

Fentanyl, Opioid Overdose and Naloxone

Opioid Agonist Therapy Conference
Saskatoon, SK
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Declaration

- No conflict of interest.
- Consultant in Addiction Medicine, SHR.
- Chair, College of Physicians and Surgeons of Saskatchewan Opioid Advisory Committee.
- Physician Lead, Saskatchewan Health – SHR Take Home Naloxone provincial pilot project.
- Methadone and Suboxone prescriber.

Objectives

- Review the historical national and provincial patterns of opioid use.
- Understand the emergence of illicit fentanyl in a supply & demand context.
- Appreciate the toxicity of fentanyl, and the provincial coroner data.
- Review evidence based treatment options.

Patterns of Opioid Use



The OpiCan Study (2006)

- Assessed opioid use pattern in 7 major Canadian cities.
- Heroin most commonly used in only 2 sites, Vancouver and Montreal.
- Heroin virtually absent in 4 sites.
- Heroin use significantly decreased in all sites vs. 2001.
- Prescription opioids were the predominant form of illicit opioids.

(Fischer et al, CMAJ, Nov. 2006)

Saskatchewan Opioid Use Patterns

- 90's: City specific patterns. Talwin and Ritalin in Regina, morphine in Saskatoon, hydromorphone in Prince Albert.
- 2000's: evolution to primarily hydromorphone, with morphine secondary.
- 2010's: emergence of illicit fentanyl.

Fentanyl Misuse

- Abused or diverted prescribed transdermal patches: excess patch use, patch chewing, brewing or drug extraction.
- Illicitly produced fentanyl powder or pills.

Transdermal Fentanyl



The FACTS about street FENTANYL
There is no such thing as a safe street drug. Know the risks.

Fentanyl is often added to other illegal drugs without people knowing.

Fentanyl has been used illegally in various forms including:

- Pills
- Pure powder
- Powder mixed with other drugs
- Patches

50 - 100 times
more potent than
Heroin • Oxycodone • Morphine

Fen-tanyl [fen-tuh-nil]
An opioid narcotic, a prescription drug used for cancer patients in severe pain.

Overdose Signs

- Trouble walking or talking
- Pinpoint pupils
- Seizures
- Slow heartbeat
- Shallow breathing
- Bluish or cold/clammy skin

Slang Terms

- Fake oxy
- Greenies
- Green beans
- Green apples
- Apples
- Eighties
- Shady eighties

You can't See it, Smell it, or Taste it.

HealthLine 811 Call 911 if you suspect someone has overdosed! **Government of Saskatchewan**


Illicit Fentanyl Branding

- Initially positioned to replace OxyContin when it was removed from the market, and replaced by OxyNeo, in 2011 – 2012.
- Oxycodone had been heavily abused through diversion, especially OxyContin.
- Criminal labs saw a marketing niche for fentanyl.

Fentanyl Production & Marketing

- Easily obtained from off-shore labs in a concentrated powder.
- Domestic pill production and distribution.
- Initially targeted suburban youth and oxycodone using demographic.
- Saskatoon price: \$20 - \$40 / pill
- Range of use: 2 – 10 (or more) per day.
- Most commonly snorted.

Internet Off-Shore Access



430 USD
per gram
Product Availability: Available in Stock
Category: Research Chemicals and Powders

Fentanyl treats severe, ongoing pain that cannot be controlled with other medicines. This medicine is a narcotic pain reliever.

\$430 1,000 mg.
-43 1 mg.
1 tab ~ 25 mcg.
\$20 - \$40 per pill



Low Tech Production



Fentanyl Toxicity

- Function of potency and variable concentration.
- Drug is diluted during production.
- Mixing and distribution of concentrated drug may vary from pill to pill, and within pill.
- Most frequently snorted but may be injected.

Office of The Chief Coroner (2015)

Breakdown of Opioid Drugs Identified in Drug Overdose Deaths by Manner of Death, 2010 – 2015									
	Codaine	Fentanyl	Heroin	Hydrocodone	Methadone	Morphine	Oxycodone	Opioid (Other)	
2010	Accident	4	2	12	11	12	10		
	Suicide	2	—	2	—	3	—		
	Homicide	—	—	—	—	3	1	1	
2011	Accident	7	2	19	20	12	5		
	Suicide	2	—	1	3	3	4		
	Homicide	—	—	—	—	—	—		
2012	Accident	12	6	16	14	19	3		
	Suicide	4	—	1	1	—	2		
	Homicide	—	—	—	—	—	—		
2013	Accident	3	9	17	21	10	7	1	
	Suicide	2	1	4	2	4	1		
	Homicide	—	—	—	—	—	—		
2014	Accident	5	9	21	20	15	4		
	Suicide	—	2	—	4	2	1		
	Homicide	—	—	—	—	—	—		
2015	Accident	6	11	14	14	15	2		
	Suicide	1	—	1	1	3	1		
	Homicide	—	—	—	—	—	—		
Undetermined	1	—	1	—	2	—			

Opioid Related Overdose Deaths

- Vast majority are accidental.
- Hydromorphone typically leads, followed by methadone, morphine and fentanyl.
- Licit fentanyl is not differentiated from illicit, but prescription opioids still dominate.

