


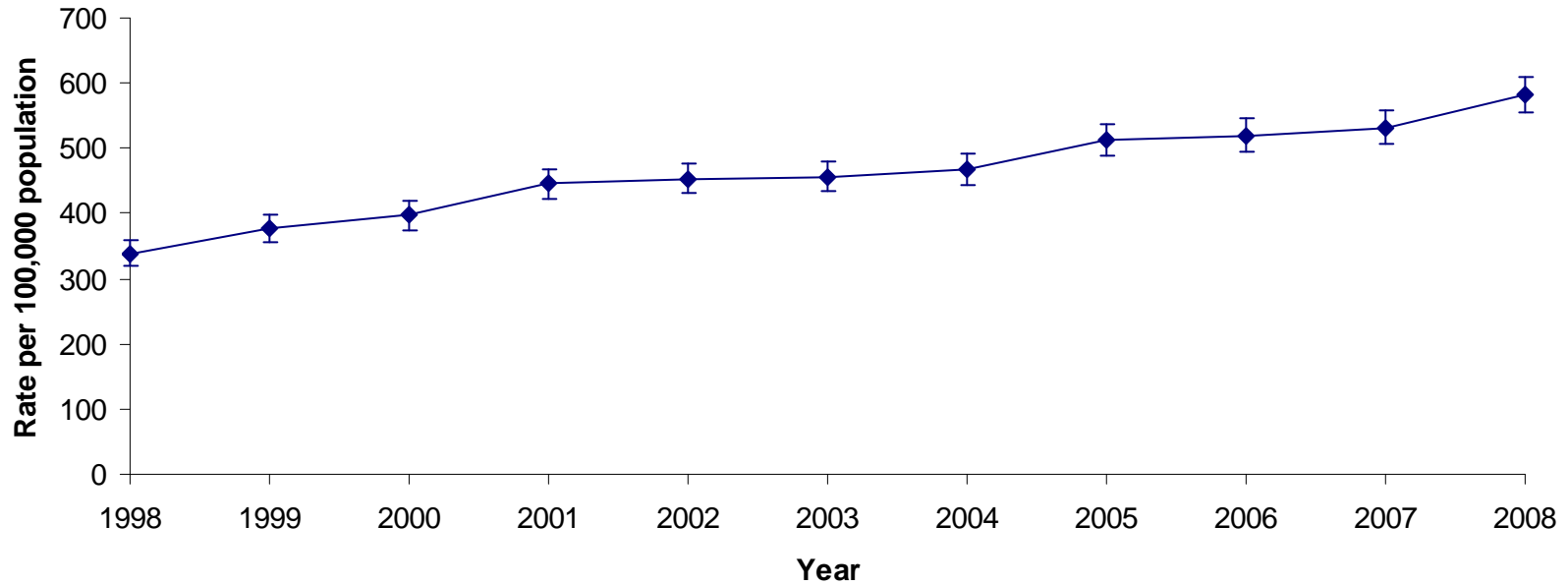
A Decade of Chlamydia and Gonorrhoea in Nova Scotia

Population Health Assessment and Surveillance
Communicable Disease Conference, March 2009

A look at STI epidemiology...

- 
- Chlamydia – on the rise
 - Gonorrhea – is there a trend?
 - Similarities and differences between Chlamydia and gonorrhea
 - What is happening in research...
 - The path ahead: data in Nova Scotia

