



Health  
Protection  
Scotland



# **Sexually Transmitted Infection, including HIV, 2013**

## **Health Protection Scotland Slide Set**

# Data sources

Data on positive diagnoses of selected STIs, including HIV, are reported from all microbiological laboratories throughout Scotland

These include data on:

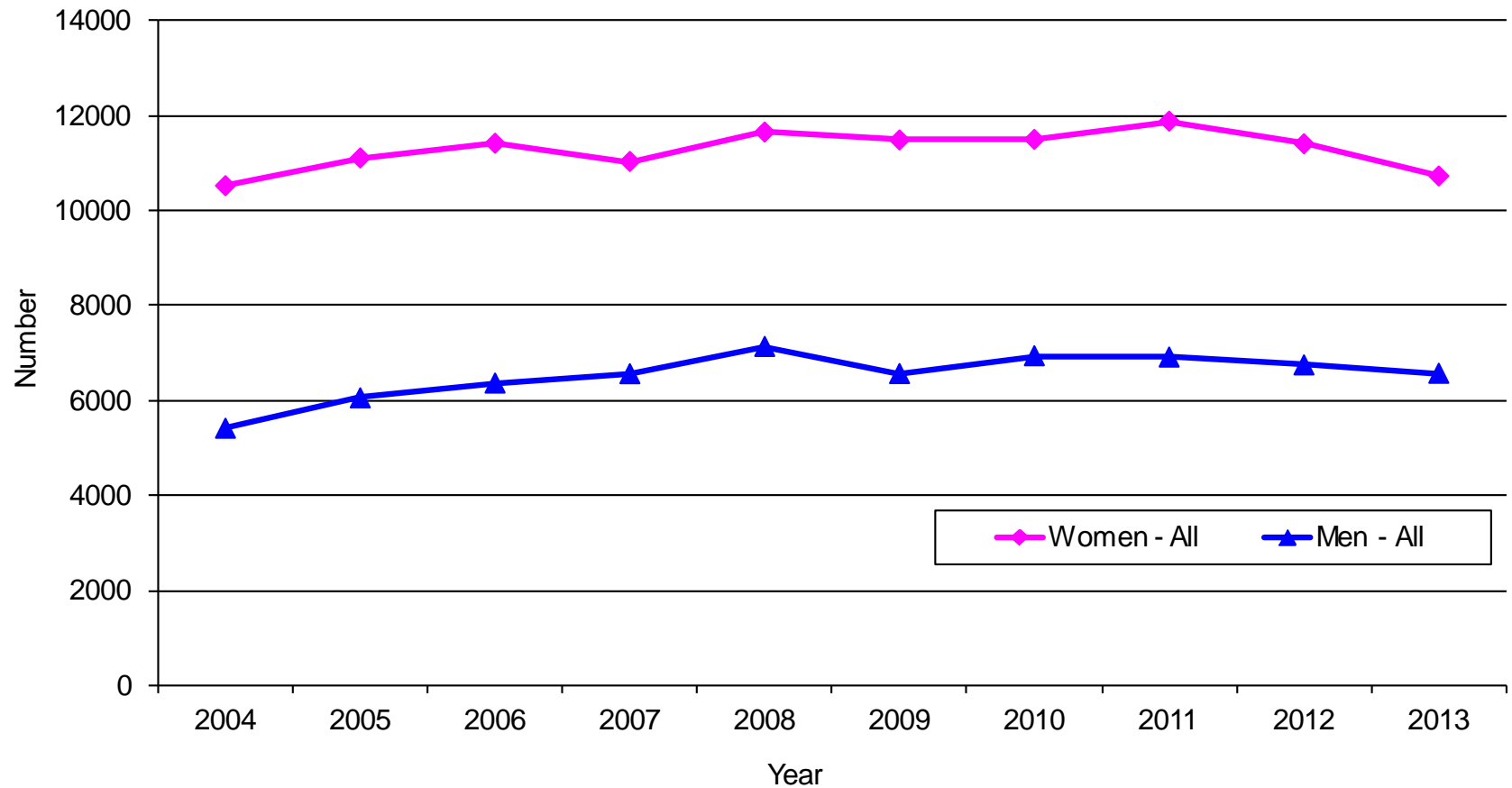
- Age,
- Gender,
- NHS board of diagnosis/treatment

Enhanced surveillance systems are employed to give more detailed information on the epidemiology of infectious syphilis and HIV infection

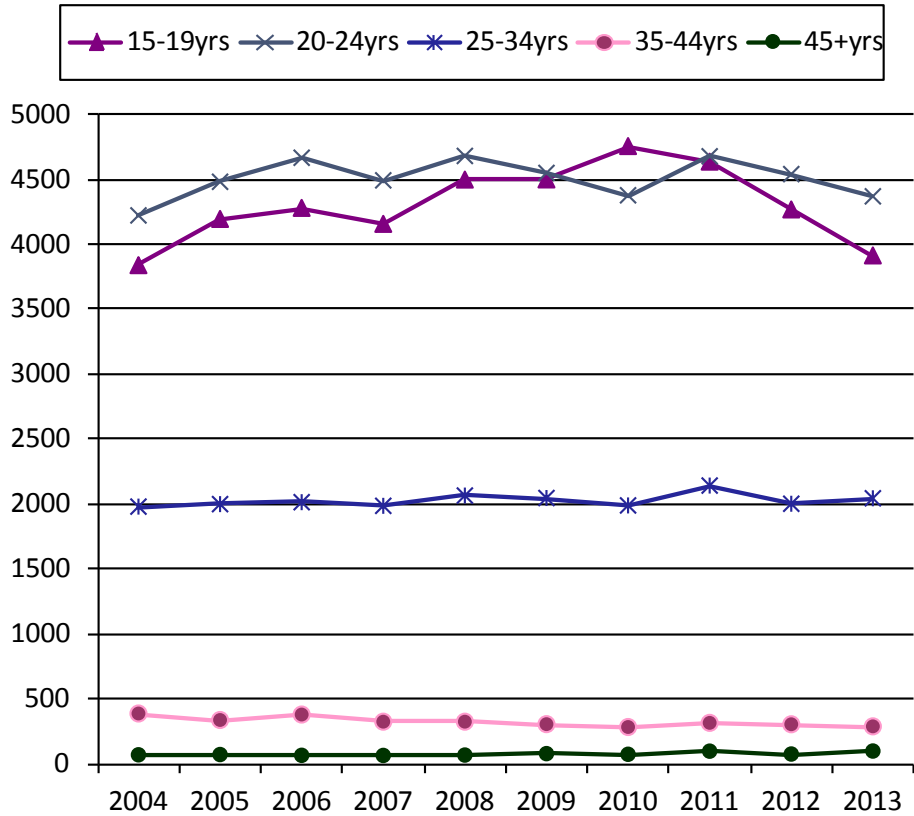
# *Chlamydia trachomatis* infection

The following slides present the data based on the laboratory positive reports of *Chlamydia trachomatis* (genital chlamydia) received by Health Protection Scotland.

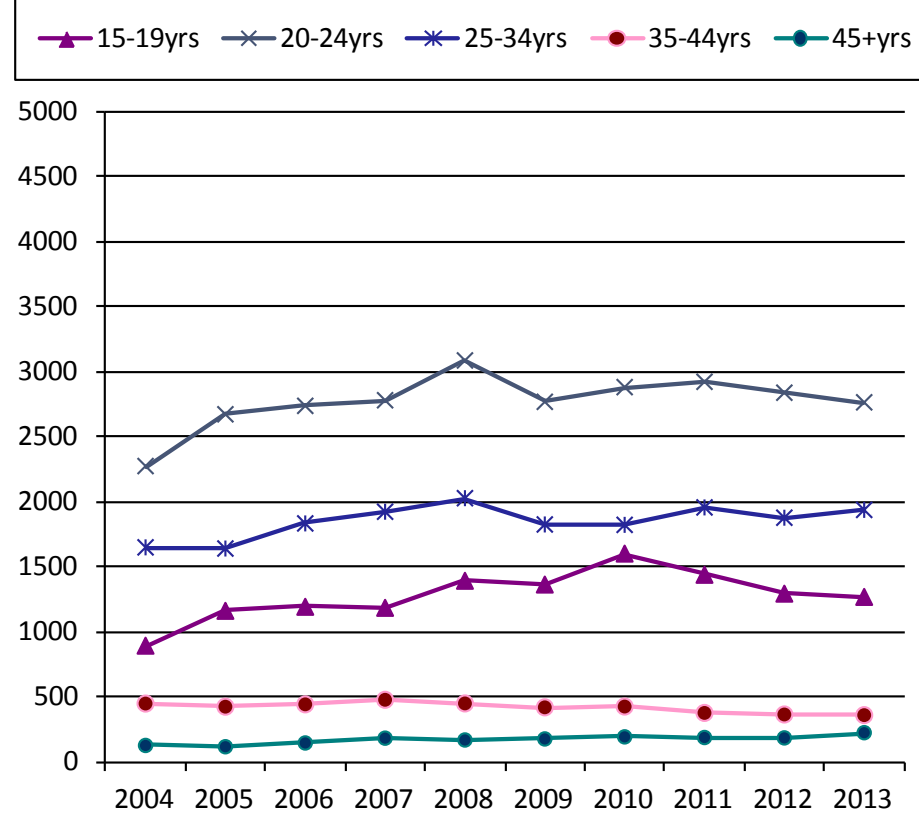
# Genital chlamydia infection in Scotland, 2004-2013



