Naloxone

Introduction at CFFM

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Learning Objectives

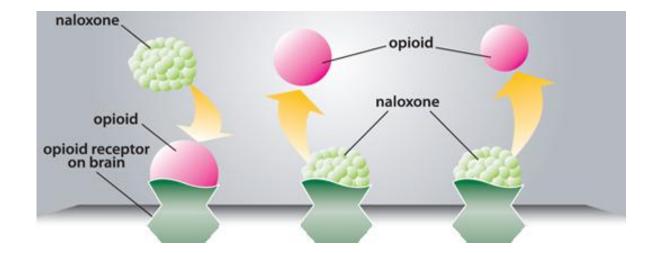
- Understand the value of take-home naloxone kits in the context of the opioid crisis
- Describe where & how take-home naloxone kits are accessible in the community
- Describe how to recognize and respond to an opioid overdose
- Demonstrate the use of and administration of various naloxone rescue kits

What is Naloxone?

 WHAT: Antidote for opioid overdose ("opioid antagonist")

Codeine Demerol Hydromorphone Heroin Oxycodone Dilaudid Morphine Buprenorphine Fentanyl Methadone

- HOW:
 - Stronger affinity for opioid receptors than opioids
 - Knocks opioids off their receptors in the brain
- RESULT: reverses respiratory depression



What will Naloxone NOT work for?

- Benzodiazepines (e.g., clonazepam)
- Alcohol
- Other sedatives (e.g., phenobarbital)
- Stimulants
 - cocaine
 - amphetamines

If in doubt, give naloxone

- Very safe
- No effect in the absence of opioids
- No abuse potential
- Adverse effects typically related to injection site reaction or withdrawal symptoms:
 - Irritability, anger
 - Sweating, shivering
 - Muscle pain
 - Vomiting, diarrhea

A BRIEF HISTORY

Evolving Regulatory Status

- Traditional use: hospital only, on emergency carts as IM injections only
- March 22, 2016: Health Canada removed naloxone from the Prescription Drug List
 - Schedule 2 (OTC) medication
 - Training for administration still required as only the injectable formulation available
- Deregulation was an unprecedented move deemed necessary given the increasing opioid epidemic

Increasing Convenience

- Nasal spray entered the market, but very expensive
- Nasal spray not (originally) covered by MOHLTC
 - Exception: covered for prison inmates leaving incarceration; highest risk to re-use opioids

INJECTION (IM)

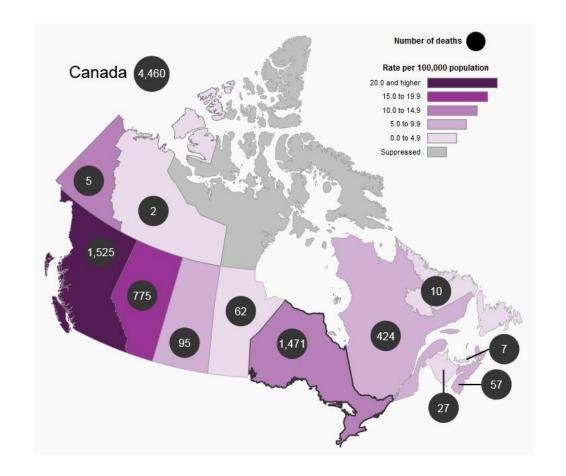
- Faster onset (2-5 min)
- Less comfortable for most people to use
- More time to prepare dose

NASAL SPRAY

- Easy to use, non-invasive
- Slower onset (8-10 min)
- Altered nasal tissue can change drug absorption (e.g., nasal polyps, recent decongestant use)

Opioid crisis continues to grow

- 94% of opioid overdose deaths happen by accident
- Young Canadians (ages 15 24) are the fastest-growing population



Good Samaritan Drug Overdose Act

 Provides legal protection for people who experience or witness an overdose and seek help

- Training was provided to Waterloo Regional Police Services
- Importance of calling 911 in an overdose situation and reassurance that they would be protected from simple possession charges

Increased Accessibility

WHERE?

- Public health units
- Most community pharmacies
- Participating organizations: CHCs, shelters, police / fire services
- Several schools and bars have opted to have naloxone on their premises

• **HOW**?

- OTC: no prescription required
- Community pharmacies
 - previously required an Ontario health card number
 - 2018 Update: no OHIP required, no identification required (anonymous)

Cost of Naloxone Kit

For consumers? Free!

- For the government?
 - Reimburses eligible organizations: intra-nasal kit: \$120, injectable kit: \$70
- For non-eligible organizations? (e.g., CFFM)
 - Can purchase pre-packaged kits from McKesson

What must a take-home naloxone kit include?