Age-adjusted Chlamydia rate (15-39 years), Nova Scotia, 1998-2008



Chlamydia

- 76% female
- 88% between 15 and 29 years
- 96% between 15 and 39 years

Chlamydia



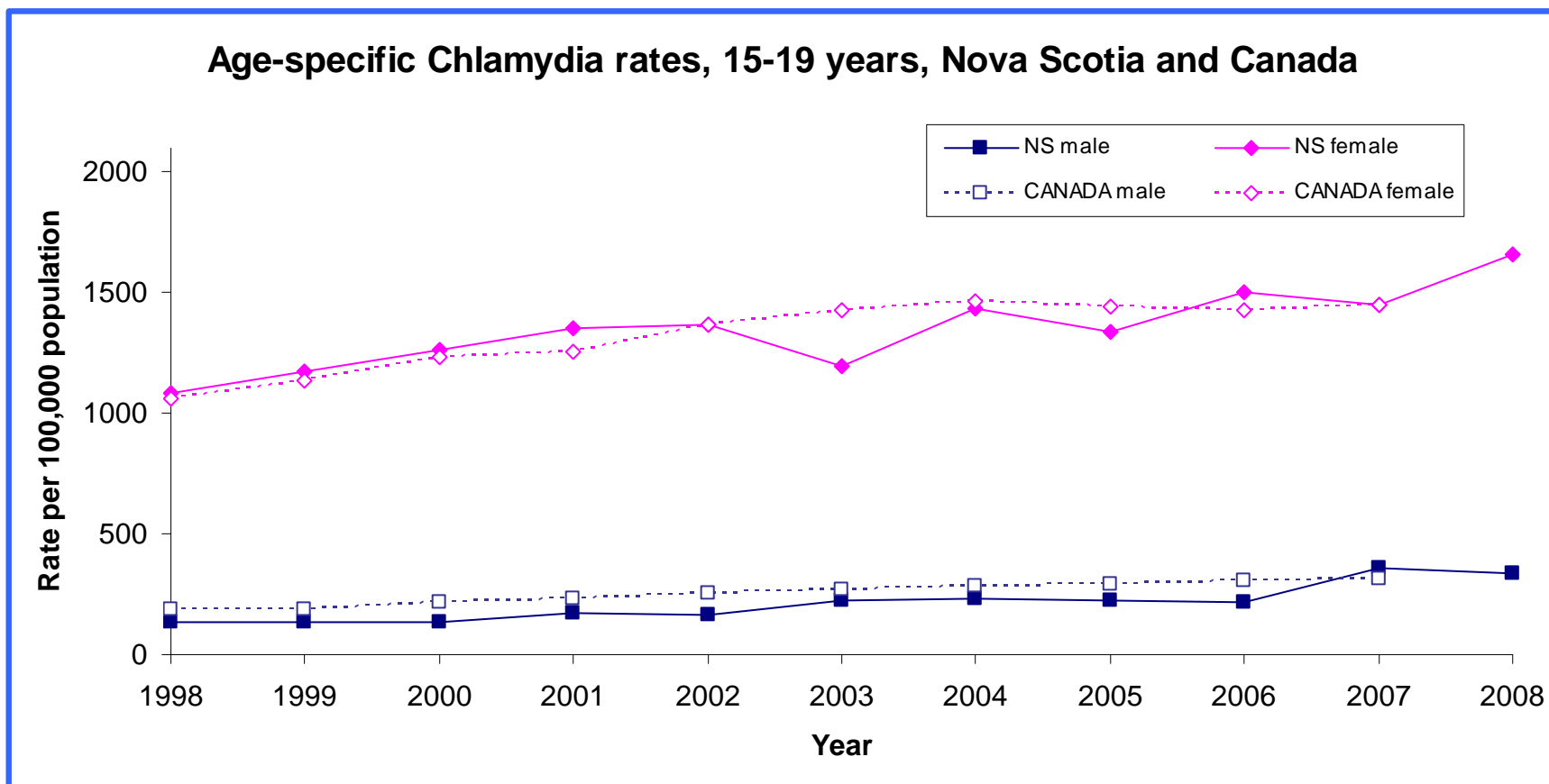
- 75-80% asymptomatic
→ affects duration