# Genital chlamydia infection in Scotland, by age and gender, 2004-2013

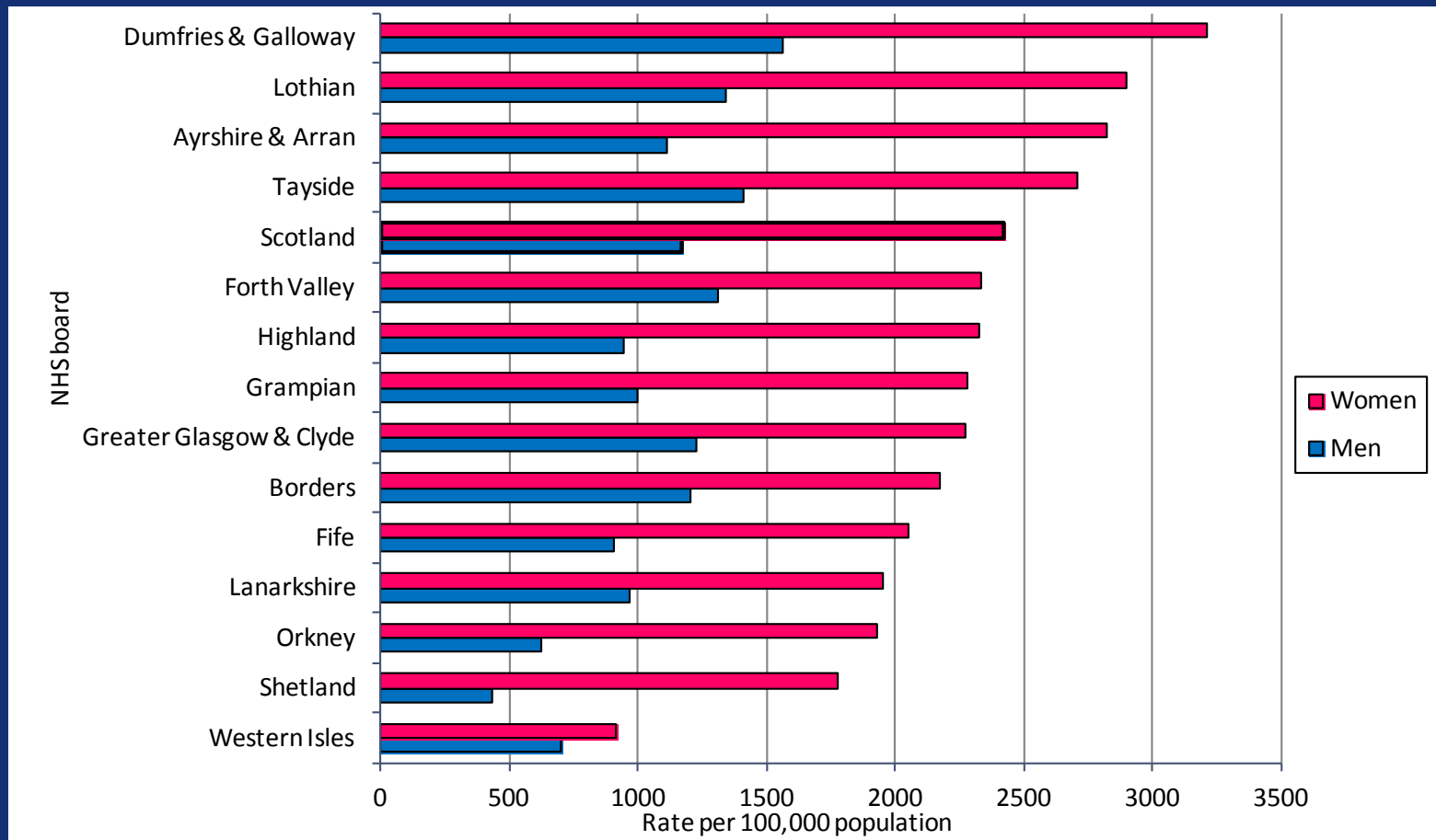


**Women**



**Men**

# Rates of diagnosis of genital chlamydia in those aged less than 25 by gender and NHS board, Scotland, 2013



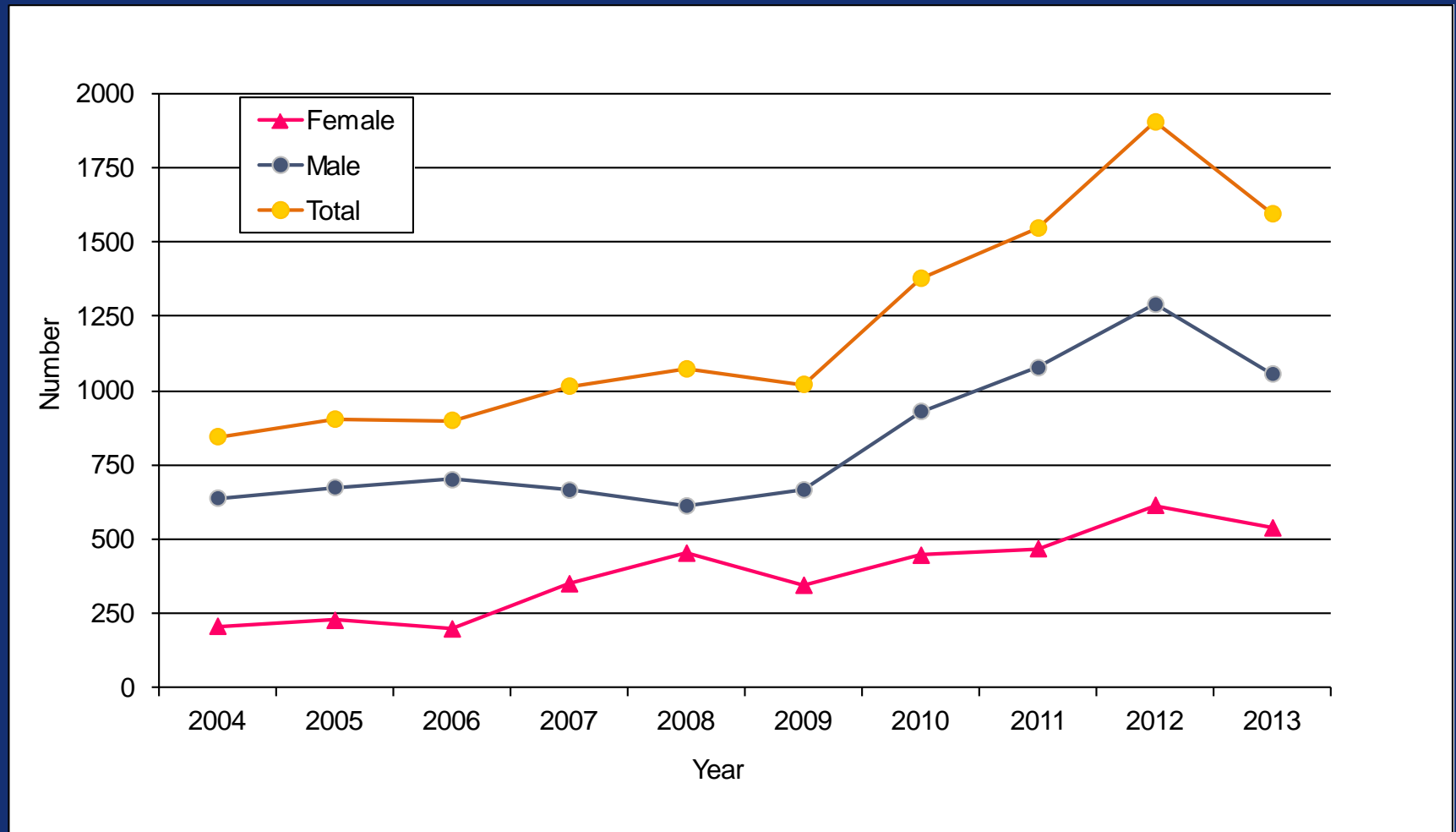
Data source: laboratory reports

The denominator is the male and female population aged 15-24 from the mid-year population data for 2011 available from GROS at the National Records of Scotland (NRS). These data are based on laboratory reports by NHS board of diagnosis and treatment.

# *Neisseria gonorrhoeae*

The following slides present the data based on the laboratory positive episodes of *Neisseria gonorrhoeae* (gonorrhoea) received by Health Protection Scotland.

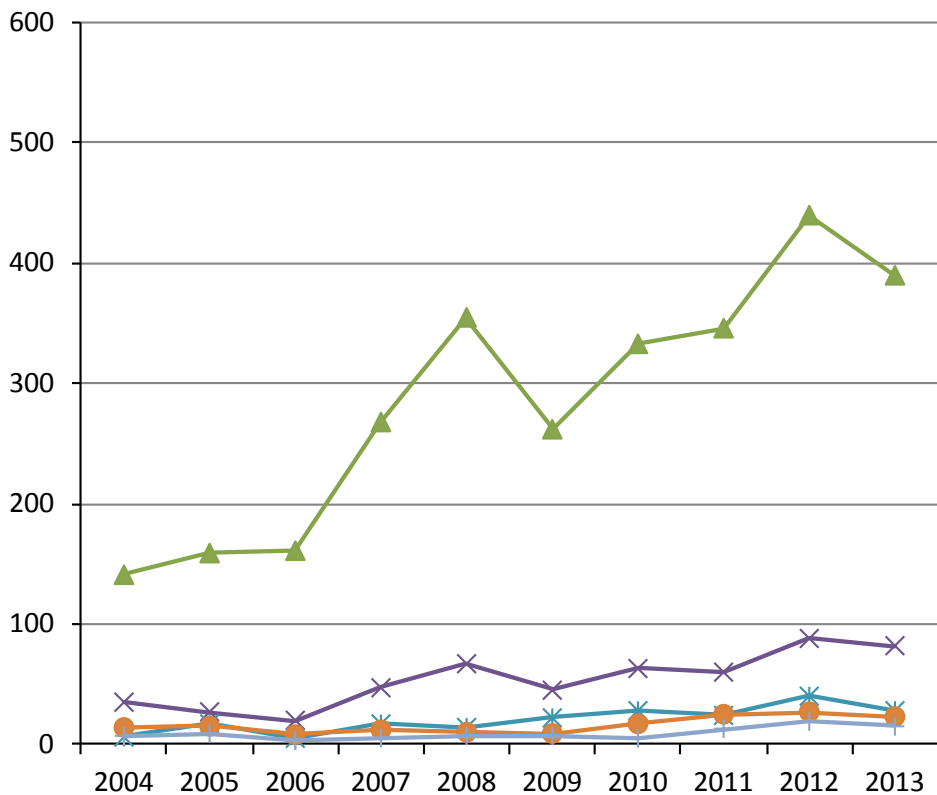
# Laboratory reports of episodes of gonorrhoea by gender, Scotland 2004-2013





