

# FENTANYL CITRATE (SUBLIMASE)

## PHARMACOLOGY & MECHANISM OF ACTIONS:

- ❑ Opiate Analgesic 10 times more potent than Morphine Sulfate and Demerol
- ❑ Principal actions of therapeutic value are analgesia and sedation
- ❑ Alterations in respiratory rate and alveolar ventilation, associated with narcotic analgesics, may last longer than the analgesic effect.
- ❑ Fentanyl appears to have less emetic activity than morphine
- ❑ Onset 2-3 minutes
- ❑ Duration variable, usually 15-60 minutes
- ❑ Metabolized in the liver, protein bound, redistributed after initial dose
- ❑ Combines with opioid receptor sites in the brain to produce potent analgesic effects.

## INDICATIONS:

- ❑ Severe pain associated with medical and/or traumatic situations.

## CONTRAINDICATIONS:

- ❑ Allergy to Fentanyl
- ❑ Use of MAOI inhibitors (Phenelzine sulfate= Nardil, Tranylcypromine= Parnate) up to two weeks prior to Fentanyl administration.
- ❑ Bradyarrhythmias
- ❑ Altered mental status/head injury
- ❑ Myasthenia gravis
- ❑ SBP <100 mmHg

## ADMINISTRATION:

	ADULT		PEDIATRIC
EMT-I	<p><b><i>ACUTE PAIN RELIEF</i></b></p> <ul style="list-style-type: none"> <li>❑ 50-100 mcg IV/IO/IM/IN</li> <li>❑ Can repeat in 5-10 minutes</li> </ul> <p><b><i>ACUTE CORONARY SYNDROME/CHEST PAIN (UNRELIEVED BY NTG)</i></b></p> <p>50-100 mcg IV/IO/IM/IN</p>	EMT-I	<p><b><i>ACUTE PAIN RELIEF</i></b></p> <ul style="list-style-type: none"> <li>❑ 1 mcg/kg IV/IO/IM/IN</li> </ul> <p>Can repeat every 5 minutes, max. dose 4 mcg/kg (any pediatric patient)</p>

## SPECIAL NOTES:

- ❑ Check and document vial signs and patient response after each dose.
- ❑ The action of Fentanyl is prolonged and its elimination slower in the elderly. Smaller maintenance doses are advisable
- ❑ Fentanyl must be used cautiously in patients that have already received morphine
- ❑ Less likely to cause nausea and hypotension than Morphine.
- ❑ Pregnancy Category C.

## PRECAUTIONS & SIDE EFFECTS:

- ❑ Fentanyl can cause respiratory depression that is reversible with Narcan. This respiratory depression is exacerbated by underlying lung disease and use of the other respiratory depressant drugs (benzodiazepines, alcohol, cyclic antidepressants)
- ❑ Bradycardia
- ❑ Excessive sedation
- ❑ Occasional skeletal muscle rigidity
- ❑ Occasional bronchospasm