fever
Fever is when the temperature of the body rises above normal, generally above 38 degrees (38°C) when the temperature is taken under the arm or in the mouth. Fever usually occurs as a result of an infection. The normal body temperature varies between about 35.8°C and 37.4°C. Different people may have slightly different normal temperatures, and each person’s normal body temperature will vary a little at different times of the day (up to 1°C).

What causes fever

- Fever is one of the ways that the body fights an infection.

- In children, most fevers are caused by viral infections. Most of these infections are not serious, even if the temperature is high for a short time (e.g. over 40°C).

- Some fevers are caused by bacterial infections, such as ear infections and tonsillitis, and sometimes children will become well more quickly if they have antibiotics for these infections.

- It is common for young children to have many mild infections which cause fevers - often five to ten viral infections each year.

- Small rises of body temperature can happen in hot weather, or after a hot bath, and after exercise (including when a baby cries vigorously), but these will not cause a rise in temperature to or above 38°C.
When to take a child’s temperature

- It is not necessary to know what a child’s temperature is. Other signs such as feeling hot when touched, crying, being unusually sleepy, vomiting, pain or refusing to drink can tell you how sick your child is.

- Many parents or carers will take a child’s temperature when the child feels warmer than usual, is irritable and miserable, and looks unwell, to confirm that the child does indeed have a fever.

How to take a child’s temperature

- Under the arms (axillary temperature) - this can be used for all children, and is the safest way for young children.

- Place the thermometer high in the armpit and then place the arm down by the child’s side.

- Read the thermometer after three minutes, or follow the instructions that come with an electronic thermometer.

- Mouth (oral temperature) - this can be used for children over five years old.

- Place the thermometer as far under the tongue as possible and get the child to keep his mouth closed around the thermometer.
Read the thermometer after three minutes, or follow the instructions that come with an electronic thermometer.

Do not take a child’s temperature this way if the child has recently had a cold drink or warm one.

Ear (tympanic temperature) - a special ear thermometer can be used, but this method may not be as accurate as the arm or oral method.

Bottom (rectal temperature) - this method can also be used, but is usually not needed.

When to see a doctor

Children with fevers are usually quieter and less active than usual.

See your doctor if your child:
  - has a high fever, for example over 40ºC
  - is becoming more unwell
  - is more difficult to wake up
  - has a rash
  - is vomiting and has diarrhoea more than a couple of times
  - will not drink
  - has pain.

See your doctor if the fever does not settle when you have given your child paracetamol (or ibuprofen for babies and children over six months old).
All babies under 12 months old with fever should be seen by a doctor.

See your doctor if you are worried about your child’s health.

What to do

A fever by itself can cause a child or older person to feel unwell and tired and to have a headache. A fever by itself does not cause a health problem (the ‘problem’ is whatever has caused the fever), but it can trigger a febrile convulsion. Febrile convulsions (fits) caused by a fever rarely cause any ongoing health problems (see Febrile convulsions at the end of this brochure).

The main thing you can do for fever is to help your child feel better by comforting, holding, cuddling and soothing her.

Cover the child in light clothing.

- When a child has a fever, the child will often feel that she is cold and she may want to be wrapped up in a blanket.

- Wrapping a child with a fever in a blanket or thick clothes can push the child’s temperature up, as the body cannot lose heat through the skin.

Extra drinks are needed. Give extra breast feeds, water or diluted fruit juice.

Tepid sponging is not recommended.

- Tepid sponging (sponging with warm water) does not bring a child’s temperature down for long; it will go back up as soon as the sponging is stopped.
- Sponging does not affect the part of the brain that controls temperature.

- Using cool water can be uncomfortable for a child, and if the child cries or shivers, the body temperature usually goes up, not down.

- Never place a sleeping, drowsy, or unconscious child or baby in a bath.

- Also avoid fanning the child.

