

# Using cross-matched HIV and sexually transmitted disease registry data to estimate adherence to dual screening recommendations in New York City

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# Background

- Persons diagnosed with both HIV and sexually transmitted diseases (STD) in temporal proximity likely contribute disproportionately to overall transmission of STD and HIV.
- HIV and STD infections have common risk factors and usually occur in similar populations.
- Coinfections can increase HIV viral load and persons with STDs have increased susceptibility to HIV.
  - Treatment can reverse these effects.
  - Treatment of STDs among HIV/STD coinfected persons has been estimated to provide a 27% reduction in HIV transmission (Rothenberg RB, et al. Sex Transm Dis, 2000).
- CDC testing guidelines recommend dual HIV/STD screening.

**Objective:** To estimate adherence to dual screening recommendations in New York City based on a recent HIV/STD surveillance registry match.

# Methods

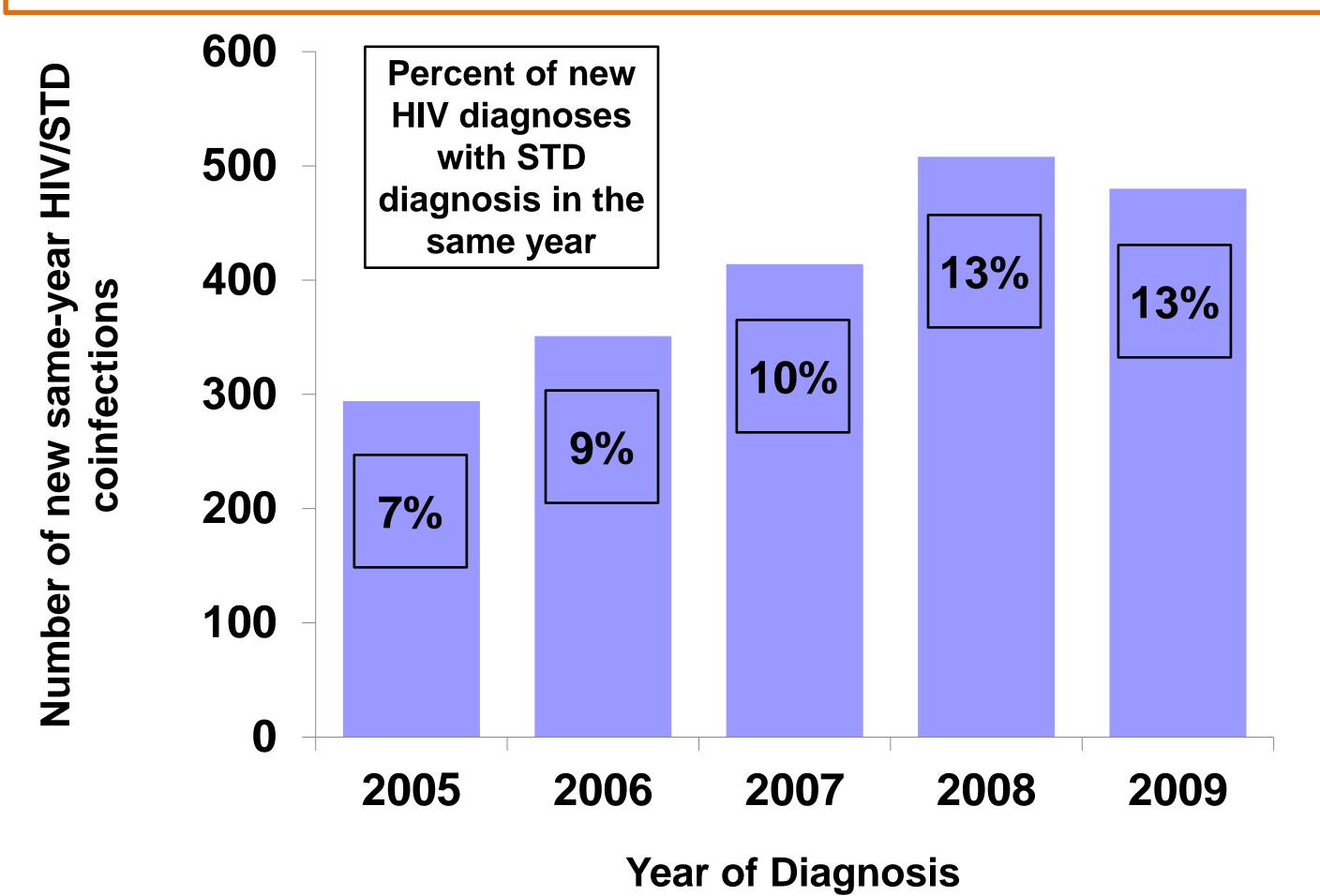
### **Match Flow Chart** STD Surveillance **HIV Surveillance Registry Data Registry Data** STDs reported to NYC AIDS diagnoses (January 2000 – June reported to NYC (1981 – **March 2011)** 2010) Includes syphilis, HIV diagnoses reported to NYC (2000 - March gonorrhea, and chlamydia 2011) 232,295 persons 618,597 events **Automated** Pairs including an deterministic match HIV case with a death date prior to 1/1/2000 and pairs with a gender Manual review of 2,878 mismatch excluded potential matches For 2000 34,542 matches representing through 18,385 unique persons identified 2010

