MORPHINE SULFATE

DRUG CLASSIFICATION	Opioid Receptor Agonist Opioid Analgesic Agent
MECHANISM OF ACTION	Selective to the mu-receptor, with primary actions in the brain through transitory stimulation prior to depression; binds to CNS opioid receptors, promotes analgesia and respiratory depression by decreasing brainstem respiratory centers response to CO_2 and electrical stimulation; inhibiting ascending pain pathways and altering perception of and response to pain; produces generalized CNS depression.
CLINICAL INDICATIONS	Moderate-to-Severe Pain Control Post-Intubation / BIAD Management of Airway Pediatric Pulmonary Edema / CHF
STANDARD CONTRAINDICATIONS	Hypersensitivity to Morphine or Relative Components Significant Signs and Symptoms of Respiratory Depression Concurrent Use of MAOIs or use of MAOIs within the last 14 days Known or Suspected GI Obstruction (Including Paralytic Ileus) Acute or Severe Bronchial Asthma in the Absence of Resuscitative Equipment
POTENTIAL ADVERSE EFFECTS	Respiratory Depression **/** Respiratory Arrest **/** Hypotension **/** Hallucinations **/** Nausea **/** Vomiting **/** Constipation **/** Pruritis **/** Rash
GENERAL RISKS & PRECAUTION	**1)** Avoid use in patients with circulatory shock; further reduction in cardiac output or blood pressure may occur. **2)** Use extreme caution in patients with known or suspected risk of adrenal insufficiency including Addison's Disease. **3)** Use extreme caution for patients with significant COPD or decreased respiratory reserve due to risk of decreased respiratory drive. **4)** Use caution in patients susceptible to intracranial effects of carbon dioxide retention i.e., brain tumors or increased intracranial pressure. **5)** Severe hypotension or syncope in ambulatory patients may occur especially in those with compromised ability to maintain blood pressure. **6)** Avoid use with mixed agonist/antagonist or partial agonist analgesics. **7)** Use caution when injecting intramuscularly in patients with hypotension or shock, since impaired perfusion may prevent absorption. **8)** Respiratory depression, sedation, and hypotension may occur in patients with cirrhosis. **9)** Rapid intravenous administration may result in chest wall rigidity.
PROTOCOL INDEX	Pain Control (UP-11) Chest Pain: Cardiac and STEMI (AC-4) Post-Intubation / BIAD Management (AR-8) Pediatric Pulmonary Edema / CHF (PC-3)

MEDICATION ADMINISTRATION

ADULT

Moderate-to-Severe Pain
2 – 4 mg [IV/IO/IM]; May repeat 2 mg every 5 minutes as needed.
(Maximum Total Dose: 10 mg)

Post-Intubation / BIAD Management
2 – 4 mg [IV/IO/IM]; May repeat 2 mg every 5 minutes as needed.
(Maximum Total Dose: 10 mg)

Chest Pain: Cardiac and STEMI
2 – 4 mg [IV/IO]; May repeat 2 mg every 5 minutes as needed.
(Maximum Total Dose: 10 mg)

PEDIATRIC

Moderate-to-Severe Pain
0.1 mg / kg [IV/IO/IM]; May repeat every 5 minutes as needed.
(Maximum Total Dose: 10 mg)

Post-Intubation / BIAD Management
0.1 mg / kg [IV/IO]; (Maximum Single Dose: 5 mg)
May repeat every 5 minutes as needed. (Maximum Total Dose: 10 mg)

PRIOR CONSULTATION WITH MEDICAL CONTROL IS REQUIRED
Pediatric Pulmonary Edema / CHF – (See PC-3 Pearls)
0.1 mg / kg [IV/IO]; Maximum Single Dose: 5 mg