

Paracetamol use to prevent and treat fever in premature and low birth weight babies for first immunisations

East of England Neonatal Operational Delivery Network

Fever and vaccinations

Fever ($>37.5^{\circ}\text{C}$) can occur after any immunisation, but is more common when the meningococcal B vaccine (Bexsero) is given with other routine vaccines at 2 and 3 months of age.

Fever can commonly occur around 6 hours after immunisations and is nearly always gone within 2 days. The fever is a sign that the baby's immune system is responding to the vaccine. However, each baby will respond differently in terms of the level of fever.

How can risk of fever be reduced?

Paracetamol can reduce the risk of fever and should be administered at the time of immunisations, followed by a second dose after 4-6 hours and a third dose 4-6 hours after the second dose.

If paracetamol is given, less than 1 in 5 infants will get a fever and nearly all fevers will be mild (less than 39°C). Paracetamol will also help reduce the chance of your baby becoming irritable or suffering discomfort (e.g. injection site pain).

Which paracetamol product should I use?

Infant paracetamol suspension which is available as a liquid at a strength of 120mg in 5ml should be used. For infants under 2 months of age, this must be prescribed by your GP. For infants 2 months or over, this can be purchased from your local pharmacy/chemist.

How to administer paracetamol

For premature / low birth weight babies, it is important to calculate the dose of paracetamol according to the weight of your baby. A dose of 15mg of paracetamol for every kilogram your baby weighs can be given. To allow you to measure a dose easily, give the following doses according to the weight of your baby (round down to the nearest dose band). All doses must be measured using an oral syringe, which should come in the box with the paracetamol, or you can get from your local pharmacy /chemist.

Weight	Maximum single dose	Volume of 120mg/5ml suspension
1.5kg (3lb 5oz)	22.5mg	0.9ml
2kg (4lb 7oz)	30mg	1.25ml
2.5kg (5lb 8oz)	37.5mg	1.6ml
3kg (6lb 10oz)	45mg	1.9ml
3.5kg (7lb 11oz)	53mg	2.2ml
4kg (8lb 13oz)	60mg	2.5ml

What if my baby still has a fever after 3 doses?

If your baby still has a fever after the third dose, please seek the advice of your GP.

Should I wake my baby to give paracetamol?

Try to give the first dose of paracetamol at the same time as the

meningococcal B vaccination (or as soon as possible afterwards).

However if your baby is sleeping when the next doses are due, don't wake them up. You can give the dose when your baby wakes up as long as there is at least 4 hours between each dose.

Why does the information leaflet supplied with paracetamol contain different information?

You will find a patient information leaflet (PIL) with the bottle of paracetamol suspension. This may contain different dosing information. Please do not follow the dosing in that PIL and instead follow the guidance we give in this leaflet, which is specifically for premature and low birth weight babies. Paracetamol is safe to be used in children under 2 months of age including premature / low birth weight babies.

Who to contact if you have any queries?

If you have any queries, please contact your local neonatal unit

Remember to keep all medicines out of the reach of children

Further information on medicines use in children can be found at

www.medicineforchildren.org.uk

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Reference:

'Green book of immunisations, Chapter 22, page 10.

British National Formulary for Children (BNFC) – viewed online 19/04/24
UK Health Security Agency. Using paracetamol to prevent and treat fever after MenB vaccination. Nov 2022