

Bon Secours Richmond  
Pharmacy & Therapeutics Committees  
Post Operative Patient Controlled Analgesia Orders  
1/2005

**Recommendation:**

- Add fentanyl to the PCA Order Form with the following parameters.

**Fentanyl** (10 mcg/ml)

Load dose: \_\_\_\_\_ mcg (20-80 mcg)

PCA dose: \_\_\_\_\_ mcg (10-50 mcg)

Delay: \_\_\_\_\_ min (6-10 min)

Continuous dose: \_\_\_\_\_ mcg/hr (10-80 mcg/hr)

4 hour limit: \_\_\_\_\_ mcg (max. 200-600 mcg)

A standard bag size of 1000 mcg / 100 ml will be used.

**Findings:**

- Fentanyl is the preferred agent for patients who are truly allergic to phenanthrene derivatives (codeine, hydromorphone, levorphanol, morphine, oxycodone, pentazocine) and is in the same class as meperidine.
- The most commonly recommended PCA bolus dose of fentanyl PCA in clinical trials is 50 mcg for adults.
- Neither hydromorphone nor fentanyl has active metabolites.
- Opioid analgesics are divided into three classes: phenanthrenes (buprenorphine, butorphanol, codeine, hydromorphone, levorphanol, morphine, nalbuphine, oxycodone, pentazocine), phenylpiperidines (anileridine, fentanyl, meperidine, sufentanil), and phenylheptanes (methadone, propoxyphene).