Incorporating Fentanyl Test Strips in Community Substance Use Programming

August 4, 2021

Sarah Duhart Clarke, M.S., Ph.D.
RTI International
Email: sduhartclarke@rti.org
Overview

Fentanyl and the opioid overdose epidemic in the U.S.

What are fentanyl test strips (FTS), and how do they work?

What we know about FTS and drug use behavior from research so far.

Implementing FTS in community programming.
National Drug-Involved Overdose Deaths 1999-2019

Figure source: CDC, National Center for Health Statistics
Fentanyl Reports to NFLIS-Drug 2014–2019

Figure source: DEA, 2020 National Drug Threat Assessment
Fentanyl Combination Reports to NFLIS-Drug 2014–2019

Figure source: DEA, 2020 National Drug Threat Assessment
Illicit fentanyl has led to unpredictability in drug supplies
Quotes about dangerousness of uncertainty created by illicit fentanyl

“It [heroin] is very inconsistent; like you buy something from someone one day and the next [day] it’s changed: it can be stronger; it can be weaker...but never the same.” (man in his 20’s in NC)

“We noticed that fentanyl was slowly being introduced...we just kept hearing that people were dying from it and that it was scary.” (woman in her 40’s in NC)

“Dope in general is killing people, but the fentanyl is something different. It’s a different animal completely and it really is killing people...one little mistake and you’re f**kin’ dead.” (man in his 30’s in MA/NH)

“Right now, it's like I'm nervous because fentanyl is not real heroin. You know what I mean? It's not dope. This s**t is killing people.” (man in his 20’s in MD)

“When I went to my probation officer - this was like the last time before I turned myself in—it popped up that I had fentanyl, cocaine, and amphetamines. That’s the crystal, right? And mind you I didn’t do no crystal, and I didn’t do no dope.” (man in his 20’s in PA)

Quotes from Ciccarone and colleagues (2017), Duhart Clarke and colleagues (in press), Reed and colleagues (2021), and Weicker and colleagues (2020)
People involved in the criminal justice system, particularly those who were recently incarcerated, have an increased risk of overdose.

Figure source: Ranapurwala and colleagues, 2018
Why FTS?

Fentanyl is driving the overdose epidemic

Many people who die from fentanyl-involved overdose are unaware of the presence of fentanyl in their drugs

People involved in the justice system are at increased risk of overdose, in part because of sudden and unpredictable increases in the potency of illicit drugs adulterated/contaminated with fentanyl
BTNХ, Inc. FTS

- Detect presence or absence of fentanyl but not concentration levels
- Report at Johns Hopkins found high sensitivity and specificity compared to spectroscopy
How to use FTS

USING URINE DRUG TEST STRIPS AS A HARM REDUCTION TOOL
How to use FTS

**for all tests**

1. prep shot & put needle aside
2. leave residue in cooker or baggie

**only Meth & MDMA**

3. drop cooker & residue into 1/2 cup of water
4. hold test strip in cup for 15 seconds & wait 2 minutes

**everything but Meth & MDMA**

3. add a 1/4 inch of water
4. do not go past the blue line insert strip for 15 seconds

**for all tests**

5. take out, lay flat,
6. 1 line appears if fentanyl is found.
   2 lines appears if it is not found.
   Use caution. Fentanyl may still be present.
   If invalid, test with a new strip.

6. no line or missing line "c" = unclear/invalid
What do we know about FTS and how they influence drug use behavior?
Fentanyl test strips as an opioid overdose prevention strategy: Findings from a syringe services program in the Southeastern United States

Tina Ferrick, Jeffrey W. Swatz, Edward F. Zajac, Allen Less, Eliza R. Burnham, Dwayne Price, Michael J. Hagedorn, William G. Hall, Mary E. Hare, John P. Wilson, Jon E. Zibbell

Increased overdose safety: 77%
Changed any behavior: 50%
(Used less drug than usual): 32%
(Performed tester shot): 17%
(Snorted instead of injected): 10%
(Pushed plunger more slowly): 9%
(Staggered use): 2%

Consumer discernment of fentanyl in illicit opioids confirmed by fentanyl test strips: Lessons from a syringe services program in North Carolina

Jon E. Zibbell, Nicholas C. Peiper, Sarah E. Duhan Clarke, Zach R. Salazar, Louise B. Vincent, Alex H. Kral, Judith Feinberg
“Despite the limitations of the binary reporting and the desire for exhaustive drug checking, most respondents believed FTS had utility. A few older respondents planned to use FTS to avoid using fentanyl completely. Jim (age 55, Black) said he would resell or discard his drugs if they tested positive. Walter (age 46, Black) and Evelyn (age 49, Black) claimed they would avoid certain dealers or areas if their drugs tested positive for fentanyl. However, most respondents stated that they would use the drugs regardless of the FTS result, but they would use the information to inform their harm reduction practices.”
Use of rapid fentanyl test strips among young adults who use drugs