Canadian Guidelines on Sexually Transmitted Infections

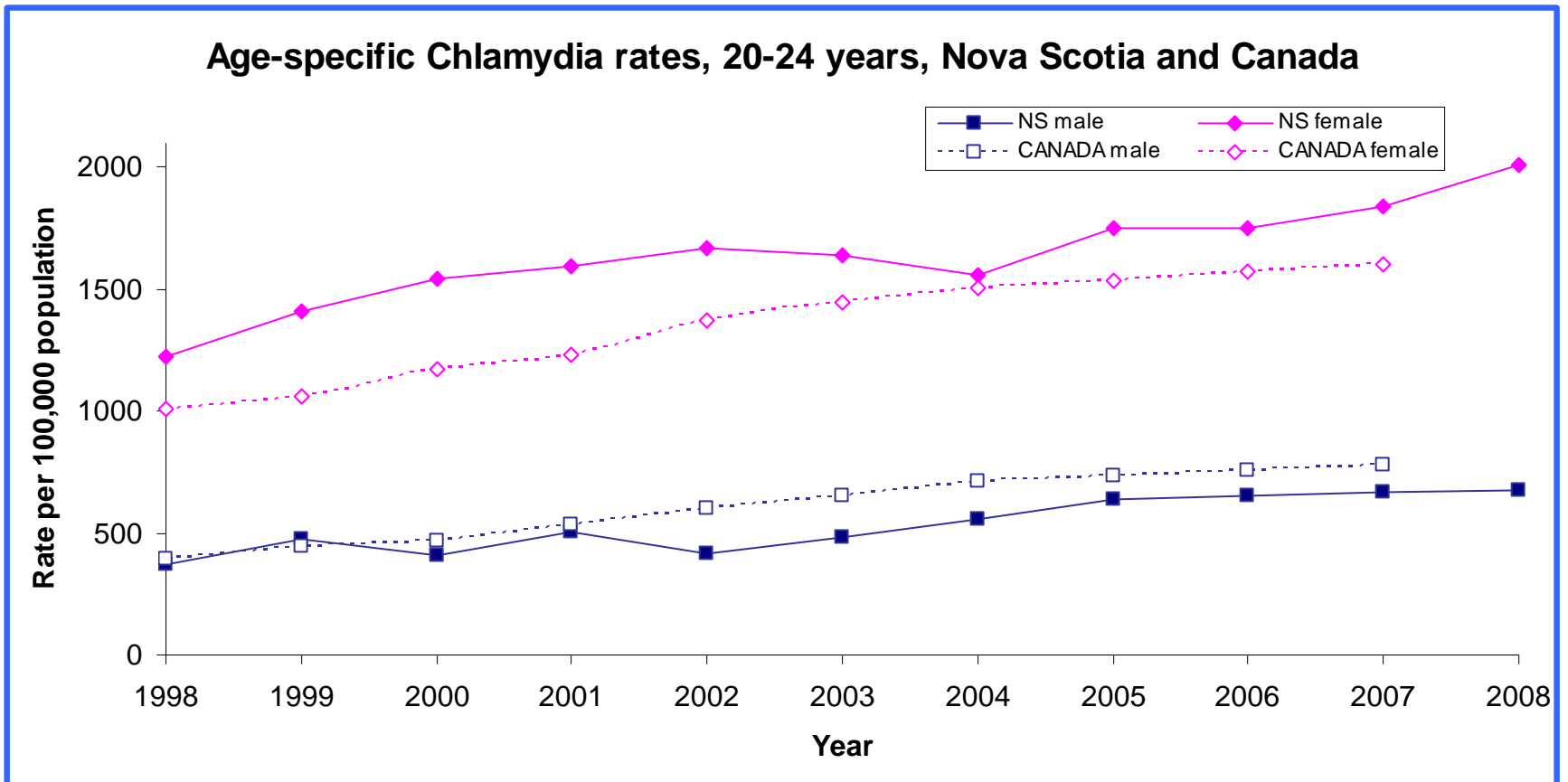
notes screening under prevention and lists:

- Sexually active females <25 years of age.
- ... prudent to screen all sexually active males <25 years...
- Pregnant women.

