

# Fentanyl PCA Guidelines - via Alaris IVAC PCAM syringe pump

**Fentanyl is a potent opioid that can be used as an alternative to morphine.**

## Indications for use

- ❖ Patients with renal impairment.
- ❖ Patients with hepatic impairment.
- ❖ True allergy to morphine (*rare*).
- ❖ Severe Morphine intolerance: uncontrolled nausea, dysphoria or severe pruritus.

## Presentation

- ❖ Glass vials, solution concentration 50 micrograms Fentanyl per ml.
- ❖ Availability: 2ml (*small vials*) and 10ml (*large vials*).
- ❖ 500mcgs Fentanyl in 10 ml.

## Preparation

Add Fentanyl 1,000 micrograms (*Two x 10 ml large vials: total 20 mls of 50mcgs/ml*) to 30mls Sodium chloride 0.9% drawn up into a 50ml leuc lock syringe to make a total volume of 50ml.

= 1,000 micrograms divided by 50mls.

= Final concentration 20 micrograms/ml.

- ❖ Check and Label syringe as per NHSL policy, (*24hour expiry*).
- ❖ Check prescription on Drug Cardex and PCA prescription chart.
- ❖ Program Alaris IVAC PCAM syringe pump; only if you have completed specific pump training program.
- ❖ On programming pump ensure you select the correct make of syringe. The pump default is BD Plastipak which is our current stock leuc lock 50ml syringe.
- ❖ Prime PCA extension set (*requires anti siphon and anti reflux valve*) currently Alaris Extension Set (*Ref 30852*).
- ❖ Review program against prescription chart and syringe with colleague and sign on checking together. Lock pump cover.

## Standard Prescription Fentanyl PCA Regime

**20 microgram bolus = 1ml**

**5 minute lockout**

*(20 micrograms of Fentanyl is approximately equivalent to 1mg of morphine)*

### Changing PCA Syringe

- ❖ Can only be changed by staff trained to do so.
- ❖ PCA syringes should be changed every 24 hours if prescription to continue.
- ❖ PCA giving sets can be in situ for up to 72 hours and then require renewal if prescription to continue.

### Discontinuing the PCA

- ❖ Two nurses must verify and destroy all remaining drug, emptying the syringe into a sharps bin - details should be recorded on PCA chart.
- ❖ Oral analgesia must be prescribed and administered prior to removal of the device.

**No background infusion usually**, except on prescription by an anaesthetist. **Any background infusion requires level one monitored bed.** Requires same 2 hourly observation management as Morphine PCA.

Notify Acute Pain Service of patient for review or on call Anaesthetist out of hours (Page 003).

### Acute Pain Service

Nurse Specialist M. Herron (DECT 6224/Page 021), Dr C. Slorach (Page 133) : Monday - Friday 9am - 5pm  
After hours or if unavailable, contact Duty Anaesthetist (Page 003)