



# Patient controlled analgesia (PCA) attachment

UR NUMBER

SURNAME

GIVEN NAME(S)

DATE OF BIRTH

AFFIX PATIENT LABEL HERE



This is a specialised analgesia technique and may only be initiated by the Children's Pain Management Service

Weight: \_\_\_\_\_ kg

## PCA guidelines

		Children < 50 kg	Children > 50 kg
<b>Opioid dilution</b>	Morphine	0.5 mg/kg diluted to a total volume of 50 mL with normal saline	50 mg diluted to a total volume of 50 mL with normal saline
	Fentanyl	15 microgram/kg diluted to a total volume of 50 mL with normal saline	750 microgram diluted to a total volume of 50 mL with normal saline
	Hydromorphone	0.1 mg/kg diluted to a total volume of 50 mL with normal saline	6 mg diluted to a total volume of 50 mL with normal saline
<b>Bolus dose</b>	Morphine	2 mL = 20 microgram/kg	1 mL = 1 mg
	Fentanyl	1 mL = 0.3 microgram/kg	1 mL = 15 microgram
	Hydromorphone	1 – 2 mL = 2 – 4 microgram/kg	1 mL = 120 microgram
<b>Lockout</b>		5 minutes	5 minutes
<b>Background infusion</b>		<b>* Rarely required</b>	<b>* Rarely required</b>
	Morphine	0.5 mL/hr = 5 microgram/kg/hr	0.5 mL/hr = 0.5 mg/hr
	Fentanyl	1 mL/hr = 0.3 microgram/kg/hr	1 mL/hr = 15 microgram/hr
	Hydromorphone	0.5 – 1 mL/hr = 1 – 2 microgram/kg/hr	0.5 – 1 mL/hr = 1 – 2 microgram/kg/hr

## Medical instructions

Tick if instructions differ from guidelines

Add \_\_\_\_\_ mg of \_\_\_\_\_ OR \_\_\_\_\_ microgram of \_\_\_\_\_

and dilute to a total of \_\_\_\_\_ mL with normal saline 0.9%. Therefore 1 mL = \_\_\_\_\_ mcg or mg (circle one)

Administer loading dose of \_\_\_\_\_ mL (Time loading dose given: \_\_\_\_\_)

## PCA pump settings

The programming of the PCA **must** be performed by Recovery Room staff, anaesthetist or CPMS.

Date / time	Concentration (mcg or mg) / mL	Bolus in mL & (mcg or mg)	Dose duration	Lockout minutes	Background mL / hour	Prescriber signature and name	Initial of pump programmers

See overleaf for revised PCA pump settings  See overleaf for night-time background

## Opioid toxicity

- STOP the infusion / remove the handset
- CALL **MET 777** if required
- Notify CPMS (page 5773)

**Dilute NALOXONE 0.4 mg to 20 mL with normal saline 0.9% (this dilution = 20 microgram per mL)**

### For opioid induced pruritus:

Administer **NALOXONE 1 microgram / kg IV**, repeat after **2 hours** if required

Administer \_\_\_\_\_ micrograms IV

Date		
Time		
Initials		

### For excess sedation: (difficult to rouse,

respiratory depression, sedation score  $\geq 3$ )

Administer **NALOXONE 2 microgram / kg IV**, repeat each **1 – 2 minutes PRN (max. 5 doses)**

Administer \_\_\_\_\_ micrograms IV

Date		
Time		
Initials		

### For resuscitation: (minimal respirations

or cardiorespiratory arrest, sedation score 4)

Administer **NALOXONE 10 microgram / kg IV**, repeat each **1 – 2 minutes PRN (max. 5 doses)**

Administer \_\_\_\_\_ micrograms IV

Date		
Time		
Initials		

Notify doctor if respirations less than \_\_\_\_\_ per minute or sedation score  $\geq 3$

Prescriber's signature \_\_\_\_\_ Print name \_\_\_\_\_ Date \_\_\_\_\_

For more details please read the 'PCA guidelines' in the Children's Pain Management Service guidelines on The Royal Children's Hospital intranet.

Pharmacy  
initials

This attachment is a legal prescription