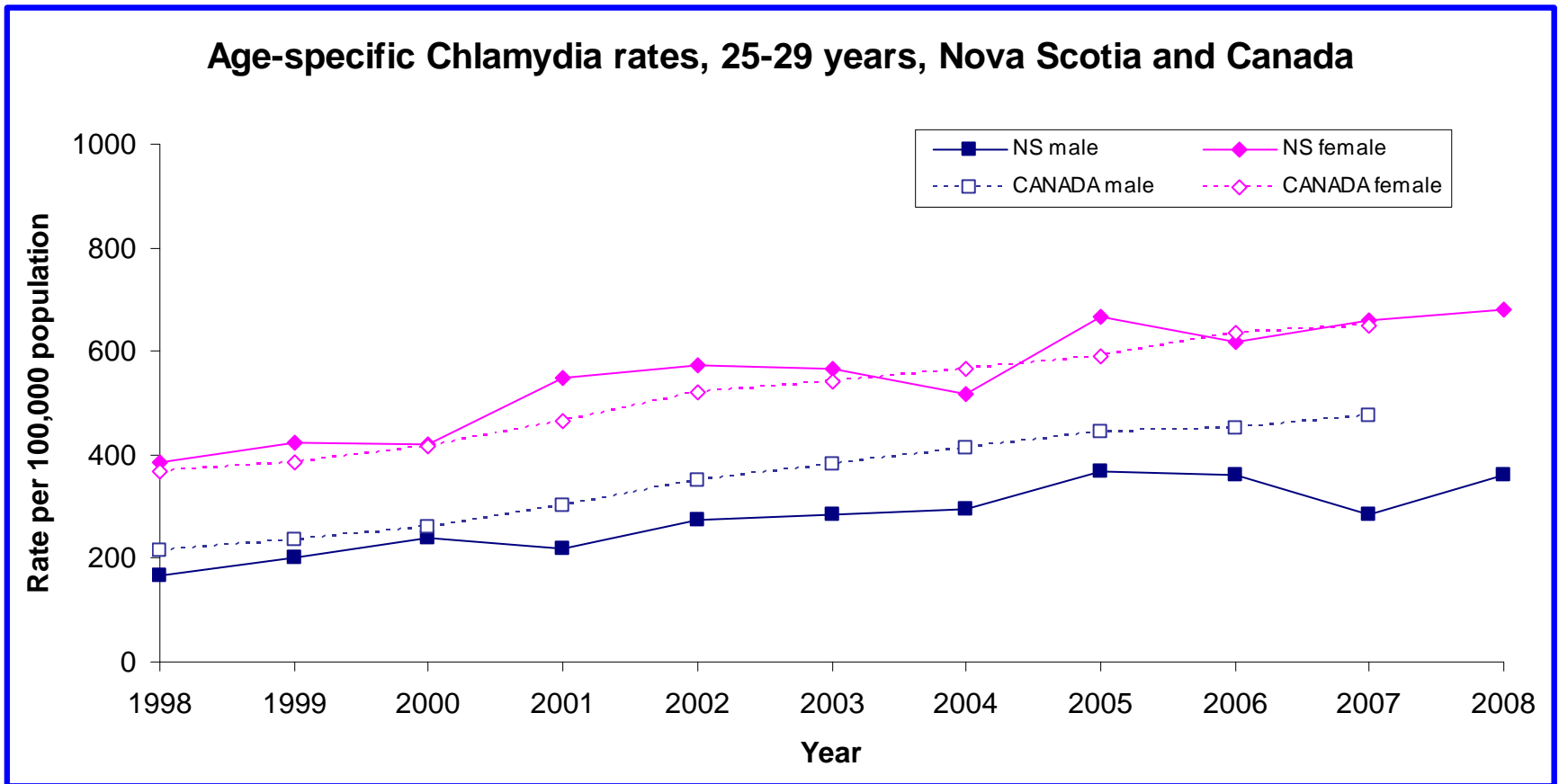
Chlamydia



Chlamydia



Chlamydia

