All About Fever in Kids

A fever is a body temperature higher than normal. (Normal is 97-99F or 36-37C.)
It is a healthy way for the body to fight off infection.

Note: Babies under 1 month old - call doctor immediately with *any concern whatsoever* about baby's condition.

What you need:

- A "screening" thermometer (for the ear, forehead, underarm, pacifer, etc.). These are less accurate.
  Don't use temperature strips that you stick on the skin.
- A rectal thermometer for babies. (Rectal temperature is 0.5 to 1 degree higher than an oral temperature.)
- An oral thermometer for kids. (Oral temperature is 0.5 to 1 degree lower than a rectal temperature.)
- Rectal and oral thermometers can be used under the arm for older babies, toddlers, and small children.

What to do:

1. Take a "screening" temperature (ear, forehead, under arm, etc.).
2. If this temperature is higher than 99, take a more accurate rectal or oral temperature.
   - Under 1 month: ***call doctor immediately with any concern whatsoever*** about baby's condition.
     A fever of 100.3+ in a baby under 1 month old is a medical emergency until proven otherwise. (38C+)
     If you can't reach your doctor, go to Urgent Care or emergency room.
   - 1-3 months old: rectal temperature more than 100.3: needs to be seen by a doctor in person promptly.
   - 3-6 months old: rectal temperature 101+: Call doctor for advice. Treat fever if baby is uncomfortable.
   - 6 months or older: rectal temperature 103+: Call doctor for advice. Treat fever.

Kinds of fever:

- *"Low-grade fever" = Over 99, under 100.3.(Normal temperature is 97-99, or 36-37C.)*
  "High fever" = 104+ (40C+).
  "Common fever" = 100.3-104 (38-40C).
- *High fevers do not cause brain damage* unless *greater than 107*. This extremely high temperature can occur with sunstroke and heatstroke, but not usually with infectious illnesses.
- Most fevers are caused by *viruses*. They're usually contagious until the fever has been gone for 24 hours.
- About 10% of viruses cause fever AND a rash.
- One virus called *roseola*, in kids from around 6 months to 3 years old, causes a high fever without any other significant symptoms for about 3 days. As the fever goes away, a pink rash appears for 1-2 days.
- *Teething doesn't cause high fever*, but the physical stress can make a baby more likely to catch a virus.
- A fever may be higher if a baby is bundled up, or if a toddler is over-dressed. *Reduce clothing and blankets*, and check temperature again after an hour.
- *Vaccinations* can cause fever. The vaccine contains tiny bits of an infectious germ, or a killed or weakend germ, and the body has a healthy reaction to it, in the form of a fever. It doesn't mean the child has the disease. (Example: a baby can get a fever after a DtaP shot. This does not mean the baby has diphtheria, or pertussis [whooping cough], or tetanus.)
- *High fevers can cause "febrile seizures"* (losing consciousness and shaking) if the temperature changes very quickly - usually in the first day of a fever. It's not an emergency, but do let your doctor know.
  ~ They're usually harmless, and can run in the family (be inherited). They aren't epilepsy.
  ~ About 1 in 25 babies and kids get them, usually between ages 6 months and 3 years.
  ~ During a seizure, don't put anything in the child's mouth - just keep them safe until it ends.
  ~ If a seizure lasts longer than 10 minutes, go to the ED, where they will give medicine to stop it.

Sickness is more important than fever.

A kid who is NOT severely ill:	*A kid who IS severely ill:*
~ *A baby* (older than 1-2 months) will make eye contact, smile, and reach for objects.	~ A baby will not make eye contact, can't stop crying, and cannot be comforted.
~ *A toddler* will pay attention to activities around them, will smile, and is able to walk to get things.	~ A toddler refuses to play, cries and can't be distracted, appears very weak, turns away and stares repeatedly, or is very hard to awaken.
~ *A schoolchild* will be able to engage in quiet activities, like coloring or reading.	~ A schoolchild refuses to talk and won't interact, or can't get out of bed.