Office of The Chief Coroner (2015)

Confirmed Drug Overdose Deaths Involving Fentanyl by Place of Death, 2013 – 2015			
	2013	2014	2015
Saskatoon	6	4	5
Regina	2	3	--
Battleford	--	1	--
Beauval	--	1	--
Kindersley	1	1	--
Lloydminster	--	1	--
Moose Jaw	--	--	1
Swift Current	1	--	--
Prince Albert	--	--	1
RM of Pleasantdale	--	--	1
Rosthern	--	--	1
Weyburn Community	--	--	1
Wynyard	--	--	1
Total	10	11	11

Evidence Based Treatments for Opioid Use Disorder / Addiction (WHO)

- Take Home Naloxone Kits
- Safe Injection Sites with a continuum of detox and treatment services. (Insite and Onsite)
- Opioid Agonist Therapy (Suboxone or methadone)

Fentanyl Use: Stabilization

- Typically younger cohort: teen or young adult.
- Male >> Female.
- Higher levels of social or family support, with associated tendency to enable.
- Lack of insight into risks and potential consequences.
- Minimal levels of engagement.
- Longer period of time, higher doses of methadone required to establish an adequate blockade.

Fentanyl Use: Stabilization

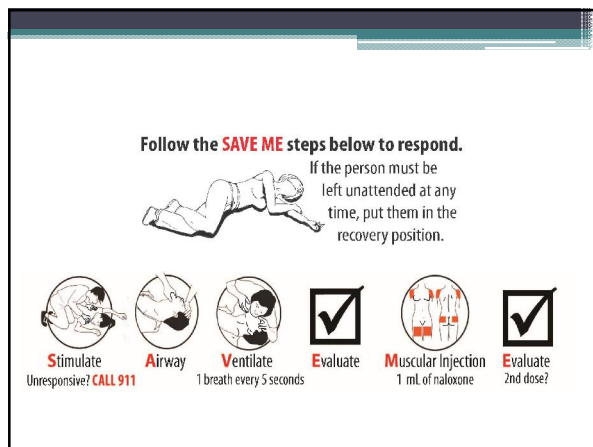
- Requires greater structure:
- Regular appointments with Addiction Counsellor.
- More frequent UDS schedule.
- Either assertive increase in methadone dosing, to blockade levels, or consider Suboxone for greater opioid receptor affinity vs. fentanyl.
- Early use of detox and treatment for concurrent stimulant use.
- Strong encouragement to return to school or work.

Take Home Naloxone

Saskatchewan Health – SHR
Provincial Pilot

Take Home Naloxone Provincial Pilot

- Targets opioid users, per Health Canada recommendations.
- Also targets those “who care about users”, per WHO recommendations:
- “These guidelines recommend that people who are likely to witness an opioid overdose, including people who use opioids, and their family and friends should be given access to naloxone and training in its use.” (WHO 2014.)



THN Pilot 4 Step Process

- 1) User and / or supports contact Addiction Counsellor at Mayfair Clinic to ascertain eligibility and current engagement in care.
- Booked to see community Mental Health Nurse educator.
- 2) 30 – 45 minute training session. Script based, video supported, post test quiz. Certificate given.

THN Pilot Process

- 3) Sees Nurse Practitioner. Kit and use reviewed, Rx given.
- 4) Kit and Rx taken to pharmacy. Naloxone (0.4 mg, 1 ml vials) labelled, dispensed and use again reviewed by pharmacist.
- Report filled when replacement Rx required.

Evaluation

- Demographics of people trained.
- RHA and community of residence.
- Opioid use: Fentanyl snorting vs. IVDU.
- Replacement Rx: OD report form.
- EMS OD data.
- Hospitalization data.
- Provincial Coroner reports.
- Client satisfaction.

Possible Next Steps

- Goal: provide access to ALL opioid users at risk of overdose.
- Dissemination to other sites within SHR, other RHA's and throughout the province.
- Dissemination to programs and organizations that serve opioid users.

Possible Next Steps

- Provincial alignment with federal deregulation of naloxone.
- Training will still be required.
- Need to retain some connection with MH&A services, to link with SUD care.
- Explore the balance: use THN as an outreach and engagement strategy for MH&A, without unnecessarily impeding access.

Thank you.

Questions?

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