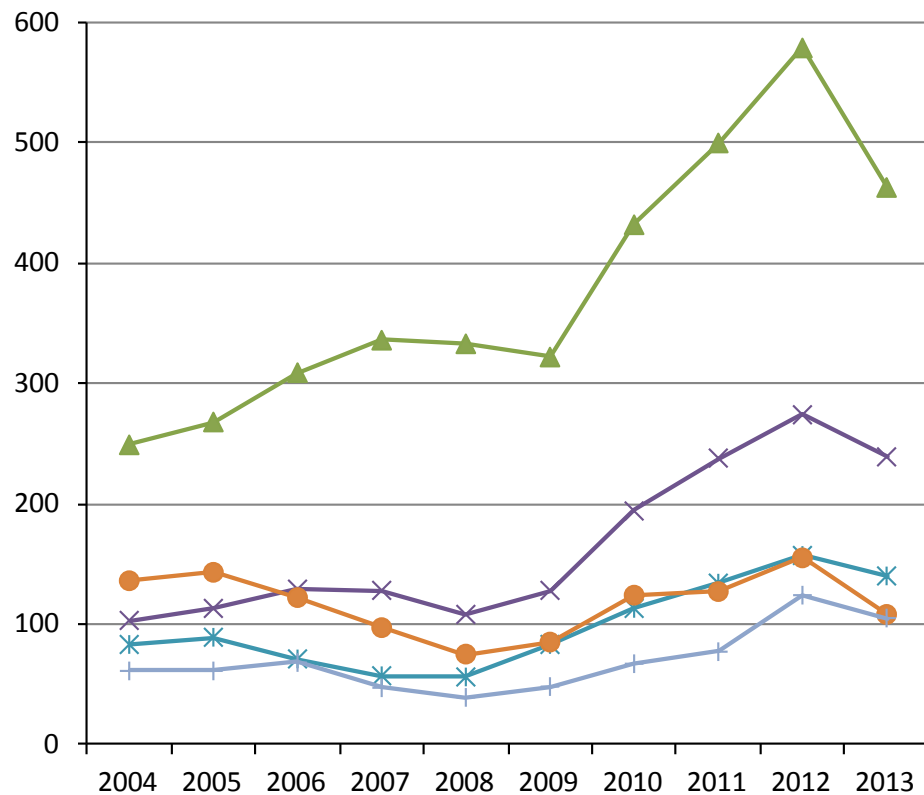
# Episodes of gonorrhoea infection in Scotland, by age and gender, 2004-2013

▲ <25yrs 
 × 25-29yrs 
 ✱ 30-34yrs 
 ● 35-44yrs 
 + 45+yrs



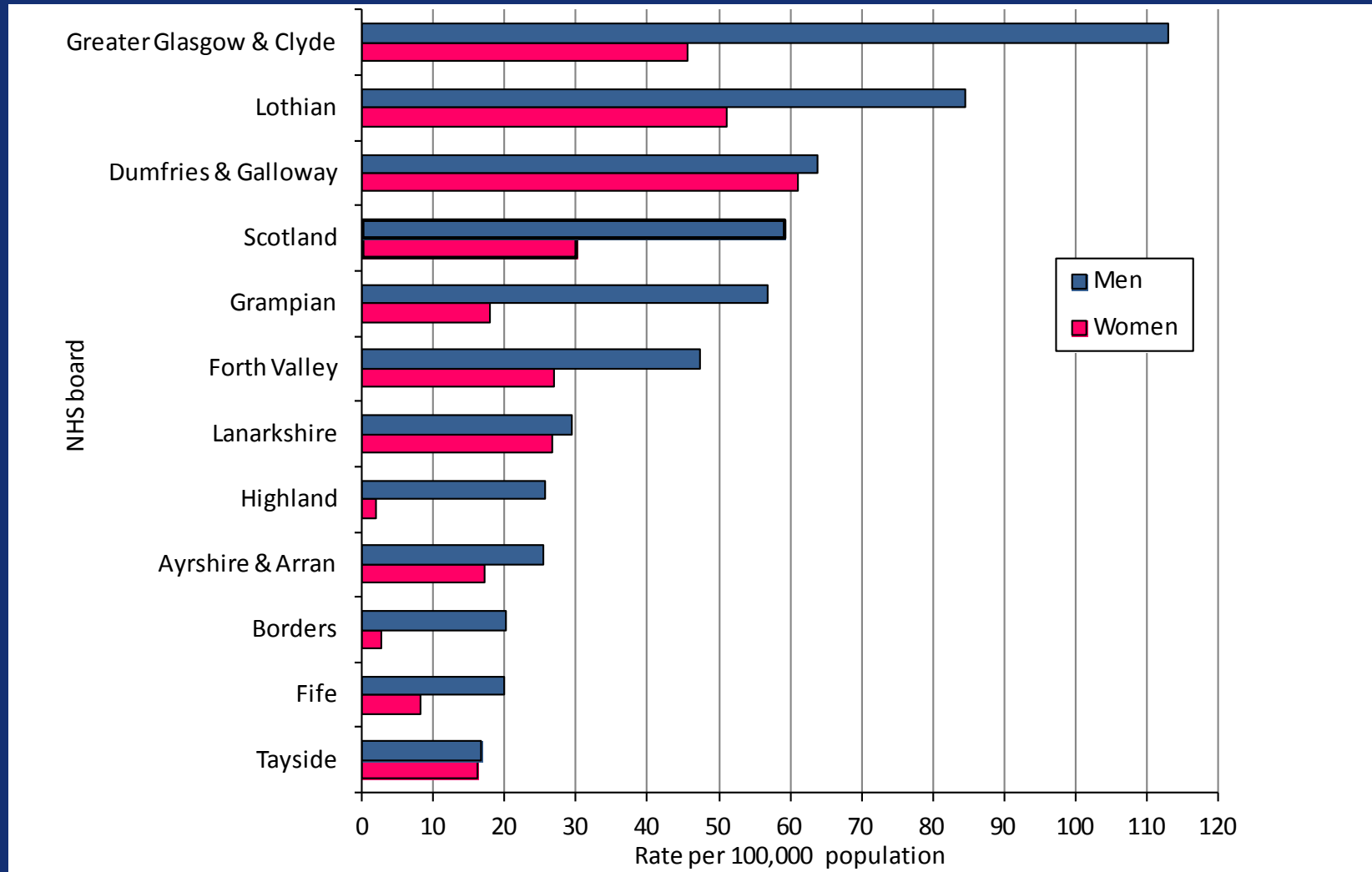
Women

▲ <25yrs 
 × 25-29yrs 
 ✱ 30-34yrs 
 ● 35-44yrs 
 + 45+yrs



Men

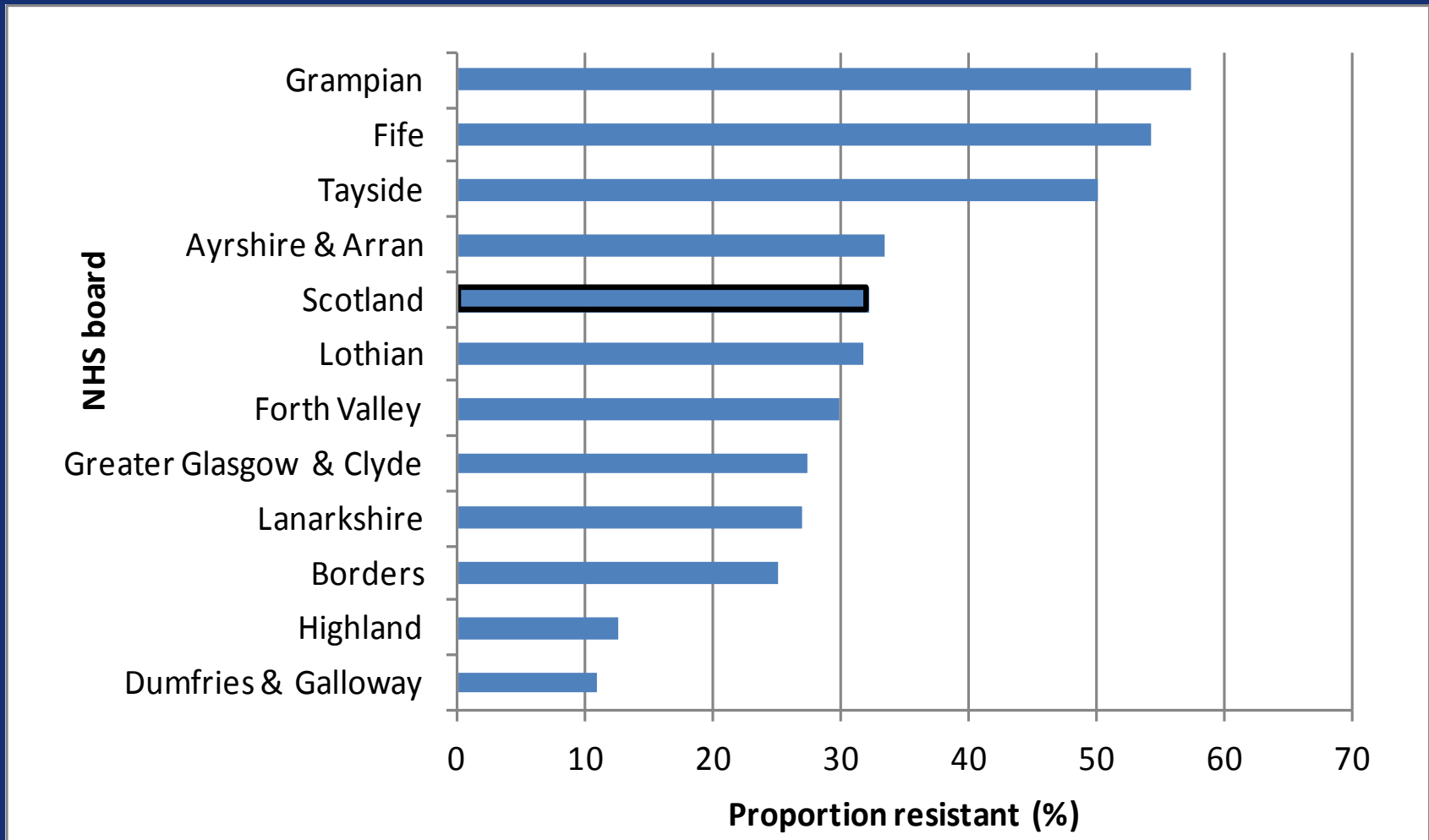
# Rates of diagnosis of gonorrhoea by gender and NHS board, Scotland, 2013



Data source: laboratory reports

The denominator is the male and female population aged 15-64 from the mid-year population data for 2013 available from GROS. These data are based on laboratory reports by NHS board of diagnosis and treatment.