Medicines:

- You can give acetaminophen (generic Tylenol) and/or ibuprofen (generic Motrin). (Dosages below.) They don't interact. If one or the other doesn't work, you can give both, alternating every three hours (so you are giving each one every six hours total). Call your doctor for instructions.
- You *can* give acetaminophen and ibuprofen right along with antibiotics.
- You *can* mix acetaminophen and ibuprofen into a spoonful of food, like yogurt or applesauce.
- If your child is sensitive to the colors/ flavors/ preservatives in over-the-counter preparations, a compounding pharmacy can make plain acetaminophen/ ibuprofen liquids without these.
- Measure it with a dropper or a special measured cup, not a regular kitchen spoon.
- Don't give over-the-counter *cold remedies or cough medicines* to kids under age 2.
  From age 2-11, only use them with guidance from your doctor.
  These medicines have been restricted for these age groups, because they don't work very well and have caused a lot of overdoses in children.
- Don't give plain aspirin to a sick child under age 19. Aspirin can react with a virus to cause Reye's disease, which has a 30% death rate in kids, from liver damage. We don't know how to predict who can get it. Symptoms of Reye's disease: rash on palms and soles, severe persistent vomiting, and confusion.

Other treatments:

- Your baby or toddler can *nurse* all they want. Your milk's immune factors are the best medicine.
- You can give the child a *lukewarm bath*. Do not give a cold bath or an alcohol rub, as these cause the temperature to drop too quickly. Never leave a baby or child alone in a bathtub.
- For kids over age 1, lukewarm *herbal tea with honey* in it can help keep them hydrated and provide calories. Good herbs include chamomile, lemon balm, elderflower.
- Encourage *sleep*. Make the environment somewhat boring (for everyone). No tv or video games that involve chases, weapons, or explosions; no loud music; no playing (or fighting) with pals, etc.

Danger signs (call doctor immediately, and/or go to emergency room of hospital):

- Dehydration: No urine in 8 hours, no tears when crying, dry cracked lips. They'll need IV fluids.
- Struggling to breathe, with the skin sucking in around the ribs or throat when trying to get a breath. This is respiratory distress; they will need medicine to relax the airway.
- Drooling and unable to swallow, with noisy breathing. Swelling may be starting to block off the airway.
- Stiff neck: won't turn head or look at tummy due to severe neck pain. This can be a sign of meningitis.
- Flat red dots or purple spots on the skin that do NOT blanch (lose color) when you press on them. (You can press with a drinking glass or jar and look through it, if you're not sure.)
  These are caused by ruptured blood vessels under the skin, not by an ordinary viral or allergic rash. This can be a sign of meningitis.

Child's weight (in pounds)	Acetaminophen infant drops, 100 mg/ mL (80 mg/ 0.8 mL) every 4 hours	Acetaminophen kids' syrup, 160 mg/ tsp (160 mg/ 5 mL) every 4 hours	Baby ibuprofen 40 mg/ mL (50 mg/ 1.25 mL) every 6 hours	Kids' ibuprofen 100 mg/ tsp (100 mg/ 5 mL) every 6 hours
5-8	0.4 mL (½ dropper)			
9-10	0.6 mL (¾ dropper)	1/3 tsp (1.8 mL)	0.625 mL (½ dropper)	
11-16	0.8 mL (1 dropper)	1/2 tsp (2.5 mL)	1.25 mL (1 dropper)	1/2 tsp (2.5 mL)
17-21	1.2 mL (1½ dropper)	3/4 tsp (3.75 mL)	1.9 mL (1½ dropper)	3/4 tsp (3.75 mL)
22-26	1.6 mL (2 droppers)	1 tsp (5 mL)	2.5 mL (2 droppers)	1 tsp (5 mL)
27-32	2 mL (2½ droppers)	1¼ tsp (6.25 mL)	~3 mL (2½ droppers)	1¼ tsp (6.25 mL)
33-37	2.4 mL (3 droppers)	1½ tsp (7.5 mL)	3.8 mL (3 droppers)	½ tsp (7.5 mL)
38-42	2.8 mL (3½ droppers)	1¾ tsp (8.75 mL)	4.4 mL (3½ droppers)	1¾ tsp (8.75 mL)

Updated 1/2012 by Leigh Saint-Louis, MD