Winnipeg Regional Health Authority / Office régional de la santé de Winnipeg
Caring for Health / À l'écoute de notre santé

TREATMENT GUIDELINE FOR OPIOID OVERDOSE

Client Health Record #
Client Surname
Given Name
Date of Birth
Gender
MFRN
PHIN
Address

ASSESSMENT: (*) These complicate management and trigger more rapid referral to hospital

Subjective Assessment

History of Opiate Use or misuse or overdose reported from individual / family or friends:

_____

_____

_____

Medical History* (to rule out other medical factors (Select all that apply))

- ☐ HIV Infection or any recent severe infections
- ☐ Diabetes
- ☐ Cardiovascular or Respiratory Disease
- ☐ Head Injury or Trauma*
- ☐ Seizure Disorders*
- ☐ Not Known

Objective Assessment

Vital Signs: _____

Pulse Oximetry Reading: _____

Physical Signs: evidence of **(select all that apply)**

- ☐ Injection inhalation drug use
- ☐ Unusual snoring, gurgling sounds, choking
- ☐ Blue lips or nails, pale cold or clammy skin
- ☐ Pupils constricted

Signs and symptoms of opioid intoxication include [2, 3, 4] **(Select all that apply)**

- ☐ Decreased Respiratory Rate (best predictor of opioid overdose is RR<12 / min)
- ☐ Low / normal pulse
- ☐ Low / normal blood pressure
- ☐ Hypoxia (SaO_2<90% on room air)
- ☐ Hypothermia
- ☐ Visible Signs of Head Trauma*

GLASGOW COMA SCALE: (Select all that apply)

EYE RESPONSE (E)		
Open spontaneously	☐	4
Open to verbal command	☐	3
Open in response to pain	☐	2
No response	☐	1
VERBAL RESPONSE (V)		
Talking/Oriented	☐	5
Confused speech/Disoriented	☐	4
Inappropriate words	☐	3
Incomprehensible sounds	☐	2
No response	☐	1
MOTOR RESPONSE (M)		
Obeys commands	☐	6
Localizes to pain	☐	5
Flexion/Withdrawal	☐	4
Abnormal flexion	☐	3
Extension	☐	2
No Response	☐	1
TOTAL (range 3-15)		

Ongoing assessment of opioid intoxication should largely be based on respiratory rate and mental status/level of conciousness.[2]

Main categories of Opioid Drugs (Select all that apply) Any concomitant use of other drugs or alcohol* ☐ **Not Known**

☐ Codeine	☐ Hydromorphone	☐ Morphine
☐ Carfentanyl	☐ Hydrocodone	☐ Oxycodone
☐ Fentanyl patch or powder/pill	☐ Methadone	☐ Pentazocine
☐ Heroin	☐ Meperidine	☐ Others:

Main categories of Mind Altering Drugs (Select all that apply) Any concomitant use of other drugs or alcohol* ☐ **Not Known**

Non-Opioid based drugs:

Hallucinogens	**Stimulants**	**Depressants**
☐ LSD	☐ Meth-amphetamine (speed, jib, crystal meth)	☐ Benzodiazepines (valium, ativan, xanax, restoril, rohypnol)
☐ Magic Mushrooms (psilocybin)	☐ MDMA (ecstasy)	☐ Barbiturates (nembutal, seconal)
☐ PCP (angel dust)	☐ Amphetamines	☐ Zopiclone
☐ Ketamine	☐ Cocaine - crack cocaine	☐ Alcohol
☐ DMT dimethyltryptamine	☐ Ritalin methylphenidate	☐ GHB gamma hydroxybutyrate "date rape drug"
☐ MDMA - also a stimulant	☐ Caffeine	☐ Muscle Relaxers (soma, flexeril)
☐ Others:	☐ Others:	☐ Solvent
		☐ Others:

INFORMATION ABOUT SPECIFIC DRUG USED (if known):