# Proportion of gonococcal isolates that are resistant to ciprofloxacin by NHS board of diagnosis and treatment, 2013



# Herpes simplex virus infection

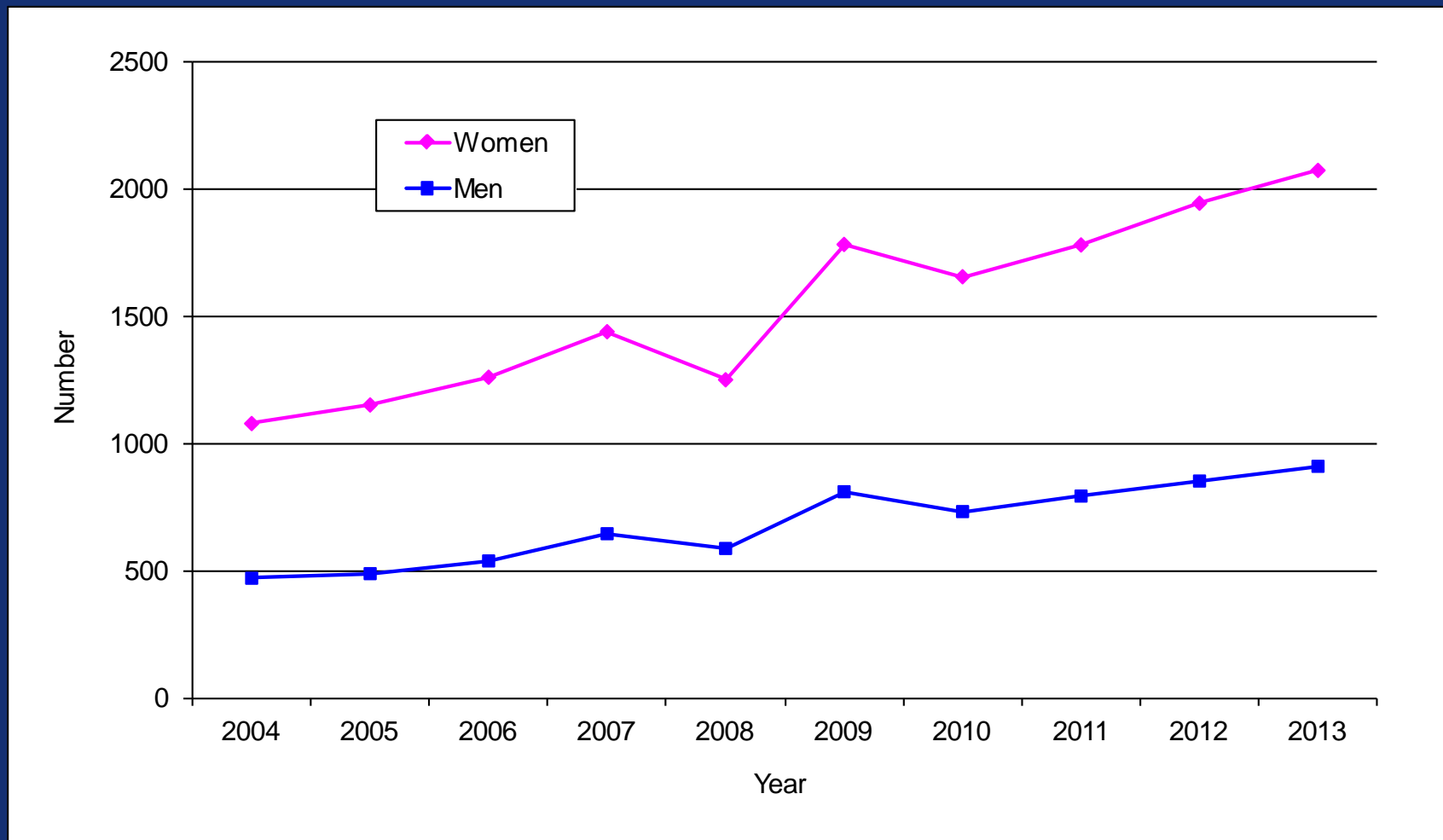
The following slides present the data based on the laboratory positive reports of Herpes simplex virus (genital herpes) received by Health Protection Scotland.

Note that it is not possible to distinguish between a primary and a recurrent infection using the laboratory data, thus, these data reflect all cases that have been diagnosed with genital herpes.

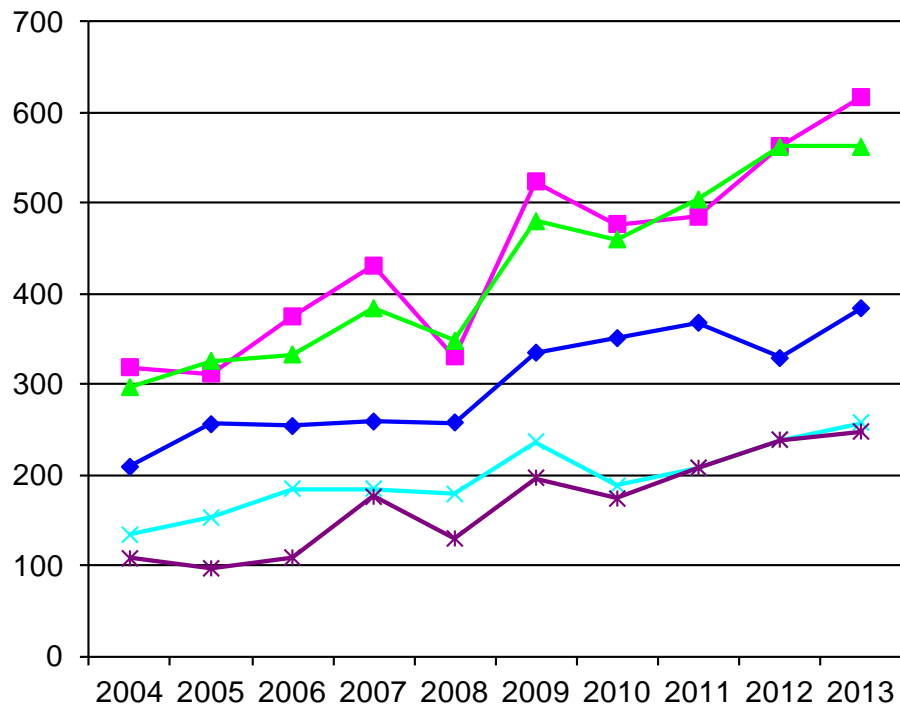
Data on first occurrence of genital herpes in the genitourinary medicine (GUM) clinic setting is not currently available but for these data prior to 2009, please refer to the archived data on the ISD website available at:

<http://www.isdscotland.org/Health-Topics/Sexual-Health/STIs/>

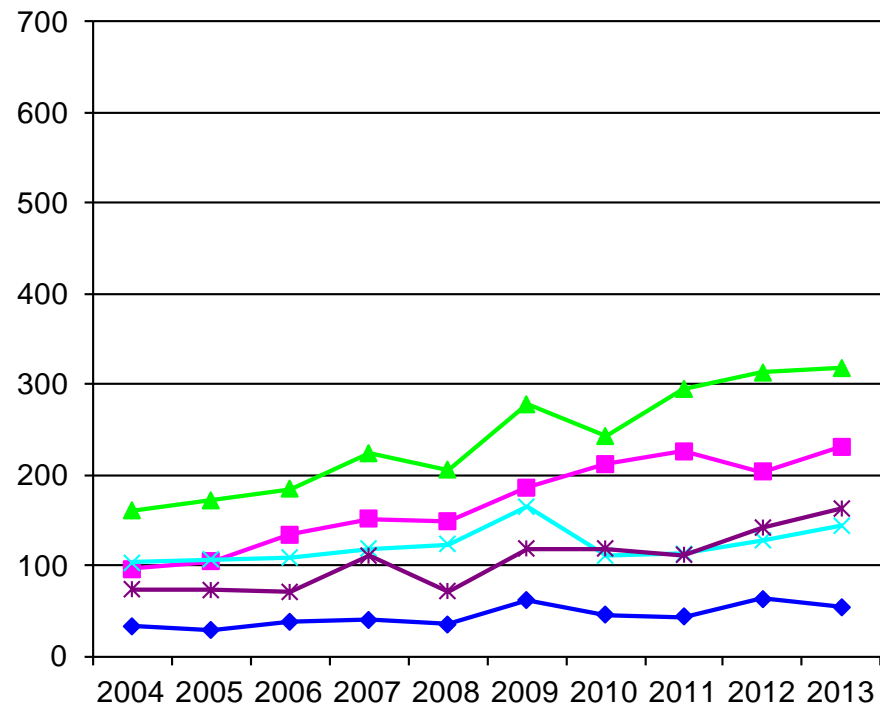
# Laboratory reports of genital herpes by gender, Scotland 2004-2013



