



HUMAN PAPILLOMAVIRUS (HPV) VACCINE UPTAKE OVER 12 MONTHS AMONG GAY, BISEXUAL, AND OTHER MEN WHO HAVE SEX WITH MEN (GBM) LIVING WITH HIV IN THREE CANADIAN CITIES

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Background

- ▶ HPV is an important HIV co-infection that can be prevented by vaccination
- ▶ GBM and/or those living with HIV aged ≤ 26 years are eligible for free HPV vaccine in BC (since 9/2015), Quebec (1/2016), and Ontario (9/2016; GBM only)
- ▶ **Objective:** To measure 12-month changes in HPV vaccine uptake among community-recruited cohorts of GBM living with HIV

Methods

- ▶ **Population:** Sexually active GBM living with HIV aged ≥ 16 years in Montreal, Toronto, and Vancouver (Engage Cohort Study)
- ▶ **Recruitment:** 2/2017 – 8/2019
- ▶ **Follow-up:** 12 months
- ▶ **Outcome:** Self-reported receipt of ≥ 1 dose of HPV vaccine during follow-up
- ▶ **Analysis:** Univariable logistic regression to derive odds ratios (OR) for incident HPV vaccination during follow-up among unvaccinated participants at baseline

Results

Table 1. Participant characteristics at baseline (n=295)

Characteristic	MTL N=155	TOR N=61	VAN N=79
Median age (years)	51	40	52
% identify as gay	91%	89%	91%
% out to HCP	92%	98%	92%
% private insurance	34%	36%	37%
% AGW dx, past 6m	3%	5%	4%

AGW=anogenital warts; HCP=healthcare provider; MTL=Montreal; TOR=Toronto; VAN=Vancouver

Men in Toronto were younger and more likely to report being “out” to their healthcare provider.

- ▶ **295** Engage participants living with HIV completed ≥ 1 follow-up visit (66% retention)
- ▶ Median follow-up: **12 months** (2018-2021)
- ▶ Less than half of GBM living with HIV were vaccinated (≥ 1 dose) against HPV by follow-up: **10.3%** in Montreal, **44.3%** in Toronto, and **27.8%** in Vancouver
- ▶ Among the 10 participants eligible for public programs (aged ≤ 26 years), **80.0%** were vaccinated by follow-up

