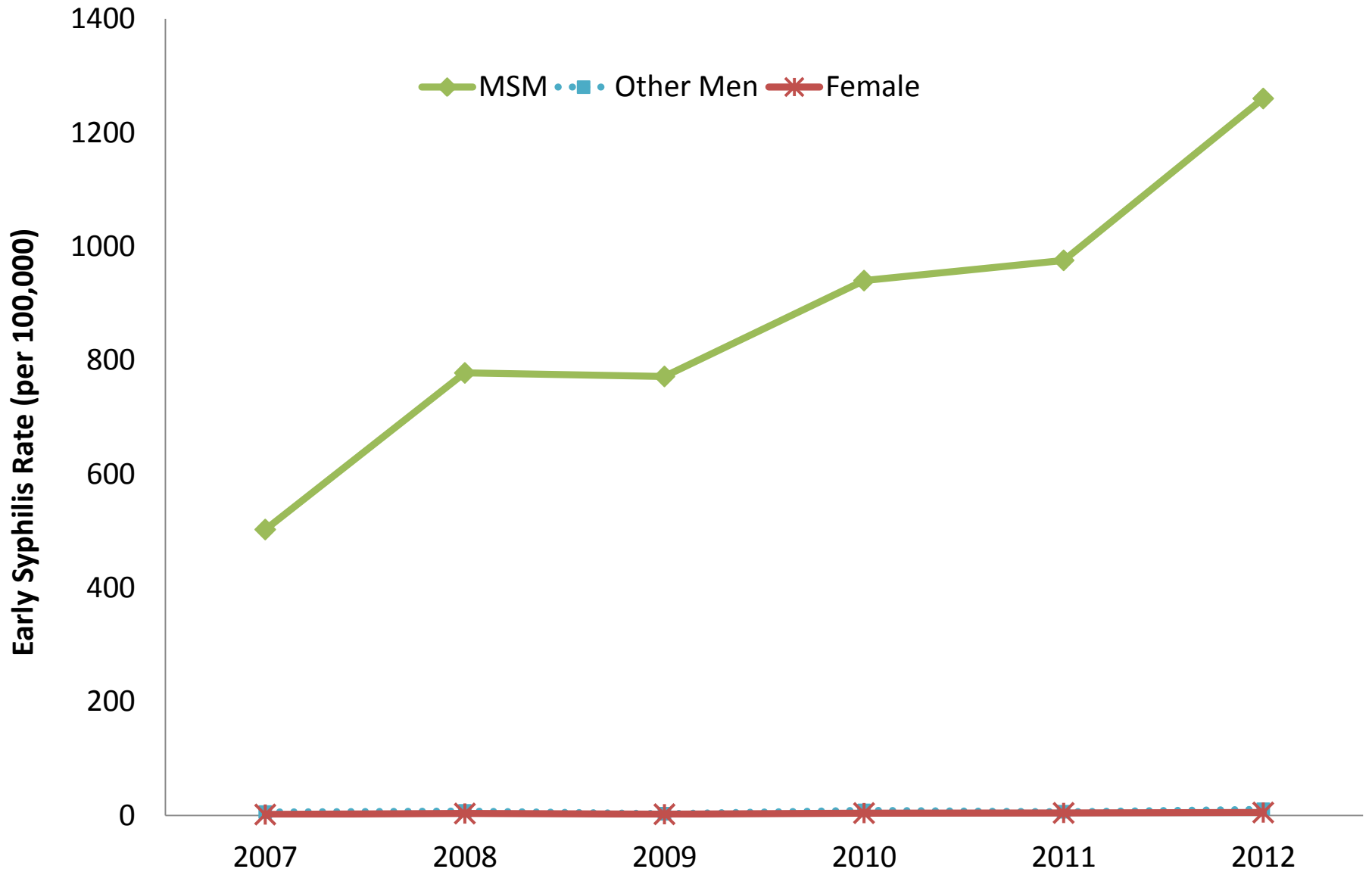
- MSM is defined as a male who identified as gay or bisexual or reported ever having had sex with a male
  - Data across clinic visits/morbidity events are used to determine MSM status
- As per CA state law, all positive reactive syphilis serologic results and positive chlamydia and gonorrhea tests are reported to SFSTD from laboratories as well as mandated provider case reports
- Beginning in 2004, SFSTD began requiring gender of sex partners be reported on all syphilis, chlamydia, and gonorrhea case reports
- San Francisco STD morbidity is defined as a lab or provider report of syphilis, chlamydia, or gonorrhea for a resident of San Francisco
  - When multiple reports for the same patient and same STD are received within 30 days of a prior report, only the initial report is counted as San Francisco morbidity
- For syphilis, active case investigations and interviews are conducted by SFSTD field staff. Due to the high volume, chlamydia and gonorrhea morbidity reports are not investigated. As a result, more detailed information is available for reported syphilis cases.
- SFSTD recommends that sexually active MSM be screened every 3-6 months for:
  - Syphilis
  - Chlamydia (rectal and pharyngeal sites)
  - Gonorrhea (rectal and pharyngeal sites)

# Reported Early Syphilis by Sex/Sexual Orientation, San Francisco 2007-2012





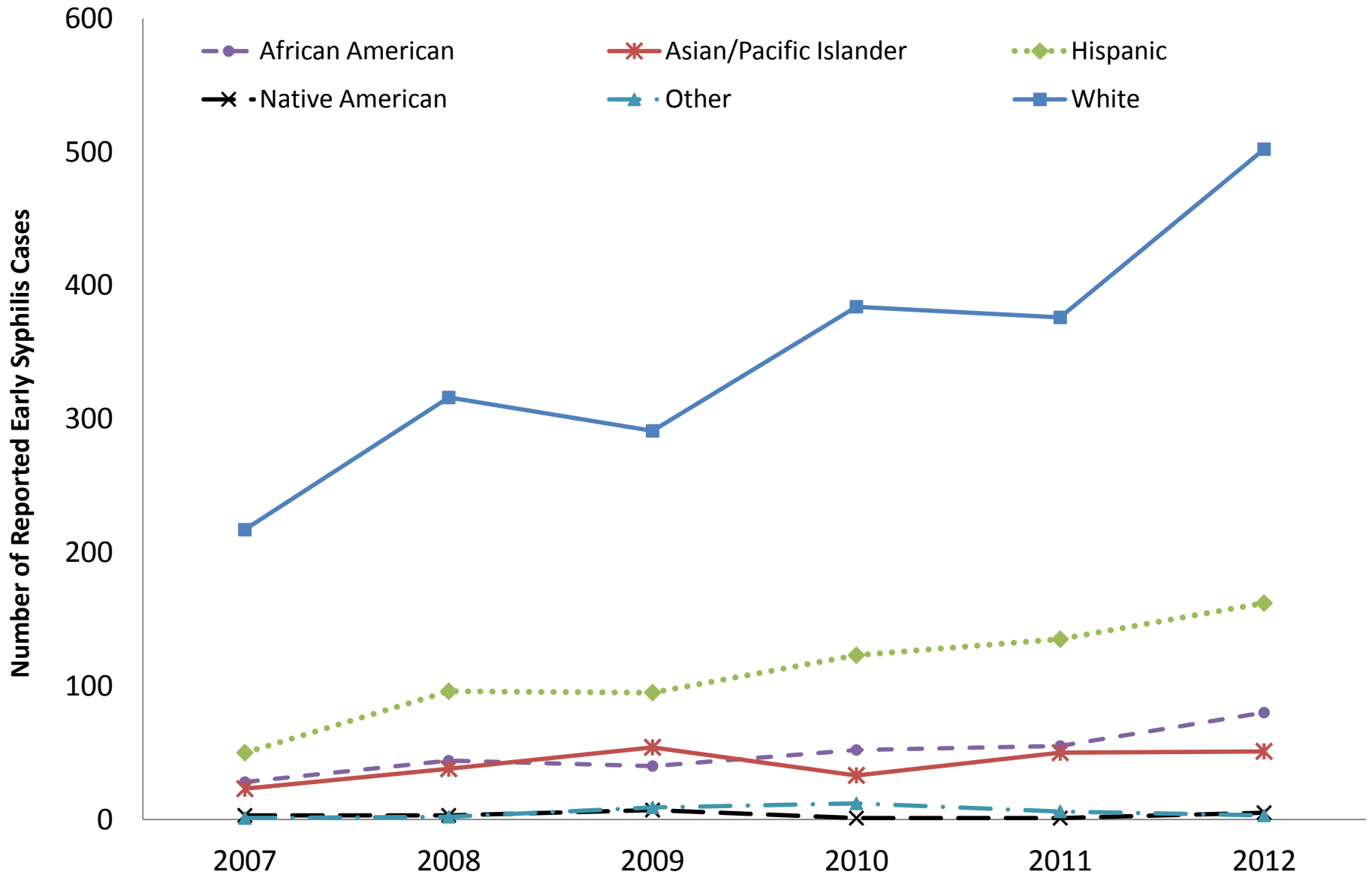
# Early Syphilis Rates (per 100,000 population), San Francisco 2007-2012



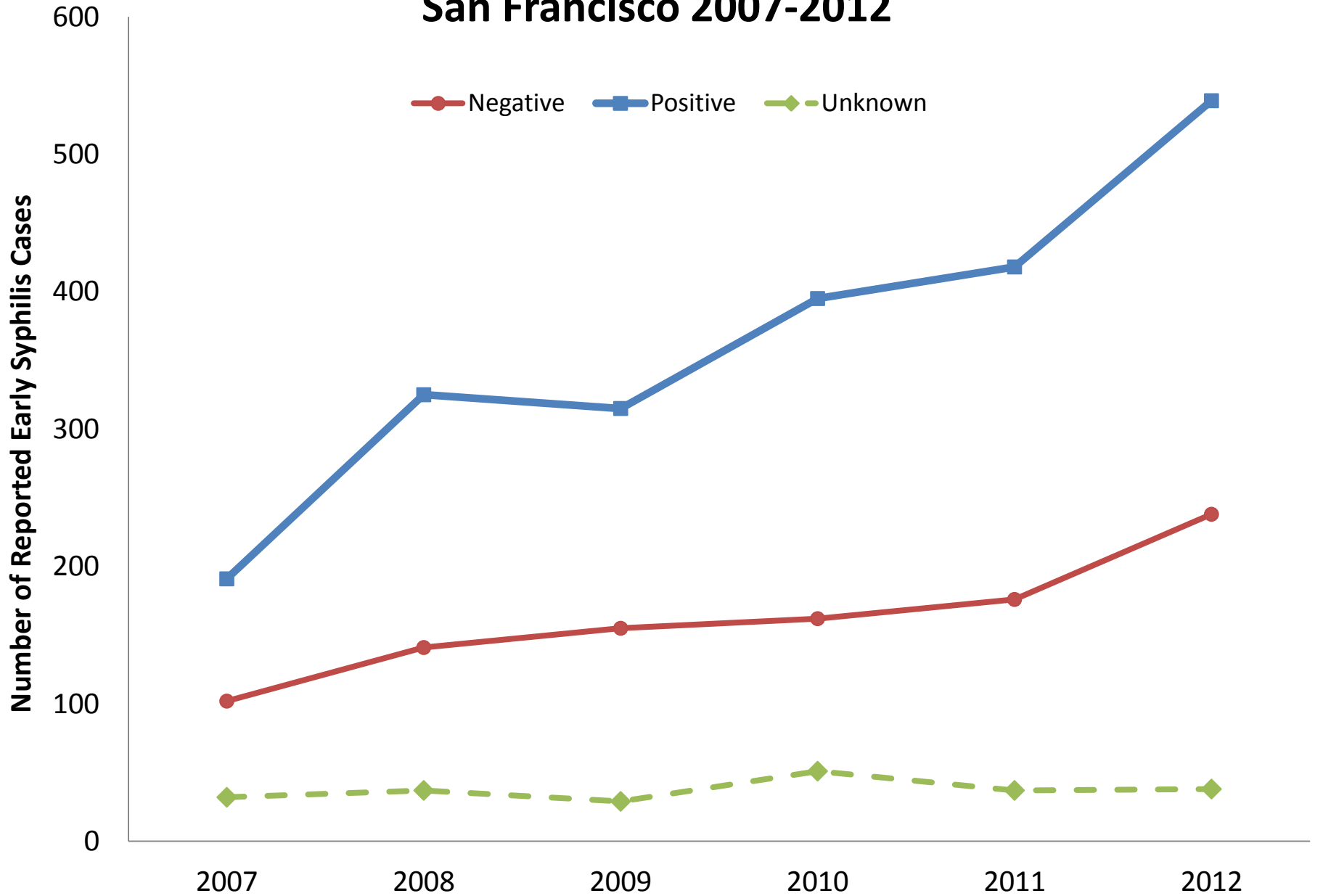
# Reported MSM Syphilis by Age, San Francisco 2007-2012



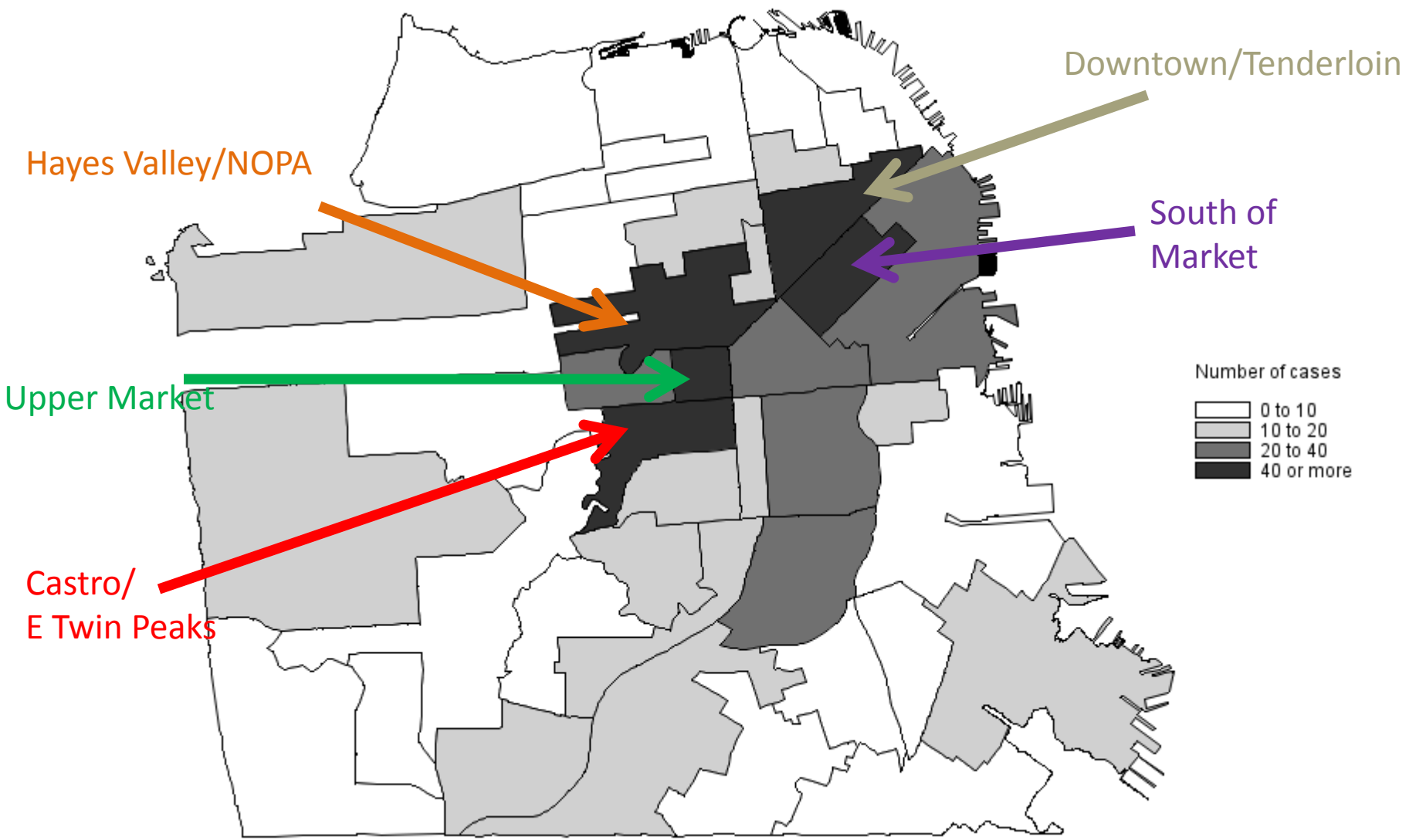
# Reported MSM Early Syphilis by Race/Ethnicity, San Francisco 2007-2012



