

Lerner Center for Public Health Promotion & Population Health



## **RESEARCH BRIEF #100**

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### Over Two-Thirds of Opioid Overdose Victims in Canada were Employed Before They Died

Alexander Cheung, Joseph Marchand, and Patricia Mark

#### **KEY FINDINGS**

- Drug overdose is the leading cause of unnatural deaths in Canada.
- From 2016 to 2019, over two-thirds of opioid overdose victims were working and contributing to the economy before they died.
- Those employed in construction, trades and transportation had the highest opioid overdose rates over this period.
- Fatal opioid overdose cost the Canadian economy between \$8.8 to \$10.9 billion from 2016 to 2019.
- Destigmatization of drug use, safe supply, improved access to medical care and take-home Naloxone kits are critical for reducing deaths.

Between 2016 and 2021, nearly 30,000 Canadians lost their lives to an opioid overdose.<sup>1</sup> As in the United States, drug overdose is the leading cause of unnatural deaths in Canada, with most overdoses involving opioids.

There is a common perception that individuals who use drugs, including opioids, are unproductive members of society. However, in Canada, many victims suffer from Opioid Use Disorders (OUDs) while simultaneously contributing positively to society. Since 2011, over two-thirds of opioid overdose victims were working and contributing to the economy before they died. When individuals die prematurely, they lose productive working life years.<sup>2</sup>

This brief summarizes findings from our recent <u>peer-reviewed study</u> that quantified the lost labour productivity to the Canadian economy from 2016 to 2019. We found that fatal opioid overdoses cost the Canadian economy between \$8.8 to \$10.9 billion in lost labour productivity over this period. Our findings challenge the notion that the opioid crisis only affected unproductive (i.e., unemployed) members of society. Overdose deaths have had economic costs on top of immeasurable human costs.

# **Opioid Overdoses Cost the Canadian Economy Between \$8.8 and \$10.9 Billion in Lost Labour Productivity, 2016-2019**

From 2016 onward, approximately three-quarters of fatal opioid overdose victims were male, and the average age of death was 42. In Canada, the average retirement age is 64, meaning that each victim lost an average of 22 working life years. In models that project forward streams of lost output when an employed person dies prematurely, we estimated that Canadian economy lost between \$8.8 and \$10.9 billion in labor productivity from 2016 to 2019. To provide some context for these values, \$10.9 billion is close to Montreal's combined 2018 and 2019 municipal operating budget.

#### The Construction, Trades, and Transportation Industries were Heavily Impacted by Opioid Overdoses

Construction and trade work is often physically demanding and musculoskeletal injuries are common (falls, back and extremity injuries, etc.), leading to increased risk of opioid use and overdose.<sup>3</sup> Furthermore, these industries often lack paid sick leave, requiring workers to seek opioid medications to treat their pain quickly so they can keep working. We found that one-third of employed overdose victims in Canada were working in the construction industry at the time of overdose. Workers in male-dominated industries, such as construction, are less likely to talk about mental health or substance abuse problems due to stigma and, as such, have been severely affected by the opioid crisis. Fear of criminal and employment repercussions from opioid use discourages many workers from seeking treatment for their OUDs.<sup>4</sup>

#### Future Public Policy Steps for Mitigating the Opioid Crisis

In Canada, the opioid crisis is viewed as a public health issue rather than a purely criminal one. As such, British Columbia will be the first province to decriminalize small possession of drugs for a three-year trial starting in January 2023. It was also the first province to set up a ministry dedicated to seamlessly coordinating mental health and addiction services in 2017. The stigmas associated with drug use often prevent many working people from seeking help from the fear of employment and reputational repercussions. In Canada, over 85% of people died indoors (i.e., in an apartment, home, shelter, etc.), often alone, and nearly 90% of victims died of fentanyl or fentanyl-type analogues.<sup>5</sup>