# Genital herpes infection in Scotland, by age and gender, 2004-2013

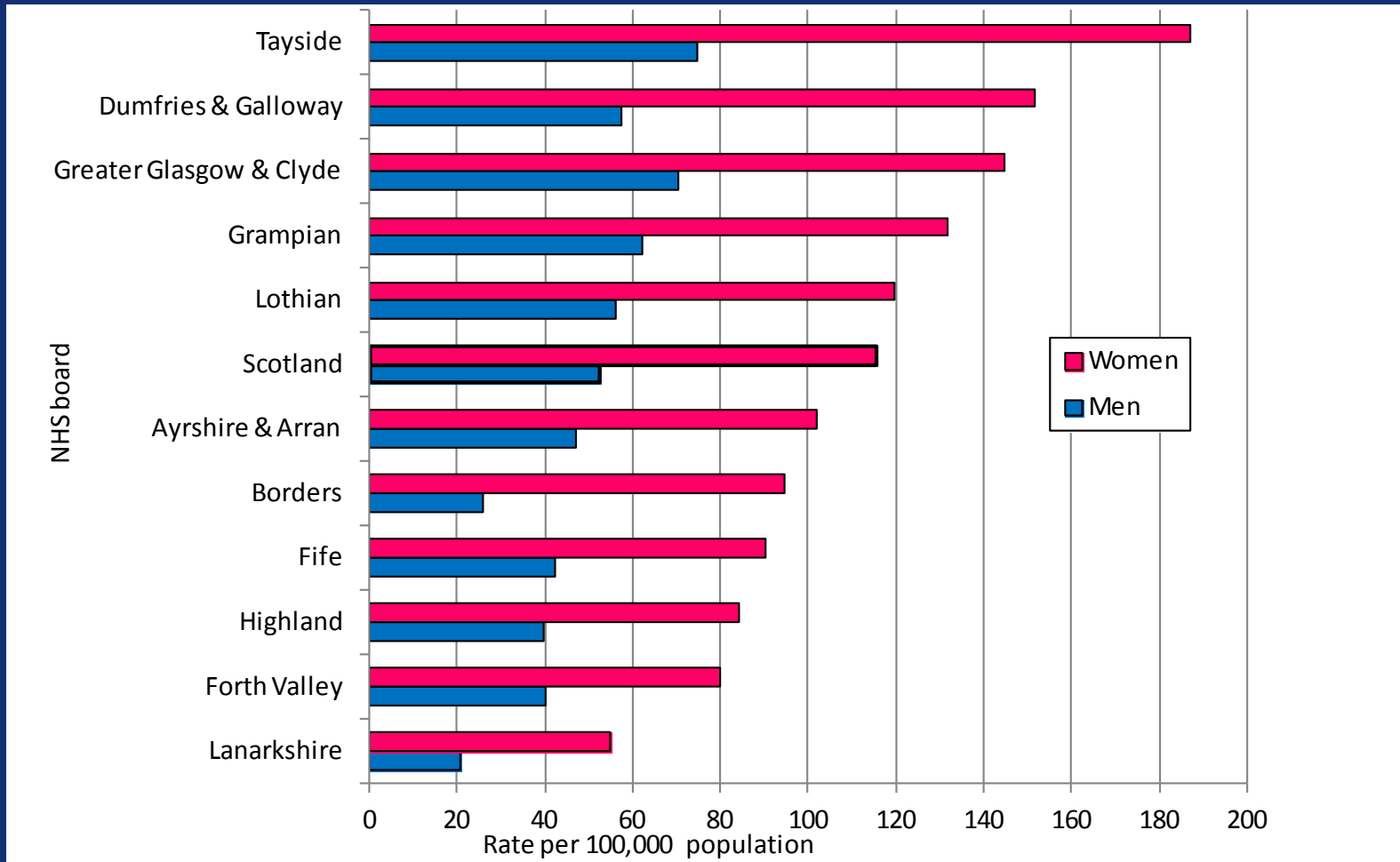


Women



Men

# Rates of diagnosis of genital herpes by gender and NHS board, Scotland, 2013



Data source: laboratory reports.

The denominator is the male and female population aged 15-64 from the mid-year population data for 2013 available from GROS at the National Records of Scotland (NRS). These data are based on laboratory reports by NHS board of diagnosis and treatment.

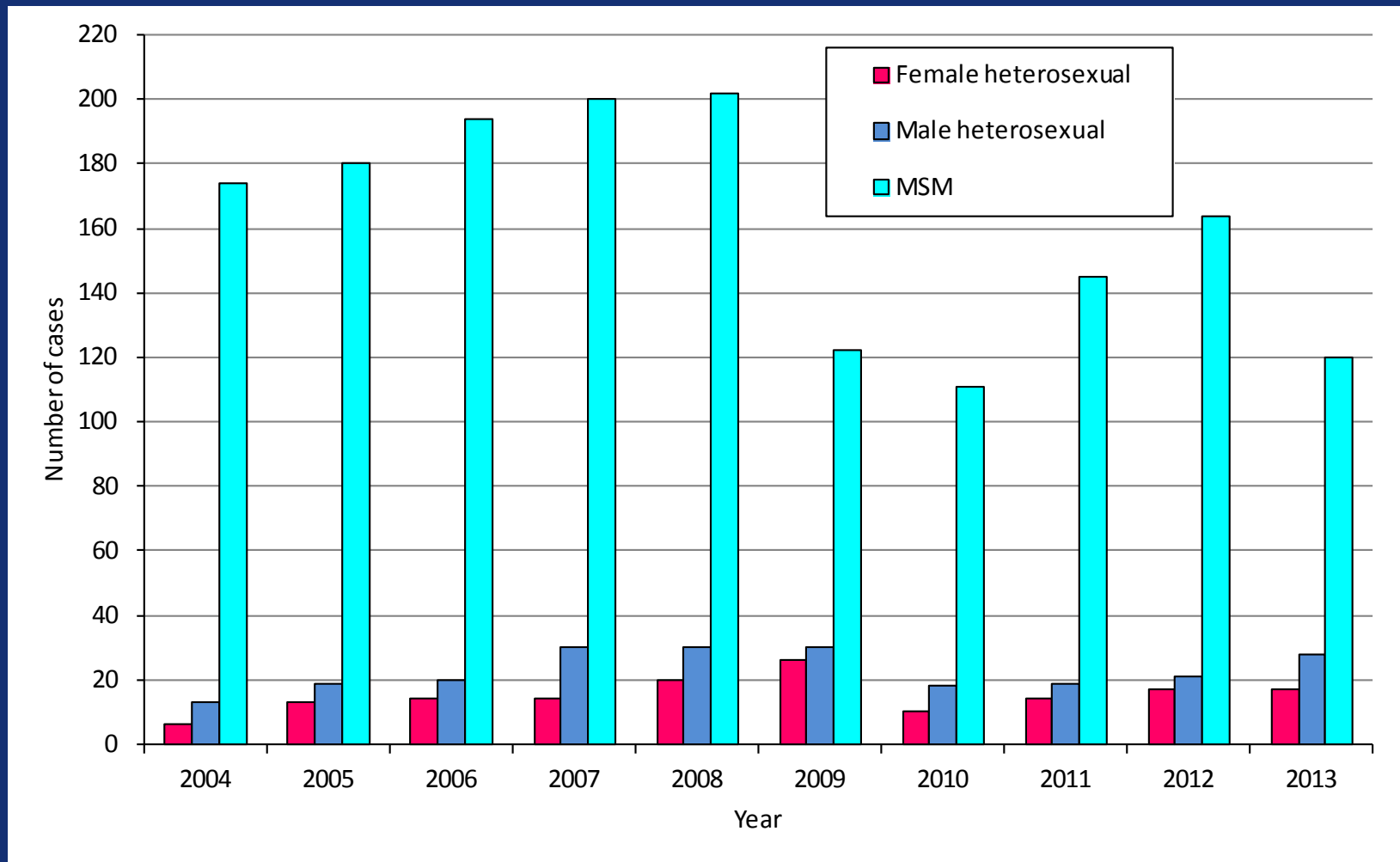
# Infectious syphilis

The following slides present the data based on the reports of infectious syphilis received by Health Protection Scotland.

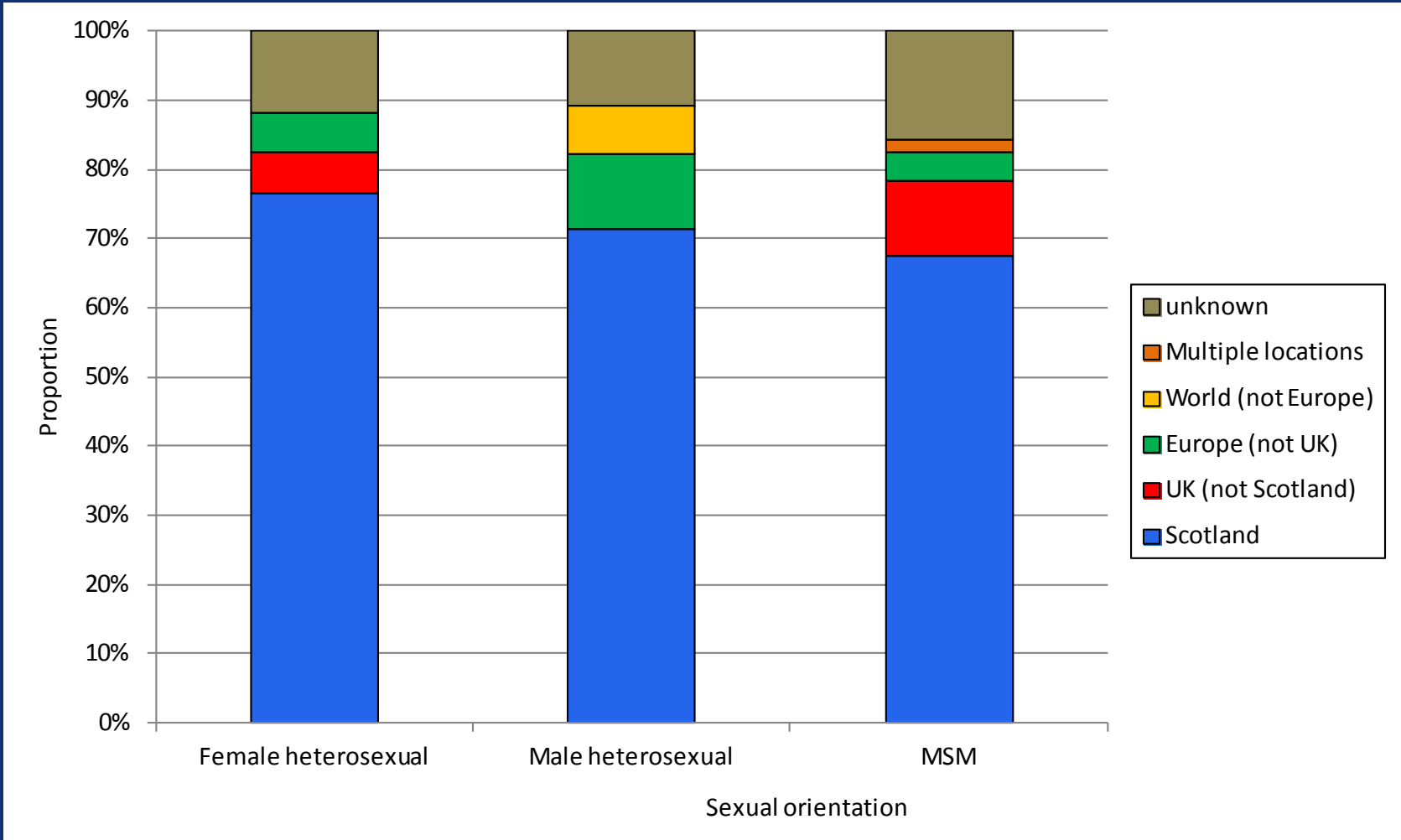
The National Enhanced Surveillance of Infectious Syphilis Scotland (NESISS) is an enhanced surveillance system; both epidemiological and laboratory data are collected on all infectious cases.



