

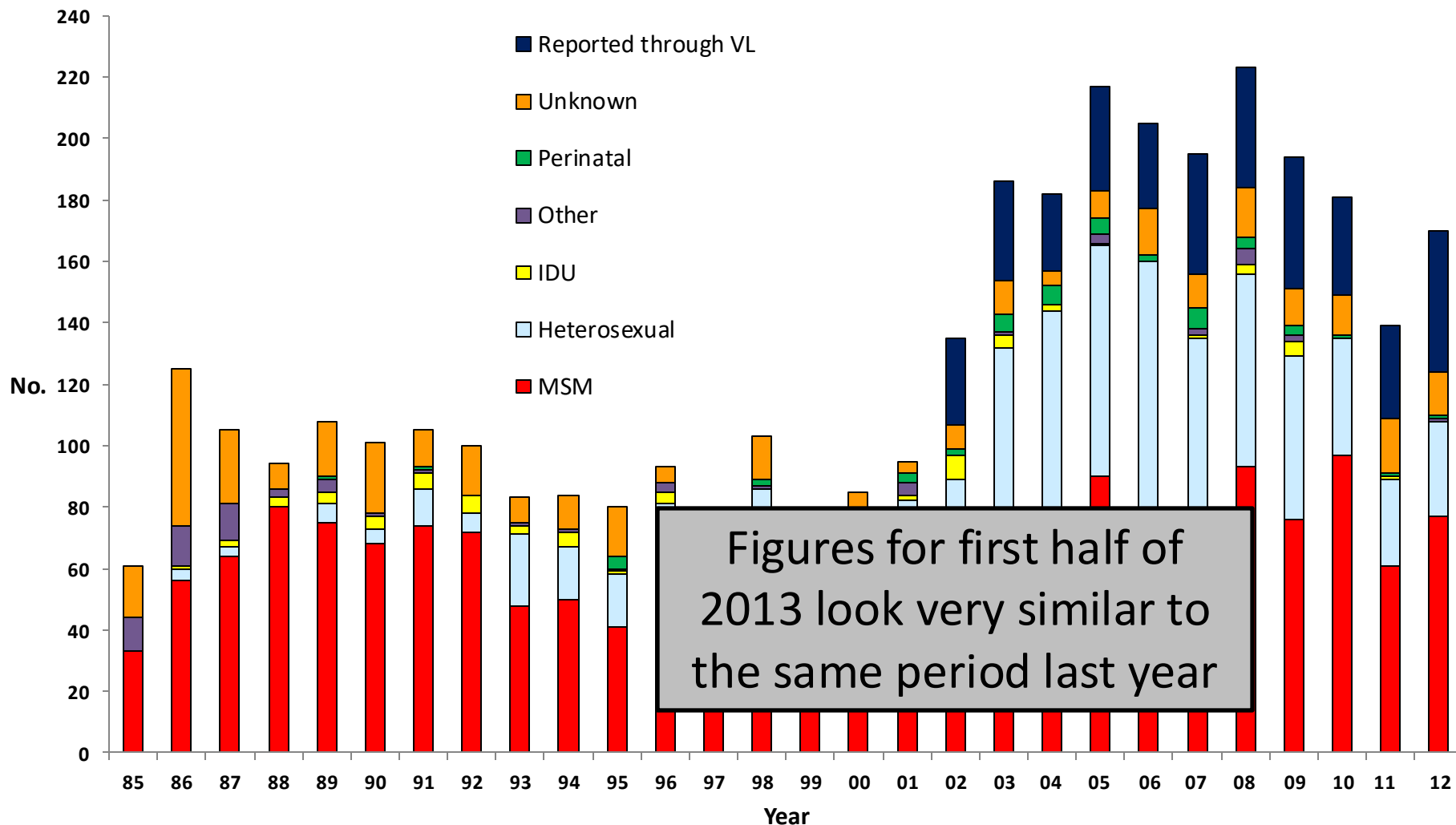
Update on HIV epidemiology and syphilis + some findings on other STIs among MSM

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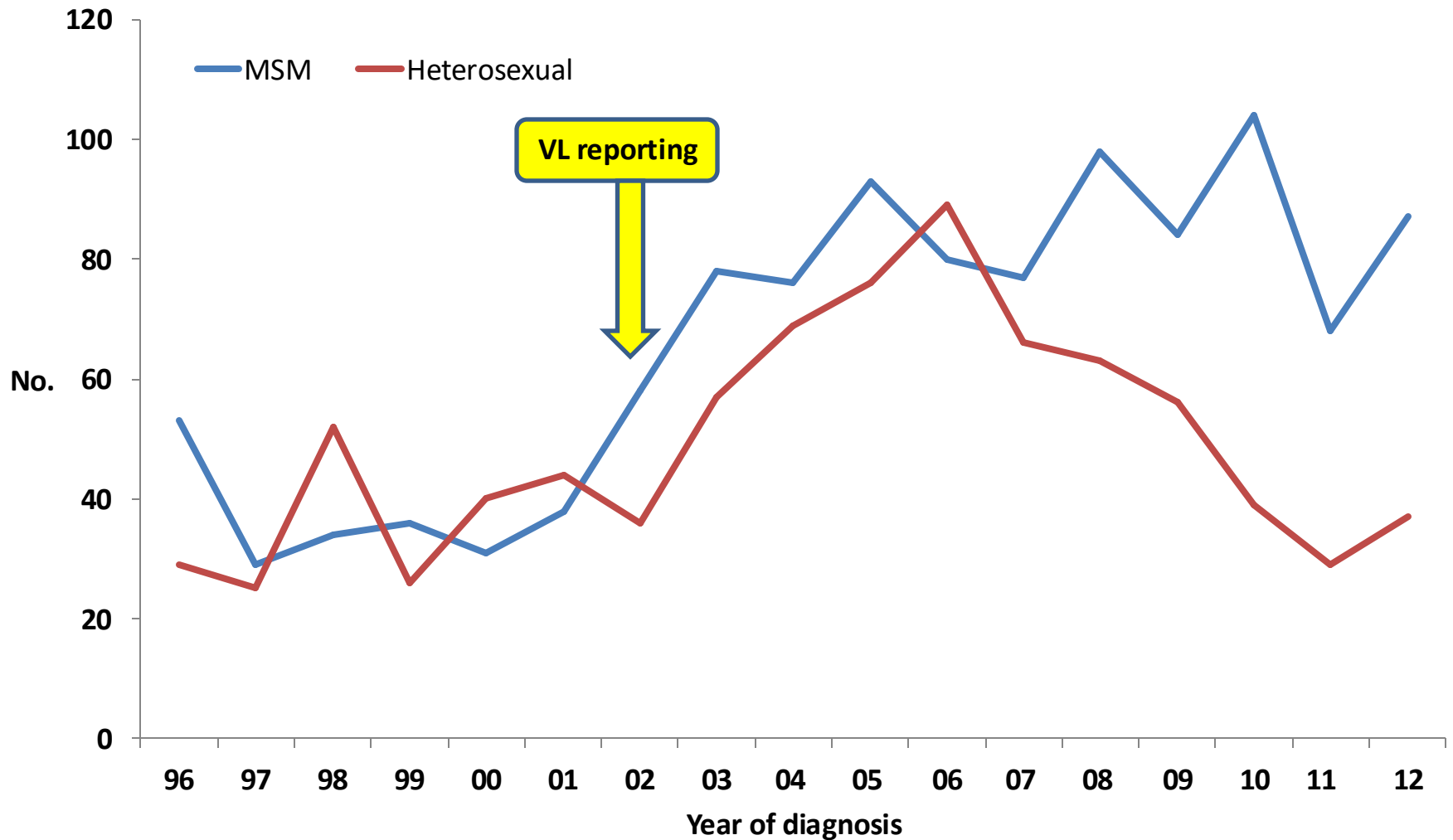
- Update on HIV epidemiology
- Update enhanced syphilis surveillance
- New findings on other STIs among MSM in GAPSS

