

# 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 ½ 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.