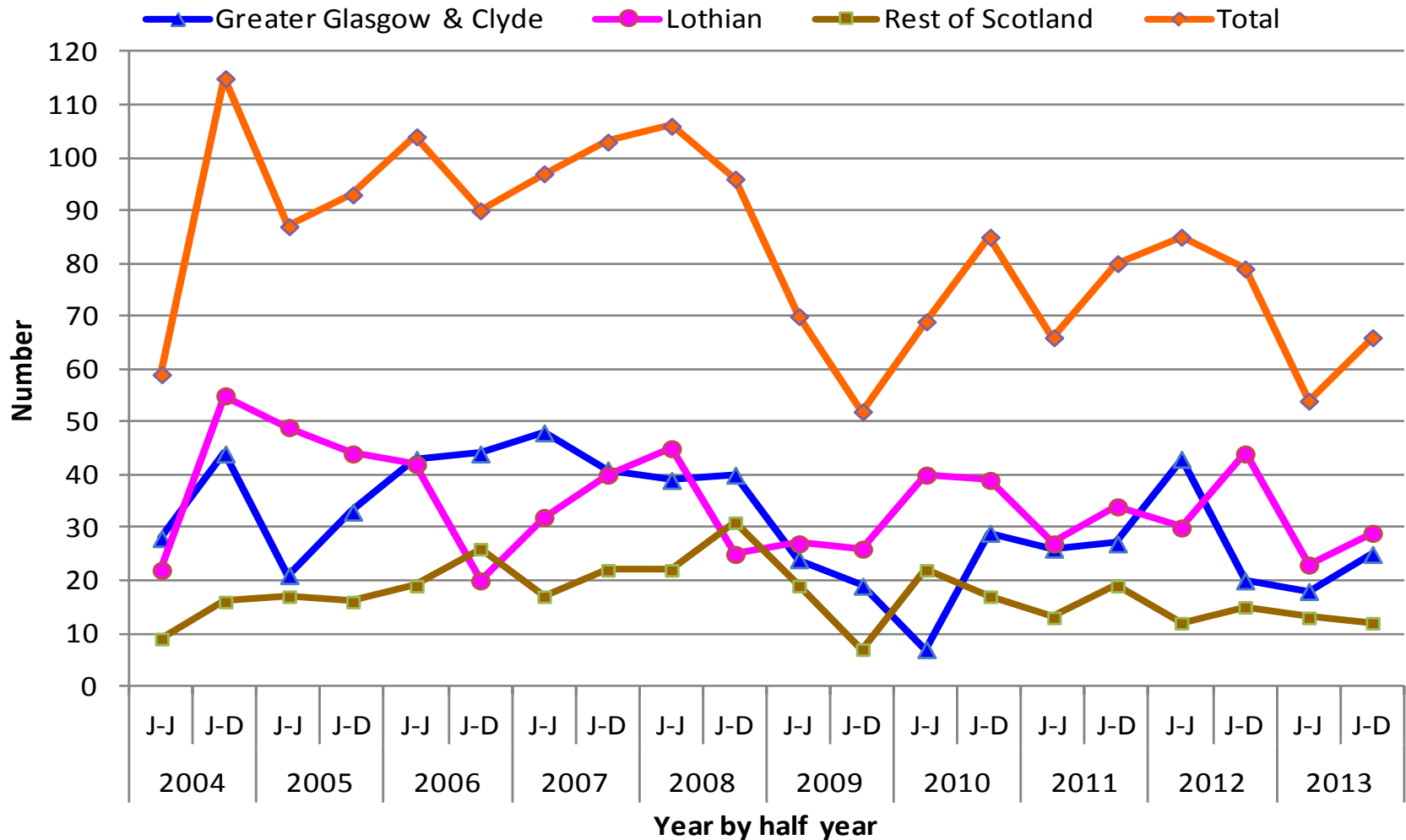
# Infectious syphilis by sexual orientation, Scotland, 2004–2013



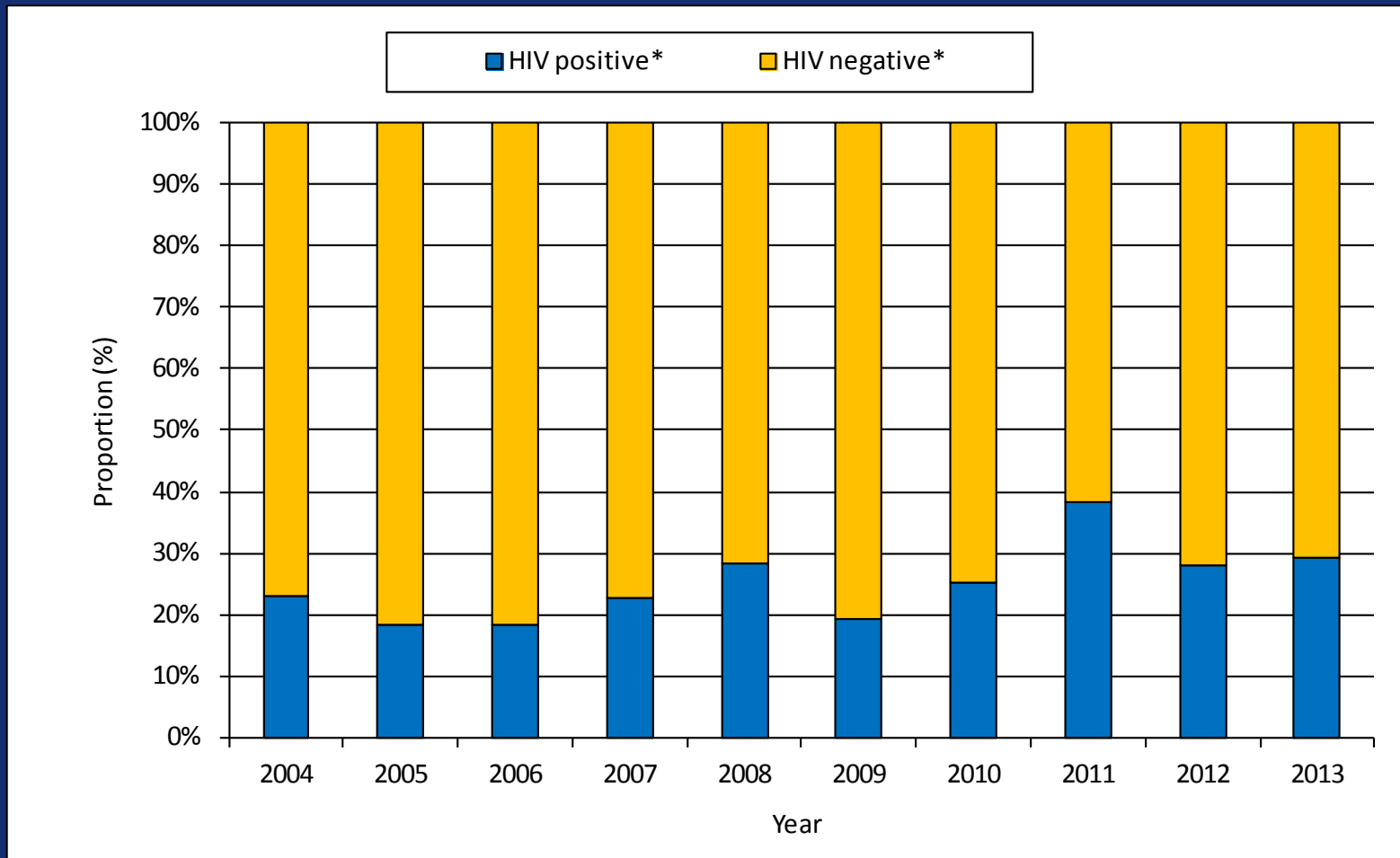
# Location where syphilis infection was acquired, by sexual orientation, 2013



# Infectious syphilis among men who have sex with men (MSM) by GUM clinic of diagnosis, Scotland, Jan 2004–Dec 2013



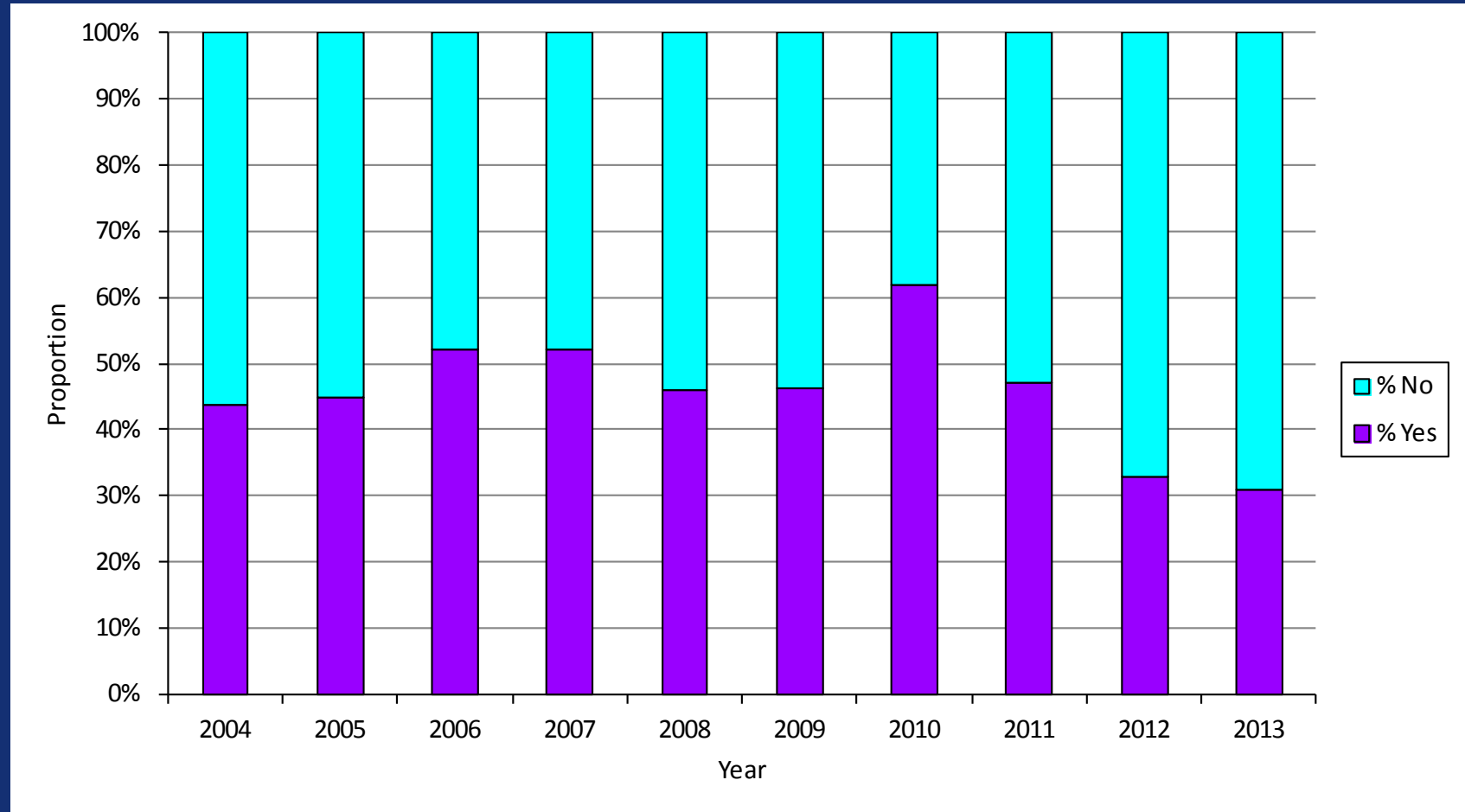
# Proportion of MSM\* with infectious syphilis who are co-infected with HIV, 2004-2013