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HIV diagnosed in New Zealand through WB testing (year of diagnosis) and VL (year of first test)

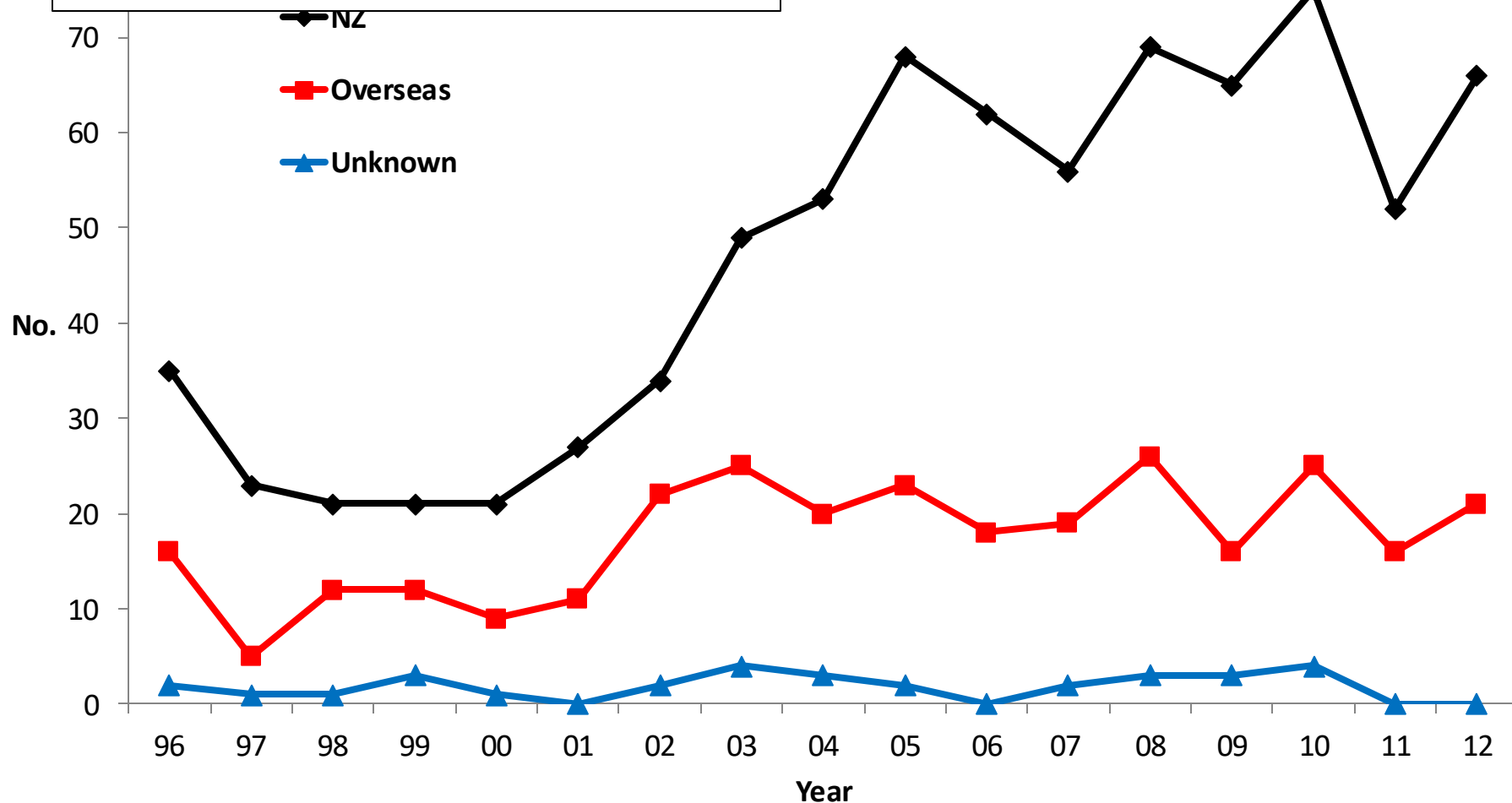


Diagnoses in New Zealand

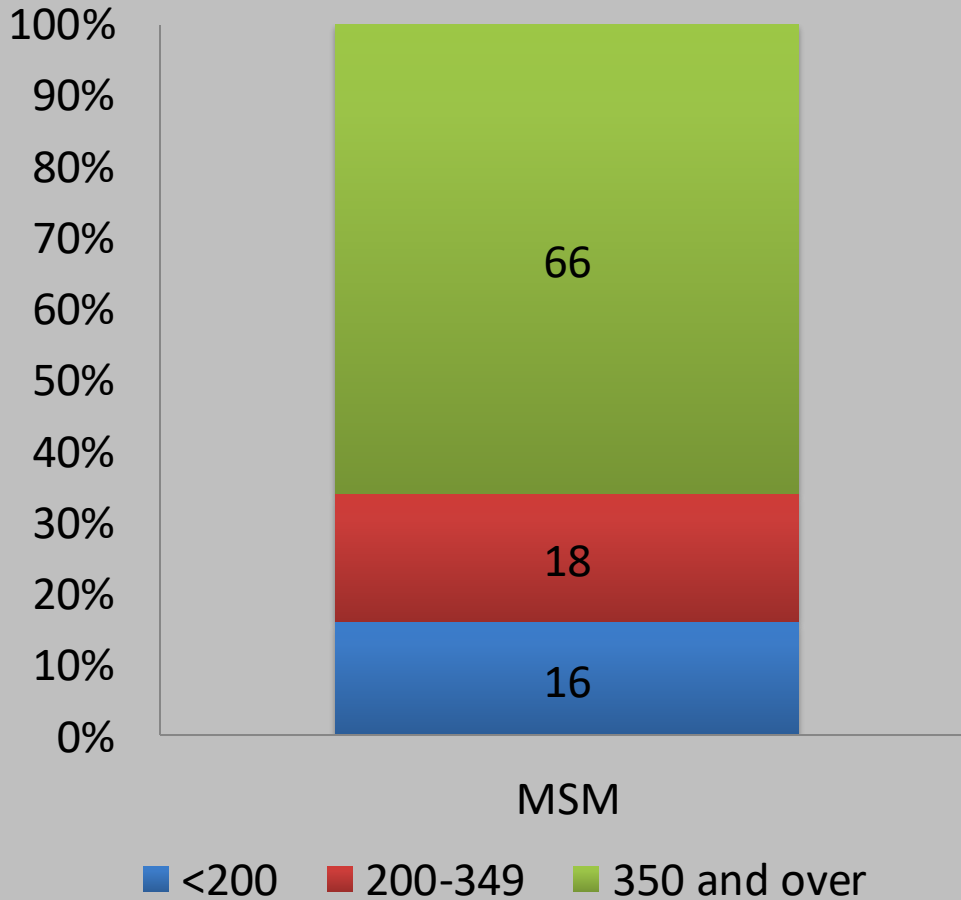


Country of infection of MSM diagnosed in New Zealand

Care with 'diagnosis rates'
over short time periods

