PREVENTING AND RESPONDING TO THE ADVERSE EFFECTS OF OPIOIDS: NALOXONE

Background
Discussing how to prevent and respond to adverse effects of opioids, including how to administer naloxone can increase people’s knowledge and willingness to act.

Some people are at higher risk of experiencing adverse effects (also known as an overdose) than others. Risk factors include:

- Mixing drugs
- Using alone
- Variations in drug purity
- Previous overdose experience
- Decreased tolerance due to not using opioids for a period of time. For example, after detox, rehabilitation or drug treatment e.g. dose reduction
- People who use prescription opioids, especially higher doses (e.g. over 40mg oral morphine equivalent/25mg oral oxycodone)

People who inject opioids, especially specific populations (e.g. Aboriginal people and post-release prison populations) are also at an increased risk.

What is naloxone?
Naloxone reverses the effects of opioids, is fast acting and can be a life saving measure for people experiencing adverse effects of opioids. Opioids include heroin, morphine, methadone, fentanyl, oxycodone and codeine.

Naloxone is non-addictive (no potential for abuse) and there are no side effects except potential for precipitated withdrawal symptoms. Naloxone has no effect on someone who has not used opioids.

Naloxone is available as an intramuscular injection or as a needle free preparation in the form of a nasal spray.

Take Home Naloxone Pilot
From 1 December 2019 until February 2021, South Australia is participating in the PBS-Subsidised Take Home Naloxone Pilot to increase access to naloxone and reduce opioid related fatalities.

The pilot will reimburse pharmacies for the cost of the naloxone and dispensing fees for the duration of the Pilot.

Across SA, vouchers are given to people at risk of experiencing or witnessing adverse effects of opioids through a range of settings including hospital and community pharmacies, prisons, primary care settings, alcohol and other drug services, Clean Needle Programs and peer networks alongside this brief advice and client resource. Vouchers can then be presented at a participating pharmacy in exchange for no cost naloxone. People may also present to participating pharmacies for no cost naloxone without a voucher.

Intramuscular injections:
Intramuscular injections are available in

- 1ml (400 microgram) ampoule
- 2ml Prenoxad prefilled syringe (5 x 400 microgram doses).

If using the Prenoxad prefilled syringe, a 23 gauge (blue) needle is required. A 23 gauge (blue) needle and a syringe are required to administer naloxone from an ampoule. Sharps disposal units are recommended and available at selected Clean Needle Program (CNP) sites or pharmacies.

Nasal spray:
Intranasal naloxone, Nyxoid, is available as two, single dose, nasal spray units, each containing 1.8mg/0.1ml of naloxone. One dose of nasal spray has a similar onset for reversing opioid adverse effects comparable to 1ml (400 micrograms) of intramuscular naloxone. Two nasal spray doses are expected to perform similarly to 5 doses of 1ml (400 micrograms) intramuscular naloxone.
How to provide brief advice to clients (5-10 minute discussion)

A 5-10 minute conversation can effectively educate people on how to recognise and respond to the adverse effects of opioids, including how to administer naloxone. Discussions can be quick and informal, and be incorporated within existing client interactions.

1. Use the following pages to guide your discussions with clients on:
   - Overdose risk and prevention
   - How to administer naloxone
   - Response strategies (“DRS ABC”)
   - Overdose symptoms

2. Provide the accompanying preventing and responding to adverse effects of opioids client handout which summarises how to administer intramuscular and intranasal naloxone.

3. For the administration of intramuscular naloxone by injection provide the following if available:
   - Ampoule: 5 x 23 gauge (blue) needles AND 5 x syringes
   - Prenoxad: 3 x 23 gauge (blue) needles – As Prenoxad comes in a kit with five doses but only two needles, provision of additional needles is encouraged.

The “DRS ABC” response strategy can be applied however, naloxone itself is only effective for opioids.
Brief advice discussion points - preventing and responding to adverse effects of opioids

Ensure the client has the accompanying prevent and respond to adverse effects of opioids client handout and equipment required for administration.

**OVERDOSE RISKS**

1) Explain that risk of overdose is highest when...

- Drug tolerance is low due to not using opioids for a period of time. For example, after prison, detox, or drug treatment.
- Drugs are mixed, especially heroin/opioids with other downers, like alcohol, ‘benzos’ or medicines that make you sleepy.
- Using alone
- Increase in amount/dose, or strength of opioids compared to usual (increase in purity).