Data source: NESISS

\* Of those whose HIV status is known

# Proportion of MSM\* with infectious syphilis where oral sex is the likely route of transmission, 2004-2013



Data source: NESISS

\* Of those who stated Yes or No

# Infectious syphilis in MSM, 2013

## number of reported contacts

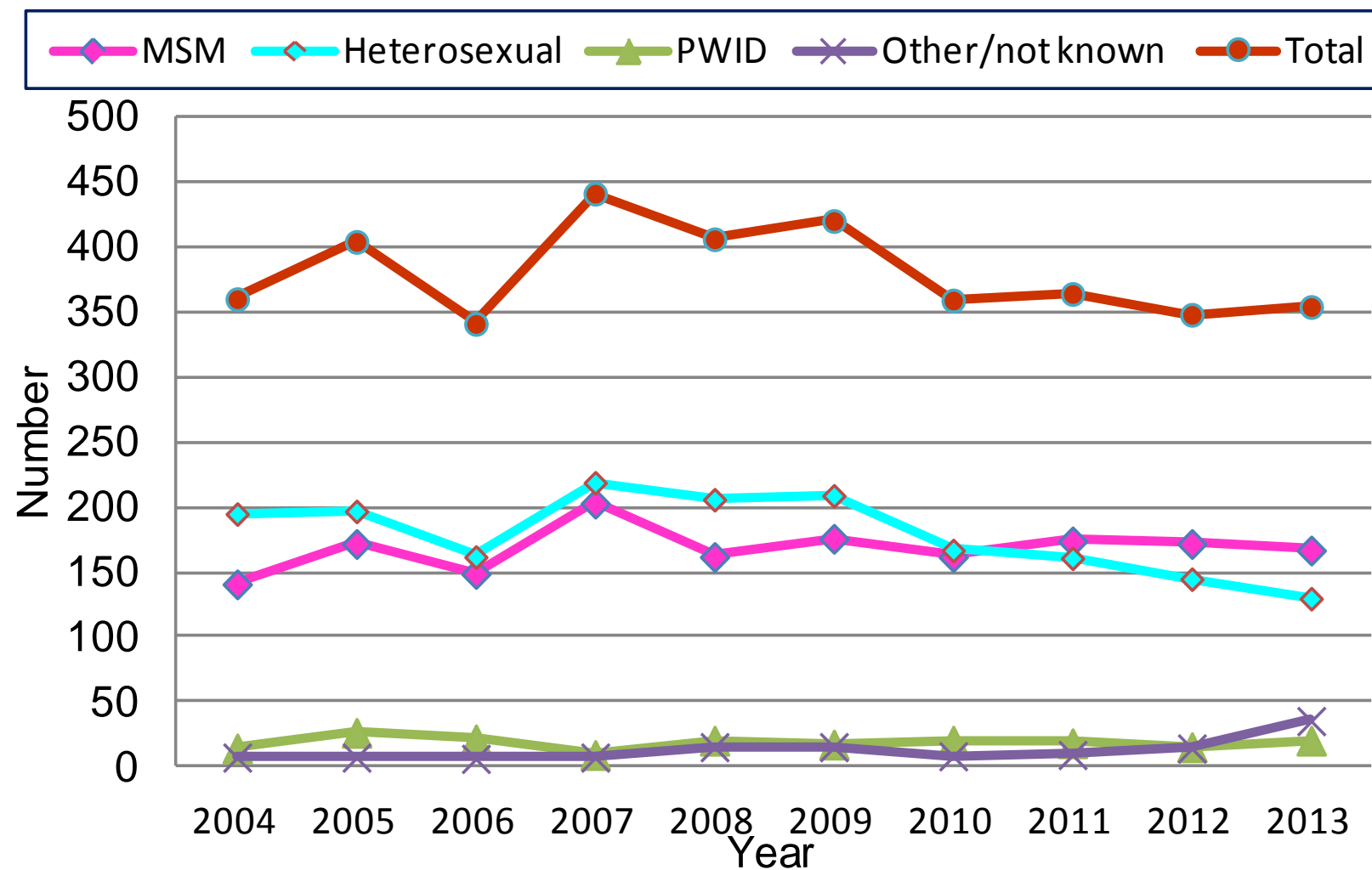
Reported number of partners	Number of cases reporting	Total number of contacts	Number of traceable contacts	% Traced
1	32	32	24	75%
2	27	54	30	56%
3	17	51	34	67%
4	10	40	25	63%
5-9	10	60	32	53%
10-20	8	128	28	22%
>20	6	307	7	2%
<b>Total</b>	<b>110</b>	<b>672</b>	<b>180</b>	<b>27%</b>

# HIV

The following slides present data based on:

- (i) new reports of HIV infection and;
- (ii) data on treatment and care in those living with HIV and attending specialist services

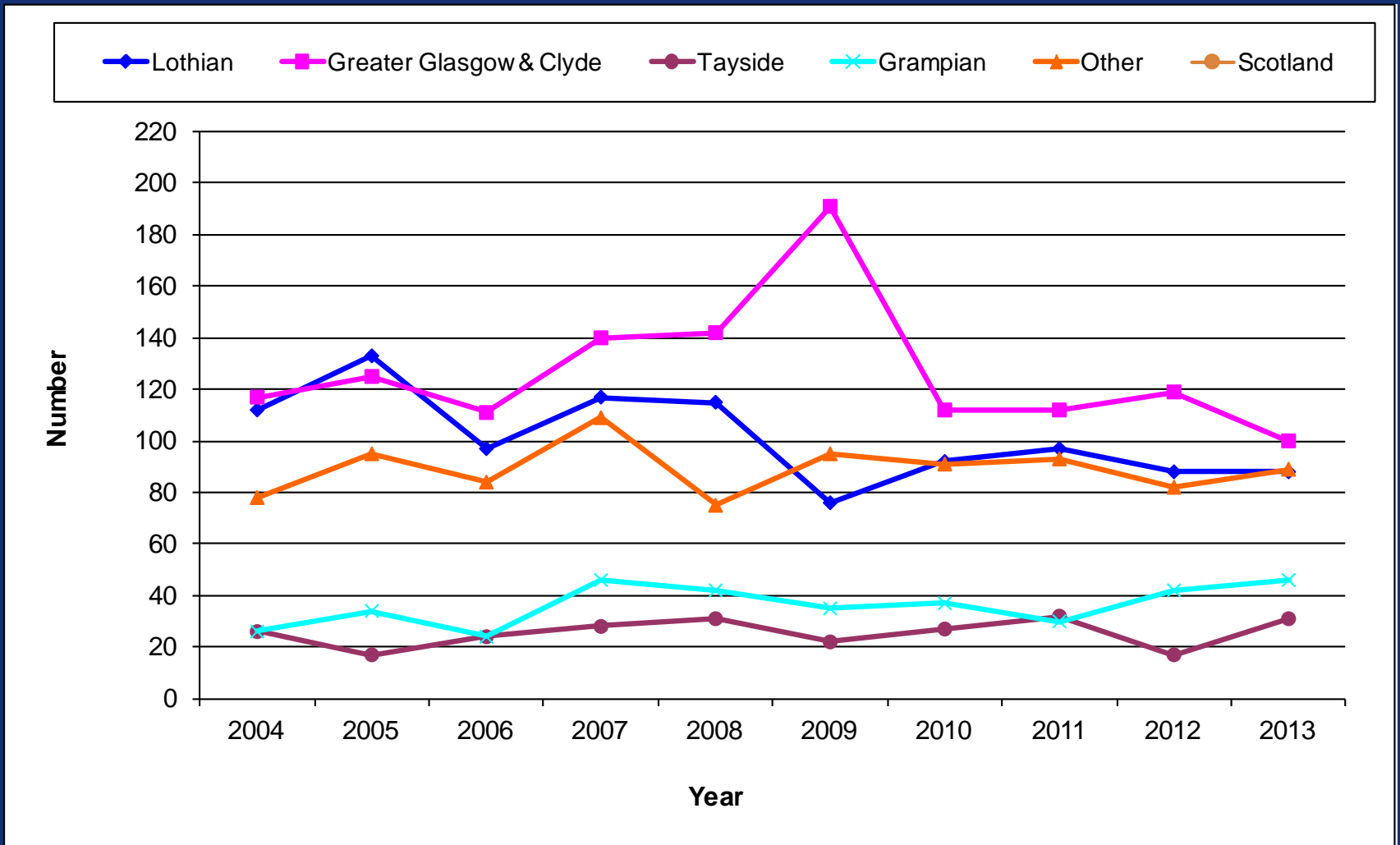
# HIV infected persons by transmission category and year of report, Scotland, 2004-2013



