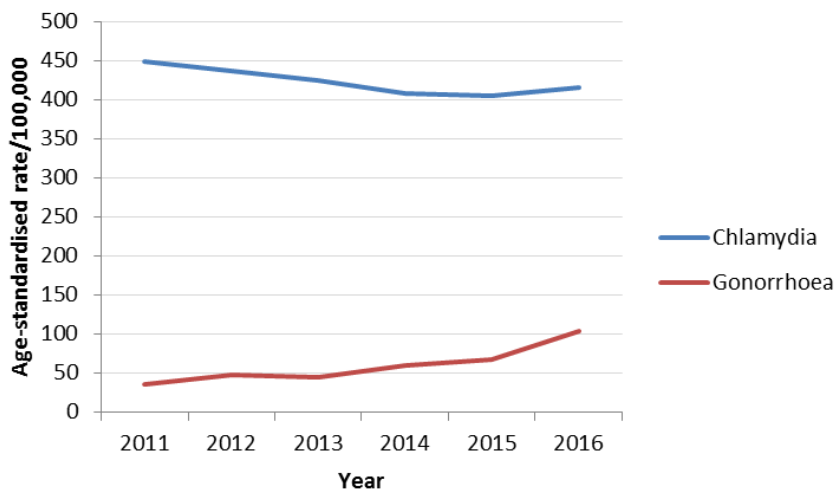


## Gonorrhoea symposium, Western Australia

Donna Mak  
Communicable Disease Control Directorate  
Western Australian Department of Health

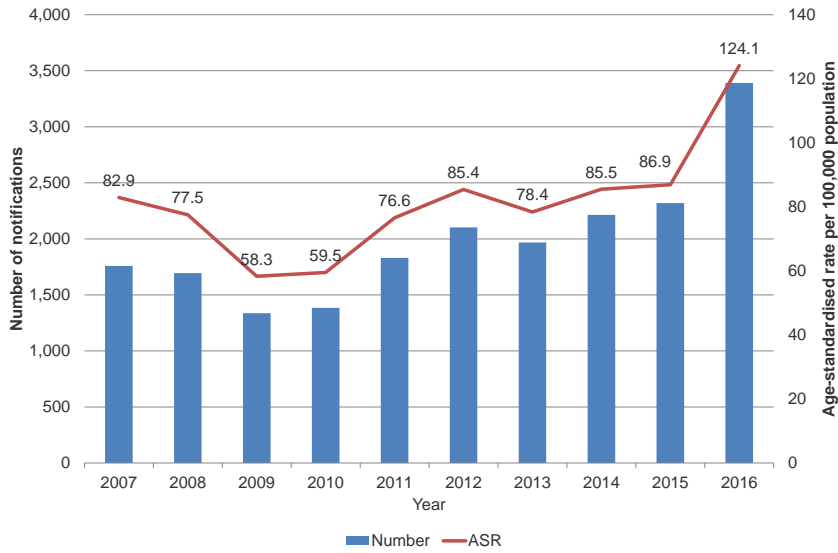
better health • better care • better value