**OVERDOSE SIGNS**

2) Describe the signs of overdose

*Look and listen for:*

- Very slow and shallow breathing or not breathing at all.
- Not waking up (or not reacting to loud noises).
- Blue lips and nails.
- Gurgling, snoring or choking sounds.
- Slow, faint or no pulse.
3) Explain action plan

**DRS ABC + Naloxone**

*DRS ABC can be applied for any overdose event. However, the naloxone medicine only works on opioids*

- **DANGER:** Ensure that there is no danger to you or the person
- **RESPONSIVE:** Try to wake them up by calling their name and squeeze shoulders
- **SEND FOR HELP:** Call 000 for an ambulance. Give the address or location. Say “The person is unconscious and not breathing”
- **AIRWAY:** Make sure nothing is blocking their airway
  - **BREATHING:** Check their breathing - watch their chest and put your cheek over their nose and mouth to feel breathing.
  - Give them one dose of naloxone
    - If the person is breathing, place in recovery position and give naloxone (if available)

- **CPR if they are NOT breathing (one round):**
  - Do 30 chest compressions
  - Tilt head back. Lift chin. Pinch nose
  - Give 2 quick breaths

- **NALOXONE:** Are they any better? If not, can you get naloxone and prepare it quickly so the person doesn’t go too long without CPR?
- If no response after 2-3 minutes, give a second dose
- Prepare the intramuscular naloxone and inject it into their outer thigh or shoulder muscle.
- If using nasal spray, gently insert spray nozzle into one nostril and depress plunger fully (use other nostril if second dose).

Repeat CPR and naloxone as necessary until the person is responsive or an ambulance arrives.
If using intranasal naloxone give one spray into one nostril. Take note which nostril was used.

If using intramuscular naloxone by injection:
- If using ampoule: Attach 23 gauge (blue) needle to syringe. Swirl the ampoule to ensure all the naloxone is in the base. Break the ampoule by placing thumb on blue dot, and break with a quick motion. Draw up one ampoule of naloxone
- If using Prenoxad: Attach 23 gauge (blue) needle to syringe
- No need to remove clothing
- Insert needle into muscle (outer thigh muscle or shoulder)
- Using ampoule: Slowly and steadily push plunger all the way down
- Using Prenoxad: Administer one dose – stop at the nearest black line
- Take note of time naloxone is given
- Continue with CPR
- If the person does not respond, administer a second dose of naloxone after 2-3 minutes
- If using intranasal naloxone, spray second dose into the other nostril.
- Repeat as necessary until the person is responsive or an ambulance arrives
- When person is responsive or an ambulance has arrived, discard any unused Prenoxad and safely dispose of needles/syringes
- Dispose of any used nasal sprays safely and as per manufacturer’s instructions.
- Recovery position: If you must leave, give the person CPR until you hear the ambulance sirens. Then, put the person on their side with their hand under their head.

4) Explain what naloxone is and how to administer

Naloxone reverses the effects of opioids, is fast acting and can be a life saving measure for people experiencing adverse effects of opioids.

Opioids include heroin, morphine, methadone, fentanyl, oxycodone and codeine.

Naloxone doesn’t work on any other drugs besides opioids, can’t be used to get high and isn’t addictive

Naloxone can be injected into a muscle e.g. thigh or shoulder or used intranasally, i.e. sprayed up nostril.

Naloxone can wear off in as little as 30-90 minutes.
• Naloxone is available in:
  ➢ 1ml ampoule (intramuscular injection)
  ➢ 2ml Prenoxad (5 x 400 microgram doses) (intramuscular injection)
  ➢ 1.8mg/0.1ml x 2 single dose, nasal spray units
• Naloxone can be accessed at no cost over the counter at the pharmacy
• Needle tips and syringes are not included with the ampoule. It is recommended the following be collected from selected CNP sites or pharmacies to administer naloxone:
  ➢ Ampoule: 5 x 23 gauge (blue) needle
  ➢ Prenoxad: 3 x 23 gauge (blue) needle
• If naloxone is not in stock at your local pharmacy, you may request it is ordered in
• Naloxone only works if opioids are involved in the overdose. It will not reverse an overdose resulting solely from cocaine, methamphetamine, alcohol, benzos or other non-opioid based drugs
• Encourage information to be shared among networks

HOW TO GET NALOXONE

5) Advise that naloxone is available at pharmacies either over the counter (at no cost from December 2019 until February 2021)

Ensure the individual:
- has the adverse effects of opioids client handout
- has access to a list of CNP sites
- is encouraged to share the information with their network
General strategies to discuss with at-risk individuals on how to prevent and respond to adverse effects of opioids.

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<thead>
<tr>
<th>TOLERANCE</th>
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<tbody>
<tr>
<td>Take less after a break - even a break for a few days can reduce your tolerance</td>
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<th>QUALITY</th>
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<td>Purity levels of illicit opioids vary so use less if you have a new supply</td>
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<th>OTHER PEOPLE</th>
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<tr>
<td>Don’t use opioids alone</td>
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<th>MIXING</th>
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<tr>
<td>Don’t mix drugs</td>
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<td>Think about what you already have on board (e.g. alcohol, benzos, methadone)</td>
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<th>BE PREPARED</th>
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<tr>
<td>Carry naloxone, be familiar with DRS ABC</td>
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<td>(being a better prepared witness reduces opioid overdose deaths)</td>
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<tr>
<th>CLEAN NEEDLE PROGRAM (CNP) PEER EDUCATORS</th>
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<td>Contact the Alcohol and Drug Information Service (ADIS) on 1300 131 340 to find your nearest CNP location</td>
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