



Epidemiology of Gonorrhoea in women in Australia 2007-2016

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Background

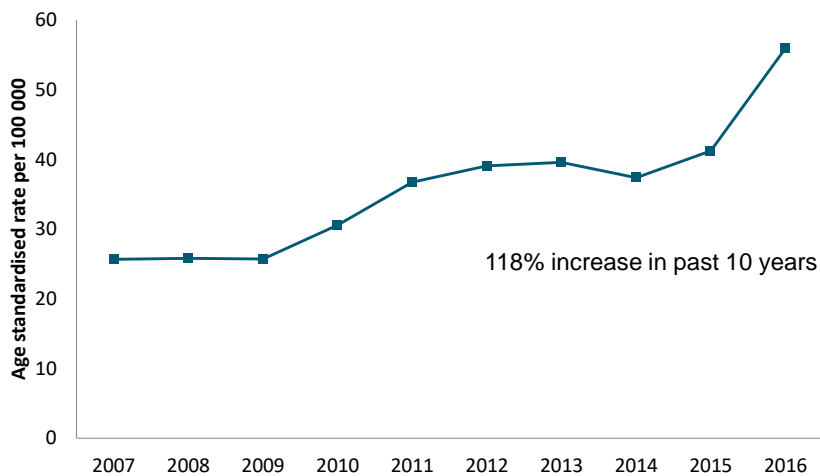
- Gonorrhoea causes pelvic inflammatory disease (PID) and infertility in women
- Gonorrhoea more likely to cause PID than chlamydia (Reekie 2014)
- Increasing antimicrobial resistance
- Concerns about rise in gonorrhoea notifications in women in the last 5 years
- Aim: to conduct a detailed analysis of national notification data in women

Gonorrhoea surveillance in Australia

- Gonorrhoea notifications reported to state/territory authorities
- National Notifiable Disease Surveillance System (NNDSS)
- Aboriginal and Torres Strait Islander status reporting
 - Restricted to six states (ACT, NT, QLD, SA, TAS and VIC) where completeness >50% in last five years
- Reporting of heterosexual contact incomplete
- Analysis focuses on women
- Crude, age standardised rates, geographical mapping

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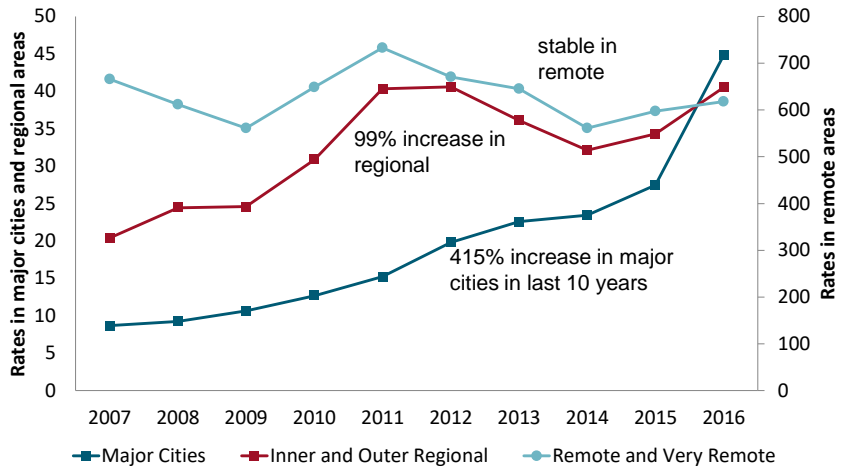
Gonorrhoea notification rate in females in Australia



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Source: States and Territories

