



Mott Poll Report

June 15, 2020
Volume 36
Issue 3

Protecting Kids Against Mosquitoes and Ticks

Warmer weather brings the potential for bites from mosquitoes and ticks when kids go out into their yards, neighborhoods and parks. The C.S. Mott Children's Hospital National Poll on Children's Health asked a national sample of parents of children ages 5-12 about their efforts to prevent and treat these bug bites.

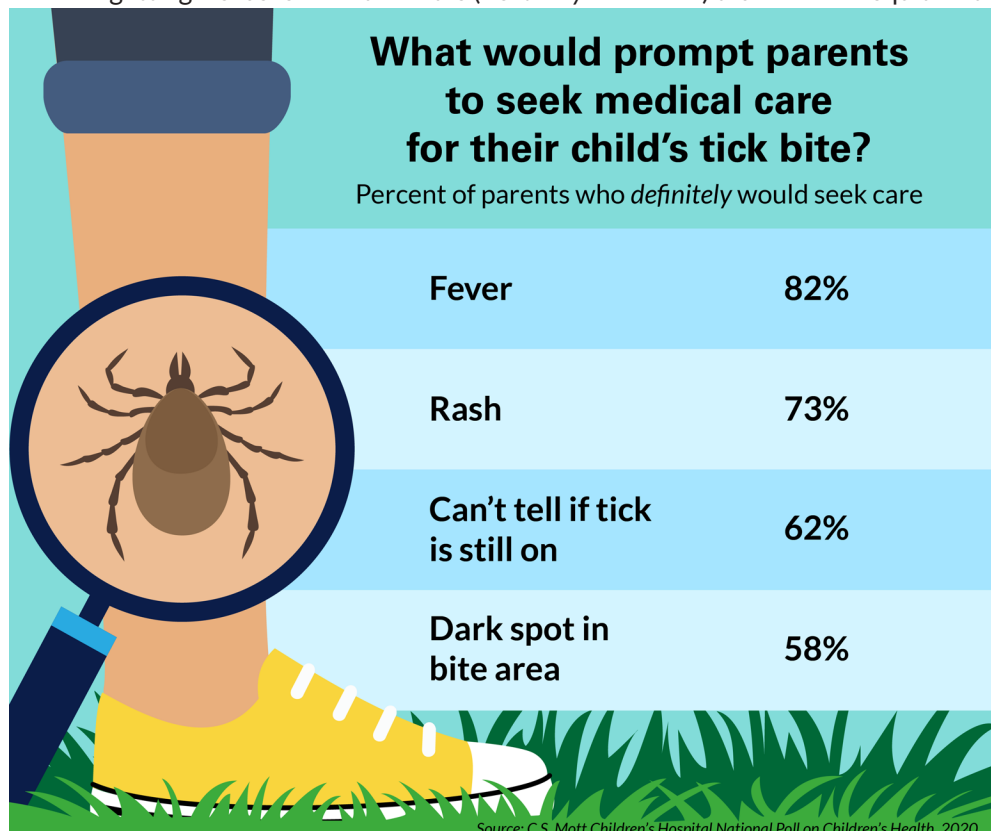
Almost all parents (87%) say they use bug repellent (*usually or sometimes*) for their children. Parents are more likely to *usually* have their children apply bug repellent when out in wooded/swampy areas (53%) compared to at a local park (18%) or in their yard/neighborhood (17%). Among parents who use bug repellent, 47% choose a repellent specifically advertised for children, and 30% use "natural" or homemade products. Parents are divided about whether they use bug repellent on their child that contains DEET, with 35% saying they do, 37% saying they do not and 29% not sure.

Other strategies to prevent bites center around clothing choices. Parents say they *often* have their child wear long pants and sleeves (34%), light colored clothing (21%) or always wear shoes (73%). About one in five parents (21%) have their child avoid soaps or shampoos with a floral scent.

Parents report *often or sometimes* using a variety of treatments to help with the itching and/or pain from mosquito bites, including topical products, oral medicines and home remedies. The most common topical treatments parents use for their children include hydrocortisone (61%), antihistamines (55%), calamine lotion (40%) or rubbing alcohol (27%). Almost half of parents (44%) say they use oral antihistamines to provide relief, while others report giving their child ibuprofen (24%) or acetaminophen (23%). Home remedies are also used by many parents, including ice/cold rag (51%), oatmeal baths (16%) and baking soda (14%).

If a parent found a tick on their child, the most common strategies they would use to get it off are pulling it off with tweezers (72%), applying rubbing alcohol (23%), using a fingernail or credit card to scrape it off (19%) or covering it with Vaseline® (13%).