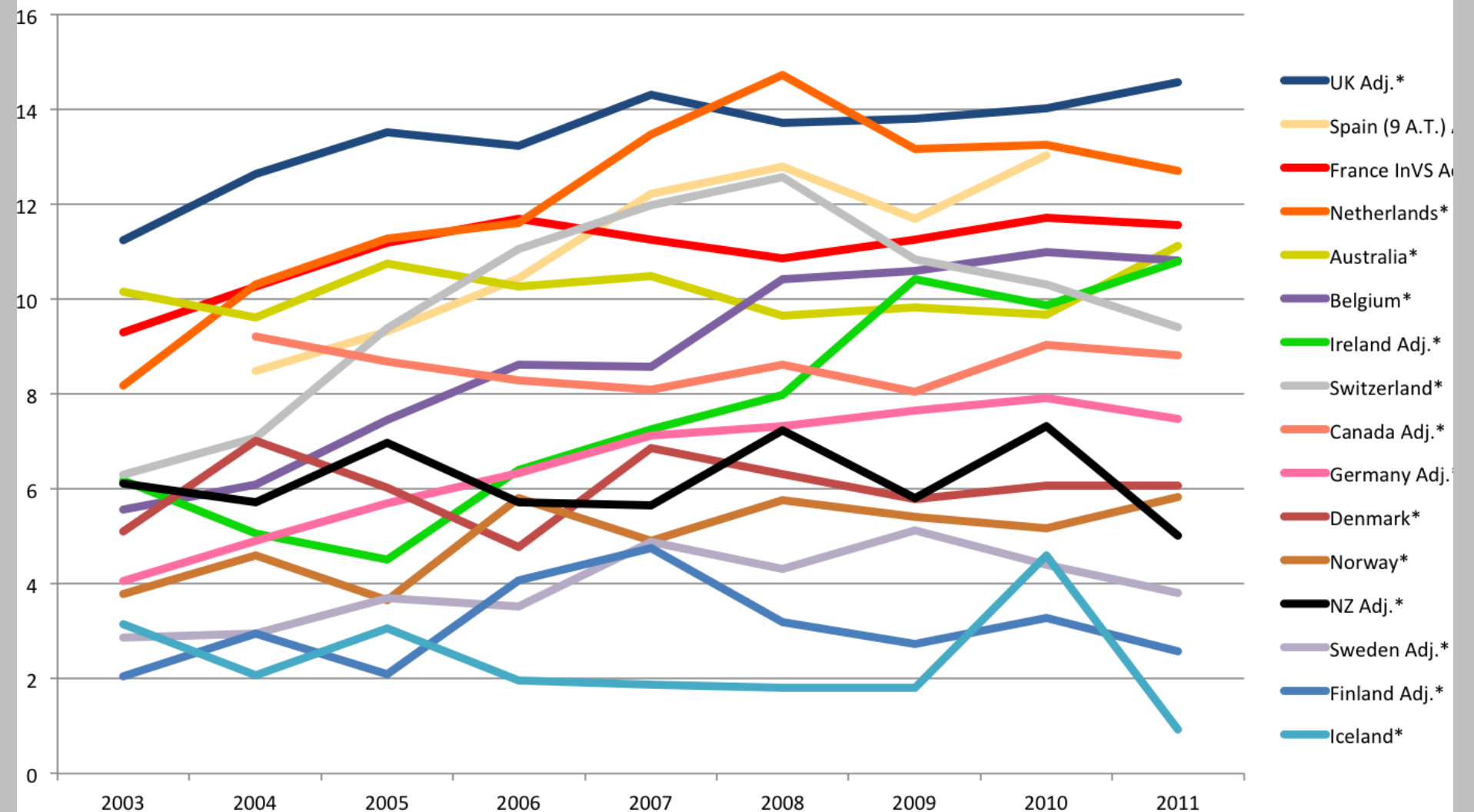


Initial CD4 count for MSM - 2012



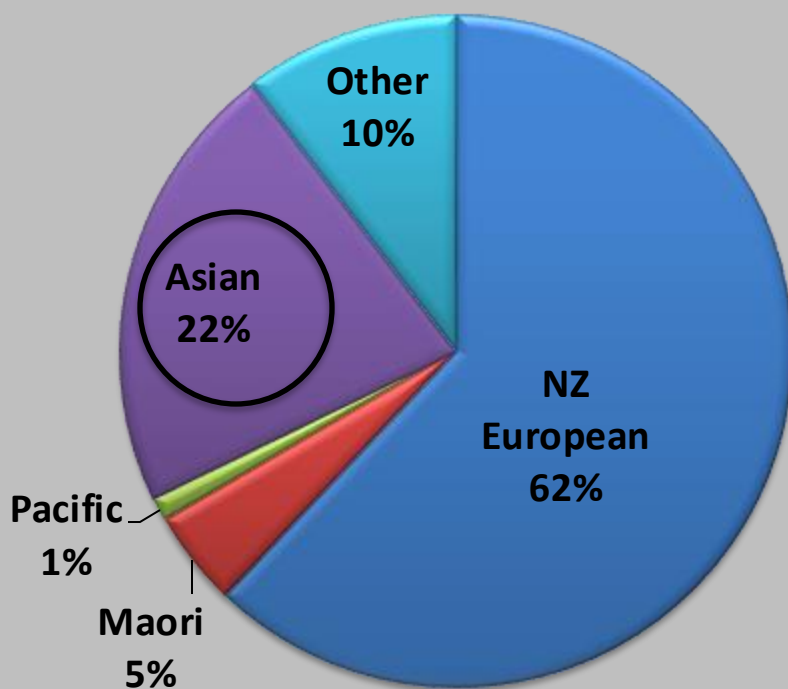
2/3rd of newly diagnosed MSM are being diagnosed at a stage when ART effective – but of course it would be better if there were no new infections

New Diagnoses of HIV among MSM, per 100,000 Men aged 15-64: 2003-2011

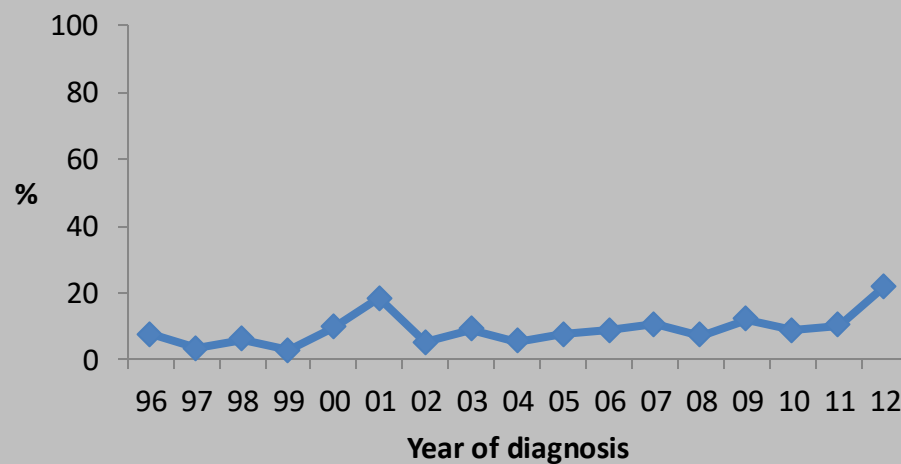


MSM diagnosed 2012 (n=87)