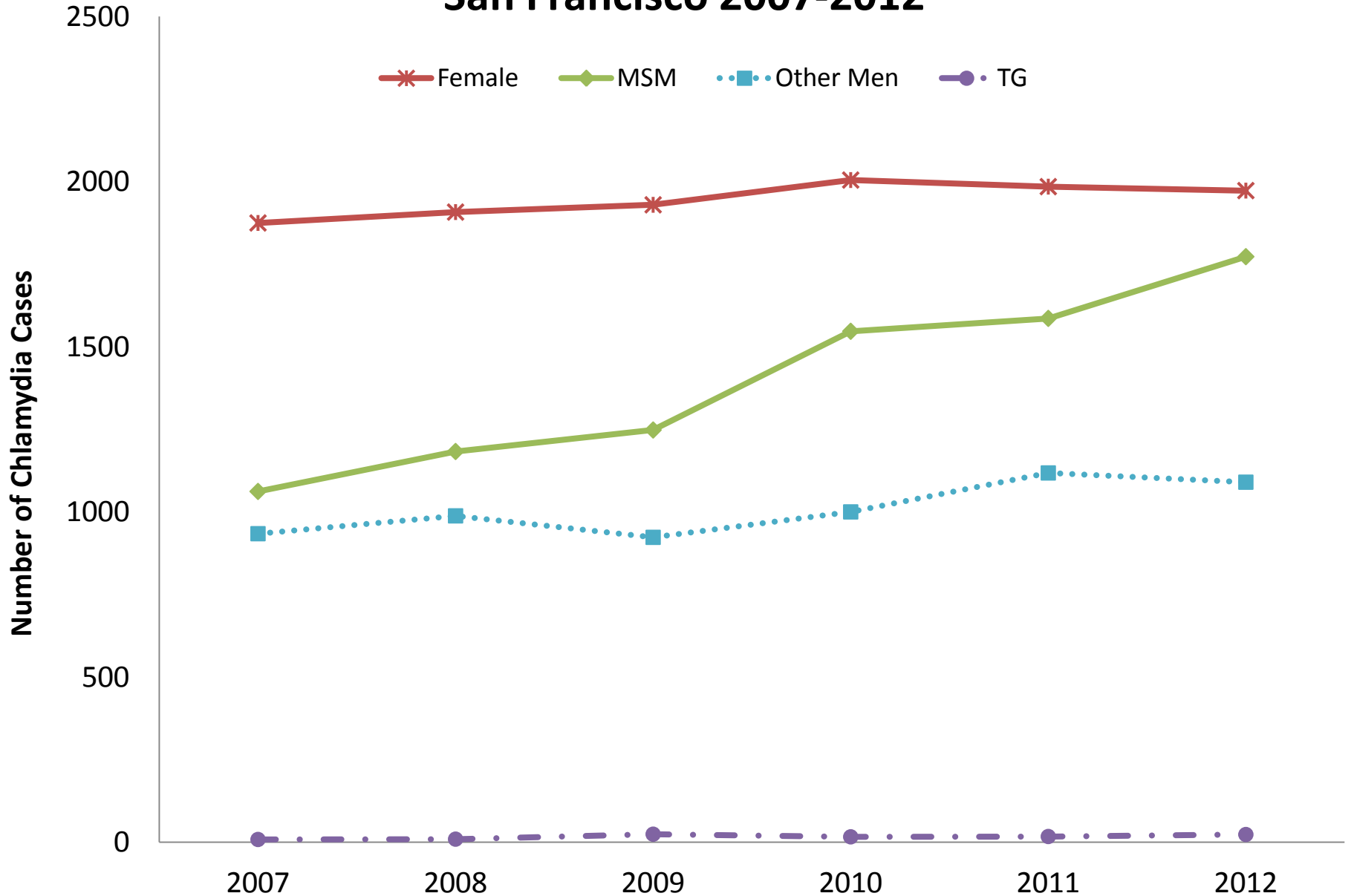
# Reported MSM Early Syphilis by HIV Status, San Francisco 2007-2012



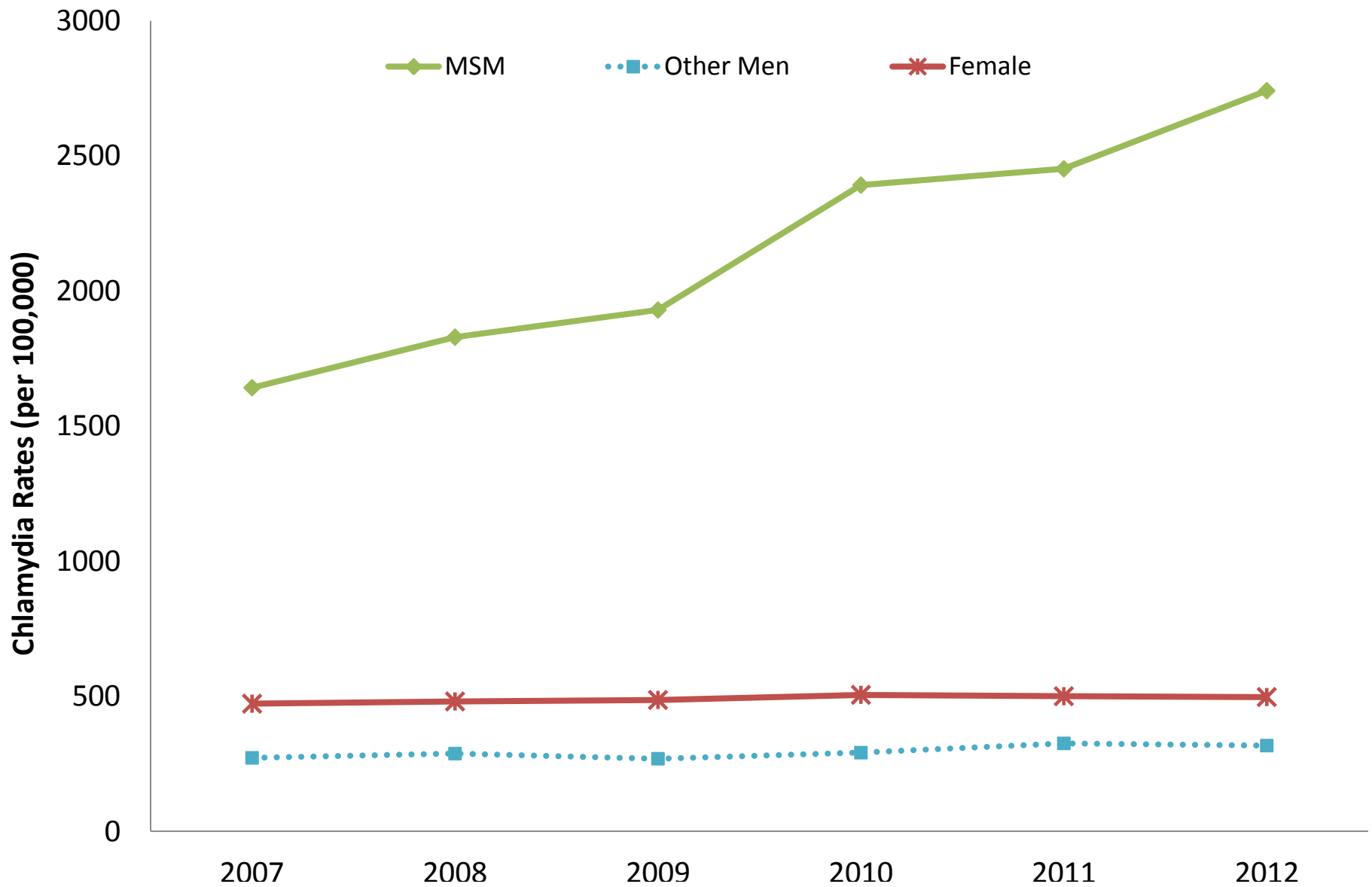
# Early Syphilis Cases among MSM, San Francisco 2012



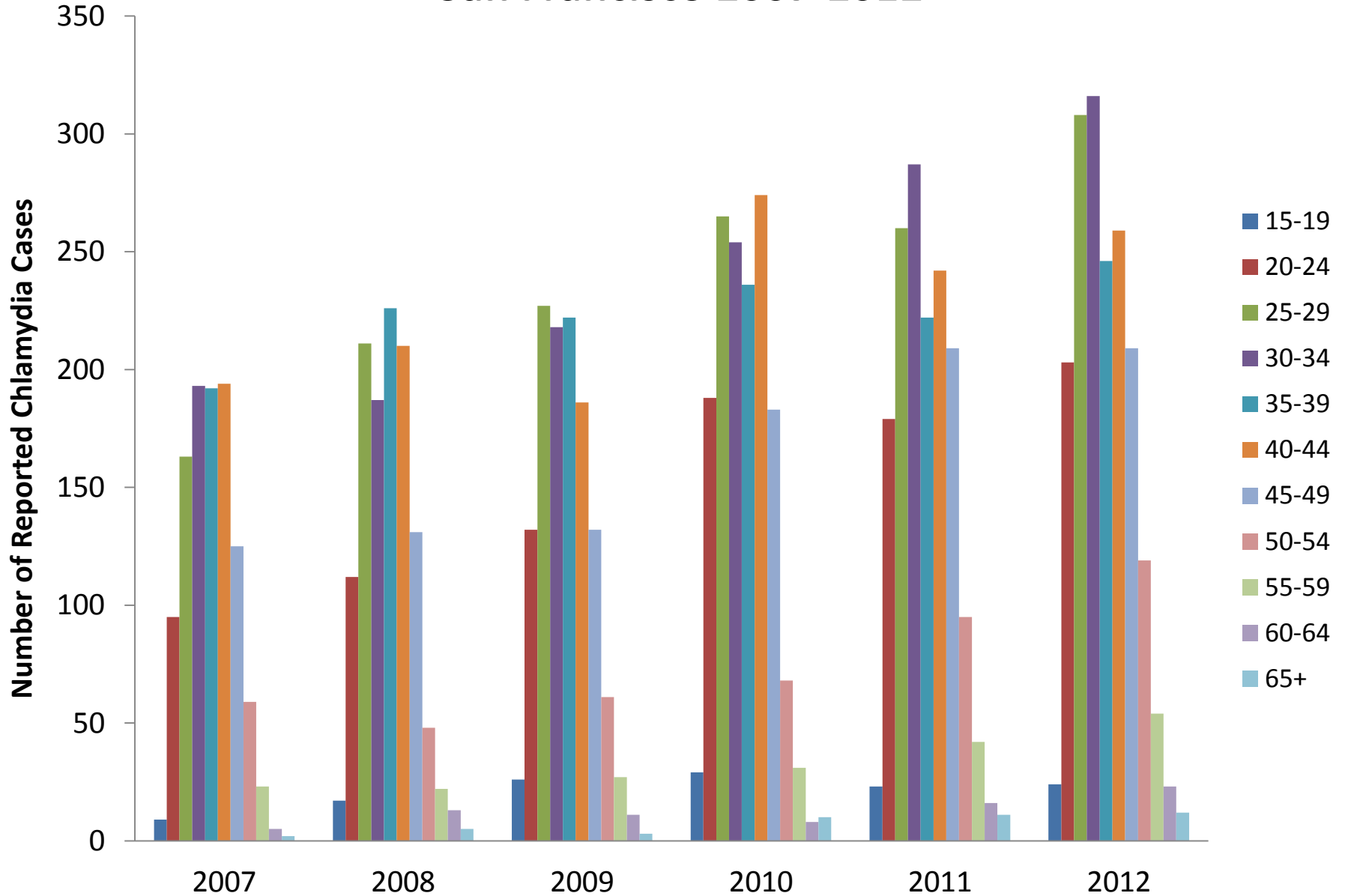
# Reported Chlamydia by Sex/Sexual Orientation, San Francisco 2007-2012



