# Non-Medical Use and Abuse of Drugs Used for Opioid Agonist Therapy in Canada K. Patrick May<sup>1</sup>, Karilynn M. Rockhill<sup>1</sup>, Nicolia A. Eldred-Skemp<sup>1</sup>, Colleen M. Haynes<sup>1</sup>, Beth Sproule<sup>2</sup> Richard C. Dart<sup>3,1</sup>, Jody L. Green<sup>3,1</sup>

### Introduction

Methadone has been the primary drug for opioid agonist therapy in Canada, and buprenorphine is increasingly being suggested as a safer alternative to methadone. Given the importance of these two opioids, data from the Survey of Non-Medical Use of Prescription Drugs (NMURx) were examined to assess lifetime non-medical use (NMU) and abuse of methadone and buprenorphine.

### Methods

The NMURx program is a large-scale, repeated, crosssectional survey of adults (15+) in Canada.

- NMURx studies NMU of medications among the general population and characterizes associated behaviors.
- NMU is defined as medication use without a doctor's prescription or for any reason other than what was recommended by a doctor (e.g. "for enjoyment/to get high", "to self-treat pain").
- Abuse is defined as non-medical use "for enjoyment/to get high."
- Post-stratification weights were calculated and applied to reflect the distribution of adults in Canada, based on age, gender, and geographic region.

This analysis used data collected in Canada during the third quarter of 2016 to estimate the prevalence and 95% confidence intervals (CI) of lifetime use of methadone and buprenorphine. Additionally, the proportion and 95% CI were calculated for each drug among those reporting lifetime use, of lifetime NMU and lifetime abuse.

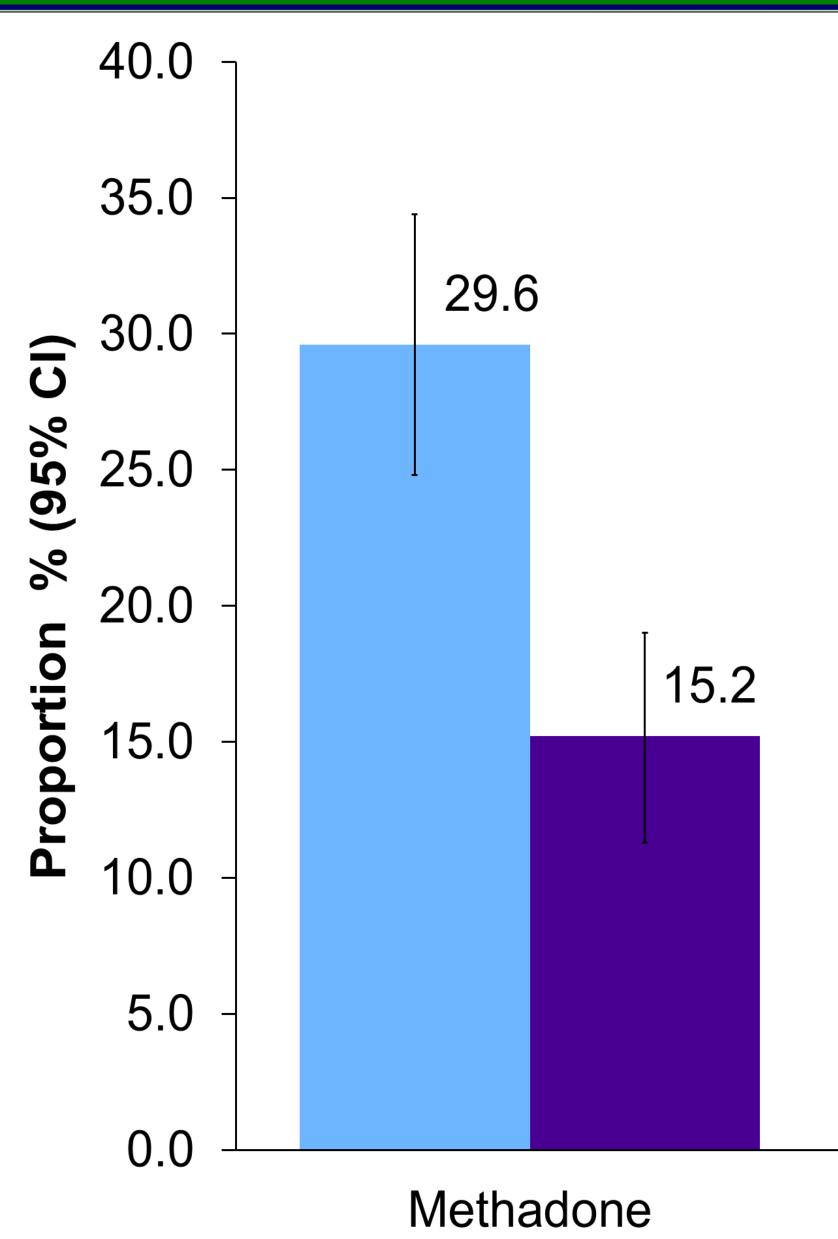
- Respondents could report non-medical use and abuse at the drug product level or, in the case that the specific product is unknown, at the active pharmaceutical ingredient (API) level.
- Respondents may report abuse of a product or API only after reporting NMU of the product or API.

