

# EPIDEMIOLOGY OF INJECTION DRUG USE AND PREVENTION OF HCV INFECTION AMONG PEOPLE WHO INJECT DRUGS IN CANADA, 2011-2016

## Authors:

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**Background:** Accurate estimates of the number of people who inject drugs (PWID) are critical for informing harm reduction and treatment service planning as well as estimating the number of people living with HCV. We aimed to calculate the number of PWID in Canada and annual coverage of opioid substitution therapy (OST) and needle-syringes for PWID.

**Methods:** The number of PWID was estimated for 9/13 Canadian provinces with available data on the number of methadone recipients in 2011 (benchmark data). Benchmark data were transformed to PWID population size using a multiplier method to adjust for (1) the probability that a given methadone recipient injected recently and (2) the probability that a person who recently injected drugs receives methadone (province-specific estimates from I-Track survey). Updated annual estimates (2011-2016) available only for Quebec and British Columbia were extrapolated to remaining provinces. Annual coverage of OST (per 100 PWID) and needle-syringes (per PWID) was calculated using provincial data from 2011-2016.

**Results:** An estimated 122,467 (89,320-155,611) individuals in Canada injected drugs in 2011 [prevalence 0.53% (0.39-0.67%)], increasing by 26% to 153,763 (112,147-195,377) in 2016 [prevalence 0.65% (0.47-0.82%)]. OST coverage increased by 25% (53 to 67 per 100 PWID) and needle-syringe coverage by 60% (201 to 321 per PWID) during the same period. There was considerable inter-provincial variation in OST (44-162) and needle-syringe (153-1972) coverage. By 2016, all provinces met WHO guidelines for OST coverage (40 individuals per 100 PWID) and all but one met needle-syringe guidelines (>200 per PWID).

**Conclusion:** Findings are consistent with previous national estimates of the number of PWID in Canada, but present previously undocumented provincial estimates and coverage. Increased data collection at regional levels will increase accuracy of estimates, while implementing this modest data collection (health-service indicators and PWID surveys) in international settings would enable harmonization of simple monitoring methods worldwide.

## Disclosure of Interest Statement:

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