# Chlamydia Rates (per 100,000 population), San Francisco 2007-2012

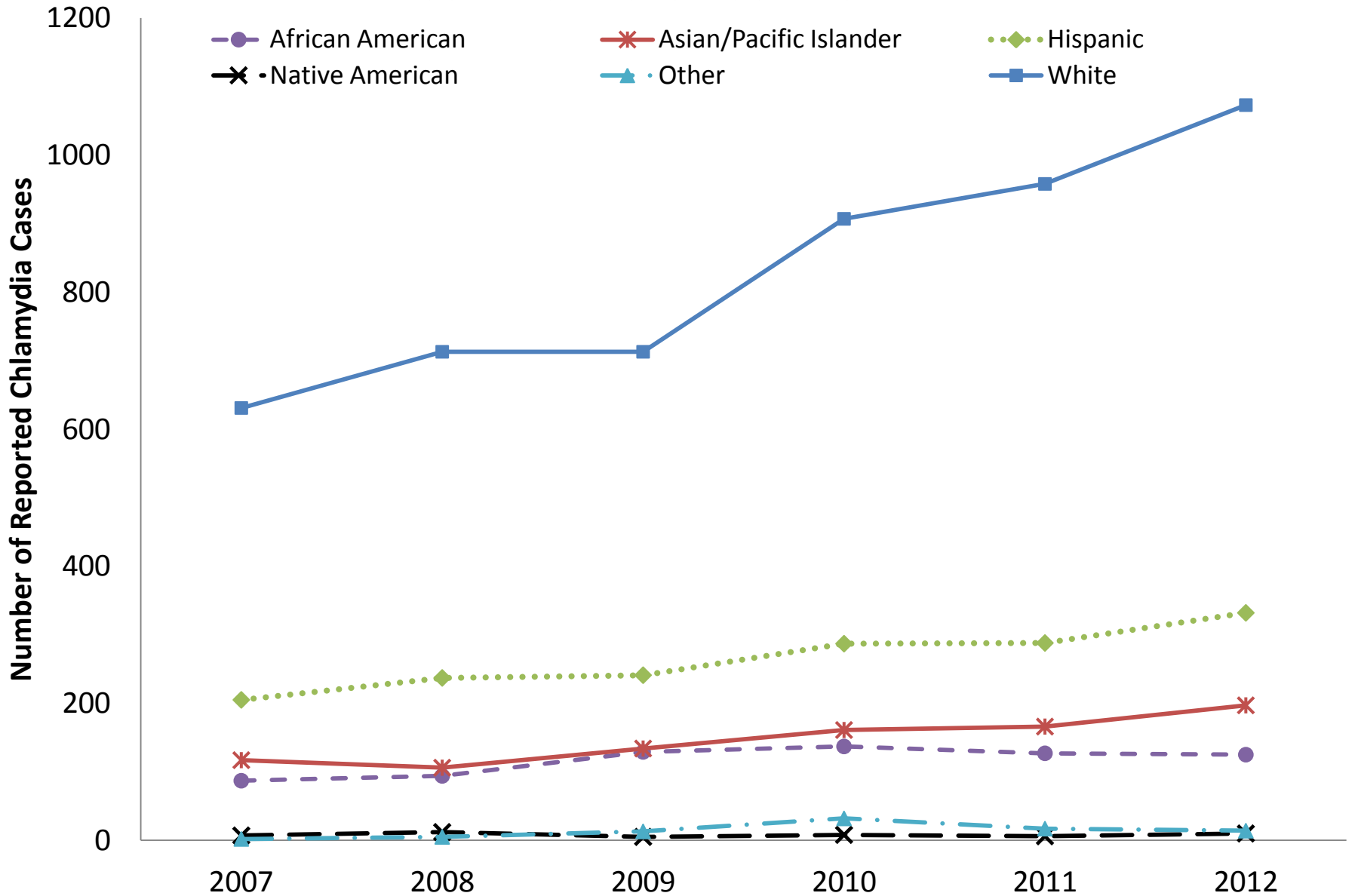


# Reported MSM Chlamydia by Age, San Francisco 2007-2012

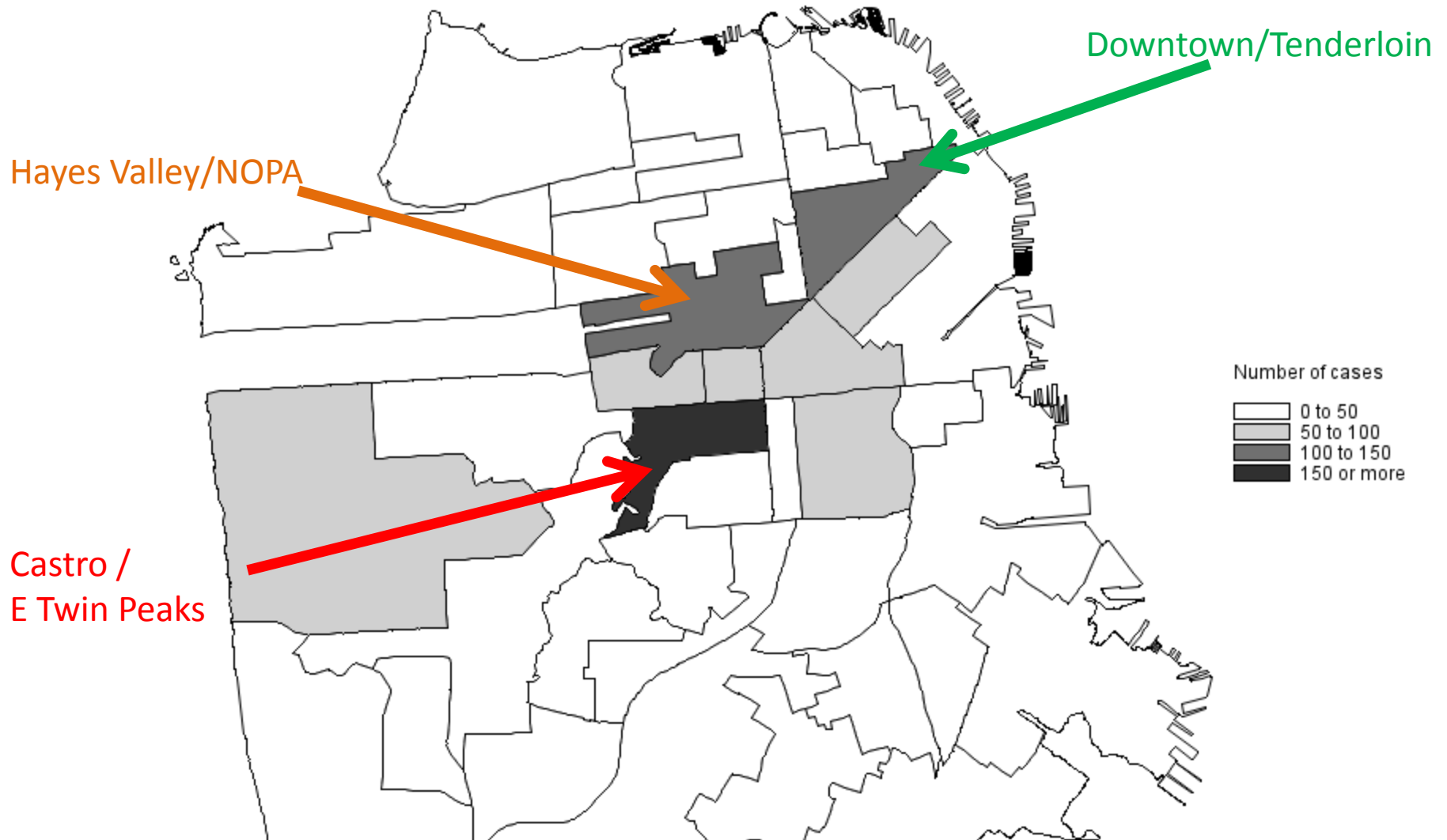




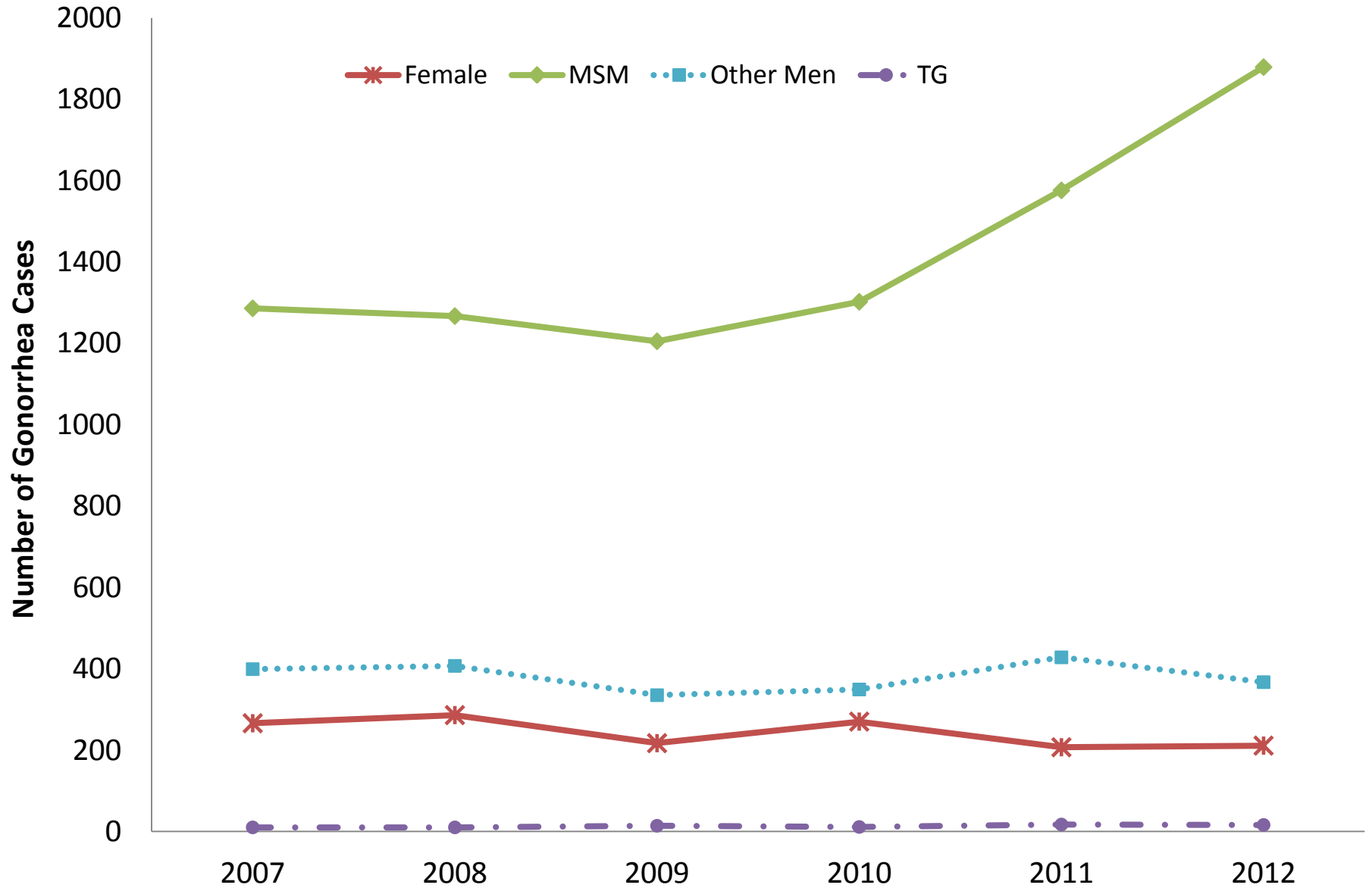
# Reported Chlamydia by Race/Ethnicity, San Francisco 2007-2012



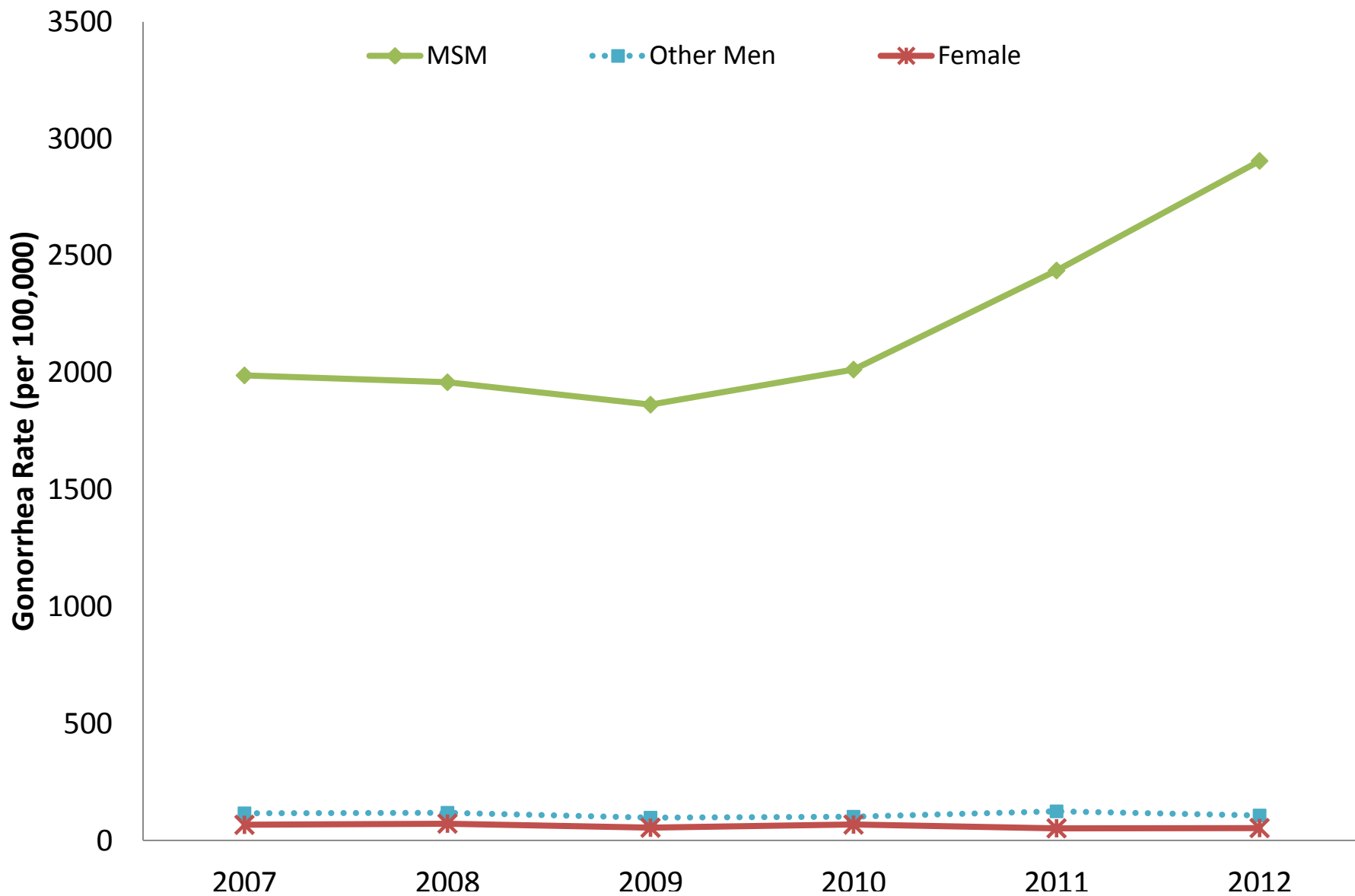
# Chlamydia Cases among MSM, San Francisco 2012



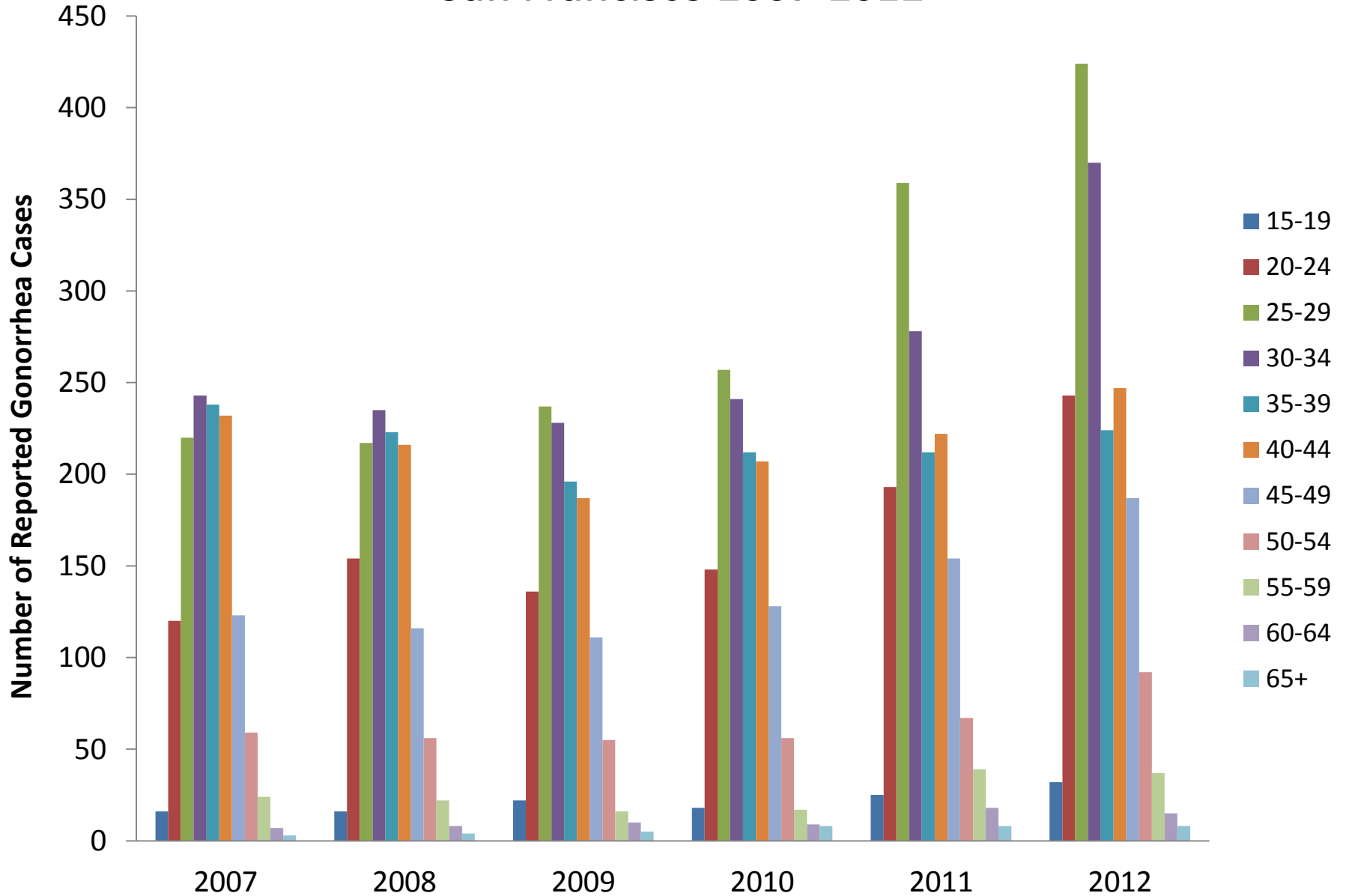
# Reported Gonorrhea by Sex/Sexual Orientation, San Francisco 2007-2012



