Nelson Branco, MD, FAAP Partner, Tamalpais Pediatrics, Greenbrae, CA Medical Staff, Marin General Hospital and Novato Community Hospital

FEVER

All parents worry when their child has a fever, but fever itself is not dangerous to your child. As infants and children grow, the immune system is challenged by many different infections. Fever is the body's way of turning on the immune system to fight these viruses and bacteria.

Fever is not an illness – it's a symptom of infection. Most are due to viruses – colds, stomach flu (gastroenteritis), Roseola, or chicken pox. It can also be a sign of a more serious bacterial infection like pneumonia, ear infection, UTI, or meningitis. Rarely, fever is caused by conditions like arthritis.

Children's temperatures normally vary from 97 to 99 degrees Fahrenheit. Rectal temperatures are most accurate, and in infants under six months is the best way to take a temperature. In older babies and children, an axillary (under the arm) or oral temperature can be used. Ear thermometers are quick and easy, but less reliable. Forehead strips are unreliable. A child has a fever if the rectal temperature is above 100.5 degrees, or an oral or axillary temperature is greater than 100 degrees.

Fever is not dangerous. Many people think that high fever can cause brain damage. This is not true. Children who have a fever high enough to cause brain damage (over 106 degrees) already have a brain abnormality that allows the fever to get that high.

Children between the ages of 5 months and 5 years may have a febrile seizure, or convulsion, if their temperature rises very quickly. These are scary events but not dangerous to the child and **do not** cause any damage to the brain. Most febrile seizures last less than a minute and stop on their own. If this happens, it is important for you to stay calm, turn your child on their side and watch their breathing. Make sure to call for help if you need it, and get your child to the doctor's office or emergency room so that they can be checked after the event.

Comfort is the main reason to treat fever. If your febrile child is happy, playful, or asleep, they do not need medication. However, if they're fussy, tired or uncomfortable, you should help them by bringing down the fever. If they still look sick after bringing down the fever, they should be evaluated by a doctor as soon as possible.

When your child has a fever, dress them in loose fitting clothes and offer plenty of fluids. Children need to drink more when they have a fever – water, breastmilk, milk, formula, Pedialyte, water, juice, herbal teas, or soup broths are

fine. You can give your child either Acetaminophen (Tylenol or Tempra) or Ibuprofen (Motrin or Advil) to make them more comfortable. Both of these medications are safe, given in correct doses according to weight or age. You can give both of these medications at once, or close in time to each other. You should never give a child aspirin, as this can cause a serious condition called Reye's syndrome.

If your child is still hot and uncomfortable, you can give them a bath after using medications. First give them the medicine, and then 30 - 60 minutes later put them in a warm bath. The water should not be cool or cold. Shivering creates more heat inside the body, so take your child out before the water cools off. Never give your child alcohol baths or wipe their skin with alcohol.

Most fevers are cause by a virus that the immune system will fight off easily, but this is not always the case. You should take your child in to be evaluated if your child:

Is under 3 months of age Looks very sick, or is pulling on their ears or complaining of ear pain Is refusing to drink fluids, or has persistent vomiting Has difficulty breathing Has a rash that looks like tiny purple or dark red bruises under the skin Has a history of chronic illness, recurrent infections or a serious medical condition Has traveled to a country in the tropics within the past 12 months

In summary, fever is not dangerous to your child, and most fevers are due to viral illnesses. Most children can be treated at home with lots of fluids, rest, and Ibuprofen or Acetaminophen. Treating a fever is never urgent, but it will make a child feel better and act more normally. Give your child lots of rest and fluids, watch them closely and call your doctor if you have any concerns or questions.