Results

Figure 1. Change in HPV vaccination from baseline to 12-month follow-up

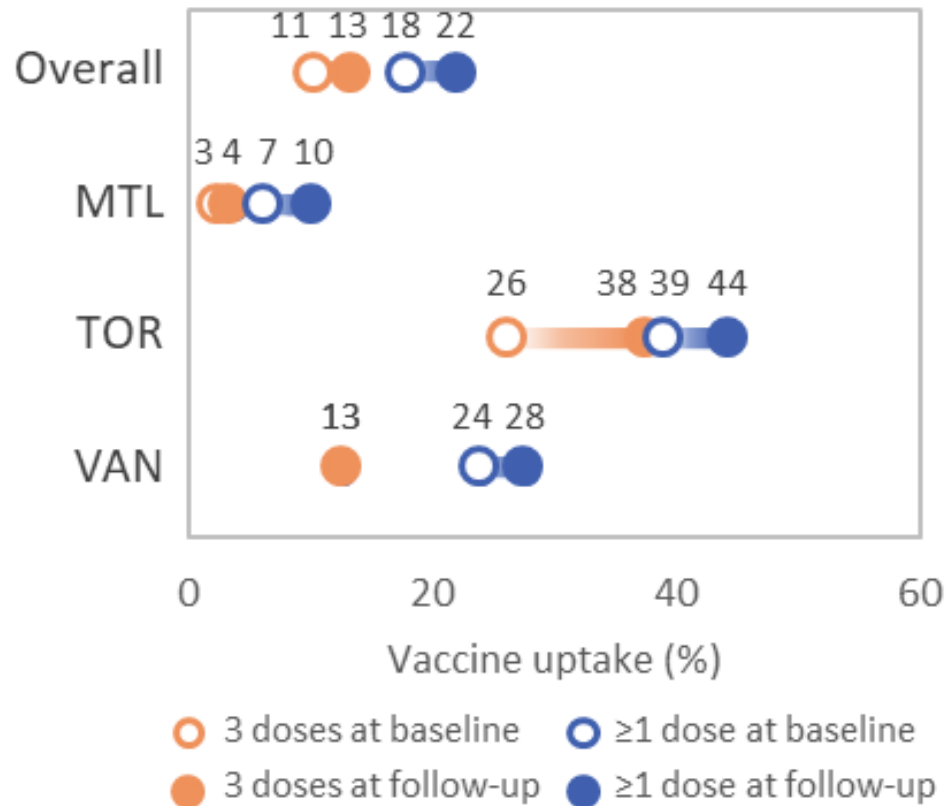
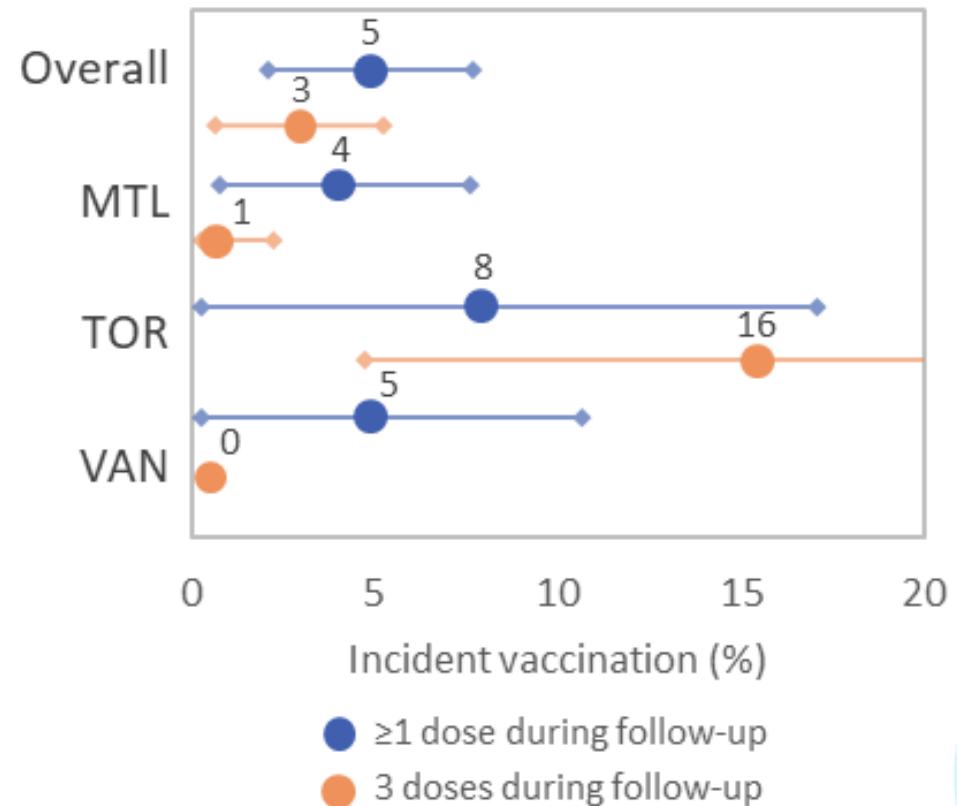


Figure 2. Incident HPV vaccination during 12-month follow-up among unvaccinated participants



Key Findings

- ▶ Baseline factors associated with incident vaccination (≥ 1 dose) during 12-month follow-up among unvaccinated participants included:
 - ▶ Age ≤ 45 years (OR=3.99, 95%CI=1.16-13.61)
 - ▶ Private insurance (OR=3.34, 95%CI=1.02-10.88)
 - ▶ Anogenital wart diagnosis, past 6 months (OR=7.17, 95%CI=1.28-40.08)
- ▶ Despite being at higher risk for HPV, less than half of GBM living with HIV were vaccinated against HPV in Canada's three largest cities.
- ▶ Most were ineligible for publicly-funded programs, although research is ongoing to determine clinical benefit of HPV vaccine in older males.

Findings suggest the need for expanded public funding or insurance coverage for HPV vaccines for people living with HIV.

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