### Rate of gonorrhoea and chlamydia notifications in the Perth metropolitan area, WA, 2011 to 2016

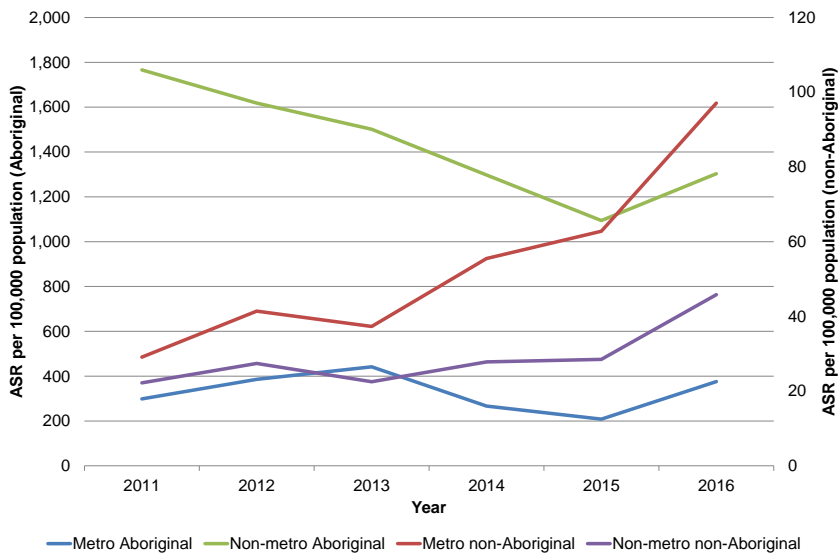


Dual testing in all WA pathology labs since before 2011

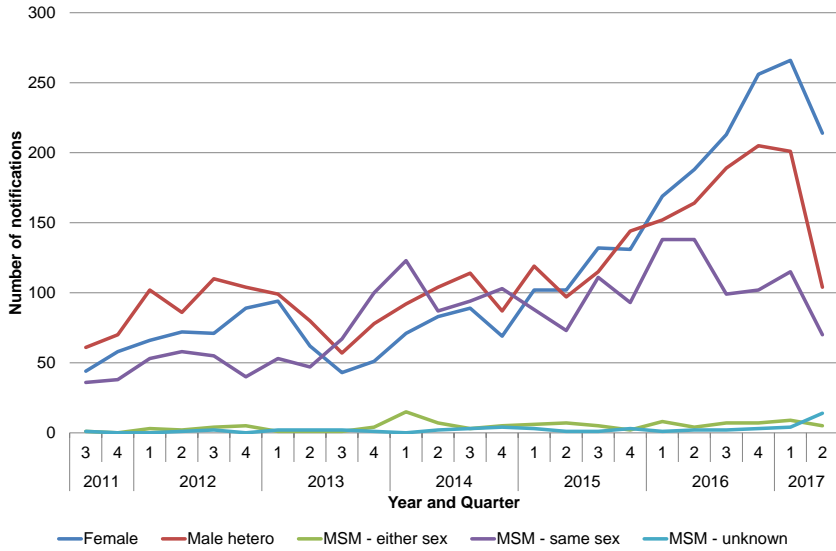
### Number and rate of gonorrhoea notifications, WA, 2007 to 2016



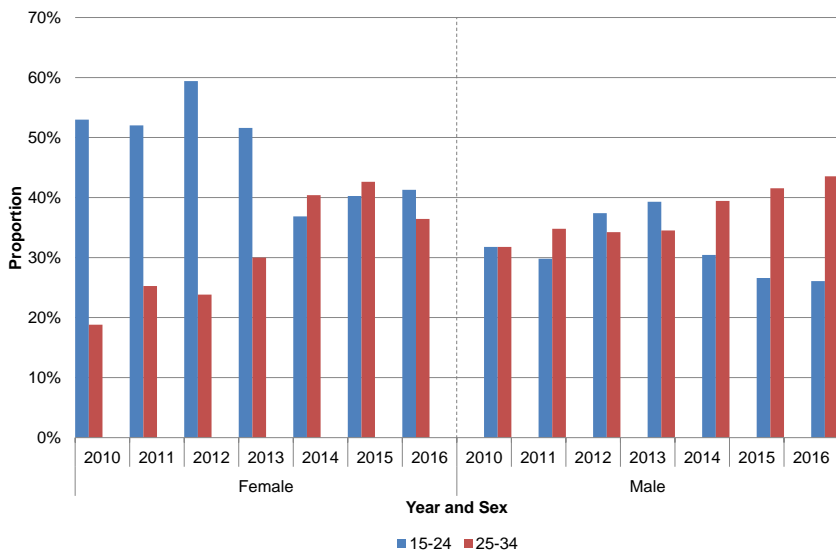
### Rate of gonorrhoea notifications by area and Aboriginality, WA, 2011 to 2016



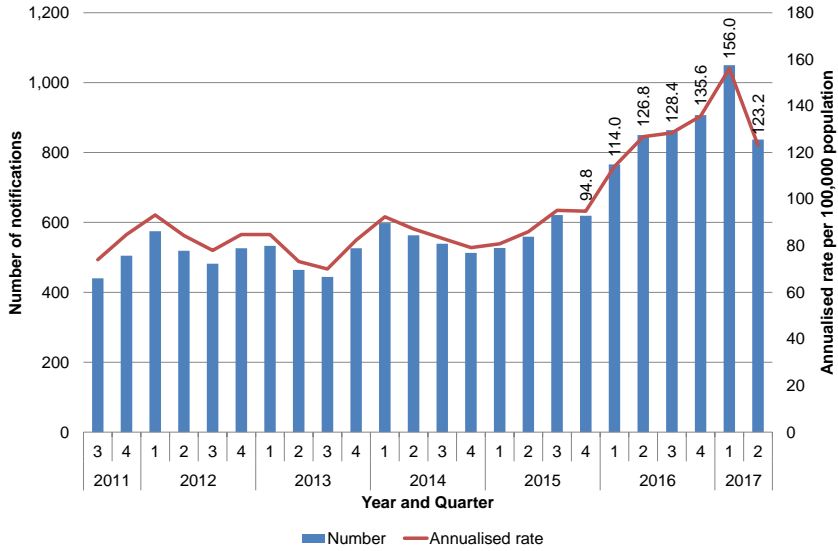
### Number of gonorrhoea notifications by sexual preference and quarter, Perth metropolitan area, WA, 2011 to 2017 YTD



