

### Practical tips and information for managing pain in children

In 2013, 54% of all children aged < 12 years enrolled in general practice in New Zealand had an analgesic medicine dispensed. Children experience pain in the same way as adults but may not have the verbal or communication skills to adequately express the location, type and intensity of pain. This, along with a cautious approach to giving analgesia to children, can sometimes result in pain being undertreated.

- Paracetamol and ibuprofen are the most appropriate analgesics for short-term mild pain relief, while the underlying cause of pain is managed. Combining or alternating paracetamol and ibuprofen is acceptable, but not routinely recommended.
- Paracetamol is usually first-line, and should be dosed based on the weight of the child (15 mg/kg, every 4 hours)
- Ibuprofen is the preferred non-steroidal anti-inflammatory drug (5-10 mg/kg, every 6-8 hours). Diclofenac sodium 12.5 mg and 25 mg preparations are approved for use in children aged over one year, however it is rarely used in a general practice setting.
- If referral to secondary care is required in an acute situation, pain relief should ideally be started prior to transfer
- Morphine is the first-line analgesic for children with moderate to severe pain, e.g. trauma; the appropriate dose (based on both age and weight) is the lowest dose which provides effective analgesia with manageable adverse effects
- Intranasal fentanyl can be considered if available

This report discusses the use of analgesics for the treatment of pain in children between January – December 2013.



## Pain in Children in New Zealand

Figure 1 below highlights the 16% increase in the use of analgesics by children aged under 12 years from 2008 to 2013. This increase is mainly due to children receiving multiple analgesics rather than more children receiving medicines.

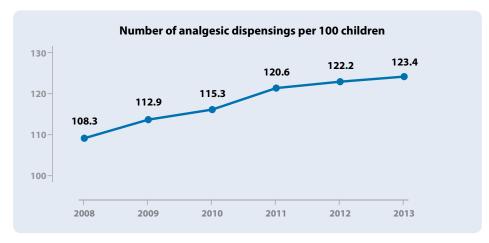


Figure 1. The rate of analgesic dispensings for New Zealand children aged under 12 years, 2008–2013

**Paracetamol** is the first-line treatment for pain in children, **ibuprofen** is also appropriate for children with mild pain.

**Opioids** are rarely indicated for mild to moderate pain management in general practice settings, although **morphine**, and sometimes **fentanyl**, may be appropriate in acute moderate to severe pain situations, e.g. trauma. The use of opioids in children has increased 77% between 2008–2013.

**Aspirin** is contraindicated in children aged under 16 years but continues to be prescribed to this age group.

Table 1 below shows the number of patients receiving each of the top six analgesics dispensed to children aged under 12 years nationally in 2013 and the comparative rates for your practice.

# **Nationally**

**716,169** children aged under 12 years are registered to a practice

**54.2%** of all registered patients aged under 12 years received an analgesic in 2013

## **Sample Practice**

288 children aged under12 years are registered to your practice

**62.8%** of your registered patients aged under 12 years received an analgesic in 2013

### **Sample Practice Data**

### Dispensing of analgesics to children registered at Sample Medical Centre

Analgesic	Nationally Number of patients	%	<b>Your Practice</b> Number of patients	%
Paracetamol	367,626	94.7%	176	97.2%
Ibuprofen	128,289	33.0%	46	25.4%
Codeine phosphate	3,939	1.0%	0	0.0%
Diclofenac sodium	706	0.2%	1	0.6%
Aspirin	342	0.1%	0	0.0%
Tramadol	287	0.1%	0	0.0%

**Table 1.** Number of children receiving the top six analgesics during 2013, nationally and in your practice (from any prescriber). The percentage shown is the proportion of children who received each analgesic, e.g. 95% of all children who received one or more analgesics received paracetamol.