What Parents Should Know About Bugs and Bug Repellents

As the weather warms, children enjoy the outdoors more, but this also brings insects, insect bites, and sometimes insect-borne diseases.

How Do You Protect Your Children Against Insect Bites?
Try to avoid areas with lots of insects, including areas with high grass or still water where mosquitoes breed. The time of day can matter. Mosquitoes bite more frequently during dusk and dawn. When outdoors, wear long pants, a wide-brimmed hat, lightweight long sleeves, socks, and closed-toed shoes. Using mosquito netting over strollers and beds is also protective. Avoid wearing bright colors and floral prints, as these typically attract bugs. Lastly, apply bug repellent. Keep in mind repellents keep biting insects away, but they do not kill bugs. After you are done with an outdoor activity, always check your child’s skin for ticks. Store bug repellents out of a child’s reach, as they can be toxic if ingested.

How Do You Choose a Bug Repellent?
N,N-diethyl-m-toluamide (DEET) is the active ingredient in many repellents and is safe for use in children 2 months and older. DEET is effective against mosquitoes, ticks, and some flies. The concentration of DEET tells you how long the repellent provides protection. Choose a bug spray that will protect your child for their entire outdoor activity with only 1 application. Repellent containing a 10% concentration of DEET will provide 2 hours of protection, while a 30% concentration of DEET will provide 5 hours of protection. When protecting against ticks, use at least a 20% concentration of DEET. If you live in a tropical environment, use a 25% to 30% concentration of DEET.

Avoid choosing products that combine bug spray and sunscreen. Sunscreen requires more frequent applications and should be applied separately. Insect repellent can decrease the sun protection factor (SPF) of sunscreen. Increase your sunscreen SPF if you are also applying DEET. Picaridin is another ingredient in insect repellent that can protect against mosquitoes, but it is less effective than DEET against ticks, fleas, and flies. Use a concentration of 20%, which will last for 8 hours, for the best effect.

So-called natural insect repellents are safe but not effective according to the US Environmental Protection Agency. Oil of lemon eucalyptus can protect against mosquitoes for up to 6 hours but is not recommended for children younger than 3 years. Citronella can provide mosquito protection for a short time, typically less than 1 hour. Catmint and other essential oils do not provide any insect repellent.

Tips for Applying Bug Repellent
Always spray in an open area with adequate ventilation. Do not spray directly on your child’s face. Instead, spray onto your hands and apply it to their face and neck, avoiding their eyes. Also, avoid spraying their hands as children tend to touch their mouth and eyes. Direct DEET application to clothing or eyeglasses can damage fabric and plastic. Wash your child’s skin and clothes when they are finished playing outside.

Getting outdoors and staying active is wonderful for children’s physical and mental health. Insect repellents and other ways to avoid bites can help protect your child while they enjoy the warmer weather months.

FOR MORE INFORMATION
https://www.healthychildren.org/English/safety-prevention/at-play/Pages/Insect-Repellents.aspx
https://publications.aap.org/pediatricsinreview/article-abstract/42/4/189/180709/Preparing-Children-for-International-Travel

Authors: Emily J. Henderson, MD; Jennifer N. Rutt, MD; Laurie W. Albertini, MD
Published Online: July 31, 2023. doi:10.1001/jamapediatrics.2023.2370
Author Affiliations: Department of Pediatrics, Atrium Health Wake Forest Baptist, Winston-Salem, North Carolina.
Conflict of Interest Disclosures: None reported.