

PARACETAMOL – SAFE PRESCRIBING – MIND THAT CHILD!

- ▶ EDUCATE CAREGIVERS TO STORE ALL MEDICINES OUT OF REACH AND OUT OF SIGHT OF CHILDREN
- ▶ ENCOURAGE PARACETAMOL TO BE USED FOR APPROVED CONDITIONS ONLY
- ▶ USE INDIVIDUALISED DOSES; SUPPLY SMALLER VOLUMES
- ▶ CHECK THAT CAREGIVERS AND FAMILIES KNOW HOW TO MEASURE EACH DOSE
- ▶ VISIT WWW.SAFERX.CO.NZ FOR USEFUL PATIENT RESOURCES

Paracetamol is the most common medicine involved in childhood poisonings and the leading cause of paediatric acute liver failure in New Zealand. The most common errors with paracetamol dosing are increased frequency of dosing, exceeding recommended doses, and prolonged duration of therapy (>48 hours). Parents and carers have expressed difficulty reading and understanding labelled instructions, and using measuring devices. Clearly explain the dosing instructions particularly for children less than 5 years who are most at risk.

EDUCATE CAREGIVERS TO STORE ALL MEDICINES OUT OF REACH AND OUT OF SIGHT OF CHILDREN

Many childhood overdoses of paracetamol are attributed to unsupervised ingestion; remind families and caregivers to store all medicines and poisons well out of reach, and **out of sight of children, ideally in a locked cupboard**. Child resistant closures must be placed on dispensed oral liquid formulations of paracetamol.

ENCOURAGE PARACETAMOL TO BE USED FOR APPROVED CONDITIONS ONLY

Paracetamol is indicated for mild to moderate pain, or pyrexia **with** discomfort. Encourage caregivers to reserve it for children in discomfort or with known painful conditions. The primary goal should be to improve the child's comfort rather than focusing on the normalisation of body temperature.

Pyrexia alone does not require treatment and is not known to endanger an otherwise healthy child. **There is no evidence that anti-pyretic therapy decreases the recurrence of febrile seizures**. The use of prophylactic paracetamol during immunisations is not recommended because it may affect the antibody response.

USE INDIVIDUALISED DOSES; SUPPLY SMALLER VOLUMES

Give children the lowest dose of paracetamol that is necessary for the shortest time possible. Health professionals can promote the safe and effective use of paracetamol by:

- Restricting volume to 200mL per dispensing
- Prescribing for each child rather than an entire family
- Individualising doses with volumes that are easy to measure
- Avoiding combined therapy (eg with ibuprofen) which may confuse the dosing regimen
- Recommending to give for no more than 48 hours
- Providing clear verbal and written information
- Checking that caregivers understand the directions on the label

Paracetamol dose for infants and children over 1 month of age	
Dose and frequency	15 mg/kg/dose, every four hours, up to four times a day
Maximum doses	60mg/kg/day, up to 1000mg/dose or 4000mg/day

There is a weight-based dosing label in pharmacy dispensing software to print and attach to dispensed bottles of paracetamol.

CHECK THAT CAREGIVERS AND FAMILIES KNOW HOW TO MEASURE EACH DOSE

Ask caregivers if they have appropriate measuring devices and they understand how to use them. A survey of 200 parents revealed that over 60% had administered incorrect doses of paracetamol to their children. Ensure they know which

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strength they are using (120mg/5ml **or** 250mg/5ml), and the correct volume to give.

Do not give more than four doses 24-hours; too frequent dosing can cause liver failure requiring transplantation. This risk is increased with multiple caregivers; encourage clear communication and documentation of doses.

If a child has received too much paracetamol, they must receive immediate medical attention. Nausea and vomiting are the only early features of poisoning, and may be attributed to the condition being treated. Acetylcysteine protects the liver if infused within 24 hours of ingestion, and is most effective if given within 8 hours, but hepatic damage may not be apparent for 4-6 days.

Note: There has been a reported association with paracetamol and serious skin reactions. The FDA has issued a drug safety warning that paracetamol has been associated with severe cutaneous adverse reactions (SCARs) which include Stevens Johnson Syndrome. Caregivers should seek advice from a doctor at the first appearance of a skin rash, peeling or mouth ulcers.

VISIT [WWW.SAFERX.CO.NZ](http://www.saferx.co.nz) FOR USEFUL PATIENT RESOURCES

A leaflet about giving paracetamol safely to babies and children is available in English, Chinese and Korean on www.saferx.co.nz. Either print directly from the site, or contact feedback@saferx.co.nz for printed versions. Several practices provide this leaflet to caregivers during the 6-week immunisation appointment.

ACKNOWLEDGEMENTS

We wish to thank Dr Michael Shepherd, Director of Starship Child Health and Paediatric Emergency Medicine Specialist, Starship Child Health, Auckland DHB and Jenny Crawford, Paediatric Pharmacist, Waitakere Hospital, Waitemata DHB for their valuable contribution to this bulletin.

KEY REFERENCES

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2. New Zealand Formulary for Children. Paracetamol. www.nzf.org.nz/nzf_2439.html (Accessed 16-05-16)
3. Bennin F, Rother HA. 'But its just paracetamol': Caregivers' ability to administer over-the-counter painkillers to children with the information provided. *Patient Education and Counselling* 2015;98:331-7. www.sciencedirect.com/science/article/pii/S0738399114004984 (Accessed 16-09-16)

[CLICK HERE FOR FURTHER INFORMATION ON PARACETAMOL AND A FULL REFERENCE LIST](#)

For further information on other high-risk medicines visit our website at: www.saferx.co.nz

No: 0182-01-093, September 2016, Review September 2019

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