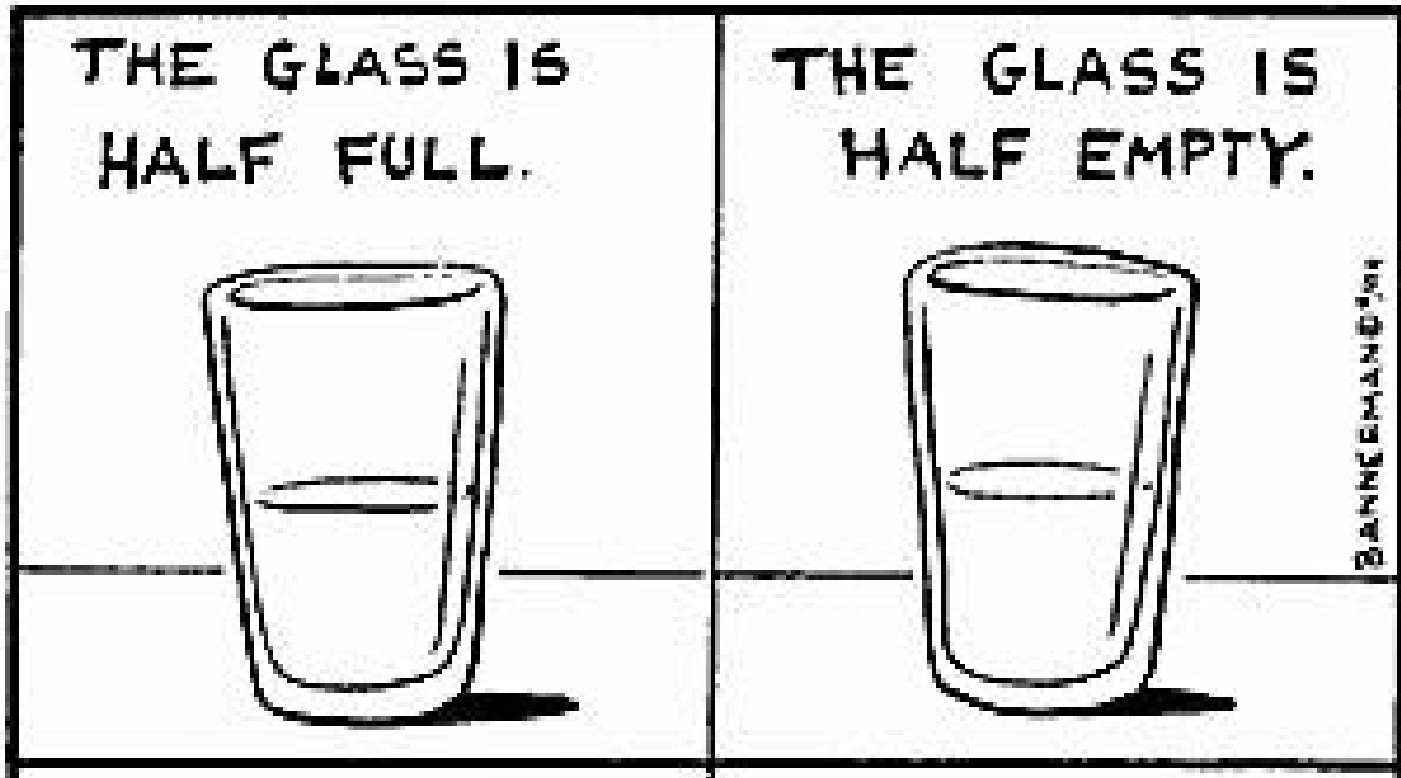


What is causing the increase?



