Non-pharmaceutical Fentanyl: Canadian Fentanyl Trends Moving to the US

Steven P. Kurtz, Ph.D.
Nova Southeastern University
Center for Applied Research on Substance Use and Health Disparities

RADARS® 10th Annual Scientific Meeting International Pre-Symposium
Washington, DC May 5, 2016
Acknowledgements

Research from Nova Southeastern University’s Center for Applied Research on Substance Use and Health Disparities (ARSH) is supported by Denver Health and Hospital Authority - a public, not-for-profit agency based in Colorado.
RADARS® System Mosaic Approach

- College Survey
- Early Experimenters
- Poison Center
- Acute Events
- OTP (Opioid Tx Program)
- Patients in Treatment
- SKIP Survey of Key Informant Pts
- Patients in Treatment
- Drug Diversion
- Criminal Justice/Law Enforcement
Drug Diversion Program

- Number of new cases of pharmaceutical diversion investigated by law enforcement units or reported to state regulatory boards

- Coverage
  260 reporters from 49 states

- Reporting Timeframe
  3 months in arrears
3-Digit ZIP Codes Reporting to Drug Diversion for 2015
Targeted Drugs

- Amphetamine
- Buprenorphine
- Cannabinoids
- Fentanyl
- Hydrocodone
- Hydromorphone
- Methadone
- Methylphenidate
- Morphine
- Oxycodone ER
- Oxycodone IR
- Oxymorphone
- Sufentanil
- Tapentadol
- Tramadol
Questionnaire

- Case counts for each targeted drug
- Dosage size and form
- Other diverted drugs
- Open-ended responses to a question about new drug trends
Non-pharmaceutical fentanyl

- Acetyl fentanyl and other analogues
- 50 to 100 times more potent than morphine
- Blood tests do not distinguish from pharmaceutical fentanyl
- Legal status depends on the analogue
Reports of non-pharmaceutical fentanyl

Key

- Powder alone or combined with heroin
- Sold as prescription medications (pills)
- No reports of NPF
3Q 2015

Alaska Hawaii
NPF follows the opioid epidemic

DRUG POISONING DEATHS INVOLVING HEROIN AND OTHER OPIOID DRUGS, BY COUNTY, 2006-2010

#DrugPolicyReform

Source: CDC
2015 Drug Diversion Rates (per 100,000 pop)
No change in Rx fentanyl diversion
National Drug Threat Assessment
Primary Heroin Trafficking Routes 2008–2010
2012: New NPF Trafficking
Fentanyl OD Deaths in BC

Drug overdose deaths involving fentanyl

Source: B.C. Coroner's Service

Made with Chartbuilder
Fentanyl OD Deaths in Ontario

**NUMBER OF DEATHS FROM THREE CLASSES OF OPIOIDS***

* In Ontario. Includes alcohol toxicity, ** OxyContin, a brand name version of oxycodone removed from the market in Canada in 2012.

CARRIE COCKBURN / THE GLOBE AND MAIL)
SOURCE: PRELIMINARY STATISTICS FROM OFFICE OF THE CHIEF CORONER FOR ONTARIO
Canada NPF Market

- High volume Chinese trade through Vancouver
- No searches of parcels under 30 grams in weight
- Distant from Mexico heroin sources
Timeline

- 1981 first fentanyl analogue Schedule 1
- Fentanyl-laced heroin / fentanyl powder:
  - 2012 British Columbia
  - Apr 2013 Maine
- Fake prescription medications:
  - May 2013 Montreal
  - Sep 2013 Louisiana, Rhode Island
- 2013-2015 Escalating overdose deaths
Timeline (continued)

Public health actions:

- Jun 2013  CCENDU (Canada) warning
- Feb 2014  CCENDU fake pill warning
- Dec 2014  Alberta warning
- Mar 2015  US DEA warning
- May 2015  US DEA: acetyl fentanyl Sched 1
- Oct 2015  China outlaws manufacture of fentanyl analogues
- Oct 2015  CDC warning / clinical guidelines
- Apr 2016  US DEA fake pill warning
NPF pill press businesses

- Pill press equipment and NPF supplied by Chinese
- Internet ordering and in-country pill pressing
- Found in BC, Alberta, Ontario and Quebec in Canada
- In the US so far: Los Angeles, New York, Ohio, Seattle
Pill press plus 1K NPF = $100,000
Street value = $20,000,000
Counterfeit Xanax with Fentanyl
A powerful synthetic analgesic, W-18 may be many times stronger than fentanyl.

Police in Edmonton, Alberta, rushed to warn the public and emergency departments about W-18 after they seized four kilograms of the drug in powder form.

Canada has moved to add W-18 to Schedule I.
DEA agents in South Florida intercepted an international priority mail package with more than 1,000 blue fentanyl pills and other drugs, including W-18, that were shipped from an inmate in a prison near Montreal.

Canada law enforcement found that Chinese companies are acquiring expired patents to reproduce new synthetic substances for sale on the international market.
Conclusion

- Canada and US have different but complementary drug trafficking routes

- Illicit drug trade adapts to Rx opioid misuse trends and control measures

Most worrisome:

- high potency illicit fentanyl analogues are easily camouflaged and transported
- mass produced counterfeit Rx products
Public health policy issues

- International cooperation
- Systematic surveillance, including Rx counterfeits and substitutes
- Law enforcement efforts to control illicit trade
- Prevention measures targeted to young people
- Pain management treatments that work
- Treatments with low abuse liability
- Access to opioids for patients that need them
- Drug treatment access
- Harm reduction, including needle exchange, safe injection sites, and OD reversal
Thank you

steven.kurtz@nova.edu
arsh.nova.edu