The opioid death crisis in Canada: crucial lessons for public health





A chief coroner investigation in British Columbia, Canada, identified an "inordinately high number" of drug-related deaths related to a "very real and very serious" drug problem, and recommended unconventional measures to reduce mortality.¹ This occurred 25 years ago, in 1993, the number of drug-related deaths in British Columbia peaked at 330.¹ Today, the epidemic of primarily opioid-related deaths in Canada is far worse than it was a quarter of a century ago. In 2017, there were 1473 drug-related deaths in British Columbia and 3996 in Canada in total—an increase of more than 400% from 1993—and these deaths now account for substantially greater mortality than motor-vehicle accidents and other leading causes of premature deaths.²

Since the early 1990s, when illicit drug users were considered a population at a highly increased risk of HIV, and overdose deaths were primarily from combined heroin and cocaine injecting, interventions have seen major shifts towards more health-oriented responses. For example, Canada has implemented and expanded syringe and naloxone distribution, opioid substitution treatment, and supervised consumption sites.³ Despite these seminal evolutions of health interventions, there remain catastrophically high levels of drug-related mortality.

This unfolding opioid death crisis bears a tragic lesson: although the interventions to date have protected human lives, current actions are simply not sufficient. Three leading contributors to the current opioid crisis exist. The first involves the rising numbers of increasingly potent medical opioid prescriptions since 2000. Excessive prescription practices have rendered Canada's opioid consumption second only to that of the USA, and have exposed large numbers of Canadians to very addictive opioid drugs.⁴ As many as one in five Canadians used a medical-grade opioid during peak years (eg, 2008–10).⁵ Not only did this overprescription directly lead to many people becoming opioid dependent, it also provided the main supply of opioids for non-medical use.

Second, as the harmful consequences of excessive opioid-exposure became apparent, a series of efforts to curtail medical opioid supply and related harms were initiated. These included the de-scheduling of select opioid drugs (eg, slow-release oxycodone),

intensified prescription monitoring, and restrictive prescription guidelines.⁶ Although well intended, these measures did not account for the consequences on the growing population of opioid users at increased risk, and specifically the volatile and hazardous dynamics of opioid supply. Coinciding with the reductions in medical opioid prescription, which starting around 2012, an illicit supply of increasingly potent opioids proliferated, filling the emergent supply gaps left by the reduced availability of medical opioids in Canada.7 This included an unprecedented rise in the availability of synthetic opioids (eg, fentanyl) and hazardous analogues such as carfentanil, which put opioid users at an exponentially higher risk of overdose compared with conventional opioids. Statistics from across Canadian jurisdictions clearly illustrate concurrent reductions in medical opioidrelated deaths and increases in illicit opioid fatalities.

Third, the circumstances outlined essentially render the current opioid mortality crisis in Canada, at its core, a crisis of toxic drug exposure, which public health and intervention systems to date have failed to effectively address. Existing interventions have reduced mortality and morbidity among some groups of users; however, they have been vastly insufficient. Existing responses largely consist of peripheral measures that are unable to comprehensively address the crux of the problem, in which toxic opioid exposure has resulted in excessive increases in fatalities. As with infectious diseases (eq, Ebola and SARS), outbreaks require preventive vaccinations and emergency treatment for populations at increased risk.8 Similarly, the current opioid crisis in Canada would require systematic identification and protection of an estimated population of as many as 1 million users at risk from toxic opioid products, through provision of a safer opioid supply. 9 This was the premise for a local project that aims to distribute medical-grade hydromorphone through secure dispensing machines in Vancouver.¹⁰ However, such measures to prevent the use of toxic opioids have not been systematically implemented in the overall Canadian public health response.

The current opioid mortality crisis constitutes a much greater challenge than the crisis of the early 1990s,

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because it involves a vastly larger population at risk and the availability of more hazardous drugs. Both crises show that at-risk users primarily require protection from hazardous drug products. However, this observation has not been acted upon and many people involved with non-medical opioids continue to rely on supplies that are unregulated and toxic. This is likely to result in substantially more deaths. Our understanding of science and medicine should improve the nature and implementation of practical public health interventions and the consequential protection of human health over time. Therefore, it is time for the opioid death crisis in Canada to be tackled better, and not worse, than the "very real and very serious" drug death crisis in the 1990s.¹

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