



## Background

Opioid overdose and mortality have increased at an alarming rate in Canada, leading to the rise of public health initiatives aimed at reducing the harms associated with opioid use. Opioids are a class of drugs that include prescription medications for treating pain (such as oxycodone, fentanyl, and morphine) and for treating opioid addiction (such as methadone), as well as illegal drugs (such as heroin and bootleg fentanyl). Opioid overdose depresses the central nervous system, which can cause slowed/stopped breathing, loss of consciousness, and death.<sup>1</sup> According to the Office of the Chief Coroner's report, opioid-related deaths in Ontario have risen from 514 in 2010 to 685 in 2015.<sup>2</sup> Naloxone is the primary tool for the reversal of opioid overdose. It has a history of safe and effective use by healthcare providers in Canada, but until recently was primarily used in hospital settings.<sup>3</sup>

## How it works

Naloxone, a non-addictive opioid receptor antagonist, reverses the central nervous system-depressant effects caused by opioid overdose.<sup>4</sup> It is typically given by injection into the muscle, takes approximately 3-5 minutes to work, and wears off after approximately one hour.

## Naloxone Availability in Ontario

In 2016, in response to the growing opioid-overdose crisis, naloxone was reclassified as a Schedule II drug in Canada, making it available without a prescription.<sup>5</sup> Ontario's comprehensive Strategy to Prevent Opioid Addiction and Overdose includes initiatives to increase the accessibility of naloxone, such as providing take-home naloxone kits free of charge to people currently using opioids, people at risk of returning to opioid use, people likely to witness an opioid overdose, and at-risk inmates released from provincial correctional institutions.<sup>6,7</sup> Take-home naloxone kits are available in many pharmacies across the province. Upon providing naloxone kits, pharmacists train the client on how to recognize and appropriately respond to an opioid overdose, including how to administer naloxone.<sup>4</sup>

Naloxone is currently available in Canada in injectable and nasal-spray forms. Naloxone in an auto-injector, similar to an EpiPen, has not been approved for use in Canada. Take-home naloxone kits in Ontario typically contain injectable naloxone because naloxone nasal-spray has

only recently been approved for use in Canada, is much more expensive than injectable naloxone, is less effective, and is not currently reimbursed under the Ontario Naloxone Pharmacy Program.<sup>7-10</sup> However, the needle-free nasal-spray has the advantages of being ready-to-use and easily administered with minimal training.<sup>10</sup> Each injectable take-home naloxone kit contains ampoules of injectable naloxone, syringes, an overdose response reference card and an overdose training certification card.<sup>4</sup> Starting in October 2016, Ontario pharmacies are required to report quarterly data on naloxone kit distribution and naloxone administration events to the Ministry of Health and Long Term Care.

Naloxone is a mandatory medication for all ambulances and paramedic vehicles in Ontario.<sup>11</sup> The recent approval of naloxone nasal-spray may encourage other first responders in Ontario to consider carrying naloxone for use in overdose situations.

The status of naloxone availability in Ontario is changing quickly; information in this document reflects its status as of October 2016.

## References

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