

## PAIN MANAGEMENT IN CHILDREN

### Information sheet for the community pharmacist

Pain management remains one of the fundamental goals of medicine. As we know, pain can cause significant suffering in children. Until recently, there has been a wide range in practice in the management of pain. To help optimize pain management, pain specialists at the Hospital for Sick Children have developed a Clinical Practice Guideline to standardize the assessment and treatment of pain in children.

The purpose of this information sheet is to provide you with information on pharmacological strategies to optimize pain management in children and to answer some common questions about the use of opioids in children.

#### General Principles

##### Prevent Pain when possible.

- Pain is better prevented than treated.

##### Give analgesics regularly.

- For pain that is expected to be constant (e.g. post-surgical), analgesics should be ordered and given as scheduled medications.
- As needed dosing should be used for breakthrough pain only.

#### Pharmacological Strategies

PAIN SEVERITY	AGENTS OF CHOICE
Mild pain	acetaminophen +/- NSAID
Moderate pain	acetaminophen +/- NSAID + morphine
Severe pain	acetaminophen +/- NSAID + morphine or other strong opioid

NSAID - Non-steroidal anti-inflammatory drug

#### Agent of choice for oral opioids

- **Oral morphine is preferable to codeine** because it is more effective than codeine at providing pain relief.
- Codeine is metabolized to a small amount of morphine for its analgesic effect.
- Codeine is ineffective in at least 10% of the population who are unable to metabolize it to morphine.

Drug	Route	Usual Starting Dose
Morphine	PO/PR	0.2 – 0.5 mg/kg q4-6h

#### COMMON QUESTIONS ABOUT THE USE OF OPIOIDS IN CHILDREN

##### Is it safe to give morphine to young children, even to neonates?

Yes, morphine and other opioids can be given safely in children of all ages, including neonates.

To ensure opioids are prescribed safely in children, ensure analgesic dosing is calculated based on the child's weight. Neonates and some ex-preterm infants are more sensitive to opioids, and dosing should be appropriately adjusted. (Refer to SickKids' Drug Handbook and Formulary for dosing information).

##### Is there a ceiling effect to opioids?

No, there is no ceiling effect to opioids. A "maximum dose" does not exist for opioids. Opioids can be titrated safely according to pain intensity however side effects may be a limiting factor.

##### Can children become addicted to opioids?

No, treating pain with opioids does NOT lead to psychological dependence or addiction.

##### Can children be on both sustained release and immediate release products at the same time?

Yes, children on sustained release opioids can also have the immediate release preparation of the same opioid for breakthrough pain. Each breakthrough dose is usually 15% of the 24 hour dose. Scheduled doses may need to be adjusted if more than 3 breakthrough doses are required.

### **How can side effects of opioids be managed?**

Anticipate and treat opioid related side effects proactively. Most opioid side effects can be easily treated with simple interventions. Recommend a stool softener or laxative to prevent constipation, and anti-emetics and anti-pruritics as needed.

### **What is the oral equianalgesic dose between opioids?**

<b>Drug</b>	<b>Equianalgesic PO Dose (mg)</b>
Codeine	200
Hydromorphone	7.5
Meperidine	300
Morphine	Acute: 60, Chronic: 30
Oxycodone	30

### **Where can I find out more information on pain management in children?**

Visit [www.cps.ca](http://www.cps.ca), [www.aap.org](http://www.aap.org), [www.aboutkidshealth.ca/pain](http://www.aboutkidshealth.ca/pain)

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*Disclaimer: The information in this information sheet is accurate at the time of printing. It provides a summary of information about pain management and does not contain all possible information about pain management. If you have any questions or want more information about pain management, please contact the Drug Information Service at (416) 813-6703.*