

# Fever

Hilliard Pediatrics, Inc. – Dr. Beth Schloss

Kids get a lot of fevers! Somehow kids seem to get fevers only at the most inconvenient times for families – middle of night, vacation, holiday, etc. Fever is just a symptom of an illness but can be very worrisome for parents. Let's review some information about fevers and how to treat them.

We consider a temperature of 100.4°F or higher to be a fever. The most accurate way to measure the body temperature is with a rectal thermometer. We recognize that rectal temperatures are not ideal in many situations, but they are strongly recommended in infants less than 2 months old if you are concerned about a fever. Temporal artery (forehead), ear, axillary (armpit), and oral (mouth) thermometers are fine as well in older children. As for which to use, go with whatever one is easiest to obtain (especially in feisty toddlers!).

Kids will often look pitiful when they have a fever (ex. toddler will be laying on the floor or cuddle with parent instead of running around like usual). Treat the fever with an appropriate dose of acetaminophen (Tylenol®) or ibuprofen (Motrin®, Advil®) – ibuprofen can only be used age 6 months and older. They should start perking up 1-2 hours after the medication is given. They may not be running around again, but at least sitting up, quietly playing, or taking some fluids, etc. If the fever is very high, then temperature may not come all the way down to normal but should come down a couple degrees. As long as the child looks better, that is okay. When a child has a fever, their body will try to cool itself so the child will have a faster heart rate and will breathe faster as well. When the fever is treated, both their heart rate and respiratory rate should improve.

As for high temperatures, it is not the number on the thermometer that concerns us, it is how the child looks. The height of the fever does not correlate to the severity of the illness. Some kids can be very sick, and their temperature may only be 101°F. Some kids will have a temperature of 104°F and only have a mild illness. The most important part is how they look 1-2 hours after they are given a fever reducing medicine (acetaminophen or ibuprofen). If they are not perking up, then they need to be seen at our office during business hours or at Nationwide Children's Urgent Care/Emergency Room during evening/weekends.

Acetaminophen will last 4-6 hours, and ibuprofen will last for 6-8 hours. These medicines treat the fever but not the underlying cause, so we anticipate that the fever will return when the medicine wears off. You can alternate between acetaminophen and ibuprofen every 3-4 hours if needed (ex. give Tylenol® at 12pm, then Motrin® at 3pm, then Tylenol® at 6pm, then Motrin® at 9pm, etc).

Kids get a fever with illnesses more frequently than adults and they tend to spike higher fevers as well. Fevers can happen for multiple reasons, most frequently it is due to an infection. The fever itself is not the disease, it is just a sign that the body's defenses are trying to fight an infection.

-Viral infections are very common in children and frequently cause a fever.

- Ex: influenza, croup, cold viruses, bronchiolitis, GI viruses causing vomiting/diarrhea, hand foot mouth virus, roseola, etc.
- Some viral infections, like influenza, can cause very high fevers up to 106-107°F

-Bacterial infections

- Ex: ear infection, pneumonia, strep throat, urinary tract infection, bad skin infections, etc.
- These typically need to be treated with antibiotics

Other rarer causes of fever include Kawasaki's disease, rheumatologic issues, periodic fever syndromes, and malignancy. These are much less common than viral and bacterial infections, but it is something we consider when the fever is prolonged.

### When to seek immediate medical attention:

- Fever in an infant <8 weeks old
- Temp 108°F or higher
- If a child continues to look lethargic/pitiful after treating with acetaminophen (Tylenol®) or ibuprofen (Motrin®, Advil®)
- Fever with stiff neck, severe headache, or your child is not interacting normally
- Fever associated with breathing difficulty, severe abdominal pain, or concern for dehydration.

### When to be seen in our office:

- Fever lasting > 5 days, or high fever (> 102°F) for 3 days
- Late onset fever – ex. Runny nose for 5 days now with a new fever
- Worsening fever or symptoms
- If you are worried and would like them evaluated in person

### Treating the fever at home:

- May give acetaminophen or ibuprofen as discussed (see dosing below)
- Encourage fluids like Pedialyte or Gatorade
- Rest

### Other resources for parents:

- Healthychildren.org is the American Academy of Pediatrics website for parents. It has a wonderful section of articles about fever in children. Here is the link:
  - <https://www.healthychildren.org/English/health-issues/conditions/fever/Pages/default.aspx>

## Medication Dosing:

### Acetaminophen (Tylenol®)

Weight	Infant's Suspension 160mg/5mL	Children's Suspension 160mg/5mL	Chewable Tablets 160mg	Regular 325mg Tablets
< 12 lbs	¼ tsp. (1.25 mL)	--	--	
12-17 lbs	½ tsp. (2.5 mL)	--	--	--
18-23 lbs	¾ tsp. (3.75 mL)	--	--	--
24-35 lbs	1 tsp. (5 mL)	1 tsp. (5 mL)	1 tablet	--
36-47 lbs	--	1.5 tsp. (7.5 mL)	1.5 tablets	--
48-59 lbs	--	2 tsp. (10 mL)	2 tablets	1 tablet

Weight	Infant's Suspension 160mg/5mL	Children's Suspension 160mg/5mL	Chewable Tablets 160mg	Regular 325mg Tablets
60-71 lbs	--	2.5 tsp. (12.5 mL)	2.5 tablets	1 tablet
72-95 lbs	--	3 tsp. (15 mL)	3 tablets	1.5 tablets
>95 lbs	--	--	--	2 tablets

**Ibuprofen (Motrin®, Advil®)** – must be greater than 6 months old and no kidney issues

Weight	Infant Drops 50mg/1.25mL	Children's Suspension 100mg/5mL	Chewable Tablets 100mg	Regular 200mg Tablets
12-17 lbs	1 dropper / 1.25 mL	0.5 tsp. (2.5 mL)	--	--
18-23 lbs	1.5 droppers / 1.875 mL	0.75 tsp. (3.75 mL)	--	--
24-35 lbs	2 droppers / 2.5 mL	1 tsp. (5 mL)	1 tablet	--
36-47 lbs	--	1.5 tsp. (7.5 mL)	1.5 tablets	--
48-59 lbs	--	2 tsp. (10 mL)	2 tablets	1 tablet
60-71 lbs	--	2.5 tsp. (12.5 mL)	2.5 tablets	1 tablet
72-95 lbs	--	3 tsp. (15 mL)	3 tablets	1.5 tablets
>95 lbs	--	--	--	2 tablets

**Acetaminophen Suppositories** – can be used if child is unable to take medicine by mouth

Age	Infants 80mg	Children's 120mg	Junior Strength 325mg
3-11 months	1 suppository	--	--
12-35 months	1 suppository	--	--
3-5 years	--	1 suppository	--
6-12 years	--	--	1 suppository