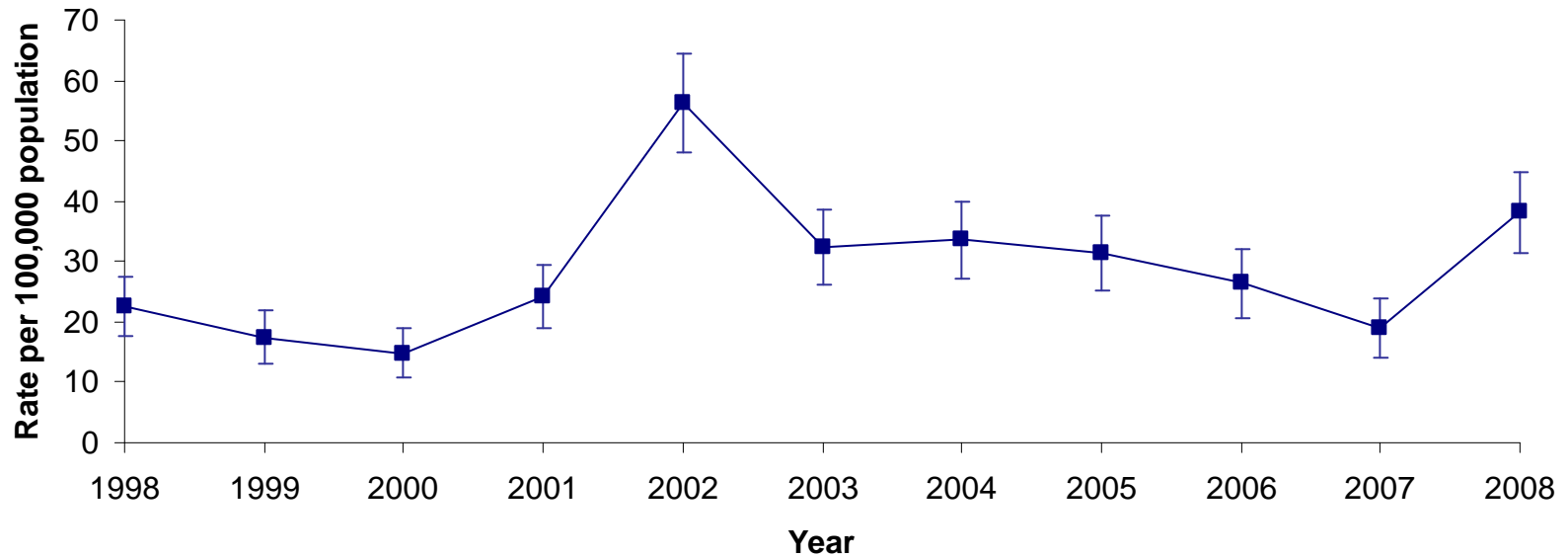
- This is a difficult question here and elsewhere.
- Change in lab test (EIA to PCR)
- Urine testing introduced
- 1999/2000: CDHA tested ~22,000 specimens
- 2007/2008: CDHA tested ~32,000 specimens
- Percent positivity as a proxy for prevalence (but limitations)

Do you want the good news or the bad news?



- Better testing?
- More testing?
- More Chlamydia detected
- Increase in cases?
- Increase in transmission?
- More Chlamydia detected

