

# Prevalence & risk factors for oropharyngeal Chlamydia trachomatis infection in men who have sex with men attending a large urban sexual health clinic

Loomba PN<sup>1</sup>, Knight V<sup>1,2</sup>, McNulty A<sup>1,3</sup>

1. Sydney Sexual Health Centre, Sydney, NSW, Australia
2. The Kirby Institute, University of New South Wales, Sydney, NSW, Australia.
3. School of Public Health and Community Medicine, University of NSW, Kensington, NSW

## Background

The prevalence of Chlamydia trachomatis (CT) and Neisseria gonorrhoea (NG) continues to increase globally especially amongst men who have sex with men (MSM). In Australia, STI and HIV affect MSM disproportionately to other groups, with Chlamydia trachomatis and Neisseria gonorrhoea (GC) among the most common (1). Given that many STI are asymptomatic regular testing and timely treatment remains the cornerstone of effective population health control. In response to this many countries have introduced screening guidelines (2, 3).

In 2014, the Australian STI Gay Men's Action Group (STIGMA) guidelines were updated and routine screening for oropharyngeal Chlamydia trachomatis (OCT) was a new recommendation.

## Aim

Identify the prevalence and risk factors associated with oropharyngeal Chlamydia trachomatis (CT) in patients attending SSHC between 1 October 2012 and 31 April 2014.

## Methodology

At SSHC, MSM have been routinely screened for OCT using the Roche Cobas duplex assay for NG and CT since the 29<sup>th</sup> September 2012. Retrospective data was extracted on all MSM who were diagnosed with OCT between 1/10/2012 and 31/04/2014. Controls consisted of MSM who only had a negative OCT swab in the study period and each patient was only counted once.

Summary statistics were used to describe the characteristics of the study group. Categorical variables were compared with Chi-2 tests and continuous variables were compared using Ranksum tests. OCT prevalence was calculated on all MSM tests conducted at the service during the study period.

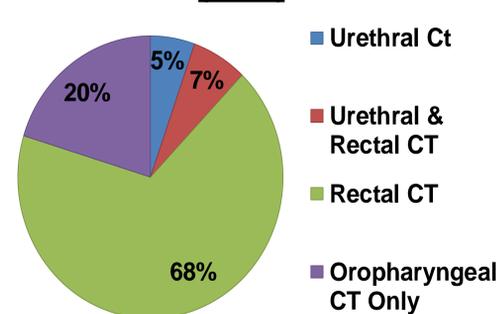
## Results

In the study period, a total of 74 of 2920 MSM were diagnosed with OCT. The 2920 MSM had a total of 11,226 tests performed, an average of 3.8 tests per MSM during the study period. Demonstrating an OCT prevalence in MSM of 1%.

Compared to controls, MSM with OCT were younger ( $p=0.01$ ), more likely to present as a STI contact ( $p=0.04$ ), report  $\geq 5$  partners in 3 months ( $p<0.001$ ), and have a STI co-infection ( $p<0.001$ ). Of the positive OCT (74) cases, 80% (59) of MSM had CT co-infection at another site, 6% (4) with urethral CT and 74% (55) with rectal CT.

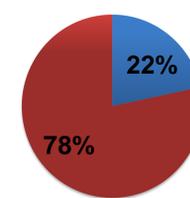
Patient characteristics	Throat CT positive	Throat CT negative	Stats
Demographics	n=74	n=2846	
Median age (IQR)	31 (27-38)	33 (28-41)	0.013*
Indigenous	0 (0)	14 (0.5)	0.54
Born overseas	40 (55)	1431 (50)	0.79
English language	65 (88)	2361 (83)	0.52
Contact of an STI	11 (15)	235 (8)	0.04
Residing in "Gay Sydney"	25 (34)	697 (25)	0.06
Symptoms	13 (18)	676 (24)	0.20
<b>Sexual Behaviour</b>			
$\geq 5$ male partners in last 3 months	46 (62)	1024 (36)	<0.001
$\geq 20$ male partners in last 12mths	41 (55)	796 (28)	<0.001
Median number male partners in last 3 months (IQR)	6 (3-10)	3 (1-5)	<0.001*
Median number male partners in last 12 months (IQR)	20 (9-35)	6 (2-14)	<0.001*
<b>Other risk factors</b>			
Current sex worker	1 (1)	131 (5)	
STI# co-infection at diagnosis visit	51 (69%)	383 (14%)	<0.001

Anogenital CT co-infection in MSM with OCT (n=74)



Other STI co-infection in MSM with OCT (n=74)

- Oropharyngeal CT Only
- Any STI co-infection (GC, CT, infectious syphilis, MG, LGV)



## Discussion

The majority of MSM with positive OCT swabs would have been treated regardless, due to CT co-infection at another site. Based on the study prevalence, the cost benefit of screening in this population should be reconsidered.