Take Home Naloxone: What Pharmacists Need to Know

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Conflict of Interest/Disclosure

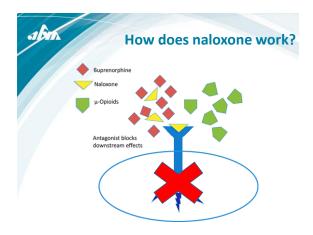
- Dr. Sheri Fandrey
 - Has no conflicts to disclose
 - Has received no speaking fees for this program
 - This program has received no financial support from any commercial or other organization.
 - This program received in-kind support from my employer to cover transportation costs.

Objectives

- · Examine the scope of the current opioid overdose crisis
- · Identify risk factors associated with opioid overdose
- Recognize the signs & symptoms of opioid overdose
- Demonstrate the use & administration of naloxone
- Identify resources for training the public on naloxone

What is naloxone?

- Naloxone is a competitive antagonist at the mu, kappa & delta opioid receptors
 - $-\,$ Has no effect in the absence of opioids, or with non-opioids
 - Any adverse effects directly related to induced opioid withdrawal or reaction at injection site
 - Very safe no abuse potential
- It has a higher affinity for opioid receptors than most opioid agonists – displaces agonists from receptor site
- Newer super-potent fentanyl analogues may have affinity for the opioid receptor equal to naloxone
- Onset of action 3-5 minutes
- Duration of action 30-90 minutes
 MUCH shorter duration than opioids, especially in overdose



What is take home naloxone (THN)?

- THN kits containing 2 doses of IM or IN naloxone, along with:
 - Gloves
 - Safety syringes (for IM or non-proprietary IN)
 - Alcohol swabs
 - Breathing mask one way valve to protect person giving breaths

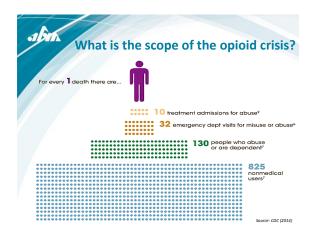




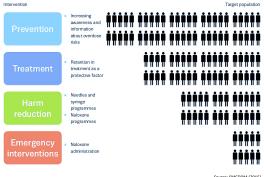
Why is THN necessary?

- Opioid overdoses are a serious public health issue

 More than 100 people die in Manitoba every year from overdose – leading cause of accidental death
- More than 75% of overdoses are witnessed by someone
 Very strong evidence that lay people with appropriate
 - training can recognize and respond to opioid overdoses
 - Administering naloxone avoids the need for prolonged rescue breathing
- Temporary reversal of respiratory depression
 - Buys enough time for transport to an ER
 - Reduces risk of brain injury (anoxia) and death
- No evidence that THN increases risk taking behaviour



Targets of overdose prevention



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	Source:	EMCDDM (2	015)					



Why should pharmacists care?

- Canadians have the 2nd highest use of prescription opioids in the world
- The current opioid overdose crisis was largely driven by overuse of prescription opioids (e.g., OxyContin)
- Diversion of prescription opioids still major source of street opioids
- Pharmacists have an opportunity to be part of the solution by providing:
 - education on the use of naloxone and treatment of opioid overdose for all Rx opioid patients
 - improved access to THN, especially in rural/remote areas

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- referrals to those looking for treatment options

Trends in high-dose opioid prescribing in Canada (2006-2011)

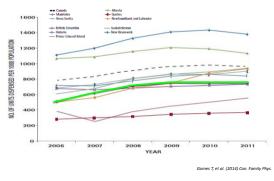
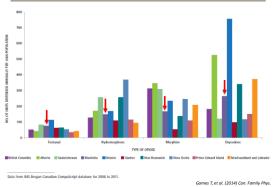




Figure 2. High-dose opioid dispensing rate (number of units per 1000 population), by province and opioid type: Rates are calculated as the average rate of dispensing between 2006 and 2011.



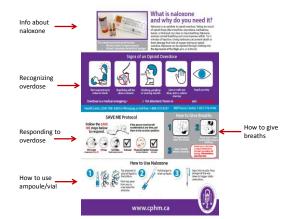
Who might benefit from THN?

- High dose opioid prescriptions (>100mg/day ME)
- Entering/tapering methadone maintenance treatment
- Illicit and Rx opioid use by people:
 - with breathing problems
 - with kidney and/or liver disease
- who also use Rx/non-Rx depressants (e.g., alcohol, BZs)
- People who use illicit opioids
- Reduced tolerance due to abstinence (prison or detox) even for a few days
- Reduced access to emergency services (rural/remote)
- Family and friends of those who use Rx or illicit opioids

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• Those who want to recognize & respond to OD

