# EMERGENCY DEPARTMENT VISITS DUE TO A SUSPECTED OVERDOSE FOLLOWING DISTRIBUTION OF INCOME ASSISTANCE PAYMENTS IN BRITISH COLUMBIA, CANADA

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# **Background:**

British Columbia, Canada's westernmost province, consistently faces some of the highest rates of toxic drug poisoning (i.e., overdose) deaths in the country. Previous research has shown that the rates increase even further following income assistance payments, a phenomenon commonly known as the 'cheque week effect'. However, deaths capture only a small proportion of overdoses that take place in the community. We examined the association between income assistance payment dates and emergency department (ED) visits due to a suspected overdose within British Columbia's largest regional health authority.

#### Methods:

We identified ED visits related to a suspected opioid-associated overdose between April 14, 2016 and February 21, 2022 from hospital records. We compared daily overdose-related ED visits during cheque weeks vs. non-cheque weeks using Welch's t-test accounting for unequal variance. We examined whether the COVID-19 pandemic magnified this effect, using negative binomial regression with the pandemic period as an interaction term.

#### **Results:**

We calculated 20,024 overdose-related ED visits since an overdose public health emergency was declared in April 2016. We identified a significant increase that started on cheque issuance day and lasted for five days. The period around cheque issuance corresponded to a 39.5% increase in the daily average number of visits, which translates to approximately 1,699 'excess' overdoses. While the overall number of visits increased during the COVID-19 pandemic, it did not correspond to a stronger cheque week effect (interaction effect = 1.05; 95% CI 0.96-1.16).

## **Conclusion:**

The 'cheque week effect' contributed to a significant increase in the number of overdose-related ED visits, and was observed consistently before and during the COVID-19 pandemic. Our findings suggest a need for more equitable income options, enhanced harm reduction and social supports for people who use drugs around cheque week, and further understanding of the needs of people with lived and living experience.

## **Disclosure of Interest Statement:**

No competing interest to disclose.