<sup>1</sup>Rocky Mountain Poison & Drug Center - Denver Health, CO <sup>2</sup>Centre for Addiction and Mental Health, University of Toronto, Toronto, Ontario, Canada <sup>3</sup>Canadian Consumer Product and Pharmaceutical Safety Inc., Toronto, Ontario, Canada

## Table 1: Respondent Demographics

Characteristic
Gender
Male
Female
Age (years)
15-24
25-34
35-44
45-54
55-64
65+

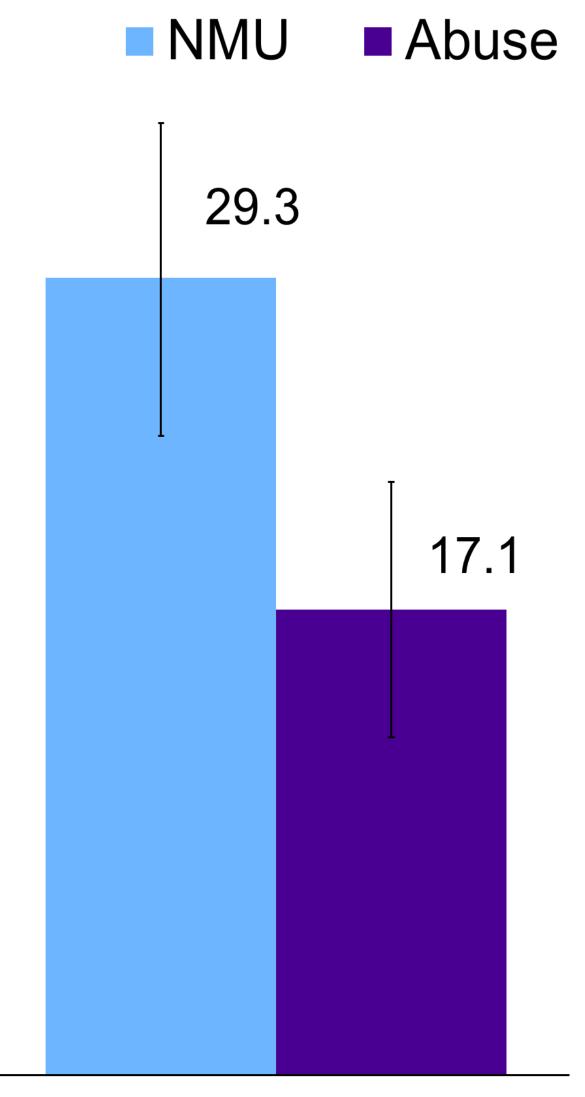
# Figure 1: Lifetime NMU and Abuse among those Reporting Lifetime Use



% (95% CI) Weighted N=30,454,776

> 49.3 (48.2, 50.4) 50.7 (49.6, 51.8)

> 14.9 (14.0, 15.7) 16.6 (15.8, 17.3) 15.8 (15.0, 16.5) 16.8 (16.1, 17.5) 16.3 (15.6, 16.9) 19.7 (18.5, 20.8)



Buprenorphine

**Methadone:** The estimated prevalence of lifetime methadone use was 3.9% (95% CI: 3.5-4.3); of which an estimated 29.6% (24.8-34.4) ever non-medically used and an estimated 15.2% (11.3-19.0) ever abused (Figure 1).

**Buprenorphine:** The estimated prevalence of lifetime buprenorphine use was 2.9% (2.5-3.2); of which an estimated 29.3% (23.5-35.0) ever non-medically used and an estimated 17.1% (12.4-21.8) ever abused (Figure 1).

- (2.9%: 2.5-3.2).
- and/or abuse of the drug.

Lifetime NMU and abuse were reported at similar rates among users of the two most common drugs for opioid agonist therapy in Canada, suggesting both drugs may have similar abuse potential.

One limitation with this study concerns our definition of abuse, which may not capture the habitual nature or damaging impact of drug abuse as well as other conceptualizations of abuse.



## Results

## Conclusions

Slightly more Canadian adults have used methadone in their lifetime (3.9%: 3.5-4.3) than have used buprenorphine

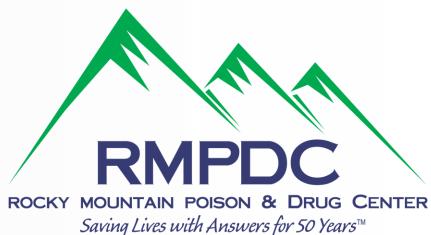
Similar proportions among those that had ever used methadone or buprenorphine have also reported NMU

More than half of those reporting NMU of methadone or buprenorphine also reported abusing the drug.

### Discussion

### Limitations





The System is supported by subscriptions from pharmaceutical manufacturers for surveillance, research and reporting services. The System is the property of Canadian Consumer Product and Pharmaceutical Safety Inc. which retains exclusive ownership of all data, databases and systems. Subscribers do not participate in data collection or analysis, nor do they have access to the raw data.