### **Analysis Definitions**

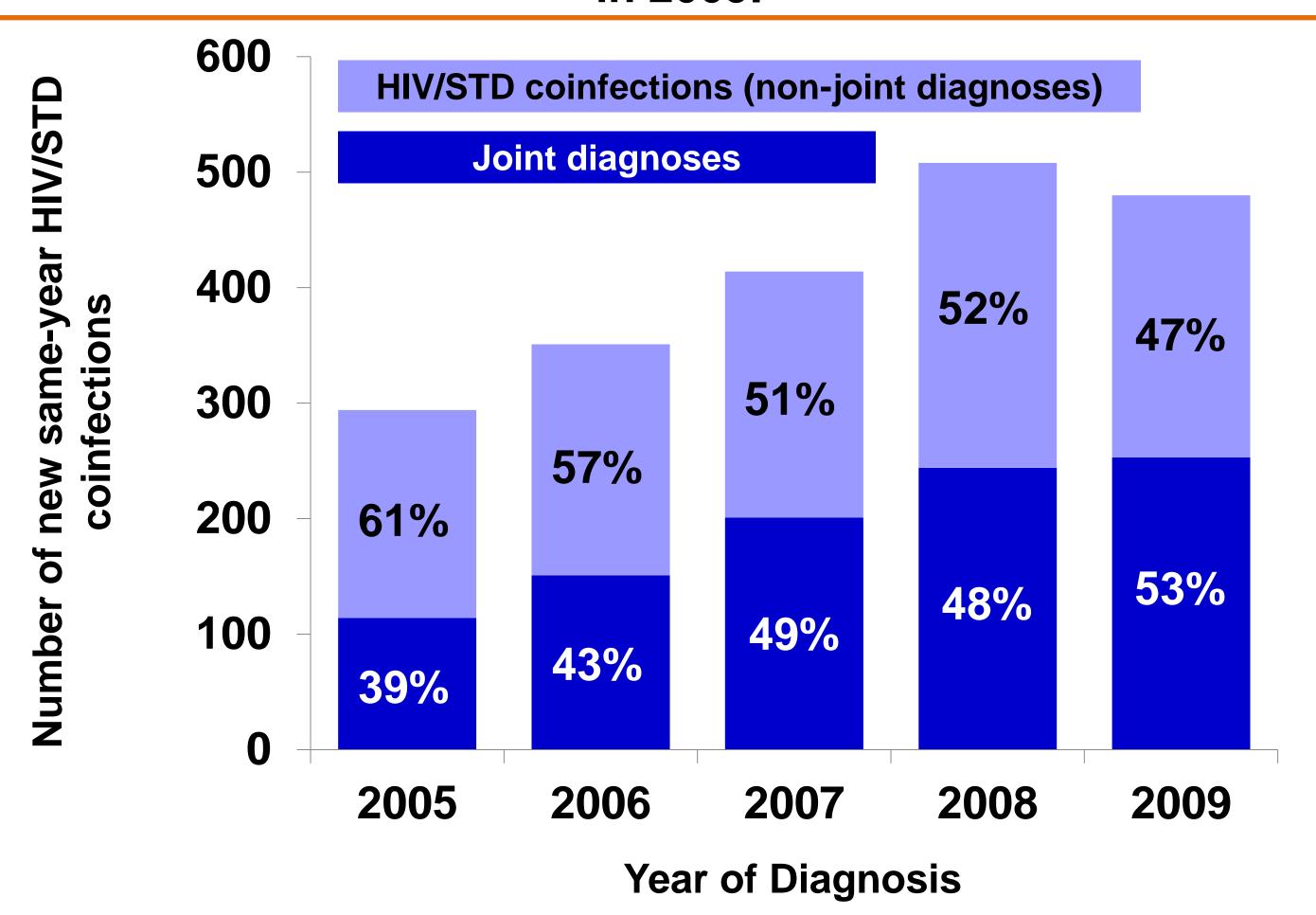
- Descriptive analyses were used to explore coinfections occurring from 2005 – 2009. The following definitions were used:
  - HIV/STD Coinfections persons diagnosed with HIV and STD during same calendar year.
  - HIV/STD Joint Diagnoses persons diagnosed with HIV and STD during same calendar month. This group was used as a way to examine trends in coinfection diagnoses likely made in the same clinical encounter.

# Results

The percentage of persons newly diagnosed with HIV who also had an STD diagnosis in the same year increased from 7% in 2005 to 13% in 2009.



The proportion of joint diagnoses among all same-year coinfection diagnoses increased from 39% in 2005 to 53% in 2009.



# Conclusions

- Much of the increase in the number of same-year HIV/STD coinfection diagnoses can be accounted for by joint diagnoses.
- This suggests greater dual HIV/STD screening in NYC from 2005-2009.
- This may reflect better adherence to national screening recommendations over time.
- Recommendation: Continued promotion of dual screening practices in NYC to ensure diagnosis of dually infected individuals.

## • Limitations:

- Negative results of HIV/STD tests not included >
  conservative estimate of dual screening practices
- If a person had multiple STD diagnoses in one year, only the first diagnosis in that year was analyzed → underestimation of joint diagnoses

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