

## Supplementary Material

### Seasonal variations in kissing and sexual activities among men who have sex with men in Melbourne, Australia: implications for seasonal sexually transmissible infection preventions and interventions

*Eric P. F. Chow<sup>A,B,C</sup>, Lenka A. Vodstrcil<sup>A,B</sup> and Christopher K. Fairley<sup>A,B</sup>*

<sup>A</sup>Melbourne Sexual Health Centre, Alfred Health, 580 Swanston Street, Carlton, Vic. 3053, Australia.

<sup>B</sup>Central Clinical School, Monash University, 99 Commercial Road, Melbourne, Vic. 3004, Australia.

<sup>C</sup>Corresponding author. Email: eric.chow@monash.edu

**Table S1.** The mean number of male partners among 4391 men who have sex with men, stratified by month

**Table S2.** The mean number of male partners among 1437 men who have sex with men who reported their partners within one season, stratified by Australian seasons

**Table S3.** The incidence rate ratio of the number of male partners among 1437 men who have sex with men, stratified by Australian seasons

**Table S1. The mean number of male partners among 4391 men who have sex with men, stratified by month**

Month-Year	Number of MSM, <i>N</i>	Kissing-only partners	Sex-only partners	Kissing-with-sex partners
		<i>Mean (95% CI)</i>	<i>Mean (95% CI)</i>	<i>Mean (95% CI)</i>
March-2017	405	3.73 (3.20 to 4.26)	1.35 (1.06 to 1.65)	4.95 (4.47 to 5.43)
April-2017	411	4.00 (3.44 to 4.56)	1.49 (1.17 to 1.81)	4.58 (4.14 to 5.02)
May-2017	378	4.19 (3.58 to 4.80)	1.58 (1.22 to 1.93)	4.79 (4.31 to 5.27)
June-2017	344	4.44 (3.76 to 5.11)	1.45 (1.11 to 1.80)	5.01 (4.48 to 5.53)
July-2017	357	3.74 (3.17 to 4.30)	1.57 (1.21 to 1.93)	4.67 (4.19 to 5.15)
August-2017	389	3.81 (3.26 to 4.36)	1.60 (1.24 to 1.95)	5.15 (4.65 to 5.66)
September-2017	345	4.12 (3.49 to 4.75)	1.21 (0.92 to 1.49)	5.50 (4.93 to 6.07)
October-2017	329	5.09 (4.30 to 5.88)	1.39 (1.05 to 1.73)	5.60 (5.00 to 6.19)
November-2017	330	3.80 (3.20 to 4.40)	1.32 (1.00 to 1.65)	4.33 (3.86 to 4.80)
December-2017	358	4.15 (3.53 to 4.78)	2.56 (1.98 to 3.13)	4.65 (4.16 to 5.13)
January-2018	405	5.00 (4.30 to 5.69)	1.56 (1.22 to 1.90)	4.89 (4.42 to 5.36)
February-2018	340	5.59 (4.74 to 6.43)	1.65 (1.26 to 2.03)	5.89 (5.28 to 6.50)

**Table S2. The mean number of male partners among 1437 men who have sex with men who reported their partners within one season, stratified by Australian seasons**

Australian seasons (months)	Number of MSM, <i>N</i>	Kissing-only partners	Sex-only partners	Kissing-with-sex partners
		<i>Mean (95% CI)</i>	<i>Mean (95% CI)</i>	<i>Mean (95% CI)</i>
Autumn (March-May)	378	4.19 (3.59 to 4.79)	1.58 (1.23 to 1.92)	4.79 (4.30 to 5.28)
Winter (June-August)	389	3.81 (3.27 to 4.35)	1.60 (1.25 to 1.94)	5.15 (4.64 to 5.67)
Spring (September-November)	330	3.80 (3.21 to 4.39)	1.32 (1.01 to 1.64)	4.33 (3.85 to 4.80)
Summer (December-February)	340	5.59 (4.76 to 6.42)	1.65 (1.27 to 2.02)	5.89 (5.27 to 6.51)

**Table S3. The incidence rate ratio of the number of male partners among 1437 men who have sex with men, stratified by Australian seasons**

<b>Australian seasons (months)</b>	<b>Number of MSM, <i>N</i></b>	<b>Kissing-only partners</b>	<b>Sex-only partners</b>	<b>Kissing-with-sex partners</b>
		<i>IRR (95% CI)</i>	<i>IRR (95% CI)</i>	<i>IRR (95% CI)</i>
Autumn (March-May)	378	1 (ref)	1 (ref)	1 (ref)
Winter (June-August)	389	0.91 (0.74 to 1.11)	1.01 (0.75 to 1.37)	1.08 (0.93 to 1.24)
Spring (September-November)	330	0.91 (0.74 to 1.12)	0.84 (0.61 to 1.16)	0.90 (0.78 to 1.05)
Summer (December-February)	340	1.33 (1.09 to 1.64)	1.04 (0.76 to 1.43)	1.23 (1.06 to 1.42)
<i>P</i> <sub>trend</sub>	-	0.010	0.913	0.061