



Mott Poll Report

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Figuring Out Fever in Children

Fever is a common symptom in children and can be a challenge for parents to decide how to handle. The C.S. Mott Children's Hospital National Poll on Children's Health asked a national sample of parents of children 0-12 years about their actions and decisions when their child may have a fever.

Most parents (89%) agree that running a low-grade fever helps a child's body fight off infection. Three in four parents (75%) say they take their child's temperature as soon as they notice a possible problem, while 23% of parents wait to see if the problem continues or worsens before taking their temperature; 2% take their child's temperature in rare situations only.

Parents say they typically take their child's temperature by forehead scan (45%), mouth (25%), ear scan (13%), underarm (10%) or rectal (3%); 4% assess a possible fever by feeling if their child is hot to the touch. Parents of children 0-3 years are more likely to take an underarm or rectal temperature. Most parents (72%) believe their method gives a true measure of their child's temperature, but this belief is higher among parents who take the temperature rectally (90%) or by mouth (84%), and lower among those using ear scan (75%), forehead scan (70%) or underarm (60%). Only 56% feel very confident they understand how temperature readings can change according to the method used.

Two-thirds of parents (65%) rate themselves as very confident in their ability to know whether their child needs medication to reduce fever. However, parents report different thresholds for the temperature at which they would give fever-reducing medication to their child: 35% say below 100.4°; 50% between 100.4° and 101.9°; and 15% at 102.0° or higher. Two-thirds of parents (67%) say they prefer to try other methods like a cool washcloth before using fever-reducing medication.

When giving their child fever-reducing medication, 65% of parents say they always or usually record the time of each dose, and 84% always or usually re-take their child's temperature before giving another dose. Parents of children 0-3 years are more likely to record the time and re-take the temperature. One-quarter of parents (26%) say they always or usually give another dose of medication to prevent the fever from returning.

Parent practices when giving their children fever-reducing medication

84% Re-take temp before giving another dose

65% Record time of each dose

26% Give another dose to prevent return fever



Report Highlights

9 in 10 parents agree that running a low-grade fever helps a child's body fight off infection.

2 in 3 parents are very confident they know whether their child needs medication to reduce fever.

1 in 3 parents would give fever-reducing medication for elevated temperature below 100.4°.

Data Source & Methods

This report presents findings from a nationally representative household survey conducted exclusively by Ipsos Public Affairs, LLC (Ipsos) for C.S. Mott Children's Hospital. The survey was administered in August-September 2022 to a randomly selected, stratified group of adults who were parents of at least one child age 0-18 years living in their household (n=2,023). Adults were selected from Ipsos's web-enabled KnowledgePanel® that closely resembles the U.S. population. The sample was subsequently weighted to reflect population figures from the Census Bureau. The survey completion rate was 61% among panel members contacted to participate. This report is based on responses from 1,376 parents with at least one child age 0-12. The margin of error for results presented in this report is ±1 to 3 percentage points and higher among subgroups.

A publication from C.S. Mott Children's Hospital, the University of Michigan Department of Pediatrics, and the Susan B. Meister Child Health Evaluation and Research (CHEAR) Center.

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C.S. Mott Children's Hospital National Poll on Children's Health

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Implications

Fever is a signal that the child has an illness and the body is attempting to fight off the cause. When parents suspect their child may have a fever, their first decision is whether to take the child's temperature. Some parents do this at the first sign of any problems, while others choose to monitor their child, and likely consider other factors such as whether the child has additional symptoms of illness.

There are several options for taking a child's temperature, including the type of device and where the device is placed. Contact thermometers use electronic heat sensors to record body temperature and can be placed in the mouth, under the arm, or in the rectum. For infants and young children, rectal temperatures are most accurate. Once children are able to hold a thermometer in their closed mouth, oral temperatures also are accurate. Armpit temperatures are the least accurate method.

Remote thermometers use an infrared scanner to measure the temperature at the forehead or inside the ear canal. Their accuracy varies by brand, how well they are calibrated, and if they are used correctly; they are not recommended for newborns. With forehead scanning, the reading may be inaccurate if the scanner is held too far away or if the child's forehead is sweaty. With ear thermometers, earwax can interfere with the reading. Regardless of the device used, it is essential for parents to review the directions to ensure the method is appropriate for the child's age and that the device is placed correctly when measuring temperature.

An important decision for parents is whether to give fever-reducing medicine. While child health experts typically define fever as a temperature at or above 100.4°F, one-third of parents in this Mott Poll indicated that they would give fever-reducing medication even at temperatures below this threshold. If the child is otherwise doing well, this level of elevated temperature does not require fever-reducing medication.

When deciding whether to give fever-reducing medications, parents should consider that lowering a child's temperature does not cure their illness faster; the main benefit is to help relieve their discomfort. Most parents in this poll believe that allowing their child to run a low-grade fever is helpful in fighting off infection; this is consistent with research showing that at increased temperatures our immune cells are more effective at destroying the viruses and bacteria that cause infection. An alternative to medication is to monitor the temperature, while keeping the child comfortable with non-medication strategies, such as ensuring the child is in light clothing and encouraging them to stay well hydrated.

Many parents wonder if they should give their child fever-reducing medication prior to receiving vaccines. While this was a common practice in the past, it is not currently recommended due to concerns that it may reduce the effectiveness of vaccines. Fever in the days after vaccination is a sign that the child's immune system is responding to the vaccine. As long as the child is comfortable, fever-reducing medication is not necessary.

When parents choose to give fever-reducing medication, it is helpful to keep a log of temperature readings and when the medicine was given; this will provide an accurate record. Parents should avoid using combination ("multi-symptom") cold medications along with fever-reducing medications due to the risk of over dosage. In addition, parents should not give aspirin to reduce fever.

Parents also must decide whether to contact the child's doctor. For children 0-3 months, any fever should prompt a call to the provider. For children 4-12 months, parents should call if a fever is accompanied by signs such as decreased activity, increased fussiness, or decreased urine output. A fever that reaches 104° or remains for an extended period (more than 24 hours for children under 2 years of age, or more than 3 days for children 2 years of age or older) should prompt contact with the provider, as should symptoms like a stiff neck, difficulty swallowing/drooling, vomiting, or being very drowsy.