

**Trends in hepatitis C virus seroprevalence and associated risk factors among men who have sex with men in Montréal: results from three cross-sectional studies (2005, 2009, 2018)**

**Supplementary files**

## Supplementary file 1: Additional references

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Supplementary file 2: Eligibility criteria for participating in the Argus 1 (2005), Argus 2 (2009), and Engage (2018) studies conducted in Montréal, Québec (Canada).

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<b>Study</b>	<b>Eligibility criteria</b>
<b>Argus 1 (2005)</b>	<ul style="list-style-type: none"><li>- Gender-identify as a man</li><li>- Have ever had sex with a man</li><li>- Be 18 years of age or older</li><li>- Speak French or English</li><li>- Reside on the island of Montréal</li><li>- Be able to provide informed consent</li></ul>
<b>Argus 2 (2009)</b>	<ul style="list-style-type: none"><li>- Gender-identify as a man</li><li>- Have ever had sex with a man</li><li>- Be 18 years of age or older</li><li>- Speak French or English</li><li>- Reside in the province of Quebec</li><li>- Be able to provide informed consent</li></ul>
<b>Engage (2018)</b>	<ul style="list-style-type: none"><li>- Gender-identify as a man</li><li>- Report sexual activity with a man in the past 6 months</li><li>- Be 16 years of age or older</li><li>- Be able to complete a computer-based questionnaire in French or English</li><li>- Reside in the greater Montréal region</li><li>- Be able to provide informed consent</li><li>- Receive a voucher for participation in the study, or be purposively invited to be an initial “seed”</li></ul>

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Supplementary file 3: Standardized HCV seroprevalence among all men who have sex with men (MSM) and stratified by HIV status, by injection drug use status, and by age group, in 2005, 2009, and 2018 in Montréal, Québec (Canada).

Group	Standardized HCV seroprevalence (95% confidence interval)		
	2005	2009	2018
<b>All MSM</b>	7% (3-10)	8% (1-9)	8% (4-11)
<b>MSM living with HIV</b>	17% (6-25)	8% (2-16)	17% (6-29)
<b>HIV-negative MSM</b>	6% (3-8)	8% (0-9)	6% (3-9)
<b>MSM with a history of IDU</b>	74% (62-85)	37% (8-48)	60% (42-77)
<b>MSM without a history IDU</b>	3% (1-4)	2% (0-3)	2% (1-4)
<b>MSM aged &lt;30 years old</b>	6% (2-9)	3% (0-3)	0% (0-1)
<b>MSM aged 30-44 years old</b>	9% (3-12)	10% (1-12)	8% (2-15)
<b>MSM aged ≥45 years old</b>	6% (1-9)	9% (0-12)	17% (9-24)
<b>HIV-negative MSM without a history of IDU</b>	2% (1-3)	2% (0-4)	1% (0-2)

IDU: injection drug use; MSM: men who have sex with men.

Supplementary file 4: Adjusted prevalence ratios of multiplicative interaction terms and relative excess risk due to interaction of selected potential risk factors for HCV seropositivity pooling three cross-sectional surveys of men who have sex with men in Montréal, Québec (Canada; 2005, 2009, 2018).

<b>Interaction studied</b>	<b>Exponentiated coefficient of the multiplicative interaction term (95% confidence interval)</b>	<b>Relative excess risk due to interaction (95% confidence interval)</b>
<b>HIV infection; CAS with a man of serodiscordant/ unknown HIV status (P6M)</b>	1.0 (0.4; 2.3)	-0.5 (-1.5; 0.9)
<b>HIV infection; &gt;5 male sexual partners (P6M)</b>	0.9 (0.5; 1.6)	-0.8 (-1.7; 0.1)
<b>HIV infection; transactional sex (P6M)</b>	0.6 (0.4; 0.9)	-3.3 (-4.6; -2.3)
<b>HIV infection; group sex (P6M)</b>	0.9 (0.5; 1.7)	-0.8 (-1.7; 0.2)
<b>History of IDU; CAS with a man of serodiscordant/ unknown HIV status (P6M)</b>	1.0 (0.5; 1.9)	-6.7 (-10.2; -4.1)
<b>History of IDU; &gt;5 male sexual partners (P6M)</b>	1.1 (0.7; 1.8)	-6.5 (-10.6; -3.8)
<b>History of IDU; transactional sex (P6M)</b>	0.9 (0.6; 1.6)	-8.9 (-13.9; -5.6)
<b>History of IDU; group sex (P6M)</b>	2.0 (1.1; 3.7)	-4.6 (-7.9; -1.7)

CAS: condomless anal sex; IDU: lifetime injection drug use; P6M: past 6 months.

These interaction terms were included in the multivariable model described in table 4, separately.

All the variables used in the interaction terms are binary (coded 0,1).