Opioid Overdose (Suspected): Management, Including Naloxone Administration without a Provider Order

Site Applicability

All VCH and PHC Acute Care Sites: Inpatient Units and Ambulatory Clinics

Practice Level

Profession	Setting	Basic Skill	Advanced Competency Requires additional education
RN, RPN	Acute Care Ambulatory Outpatient Clinics	Administration of naloxone with an order (by the following routes): • IV, SUBCUT, and IM	Insertion of an oropharyngeal airway Bag-Valve Mask (BVM) Ventilation **Nurse Independent Activity (NIA)** • Administration of IV, SUBCUT, IM naloxone ***without*** an order • Administration of oxygen to treat hypoxia
LPN	Acute Care Ambulatory Outpatient Clinics	Administration of naloxone with an order to treat an opioid overdose emergency (by the following routes): • SUBCUT and IM	Insertion of an oropharyngeal airway Bag-Valve Mask (BVM) Ventilation **Nurse Independent Activity (NIA)** • Administration of IM or SUBCUT naloxone ***without*** an order to treat an opioid overdose emergency • Administration of oxygen when oxygen saturation is less than 92%

Education:

- **Performance of a Nurse Initiated Activity (NIA)** (see Nurse Independent Activities (NIA) and Nurse-Initiated Protocols (NIP) Policy) is an advanced skill requiring additional education.
- Physician/Nurse Practioner orders override the use of NIA
- **Insertion of oropharyngeal airway and use of bag-valve mask** through training with a Clinical Educator/Lead or formal First Aid Course that includes these skills.

Algorithm

Suspected Opioid Overdose

Confirmed or likely opioid intake AND one or more of the following:

- Decreased level of consciousness
- Inability to maintain airway (including gurgling or snoring respirations)
- Apnea or progressive slowing of respiratory rate (below 10 breaths / minute)
- Decreased oxygen saturation (late sign, especially when on supplemental oxygen)
- Pallor or cyanosis
- Pulselessness, new bradycardia, new irregular pulse / dysrhythmia
- Constricted / pinpoint pupils with slow reactivity

C- A-B	**ASSESS Circulation, Airway, Breathing, and Level of Consciousness** **PROVIDE emergency interventions as appropriate** **STIMULATE / ATTEMPT to rouse the patient – remind patient to breath and instruct them to take deep breaths**			
CLINICAL FINDINGS	**UNRESPONSIVE** **(POSS 4)** ***OR*** **Inadequate:** **Circulation (including pulseless)** **Airway** (including gurgling or snoring respirations) **Breathing** (including apnea or gasping breaths or cyanosis)	**Somnolent, minimal or no response to verbal and physical stimulation** **(POSS 4)** ***OR*** Respiratory Rate **Below 8**	**Frequently drowsy, rousable, drifts off to sleep during conversation** **(POSS 3)** ***AND*** Respiratory Rate **8 or Greater**	**Slightly Drowsy, Easily Roused** **(POSS 2)** ***AND*** Respiratory Rate **8 or Greater**
INITIAL RESPONSE	**Initiate a code blue or call 911** **Provide emergency interventions** which may include: • Chest compressions if pulseless • Maintaining an open airway • Manual ventilation with bag valve mask with 15 L supplemental oxygen if respiration inadequate • Oxygen by simple face mask at 10 L/min if spontaneous respiration adequate **Stop Opioids***	**Consider initiating code blue, 911, or medical emergency team (e.g. CCOT) if patient requires resources beyond those immediately available** **Apply oxygen** PRN to maintain SpO_2 above 92% or patient's baseline (whichever is less) **Stop Opioids***		
NALOXONE	Administer naloxone 0.4 mg IM/SUBCUT Q2 to 5MIN PRN STAT ***OR*** **RN/RPN Only** and if established IV Access Administer naloxone 0.4 mg IV direct Q2MIN PRN STAT	Administer naloxone 0.2mg to 0.4 mg IM/SUBCUT Q2 to 5MIN PRN STAT ***OR*** **RN/RPN Only** and if established IV Access Administer naloxone 0.2 mg to 0.4 mg IV direct Q2MIN PRN STAT		
ONGOING INTERVENTIONS AND MONITORING	**Repeat naloxone** until the person becomes responsive to voice and spontaneous respiratory rate above 8 breaths / minute **If inadequate response after initial naloxone dose consider:** • Activating code blue if not already done • Assessing for other contributing factors (e.g. hypoglycemia) • Administering naloxone 0.4 mg IV direct (RN/RPN only)/IM/SUBCUT if non-prescribed drug use suspected **Monitor:** respiratory rate, level of consciousness, SpO_2 Q15MIN and PRN until no naloxone given for 1 hour, then Q1H for 4 hours		Increase monitoring of respiratory rate, level of consciousness, and SpO_2	
IMMEDIATE FOLLOW UP	**Inpatient:** Notify MRP and site-specific addiction service (if following patient) Obtain orders from MRP and/or site-specific addiction service regarding opioid medications STAT **Outpatient or Visitor:** Transfer to hospital Emergency Department (ED) Provide patient and family education		**Outpatient or Visitor** Consider need for transfer to hospital ED	

*Stopping opioids includes: PCAs, opioid infusions, epidurals containing opioids, and removing opioid dermal patches

Need to Know

Patients and visitors in acute sites and ambulatory clinics may exhibit signs and symptoms of opioid overdose from both prescribed and non-prescribed opioids.