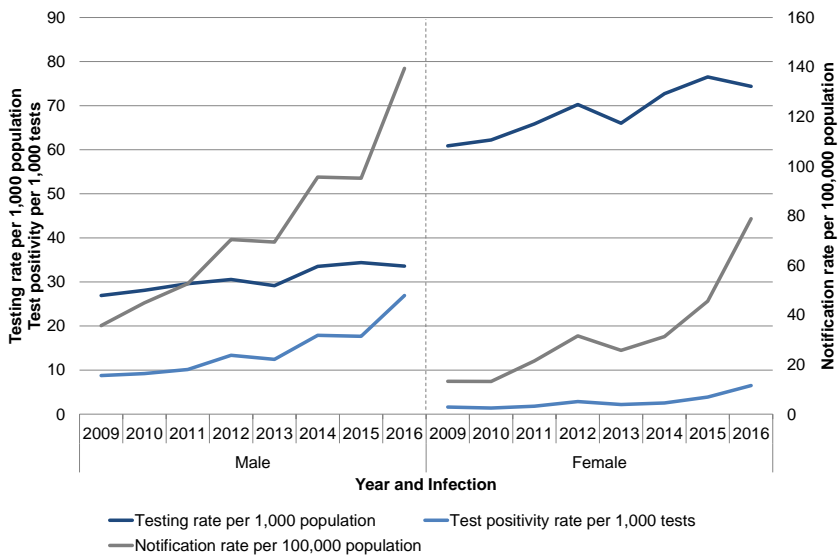
### Proportion of gonorrhoea notifications by sex and age group, Perth metropolitan area, WA, 2010 to 2016



### Number and rate of gonorrhoea notifications by quarter, WA, 2011 to 2017 YTD



### Gonorrhoea testing, notification and test positivity rate by sex, Perth metropolitan area, WA, 2009 to 2016



# Case investigation of metro gonorrhoea notifications from 1.7.17

- Enhanced Surveillance Form (ESF) & letter faxed to GP within 48 hrs of notification, info re gonorrhoea Rx & contact tracing/partner notification.
- No f-up if no GP response unless in a high priority group, i.e.
  - <16 years
  - Notified by Department of Corrective Services and discharged.
  - Aboriginal
  - Pregnant
  - Sex workers & clients
  - Homeless
  - Emergency Department (ED)
  - Hospital notified cases (excluding STI specialist services)
  - After hours GPs
  - Outside metro Perth

health.wa.gov.au

**Government of Western Australia**  
North Metropolitan Health Service  
Public Health and Ambulatory Care

Dr Doctor's Name  
Practice Name  
Address  
Suburb PCode:

**CONFIDENTIAL**

**Dear Dr** Click here to enter text.

**Re: Your patient** Patient Name: \_\_\_\_\_ DOB: Click here to enter text.

Metropolitan Communicable Disease Control has received a laboratory notification of gonorrhoea for the above named patient.

Please note the standard West Australian treatment for gonorrhoea is:  
Ceftriaxone 500mg in 2mL, 1% lignocaine intramuscularly, **AND**  
Azithromycin 1g (orally), **given together as a single treatment**

We would be grateful if you could perform the following regarding this diagnosis:  
Please complete the enclosed Enhanced Surveillance Form and return this to Metropolitan Communicable Disease Control via fax on 9222 8599.

Here is some further information that may assist you:

- Consider the need for a **full STI / BBV screen** including syphilis hepatitis B / C and HIV and advise of the window period for seroconversion and retest at 3 months.
- **Initiate contact tracing** / partner notification of sexual partners. Partners should be advised to have a full STI / BBV check including syphilis.
- Contact tracing for gonorrhoea should be a minimum of 2 months and where feasible, up to 6 months depending on sexual history and co-infection with chlamydia. Keep in mind that gonorrhoea is asymptomatic in 80% of women and 10-15% of men.
- **Gonorrhoea testing:** In asymptomatic cases, for men, collect 20mL first void urine; for women, collect an endo-cervical swab or a self-obtained lower vaginal swab as well as 20mL first void urine. Where indicated, consider anal and / or oropharyngeal swabs. For symptomatic cases, a swab of the discharge for smear and culture is also required so that antimicrobial susceptibilities can be obtained. (Do not refrigerate.)
- Consider patient review 1 to 2 weeks after treatment if contact tracing is not completed, if symptoms are still present, if infection was acquired overseas, or if a non-standard treatment was given.

