Algorithm for Intramuscular Naloxone Administration in Suspected Opioid Poisoning (Overdose)

Alberta Health Services
Harm Reduction Services

1 — Identify Suspected Opioid Poisoning (Overdose)

Signs and Symptoms (S/S)

- Slow or no breathing (slow: < 12 breaths per minute)
- Unresponsive to voice or pain
- Pale face
- Lips or nails appear blue
- Gurgling or snoring sounds
- Choking or vomiting
- Cold or clammy skin
- Constricted or tiny pupils
- Seizure-like movements or rigid posture

1 or more S/S present → Activate emergency response processes specific to work setting. → Proceed to step 2.

2 — Check for Response

Scene safety check

- **Unsafe** → Wait for help to arrive.
- **Safe** → Check for responsiveness:
  1. Verbal Response
  2. Pain Response (sternal rub)

→ Proceed to step 3.

3 — Check for Breathing

- **Breathing normal** → Place in recovery position and monitor breathing regularly. → Wait for help to arrive.
- **Breathing abnormal or absent** → Provide rescue breaths for 2 minutes (1 breath every 5 seconds; about 24 breaths). → Proceed to step 4.

4 — Evaluate

Signs of positive change

- Breathing independently
- Moaning or speaking
- Moving body
- Becoming alert

- **Positive change** → Place in recovery position and monitor breathing regularly. → Wait for help to arrive.
- **No change** → Proceed to step 5.

5 — Administer Naloxone

Prepare 0.4 mg (1 mL) naloxone for injection (entire vial/ampoule).

Inject into either
1. Vastus lateralis (middle outer thigh) **or**
2. Deltoid (upper outer arm)

Provide rescue breaths for 2 minutes (1 breath every 5 seconds; about 24 breaths).

Repeat steps 4 and 5 until signs of positive change or help arrives.

6 — Support and Aftercare

Provide appropriate handover to emergency medical support when they arrive.

If appropriate

If patient is alert,
1. Debrief
2. Provide education on safer practices and naloxone
3. Offer naloxone kit and resources

Document per setting requirements.

Updated January 2020 by Harm Reduction Services
Contact us at harm.reduction@ahs.ca