## Youth and the opioid crisis: Strategies for intervention and the British Columbian experience

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## **Abstract**

The opioid crisis is a growing public health concern in Canada, especially in British Columbia, where it has been declared a public health emergency. In response to the rising number of youth overdose deaths, British Columbia has implemented a number of harm reduction and prevention strategies. Areas for continued improvement include naloxone kit training, encouraging users to not use alone and for bystanders to call 911 in the event of an overdose, and minimizing risk factors for addiction while maximizing protective factors. As the opioid crisis continues its spread east, other jurisdictions have much to learn from the British Columbian experience.

The opioid crisis is a growing public health concern in Canada, Lespecially in British Columbia, where it has been declared a public health emergency.<sup>1</sup> Continuing its upward trend since 2012, the number of fatal overdoses in British Columbia rose to 1,422 in 2017 (an average of 3.9 deaths per day), a 43% increase from the 993 overdose deaths in 2016 (Table 1).2

Nationwide, young people aged 15-24 had the fastest growing rates of hospitalization for opioid poisoning in the last decade.<sup>3,4</sup> In British Columbia, overdose deaths amongst youth and young adults continue to rise in 2017 (Table 1). While British Columbia has implemented a number of strategies, there is an unmet need for understanding factors contributing to drug use and overdose in youth, and for effective prevention and harm reduction programs.

Delay in seeking medical treatment is a major contributor to overdose fatalities.<sup>5</sup> Using in the presence of others who can recognize the signs of overdose, call for help, and provide medical interventions (e.g. naloxone) reduces fatalities and is a strength of INSITE, a supervised injection site in Vancouver.<sup>6</sup> There has never been a death at a supervised injection site anywhere in the world.<sup>7</sup> A review of overdose deaths in British Columbia from 2009-2013 found that 77% of youth aged 13-18 were with other people when they overdosed.<sup>5</sup> While not using drugs alone is an important step in reducing the risk of fatal overdose, in 15% of youth overdose deaths, someone had placed them in the recovery position or performed a welfare check but did not call 911.5 Educating people likely to witness an overdose and reducing barriers to seeking medical assistance are of utmost importance. The Coroners Service of British Columbia has recommended that the physical education curriculum in schools address the issue of calling 911 when witnessing someone in medical distress, including overdose.<sup>5</sup> A common misconception among drug users is that by calling 911 for an overdose they risk facing sanctions for drug possession.<sup>8,9</sup> Education surrounding the Good Samaritan Drug Overdose Act, which provides legal protection for people seeking emergency support while experiencing or witnessing an overdose, is important for encouraging people to call 911 in these situations. 10

Of youth who died of overdose in British Columbia, 50% lived with family, and none lived on the street exclusively.<sup>5</sup> In 62% of youth who lived with family and 100% of those who did not, people living with them knew about their drug use.5 Most fatal youth overdoses occurred at residential addresses. Educating those living with drug users about the signs of overdose and how to respond is an important measure in preventing fatalities; this could be provided through pharmacies or by the Ministry of Child and Family Development, who had contact with 77% of youth who died of overdose. 5 31% of youth

Table 1 | Overdose deaths in Canada and British Columbia, 2016-2017

		Deaths		Deaths per 100,000 population	
		2016	2017	2016	2017
Opioid- related deaths in Canada <sup>34</sup>	All	2,861		7.9	
Illicit drug overdose deaths in British Columbia <sup>2</sup>	All	993	1422	20.9	29.6
	Youth (age 10 - 18)	12	23	2.7	5.2
	Youth (age 19 - 29)	207	269	29.3	38.0

who died had previous hospitalizations for overdose, which constitute opportunities for education for these youth and their families.<sup>5</sup> Families can be referred to advocacy campaigns providing resources, tools, and information about drug use, addiction, and harm reduction, such as Moms Stop the Harm.<sup>11</sup> Medications prescribed to someone else were involved in 31% of youth overdose deaths, usually involving medications prescribed to a family member (23%). This highlights the need, when prescribing and dispensing opioids, for patient education on risk to others, the importance of securing medications, and safe disposal.12

Educating frontline staff involved with high-risk youth (e.g. group home workers, police, and school outreach programs) about naloxone kits (a lifesaving tool that can reverse opioid overdose), increasing knowledge about signs of overdose and where youth and their families can access free kits (e.g. through towardtheheart.com), and furthering awareness of resources for prevention and addiction treatment could reduce the impact of opioids. 9,13-18 Several school districts in British Columbia and higher education institutions, including the University of British Columbia, have already implemented or begun planning to make naloxone kits publically available. 19,20 Naloxone training was viewed positively by participants of the Vancouver Inner City Youth program, suggesting that this could be beneficial elsewhere.<sup>21</sup>

The recent epidemic of drug overdose deaths has been attributed to the increased prevalence of illicit fentanyl, a potent opioid detected in 5% of overdose deaths in 2012 and 81% in 2017. 1,2 The number of illicit drug overdose deaths that did not involve fentanyl has remained relatively stable since 2011, at an average of 300 deaths per year.<sup>2</sup> Of youth in British Columbia who died of overdose from 2009-2013, 23% had either consumed a drug which they had mistaken for another or a drug that had been adulterated with another substance (e.g. MDMA adulterated with fentanyl).<sup>5</sup> Increasing the availability of drugtesting kits could reduce the number of these accidental deaths. Free, nonjudgmental drug testing at festivals in British Columbia has been

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shown to reduce the risk of drug use where it is already occurring, as exemplified by the efforts of the AIDS Network Kootenay Outreach and Support Society (ANKORS).<sup>22,23</sup> This is a critical opportunity for drug education in a trusting environment, the "hook" that engages users in conversations about harm reduction.<sup>22,23</sup>

Youth engagement in harm reduction approaches is essential in preventing opioid–related harm and overdoses.<sup>24</sup> Peer–to–peer programs, involving peers with lived experience of drug use, are an effective method of engaging and empowering youth and have been effective in reducing mortality amongst adult drug users in the Vancouver Downtown Eastside area.<sup>25-27</sup> Preventative measures to both minimize risk factors for addiction, like childhood trauma or mental illness, and maximize protective developmental assets, including family, school, and community support systems, are another key aspect of reducing substance misuse.<sup>28-30</sup>

British Columbia has implemented many effective strategies for overdose prevention and harm reduction in youth, which could serve as an effective model for other regions as the opioid crisis spreads east. 31,32 While increasing the availability of naloxone kits, encouraging bystanders to call 911, and minimizing risk factors for addiction are areas for further improvement in British Columbia, a bolder approach would be decriminalization of all illegal drugs. This would improve the safety of drug consumption and allow policing costs to be redirected towards treatment and prevention programs. While a controversial strategy, it has been highly successful in Portugal, which, in the midst of a heroin epidemic, decriminalized drugs in 2001 and now has one of the lowest fatal overdose rates in the world. 33 What is clear is that the opioid crisis is a complex issue that will require a multipronged approach to overcome.

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