Age-adjusted gonorrhoea rate (15-39 years), Nova Scotia, 1998-2008



Gonorrhoea

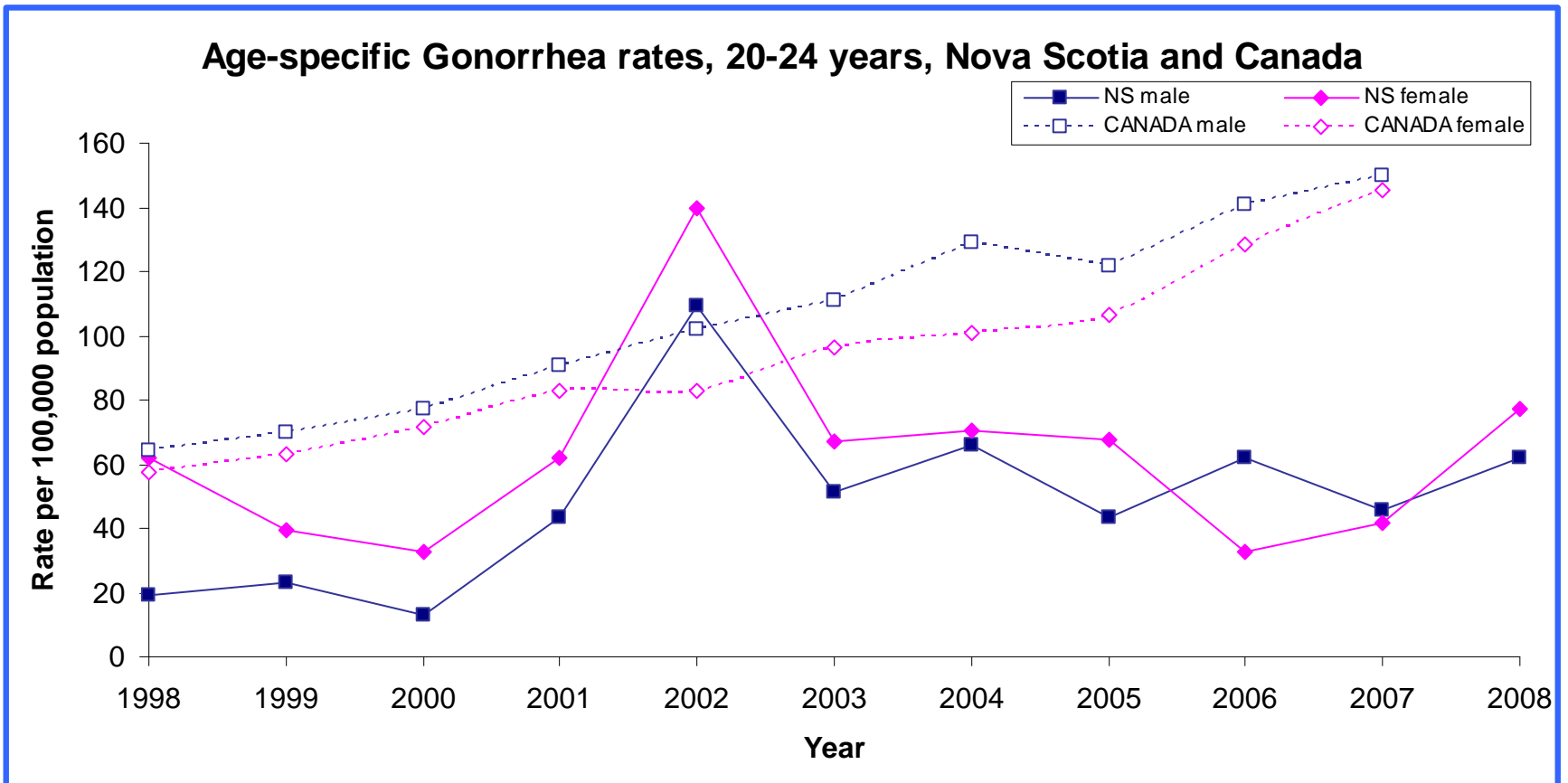
- 52% female
- 76% between 15 and 29 years
- 90% between 15 and 39 years

Gonorrhoea



- Males – 10-20% asymptomatic
→ Affects duration
- Prevention Guidelines do not suggest screening for gonorrhoea

Gonorrhoea



Are all STIs the same???



CHLAMYDIA

- nearing 2000 cases/year
- 76% female
- 75-80% asymptomatic
- Follow-up → “within four working days ... with physician and client or follow-up with physician only”
- Screening listed as prevention

GONORRHEA

- ~100 cases/year
- 52% female
- majority symptomatic
- Follow-up → “within four working days ... with physician and client”
- Screening not indicated