Department of Epidemiology, School of Public Health, Brown University, Providence, RI, USA
School of Population and Public Health, University of British Columbia, Vancouver, Canada
British Columbia Centre for Disease Control, Vancouver, Canada
Vancouver Coastal Health, Vancouver, Canada
Department of Emergency Medicine, Brigham and Women’s Hospital, Boston University School of Medicine, Boston, USA
Department of Pediatrics, Children’s Hospital, Boston, USA
Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA
Department of Emergency Medicine, Warren Alpert Medical School of Brown University, Providence, USA

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changed any behavior</td>
<td>68%</td>
</tr>
<tr>
<td>Used less drug than usual</td>
<td>45%</td>
</tr>
<tr>
<td>Used more slowly</td>
<td>42%</td>
</tr>
<tr>
<td>Used with someone else</td>
<td>39%</td>
</tr>
<tr>
<td>Performed tester shot</td>
<td>36%</td>
</tr>
<tr>
<td>Threw drugs out</td>
<td>10%</td>
</tr>
</tbody>
</table>
“Love it. Those strips are fantastic. . . . I’ll bet you a dollar to a donut, you get the strips, you can measure out the fentanyl, that drug dealer will be out of business. People will think "Dude’s s**t is garbage." That will save lives. Bad enough I’m getting high, now you are going to try and kill me with this fentanyl? People, we talk.”

“I wouldn’t want that dependency. I don’t want to wake up in the morning and f**king need that. I for sure [would use test strips to test for fentanyl]”

“I don’t want to do no fentanyl, I don’t want to touch it, I don’t want to smoke it, I don’t want to shoot it or anything like that. It’s something I would want to know if it is in my drugs because I don’t want to use it.”
Implementing FTS in Community Programming
Purchasing FTS

- $1 per strip from BTNX
- North American Syringe Exchange Network (NASEN)
  - 80 cents per strip
- Include instructions for use
Partnering with Local Organizations

• Many harm reduction agencies are already distributing FTS

• Local organizations have already established trust with people who use drugs
Law Enforcement Buy-In

• Start with myth-busting and educating
  • Many LEO believe dermal exposure to fentanyl can be fatal – this is not true

“...Fentanyl and its analogs are potent opioid receptor agonists, receptor agonists, but the risk of clinically significant exposure to emergency responders is extremely low...Incidental dermal absorption is unlikely to cause opioid toxicity. For routine handling of drug, nitrile gloves provide sufficient dermal protection...” – American College of Medical Toxicology and American Academy of Clinical Toxicology Joint Position Statement, 2017
Examples of Law Enforcement Agencies Already Distributing FTS

11 Massachusetts Police Departments Selected to Participate

BOSTON — The Police Assisted Addiction and Recovery Initiative (P.A.A.R.I.) has partnered with 11 Massachusetts police departments to utilize fentanyl test strips as a new tool to engage people with opioid use disorder and help prevent overdose deaths.

The three-month pilot project, made possible by a $150,000 grant from the Massachusetts Department of Public Health, launched this week and will continue through June. Through this project, police departments and their community partner agencies will distribute Fentanyl Test Strip Kits as an engagement tool for individuals at risk of opioid overdose.

Police departments get new tool to reduce overdose deaths: fentanyl test strips

Seven Maine police departments are getting a new tool they hope will reduce the number of fatal drug overdoses in the state. Departments in Westbrook, South Portland, Biddeford, Kennebunk, Augusta, Bath and Brunswick are among 19 agencies in Maine and Massachusetts that will receive fentanyl test strips. They can be distributed to people to detect whether the drugs they are using are laced with the powerful synthetic opioid. Local and state officials say they are a harm reduction tool that can be used with other resources, including steering users to treatment programs, to prevent overdoses.
Contact Information

Presenter: Sarah Duhart Clarke, Ph.D.
  Email: sduhartclarke@rti.org
  Phone: (919) 541-7191

Project Director: Kevin Strom, Ph.D.
  Email: kstrom@rti.org
  Phone: (919) 485-5729

Associate Project Director: Sara Calvin, M.S.
  Email: scalvin@rti.org
  Phone: (919) 541-6882
https://cossapresources.org/Program/TTA

The COSSAP training and technical assistance program offers a variety of learning opportunities and assistance to support BJA COSSAP grantees and other local, tribal, and state stakeholders to build and sustain robust, multi-layered criminal justice responses to risk substance use and misuse.

Training and technical assistance is provided in a variety of formats, including virtual and in-person training events, workshop and meeting presentations, and online resources.

The COSSAP TTA Program supports communities by:

- Facilitating peer-to-peer learning opportunities in which communities can learn from experienced programs through virtual consultations and on-site visits.
- Providing speakers for conferences and workshops or skilled subject matter experts for training events to educate stakeholders and build capacity.
- Facilitating strategic and cross-system planning to identify community resources, establish priorities, and develop a road map to achieving goals.
- Identifying materials such as policies and procedures, guidelines, and data sharing agreements that support program activities.
- Supporting POMPs by increasing POMP efficiencies and facilitating coordination between POMPs and state and national stakeholders.
BJA's Comprehensive Opioid, Stimulant, and Substance Abuse Program