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

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RADARS® System Mosaic Approach

College Survey | Early Experimenters
OTP Opioid Tx Program | Patients in Treatment
Drug Diversion | Criminal Justice/Law Enforcement

Poison Center | Acute Events
SKIP Survey of Key Informant Pts | Patients in Treatment
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
NPF follows the opioid epidemic

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

Source: CDC

#DrugPolicyReform
2015 Drug Diversion Rates (per 100,000 pop)

No change in Rx fentanyl diversion
National Drug Threat Assessment
Primary Heroin Trafficking Routes 2008–2010

[Map showing primary heroin trafficking routes in the United States, with different colors indicating primary, secondary, and tertiary routes.]
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

<table>
<thead>
<tr>
<th>NUMBER OF DEATHS FROM THREE CLASSES OF OPIOIDS*</th>
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<tbody>
<tr>
<td>250</td>
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<tr>
<td>200</td>
</tr>
<tr>
<td>150</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>50</td>
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* 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

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