Opioid overdose that is not detected and treated in a timely manner can lead to respiratory depression, hypoxia, respiratory arrest, neurological damage or death. Restoration of adequate respirations and oxygenation is the goal of initial opioid overdose management. Use of naloxone is a safe treatment to reverse respiratory depression from opioids and will have no harmful effect if someone has not taken opioids.

Naloxone is a synthetic competitive opioid antagonist which blocks and displaces previously administered opioids from opioid receptors but has no pharmacological activity as an independent agent.

Naloxone has a shorter half-life than some opioids. Patients treated for suspected opioid overdose require close monitoring. In addition to reversing the respiratory effects of opioids, naloxone also reverses other properties of opioids. See Appendix A for effects of abrupt reversal of opioid depression.

Naloxone is only effective against opioids and is not effective against other agents that can cause respiratory depression such as benzodiazepines and alcohol.

Since the emergence of the opioid overdose crisis, there have been unusual or atypical clinical presentations of opioid overdose such as dyskinesia (i.e. flailing), muscle rigidity (clenched jaw, chest wall), or individuals who appear to be standing, walking or awake. More information on this clinical presentation can be found here (p 27).

Given the complex nature of patients in acute and ambulatory care settings, other causes contributing to a patient's altered level of consciousness or respiratory depression should be considered when responding to a suspected opioid overdose.
All patients at risk of an opioid overdose are eligible to receive a Take Home Naloxone kit and training. Risk assessment is based on patient's history or active opioid use.

Equipment and Supplies (where available)

- Syringes with IM/SUBCUT needles
    - Sterile normal saline flushes for IV administration
- Alcohol swabs
- Gloves
- Pulse oximeter
- O_2 supply with nasal prongs/simple mask/bag valve mask
- Sharps disposal container
- Naloxone injectable (for IV/IM/SUBCUT administration)
    - To access naloxone from the Automated Dispensing Cabinet (ADC) [Omnicell] for urgent administration, see Appendix B

Protocol

Assessment

Early recognition of possible opioid overdose is key to timely and appropriate interventions.

Refer to Algorithm.

See Appendix C: Pasero Opioid-induced Sedation Scale (POSS).

Consider other or concomitant causes of patient presentation including, but not limited to:

- Physical trauma, including head injury
- Hypoglycemia
- Other medications or non-prescribed substances (e.g. benzodiazepines)
- Alcohol

Interventions

1. Refer to Algorithm.
2. Assess for side effects of naloxone related to the sudden increase in sympathetic nervous system activity created by opioid reversal (see Appendix A).

Documentation

- All assessments, interventions, patient response and follow-up actions
- NIA enacted as per Policy: Nurse Independent Activities (NIA) and Nurse-Initiated Protocols (NIP).
- Patient teaching, including the provision of Take Home Naloxone kits and information about overdose prevention sites and supervised consumption sites as appropriate.
- Complete a Patient Safety Learning System (PSLS) report.

For *visitors* in Acute Care: Initial documentation for care provided to a visitor must be on the Cardiac Arrest Record.

Patient and Family Education

- Refer to "Client Education" section of the BC Centre for Disease Control Decision Support Tool Administration of Naloxone
- Provide education and training for Take Home Naloxone

Related Documents

PHC-VCH Shared Documents

- Nurse Independent Activities (NIA) and Nurse-Initiated Protocols (NIP)
- Opioid Overdose: Management of Suspected Opioid Overdoses in Community Settings (Adults and Youth) for Allied Health and Unregulated Care Providers

PHC Documents

- Nurse Independent Activities (NIA)/Nurse Initiated Protocols (NIP) Approved at PHC
- Dispensing Naloxone Kits to Clients at Risk of Opioid Overdose (Adults and Youth)
- Cardiac Arrest (Code Blue): Initiating and Responding (SPH and MSJ)
- Oxygen Therapy, Acute Care

VCH Documents

- Dispensing/Distributing Take Home Naloxone Kits to be used for Suspected Opioid Overdose (Adults and Youth)
- Code Blue Initiation and Response: Adult
- Opioid Overdose: Management of Dyskinesia in Suspected Opioid Overdose

Resources

- PDTM – Naloxone monograph
- Lexicomp - Naloxone

References

BC CDC. (2016) BCCDC Decision Support Tool Administration of Naloxone

http://www.bccdc.ca/resource-gallery/Documents/Educational%20Materials/Epid/Other/NaloxoneDSTUseforRN.pdf

BC CDC. (2019) Training Manual Overdose Prevention, Recognition and Response.

