

## Fatal and nonfatal overdose after release from prison: Findings from data linkage studies in Australia and Canada

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**Introduction:** People released from prison are at heightened risk of fatal and nonfatal overdose. However, neither the epidemiology nor the risk factors for overdose in this population are sufficiently well understood to inform targeted prevention.

**Methods:** We used linked administrative data to identify instances of overdose in cohorts of adults released from prisons in Australia and Canada. In Australia, data came from a prospective cohort study of 1325 adults released from prisons in Queensland, and linked correctional and death records (N=42,015). In Canada, data came from the Provincial Overdose Cohort, which included linked correctional and health records for all persons aged ≥23 in British Columbia 2015-2017 (N=765,690).

**Results:** In Australia, rates of fatal and nonfatal overdose were higher in the first two weeks post-release. Risk factors included past overdose, history of opioid or alcohol use, poor mental health, dual diagnosis, and benzodiazepine use. Indigenous people were at lower risk. Two thirds of people with medically verified overdose history did not report this in prison.

In Canada, people with incarceration history were four times more likely to die from overdose. Risk of nonfatal overdose was higher on the day of prison reception, and up to four weeks post-release. Among those released from prison, risk of fatal overdose was four times higher for those dispensed opioids for pain.

**Conclusions:** Fatal and nonfatal overdose are key drivers of health burden among people who experience incarceration. Those with co-occurring substance use and mental health problems are at greatest risk, particularly immediately post-release.

**Implications for Policy:** Amassing international evidence demonstrates the urgent need for a targeted, evidence-based response to prevent fatal and nonfatal overdose among people who experience incarceration. Those with a dual diagnosis are at greatest risk, particularly

immediately post-release. Health-focussed, multi-sectoral transitional support may reduce overdose in this population.

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