Monitoring for novel synthetic opioids
and other psychoactive substances
within Australia's Supervised Injecting Facilities

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Background

- The increasing **overdose deaths from fentanyl** and analogues in North America has led to expansion of drug checking, and other harm reduction responses
- Concerns exist about the emergence of fentanyl and other novel synthetic opioids, often sold as heroin, in the Australian drug market
- Supervised Injecting Facilities provide one key setting for drug checking and overdose monitoring
- This study aimed to (1) **monitor unintentional fentanyl consumption** amongst people who use heroin in Australia, (2) understand if novel synthetic opioids were causing overdoses in Australia, and (3) **establish testing and other harm reduction responses** in partnership with consumers and other stakeholders

Methods & Results

- Participants were recruited from the two Supervised Injecting Facilities in Australia: the Medically Supervised Injecting Centre (MSIC Sydney) and the Medically Supervised Injecting Room (MSIR Melbourne).

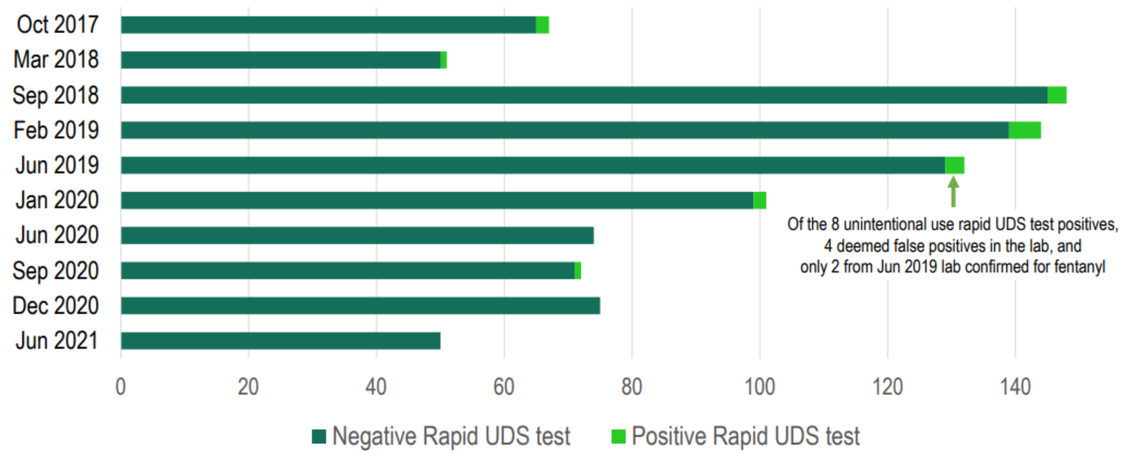
1. Testing urine samples with Fentanyl Test Strips

Methods

Rapid Urine Drug Screens (UDS) with Fentanyl Test Strips (FTS) paired with surveys (n=911 people who used heroin in the past 2 days from 2017-21), with laboratory analysis of samples that tested positive using FTS and control samples

Results

- 17 positive (9 self-reported fentanyl use, 8 unexpected by participants)
- Confirmatory lab analysis was conducted on 6 of the 8 unexpected samples, with 4 deemed to be false positives, and 2 confirmed the presence of fentanyl
- This was the first confirmation of unintended use of fentanyl type substances in this cohort.



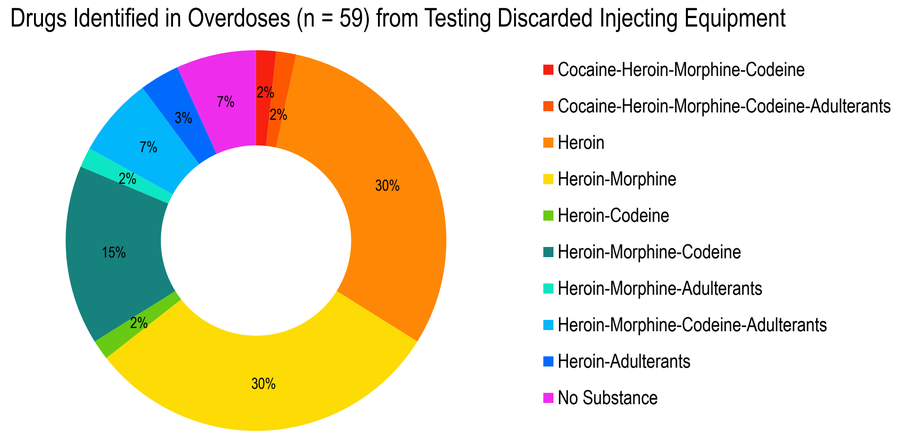
2. Lab testing overdose equipment

Methods

Injecting equipment associated with opioid overdoses sent to lab to test what drugs were involved. A total of 59 overdose events at MSIC + MSIR were represented through 137 pieces of injecting equipment.

Results

- **Fentanyl and other NPS were not identified** in injecting equipment from overdoses
- Almost all (93%) overdoses involved heroin with related alkaloids and common adulterants



3. Drug checking with Fentanyl Test Strips

Methods

- Drug checking at with FTS with laboratory confirmation (n=34 at a single SIF)
- Test wash in spoon after drawing up injection (before/after injecting)
- One page survey on experience of drug checking

Results

- Initially research approvals → limited demand
- Changed procedures to reimburse participants ($10) → increased but still limited demand
  - More support for drug testing if completed **after rather than before drug use** (p= 0.025).
  - **2 positive samples** sent for lab confirmation → **both <u>false positives</u>** (N.B. False positives common in urine testing also, in addition to results being misread)

4. Expert Workshops

Methods

Two workshops with key experts (n = 21, including SIF staff, content experts and people with lived experience) to understand how results from methods 1-3 may inform future testing within the supervised injecting facilities.

Results

- Workshop participants felt routine monitoring for FTS may have limited value currently (i.e. while there was infrequent evidence of fentanyl in the market), until there is a significant change in overdose rates, or other signals to warrant testing.
- Discussions from the online workshops were used to develop a fentanyl monitoring and response plan, defining signals to upscale testing, testing approaches and communication pathways

Discussion

- We found limited evidence of unintentional fentanyl use amongst people who regularly inject heroin → there appears to be very little fentanyl in the Australian drug market at present
- Quick, cost-effective onsite fentanyl testing is feasible – but **false positive results may limit value and undermine confidence in testing results.**
- **Confirmatory testing,** and education for staff and consumers about the causes of false positives with FTS is needed
- The role of *routine* monitoring for fentanyl is unclear in the current low-fentanyl context
- A process to rapidly upscale targeted testing and harm reduction responses, should signals of increased fentanyl prevalence in the Australian heroin market emerge, was developed through this work