Unfortunately, the drug supply has only gotten more toxic recently, with deaths sharply increasing since 2020. Destigmatizing OUDs, reducing barriers to treatment, and identifying and caring for those suffering from OUDs will be crucial in combating the opioid crisis. For example, OUD care is continuous in parts of Canada, ensuring people don't "fall through the cracks." When people present to the Emergency Department (ED) with OUD symptoms, they are promptly seen by an addictions medicine specialist. They are connected to community services and return to the community with take-home opioid agonist therapies. Even in the criminal system in the province of Alberta, when someone is arrested, they have immediate access to opioid agonist therapies such as Sublocade and Suboxone in municipal jails.<sup>6</sup>

Given our finding of higher risk of overdose among constructions workers and those in other trade occupations, prevention strategies should focus on worksite opioid education, access to take-home naloxone kits, industry-accessible time off to properly heal injuries, and non-opioid substitutes for pain management. A safer drug supply through supervised injection sites such as Insite in Vancouver, and anonymous drug checking services (to determine if drugs have fentanyl) may also save lives.<sup>4</sup>

#### **Data and Methods**

The data for our study come from several public sources, including Statistics Canada, the Government of British Columbia, the British Columbia Coroner's Office, the Canadian Revenue Agency, and the Royal Canadian Mounted Police. In cases where national data were lacking, national data were extrapolated from representative provincial data.<sup>5</sup> Full methodological details are available in the published study.

#### References

- 1. Special Advisory Committee on the Epidemic of Opioid Overdoses. (2022, June) *Opioid- and Stimulant-related Harms in Canada*. Government of Canada. <u>https://health-</u> <u>infobase.canada.ca/substance-related-</u> <u>harms/opioids-stimulants</u>
- 2. Statistics Canada. (2018, November 13). Drug Overdose Crisis: Socioeconomic Characteristics of Those Dying of Illicit Drug Overdoses in British Columbia, 2011 to 2016. The Daily. <u>https://www150.statcan.gc.ca/n1/en/dail</u> <u>y-quotidien/181113/dq181113a-</u> <u>eng.pdf?st=XZROJqwc</u>
- Hawkins, D., Roelofs, C., Laing, J., & Davis, L. (2019). Opioid-related overdose deaths by industry and occupation— Massachusetts, 2011-2015. *American Journal of Industrial Medicine*, 62(10), 815–825.
- 4. Gomes, T., Iacono, A., Kolla, G., Nunez, E., Leece, P., Wang, T., Campbell, T., Auger, C., Boyce, N., Doolittle, M., Eswaran, A., Kitchen, S., Murray, R., Shearer, D., Singh, S., Watford, J. on behalf of the Ontario Drug Policy Research Network, Office of the Chief Coroner for Ontario and Ontario Agency for Health Protection and Promotion (Public Health Ontario).(2022). Lives lost to opioid toxicity among Ontarians who worked in construction. Toronto, ON: Ontario Drug Policy Research Network.
- 5. Coroners. (2022, August 16). *Statistical reports on deaths in British Columbia.* Province of British Columbia. Retrieved August 26, 2022, from <u>https://www2.gov.bc.ca/gov/content/life</u> <u>-events/death/coroners-</u>

#### service/statistical-reports

6. Programs for the Treatment of Opioid *Addiction: An Environmental Scan.* Ottawa: CADTH; 2019

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#### About the Authors Alexander Cheung

(apcheung@ualberta.ca) is a recent graduate of the Master of Economics program at the University of Alberta in Edmonton, Alberta, Canada. **Joseph Marchand** (jmarchan@ualberta.ca) is a Professor in the Department of Economics at the University of Alberta in Edmonton, Alberta, Canada. **Patricia Mark, MD** was an addictions medicine physician with the Vancouver Island Health Authority in British Columbia, Canada. She was a pioneer of methadone treatment on Central Vancouver Island in the 1990s and spent her career working with marginalized and unhoused populations. She passed away on April 8th, 2022.

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