

## HIV and STI

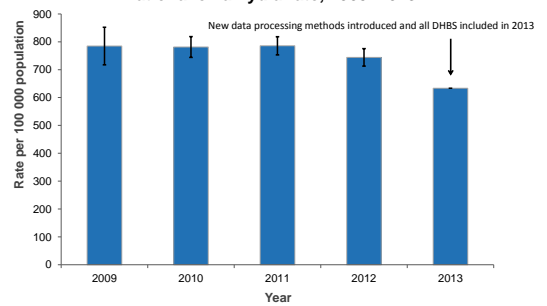
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### STI Surveillance in New Zealand

- + ESR collates quarterly and annual:
  - + Diagnostic data from SHC, FPA, YHC
  - + No general practice data collected
  - + Laboratory data for chlamydia and gonorrhoea from all laboratories nationwide
- + ESR now also collates enhanced syphilis surveillance data (previously collated by AIDS Epidemiology Group) but there is no laboratory data collected.

**National chlamydia rate, 2009–2013**

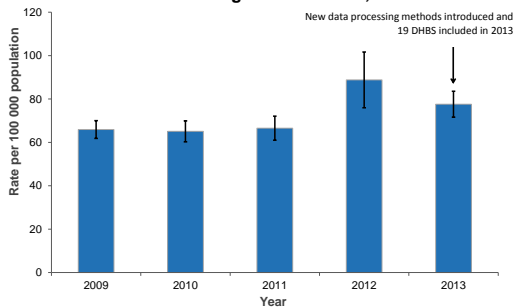


Note: Estimated rates were calculated for 2009–2012 with 95% CI's based on data from 15 DHBS. New data processing methods allow for exclusion of repeat tests within a defined period.

Source: Sexually Transmitted Infections in New Zealand: Annual Surveillance Report 2013, available from [www.surv.esr.cri.nz](http://www.surv.esr.cri.nz)



**Estimated national gonorrhoea rate, 2009–2013**

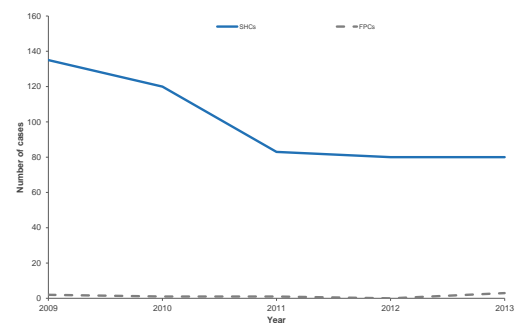


Note: Estimated rates were calculated for 2009–2012 with 95% CI's based on data from 17 DHBS. Estimated rates were calculated for 2013 with 95% CI's based on data from 19/20 DHBS. New data processing methods allow for exclusion of repeat tests within a defined period.

Source: Sexually Transmitted Infections in New Zealand: Annual Surveillance Report 2013, available from [www.surv.esr.cri.nz](http://www.surv.esr.cri.nz)



**Infectious syphilis case numbers by clinic type, 2009–2013**



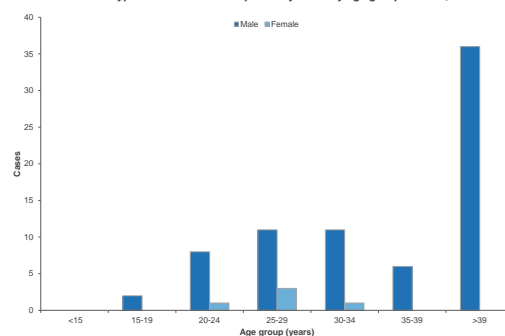
Source: Sexually Transmitted Infections in New Zealand: Annual Surveillance Report 2013, available from [www.surv.esr.cri.nz](http://www.surv.esr.cri.nz)