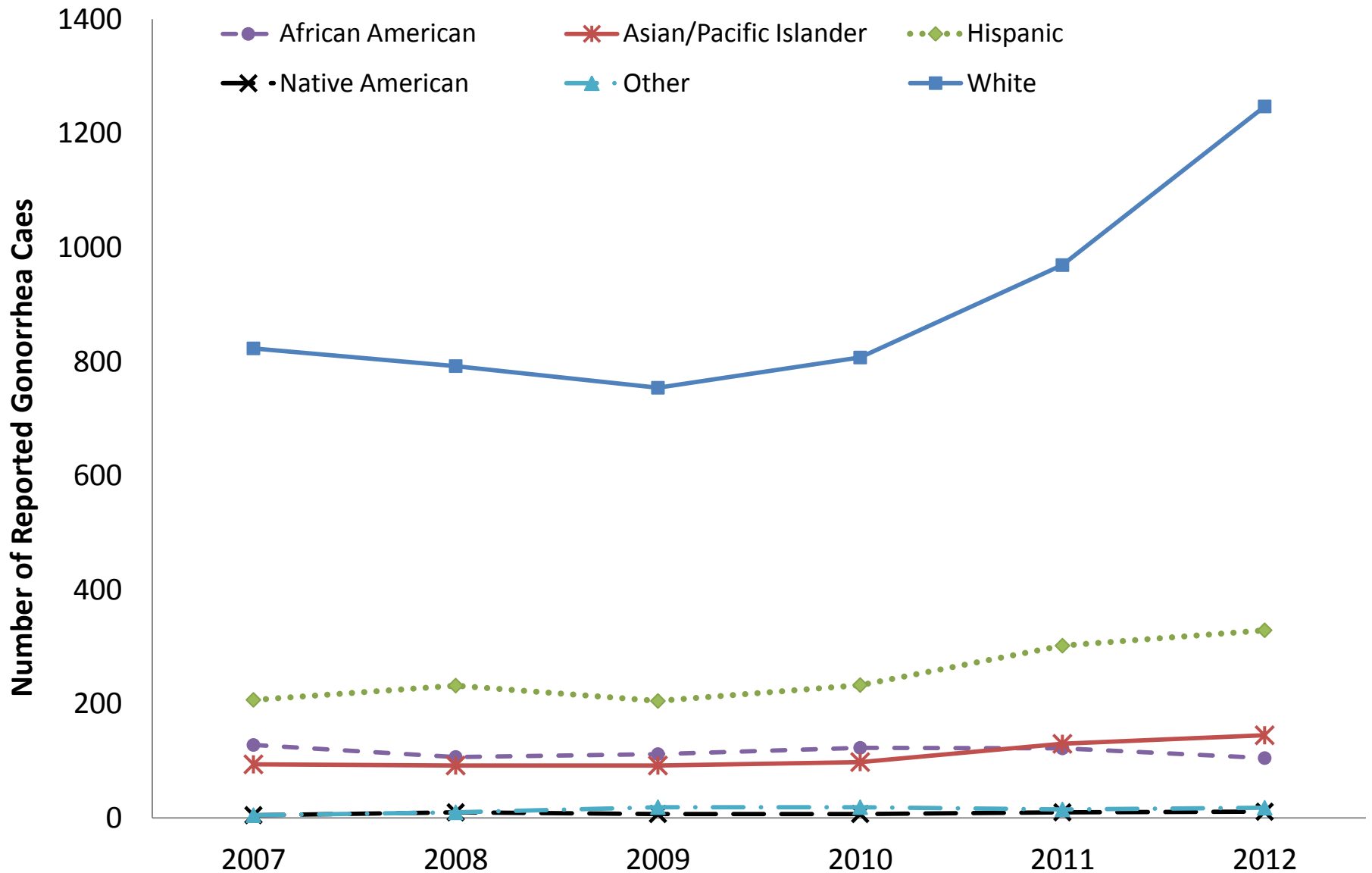
# Gonorrhea Rates (per 100,000 population), San Francisco 2007-2012



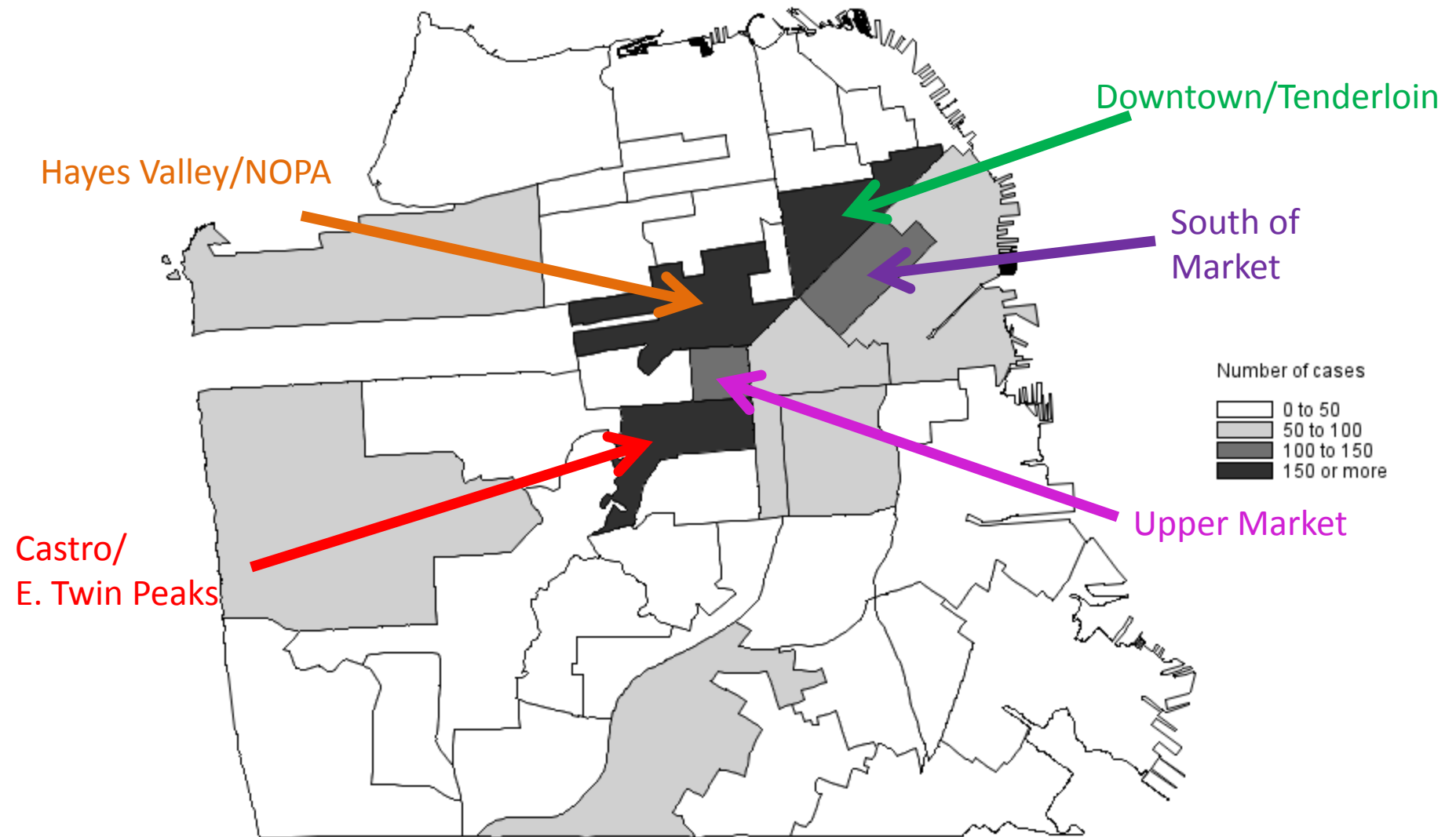
# Reported MSM Gonorrhea by Age, San Francisco 2007-2012



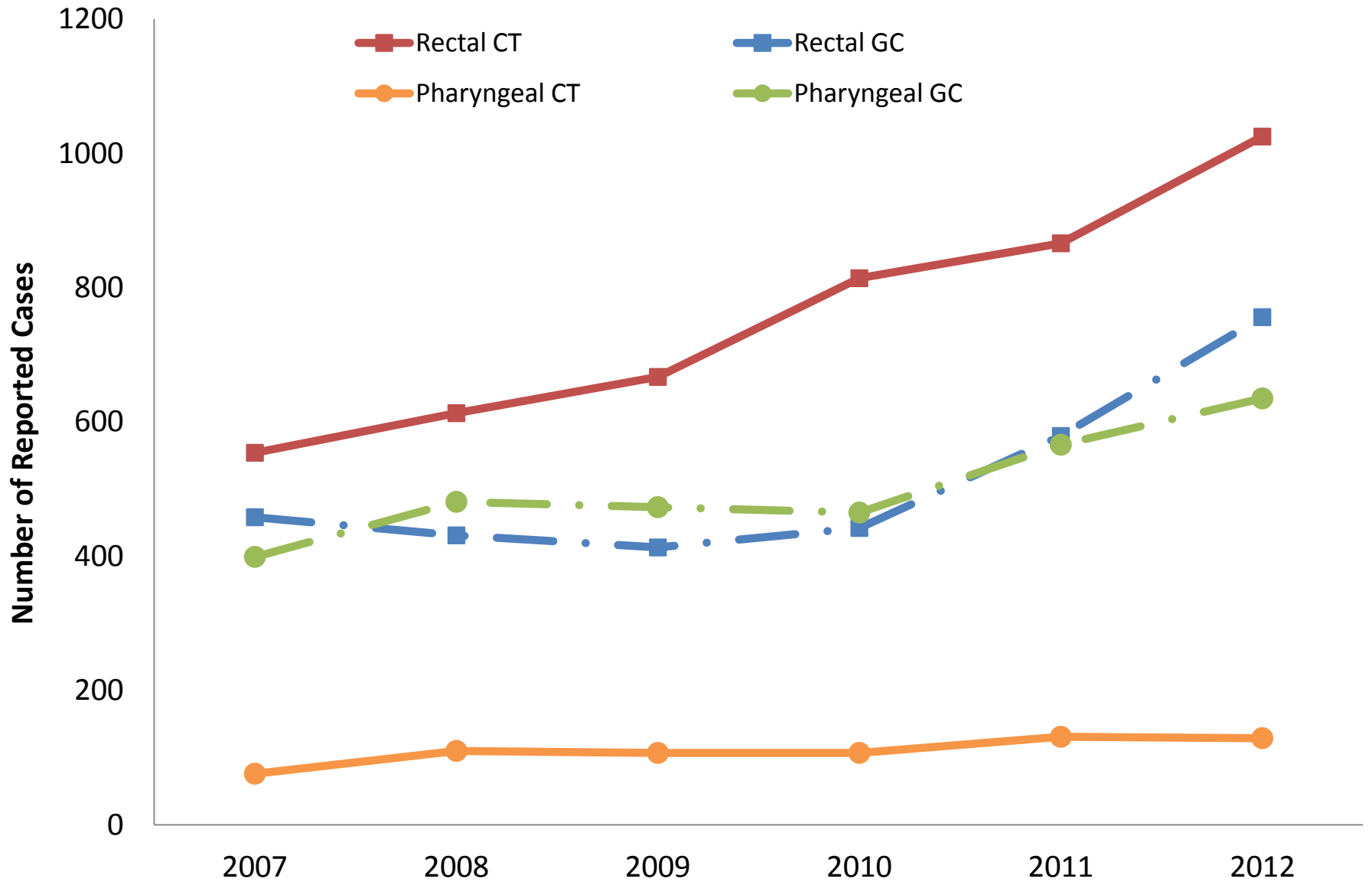
# Reported MSM Gonorrhea by Race/Ethnicity, San Francisco 2007-2012



# Gonorrhea Cases among MSM, San Francisco 2012



# Reported Rectal and Pharyngeal Chlamydia and Gonorrhea among MSM, San Francisco 2007-2012





# San Francisco City Clinic

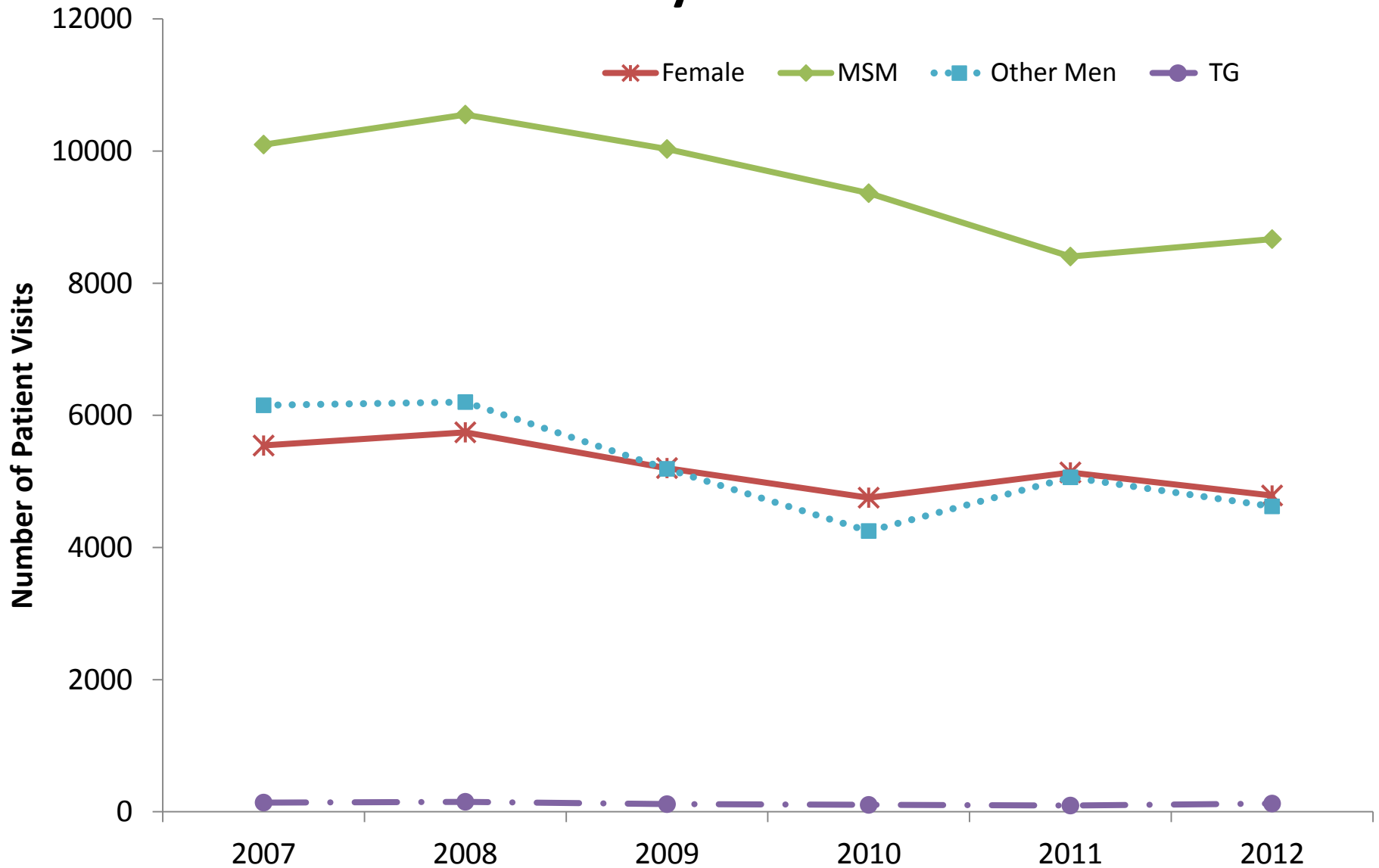
# Data from San Francisco City Clinic

- San Francisco City Clinic (SFCC) provides low cost STD, HIV, and reproductive health services 5 days per week
- SFCC began using a fully electronic medical record system in June 2010
- All patients at SFCC are seen by a clinician for evaluation and risk assessment
- Demographic information is collected from patients at registration. Sexual and drug using behaviors are collected from clinicians during exam
  - All patients have a new behavioral assessment conducted if it has been more than 2 weeks since their last visit
- At SFCC, all MSM are screened for chlamydia and gonorrhea at the urogenital, pharyngeal, and rectal sites (based on reported exposure), syphilis, and offered testing for HIV

