



BC Centre for Disease Control
An agency of the Provincial Health Services Authority

Take Home Drug Checking in British Columbia

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Introduction

- On April 14, 2016, Dr. Perry Kendall, Provincial Health Officer, declared a public health emergency under the *Public Health Act* in response to the alarming rise of opioid overdose deaths in British Columbia (BC)
- Studies show that most people who use drugs (PWUD) would like to know about the presence of fentanyl before use^{1,2,3} and would modify their using behaviour if they were aware of the presence of fentanyl.^{1,3}
- The BTNX brand of immunoassay strips (licensed in Canada for urine drug screening) has been shown to accurately and reliably identify the presence or absence of fentanyl (and a number of fentanyl analogues) when used on street-acquired drugs dissolved in water.
- The distribution of fentanyl test strips for personal use may increase accessibility to individuals who may not have access to on-site drug checking services. This allows individuals to make informed choices about their substance use and potentially prevent overdose.

Objective

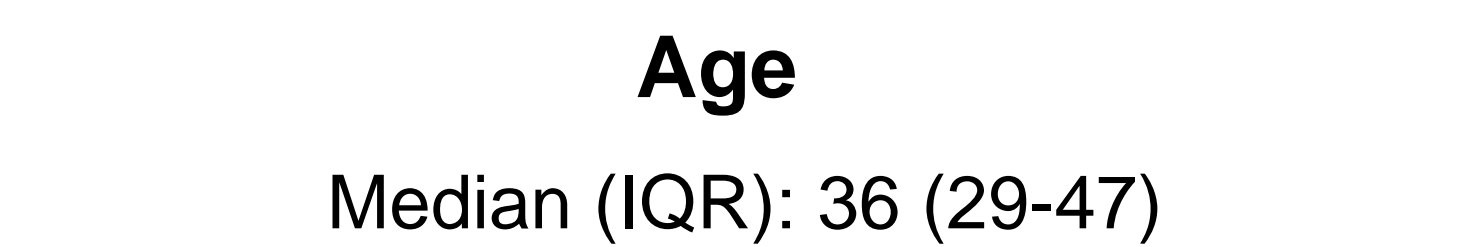
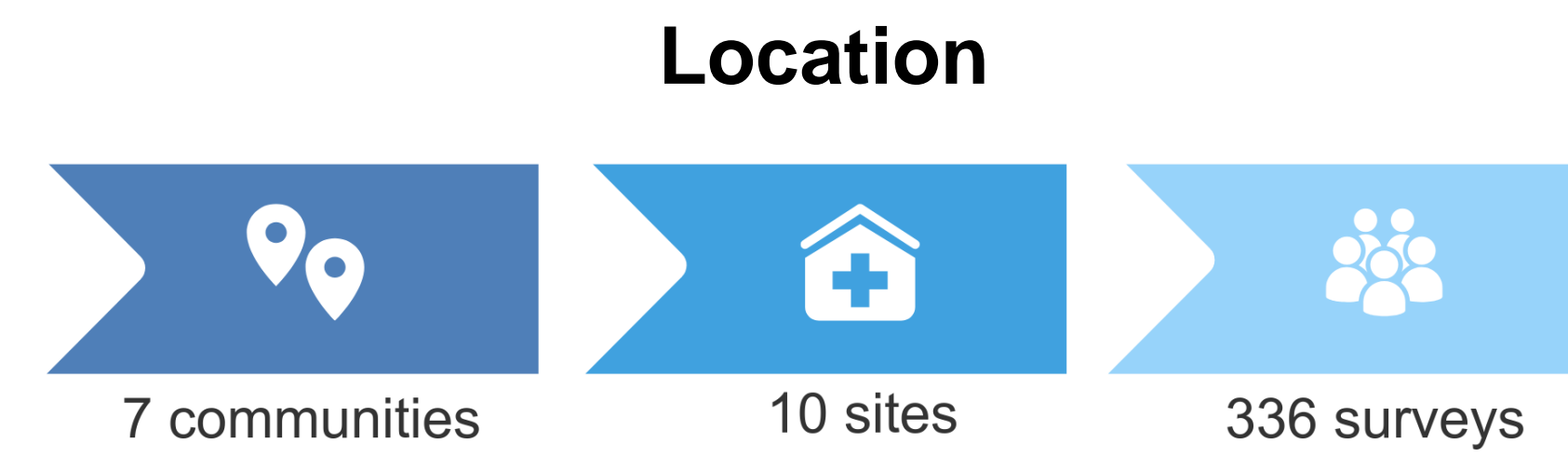
- The aim of the pilot is to evaluate the effectiveness of take home fentanyl test strips, and to assess the feasibility and acceptability of fentanyl test strips as an overdose prevention strategy to PWUD in BC.

