Opioid Safety

- Opioid medications are the primary medications administered to patients with moderate to severe nociceptive pain.
- Safe use of opioid medications requires knowledge of:
  - high risk patients
  - opioids available
  - formulations available
  - routes of administration
  - safe dosing
  - management of potential medication side effects
  - specific patient observation and monitoring.
- Ensure that care is provided in an environment with pre-checked oxygen and suction .
- Naloxone should always be available in areas where opioid medications are administered.
- As a result of the individual variability of response following opioid administration, close observation is required for all patients over the period of peak concentration of the medication - this will depend on the specific medication used and the route of administration – refer to Minimum Observations following Opioid Administration section
- **Opioid analgesia should not be administered unless the patient has a sedation score less than 2** (is easy to rouse to voice or light touch and able to maintain eye opening and eye contact for >10 seconds).
- Document in 'Pharmacy/Additional Information' space on the National Standard Medication Chart *only give if sedation score < 2* or *only give if SS<2*
- Prescriptions for immediate release oral opioids with a dose range allows the nurse to provide analgesia based on individual response to treatment.
- Prolonged use of opioids can result in tolerance, requiring greater doses if the cause of pain does not diminish over time. Opioid rotation should be considered with a reduction in the equianalgesic dose of the new medication.
- Opioid-induced hyperalgesia is where increasing doses of opioids paradoxically lead to increased pain sensitivity (hyperalgesia) rather than analgesia. Treatment options for suspected opioid-induced hyperalgesia include dose increase (to rule out tolerance), opioid dose decrease or cessation, changing to non-opioid analgesics or using multimodal analgesia for opioid-sparing .

- Recommended analgesic doses in this procedure are for opioid naive patients.
- Recommended doses are for routine analgesic use. Refer to organisational procedure for management of opioid medications used in conjunction with sedative medications for procedural pain relief.

Minimum Observations Following Opioid Administration

> This applies when given for routine analgesia. When given in higher doses and/or in conjunction with sedatives – refer to organisational procedure.

> Does not apply to opioid weaning programs such as Neonatal Abstinence Syndrome.

ROUTE	OBSERVATIONS
Oral opioids	Observe 1 hour post administration for analgesic effect and side effects. Record sedation score and pain score plus additional observations if any signs of respiratory compromise or over sedation. ⚠ Age < 12months – **see Infants alert below**
Intramuscular / subcutaneous opioids **Not recommended for general paediatric use**	**Subcutaneous Fentanyl:** Record pre and 15 minutes post each dose administration: respiratory rate, heart rate, SpO_2, sedation score and pain score. **Morphine:** Record pre and 30 minutes post each dose administration: respiratory rate, heart rate, SpO_2, sedation score and pain score.
Intravenous bolus	Record pre and 5, 15 and 30 minutes post administration: • respiratory rate, heart rate, SpO_2, sedation score and pain score. Continuous oximetry recommended and mandatory for infants < 12 months.
Intranasal fentanyl	Record pre and 10 and 30 minutes post administration: • respiratory rate, heart rate, SpO_2, sedation score and pain score. Observe for 45 minutes from last dose.
Opioid infusions, Patient Controlled Analgesia	Observations as per organisational procedure. Mandatory for all patients: continuous pulse oximetry – record respiratory rate, heart rate, SpO_2, sedation score and pain score hourly. ⚠ Age < 12 months – **see Infants alert below**

INFANTS

Require smaller doses + longer observation

Discuss doses with Anaesthetic, Medical, ED, ICU or Neonatal Consultant for infants less than 12 months of age

Opioids administered via <u>any route</u> require minimum cardio-respiratory monitoring as below

Record respiratory rate, heart rate, SpO_2, sedation score and pain score at least hourly for duration of monitoring or more frequently depending on route as per above observations

Age	Minimum duration of monitoring
Ex-premature infant up to 6 months corrected age (older if persisting respiratory issues)	12 hours post opioid or last apnoea/brady
Full term infant: Birth - 2 months	8 hours
Full term infant: 2 - 6 months (pulse oximetry monitoring may be sufficient)	4 hours
6 – 12 months (pulse oximetry monitoring may be sufficient)	2 hours