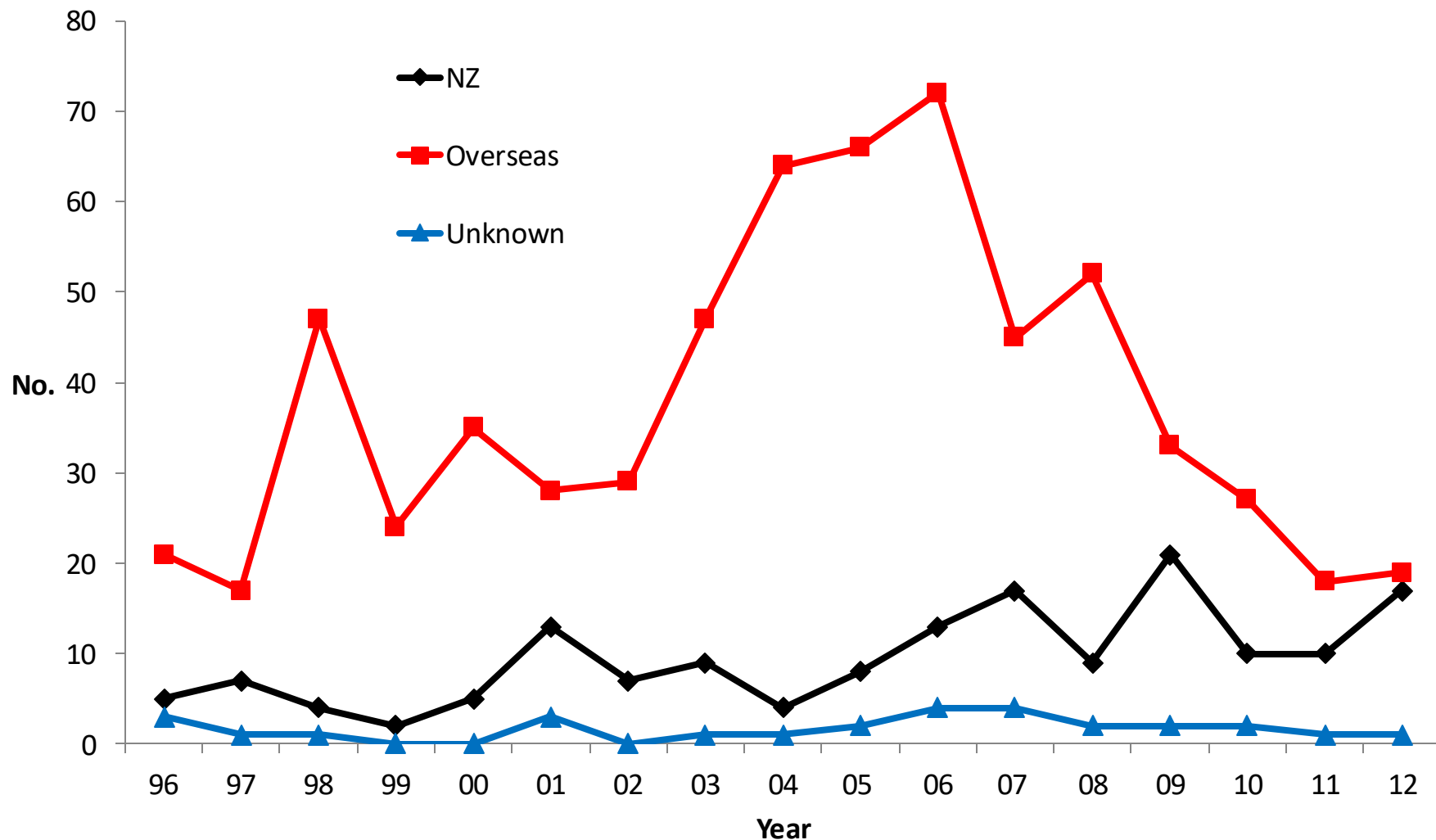
Ethnicity



Proportion of total MSM who were Asian

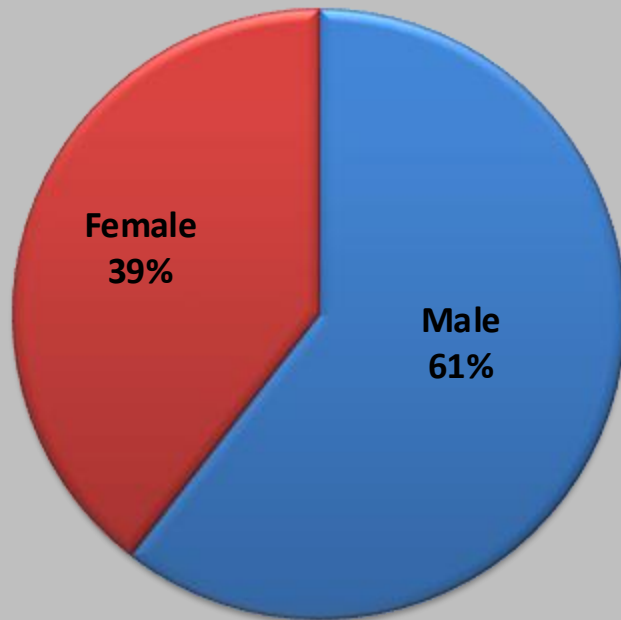


Country of infection of heterosexually infected men and women diagnosed in New Zealand

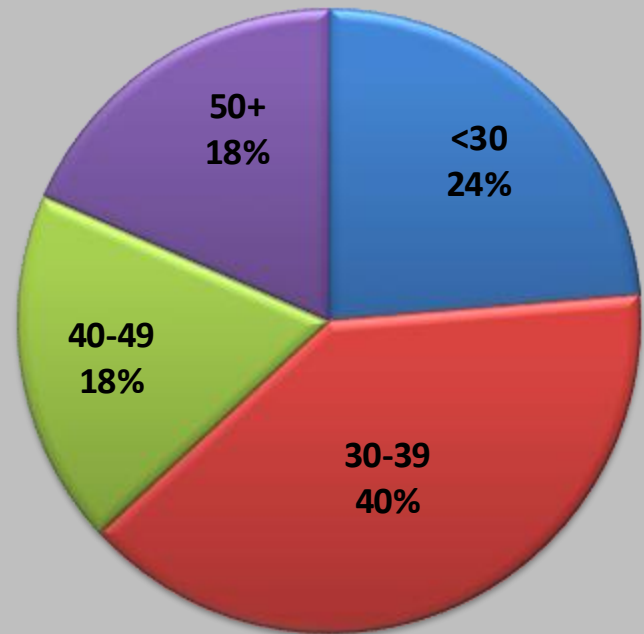


Characteristics of heterosexually infected men and women diagnosed – 2012 (n=38)

