

# Association between increased dispensing of opioid agonist therapy take-home doses and opioid overdose and treatment interruption and discontinuation

## Background

- Opioid agonist therapy (OAT) with methadone or buprenorphine/naloxone is the first-line treatment for opioid use disorder, yet 6-month treatment retention is low.
- Significant barriers to treatment retention are requirements for frequent interactions with pharmacies and physicians to access treatment as well as the strict criteria that needs to be met in order for people to receive take-home doses.
- Healthcare disruptions and physical distancing measures put in place in response to the COVID-19 pandemic prompted concerns around access to OAT. On March 22, 2020, Ontario released new guidance recommending that clinicians extend the number of take-home OAT doses to their patients with sufficient social stability and ability to store doses safely.
- It is unknown whether this change in practice was associated with changes in treatment retention or risk of overdose.

## What did we investigate?

Whether pandemic-specific guidance to increase access to take-home doses of OAT was associated with changes in treatment retention and opioid-related harms among OAT recipients in Ontario, Canada.

## Key findings

In general, patients who were transitioned to take-home doses or who received extended take-home doses in alignment with pandemic-related clinical guidance had lower rates of treatment interruption or discontinuation, and a similar or lower risk of opioid overdose in the subsequent 6 months, compared to those whose take-home doses remained unchanged.

## How was the study conducted?

*Design:* Retrospective, population-based propensity-weighted cohort study

*Population:* Residents of Ontario, Canada who were actively being treated with either methadone or buprenorphine/naloxone for OAT on March 21, 2020, which were further stratified according to their take-home dose status:

1. Daily dispensed methadone
2. Daily dispensed buprenorphine/naloxone
3. Weekly dispensed methadone
4. Weekly dispensed buprenorphine/naloxone

*Study period:* Changes in OAT take-home dose frequency were assessed between March 22-April 21, 2020, and people were followed for up to 180 days to assess outcomes.

*Exposure:* Whether or not people received increased take-home doses in the first month of the pandemic

*Outcomes:* Fatal or non-fatal opioid overdose, interruption in treatment, and treatment discontinuation



## What did we find?

- 21,297 OAT recipients were included in the study.
- Among the 5,852 individuals receiving daily dispensed methadone, transitioning to take-home doses (compared with not receiving take-home doses) was significantly associated with:
  - 27% lower risk of opioid-related overdose,
  - 20% lower risk of treatment discontinuation, and
  - 20% lower risk of treatment interruption.
- Among the 662 individuals receiving daily dispensed buprenorphine/naloxone, there was no significant difference in opioid-related overdose, treatment discontinuation, or treatment interruption between those who transitioned to take-home doses and those who did not.
- Among the 11,010 individuals receiving weekly take-home doses of methadone prior to the guidance change, extending take-home doses (compared with no change in take-home doses) was significantly associated with:
  - 28% lower risk of treatment discontinuation, and
  - 31% lower risk of treatment interruption.
  - No significant association was observed for risk of opioid-related overdose.
- Among the 3,773 individuals receiving weekly take-home doses of buprenorphine/naloxone prior to the guidance change, extending take-home doses (compared with no change in take-home doses) was significantly associated with a 26% lower risk of interruption in therapy and no change in other outcomes.

## Recommendations

Given the observed benefits of extended take-home OAT doses during the pandemic and lack of evidence of harm, ongoing efforts should be made to continue to provide people with OUD with more flexible access to treatment where appropriate.

## For more information

Gomes, T., Campbell, T., Kitchen, S., Garg, R., Bozinoff, N., Men, S., Tadrous, M., Munro, C., Antoniou, T., Werb, D., & Wyman, J. (2022). [Association between Increased Dispensing of Opioid Agonist Therapy Take-Home Doses and Opioid Overdose and Treatment Interruption and Discontinuation. JAMA.](#)