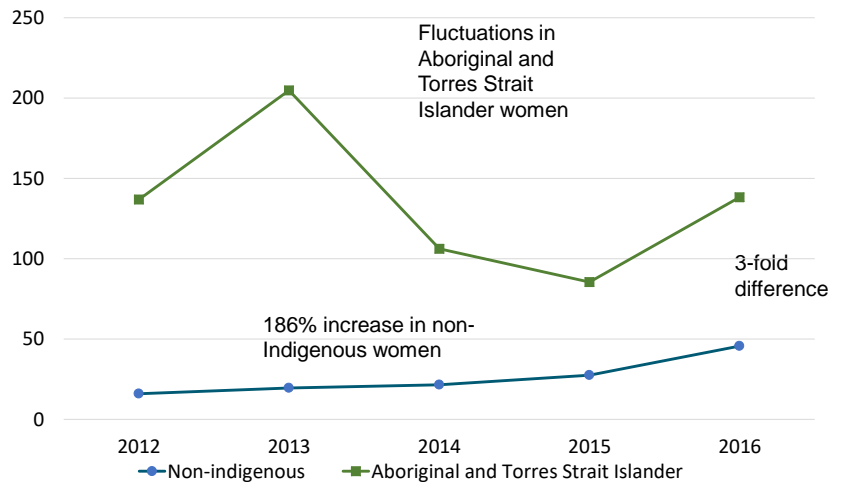
Gonorrhoea notification rate in females by region of residence



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Source: States and Territories

Gonorrhoea notification rate in females in major cities, by Aboriginal and Torres Strait Islander status*



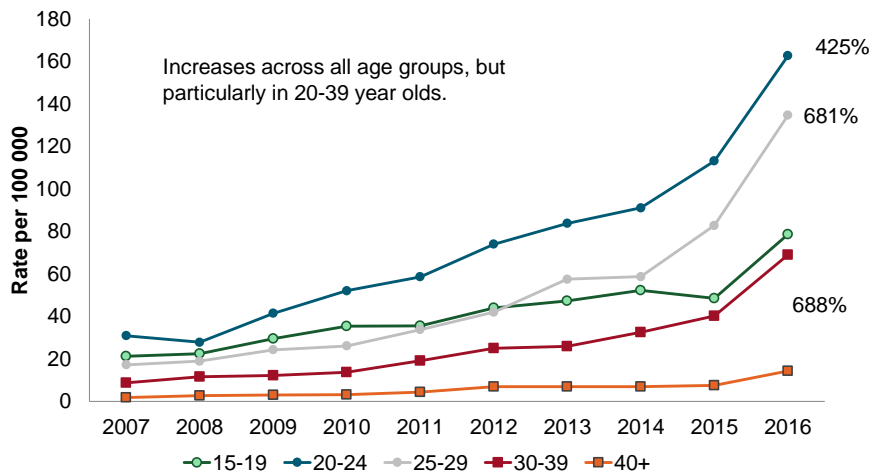
*excludes NSW and WA

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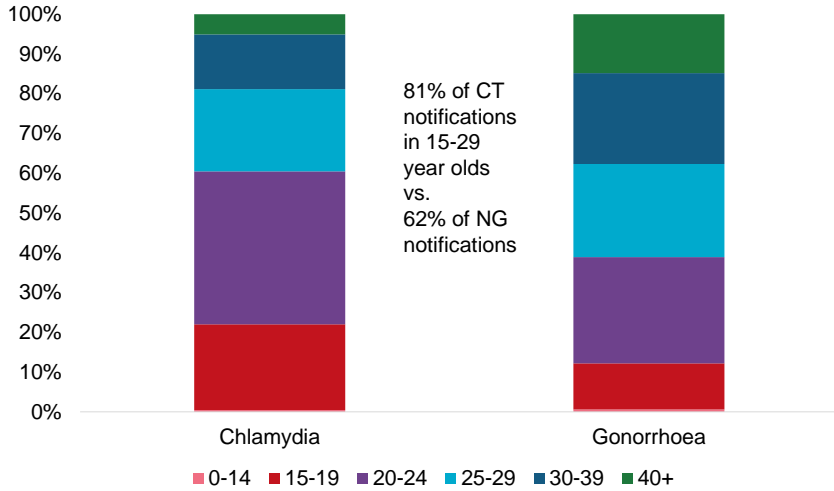
Source: States and Territories

Non-Indigenous females in major cities

Gonorrhoea notification rate, non-Indigenous females in major cities, by age group



