Medical Control Guideline: DRUG REFERENCE – FENTANYL **Ref. No. 1317.19**

Classification

Synthetic opioid

Prehospital Indications

Multiple provider impressions: pain management

Other Common Indications

None

Adult Dose

50mcg (1mL) slow IV/IO push or IM/IN, repeat every 5 min prn, maximum total dose prior to Base contact 150mcg
Contact Base for additional pain management after maximum dose administered: may repeat dose for a maximum total dose of 250mcg

Pediatric Dose

1mcg/kg (50mcg/mL) slow IV/IO push or IM, dose per *MCG 1309*, or
1.5mcg/kg (50mcg/mL) IN, dose per *MCG 1309*
Repeat in 5 min prn x1, maximum 2 total doses prior to Base contact
Contact Base for additional pain management after maximum dose administered: may repeat dose for a maximum 4 total doses

Mechanism of Action

Narcotic agonist-analgesic of opiate receptors; inhibits ascending pain pathways thus altering response to pain, increases pain threshold, produces analgesia, respiratory depression and sedation

Pharmacokinetics

Onset is immediate; peak in 3-5 min; duration is 30-60 min

Contraindications

Hypersensitivity
Pregnant patients in labor

Interactions

Alcohol and other central nervous system depressants potentiate its effect

Adverse Effects

Chest wall stiffness / Chest wall pain
Delirium / Convulsions (uncommon)
Muscle stiffness
Nausea and vomiting (most common)
Respiratory depression

Prehospital Considerations

- Monitor respiratory status. Respiratory depression, when it occurs, may last longer than the analgesic effect.
- Administer slowly to decrease likelihood of chest stiffness, which can be life threatening.
- Onset of fentanyl is quicker and duration of action is shorter as compared to morphine. Unlike morphine, fentanyl does not cause histamine release. Therefore, it is unlikely to cause hypotension in therapeutic dosages.
- Naloxone can be used for reversal if needed.