

# Increased overdose and mental health risks persist two years after opioid dose reduction

June 13 2022

---



Credit: CC0 Public Domain

Researchers from the UC Davis Center for Healthcare Policy and Research examined the potential long-term risks of opioid dose tapering. They found that patients on stable but higher-dose opioid therapy who

had their doses tapered by at least 15% had significantly higher rates of overdose and mental health crisis in the second year after tapering compared to their pre-tapering period.

Their study was published June 13 in *JAMA Network Open*.

## **Opioid therapy and the push to reduce the dose of pain medication**

Changes in prescribing guidelines and [regulatory policies](#) driven by the rise in [opioid-related deaths](#) have led many physicians to reduce daily doses for [patients](#) on stable [opioid](#) therapy for [chronic pain](#). The dose reduction process—called tapering—has been linked to worsened pain, symptoms of opioid withdrawal and depressed mood among some patients.

Recently, a team of UC Davis Health [researchers found](#) an increased risk of overdose and [mental health crisis](#) up to one year following dose reduction. Their research suggested that patients undergoing tapering need significant support to safely reduce or discontinue their opioids.

"While patients may struggle during the early tapering period, we reasoned that many may stabilize with longer-term follow-up and have lower rates of overdose and mental health crisis once a lower opioid dose is achieved," said Joshua Fenton, professor and vice chair of research in the Department of Family and Community Medicine at UC Davis School of Medicine and lead author of the study. "Our findings suggest that, for most tapering patients, elevated risks of overdose and mental health crisis persist for up to two years after taper initiation."

## **Pain management and the risks of dose changes**

To draw associations between dose reductions and changes in the risk for

overdose and mental health visits, the researchers used a database covering a 10-year period (2008-2017) for more than 28,000 patients prescribed long-term opioids. They examined enrollment records and medical and pharmacy claims for patients prescribed stable high opioid doses (the equivalent of at least 50 morphine milligrams per day) and who had their doses reduced by at least 15%.

From this patient cohort, they selected those who had at least one month of follow-up during the second year of their post-tapering period. They identified a total of 21,515 tapering events for 19,377 patients.

Those events included emergency department visits or inpatient hospital admissions for drug overdose, withdrawal, or mental health crisis events, such as depression, anxiety or suicide attempts. The team compared rates of these events in the pre-tapering period with those during the second year of follow-up after tapering initiation.

"We used an innovative observational study design to understand the patients' experience before and after opioid dose reduction. We compared outcome rates in pre- and post-taper periods with patients serving as their own controls," said Daniel Tancredi, co-author of the study and professor in the Pediatrics Department at UC Davis Health. "This design has the advantage of controlling for patient characteristics that may influence relationships between tapering and adverse events."

The study found that for every 100 patients, there was an average of 3.5 overdose or withdrawal events and 3 mental health crises during the pre-tapering period, compared to 5.4 events and 4.4 crises in the 12-24 months post-tapering period. That's a 57% increase in overdose or withdrawal incidents and a 52% increase in mental health crises. The risks of tapering were greatest in patients with the highest baseline doses.

"We found that the increased rates of overdose and mental health crisis observed during the first year after opioid dose tapering persist through the second year," Fenton added.

## **Long-term follow-up and support for patients on reduced pain therapy**

In 2018, the Department of Health and Human Services (HHS) issued guidelines to advise clinicians to monitor patients carefully during tapering and provide psychosocial support. They recommended close follow-up and cautioned about the potential risks of rapid dose reduction, including withdrawal, transition to illicit opioids, and [psychological distress](#).

This new study emphasized the need for clinicians and patients to discuss dose reduction and carefully weigh the risks and benefits of opioid continuation and tapering. Tapered patients would benefit from close follow-up and monitoring not only in the short term but in the long term too, to make sure they're coping well on lower doses.

"We hope this work will inform a more cautious approach to decisions around opioid dose tapering," Fenton said. "While our results suggest that all tapering patients may benefit from monitoring and support up to two years after taper initiation, patients prescribed higher doses may benefit from more intensive support and monitoring, particularly for depression and suicidality."

Other UC Davis Health collaborators include Elizabeth Magnan, Iraklis Erik Tseregounis, Guibo Xing and Alicia Agnoli.

**More information:** Long-term Risk of Overdose or Mental Health Crisis After Opioid Dose Tapering, *JAMA Network Open* (2022). [DOI: 10.1001/jamanetworkopen.2022.16726](https://doi.org/10.1001/jamanetworkopen.2022.16726)

Provided by UC Davis

Citation: Increased overdose and mental health risks persist two years after opioid dose reduction (2022, June 13) retrieved 20 November 2023 from

<https://medicalxpress.com/news/2022-06-overdose-mental-health-persist-years.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.