

# Impact of methamphetamine/amphetamine use on discontinuation of methadone and buprenorphine/naloxone among people with prescription-type opioid use disorder in Canada

Category: Poster Presentation (In-Person)

## Abstract Body

**Background:** Although concurrent stimulant use is increasing among people with opioid use disorder (OUD), there is little evidence on its impacts on opioid agonist therapy (OAT) outcomes. The aim of this study was to determine the impact of baseline methamphetamine/amphetamine use on discontinuation of OAT among individuals with prescription-type opioid use disorder (POUD) in Canada initiating methadone or buprenorphine/naloxone (BUP/NX).

**Methods:** Secondary analysis of a pan-Canadian pragmatic trial conducted between 2017 and 2020 comparing supervised methadone versus flexible take-home dosing BUP/NX models of care among POUD. Cox proportional hazard models were used to evaluate the independent effect of methamphetamine/amphetamine use (measured by urine drug test [UDT]) at baseline on (assigned or any) OAT discontinuation.

**Results:** The sample included 209 participants that initiated OAT, of which 96 (45.9%) had positive methamphetamine/amphetamine UDT at baseline. Baseline methamphetamine/amphetamine use was associated with shorter median times in assigned (21 versus 168 days, hazard ratio [aHR] = 2.32, 95% confidence interval [CI] = 1.51 – 3.56) and any OAT (25 days versus 168 days, aHR = 2.07, CI = 1.32 – 3.26). No interaction between methamphetamine/amphetamine and assigned OAT was observed for either discontinuation outcome ( $P > 0.05$ ).

**Conclusion:** Methamphetamine/amphetamine use was common among this sample of people with POUD and was associated with increased risk of OAT discontinuation. Supplementary interventions, including treatment for stimulant use, are needed to improve retention in OAT and optimize treatment outcomes in this population.

Key Words (Max 5)

- Epidemiology

- Opiate Agonist Therapy
- Opioids/Opiates
- Substance Use Disorders (general)

#### Learning Objective #1

Attendees will learn about the independent effect of methamphetamine/amphetamine use on opioid agonist therapy (OAT) discontinuation among individuals with prescription-type opioid use disorder in Canada initiating OAT.

#### Learning Objective #2

Attendees will be able to identify risk factors for opioid agonist therapy (OAT) discontinuation among individuals with prescription-type opioid use disorder in Canada initiating OAT.

#### Reference #1

Mackay L, Bach P, Milloy MJ, Cui Z, Kerr T, Hayashi K. The relationship between crystal methamphetamine use and methadone retention in a prospective cohort of people who use drugs. *Drug Alcohol Depend.* 2021 Aug;225:108844.

#### Reference #2

Tsui JI, Mayfield J, Speaker EC, Yakup S, Ries R, Funai H, et al. Association between methamphetamine use and retention among patients with opioid use disorders treated with buprenorphine. *J Subst Abuse Treat.* 2020 Feb;109:80–5.

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