

VIDUS, ACCESS AND ARYS RESEARCH SUMMARY: INCREASING FENTANYL EXPOSURE AMONG PEOPLE WHO INJECT DRUGS IN VANCOUVER

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BACKGROUND:

The overdose crisis in British Columbia has seen a significant rise in overdose deaths due to illicit drugs since the beginning of the COVID-19 pandemic in March 2020. A key factor to the overdose crisis is illicitly manufactured fentanyl and its analogues that have contaminated the illicit drug supply.

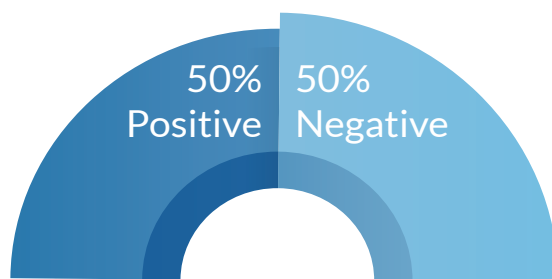
The Vancouver Injection Drug Users Study (VIDUS), the AIDS Care Cohort to evaluate Exposure to Survival Services (ACCESS), and the At-Youth Risk Study (ARYS) has followed people who use illicit drugs (PWUD) in Vancouver for decades. This report briefly summarizes select research findings and key indicators related to fentanyl use and overdose from these studies.

SUMMARIES OF SELECT RESEARCH PUBLISHED OR PRESENTED:

Known exposure to fentanyl is linked with polysubstance use, marginalization and injecting drugs alone¹

- In 2016-17, we examined the extent to which people who inject drugs (PWID) are knowingly or unknowingly exposed to fentanyl, using a urine drug screen.
- Among 590 PWID, 50% tested positive for fentanyl, including 24% knowingly and 26% unknowingly exposed to fentanyl.
- Known exposure to fentanyl was linked to recent use of heroin, crystal methamphetamine, and speedball/goofball.
- PWID who tested positive for fentanyl were more likely to access opioid agonist therapies and naloxone.
- PWID who were aware of fentanyl exposure were additionally more likely to inject drugs alone, experience recent incarceration and report difficulty accessing health or social services.

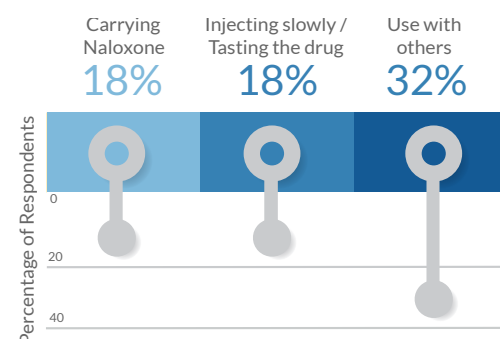
Fentanyl Urine Drug Test



Emergence of illicit fentanyl has not translated into a substantial change in drug use behavior, though those who did change their behaviour also remained at high risk of overdose²

- In 2016-17, we asked PWUD whether the emergence of fentanyl has led them to change how they use drugs.
- Among 999 PWUD interviewed, 39% (or 48% of PWID) reported some changes in drug use behaviour to prevent an overdose.
- Among those who did not change their drug use behaviour, 39% tested positive for fentanyl, and 10% recently experienced a non-fatal overdose.
- While PWUD who reported behaviour changes were more likely to be accessing opioid agonist therapy, they were also more likely to test positive for fentanyl, experience non-fatal overdose and engage in injection drug use, indicating that their risk of overdose remained high.

Most common reported behaviour changes since emergence of Fentanyl



1. Hayashi K et al. (2021) Drug and Alcohol Review. <https://doi.org/10.1111/dar.13261>

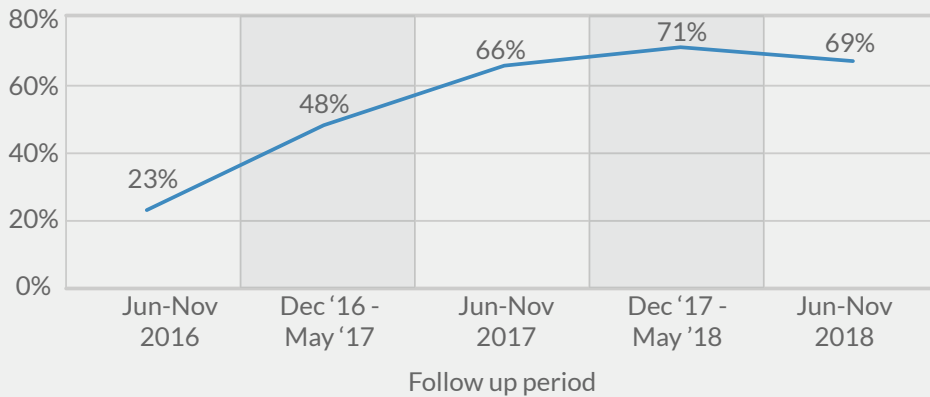
2. Brar, R et al. (2020). The American Journal of Drug and Alcohol Abuse, 1-7 <https://doi.org/10.1080/00952990.2020.1771721>

TRENDS OF SELECT OVERDOSE-RELATED INDICATORS AMONG PEOPLE WHO INJECT DRUGS (PWID):

Since previous research highlights a high risk of overdose among PWID, we present some key data related to fentanyl use that were collected from 1,379 VIDUS, ACCESS and ARYS study participants who injected drugs between June 2016 and November 2018. During this period, participants were invited to complete semi-annual study visits involving answering an interviewer-administered questionnaire and providing urine samples for drug screen.