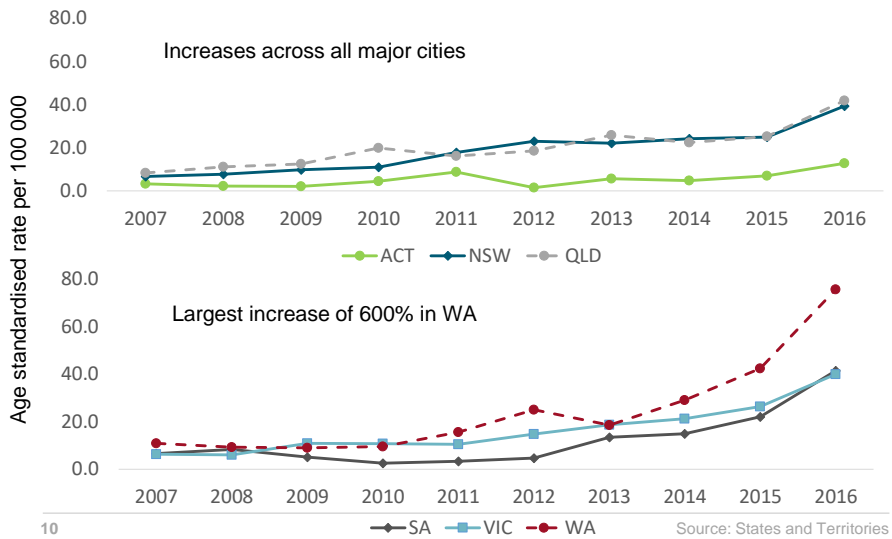
Gonorrhoea and Chlamydia notifications in non-Indigenous females, major cities, by age group, 2016



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Source: States and Territories

Gonorrhoea notification rate, non-Indigenous females in major cities, by state and territory



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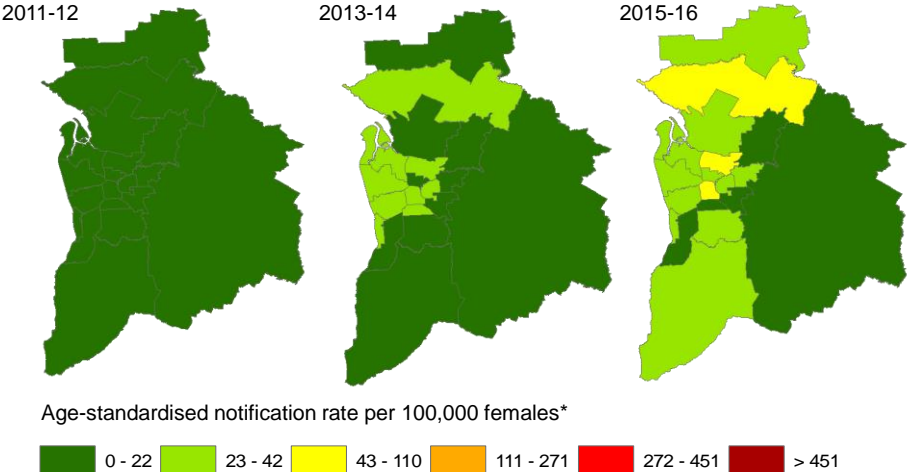
Source: States and Territories