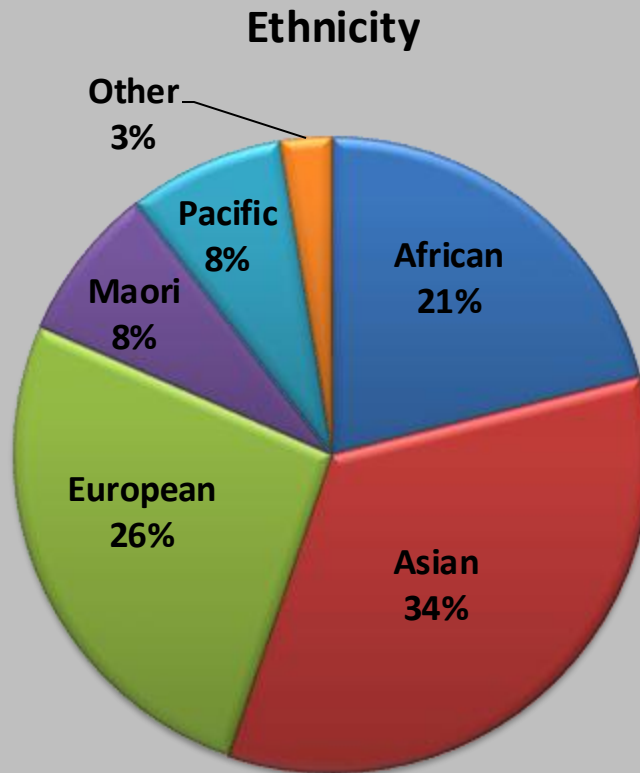
Gender



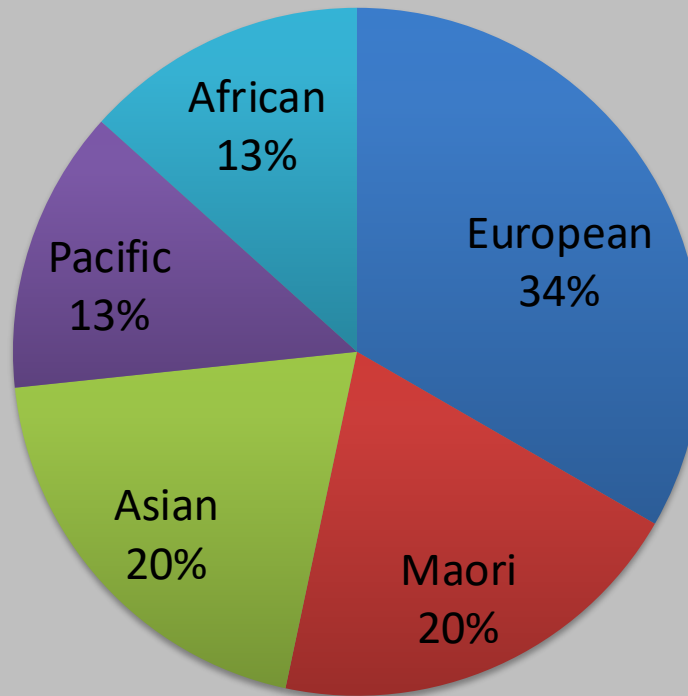
Age at diagnosis



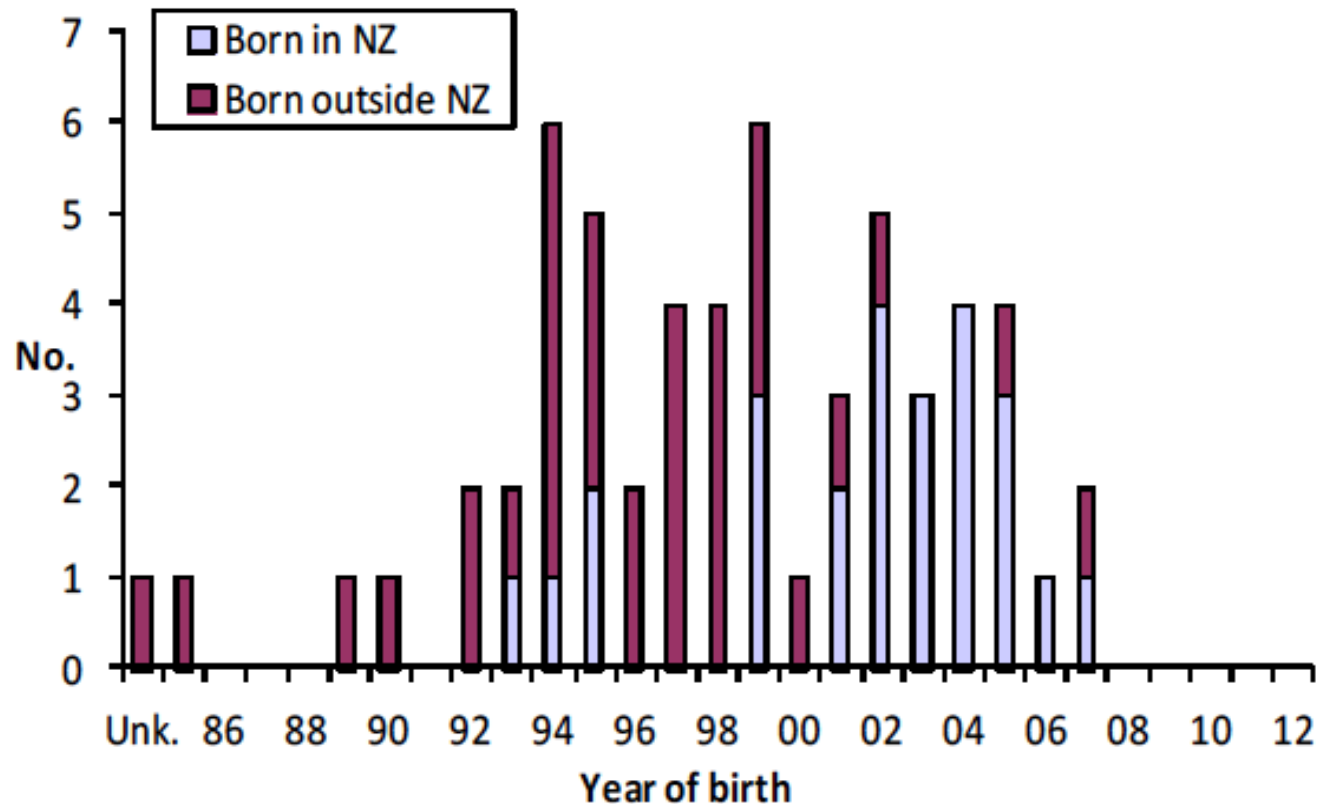
Heterosexually acquired diagnosed in 2012 (n=38)



Heterosexually acquired in New Zealand diagnosed in 2012



Perinately acquired HIV



One child diagnosed in 2012 with perinatal HIV
born in New Zealand in 2002

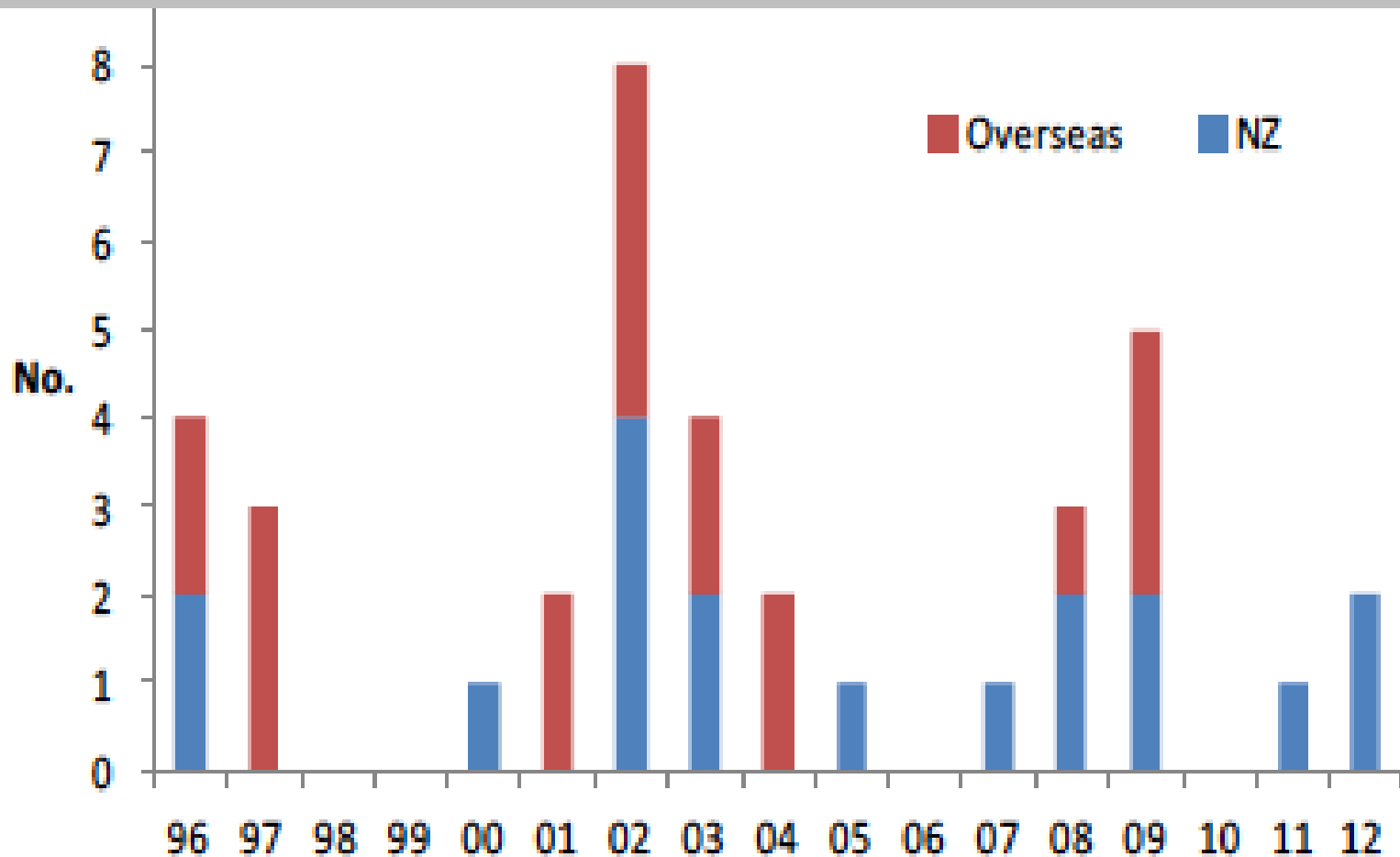
Women diagnosed during pregnancy

- Only 2 pregnant women diagnosed during 2012
 - In spite of introduction of ‘universal offer’ policy and high uptake