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Stolbach, A., Hoffman R.S. (2020). *Acute opioid intoxication in adults*. Uptodate. https://www.uptodate.com/contents/acute-opioid-intoxication-in-adults

Appendices

- Appendix A: Possible Effects of Abrupt Reversal of Opioids
- Appendix B: Accessing Naloxone from the ADC (Omnicell) for Urgent Administration
- Appendix C: Pasero Opioid-induced Sedation Scale (POSS)

Appendix A:

Signs and Symptoms of Abrupt Reversal of Opioids / Opioid Withdrawal

System	Possible Side Effects / Assessment Findings
Central Nervous	• Excitation/tremulousness • Pain/pain crisis • Irritation • Agitation • Confusion/startled
Cardiovascular	• Tachycardia • Hypertension • Arrhythmias
Gastrointestinal	• Nausea • Vomiting • Diarrhea • Cramping
Skin	• Sweating

Appendix B: Accessing Naloxone from the ADC (Omnicell) for Urgent Administration

PHC Acute Care

1. For a ***patient*** - select the patient's name, or
   For a ***visitor*** or ***staff member*** - select **opioid Overdose* on the Global List for all areas **except** the ED where it exists on the Local List
2. Select stocked medications
3. Select naloxone
4. Remove the naloxone

Appendix C: Pasero Opioid-induced Sedation Scale (POSS)

S= Sleep, easy to rouse

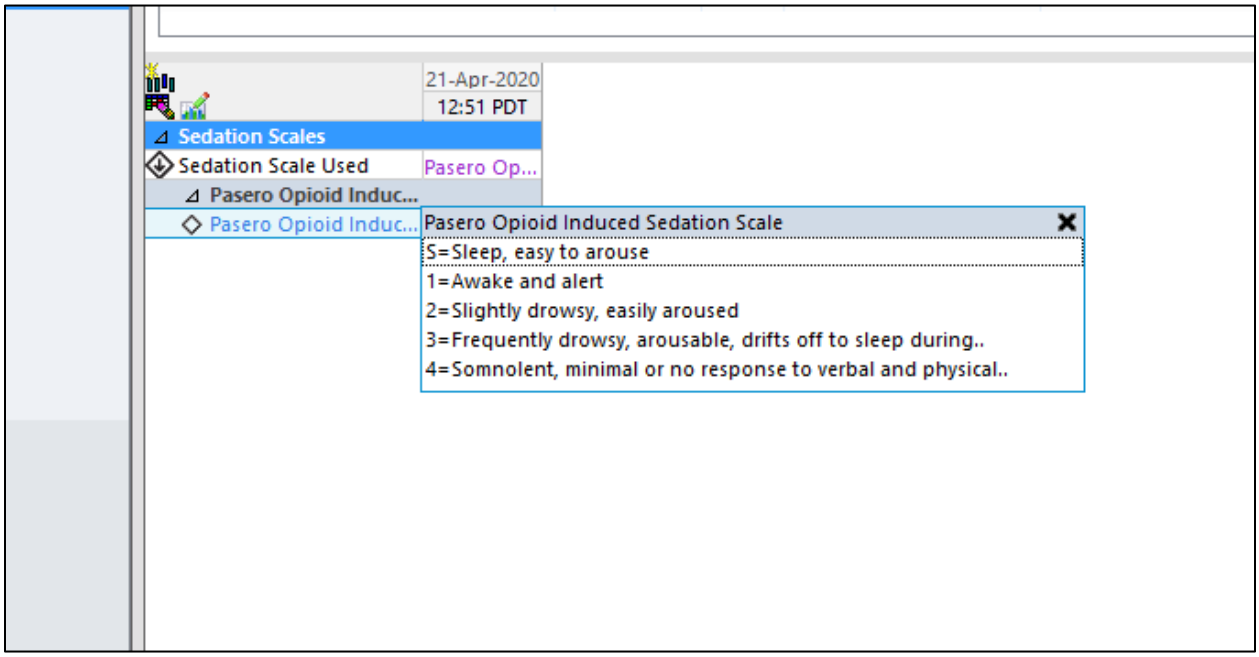
1= Awake and alert

2= Slightly drowsy, easily roused

3= Frequently drowsy, rousable, drifts off to sleep during conversation

4= Somnolent, minimal or no response to verbal and physical stimulation

<u>For sites that have implemented CST-Cerner:</u>



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