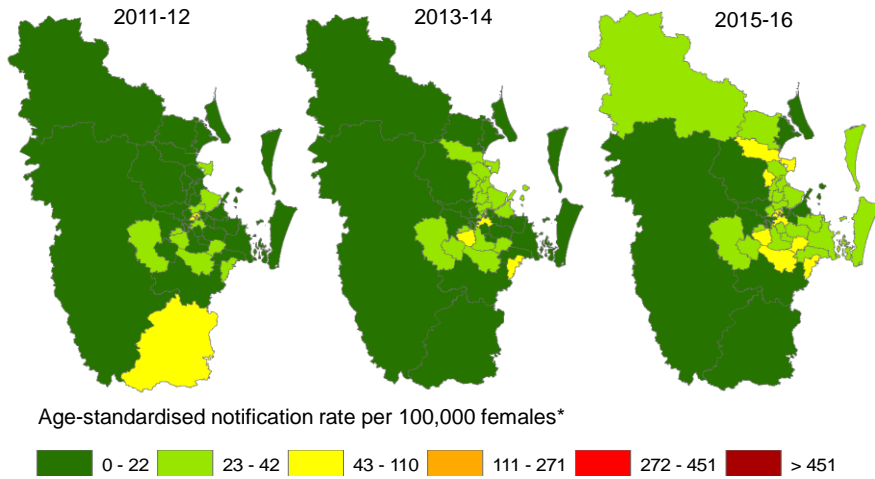
Geographical mapping of capital cities



Gonorrhoea notification rates, females, Greater Adelaide



Gonorrhoea notification rates, females, Greater Brisbane

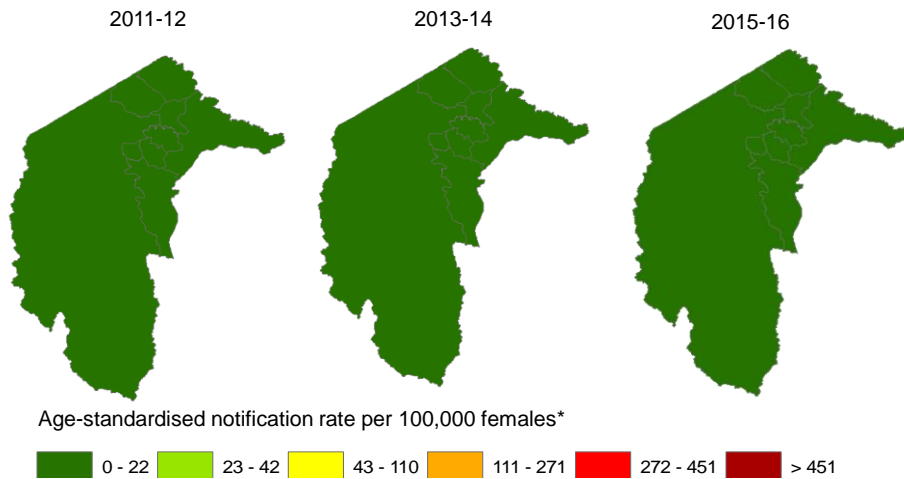


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*Based on the national distribution of SA3 notification rates.

Source: States and Territories

Gonorrhoea notification rates, females, Australian Capital Territory

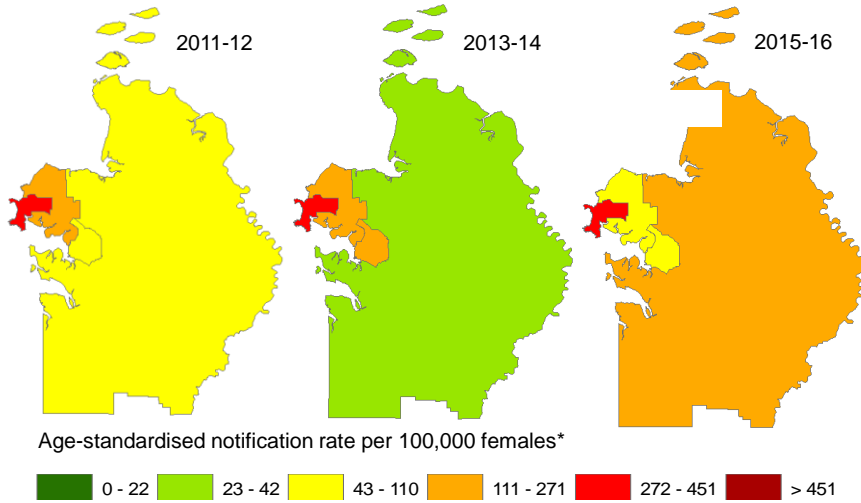


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*Based on the national distribution of SA3 notification rates.