INJECTABLE KITS

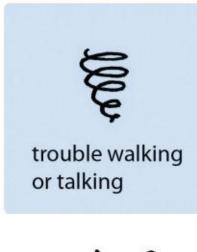
- 2 naloxone (0.4ml/ml) vials or ampoules – single dose
- 2 25G, 1" syringe, needle attached
- 2 alcohol swabs
- 2 ampoule "snappers"
- 1 one-way breathing barrier
- 1 pair non-latex gloves
- 1 identification card for trainee

NASAL SPRAY KITS

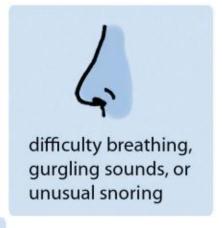
- 2 doses of Narcan nasal spray (4mg/ml) – single dose
- 1 one-way breathing barrier
- 1 pair non-latex gloves
- 1 identification card for trainee

USING NALOXONE

Recognizing an Opioid Overdose

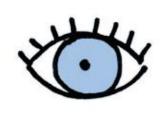












tiny pupils



A life-saving medication

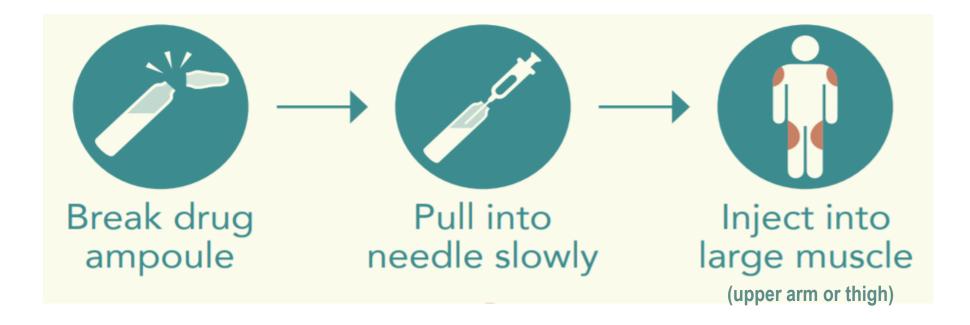
But a *temporary* antidote

Always call 9-1-1 immediately



Injectable Naloxone

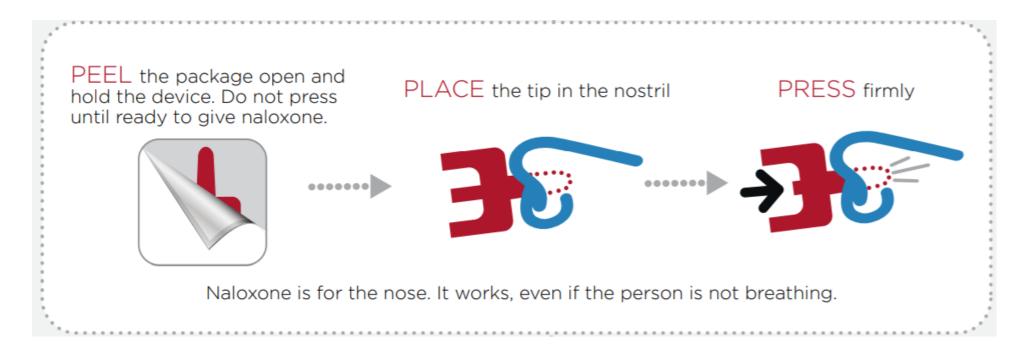
- Typically administered using a 22-gauge needle, 3cm in length
- This larger needle can go through the persons clothes if necessary

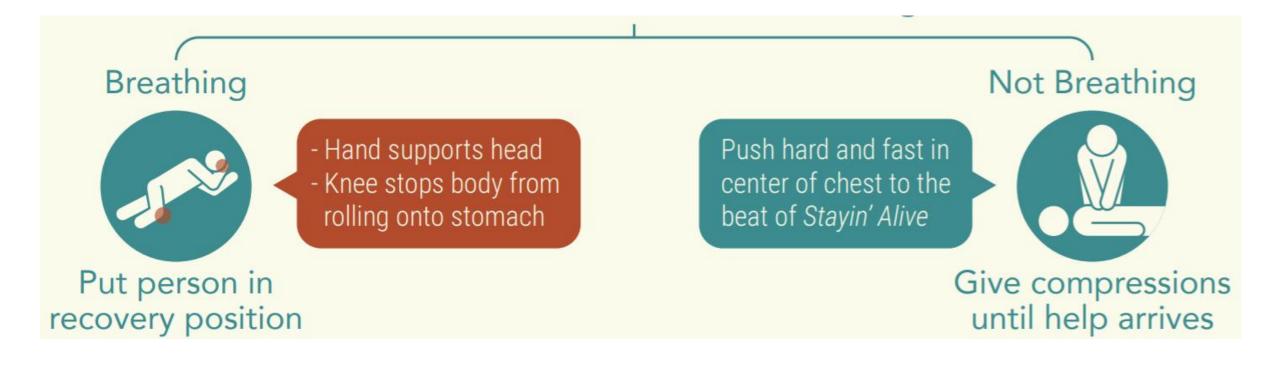




Naloxone Nasal Spray

- Support their neck and tilt head back slightly
- Careful not to press on the plunger until you are ready (only a single dose)





Is it working?

