## Chlamydia infection in Travellers



### **STI and Travellers**

 Is travel a significant risk factor for sexually transmitted infections?





#### Method

- · A retrospective study of routinely collected data
- Inclusion criteria
  - heterosexual men and women
  - > aged 30 years or under
  - > attended Melbourne Sexual Health Centre (MSHC) from
  - January 2007 to February 2017
  - Travellers: born outside Australia and present in Australia < 2 years</p>
  - Residents: born in Australia or overseas born and living in Australia >5 years
- Excludes MSM, sex workers and transgender



#### **Results**

|            | Male   | Female | Total  |
|------------|--------|--------|--------|
| Travellers | 14,172 | 17,970 | 32,142 |
| Residents  | 12,567 | 11,131 | 23,698 |





## Chlamydia positivity in females



# Chlamydia positivity in travellers by country of birth

| Country        | Chlamydia positivity<br>(%) | 95% CI (%)  | Country                       | Chlamydia positivity (%)  |
|----------------|-----------------------------|-------------|-------------------------------|---|
| European Union |                             |             | - Australia                   |   |
| United Kingdom | 12.3%                       | 11.7-13.1%  | Australia                     | 8.3% (33%C1. 8.2*8.3%)  |
| Ireland        | 10.8%                       | 9.7-12.1%   |                               |   |
| France         | 11.7%                       | 101.1-13.5% |                               |   |
| Sweden         | 12.8%                       | 10.8-15.1%  |                               |   |
| Germany        | 11.3%                       | 9.4-13.6%   |                               |   |
| Asia-Pacific   |                             |             | _                             |   |
| China          | 11.7%                       | 10.1-13.6%  |                               |   |
| New Zealand    | 12.4%                       | 10.8-14.1%  |                               |   |
| Malaysia*      | 10.0%                       | 7.5-13.3%   |                               |   |
| North America  |                             |             | * 95% Cl ove<br>resident's ch | erlaps with Australian<br>hlamydia positivity                   |
| Canada*        | 10.2 %                      | 8.6-12.1%   |                               |   |
| United States* | 7.9%                        | 6.5-9.5%    | •                             | MSHC<br>MELBOURNE SEXUAL HEALTH CENTRE<br>Part of Alfred Health |

### **Risk factors for chlamydia infection**

|                                 | Male (N=26,739)        | Female (N=29,101)                      |  |
|---------------------------------|------------------------|--|--|
|                                 | AOR (95%CI)            | AOR (95%CI)                            |  |
| Chlamydia contact               |                        |  |  |
| Yes                             | 9.5(8.4-10.8, p<0.001) | 7.1 (6.2-8.1, p<0.001)                 |  |
| Age                             |                        |  |  |
| ≤ 20                            | 1.3 (1.1-1.5, p=0.008) | 2.0 (1.7-2.3, p<0.001)                 |  |
| 21-25                           | 1.4 (1.3-1.6, p<0.001) | 1.5 (1.3-1.6, p<0.001)                 |  |
| Number of partners in last 12 m | onths                  |  |  |
| ≥4                              | 1.6 (1.4-1.8, p<0.001) | 1.4 (1.3-1.5, p<0.001)                 |  |
| Condom use in last 12 months    |                        |  |  |
| Inconsistent                    | 2.7 (2.2-3.2, p<0.001) | 2.0 (1.7-2.4, , p<0.001)               |  |
| Genital symptoms                |                        |  |  |
| Yes                             | 2.8 (2.6-3.1, p<0.001) | 1.2 (1.0-1.3, p=0.004)                 |  |
| Travellers                      |                        |  |  |
| Yes                             | 1.4 (1.2-1.5, p<0.001) | 1.4 (1.3-1.5, p<0.001)                 |  |
|                                 |                        | MSHC<br>MEDUURNE SERVIAL HEALTH CENTRE |  |

#### Summary

- Being a traveller is an independent risk factor for chlamydia infection in young heterosexuals.
- Travellers should be included as a priority population in service delivery and planning of sexual health clinics.
- Important to have ongoing provision of sexual health services for travellers to prevent onward transmission of STI in local and traveller populations.







## Call for Papers

Gonorrhoea: tackling the global epidemic in the era of rising antimicrobial resistance

Guest Editors: Eric Chow (Australia), Jason Ong (UK), Deborah Williamson (Australia), Philippe Mayaud (UK), Gwenda Hughes (UK), Teodora Wi (Switzerland)

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Submission deadline: 1 December 2018 Contact Jason Ong: jong@mshc.org.au

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