Source: States and Territories

Gonorrhoea notification rates, females, Greater Darwin

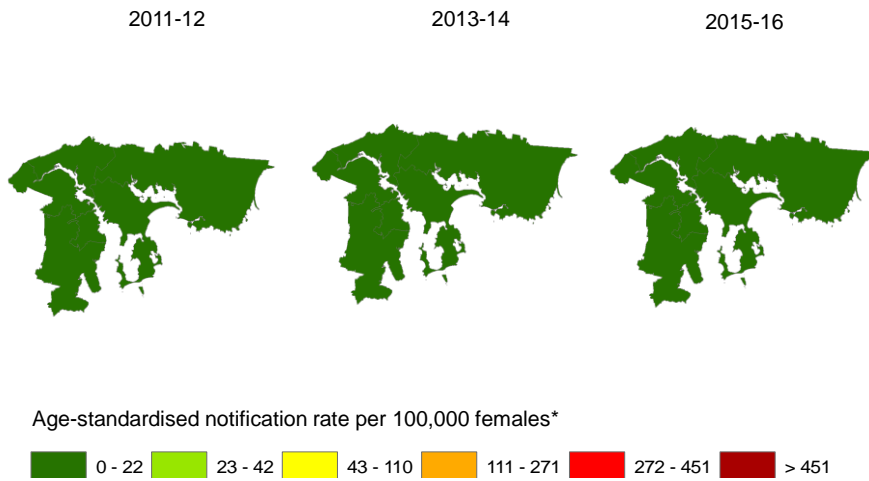


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*Based on the national distribution of SA3 notification rates.

Source: States and Territories

Gonorrhoea notification rates, females, Greater Hobart

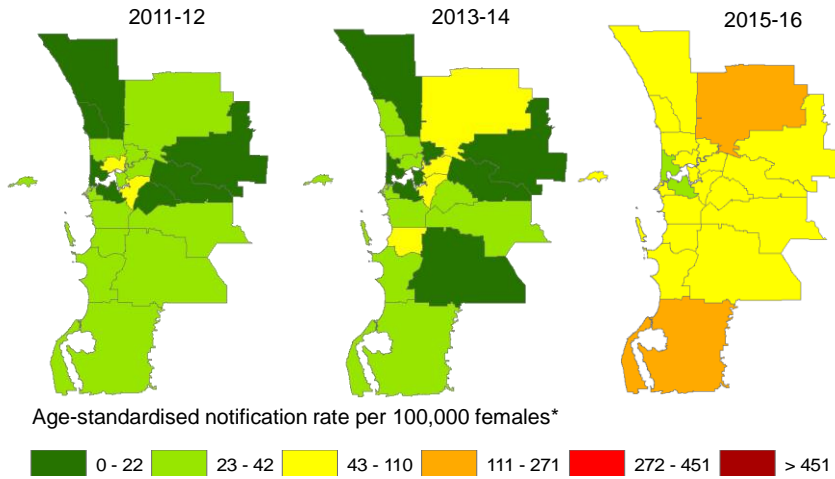


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*Based on the national distribution of SA3 notification rates.

Source: States and Territories

Gonorrhoea notification rates, females, Greater Perth

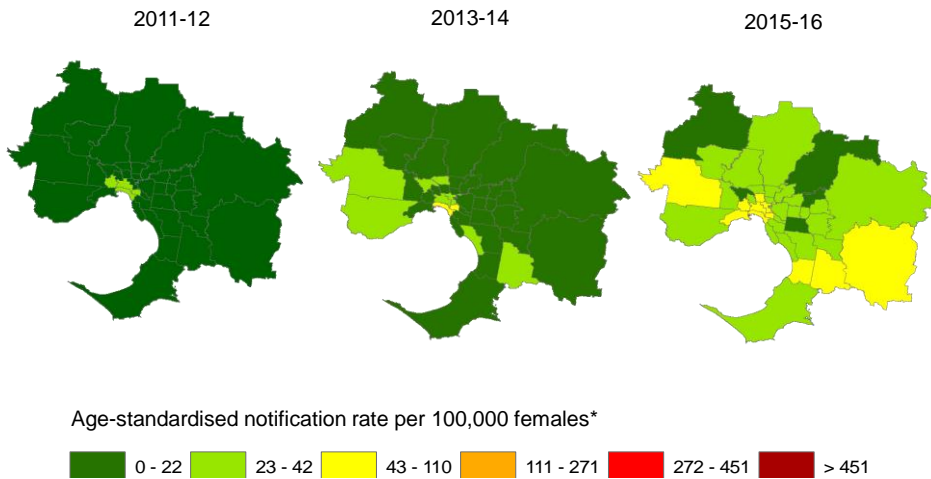


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*Based on the national distribution of SA3 notification rates.