Route of Administration: _____

Amount Used: _____

Time of Use: _____

Other Medications* (including if any, lithium, phenytoin and insulin) _____

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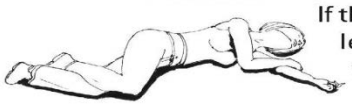
DETERMINE STAGE	ASSESSMENT:	Call 911?	MANAGEMENT
1. "Drowsy"	• RR > 10-12/min • SaO_2 > 90% on RA* • Glasgow Coma Scale 14 to 15	No	• Observe according to agency policy/ability • If no improvement or if respiratory rate or mental status worsens, proceed to Stage 2 or 3
2. "Nodding Off"	• Spontaneous respirations < 10-12/min • SaO_2 81% to 90% on RA* • Glasgow Coma Scale 10 to 13	Yes	Initiate **SAVE ME** & apply O_2 mask
3. "Unresponsive"	• Apneic - no spontaneous respirations or gasping • SaO_2 80% or lower on RA* • Glasgow Coma Scale < 10 • **Call 911 if GCS is 10 or lower**	Yes	Initiate **SAVE ME.** Use Adult Basic Life Support protocol. Bag-valve mask attached to supplemental O_2 should be administered prior to and during naloxone administration to reduce chance of acute lung injury[2]

* If pulse oximetry is not available, cyanosis is a clinical sign of hypoxia. Under optimal lighting conditions and a patient who has normal hemoglobin level and no dark skin pigmentation, frank cyanosis corresponds to a SAO_2 of about 66%.

Follow the SAVE ME steps below to respond.



If the person must be left unattended at any time, put them in the recovery position.

Use painful or verbal stimuli (i.e., shouting at the person, sternal rub)
Tip: Always say what you are going to do before you touch someone.

Person is nodding off or not responsive?

Call for team assistance to place 9-911 call when speaking to dispatcher give location details, person is unconscious & experiencing respiratory distress

Check Vital Signs:

1) If unresponsive or no pulse initiate CPR 30:2 (compressions:breaths)

Apply AED pads, turn on and follow AED instructions

2) If adequate heart rate but inadequate respiration rate initiate rescue breathing

Tilt chin up to open airway

Check airway & remove any obstructions

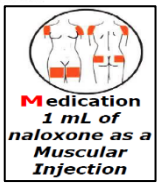
3) If in respiratory distress apply O2 mask

Using Ambubag or one way pocket mask give 2 breaths

Continue to bag 1 breath every 5 seconds until the person is breathing on their own or EMS arrives

If no response after rescue breathing for 2 minutes (40 breaths) than administer 1st dose of Naloxone HCL

Tip: Rescue Breathing is more important than naloxone to keep the brain alive.
If you do not have naloxone just keep bagging or mask breathing for the person when combined with calling 911, rescue breathing is enough to save the life of someone who has overdosed



Administer Naloxone HCL [1] 0.4mg/mL 1 ml IM

thigh (vastus lateralis) or arm (deltoid)

Onset of action: 2-3 minutes

Duration of Action: 20-90 minutes[2]

Inject at 90 degrees, push plunger until you hear a click to ensure needle retracts

Check Vital Signs
Continue to provide rescue breaths for another 2-3 minutes unless person is awake and breathing **NORMALLY** on their own
After 3-5 minutes, if they are still non-responsive and not breathing adequately on their own:
Administer 2nd dose of Naloxone HCL[1] 0.4 mg /mL 1mL IM
Onset of Action: 2-3 minutes
Duration of Action: 20-90 minutes[2]
After 3-5 minutes, if they are still non-responsive and not breathing adequately on their own;
Administer 3rd dose of Naloxone HCL[1] 0.4 mg /mL 1mL IM
Onset of Action: 2-3 minutes
Duration of Action: 20-90 minutes[2]
Continue rescue breathing until respiratory depression has resolved or help arrives

1) **Naloxone HCL Adverse Affects:** Tachycardia, hypertension, pulmonary edema, pain, chills, fever, nausea, vomiting, sweating, diarrhea, tremor, irritability, nervousness, restlessness, convulsions, rhinorrhea, sneezing. **Other:** Opioid withdrawal[4] Continuous IV of Naloxone may be most appropriate in patients who require higher doses, continue to experience recurrent respiratory or CNS depression after effective therapy with repeated doses and/or in whom the effects of long-acting opiates are being antagonized.[5]

PLAN: _____

☐ **Copy of Medication Record** ☐ **Copy of Treatment Guide is Transferred via EMS**

Transfer to EMS: _____ Time: _____ Provider: _____

Emergency Dept. Phone Contact: _____ Time: _____ Provider: _____

Signs and symptoms of opioid withdrawal include: [2]

- Anxiety and irritability
- Dilated (mydriatic) pupils
- Sweating
- Nausea and vomiting
- Diarrhea

Other causes of decreased level of consciousness

Other causes of decreased level of consciousness should be considered if there is no clinical response after administering 2 to 5 mg of naloxone.[3]

The differential diagnosis of opioid intoxication includes toxic and nontoxic conditions that can alter the mental status and/or respiratory rate.[3]

Many drugs can produce coma like effects. Alcohol, clonidine and sedative-hypnotics are the most frequently seen. Bradycardia and hypotension are more prominent in clonidine intoxication. There is little constriction of pupils in alcohol intoxication and no change in bowel sounds. Sedative-hypnotics usually result in sedation with a lesser degree of respiratory depression compared to opioids.

