

**HEMS**  
**MEDICATION SECTION**  
**FENTANYL**

Initial Date: 07/19/2023

Revised Date: 4/2/2025

Section: 9-24

## ***Fentanyl***

**Pharmacological Category:** Analgesic, Opioid; General Anesthetic

**Routes:** IV/IO/IM/IN

**Indications:**

1. Pain management
2. Patient sedation

**Contraindications:**

1. Altered Mental Status
2. Hypotension
3. Respiratory Depression

**Expected effects:**

1. Decreased pain
2. Decreased agitation

**Side effects:**

1. Drowsiness
2. Hypotension
3. Respiratory Depression
4. Vomiting

### **Dosing: CHEST PAIN/ACUTE CORONARY SYNDROME**

Indication: Chest pain in which nitroglycerin is contraindicated due to erectile dysfunction medication or suspected cardiac chest pain is refractory to nitroglycerin.

Adults (65 years of age or under) administer:

1. Fentanyl 1 mcg/kg IV/IO/IN, max single dose 100 mcg. May repeat one time.  
Total dose may not exceed 200 mcg.

Adults (> 65 years of age or older) administer:

1. Fentanyl 0.5 mcg/kg IV/IO/IN. Max single dose 50 mcg. May repeat three times.  
Total dose may not exceed 200 mcg.

### **Dosing: PAIN MANAGEMENT**

Indication: Patient is unable to tolerate ketamine or ketamine is not available and the patient has significant pain (described as 7 or greater on the Wong Pain Scale).

Adults (Patients >14 years of age) administer:

1. Fentanyl 1 mcg/kg IV/IO/IN, rounded up to the nearest dose 25,50,75, or 100 mcg, max single dose 100 mcg. May repeat one time. Total dose may not exceed 200 mcg.

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Pediatrics ( Patients  $\leq$  14 years of age) administer:

1. Fentanyl according to MI MEDIC cards
2. If MI MEDIC cards are not available administer:
  - a. Fentanyl 1 mcg/kg IV/IO/IN

**Dosing: PATIENT PROCEDURAL SEDATION**

Adults administer:

1. Fentanyl 50-100 mcg (1 mcg/kg) IV/IO titrated slowly (IN, if available). May repeat every 4 minutes to a maximum of 3 mcg/kg.

Pediatrics administer:

1. Fentanyl according to MI MEDIC cards
2. If MI MEDIC cards are not available administer:
  - a. Fentanyl 1 mcg/kg IV/IO titrated slowly (IN, if available). May repeat every 5 minutes to a maximum of 3 mcg/kg.

Used in the Following Protocols

Chest Pain/Acute Coronary Syndrome (Section 5 Adult Cardiac)

Pain Management (Section 7 Procedures)

Patient Procedure Sedation (Section 7 Procedures)