Source: States and Territories

Gonorrhoea notification rates, females, Greater Melbourne

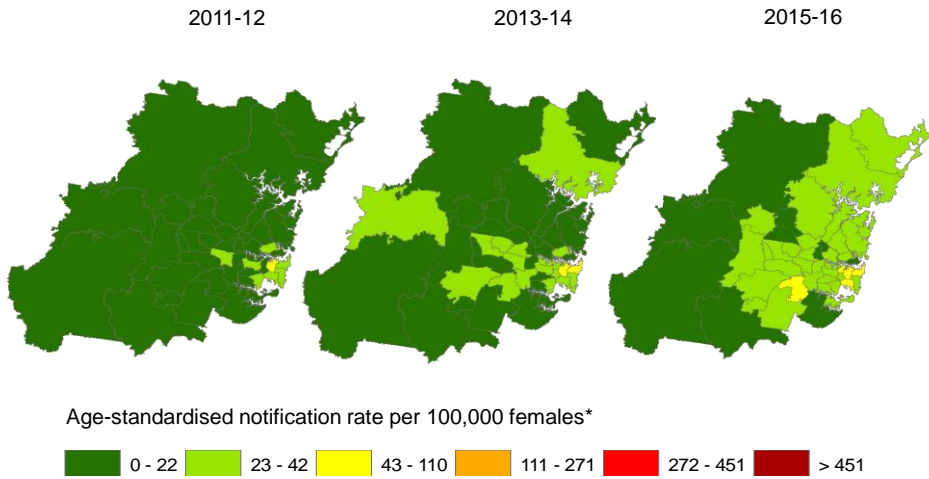


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*Based on the national distribution of SA3 notification rates.

Source: States and Territories

Gonorrhoea notification rates, females, Greater Sydney

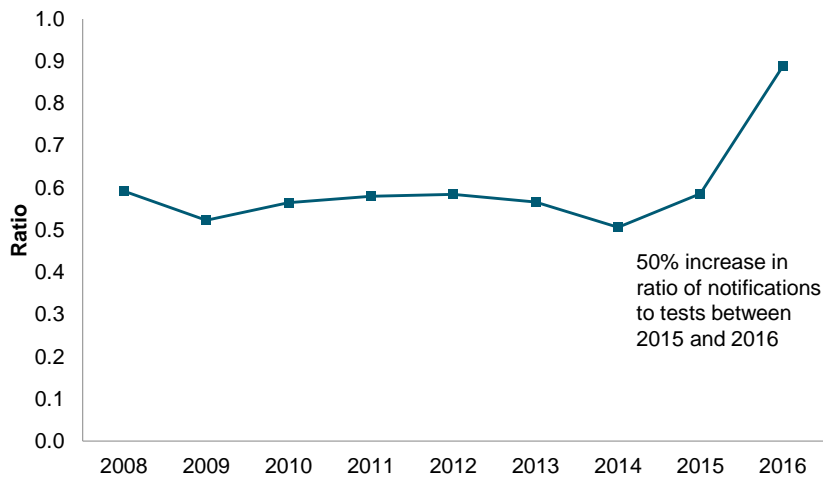


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*Based on the national distribution of SA3 notification rates.

Source: States and Territories

Ratio of gonorrhoea notifications to Medicare-rebated gonorrhoea tests, females



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Source: Medicare

Conclusions

- Increases in gonorrhoea notification rates in women
- Increase predominantly
 - Non-Indigenous women
 - Living in major cities
 - Age 20 to 39 years
 - All cities, most pronounced in WA
- Rates in Aboriginal and Torres Strait Islander women in major cities remain higher than non-Indigenous women

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Future directions

- Research into possible reasons for the increase
 - Changes in sexual behaviours – dating apps, practices?
 - Particular strain of gonorrhoea?
 - Lower socio-economic areas?
 - Inadequate health care access?
 - Combination of above?
- Analysis will now examine correlation with socio-economic status and sexual health care access
- Need for enhanced health promotion and testing strategies with young men and women

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Acknowledgements

- State and Territory health departments
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