

# Administration of Naloxone in a Home or Community Setting: A Review

## Context

Opioids are commonly used to manage pain but are also used recreationally, and sometimes children accidentally gain access to and ingest them. When opioids are misused or unintentionally ingested — even if they have been prescribed — there is a risk of overdose. Respiratory depression, a main hazard of severe opioid overdose, is potentially fatal.

## Technology

Naloxone is a non-selective, short-acting opioid receptor antagonist. Opioid receptor antagonists are medications typically used to reverse respiratory depression caused by opioid overdose.

Dispensing naloxone to opioid users so they can self-treat in the event of an opioid overdose, rather than rely on a health professional to administer treatment, may be an effective way to reduce overdose-related deaths. In Canada, there are at least four cities with local overdose prevention and response programs involving naloxone dispensing, and British Columbia has recently launched a provincial program.

## Issue

A review of the clinical and cost-effectiveness of the administration of naloxone by non-health care professionals in a home or community setting compared with its administration by health professionals, as well as of the evidence-based guidelines for administering naloxone, will help inform decisions on how to prevent opioid overdose-related deaths.

## Methods

A limited literature search was conducted of key resources, and titles and abstracts of the retrieved publications were reviewed. Full-text publications were evaluated for final article selection according to predetermined selection criteria (population, intervention, comparator, outcomes, and study designs).

## Key Messages

- When comparing naloxone administration by non-health professionals in a home or community setting with naloxone administration by health professionals:
  - no clinical effectiveness information was found
  - no cost-effectiveness information was found.
- No guidelines on the administration of naloxone were found.
- Evidence on take-home naloxone programs suggests that they are associated with a low mortality rate, but it is not known how this rate compares with the mortality rate when naloxone is administered by health care professionals.

## Results

The literature search identified 227 citations, with 2 additional articles identified from other sources. Of these, 13 were deemed potentially relevant; however, none met the criteria for inclusion in this review.

*DISCLAIMER: The information in this Report in Brief is intended to help health care decision-makers, patients, health care professionals, health systems leaders, and policy-makers make well-informed decisions and thereby improve the quality of health care services. The information in this Report in Brief should not be used as a substitute for the application of clinical judgment in respect of the care of a particular patient or other professional judgment in any decision-making process nor is it intended to replace professional medical advice. While CADTH has taken care in the preparation of the Report in Brief to ensure that its contents are accurate, complete, and up-to-date, CADTH does not make any guarantee to that effect. CADTH is not responsible for any errors or omissions or injury, loss, or damage arising from or as a result of the use (or misuse) of any information contained in or implied by the information in this Report in Brief.*

*CADTH takes sole responsibility for the final form and content of this Report in Brief. The statements, conclusions, and views expressed herein do not necessarily represent the view of Health Canada or any provincial or territorial government. Production of this Report in Brief is made possible through a financial contribution from Health Canada.*