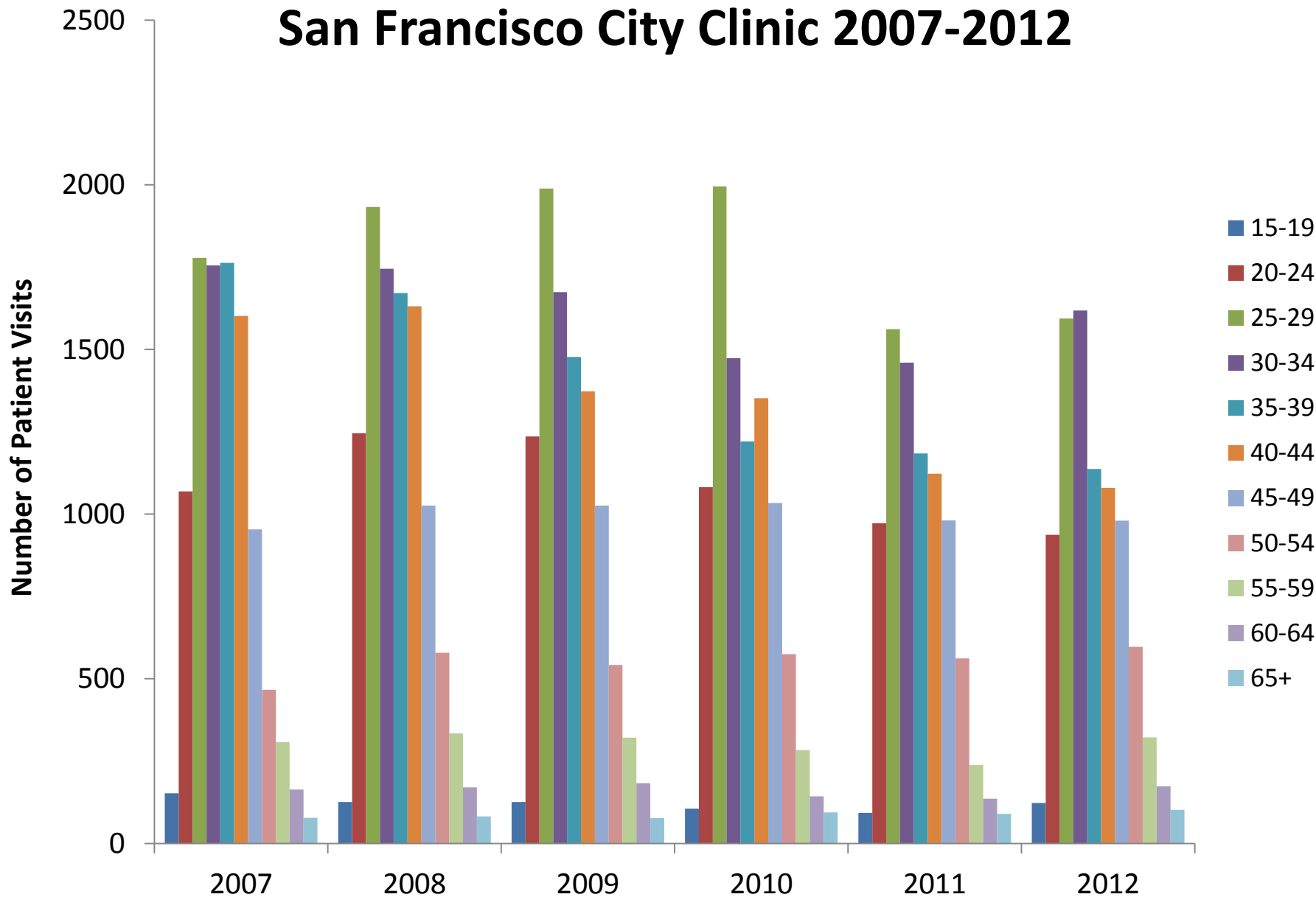
## Notes about Data Included in Supplement – City Clinic

- MSM is defined as a male who self-identified as gay or bisexual or ever reported having had sex with a male
  - Data across clinic visits/morbidity events are used to determine MSM status
- HIV status is based on self-reported status as well as HIV testing conducted at SFCC
- A symptomatic patient visit is defined as a clinical encounter where the patient reports urogenital, anorectal, pharyngeal, or dermatologic symptoms

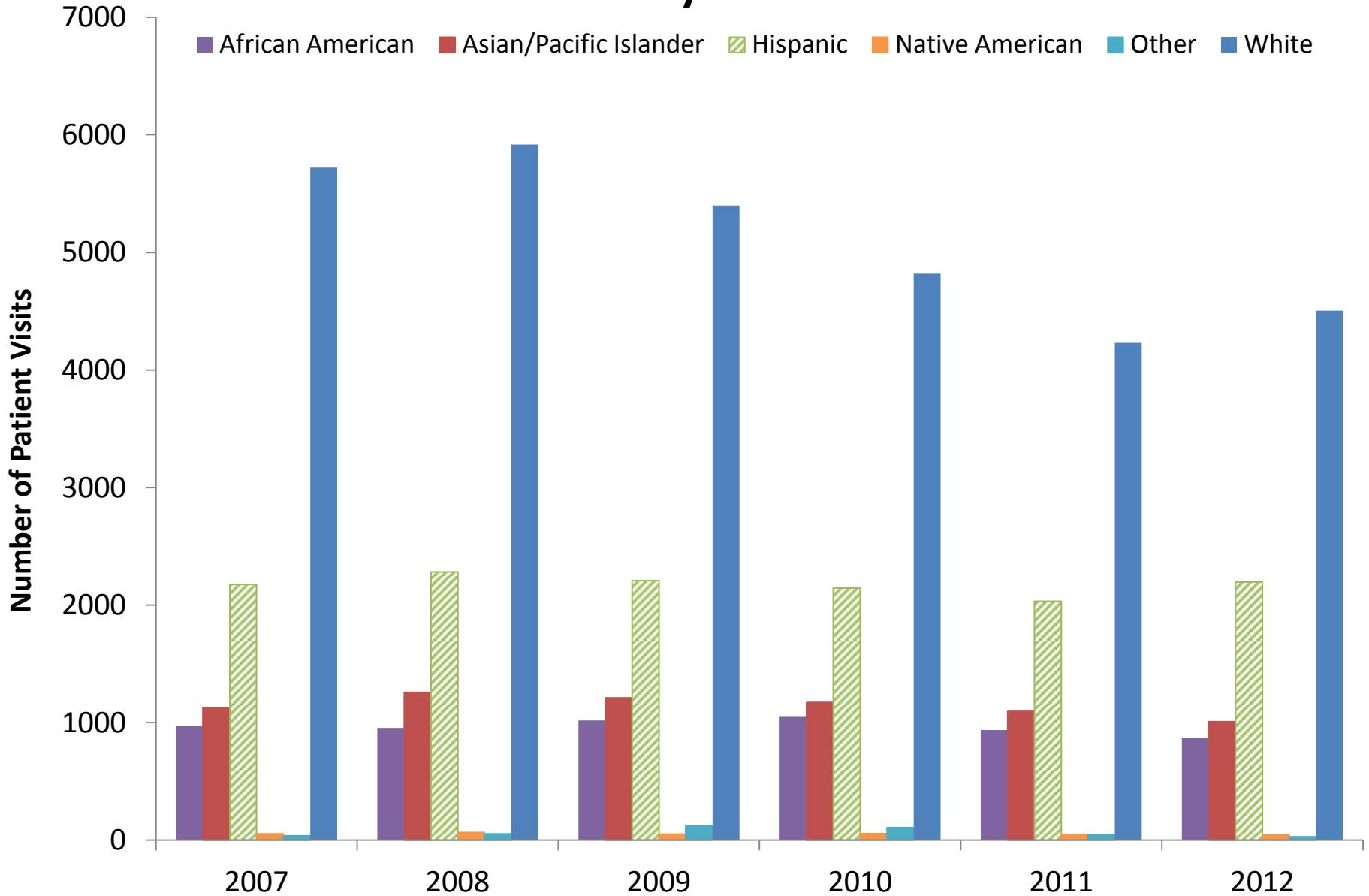
# Number of Patient Visits, San Francisco City Clinic 2007-2012



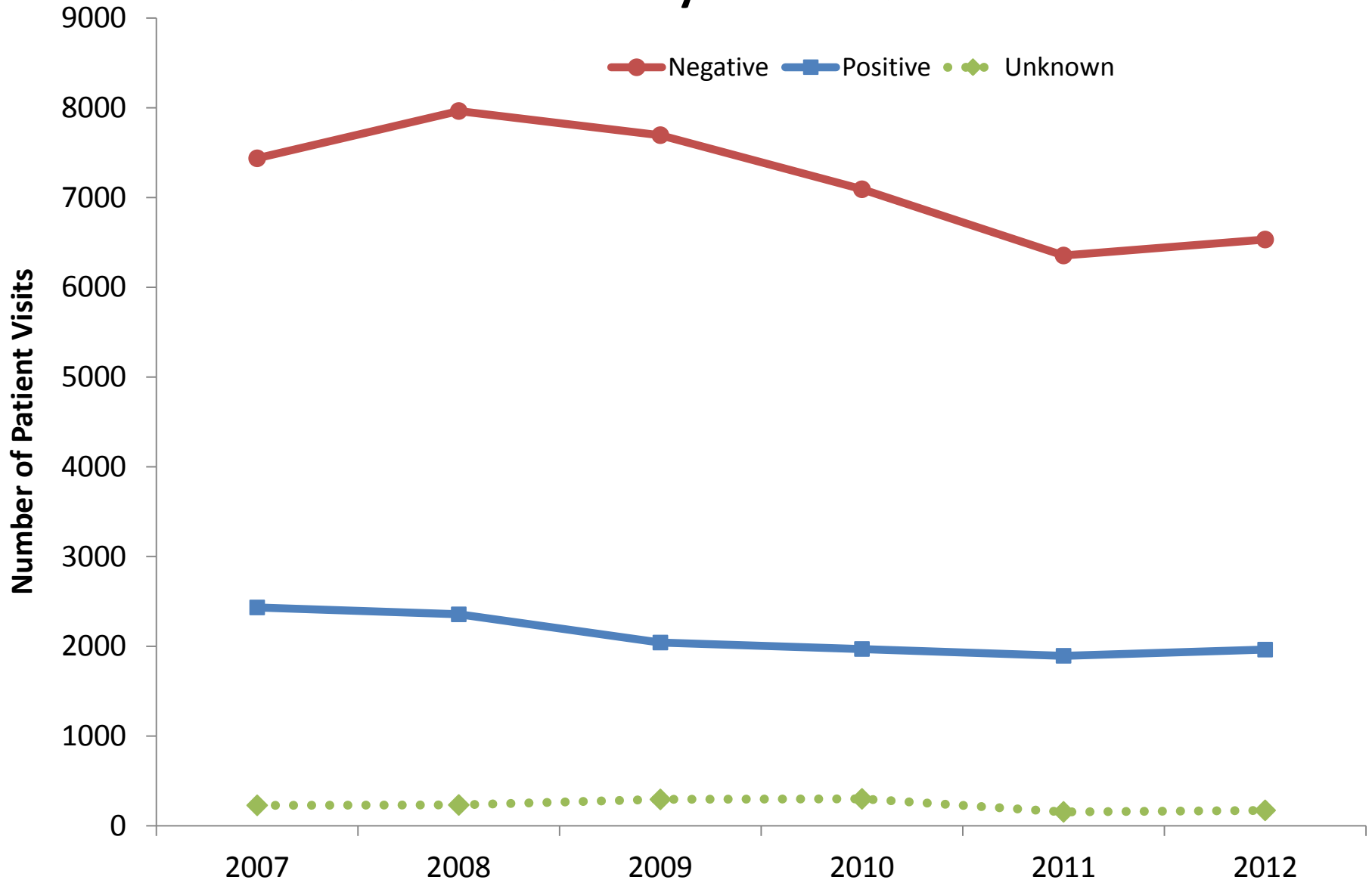
# Age Distribution of MSM Visits, San Francisco City Clinic 2007-2012



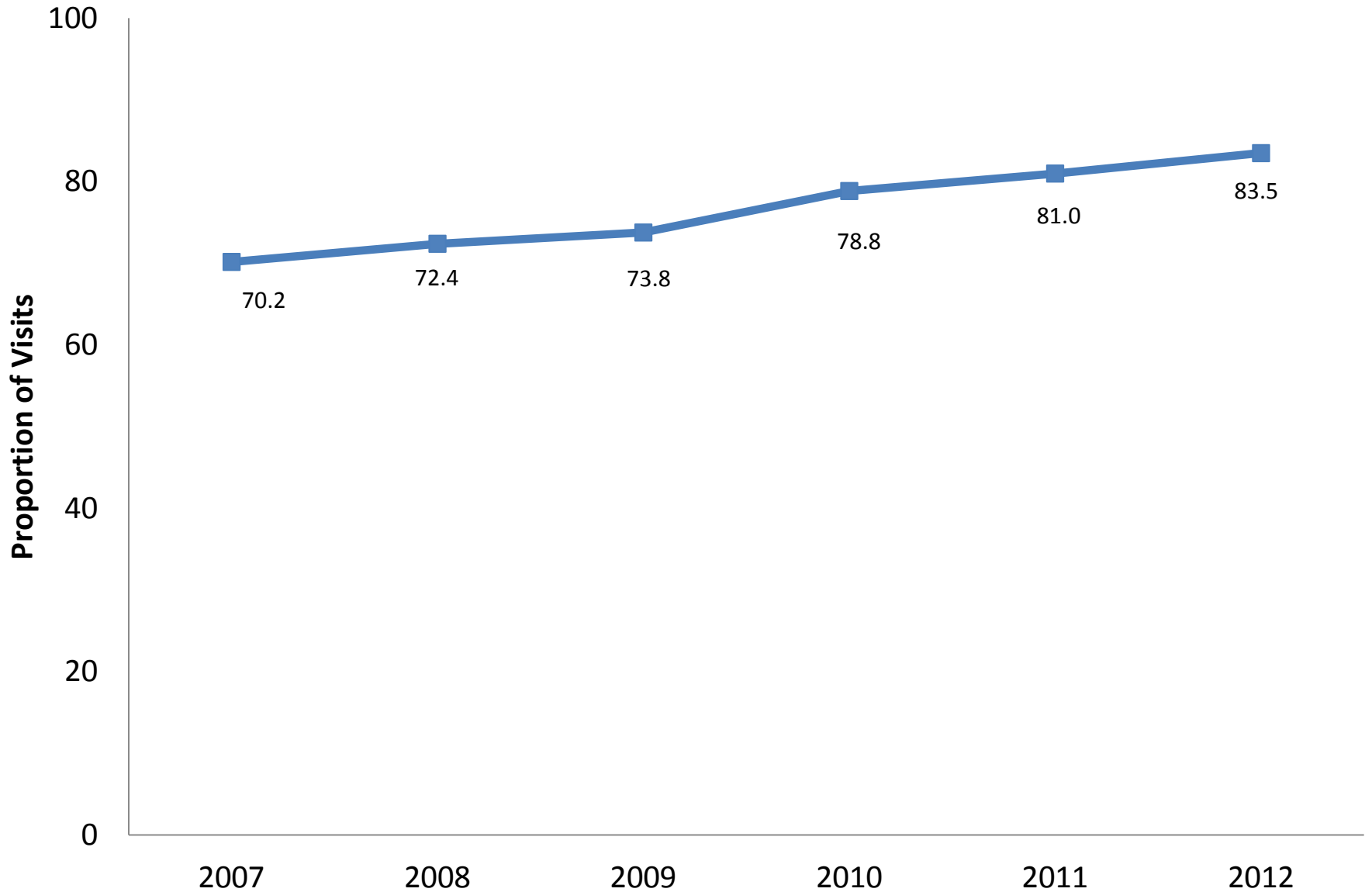
# Racial/Ethnic Distribution of MSM Patient Visits, San Francisco City Clinic 2007-2012



