

**Conclusion** Geosexually isolated participants demonstrated “convection mixing”, with repeated movement from peripheral, to downtown, back to peripheral areas. More attention should be paid to identifying STI reservoirs outside of core areas.

**Disclosure** No significant relationships.

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#### LOW IMMUNITY TO HEPATITIS A AMONGST MEN WHO HAVE SEX WITH MEN ATTENDING A LARGE SEXUAL HEALTH CLINIC IN MELBOURNE, AUSTRALIA

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**Background** Recent outbreaks of hepatitis A have been reported globally, and increasing numbers of cases and deaths are being reported in Australia, particularly among men who have sex with men (MSM). The critical vaccination threshold for hepatitis A has been estimated to be  $\geq 70\%$  to prevent outbreaks in MSM. This study aimed to determine the level of immunity to hepatitis A among MSM since 2012.

**Methods** This was a retrospective audit of serological testing data from first-time MSM attendees at the Melbourne Sexual Health Centre (MSHC) from 2012–2018. We determined the proportion of MSM who were tested and who had serological detection of hepatitis A antibodies, stratified by age and year. We used logistic regression to investigate factors associated with detection of hepatitis A antibodies.

**Results** There were 16,615 new MSM attendees at MSHC over the 7-year period, of which 9,719 (58%, 95% CI:57,59%) were tested for hepatitis A antibodies. There was a 2% annual increase in the proportion of men tested over time (from 60% in 2012 to 69% in 2018;  $p=0.025$ ). Of those tested, 44% ( $n=4,304$ , 95% CI:43,45%) of men had hepatitis A antibodies detected at their first visit, but there was no change over time ( $p=0.201$ ). However, compared to our last audit that spanned 2002–2011, a higher proportion of young MSM (aged  $<20$  years) were tested for hepatitis A at their first visit (73% vs 33% before 2012) and had antibodies detected (38% vs 19% before 2012). Detection of hepatitis A antibodies was associated with age  $\geq 30$  (Adjusted OR=1.89, 95% CI:1.77,2.02), being born overseas vs Australia/New Zealand (AOR=1.23, 95% CI:1.13,1.33), and consistent condom use in the last 12 months (AOR=1.19, 95% CI:1.12,1.28).

**Conclusion** Hepatitis A immunity amongst MSM remains far below the estimated 70% required to prevent outbreaks. Measures including increased testing and higher vaccination coverage are needed to limit the number of cases and deaths.

**Disclosure** No significant relationships.

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#### DO SEXUAL PRACTICES DIFFER BY AGE AMONG GAY AND BISEXUAL MEN? A CROSS-SECTIONAL STUDY IN MELBOURNE, AUSTRALIA

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**Background** Unlike chlamydia, gonorrhoea is considerably more common in young men who have sex with men (MSM). This may relate to differences in sexual practices although currently studies predominantly focus on anal sex with very limited data on fellatio and kissing. This study aimed to examine a range of different sexual practices among MSM.

**Methods** MSM who attended the Melbourne Sexual Health Clinic in 2017 were invited to participate in a survey on nine sexual practices engagement with their most recent regular and/or casual partner(s). This included: kissing, touching penises, mutual masturbation, giving/receiving fellatio, giving/receiving rimming as well as insertive/receptive anal sex. Chi-squared trend test was used to examine the age patterns of different sexual practice.

**Results** 1601 men were included with a median age of 30 (IQR 25–36). Kissing was the most common practice among casual partners (92.4%), followed by giving fellatio (85.8%) and receiving fellatio (83.9%). The least common activity was giving rimming (38.0%), followed by receiving rimming (45.8%). The proportion of kissing decreased with increasing age (95.0% among men aged  $<30$  vs 79.1% among men aged  $\geq 50$ ,  $p_{\text{trend}} < 0.001$ ). Receiving rimming also decreased with increasing age ( $p_{\text{trend}} = 0.034$ ). Receptive anal sex was more common among younger men ( $p_{\text{trend}} < 0.001$ ) but insertive anal sex was more common among older men than younger men ( $p_{\text{trend}} = 0.002$ ). Sexual activity had fewer correlations with age among regular partners. Younger men were more likely to masturbate mutually ( $p_{\text{trend}} = 0.031$ ) and receive anal sex from their regular partners ( $p_{\text{trend}} = 0.013$ ).

**Conclusion** Age is strongly associated with sexual practices among casual partners but less so among regular partners. Younger men more likely to engage in activities associated with gonorrhoea transmission such as kissing and receptive rimming.

**Disclosure** No significant relationships.

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#### SEXUAL PRACTICES AND HEALTHCARE USE OF MEN WHO HAVE SEX WITH MEN ONLY AND MEN WHO HAVE SEX WITH MEN AND WOMEN

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**Background** It is unclear why gonorrhoea and syphilis rates are increasing among women in Australia. One possible reason is transmission to women from men who have sex with men and women (MSMW). We aimed to explore sexual practices and healthcare use of MSMW and men who have sex with men only (MSMO).

**Methods** Semi-structured interviews were conducted. Participants were recruited from a public sexual health clinic and via community advertisements in Melbourne, Australia. Men were eligible if they were cisgender, aged 18+ years and had sex with either men or men and women in the last 12 months. Data were analysed thematically.