Signs and symptoms after a tick bite that parents say *definitely* would make them seek medical care for their child are fever (82%), rash (73%), can't tell if the tick is still attached (62%) or a dark spot in the bite area (58%). Parents are more concerned about children getting diseases from tick bites (46% *very concerned*) than from mosquito bites (23% *very concerned*).



Report Highlights

1 in 3 parents use a bug repellent on their child that contains DEET.

Nearly half of parents give their children oral antihistamines to help with itching from bites.

Parents are twice as concerned about ticks transmitting diseases than they are about mosquitoes.

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 January-February 2020 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=2,016). 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 60% among panel members contacted to participate. This report is based on responses from 1,120 parents who had at least one child age 5-12 years. The margin of error for results presented in this report is ±2 to 3 percentage points.

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

Findings from the C.S. Mott Children's Hospital National Poll on Children's Health do not represent the opinions of the University of Michigan. The University of Michigan reserves all rights over this material.

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

Co-Director: Sarah J. Clark, MPH
Co-Director: Gary L. Freed, MD, MPH
Poll Manager: Dianne C. Singer, MPH
Data Analyst: Acham Gebremariam, MS
Publication Designer: Sara L. Schultz, MPS



**SUSAN B. MEISTER
CHILD HEALTH EVALUATION
AND RESEARCH CENTER**
MICHIGAN MEDICINE

Implications

As the weather turns warmer, children spend more time outdoors with family and friends. Whether children play in their yard, at a neighborhood park or in the woods, they may come into contact with mosquitoes and ticks. Mosquito bites occur when a female mosquito uses its mouthparts to puncture the skin to suck out a little blood and inject some of its saliva into the skin. The saliva triggers a mild immune reaction that causes the common range of signs we call mosquito bites: a puffy, white and reddish bump that appears a few minutes after the bite; a hard, itchy, reddish-brown bump; or small blisters.

Although most bites are usually just a nuisance, they cause discomfort for many children, and in some cases can transmit disease. Thus, almost 9 in 10 parents in this Mott Poll have their child use bug repellent in different outdoor settings, particularly in wooded or swampy areas.

The choice of bug repellent can be confusing for parents. The most effective mosquito repellents contain N,N-Diethyl-meta-Toluamide (DEET). Products containing no more than 30% DEET have been shown to be safe for use on children older than 2 months old. Other safe options for children older than 2 months are repellents containing picaridin. Oil of lemon eucalyptus may be a good alternative for those who prefer a natural, chemical-free repellent, but should only be used for children over 3 years. It is important to keep young children from getting repellent on their hands or faces, as it can irritate the eyes and mouth. Parents should also spray their child's clothing as mosquitoes may bite through thin material.

Parents should be aware that DEET is not very effective against ticks; picaridin works better. But the most effective repellent for ticks is permethrin. However, parents should only spray permethrin on clothes, not directly on skin. Clothing can also help to prevent bug bites. Having children wear long pants and sleeves in light colors and closed-toe shoes can protect against both mosquitoes and ticks. Tucking a child's pant legs into their socks can also be helpful. For trips to wooded areas where ticks are more prevalent, parents may choose permethrin-treated clothing for kids.

Other tactics to prevent mosquito bites include avoiding outdoor activities from dusk to dawn when they are most active. Eliminating standing water near the house can also keep mosquitoes from breeding in the area.

Parents in this Mott Poll reported using a lot of different strategies to help make their child feel more comfortable if they get a mosquito bite. Some try over-the-counter products to relieve symptoms, including hydrocortisone, antihistamine cream, calamine lotion or pain relievers. If significant itching persists, oral antihistamines may also be helpful. For parents wanting more natural remedies, ice/a cold rag, oatmeal baths or baking soda pastes are worth trying. Because some mosquitoes may carry certain diseases, parents should contact their child's health care provider if their child develops a fever, headache, or body aches within 3-14 days of a bite.

When hiking in the woods or high grassy areas, parents should always check their kids for ticks both during the hike and afterwards, especially looking on the back, neck, hairline and around the groin areas. If parents find a tick, they should first try to brush it off, as many times the tick is not attached. If it does not brush off, they should carefully remove it with sharp tweezers by grasping as close to the point of attachment as possible and pulling it straight up and out. If the head of the tick breaks off or stays attached, parents should not panic—it won't increase the risk of disease, though it can be uncomfortable, the equivalent of a splinter. After removing the tick, wash the site thoroughly with soap and water or rubbing alcohol.

The warning signs to seek medical care urgently after a tick bite are the development of headache, fever, aches and pains or rashes within 3-30 days of the bite. While most tick bites do not transmit diseases, parents should remove a tick as soon as possible. Although it usually takes at least 24 hours for a tick to transmit a disease, the longer it is attached the greater the risk.