

FentaNYL

Classification

 **HIGH ALERT MEDICATION**

CONTROLLED AND TARGETED SUBSTANCE

Synthetic opioid analgesic

Indications

- ACP: Moderate to severe pain
- ACP: Adjunct for awake intubation
- CCP: Adjunct for rapid sequence intubation

Contraindications

- Known hypersensitivity or allergy to opioids (including morphine)
- Myasthenia gravis
- Pre-existing respiratory depression
- Acute asthma
- Upper airway obstruction

Adult dosages

- ACP: Moderate to severe pain
- Loading dose: 0.5-1.0 mcg/kg IM/IV/IO. Maximum single dose 100 mcg. May repeat every 5 minutes to a total dose of 300 mcg.
- Loading dose: 1.5-2.0 mcg/kg IN. Maximum single dose 100 mcg. May repeat every 5 minutes to a total dose of 300 mcg.
- Maintenance dose in long transports: 50 mcg IM/IV/IO every 10 minutes. Maximum total dose of 250 mcg/hour.
- Maintenance dose in long transports: 50-100 mcg IN every 10 minutes as required. Maximum total dose of 250 mcg/hour.

Consider reducing doses by $\frac{1}{2}$ in patients over 65 years of age. If pain is insufficiently relieved after a total of 1-3 mcg/kg of fentaNYL, consider use of ketamine. Contact ClinicaCall if higher doses of fentaNYL are required.

Pediatric Considerations And Dosing

[Follow weight-based dosing](#)

NB: If vascular access is unavailable, the preferred route of administration for fentaNYL is intranasal – intramuscular absorption rates are inconsistent in children.

- ACP: Moderate to severe pain
- Loading dose: 1.5-2.0 mcg/kg IN. Maximum single dose 100 mcg.
- Loading dose: 1-2 mcg/kg IV/IO. Maximum single dose 50 mcg every 5 minutes as required. Total maximum dose 200 mcg.
- Maintenance dose in long transports: 0.75-1.5 mcg/kg IN every 10 minutes as required, to a maximum of 150 mcg/hour.
- Maintenance dose in long transports: 0.5 mcg/kg IV/IO every 10 minutes as required, to a maximum of 150 mcg/hour.

FentaNYL is preferred for pain management over ketamine or methoxyflurane.

Mechanism Of Action

Inhibits ascending pain pathways in the central nervous system, altering pain perception by binding to opiate receptors, producing analgesia and euphoria.

Pharmacokinetics

Intravenous:

- Onset: immediate to 2 minutes
- Peak: 3 to 5 minutes
- Half life: 3.6 hours
- Duration: 30 to 60 minutes

Adverse Effects

- Lightheadedness, dizziness, sedation, agitation, fear, delirium, drowsiness, disorientation.
- Nausea and/or vomiting.
- Respiratory depression
- Laryngospasm
- Chest wall rigidity

Overdose

Provide airway management and ventilatory support. Consider the use of naloxone to reverse opioid intoxication. Naloxone should be used judiciously in patients on long-term opioid therapy to avoid precipitating acute withdrawal syndrome.

Warning And Precautions

FentaNYL is a potent opioid analgesic and carries the risk of respiratory depression whenever it is used.

Drug Interactions

Concomitant use of benzodiazepines or other central nervous system depressants can lead to significant sedation and respiratory depression.