Outcome

- Since 1995, 115 births to women with diagnosed HIV prior to delivery
- None of the children infected
 - Although some information on 2012 births awaited

Injecting drug users



- Update on HIV epidemiology
- **Update enhanced syphilis surveillance**
- New findings on other STIs among MSM in GAPSS



Syphilis



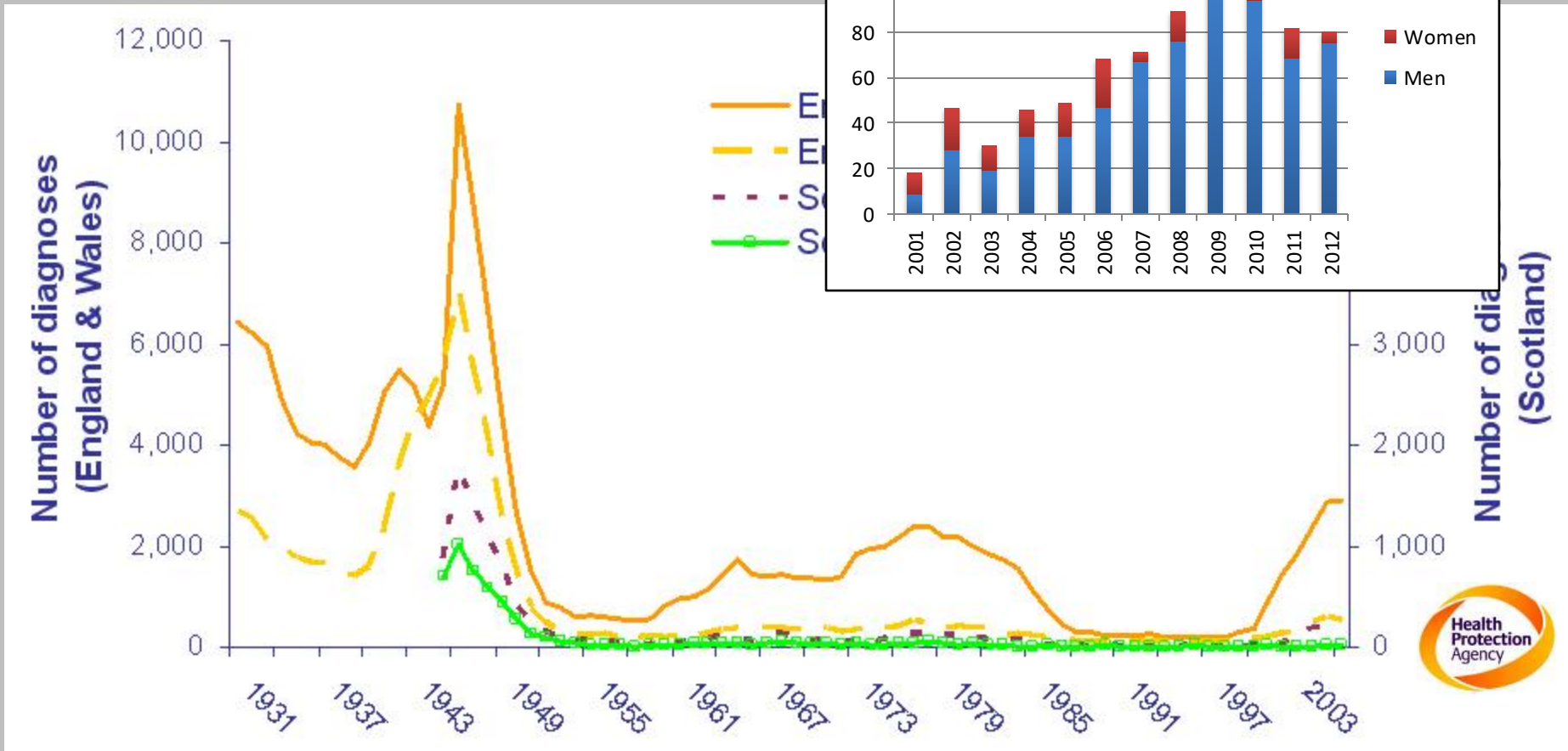
- Syphilis is caused by bacteria *Treponema pallidum*.
- Transmitted primarily through sexual contact, usually when a syphilis sore or “chancre” on the external genitals, vagina and/or the anus.

Syphilis & HIV?

- In early syphilis, genital chancres are an easy route for HIV to get into the body.
 - An HIV-negative person with syphilis is 2-5 times more likely to acquire HIV.
- Syphilis in people with HIV can increase the viral load in genital or anal fluids, making them much more infectious.
 - Also HIV+ people seem to develop more advanced stages of syphilis with more severe symptoms

Diagnoses of infectious syphilis by sex

UK: 1931



Health Protection Agency, UK, routine GUM clinic returns

	2011		2012	
	Men	Women	Men	Women
	N=67	N=5	N=61	N=2
<u>Type of partners</u>				
Same sex partners	78%	0	74%	-
Opposite and same sex partners	12%	0	7%	-
Opposite sex partners	11%	100%	16%	-
<u>Median age (range)</u>	40y (17-73y)	42y (25-57y)	32y (18-62y)	-

Place of Infection – All men

	2011	2012
Auckland	26 (39%)	23 (38%)
Wellington	8 (12%)	9 (15%)
Christchurch	9 (13%)	23 (38%)
Hamilton	4 (6%)	2 (3%)
Other /NS	20(30%)	4 (6%)

2012	Christchurch	Other
Average age	26y	37y

HIV Status of MSM diagnosed with HIV

	2011 and 2012
HIV positive	19%
HIV negative	78%
Unk/NS	3%

Conclusions

Syphilis disproportionately affects MSM

- MSM and clinicians should be aware of the risk
- Syphilis testing should be part of a routine sexual health check for MSM

HIV prevalence higher among MSM with syphilis

- Prevention advice and regular testing should be part of a care for people with HIV
- Control of syphilis should be part of any strategy to control HIV

Enhanced surveillance can provide more information and facilitate a rapid local response

- Update on HIV epidemiology
- Update enhanced syphilis surveillance
- New findings on other STIs among MSM in GAPSS

Gay Auckland Periodic Sex Survey (GAPSS) & Gay Online Sex Survey (GOSS) in 2011

- GAPSS at a large gay community event (Big Gay Out), gay bars and sex-on-site venues in Auckland.
 - N=1320
- GOSS nationwide on Internet dating sites at the conclusion of GAPSS.
 - N=1917