Characteristics at Baseline N = 1379

Median Age	41	ETHNICITY/ANCESTRY		CURRENT HOUSING SITUATION	
Females	33%	White	49%	Stable Housing	20%
Indication for Opioid Use Disorder	83%	Indigenous	38%	Single Room Occupancy	55%
Downtown Eastside Residents	64%	Other	3%	Unstable Housing	25%

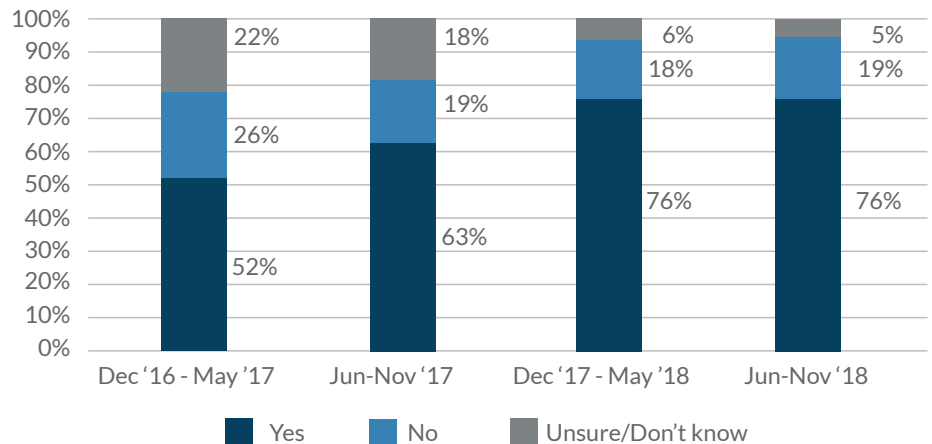


Fentanyl Positive Tests

Proportions of PWID testing positive for fentanyl have almost tripled from 23% in 2016 to 70% in 2018.

Self-reported Suspected Fentanyl Use

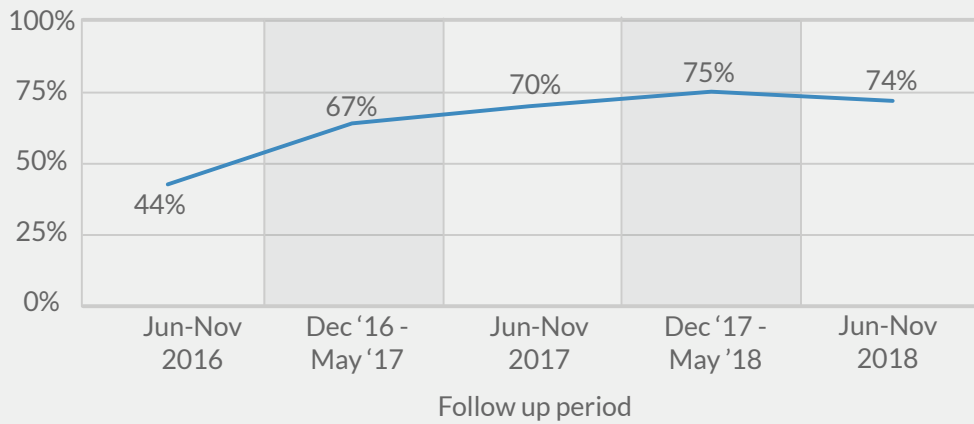
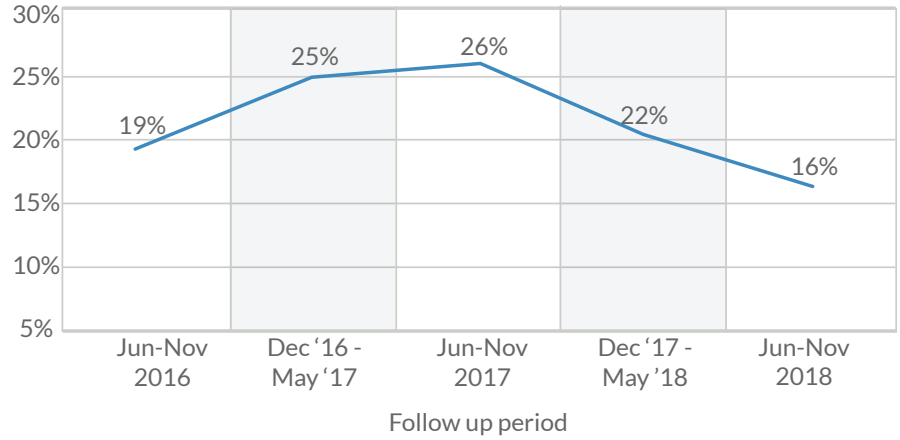
Proportions of PWID reporting suspected exposure to fentanyl increased from 52% to 76% over two years while reports of no or unsure about fentanyl exposure have decreased.