Further information regarding other STI testing, management and contact tracing is available at <http://ww2.health.wa.gov.au/Silver-book> - WA Guidelines for Managing Sexually Transmitted Infections (Silver Book)

**Note:** A mandatory report should be made if you have concerns of sexual abuse based on reasonable grounds in children <18 years old. See [www.mandatoryreporting.dcp.wa.gov.au](http://www.mandatoryreporting.dcp.wa.gov.au)

As part of a confidential public health follow up of notifiable infectious diseases we would like to contact your patient, with permission from you on the attached surveillance form.

Metropolitan Communicable Disease Control      Date: Click here to enter a date.

Metropolitan Communicable Disease Control  
PO Box 332, Northbridge, WA, 6985  
Telephone (08) 92228588 Fax (08) 92228599

**Communicable Disease Control Directorate, Department of Health, Western Australia**

**Gonococcal Infection - Enhanced surveillance form**      DOH ID: 2017.

Name: \_\_\_\_\_ Sex:  Male  Female  
DOB: \_\_\_\_ / \_\_\_\_ / \_\_\_\_      Pcode: \_\_\_\_\_

Please tick one or more boxes/circles where applicable.

**1. Please indicate all sites from which specimens were taken:** (Please tick one or more)

	Positive	Negative
<input type="checkbox"/> Urine (PCR/LCR)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Urethra	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Cervix / vagina	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Pharynx / throat	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Rectum	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Eye	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other - specify _____	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Unknown	<input type="checkbox"/>	<input type="checkbox"/>

**2. Sexual exposure for this infection:**

Opposite sex only  
 Same sex only  
 Both sexes  
 No sexual contact  
 Unknown

**3. Is the patient a current sex worker?** (i.e. sex work in last 12 months)

No  
 Yes  
 Unknown

**4. Treatment initially prescribed:** (Please tick one or more)

Ceftriaxone \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
 Amoxicillin and Probenecid  
 Azithromycin \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
 Other drugs (specify) \_\_\_\_\_  
*If treatment not recommended, specify final treatment:* \_\_\_\_\_

**5. Where was the infection most probably acquired?**

Western Australia       Perth metropolitan or rural areas\*\*  
 Remote areas\*\*  
 Interstate (specify) \_\_\_\_\_  
 Overseas (specify) \_\_\_\_\_  
 Unknown

**6. Country of birth:**

Australia  
 Other (specify) \_\_\_\_\_  
 Unknown

**7. Ethnicity:**

Aboriginal/Torres Strait Islander  
 Other  
 Unknown

**8. Language mostly spoken at home:**

English  
 Other (specify) \_\_\_\_\_  
 Unknown

**9. Type of clinical facility where the diagnosis was made:**

Public hospital  
 Private hospital  
 Sexual health clinic  
 Family planning clinic  
 General practice  
 Aboriginal medical service  
 Prison/detention centre  
 Public health/community health (includes remote areas)  
 Other (specify) \_\_\_\_\_

\* Rural area = Wheatbelt, South West, Great Southern regions      \*\*Remote area = Goldfields, Kimberley, Midwest and Pilbara regions

**Comments:**  
**As part of our confidential public health follow up of notifiable infectious diseases we will endeavour to contact your patient.**  
Can we contact your patient? Yes  No  Phone Number: \_\_\_\_\_

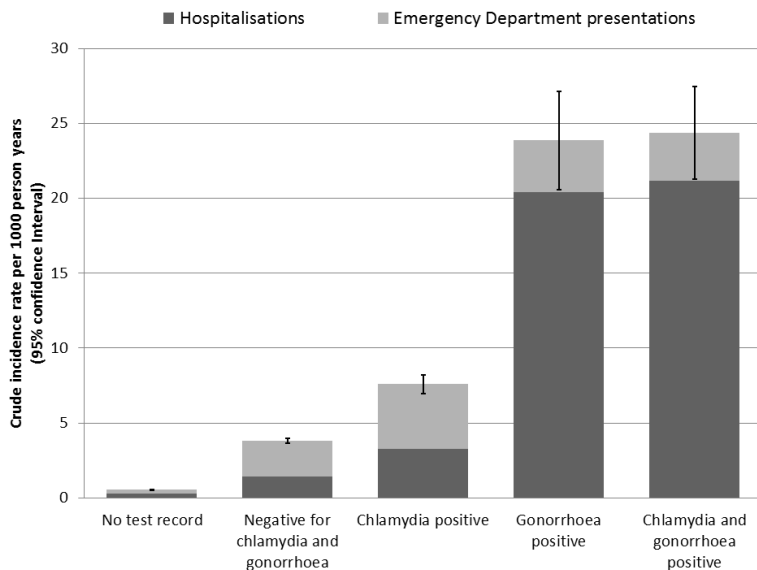
**Reporting Doctor/Nurse Details:** *Thank you for completing this questionnaire*