## Enhanced syphilis surveillance

- + Started in 2011 by a group of interested parties and data collated by AIDS Epidemiology Group
- + Task taken over by ESR in 2013
- + 2013 annual report
  - + 81 cases
  - + Approx 45% aged  $\geq 40$
  - + 90% male and 86% of those MSM
  - + MSM more likely to have symptoms (65% vs 28%) and concurrent STI diagnosis (27% vs 11%)
  - + 29% of MSM cases HIV positive
  - + Internet dating and SOSV associated with infection (caution)
- + 2014 report not available yet but 143 cases reported (76% increase)

Infectious syphilis case numbers reported by SHCs by age group and sex, 2013



Source: Sexually Transmitted Infections in New Zealand: Annual Surveillance Report 2013, available from [www.surve.esr.govt.nz](http://www.surve.esr.govt.nz)



## ASHS Data

- + HCC
- + Unable to extract sexual behaviour data and link to STI diagnoses
- + Surrogate marker of "anorectal infections" used
- + Therefore no data on MSM with urethral infections
- + No denominator data of total numbers of MSM seen in the service to use as a comparator



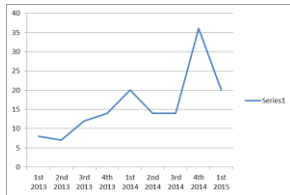
## Anorectal infections 2013-1<sup>st</sup> quarter 2015

- + Chlamydia – overall increase
  - + 2013 – 152
  - + 2014 – 155
  - + 1<sup>st</sup> quarter 2015 – 42
- + Gonorrhoea- overall increase ++
  - + 2013 – 52
  - + 2014 – 63
  - + 1<sup>st</sup> quarter 2015 – 39
- + HSV – overall increase +
  - + 2013 – 7
  - + 2014 – 11
  - + 1<sup>st</sup> quarter 2015 – 5

## Pharyngeal infections 2013-1<sup>st</sup> quarter 2015

- + Chlamydia – overall stable
  - + 2013 – 21
  - + 2014 – 25
  - + 1<sup>st</sup> quarter 2015 – 4
- + Gonorrhoea – overall increase ++
  - + 2013 – 48
  - + 2014 – 69
  - + 1<sup>st</sup> quarter 2015 – 40

## Infectious syphilis 2013 – 1<sup>st</sup> quarter 2015



## Sexuality and gender

- + 2013 – total 44 cases
  - + 5 (11%) female and 39 (89%) male
  - + 34 (77%) MSM and 10 (23%) heterosexual (5 male and 5 female)
- + 2014 – total 84 cases
  - + 2 (2%) female and 82 (98%) male
  - + 75 (89%) MSM and 9 (11%) heterosexual (7 male and 2 female)
- + 2015 (Jan-Apr) – total 30 cases
  - + 1 (3%) female and 29 (97%) male
  - + 24 (80%) MSM and 6 (20%) heterosexual (5 male and 1 female)
  - + NOTE: 7 MSM (30%) also reported female partners

## Ethnicity and age

- + Approximately 65% european
- + 15-20% asian
- + Rest = PI, Maori, other
- + 36% >= age 40 in 2013
- + 50% >= age 40 in 2014/2015

## HIV status

- + 2013 – 12 HIV positive cases making up 35% of the total and all MSM
- + 2014 – 32 HIV positive cases making up 38% of the total and 97% MSM
- + 2015 Jan-Apr – 6 HIV positive cases making up 25% of the total and all MSM

## What are we learning?

- + Dr Google is our friend!
- + Lesions do not always look typical
- + Screen, screen and rescreen
- + Repeated infections are becoming more common and this may impact serological findings

## Other STI previous 2 years ASHS - 2015

- + 13 (43%) cases of 30 had at least one other bacterial STI in the past 2 years diagnosed at ASHS
- + No heterosexual cases had another STI diagnosed
- + Of 24 MSM cases 13 (54%) had at least one STI diagnosed
  - + 4 had one infection in one site
  - + 4 had one infection in 2 sites
  - + 5 multiple infections multiple sites (including 1 prior syphilis)
- + Of the 6 HIV positive cases – 5 had at least 1 rectal infection (max = 6) over the past 2 years



The first condoms of Spring.