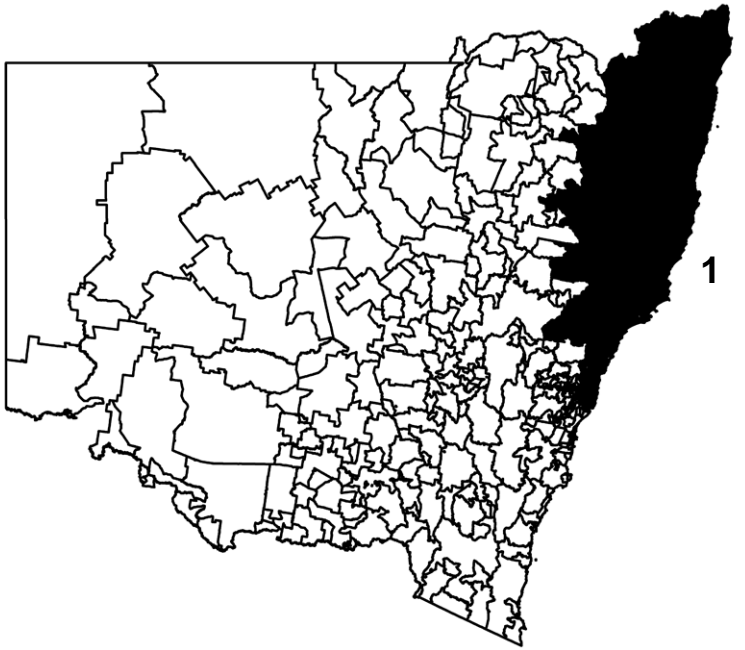
STI risk



- Traditional risk factors
- Sexual mixing
- Concurrency
- Repeat infections
- Core groups
- Social network analysis
- Person, place, and time → spatiotemporal analysis

CLUSTERS

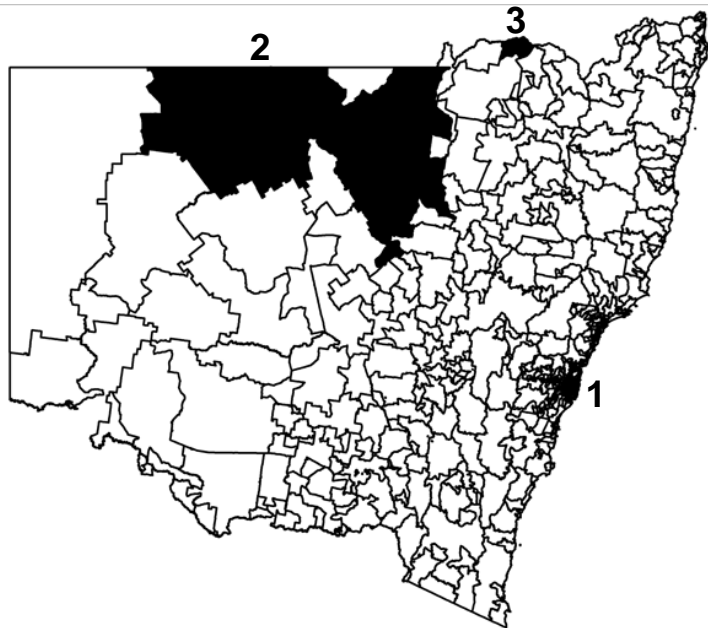
Example: Chlamydia Down Under



- **60% of cases in 50% of population**
- Single cluster
- 53% female

CLUSTERS

Example: Gonorrhea Down Under



- **44.3% of cases in 3.6% of population**
- Case demographics vary
- Different sexual networks



CLUSTER	% Male	Median Age
1	94.9	32
2	62.1	20
3	54.3	24

Variations across SSAs



Chlamydia

- Median age: 21 – 22 years
- 73.1 - 79.0% female

Gonorrhea

- Median age: 22 – 24 years
- 38.5 - 65.4% male

Summary



Chlamydia

- Rates are increasing.
- Trends are similar to national and international trends.
- Many factors contributing to increasing rates worldwide.

Gonorrhea

- Nova Scotia – low case numbers, variable rates.
- Further investigation into the epidemiology may indicate different risk factors in different jurisdictions.

The path ahead...



Electronic reporting of notifiable disease

- Standardization of case definitions
- Increased ability to identify duplicates
- Increased timeliness, data quality
- Geographical data readily available → 74% have postcodes for easy geocoding

... the provincial picture including the enhanced surveillance data

One last thought...

What does not get counted DOES count!

What will the next decade bring?

Thank you.