---

**Paracetamol**

Paracetamol is often suggested if the fever is high (over 38.5°C to 39°C). This does not deal with the cause of the fever, but can help the child feel better and may bring the temperature down. The topic ‘Using paracetamol or ibuprofen’ has more information about these medicines.

---

**How much Paracetamol to give**

- The dose of paracetamol needs to be worked out, using the weight of the child, and the strength of the paracetamol mixture.

- Paracetamol for children comes in several different strengths, for babies, for young children and for older children. Paracetamol is also made and sold by many different companies.
Common strengths include:
- 100 mg in 1 mL (drops for babies - only very small doses are given)
- 120 mg in 5 mL (syrup for young children)
- 240 mg in 5 mL (syrup for children over four years old).

The usual dose of paracetamol is 15 mg (not mL) of paracetamol per kg body weight per dose, but we recommend that you give the dose that is written on the bottle or pack for a child of your child’s weight rather than calculate a dose, as errors can be made.

If your baby or child is taking some other medicine, check that it does not have paracetamol in it, so that she doesn’t get a bigger dose than she should.

How often can it be given?
- Paracetamol can be given every four hours, and no more than five times a day.
- If your child seems to need it for more than twenty-four hours, check with your doctor to find out what is wrong.
- Taking even the recommended dose for more than one or two days has caused liver damage in some children who were unwell and dehydrated.
- Make sure your child gets plenty to drink while taking paracetamol.
Older children, weighing over 60kg, who are taking tablets, should not have more than eight 500mg tablets in any 24 hour period.

### Ibuprofen

- Ibuprofen is another medicine that can be given for fever in children over six months of age. The topic ‘Using paracetamol or ibuprofen’ has more information about these medicines.
- It does not appear to be better than paracetamol.
- It should not be given at the same time as paracetamol.
- The usual dose of ibuprofen is ten mg (not mL) of ibuprofen per kg body weight per dose, but we recommend that you give the dose that is written on the bottle or pack for a child of your child’s weight, rather than calculate a dose, as errors can be made.
- Doses can be given six to eight hours apart, with no more than three doses in 24 hours.
- Make sure your child gets plenty to drink while taking ibuprofen. Ibuprofen should not be used if a child may be dehydrated (e.g. is vomiting or has diarrhoea).
- Older children weighing over 40 kg and taking tablets should not have more than three doses of 400 mg in any 24 hour period.
Alert

Never give aspirin to a child under the age of 16 years. It can cause a rare but very serious illness called Reye’s Syndrome.

Febrile convulsions

- Some children under the age of six years have convulsions (fits) with high fevers.
- This is usually due to the temperature rising quickly, not the actual temperature that is reached.
- These are frightening to watch, but generally do not harm the child.
- It is important to have your child seen by a doctor to find out what has caused the fever.
- Note: paracetamol and ibuprofen do not appear to help prevent febrile convulsions.

The topic ‘Feeling sick’ has suggestions for caring for a sick child.
For more information contact:

- Local Community Child Health Nurse
- Local Family Doctor
- Ngala Family Resource Centre Helpline
  8.00 a.m. - 8.00 p.m. 7 days a week
  Telephone (08) 9368 9368
  Outside metro area - Freecall 1800 111 546
  www.ngala.com.au
- Parent Help Centre/Parenting Line
  Telephone (08) 9272 1466 (24hr service)
  Outside metro area - Freecall 1800 654 432

© Children, Youth and Women’s Health Service, reproduced with permission. The South Australian Government does not accept responsibility for the accuracy of this reproduction. The original version is published at http://www.cyh.com

Warning
This document is published as general information only. You should always consult a healthcare professional for diagnosis and treatment of any health condition or symptoms.

Disclaimer
The advice and information contained herein is provided in good faith as a public service. However the accuracy of any statements made is not guaranteed and it is the responsibility of readers to make their own enquiries as to the accuracy, currency and appropriateness of any information or advice provided. Liability for any act or omission occurring in reliance on this document or for any loss, damage or injury occurring as a consequence of such act or omission is expressly disclaimed.