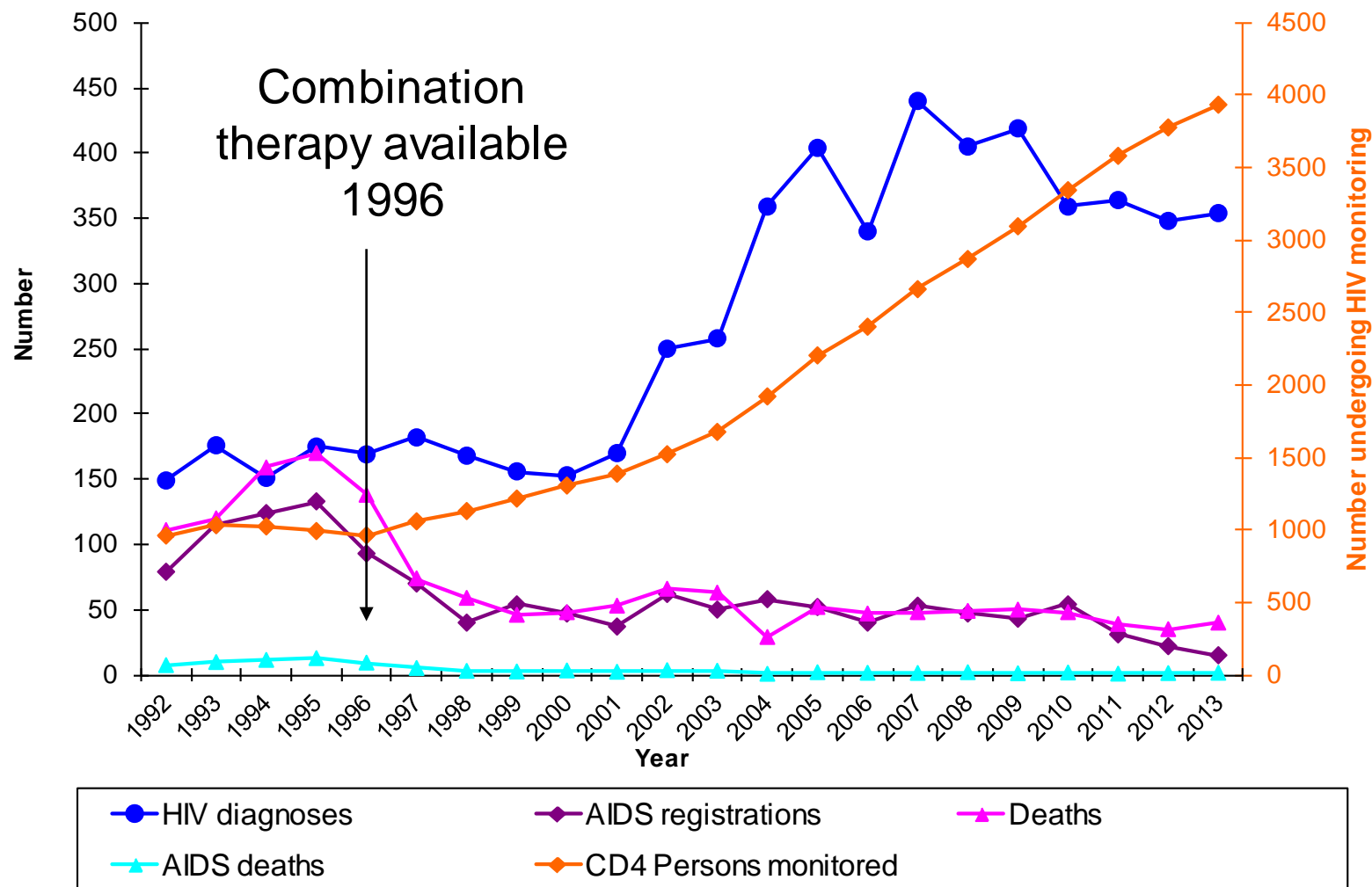
Data source: HIV diagnoses database, Health Protection Scotland



# HIV infected persons by NHS board, Scotland, 2004-2013



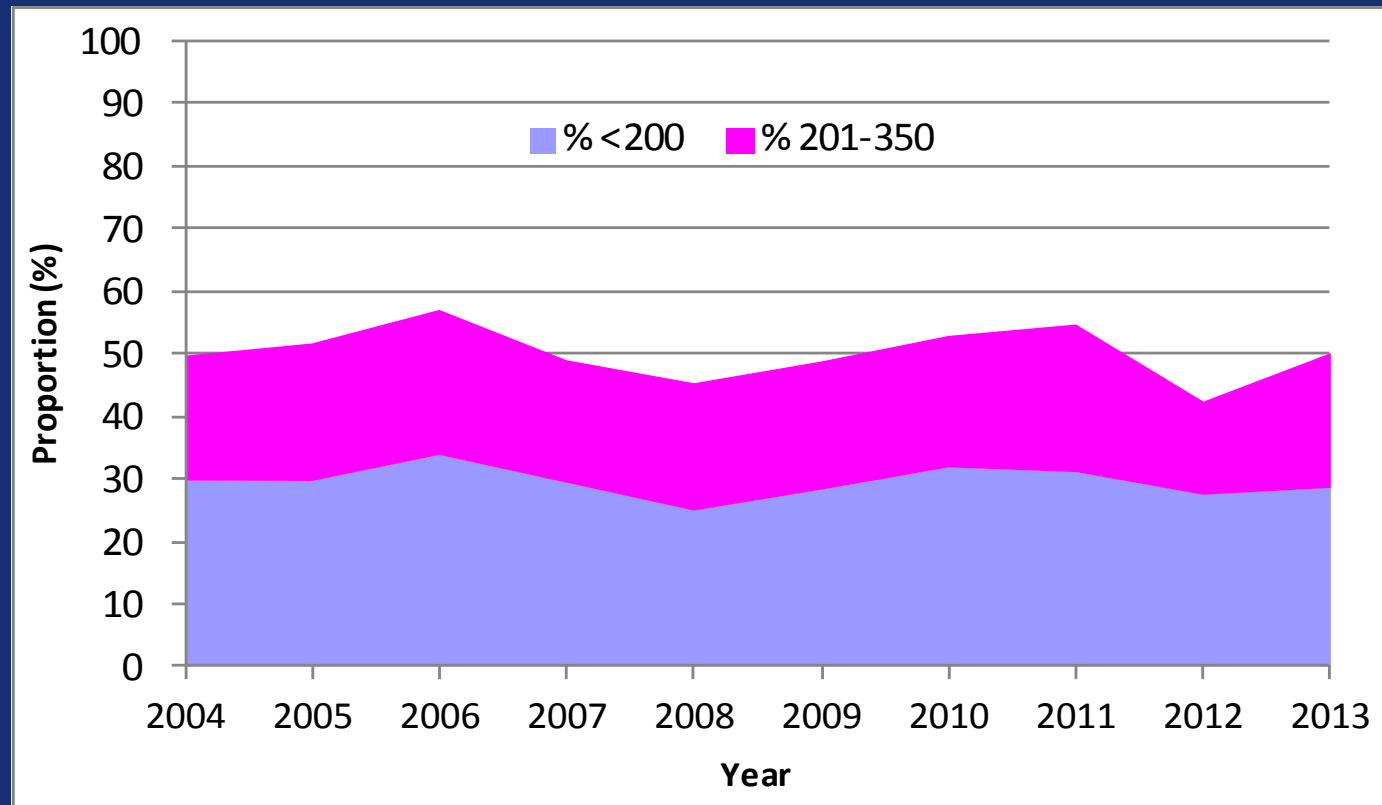
# HIV diagnoses, AIDS registrations and deaths and individuals undergoing CD4 monitoring by year of report/death in Scotland, 1992-2013



# HIV late disease presentation, 2004-2013

## Late and very late diagnosis\*

- CD4 count <350
- CD4 count <200



\*CD4 count within 30 days of first HIV positive test, infected within Scotland and not diagnosed previously outside Scotland

# Key changes in STI diagnoses by gender and sexual orientation, Scotland, 2009-2013

	All men		All women		Heterosexual men		MSM	
	1 yr	5yrs	1yr	5yrs	1yr	5yrs	1yr	5yrs
Genital chlamydia	↓	↔	↓	↓	N/A	N/A	N/A	N/A
Gonorrhoea	↓↓	↑↑↑↑	↑↑	↑↑↑↑	N/A	N/A	N/A	N/A
Genital herpes	↑	↑↑	↑	↑↑	N/A	N/A	N/A	N/A
Infectious syphilis	↓↓	↔	↓↓↓	↑↑↑	↔	↔	↓↓↓	↔
HIV	↑	↓	↓	↓↓↓	↔	↓↓↓	↓	↓

↔ no change

↑ 2-10% increase

↑↑ 11-20% increase

↑↑↑ 21-40% increase

↑↑↑↑ 41%+ increase

N/A not available

Note these changes also apply to arrows indicating a decrease.

# Summary and key points (1)

- Genital chlamydia diagnoses decreased in 2013 to 17,371. There have been an average of over 18,200 diagnoses per year during the past five years
- In 2013, 169 cases of infectious syphilis cases were reported to HPS – this is a decrease on that reported for 2012 (206)
- A high proportion of infectious syphilis cases (71%) continue to be recorded among men who have sex with men (MSM)
- In 2013, there were 354 diagnoses of HIV infection newly reported in Scotland:
  - with 167, 130 and 21 new reports of infection among men who have sex with men (MSM), among non-injecting drug using heterosexual men and women, and people who inject drugs (PWID), respectively
- A high proportion of those eligible for HIV treatment and care in Scotland are receiving it
  - Therapy continues to be successful: 96% of patients undergoing treatment for at least six months during 2013 had evidence of viral suppression

# Summary and key points (2)

- Young people, particularly women, aged less than 25, are the group most at risk of being diagnosed with an STI
  - In 2013, 77% and 72% of genital chlamydia and gonorrhoea diagnoses, respectively, in women were made in those aged under 25
- The sexual health of men who have sex with men (MSM) continues to be of concern as there is evidence from both infection and behavioural survey data of continuing high risk behaviour
  - Rectal gonorrhoea in men, a marker of unprotected anal intercourse, remained at 28% - the highest proportion recorded in the past ten years
  - Increased opportunities for behavioural interventions to promote safer sex are key to ensuring improved sexual health among MSM



# Acknowledgements

with thanks to...

- GUM clinic staff, AIDS & HIV Clinicians, Nurses, Co-ordinators, and Collaborators
- Laboratory staff throughout Scotland
- Colleagues at HPS