Congestants can also confound the diagnosis of opioid intoxication.[3]

Medical conditions producing coma may be mistaken for opioid overdose or can be concomitant.[3] Other conditions that should be considered broadly during assessment are acute neurological presentations of HIV opportunistic infections, sepsis, metabolic causes such as hypoglycaemia and electrolyte disturbances, and structural causes such as head trauma and intracranial hemorrhage.[2,3]

Patient Follow-up care

In the following special circumstances referral to nearest emergency department or inpatient assessment following naloxone administration is recommended:

- Patient is pregnant or breastfeeding (as this may cause withdrawal in neonate or newborns of opioid dependent mothers)
- Patient may have consumed methadone
    - Methadone is a long-acting opioid with a half-life much longer than naloxone. Intoxication from methadone should be managed closely. Intoxication from methadone can cause QTc prolongation and Torsades de Pointes
- Exposure route to opioid is unknown, alternate routes, such as body packing, that can result in prolonged or continued absorption
- Concurrent alcohol use. Life-threatening delirium tremens may occur with recent alcohol use
- Concurrent acetaminophen (Tylenol) overdose
- Concern for concurrent use of other drugs or illicit substances
- Signs of acute lung injury, such as crackles and wheezes, hypoxia, and occasionally frothy sputum are present
    - Acute lung injury is a potential adverse effect of morphine, heroin, methadone, and other opioids and in some cases occurs with reversal of opioid toxicity and recovery from opioid-induced respiratory depression with naloxone[3]
- Presence of injuries or medical comorbidities contributing to altered mental status and respiration rate which will not be reversed with naloxone use alone

For these special circumstance, observation of the patient should continue until respiration and mental status are normal and naloxone has not been administered for two to three hours. In the absence of these conditions, observation of the patient should continue until respiration and mental status are normal after one hour observation. If the above conditions cannot be ruled out make arrangements for extended observation.

Patient Education

- Explanation of events leading to the decision to administer naloxone
- Explain that the effects of naloxone start wearing off after 20-90 minutes while most opioids last much longer. This is why it is important to stay with a patient until help arrives or for at least 2 hours
- If patient is opioid dependant, let them know when naloxone wears off, withdrawal symptoms will subside
- Explain the importance of not taking more opioids because overdose can return
- Give patient specific harm reduction informed education in response to higher risk groups
  - Connect with doctor about respiratory, hepatic, or renal function tests
  - Educate about the additive effects of medications or alcohol
  - Not using alone if possible
  - Do 'testers' (try a small portion first)
  - After a period of abstinence tolerance is reduced consider using less, change route of administration (e.g. Switch from IV use to oral/nasal administration)
  - Ask if they would consider incorporating family or friends into safety plan and educating those identified about overdose

Team Consultation to occur as required post event for Clinic Team Defusing and Event Review as outlined:

Defusing

1. How is everyone doing?
2. How is everyone feeling?
3. Is anyone injured?*
4. Are there any immediate safety concerns for any clinic team members and patients?
5. Does anyone need a break?
6. Do we need to schedule an Event Review to debrief?

<u>If needed</u>:

Complete RL report, Contact Injury/Near Miss Intake line: 204-940-8482, Seek support from OESH: 204-926-1018 or MB Blue Cross Employee Assistance Program: 204-786-8880

Event Review

7. Describe the event:
   - Antecedent behaviours
   - Environmental factors
   - Interventions used
8. What worked well?
9. What were the challenges?
10. Does a Debriefing need to occur with the individual? Yes? Review who needs to be present? Does a Take Home Naloxone Kit need to be offered to the individual? Or
11. Are there any changes that need to be made to the Take - Home Naloxone Kit (refill required) and SAVE ME plan?
    Naloxone reverses all effects of opioids – respiratory depression, sedation, analgesia, miosis. Naloxone has no effect in the absence of opioid agents.