

Background

In June 2016, the Ontario government introduced the **Ontario Naloxone Program for Pharmacies (ONPP)**. Through this program, community pharmacies can distribute naloxone kits to all Ontarians, free of charge. In an effort to remove barriers to naloxone access, the ONPP was modified in March 2018 to: 1) allow pharmacies to distribute intranasal naloxone, and 2) remove the requirement for individuals to present a valid government health card in order to receive a naloxone kit.

What did we investigate?

Regional variation in the distribution of naloxone through the ONPP and individual- and public health unit (PHU)-level determinants of variation.

How was the study conducted?

- We conducted a population-based small area variation analysis of all Ontario residents who were dispensed a naloxone kit through the ONPP between April 1, 2017 and March 31, 2018.
- Claims for naloxone kits dispensed through Ontario pharmacies during the study period were identified through the Ontario Drug Benefit (ODB) database and used to calculate pharmacy-dispensed naloxone rates for the 35 PHUs in the province.
- PHU- and individual-level determinants of regional variation in pharmacy-dispensed naloxone were estimated using negative binomial regression models.

What did we find?

- Between April 1, 2017 and March 31, 2018, 56,530 individuals received a naloxone kit through the ONPP, with an average pharmacy-dispensed naloxone rate of 5.5 (range: 1.8 to 11.6) kits per 1,000 population in Ontario.
- Fourteen PHUs representing 34.3% of Ontario's population had naloxone dispensing rates that were significantly higher than the provincial average, while sixteen PHUs representing 59.3% of the population had rates significantly lower than the provincial average.
- Pharmacy-dispensed naloxone rates were 26% higher in areas with a supervised consumption site relative to regions without these services, and increased 9% for each additional 10 opioid-related deaths.
- Naloxone recipients were younger (median age: 38 years vs. 47 years) and more likely to be residing in an urban area compared to those who were not dispensed a kit.
- Individuals with a history of opioid use disorder, those undergoing opioid agonist therapy (OAT), and those receiving treatment with a non-OAT opioid had higher rates of pharmacy-dispensed naloxone compared to those with no or unknown opioid exposure.
- Individuals receiving 11 or more opioid prescriptions in the past year were more likely to be dispensed naloxone than those receiving no opioid prescriptions, while individuals receiving 1 to 10 opioid prescriptions in the past year were less likely to be dispensed naloxone compared to those who received no opioid prescriptions.



Key points

- There is considerable variation in pharmacy-dispensed naloxone rates across PHUs in Ontario related to both regional- and individual-level factors.
- There are higher rates of pharmacy-dispensed naloxone among younger individuals, those residing in urban areas, and those with past or current opioid exposure.
- Rates of pharmacy-dispensed naloxone are also higher in areas with supervised consumption sites and higher rates of opioid-related death.

Recommendations

Policymakers

- Policymakers should consider PHU- and individual-level determinants of pharmacy-dispensed naloxone rates to optimize the distribution of naloxone through the ONPP.
- Policymakers in other jurisdictions who are considering implementation of pharmacy-based naloxone programs should consider factors associated with uptake of naloxone to optimize accessibility within their regions.

Healthcare Professionals

- Pharmacists are encouraged to identify individuals at risk of experiencing or witnessing an opioid overdose and offer a take-home naloxone kit.

Patients

- If you, or someone you know, may be at risk of an opioid overdose, speak to your local pharmacist about accessing and administering take-home naloxone.

For more information

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Antoniou, T., McCormack, D., Campbell, T., Sutradhar, R., Tadrous, M., & Lum-Wilson, N. et al. (2020). Geographic variation in the provision of naloxone by pharmacies in Ontario, Canada: A population-based small area variation analysis. *Drug And Alcohol Dependence*.