

IN BRIEF A Summary of the Evidence

# Crushed Buprenorphine Tablets for Opioid Dependency: A Review

## Key Messages

- Crushing buprenorphine tablets before administration does not appear to alter the drug's effects on opioid withdrawal or opioid cravings — based on limited evidence.
- The number of adverse events may be higher with crushed buprenorphine tablets compared with whole tablets.
- Whether crushing buprenorphine tablets works to prevent misuse or diversion is unknown.
- The safety and effectiveness of crushing buprenorphine and naloxone combination tablets is unknown.
- There are no evidence-based guidelines on the administration of crushed buprenorphine or crushed buprenorphine plus naloxone tablets for treating opioid dependence.

## Context

Opioids are a class of medication that includes heroin, morphine, percocet, and codeine, and are usually prescribed to treat pain. However, they are also used illicitly to induce a high that can include feelings of euphoria and pleasure. Misuse of opioids can result in negative consequences — medically, socially, and legally. Dependence on opioids, both physically and psychologically, can develop quickly, and treatment involves a multidisciplinary approach that can include substitution therapy with buprenorphine or buprenorphine in combination with naloxone.

## Technology

Normally opioids cause euphoria, decreased pain, and slower breathing by binding to receptors in the brain. Buprenorphine is a medication used to treat opioid dependence that engages the opioid receptors in the brain, therefore reducing opioid withdrawal symptoms, but without producing euphoria. It also acts to block the receptors so that if opioids are taken, they are less likely to have an effect. Buprenorphine is sometimes combined with naloxone — a medication that reverses the effects of opioids, and is commonly used in opioid overdoses.

## Issue

Sublingual buprenorphine or buprenorphine and naloxone combination tablets have been recommended for office-based treatment of opioid dependence — carried out in physician offices or clinics. However, the potential for misuse or diversion of these drugs exists. To help avoid abuse potential, tablets are sometimes crushed before they are administered to patients. But whether crushing the tablets affects how the drugs work is uncertain. A review of the clinical effectiveness, safety, and clinical practice guidelines of crushed buprenorphine or crushed buprenorphine and naloxone for treating opioid dependency, compared with the uncrushed products, will help to inform decisions about this practice.

## Methods

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

## Results

The literature search identified 239 citations, with no additional articles identified from other sources. Of these, 4 were identified as potentially relevant but only 1 met the criteria for inclusion in this review – a randomized controlled trial with crossover design.

### Read more about CADTH and its review at:



[cadth.ca/crushed-buprenorphine-or-buprenorphine-naloxone-opioid-dependency-review-clinical-effectiveness-and](http://cadth.ca/crushed-buprenorphine-or-buprenorphine-naloxone-opioid-dependency-review-clinical-effectiveness-and)

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