# HIV Status of MSM Patient Visits, San Francisco City Clinic 2007-2012

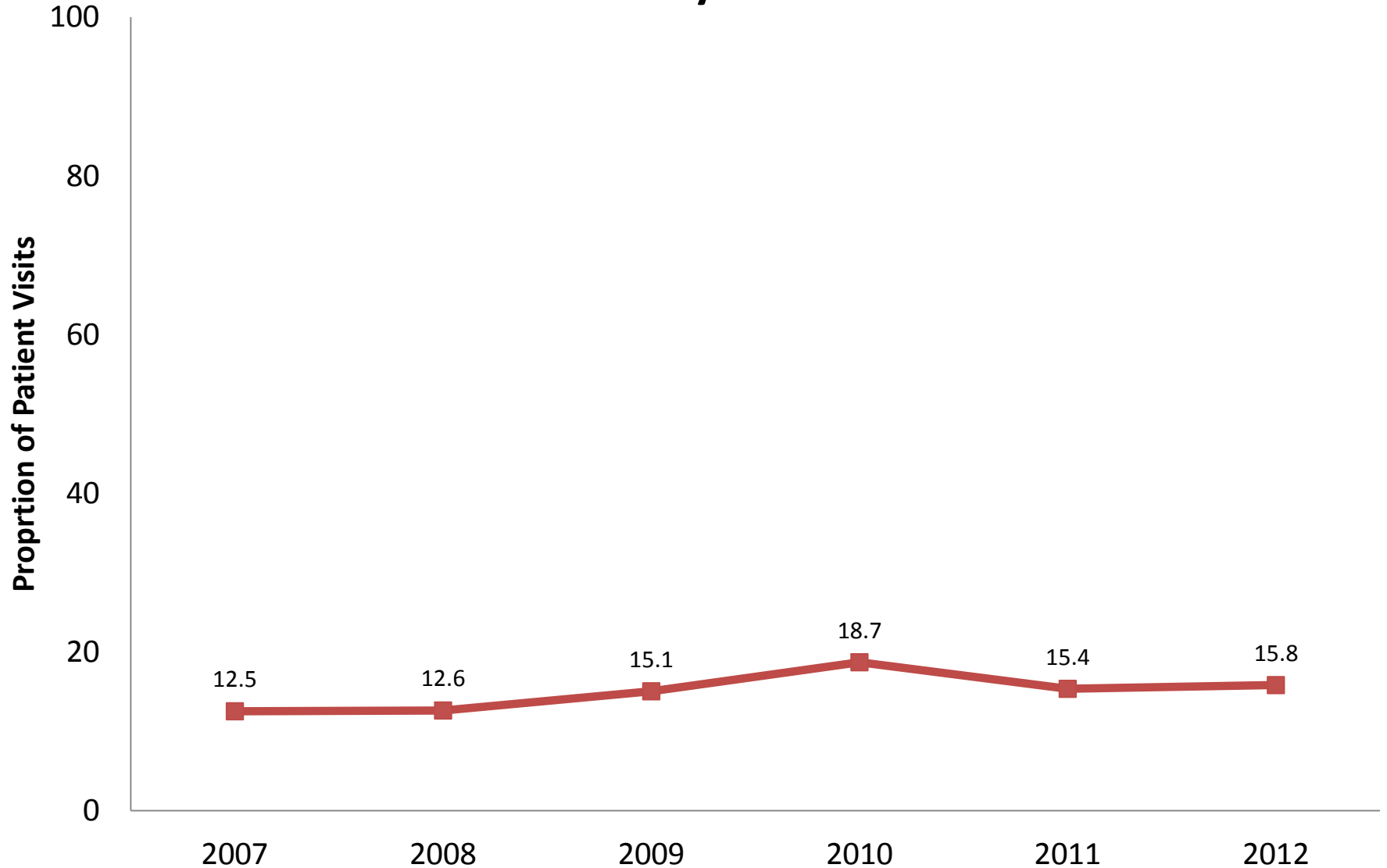


# Proportion of Symptomatic MSM Patient Visits, San Francisco City Clinic 2007-2012

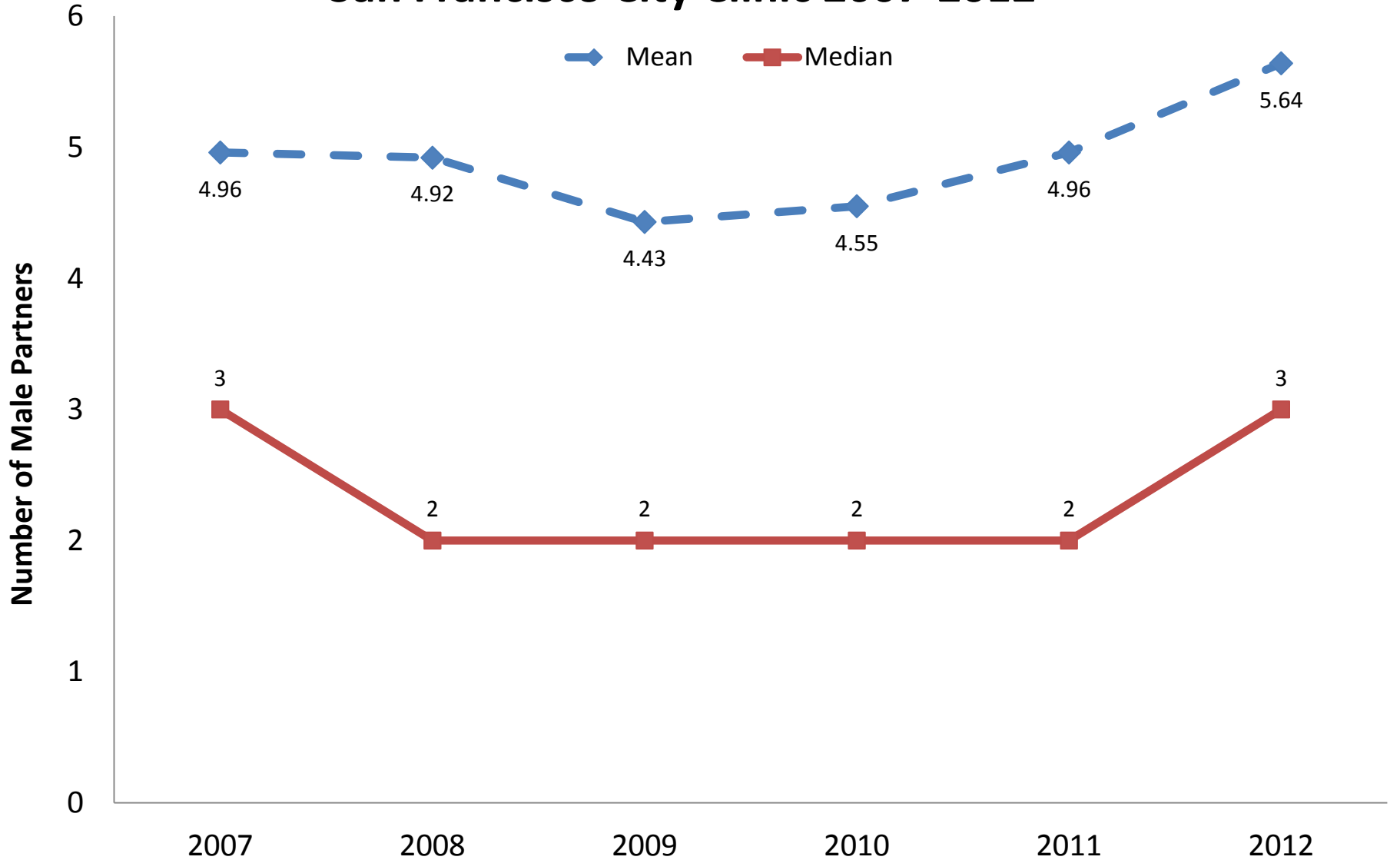




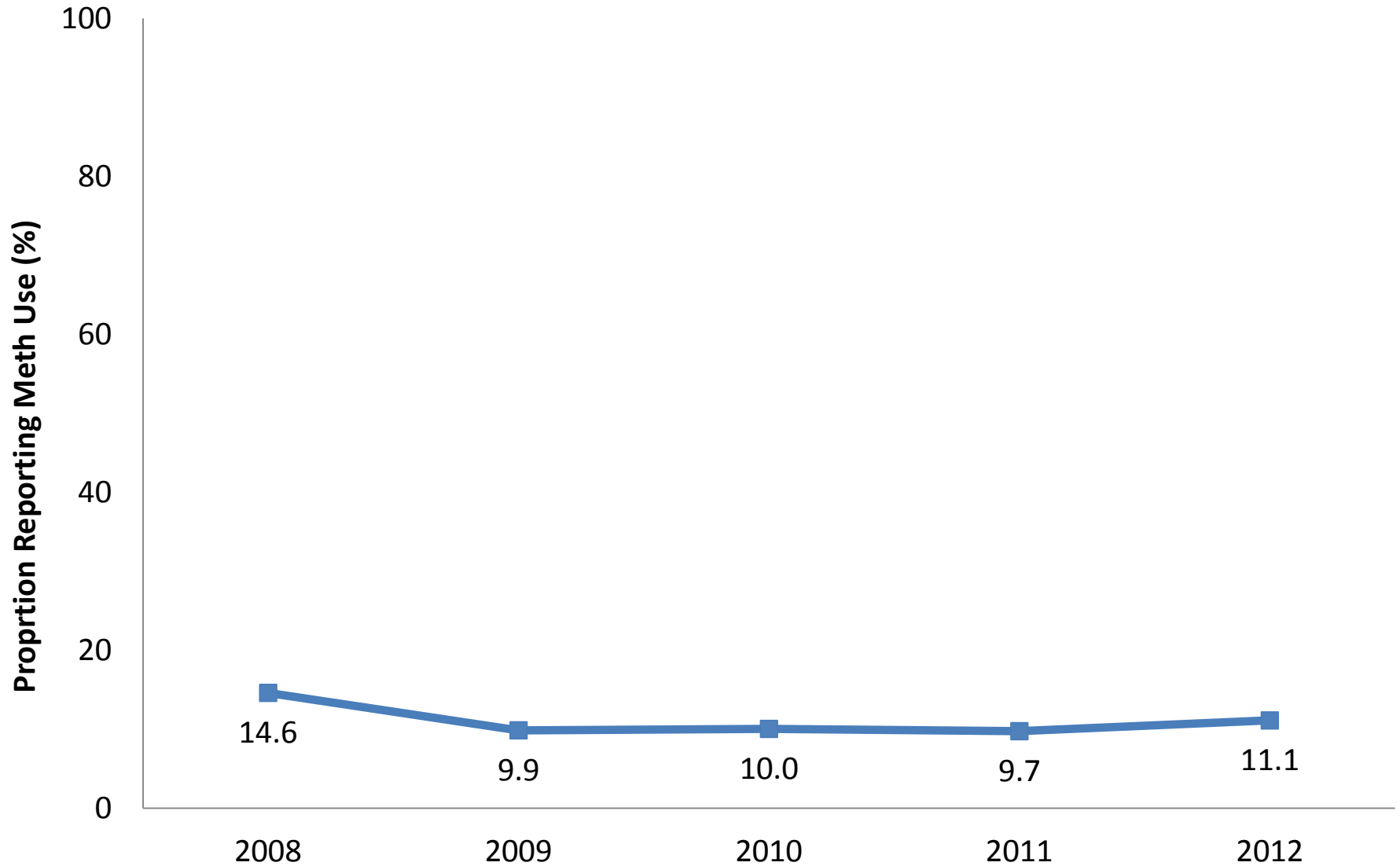
# Proportion of MSM Reporting Any Female Partners in Prior 3 Months, San Francisco City Clinic 2007-2012



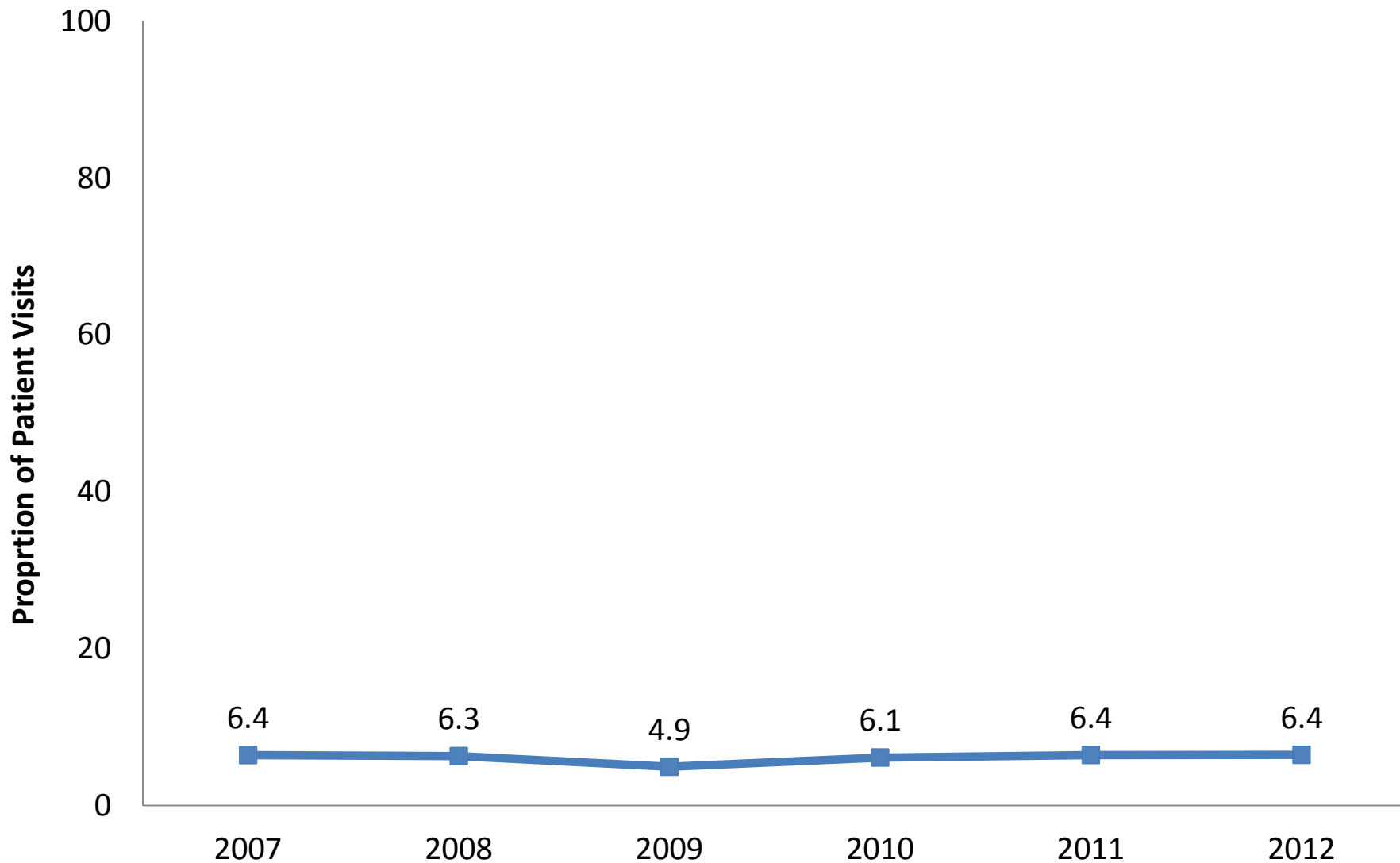
# Mean and Median Number of Male Sex Partners in Prior 3 Months Among MSM Patient Visits, San Francisco City Clinic 2007-2012