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Postcode: \_\_\_\_\_  
Nurse / Doctor signature: \_\_\_\_\_      Date: \_\_\_\_\_

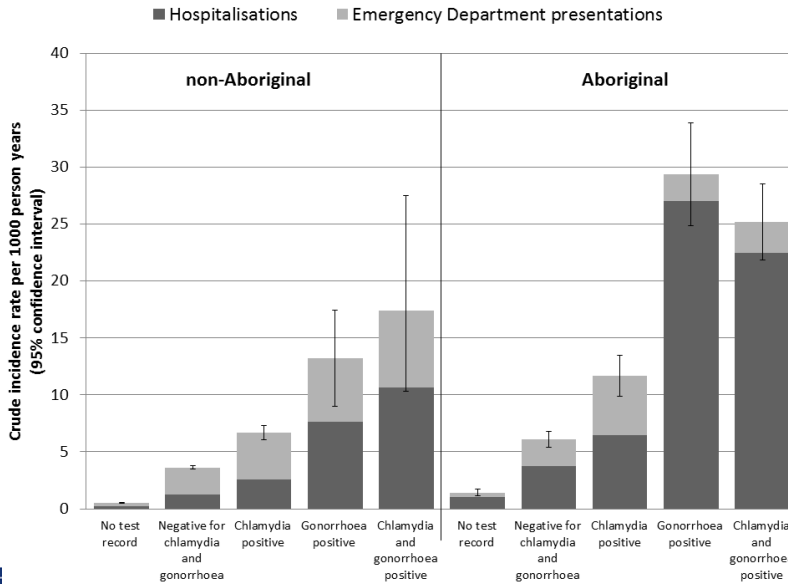
# Enhanced gonorrhoea surveillance, 2016

	Aboriginal	Non-Aboriginal
Sex	M=F	M>F
Sexual orientation	Heterosexual, <2% homosexual	Heterosexual, 23% homosexual
Health service	Public hospital, community health clinic or Aboriginal medical service	Sexual health clinic or GP
Sample	urine	urine
Rx	Amoxicillin, probenecid & azithromycin	Ceftriaxone & azithromycin

Crude incidence rate of PID by chlamydia and gonorrhoea testing and positivity, in WA women born 1974-1995, from age 15 years to 31.12.2013. (Reekie J, Donovan B, Guy R et al. Risk of pelvic inflammatory disease in relation to chlamydia and gonorrhoea testing, repeat testing, and positivity: a population-based cohort study. Clin Infect Dis, in press)



Crude incidence rate of PID by chlamydia and gonorrhoea testing and positivity, stratified by Aboriginality in WA women born 1974-1995, from age 15 years to 31.12.2013 (Reekie J, Donovan B, Guy R et al. Risk of pelvic inflammatory disease in relation to chlamydia and gonorrhoea testing, repeat testing, and positivity: a population-based cohort study. Clin Infect Dis, in press).



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## STI testing in pregnancy

- At booking visit: chlamydia, gonorrhoea, syphilis, hep B & C
- Repeat in 2<sup>nd</sup> and 3<sup>rd</sup> trimesters if high risk
- What % of women delivering in metro hospitals have had  $\geq 1$  gono/chlam test in pregnancy?
- 89%

## Number and proportion of gonorrhoea notifications with PPNG detected by PCR, WA, 2016

PHU	Notifications	GonoPPNG	%
Metropolitan	2274	54	2%
Midwest	129	26	20%
Cent-Wheatbelt	28	0	0%
Goldfields	127	1	1%
Great Southern	14	0	0%
Kimberley	464	6	1%
Pilbara	216	8	4%
Southwest	95	1	1%



PPNG detections courtesy of Dr David Speers, PathWest

[health.wa.gov.au](http://health.wa.gov.au)

## Future directions

- Qualitative interviews with metro gonorrhoea cases
- Case control study
- Genotyping
- Collaborative Health Analysis and Statistical Modelling (CHASM) – real-time, deidentified geospatial analysis of STI/BBV testing and test result data, likely to start in 2018



## Acknowledgements

We wish to thank diagnosing laboratories, doctors, practice nurses and public and community health nurses for providing the information to enable the ongoing monitoring of gonorrhoea infections in WA