### STI in ASHS HIV cohort 2013-1<sup>st</sup> quarter 2015

- + 366 individual HIV patients seen over this period
- + 347 STI diagnoses occurred in 198 male individuals (54%)
  - + Chlamydia
    - + Anorectal – 90
    - + Urogenital – 28
    - + Pharynx – 7
  - + Gonorrhoea
    - + Anorectal – 41
    - + Urogenital – 27
    - + Pharynx – 22

### STI in ASHS HIV cohort 2013-1<sup>st</sup> quarter 2015

- + Syphilis
  - + Infectious – 51
  - + Non-infectious – 9
- + Genital warts – 21
- + HSV – 18
- + LGV – 3 (plus 1)
- + Proctitis non-specific – 2
- + HBV – 3
- + HCV – 4
- + Other – 6
- + 72 (36%) individuals had multiple STI over this period – from 2-7
  - + Assoc. group sex, serosorting and drug use espec. methamphetamine

### Stigma guidelines

- + STI testing guidelines for men who have sex with men were developed by STIGMA group members in 2002 and then revised in 2005 and 2008.
- + In 2010, the guidelines were revised in partnership with national colleagues and are endorsed by the Australasian Chapter of Sexual Health Medicine/Royal Australasian College of Physicians, Royal Australian College of General Practitioners, Australasian Society of Infectious Diseases and the Australasian Society for HIV Medicine.
- + [http://stipu.nsw.gov.au/wp-content/uploads/STIGMA\\_Testing\\_Guidelines\\_Final\\_v5.pdf](http://stipu.nsw.gov.au/wp-content/uploads/STIGMA_Testing_Guidelines_Final_v5.pdf)

### Stigma Guidelines

After behavioural risk assessment and appropriate pre test discussion, **all of the STI tests** listed should be offered to:

All men who have had any type of sex with another man in the previous year	→	<b>At least once a year</b>
All MSM who fall into one or more categories listed below: <ul style="list-style-type: none"> <li>• any unprotected anal sex</li> <li>• more than 10 sexual partners in six months</li> <li>• participate in group sex</li> <li>• use recreational drugs during sex</li> </ul>	→	<b>Up to 4 times a year</b>
• are HIV-positive: <ul style="list-style-type: none"> <li>- syphilis serology; at each occasion of CD4/VL<sup>2</sup> monitoring;</li> <li>- chlamydia/gonorrhoea testing; consider at each occasion of CD4/VL<sup>2</sup> monitoring)</li> </ul>		

### Stigma guidelines

SITE SPECIMEN	STI	TECHNOLOGY	COMMENT
Pharyngeal swab	Chlamydia & gonorrhoea	NAAT*	Self-collected or clinician-collected
Anorectal swab	Chlamydia & gonorrhoea	NAAT*	Self-collected or clinician-collected
First void urine <sup>d</sup>	Chlamydia	NAAT*	Alternative: self-collected or clinician-collected penile meatal swab
Serology	Syphilis	EIA*	
	HIV	EIA*	If HIV negative
	Hepatitis A	HAV IgG EIA*	Test if not vaccinated. Vaccinate if antibody negative
	Hepatitis B	HBV core antibody, surface Antigen EIA*	Test if not vaccinated. Vaccinate if no history or documentation of full vaccination course
	Hepatitis C	HCV IgG EIA*	Only in HIV-positive or if history of injecting drug use

## Summary

- + National figures for chlamydia and gonorrhoea stable and syphilis is increasing again
- + ASHS
  - + Increase in anorectal and pharyngeal bacterial infections especially gonorrhoea, large increase in infectious syphilis
  - + Infectious syphilis – mostly MSM, European, high proportion other STI, 2015 – 30% MSM female partners also, % HIV infected stable over time
  - + Approx 50% of HIV patients STI recorded past 2.3 yrs – 36% of these had multiple STI
- + Regular screening MSM including HIV positive is very important including anorectal and pharyngeal testing