If <u>no</u> improvement in **2-3 minutes** administer second dose of naloxone

- Recall: naloxone works by "kicking" off the opioids from receptors in the brain
- Total naloxone dose will depend on:
 - Dose of opioid they took
 - Type of opioid they took (naloxone is less effective against "super-fentanyls" [e.g., carfentanil])



After Care

- When the person wakes up
- Stay with them until ambulance arrives
- They will likely be confused explain that they overdosed
- Do not let them use more substances
- Withdrawal symptoms will dissipate rapidly
- Be prepared to give more naloxone if necessary

COMMON Q&A

Questions you may have or others may ask you

Who can / should get a kit?

- Illicit/recreational user of opioids
- Patients on chronic opioid therapy
- Those who use opioids together with alcohol/sedatives
- Opioid use with comorbidities heart disease/respiratory illness/kidney/liver conditions/HIV
- First opioid prescription
- Family member, friend, or other person in a position to assist a person at risk of opioid overdose
- Essentially....All of us!

Can someone who has overdosed administer naloxone on themselves?

No. They will likely be unconscious and/or not in a position to help themselves. That is why training focuses on those in a position to help, as they will be the ones administering the naloxone!

How do I know when to administer a second dose of naloxone?

If they are still not breathing normally (shallow, slow, weak).

Don't necessarily need to re-administer until they wake up - they may still be drowsy, but as long as their breathing is normal its okay

Can naloxone cause overdose?

No, they cannot overdose on naloxone.

Sometimes multiple doses are required to reverse an overdose if someone has taken a very large quantity of opioids or a very potent opioid. These higher doses may cause greater withdrawal symptoms.

What happens if I use expired naloxone?

You should always check the expiration date and get a new kit if it has expired. Expired naloxone will not be as effective (although not harmful).

* naloxone kits must have a minimum expiry of 6 months



Is it okay to store my naloxone kit in my car?

Yes – for a short period.

Injectable naloxone has been shown to be stable when stored in non-standard conditions (e.g., extreme heat/cold) for up to 28 days.

Will naloxone work even if someone has received it before?

Yes. You cannot develop a tolerance to naloxone no matter how many times the person receives it.

NALOXONE AT CFFM

"Naloxone kits are like having a fire extinguisher in your home; you hope that you never have to use it, but it's important for the safety of yourself and your loved ones"

Next Steps for Naloxone at CFFM

- Draft policy
- Determine quantity on hand
- Patient pamphlets available?
- Posters available for clinic rooms?
- Increased discussion with patients regarding need for naloxone
- All patients on long-term opioids should have a discussion about getting naloxone for home

Additional Resources

UWaterloo 5in5 Video:

https://www.youtube.com/watch?v=ie1YXkDEPN0

Administration (injection):

- Injection: https://www.youtube.com/watch?v=oT8EsHuikwY
- Nasal: https://www.youtube.com/watch?v=aR3qA63TrAl

CAMH Checklist for Naloxone Training:

 P:\CLINICAL RESOURCES\Chronic Pain Clinic\Naloxone Info for Patient\CPRI_Ed_Catalogue_2016-17_PRINT_FINAL.pdf

Patient Pamphlets:

- P:\CLINICAL RESOURCES\Chronic Pain Clinic\Naloxone Info for Patient\Naloxone edited.pdf
- https://www.canada.ca/content/dam/hc-sc/documents/services/publications/healthy-living/naloxone-savea-life.pdf

Questions?

References

- Naloxone: frequently asked questions. Accessed at: http://naloxoneinfo.org/sites/default/files/Frequently%20Asked%20Questions-Naloxone_EN.pdf
- Canada's Fact Sheet. *Health Canada*. Accessed at: https://www.canada.ca/en/health-canada/services/publications/healthy-living/canada-opioid-crisis-fact-sheet.html
- CCENDU Bulletin: The availability of take-home naloxone in Canada (March 2016) Canadian Centre on Substance Abuse. Accessed at: https://www.ccsa.ca/sites/default/files/2019-05/CCSA-CCENDU-Take-Home-Naloxone-Canada-2016-en.pdf
- Funding of Naloxone Nasal Spray Kits through the Ontario Naloxone Program for Pharmacies (ONPP) and Updates to the Existing Program: Updated Frequently Asked Questions for Pharmacists. MOHLTC. Accessed at:
 - http://www.health.gov.on.ca/en/pro/programs/drugs/opdp_eo/notices/fg_exec_office_20180321.pdf
- Naloxone: Frequently asked questions (Feb 2019) MOHLTC. Accessed from: http://www.health.gov.on.ca/en/pro/programs/drugs/naloxone/naloxone_faq.aspx
- Lai, D., Pham, A. T., Rao, P. P. N., & Beazely, M. A. (2019). The effects of heat and freeze-thaw cycling
 on naloxone stability. Harm reduction journal, 16(1), 17.