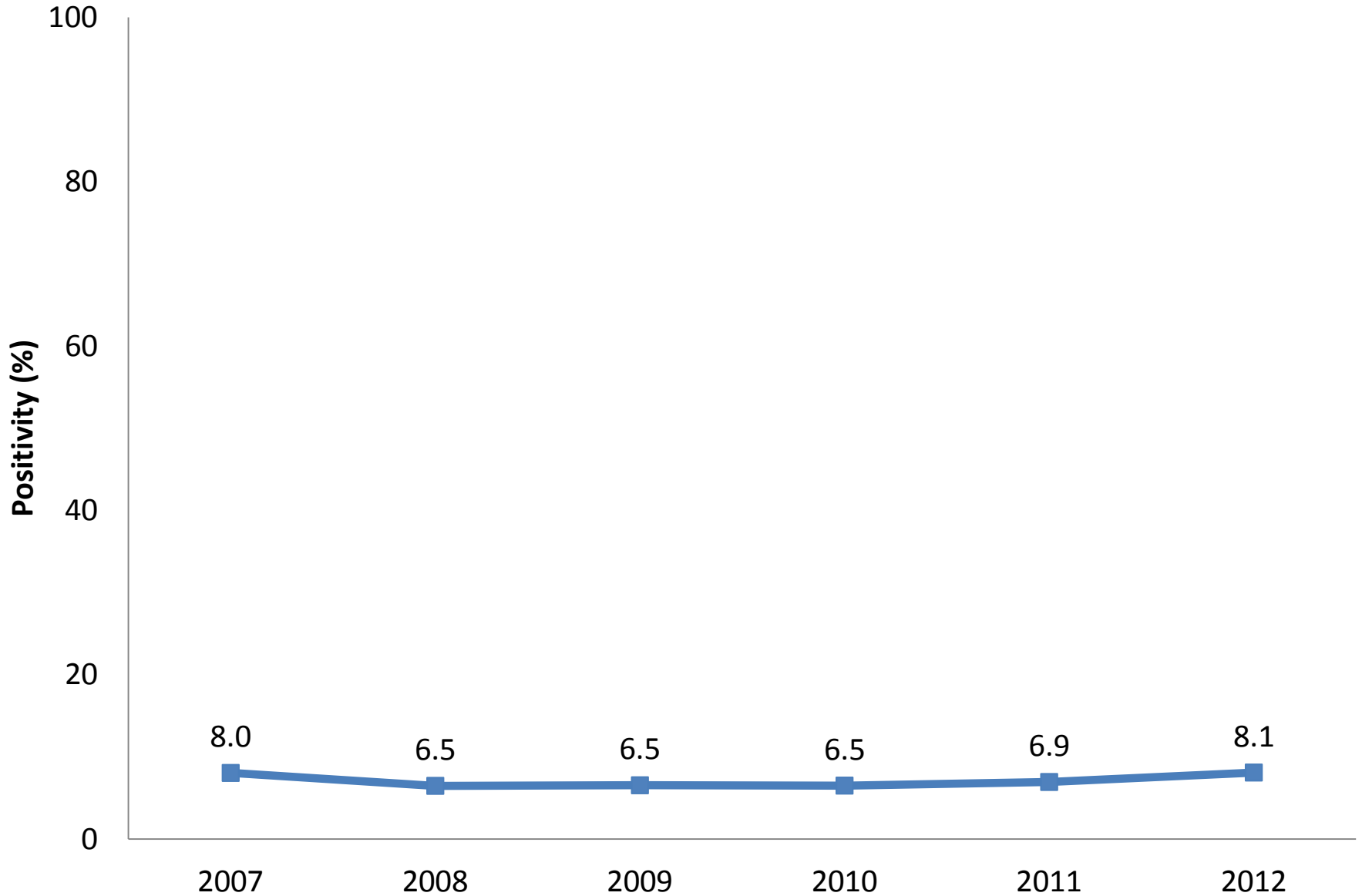
# Proportion of MSM Visits Reporting Methamphetamine Use in Prior 12 Months, San Francisco City Clinic 2007-2012



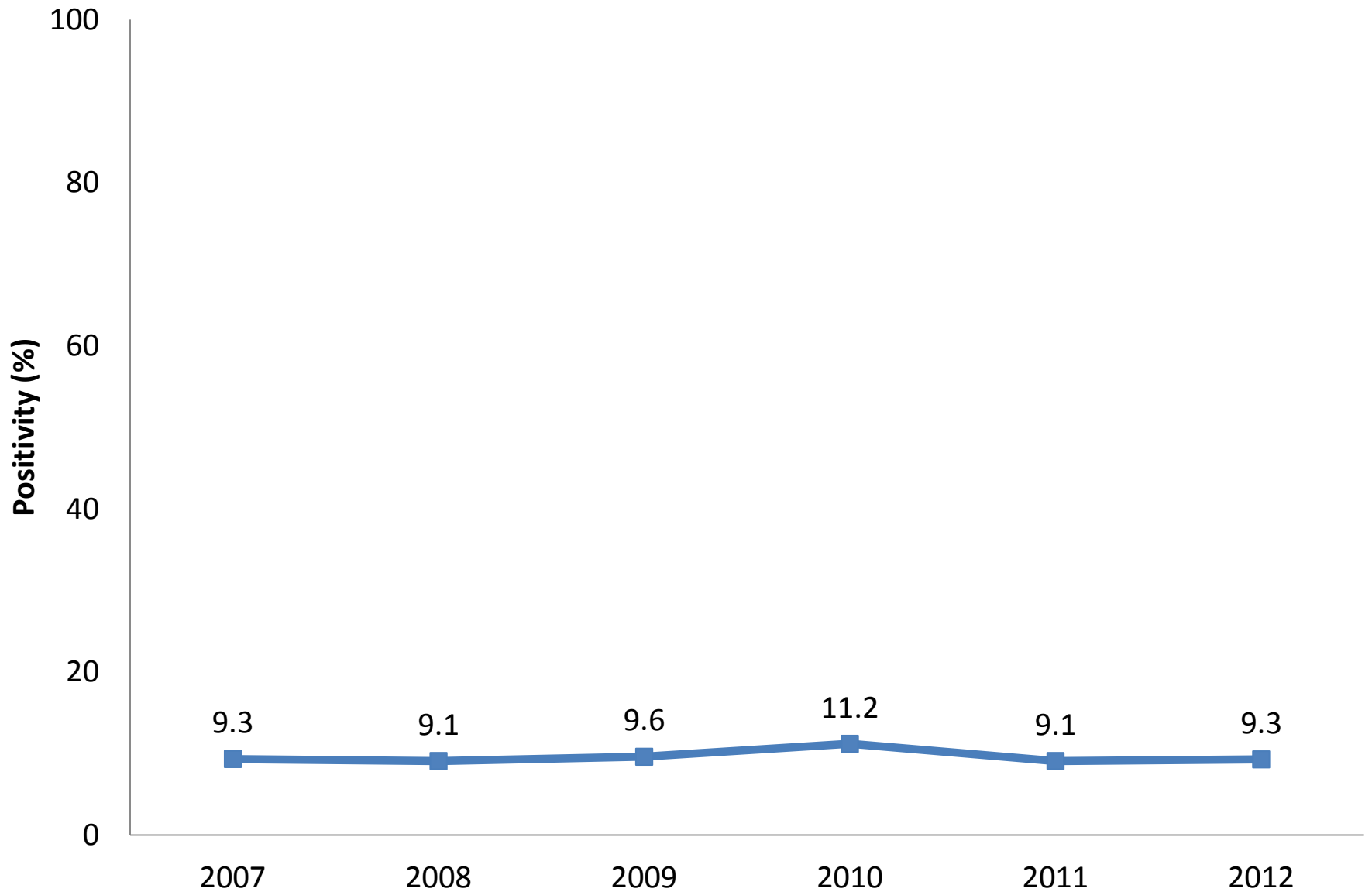
# Proportion of MSM Visits Reporting Any Lifetime Injection Drug Use, San Francisco City Clinic 2007-2012



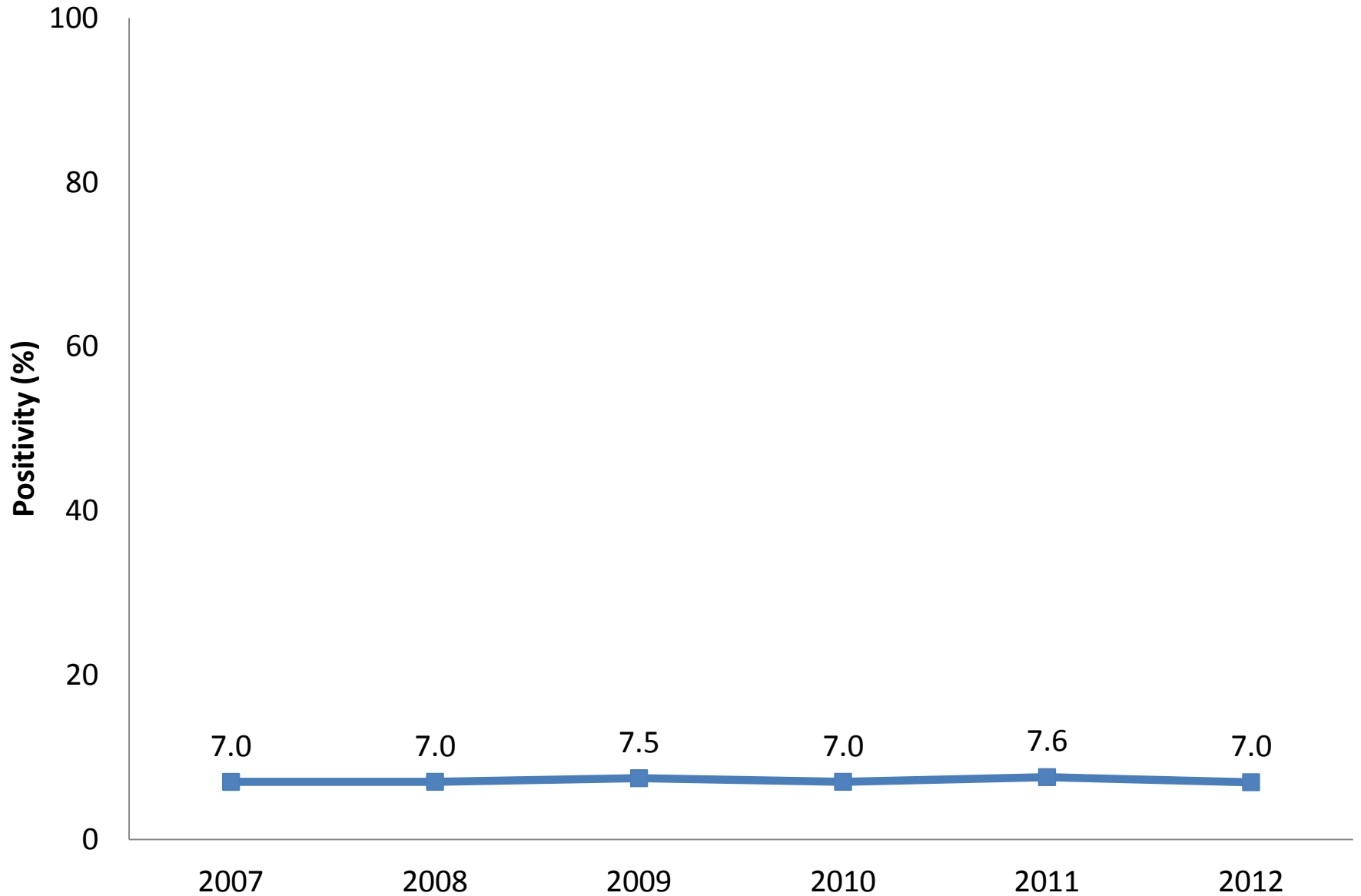
# Rectal Gonorrhea Positivity among MSM, San Francisco City Clinic 2007-2012



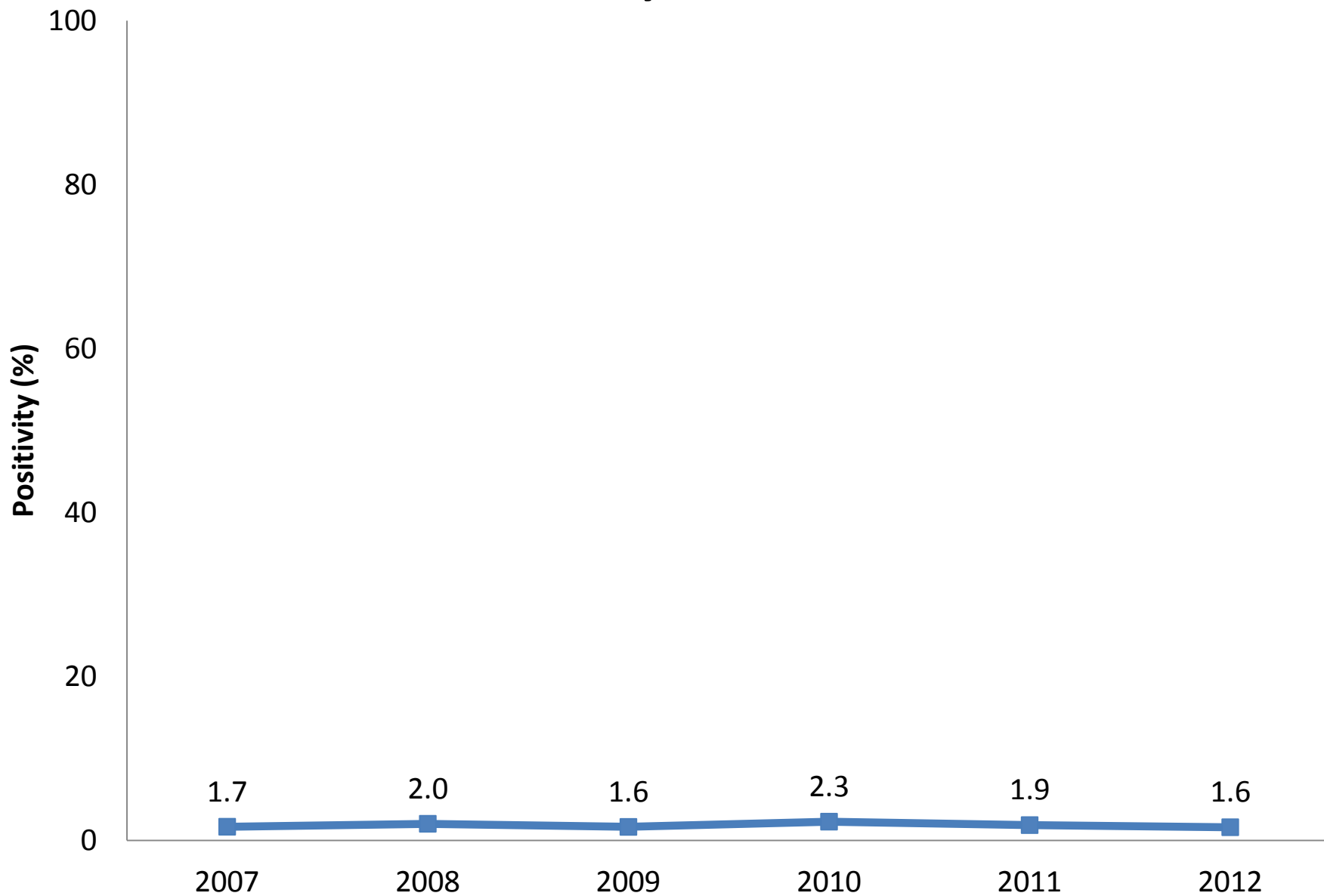
# Rectal Chlamydia Positivity among MSM, San Francisco City Clinic 2007-2012



