

EMERGENCY MEDICAL SERVICES PROGRAM

# County of Santa Cruz

#### **HEALTH SERVICES AGENCY**

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**Policy No.** 5600 **Reviewed 4/1/2014** 

**Emergency Medical Services Program** 

Approved

**Medical Director** 

**Subject: PAIN MANAGEMENT** 

#### I. Purpose:

To provide monitored pain reduction to patients having moderate to severe pain using BLS measures, Fentanyl Citrate, Morphine Sulfate, and in some instances, Versed. In addition to relieving suffering, pain reduction has been shown to facilitate more accurate patient assessments, ease extrications, calm patients and allow field personnel to give better patient care. The purpose of this policy is to provide *pain management*, not to eliminate pain altogether.

#### II. Guidelines:

- A. Prior to administering Fentanyl or Morphine gather a thorough patient description of the pain. This should include an accurate PQRST and 1-10 scale rating or other, age appropriate assessment tools. Gather a thorough physical assessment of the patient including vital signs, oxygen saturation, capnography, and EKG (when appropriate).
- B. Fentanyl is the preferred medication for controlling pain in both adult and pediatric patients. It is preferred over Morphine because it has a much shorter duration of action, induces less nausea, and is less likely to cause a histamine reaction in the patient. Fentanyl at a dose of 100 mcgs provides the same analgesia as Morphine 10 mg.

Fentanyl Citrate is not indicated for cardiac chest pain because it does not create the histamine release that dilates vessels. This is the mechanism that reduces cardiac workload.

C. Versed is to be used *only* as an adjunctive medication to Morphine, not as the primary medication for managing pain. Versed can help to reduce both the psychological and physiological response to particularly severe pain, reducing the patient's suffering and allowing responders to more easily and effectively manage the patient. Versed is NOT to be used adjunctively with Fentanyl due to the risk of severe respiratory depression.

The goal of Versed use is *not* to induce heavy sedation, but rather to improve pain management. To this end, only small doses of Versed will be used after initial Morphine administration is found not to provide adequate pain relief. In particular, Versed can be helpful in managing those patients who exhibit an extreme anxiety and fear response to their pain.

Responders should be aware that Versed may cause respiratory depression and hypotension, particularly when used with Morphine, and should be used only in situations which truly warrant its administration. In these instances, patients should be carefully monitored for adverse reactions or over sedation.

When a patient has received both Morphine and Versed, two EMS providers (EMT/paramedic or two paramedics) must accompany the patient in the ambulance to the hospital. This will insure that the patient will be properly managed should severe respiratory depression occur.

- D. BLS measures should always be used prior to medication to reduce pain. BLS measures include, but are not limited to, cold packs, repositioning, elevation, splinting/immobilizing, psychological coaching, and bandaging.
- E. When administering Fentanyl, Morphine and Versed, monitor the patient closely. Have Narcan readily available to reverse any respiratory depression that may occur. **The patient should be monitored with continuous pulse oximetry as well as with end tidal capnography.** Remember that capnography provides better real time monitoring of the patient's ventilation status, and will alert you more quickly than pulse oximetry should respiratory depression occur.
- F. Carefully document all medication responses in your PCR; this should include any changes in the patient's pain status, as well as reassessments of vital signs.
- G. The preferred route of administration is IV or IO; however, if an IV or IO cannot be established, administer the medication IM (except for cardiac chest pain patients).
- H. Measurement of a patient's pain is largely subjective; therefore s/he is the best determinant of the presence and severity of pain. All patients expressing verbal or behavioral indicators of pain shall have an appropriate assessment and management as indicated and allowed by this policy.
- I. This policy is specifically indicated for patients with moderate to severe pain. Make base station contact if there is any question about whether or not the patient meets inclusive criteria. Co-morbid factors such as extremes in age and significant medical problems can affect the patient's ability to tolerate pain medication. In these cases, dosing should be adjusted accordingly.

## III. Pain Management and Medication Administration

Pain Management Criteria		<b>Base Station Contact</b>	Treatment
A.	Significant Burns	No	Morphine Sulfate for adults:
			3-5 mg IVP/IO, or 10 mg IM to a total of 20 mg.
			Morphine Sulfate for pediatrics: 0.1 mg/kg IV/IM (no more than 5 mg per dose) to a total of 10 mg.
			Fentanyl Citrate for adults: 50- 100 mcg IVP, IO, IM, or IN to a total of 200 mcg
			Fentanyl Citrate for pediatrics: 1mcg/kg IV/IO, IM or IN; may repeat 1 mcg/kg in 10-15 minutes prn pain for a total of 2 mcg/kg; max of 100 mcg total.

## **B.** - Significant extremity injuries

(including hips)

- Crush Injuries
- Snake Bites
- Back Pain
- IO fluid administration

## No

(unless more than 10mg needed)

## **Morphine Sulfate for adults:**

2-5 mg IVP/IO or 5 mg IM up to a total of 10 mg.

## **Morphine Sulfate for pediatrics:**

0.1 mg/kg IV/IM to max of 5 mg.

### **Fentanyl Citrate for adults:**

50- 100 mcg IVP, IO, IM, or IN up to a total of 100 mcg.

## **Fentanyl Citrate for pediatrics:**

1mcg/kg slow IV/IO, IM or IN; may repeat 1 mcg/kg in 10-15 minutes prn pain for a total of 2 mcg/kg; max of 50 mcg total.

#### **Pain Management Criteria**

#### **Base Station Contact**

#### **Treatment**

C. - Cardiac Chest Pain (adults only)

No

(unless more than 5mg needed)

**Morphine Sulfate for adults:** 

2 – 5 mg IVP/IO (no IM with cardiac chest pain).

**D.** - Increased dosing for patients listed above

- Critical thoracic trauma

YES

Contact base MD prior to administering morphine sulfate or Fentanyl Citrate. Dosing per MD order only.

- Critical abdominal trauma
- Head trauma (superficial)
- Women in labor
- Abdominal Pain
- Headache without focal symptoms
- Patients with pain not listed above

**Adult Morphine Sulfate Range:** 

2-5mg IV/IM to a total of 10mg.

Pediatric Morphine Sulfate Range

1-3mg IV/IM to a total of 5mg.

**Adult Fentanyl Citrate Range** 50- 100 mcg IVP, IO, IM, or IN to a max of 100mcg.

**Fentanyl Citrate for pediatrics:** 

1mcg/kg IV/IO, IM or IN; may repeat 1 mcg/kg in 10-15 minutes prn pain for a total of 2 mcg/kg; max of 50 mcg total.

## E. Versed (adjunctive to Morphine – not to be used adjunctive to Fentanyl)

**Adults:** 

• Versed 1 - 2.5 mg IV/IO, or 2.5 - 5 mg IM. Make base station contact for further dosing. Monitor the patient carefully for hypotension and hypoxia.

#### **Pediatrics:**

• Versed 0.1 mg/kg IV/IO to a maximum of 2 mg total, or 0.2 mg/kg IM to a maximum of 3 mg total. Make base station contact for further dosing. Monitor the patient carefully for hypotension and hypoxia.

### F. Relative Contraindications:

-Closed head injury -Patients with decreased respirations

-Inadequate perfusion -Evidence of hypoxia

-Altered mental status -Sudden onset acute headache