



GENERIC NAME: MORPHINE SULFATE

BRAND NAME: Morphine Sulfate

CLASS: narcotic agonist

Mechanism of Action:

Alleviates pain by acting on the pain receptors in the brain; elevates pain threshold. Depresses central nervous system; depresses brainstem respiratory centers; decreases responsiveness to changes in PaCO₂. Increases venous capacitance (venous pooling), vasodilates arterioles, reducing preload and afterload.

Histamine release.

Indications and Field Use:

Analgesia, especially in patients with burns, myocardial infarction, or renal colic. Pulmonary edema (cardiogenic).

Contraindications:

Respiratory depression Head injuries Elevated Intra cranial pressure Asthma, relative

Abdominal pain, relative

Adverse Reactions:

CV: Brady or tachydysrhythmias, orthostatic hypotension **Resp:** Respiratory depression or arrest **CNS:** Excess sedation, seizures to coma and arrest, pupillary constriction **GI:** Nausea and vomiting, GI spasm **Derm:** Histamine release may cause local urticaria

NOTES ON ADMINISTRATION

Incompatibilities/Drug Interactions: **CNS** side effects (including respiratory depression) can be reversed by naloxone.

Adult Dosage:

IV Dose: Administer 1-3 mg increments slow IV PUSH (over 1-5 minutes) until desired effect.

Pediatric Dosage:

100-200 µg/kg slow IV push

Routes of Administration:

Usually given IV in the field, can be given IM or SC. ** IV infusion may be transported on interfacility transfers, infusion pump required.

Onset of Action:

Seconds

Peak Effects:

20 minutes

Duration of Action:

2-4 hours

Dosage Forms/Packaging:

10 mg/ml ampules, **only**

Arizona Drug Box Supply Range:

PARAMEDIC: 2 (20 mg) INTERMEDIATE: 2 (20 mg)

Special Notes:

- > Schedule II narcotic.
- > Watch for histamine effects (wheals, urticaria) proximal to IV site; contact medical control
- > Correct hypotension before administration.
- > Maximum respiratory depression 7-10 minutes after administration; can be reversed with naloxone; use caution in patients with emphysema.
- > Infusions: IV infusions of morphine sulfate may be transported, however an infusion pump is required.

** Indicates special training requirement