Methods

- Study sites were selected from community agencies, OPS and SCS locations that already provide drug checking services.
- Participants received five BTNX test strips, supplies for testing, and a survey to record test strip results. Participants completed an on-site survey when the take-home results were returned which included qualitative questions to assess acceptability and feasibility.
- The take-home drug testing results were compared to on-site drug testing results during the same period of time. The assumption is that during the period of data collection, the drugs being checked by study participants will be similar to the drugs being checked onsite by peers/staff/technicians.

Results

Demographics of Survey Participants



Location/Health Authority	Surveys	Total Health Authority
ANKORS - Cranbrook (IHA)	2	116
ANKORS - Nelson (IHA)	8	
ASK Wellness Kamloops (IHA)	17	
ASK Wellness Merritt (IHA)	44	
Living Positive Resource Centre - Kelowna (IHA)	3	220
Molson Site and Lab (VCH)	54	
North Okanagan Youth & Family Services Soc. (IHA)	18	
Insite (VCH)	106	
Overdose Prevention Society (VCH)	60	

Drug Checking Results

Take Home Test Strip Results (n=1680)

TAKE HOME DRUG CHECKING	ONSITE DRUG CHECKING
Fentanyl positivity rate, opioids 994/1105 (89.95%)	Fentanyl positivity rate, opioids 591/663 (89.14%)
Fentanyl positivity rate, crystal meth 73/265 (27.55%)	Fentanyl positivity rate, crystal meth 5/97 (5.15%)
Fentanyl positivity rate, cocaine 16/93 (17.20%)	Fentanyl positivity rate, cocaine 1/92 (1.09%)
Number of "unclear" results: 56/1680 (3.00%)	Number of "unclear" results: NONE

Note: 1506/1680 (89.64%) had both "substance tested" and "fentanyl test strip result" questions answered; the remaining were either not filled out or were unclear/invalid responses

First time vs. Experienced

Category	First time using strips FYL Positivity (n=173)	Experienced using strips FYL Positivity (n=153)	On Site FYL Positivity
Opioids	508/560 (90.71%)	456/515 (88.54%)	89.14%
Crystal Meth	47/138 (34.06%)	25/123 (20.33%)	5.15%
Cocaine	11/37 (29.37%)	5/56 (8.93%)	1.09%
Other	10/26 (38.46%)	0/17 (0%)	none

Behaviour Changes Reported

When drugs tested positive for fentanyl:

- 25% of participants reported a positive change in behaviour which included an overdose prevention measure:
 - Used less or used more slowly: 45 (13%)
 - Used with a buddy 26 (8%)
 - Had somebody check on me: 4 (1%)
 - I used at an SCS/OPS: 9 (3%)
- 65% of participants indicated no change to drug use behaviour
- <1% reported a negative change in behaviour (used more and used more quickly or used alone)

Location and Timing of Test Strip Use

- Often used at OPS/SCS (n=97) 29%
- Predominately used before drug use (n=261) 78%

Acceptability



Conclusion

Considerations

- No control over multiple variables that may affect fentanyl test strip performance in the "take home" setting
- PWUD should be made aware that a negative result for fentanyl does not guarantee that a substance is safe

Key findings

- Drug checking is one of several harm reduction strategies that may help prevent overdose deaths
- Take home drug checking of opioids appears to correspond to on-site drug checking.
- Take home fentanyl positivity results in stimulants may include false positive results, suggesting a need for further education and evaluation.
- Repeat test strip use appears to correspond with increased accuracy of test strip results when testing stimulants
- This harm reduction strategy is feasible and acceptable to PWUD.

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