Fentanyl Info and Response with case studies

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CRRA Presentation
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Objectives

• Provide information on fentanyl and its characteristics
• Discuss safety precautions that can be taken when entering properties
• Go through 3 case studies
What is Fentanyl?

• A chemical that binds to opioid receptors
• Nervous system depressant
• Thought to be 100 times stronger than morphine
• Prescribed as a pain killer for those suffering grave illnesses
• Used as an anesthetic under medical supervision
• Medically, typically given in an IV drip, patch or sublingual tablet
• Non-pharmaceutical forms are typically pill and powder
Fentanyl
How much Fentanyl is dangerous?

Exposure routes:

- Inhalation
- Dermal absorption (skin contact)
- Ingestion (e.g. touching mouth with contaminated hands)
- Absorption into the eye
Signs of fentanyl poisoning

- Vomiting
- Slowed heart rate
- Confusion
- Dizziness
- Seizures
- Trouble breathing
- Difficulty thinking/speaking
- Extreme drowsiness
- Cold, clammy skin
- Pinpoint pupils
- Shallow breathing
- Low blood pressure
- Blue lips/nails
- Respiratory arrest
Overdose deaths involving fentanyl are increasing

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Overdose deaths by Opioid type

2016 – 343 fentanyl OD deaths
In 2015, more Calgarians have died from fentanyl use than traffic collisions and homicides combined.

Your next dose of fentanyl may be your last.

#FentanylKills

Fentanyl awareness ad from Calgary police and Alberta Health Services.
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• Officially unofficially not an opioid
• We don’t know anything about it’s pharmacodynamics or pharmacokinetics
• Recently added to the *Controlled Drugs and Substances Act*
Canada 753mg/capita
US 693 mg/capita
Why Alberta?

Purchase powder from overseas to re-sell as powder in Canada:
1 kilo Fentanyl powder $12,500 USD on internet = $280,000 (sold in Canada)  
= $267,500 profit

Purchase powder to make pills:
1 kilo Fentanyl powder $12,500 USD on internet = 1 million counterfeit pills
$20/pill x 1 million pills = $20 million - $12,500 = $19,987,500 profit

$12,500 investment → $20 million return
Pill Press

• Was legal to purchase and import

• CBSA had no authority to seize pill press

• Individuals with no criminal histories importing presses into Canada

• Multi-stage commercial press $6000 to $10,000 USD

  10,000 – 18,000 tablets / hour
Risk Assessment

WHAT TO LOOK FOR WHEN ENTERING A PROPERTY:

• Person is unconscious and cause is unknown
• Drugs present on the person
• White or green residue in or around the mouth/hands
• Drug paraphernalia or drugs lying out in the open
PPE shows presence of harmful substance
Fentanyl mixed with Heroin
Furanyl Fentanyl
Mixing Operation
Pill making equipment
Pill making equipment
Personal Protective Equipment

• Use PPE, consider all potential routes of exposure:
  – Transdermal
  – Inhaled
  – Mucosal
Suspected fentanyl contact

*The risk to any individual first-responder is low*

Eye Contact

- Wash eyes with lots of water

Inhalation

- Evaluate respiratory function/pulse
- Assist with breathing if labored

ALWAYS SEEK IMMEDIATE MEDICAL ATTENTION
Suspected fentanyl contact (cont’d)

Ingestion
• Ensure airway is unobstructed
• Do not induce vomiting

Skin contact
• Remove contaminated clothing
• Thoroughly wash skin with soap & water
• Rinse with water

ALWAYS SEEK IMMEDIATE MEDICAL ATTENTION
Naloxone

- Naloxone is a medication that reverses the effects of an overdose from opioids
- Intramuscular and intranasal formulations
- May require multiple doses
- Requires training to administer
- Administered by EMS 890 times last year (fiscal 2013-14)
Naloxone in Alberta

To the end of September 2016:

• 6,701 kits distributed
• 472 reported overdose reversals
• Naloxone available at 717 sites, 2797 trainers
Naloxone in Alberta

Figure 21: Naloxone kits dispensed by community pharmacies and harm reduction agencies, by zone, Jan. 1, 2016 to Dec. 31, 2016.
Naloxone Kit

- 2 ampoules of 0.4mg/ml Naloxone
- 2 retractable syringes
- 2 alcohol swabs
- 2 nitrile gloves
- One-way rescue breathing barrier mask
- Administration instructions
- Kit identifier information
Environmental Public Health Role

• Determine risk level (production facility or possession)
• How many units/people potentially affected
• Inspection/information gathering
• Issue an Unfit for Human Habitation order if necessary
• Ensure a qualified contractor is carrying out remediation
• Review remediation report
• If remediation satisfactory, rescind order
If deemed uninhabitable…

• Owner must hire a qualified HAZMAT contractor to carry out decontamination

• Contractor must submit a scope of work to health inspector for review and acceptance

• Upon completion of decontamination, contractor must submit final report to health inspector for review and acceptance
Remediation guidelines

- Absorbent materials to be removed and discarded
- Multiple wash/rise of remaining hard surfaces
- Specific strategy to address contamination of ventilation system
Case Study #1

• Detached single family home (rental)
• Landlord came to collect rent, tenant answered the door in a face mask covered in white powder
• Landlord called CPS
• CPS investigated and found a large-scale pill production operation
• AHS deemed the house uninhabitable
• Homeowner hired contractors to remediate
• AHS rescinded order
Case Study #2

- 4-plex
- Landlord suspected illicit activity, reported to CPS
- CPS found a pill production operation
- AHS investigated and found no interconnected ventilation between units
- AHS deemed the affected unit uninhabitable
- Homeowner hired contractors to remediate
- AHS rescinded condemnation order
Case Study #3

- 1 unit of a large apartment building
- Occupants were connected to a large drug ring
- AHS deemed the unit uninhabitable
- No shared ventilation amongst units
- Occupants dragged contaminated belongings through hallway, down elevator, into foyer in a midnight move
- Common areas and unit needed decontaminating
- Remediation completed
- Order rescinded
Final take-aways

- Conduct regular inspections of your properties

- Build rapport with tenants

- Do not enter if you observe ANY suspicious activity

- Report suspect homes to CPS and EPH for investigation and follow-up
Questions/Discussion

Thank you for your time!