54. In the last **12 months** have you had any of the following sexually transmitted infections?

No ☐

Gonorrhoea ☐

Chlamydia ☐

Non-Specific Urethritis ☐

Warts (genital or anal)* ☐

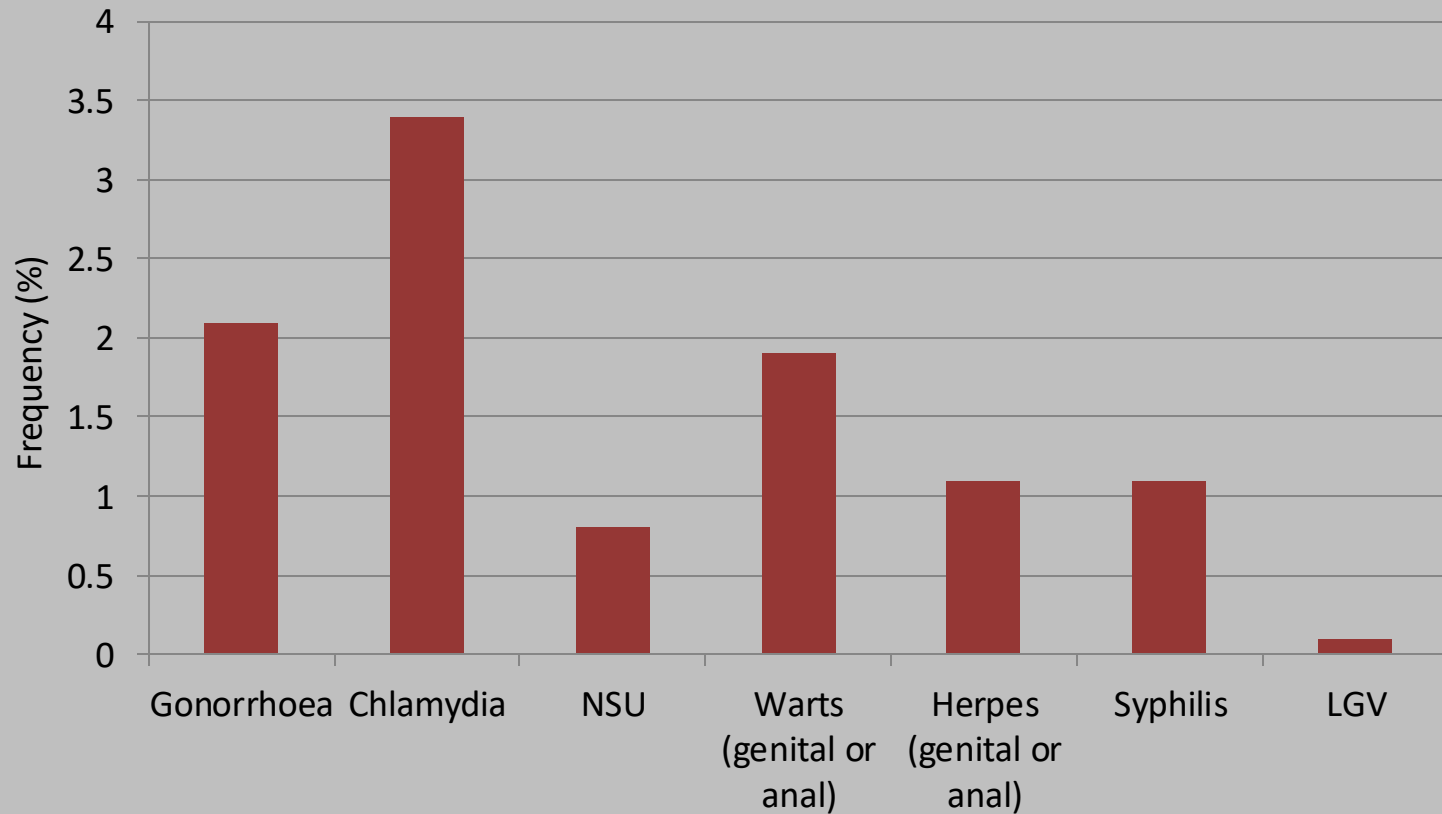
Herpes (genital or anal)* ☐

Syphilis ☐

LGV ☐

* only relates to first diagnosis, not recurring symptoms

8.2% reported at least one STI in the previous 12 months



STIs and Socio-demographic Factors

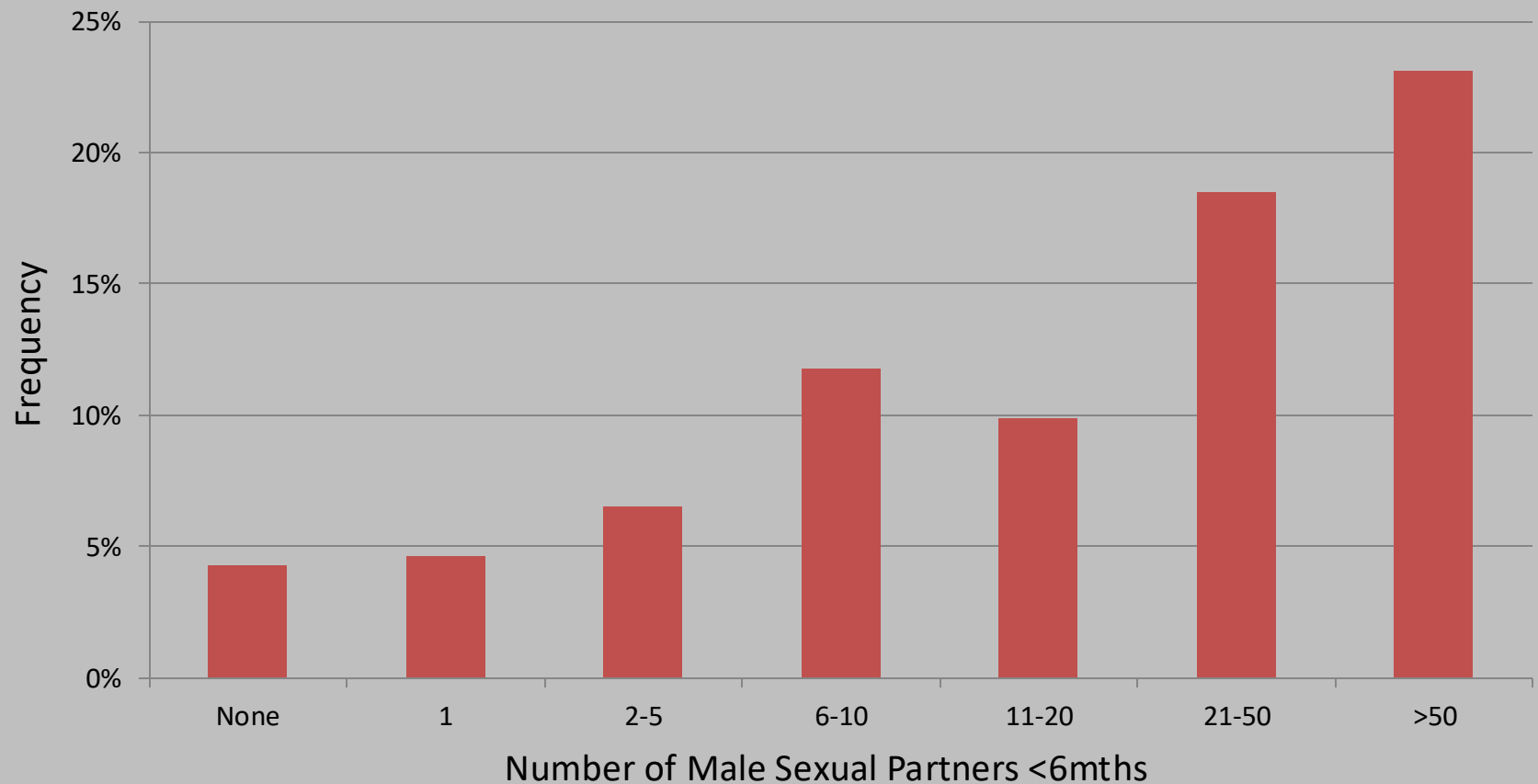
- No significant differences by:
 - age
 - ethnicity
 - education
 - place of residence
 - recruitment site