# Pharyngeal Gonorrhea Positivity among MSM, San Francisco City Clinic 2007-2012

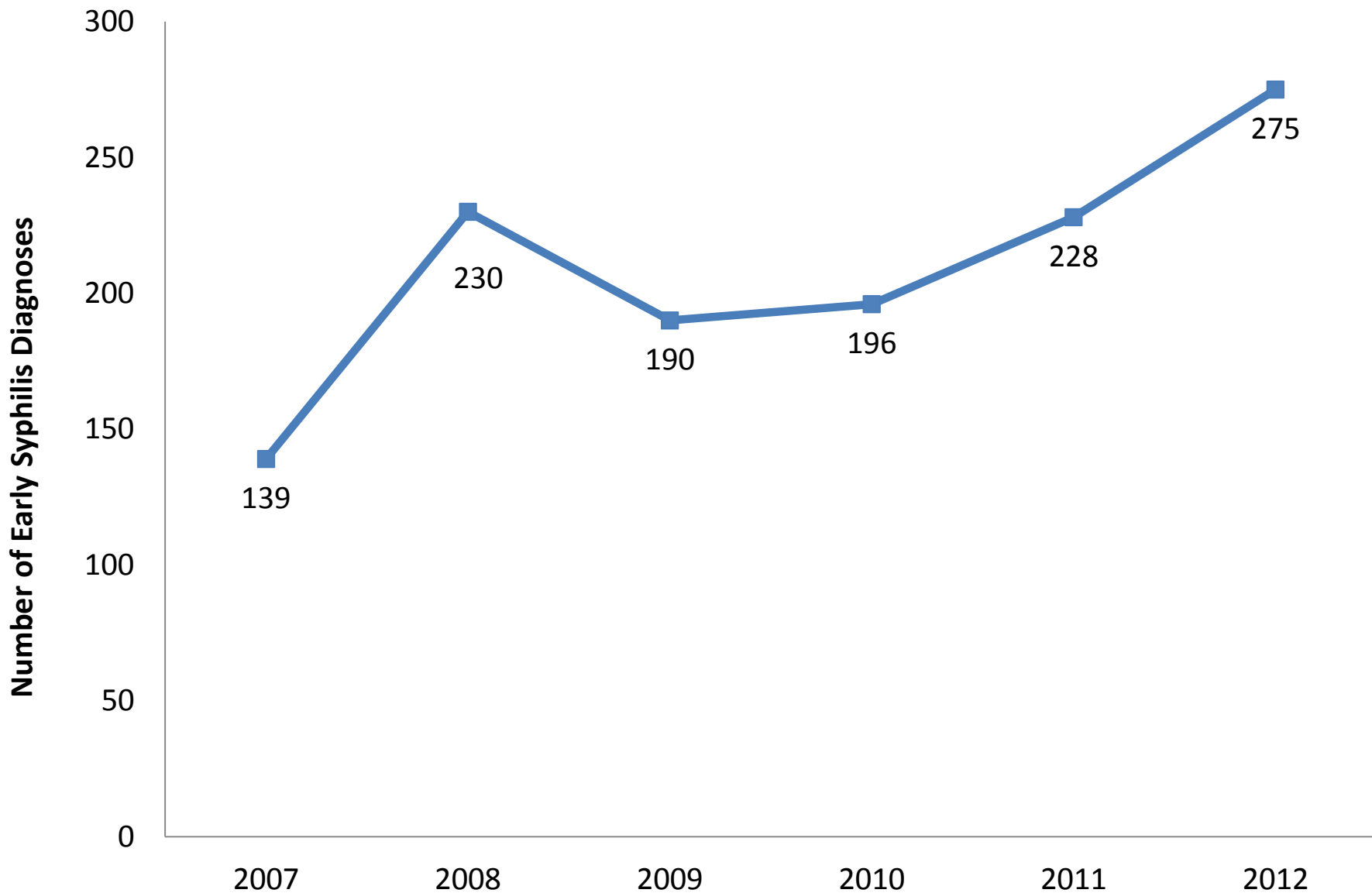


# Pharyngeal Chlamydia Positivity among MSM, San Francisco City Clinic 2007-2012

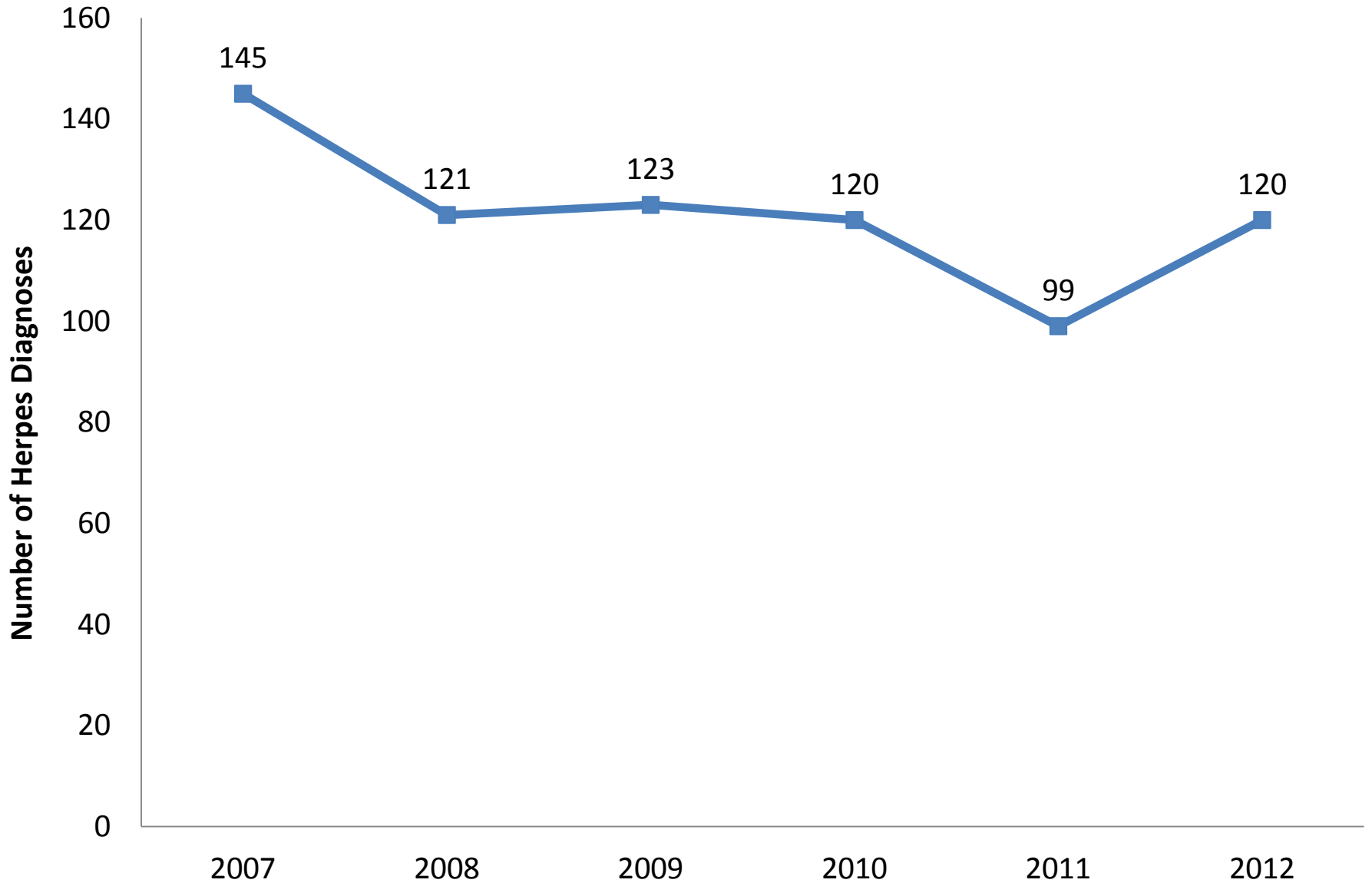




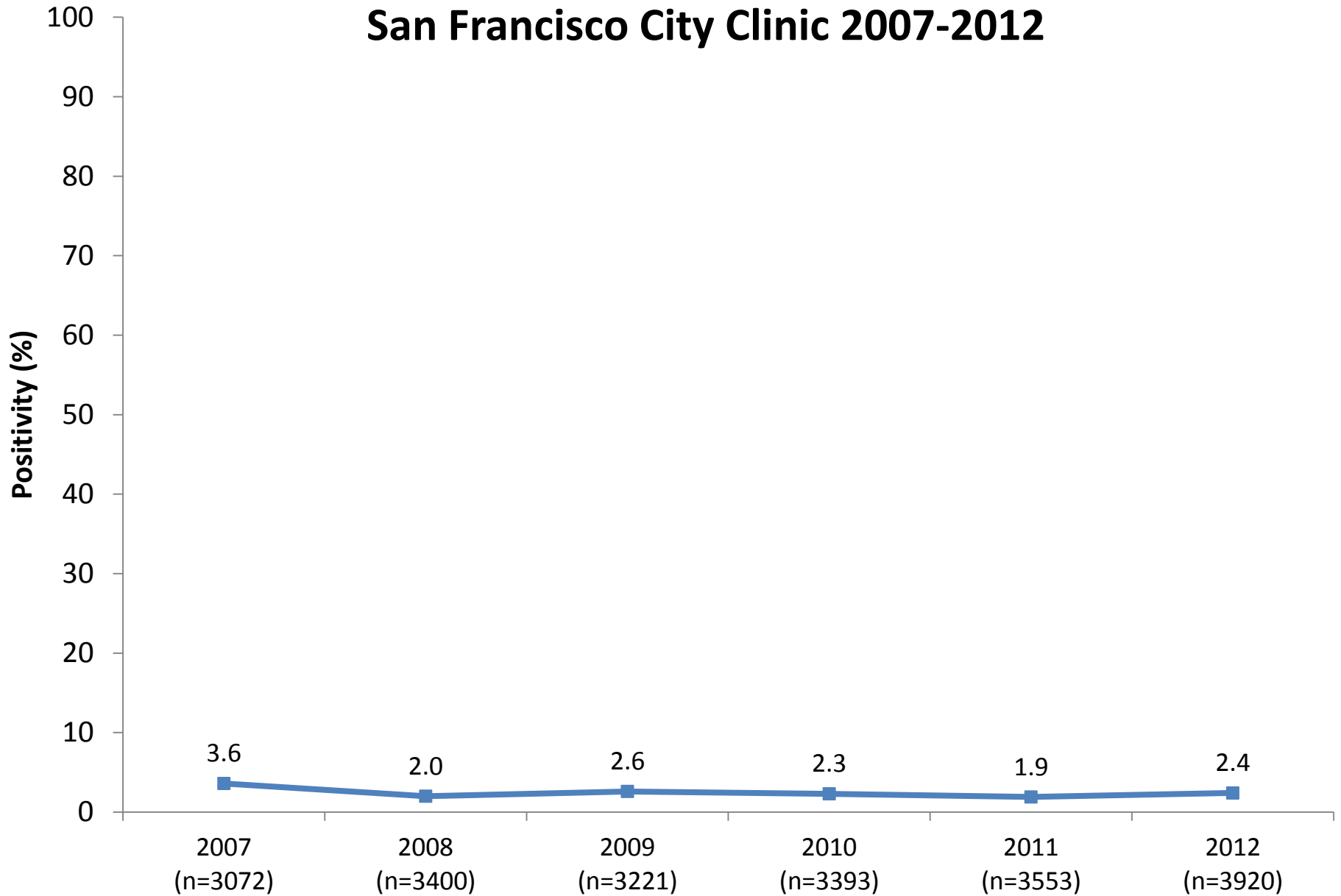
# Early Syphilis Diagnoses among MSM, San Francisco City Clinic 2007-2012



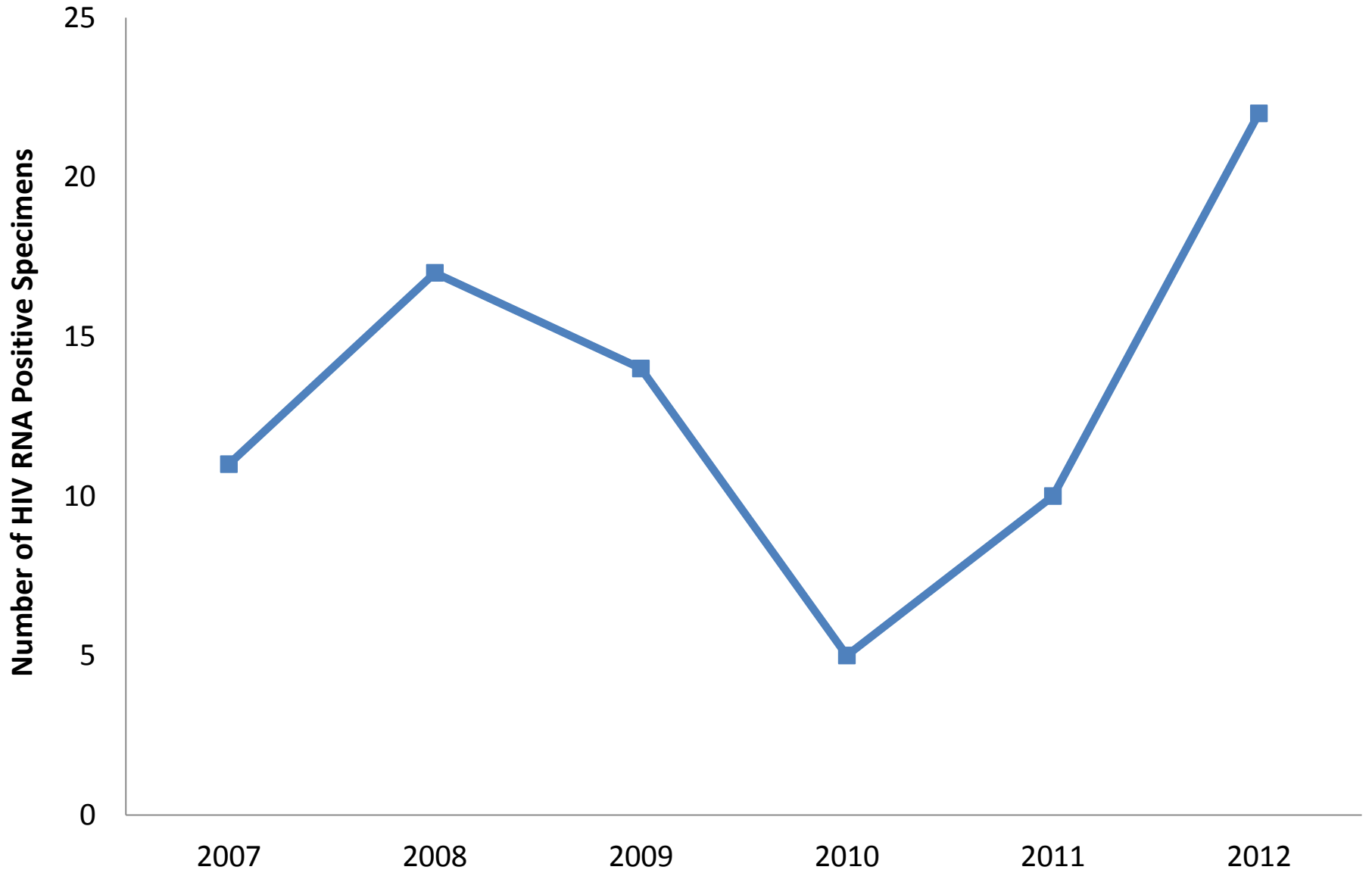
# Genital Herpes Diagnoses among MSM, San Francisco City Clinic 2007-2012



# HIV Positivity Among MSM, San Francisco City Clinic 2007-2012



# Number of Pooled HIV RNA Positive Specimens among MSM, San Francisco City Clinic 2007-2012



# For questions or comments

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## Note on totals for previous years

Numbers in this document listed for past years may not match totals in previous reports. Totals may increase due to late reports, and may decrease when duplicate reports are eliminated or cases are subsequently identified as out of our jurisdiction.