Recent Non-Fatal Overdose

Proportions of PWID reporting recent non-fatal overdose were consistently high at 16-25%

At the peak in 2017, almost one in four PWID reported recent* non-fatal overdose.

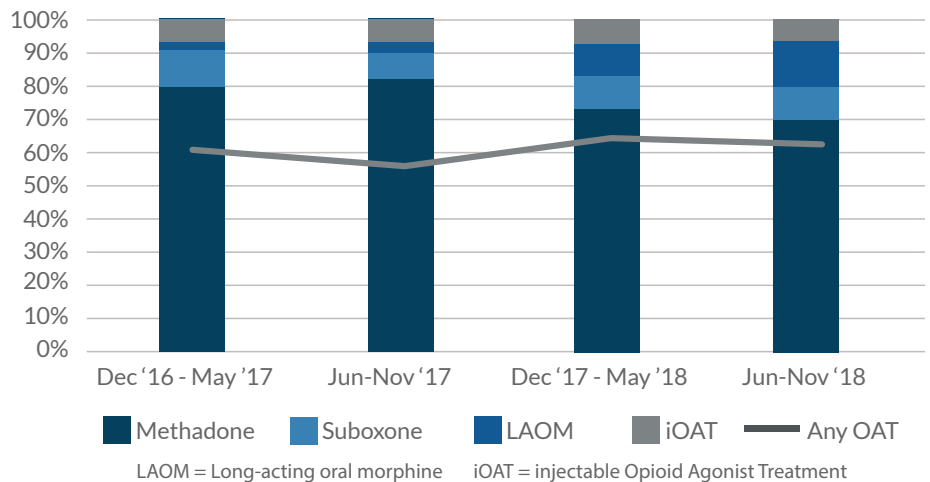


Own Naloxone Kit

Proportions of PWID who possessed a take-home Naloxone kit increased more than 1.5-fold over the two years with the biggest increase being recorded between 2016 and 2017.

Access to Opioid Agonist Therapies (OAT)

Overall access to OAT has remained relatively consistent at ~60%, while declines in access to methadone have been coupled with increases in access to long-acting oral morphine.



* Refers to six months prior to the interview.

DISCUSSION & NEXT STEPS:

High and increasing rates of fentanyl exposure among PWID

- Overall, our research findings indicate high and increasing rates of exposure to fentanyl among PWID in Vancouver between 2016 and 2018, peaking at 71% in 2017, while also showing consistently high rates of non-fatal overdose at 16-25% during this period.
- A limitation to our research report is the lack of fatal overdose statistics within the cohorts during this period. A possible explanation for the slight decline in non-fatal overdose numbers in 2018 could be potentially due to an increase in fatal overdoses in 2017 and 2018.

Individual behaviour changes: potentially limited effects in the context of highly toxic drug supply

- We also found that as of 2017, more than half of PWID that we interviewed did not report any changes in their drug use behavior following the emergence of fentanyl in the illicit drug market, even though fentanyl exposure and non-fatal overdose were very common among this group. These findings suggested the need for more education and harm reduction services for this sub-population.
- However, those who did change their drug use behaviour in an effort to prevent an overdose also remained at high risk of overdose, and PWID who were aware of fentanyl exposure were more likely than those who were unaware of fentanyl exposure to engage in overdose risk behaviour (injecting alone) and were marked with severe marginalization including incarceration.

A broad range of interventions are needed to address overdose risks

- Taken together, these findings suggest that while targeted behaviour change messaging may need to be scaled up as part of overdose prevention efforts, a broader set of structural interventions that address upstream social, structural and environmental factors that shape vulnerability to overdose among PWID will also be required to address the limited effects of individual behaviour changes in the context of highly toxic drug supply.
- Although access to take-home naloxone kits seems to have been increasing as 74% of PWID possessing it in 2018, more needs to be done to achieve a near-perfect proportion.
- Access to OAT among PWID remained stable at around 60% between 2016 and 2018, but types of medications that people accessed have been diversified to include long-acting oral morphine, in addition to methadone.
- Given that PWID who tested positive for fentanyl were also more likely to be on OAT, future research should investigate how to optimize OAT among PWID to prevent fentanyl exposure and overdose risks.

Continued research and programmatic efforts to identify and implement effective overdose prevention services are crucial to address preventable deaths among people who use drugs amidst dual crises of COVID-19 and opioid-involved overdose.

Acknowledgements

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