Anal sex

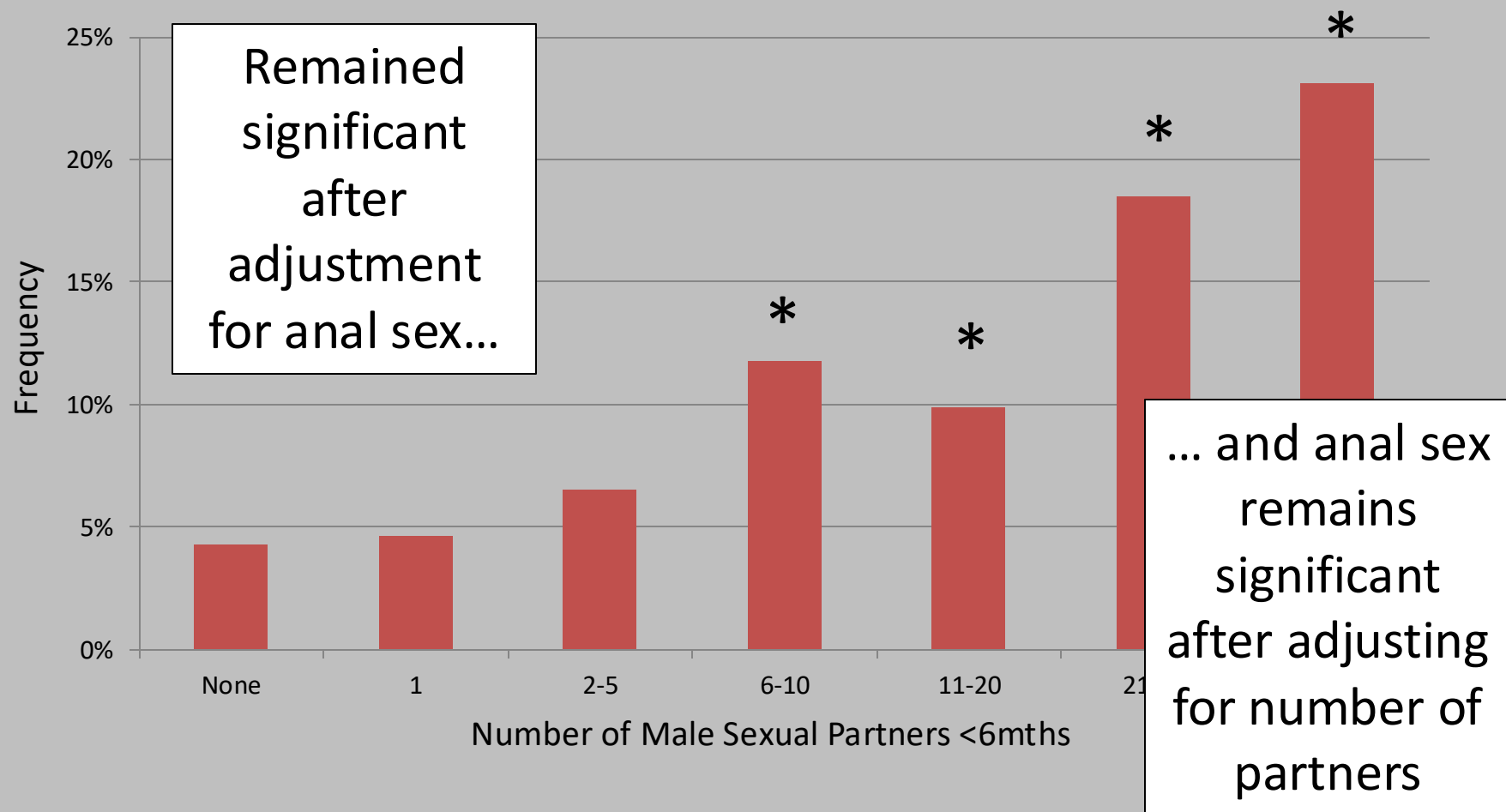
Anal sex in past 6 months	STI in past year	Odds Ratio (95% Confidence interval*)
Yes (N=2291)	9.5%	2.7 (1.7 – 4.2)
No (N=639)	3.8%	Ref.

* If 95% CI does not include 1.0 then risk 'statistically significantly' different from the reference category

Number of Male Sexual Partners in Previous 6 months



Number of Male Sexual Partners in Previous 6 months



Type of Male Partners

The sex questions are in two main sections on this page

- About casual sex partners - men you've had sex with once, twice or three times in the last 6 months.
- About regular sex partners - men you've had sex with 4 or more times in the last 6 months. They could be boyfriends, life partners, fuckbuddies etc...

Type of Male Partners

	Odds Ratio (OR)	Adjusted OR*
Only regular	Ref.	
Regular and casual	2.0 (1.3-3.1)	
Only casual	1.0 (0.55-1.7)	

Type of Male Partners

	Odds Ratio (OR)	Adjusted OR*
Only regular	Ref.	Ref.
Regular and casual	2.0 (1.3-3.1)	1.0 (0.57-1.9)
Only casual	1.0 (0.55-1.7)	0.6 (0.3-1.2)

* Adjusted for total number of male partners, but not frequency of sexual contact

Condom use

<u>Questionnaire</u>	<u>Analysis</u>
Always	High
Almost always	
About half the time	Medium
Very rarely	Low
Never	

Condom use

	With REGULAR partner AOR*	With CASUAL partners AOR*
High	Ref.	Ref.
Medium/Low	1.8 (1.3-2.7)	1.7 (1.2-2.3)

* Adjusted for total number of male partners but not frequency of sexual contact

STIs among HIV Positive Men

	AOR*
HIV +ve (>1yr ago)	1.2 (0.67-2.3)
HIV negative at last test	Ref.

* Adjusted for total number of male partners but not frequency of sexual contact

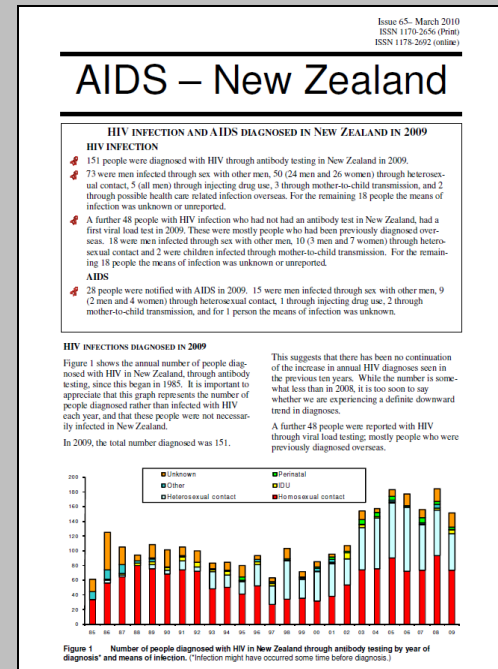
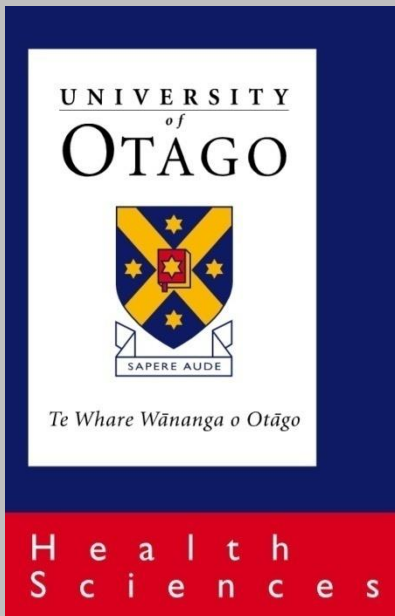
Hepatitis C a sexually transmissible infection among HIV+ men

Conclusions

- STIs relatively commonly reported by MSM
 - No good information for heterosexual men and women but probably higher among MSM
 - Anal sex, number of partners ↑risk
 - Condom use ↓
- Sexual health advice and checks important for HIV+ and HIV- people at risk
- General emphasis on Sexual Health among MSM
 - ‘Other STIs’ can impact on risk of acquisition and transmission of HIV, and among HIV+ can impose an additional health burden
 - Particularly syphilis, HPV and HCV (among HIV+)

Acknowledgements

- Ministry of Health funding
- All those who provide us with information



www.otago.ac.nz/aidsepigroup