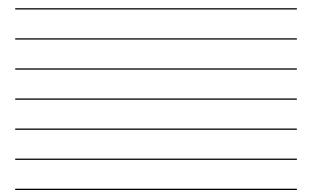
	E INJECTION TRAINING CHECKLIST TO AN OPIOID OVERDOSE		NASAL SPRAY TRAINING CHECKLIS TO AN OPIOID OVERDOSE
	Stimulate with noise (shout, use their name)	UNRESPONSIVE	* Stimulate with noise (shout, use their name)
	 Touch (sternal rub), remember, tell the person whet you are doing before you touch them 		 Touch (sternal ruls), remember, sell the person who you are doing before you touch them
CALL 911	Put the person in the recovery position if you have to leave them alone	CALL 911	Put the person in the recovery position if you have leave them alone
	Give address and if possible send someone to meet paramedics at the door		Give address and if possible send someone to me paramedics at the door
CLEAR AIRWAY	Clear ainway (removing anything from their mouth), tilt head, lift chin	CLEAR AIRWAY	Clear airway (removing anything from their mouth tilt head, lift chin
W FLITTLATE	Pinch nose and give 2 breaths	a realizate	Pinch mose and give 2 breaths
	Continue 1 breath every 5 seconds until the person is breathing again		 Continue 1 breach every 5 seconds until the pert is breaching again
GIVE 1ST DOSE	Snap top off ampoule, draw up all of the nalowone	GIVE 1ST DOSE	Tilt head back supporting neck with hand
	 Inject into large <u>muncle</u> (thigh, upper arm, or buttock) 		 Gently insert nazzle tip completely into one nastri and press plumeer firmly to release the doos
	 Inject at 90°, push plunger until you hear a click (needle will retract) 		Do not prime nasal spray
EVALUATE & GIVE	 Continue to give breaths until they respond (the person is breathing again on their own) 	EVALUATE & GIVE 2ND DOSE IF NEEDED	Continue to give breaths until they respond (the person is breathing again on their own)
	 After 5 minutes, if the person is still unresponsive, give them a 2nd dose of nalosone 		 After 5 minutes, if the person is still unresponsiv give them a 2nd dose of naloxone
	 Continue breaths until the person is breathing on their own, or until parametics arrive 		 Continue breaths until the person is breathing on their own, or until paramedics arrive
AFTERCARE	Nalssone wears off in 20-90 minutes	AFTERCARE	Naloxone wears off in 20-90 minutes
	 The person will not remember overdosing lexplain what happened) 		 The person will not remember overdosing (explait what happened)
	 Monitor the person for at least 2 hours and do NOT allow them to take more optoids (they could overdose again) 		 Monitor the person for at least 2 hours and do NOT allow them to take more opioids (they could overdose again)
REFILL	· Go to your neverest phermacy to buy more neloxone	C REFILL	· Go to your nearest pharmacy to buy more naloxon





How do you recognize an overdose?





How do you respond to an overdose?

Follow the SAVE ME steps below to respond.









breathing on their own



What else is important?

- After administering THN
 - Stay with person until ambulance arrives
 <u>Good Samaritan Drug Overdose Act</u> (5/5/17)
 - The person is likely to be confused explain that they overdosed
 - Any withdrawal symptoms caused by naloxone will quickly dissipate
 - Try to prevent use of other substances
 - Be prepared to administer additional naloxone
- Replace THN supplies after use and/or if expired
- Experiencing an overdose is a risk factor for a future fatal overdose



What are other overdose precautions?

- Don't use alone
 - Have a partner
 - In larger groups have a sober "guide" or "trip sitter"
- Use alternate routes of administration
 - Oral
 - Snorting
 - Inhaling/smoking
- Be very cautious with dosing until potency known – Take very small first hits – ½ or ½ of normal amount
- Avoid polysubstance use
 - Depressants are particularly dangerous in combination (e.g., alcohol, benzodiazepines, GHB, gabapentin, etc.)
 Stimulants (e.g., cocaine, methamphetamine) are also risky
- Have a naloxone kit available

References

Canadian Centre on Substance Abuse (2016) "CCENDU Bulletin: The Availability of Take Home Naloxone in Canada," available at: http://www.ccsa.ca/Resource%20Library/CCSA-CCENDU-Take Home-Naloxone-Canada-2016-en.pdf

Carter CL & Graham B (2013) "Opioid Overdose Prevention & Response in Canada," Policy Brief, Canadian Drug Policy Coalition, available at: <u>http://www.drugpolicy.ca/wpc</u> content/upioas/2013/01/LOPC. OverdosePreventionPolicy Final July2014.pdf

European Monitoring Centre for Drug & Drug Addiction (2015), "Preventing fatal overdoses: a systematic review of the effectiveness of take-home naloxone," EMCDDA Papers, Publications Office of the European Union, Luxembourg.

Gomes T, Mamdani MM, Paterson JM, Dhalla IA & Juurlink DN (2014) "Trends in high-dose opioid prescribing in Canada," *Canadian Family Physiclan*, 60:826-932.

Kerensky T & Walley AY (2017) "Opioid overdose prevention and naloxone rescue kits: what we know and what we don't know," Addiction Science & Clinical Practice, 12(4):1-7, available at: http://pubmedcentraicanada.ca/pmcc/articles/PMC5219773/pdf/13722_2016_Article_68.pdf

McDonald R & Strang J (2016) "Are Take-Home Naloxone Programs Effective? Systematic review utilizing application of the Bradford Hill criteria," Addiction, 111:1177-1187.

Wermeling DP (2015) "Review of naloxone safety for opioid overdose: practical considera for new technology and expanded public access," 6(1):20-31.