



Insect Repellent Fact Sheet



Summer time brings sun, fun, and BUGS! Many insects do not bother us as we work and play, but some bite or sting. Children may be particularly bothered by insects as they spend time playing outdoors and indoors. During the warmer summer months, child care providers must pay close attention to protecting youngsters, preventing insect bites and stings, and using insect repellents.



Preventing Insect Bites or Stings



- Avoid areas where insects breed, nest, or gather. Inspect the playground area for pooling or stagnant water (garbage cans, dumpsters, and tire swings). Remove all standing water.
- Long-sleeved shirts, long pants, and socks can protect your skin from possible bites or stings.
- Cover sandbox areas when not in use to avoid animal waste contamination.
- Keep all food and sweets--indoors and outdoors--covered.
- Avoid playing near flowering plants in orchards and gardens.
- Dress children in plain colors. Avoid bright, flowery prints because bright colors attract insects.
- Do not use perfumed soaps, lotion, hairspray or other (perfumed) products that attract insects.
- Limit the time infants spend outdoors. Closely watch infants to keep insects away.
- Keep window screens in good repair.
- Avoid areas with a large mosquito population. If you must be in an area where mosquitoes are present, use mosquito netting and mosquito repellent.
- Ultrasonic devices, outdoor bug "zappers", and bat houses are not effective against mosquitoes.
- Avoid spending time outdoors in the early morning and in the evening. Mosquitoes are most active during dawn and dusk.



Insect Repellent Basic Facts



- Read and follow the label directions on the insect repellent. Only use products approved by the Environmental Protection Agency (EPA).
- Most insect repellents are effective for preventing bites by mosquitoes, ticks, fleas, chiggers, and biting flies. They have almost no effect on stinging insects such as bees, hornets, and wasps.
- Insect repellents are generally available without a doctor's prescription. Only use a small amount of repellent on infants and young children. Insect repellents containing DEET (*N,N-diethyl-meta-toluamide*) have been proven to be the most effective products. For children under 2 years of age, repellents should contain no more than **10% DEET**. The chemical is absorbed through the skin and can cause harm in higher concentrations. Products containing up to 30 % DEET are safe for children over 2 years of age. The concentration of DEET varies greatly from product to product. So, it is very important to read the label carefully of any repellent you purchase.
- Insect repellents containing 10% DEET provide protection, but require reapplication every 1-2 hours to remain effective.
- When using repellent on a child, apply it to your own hands, and then rub them on the child. **Do not** apply insect repellent to a child's hands, mouth, or eye areas. Only use a small amount around the ears. Do not apply to any irritated areas or scraped skin.
- Remove insect repellent by washing with warm water and soap when the child comes indoors and before the child eats.
- If the child care provider suspects a reaction to the use of the insect repellent, contact the Poison Control Center at 1-800-222-1222. If the child goes to the doctor, send the container of insect repellent along for the doctor to read the label.

Information for the fact sheet was adapted from the following resources:

- American Academy of Pediatrics, Bantam Books, New York, NY. *Caring for Your Baby and Young Child*. 1991, page 639.
- American Academy of Pediatrics, Elk Grove Village, IL. *National Health and Safety Performance Standards, Guidelines for Out-of-Home Child Care Programs*, 2nd Edition, 2002. Standards 5.070, 5.072, and 5.202, pages 214-215, 266.
- American Academy of Pediatrics, Elk Grove, IL. *2003 Red Book, Report of the Committee on Infectious Diseases*, 25th Ed. 2003.
- American Academy of Pediatrics, Villard Books a division of Random House, New York, NY. *Guide to Your Child's Symptoms*, 1997, pages 36-37.
- Centers for Disease Control and Prevention. *Fight the Bite*. Last modified July 2003. Available: www.cdc.gov.
- Fradin, Mark S., M.D., and John F. Day, Ph.D. "Comparative Efficacy of Insect Repellents against Mosquito Bites". *New England Journal of Medicine*, Vol. 347, No. 1, p. 13-18, July 4, 2002.
- Iowa Department of Public Health. *Mosquito Repellents Fact Sheet*. Rev. 5/05. Available online: http://www.idph.state.ia.us/adper/cade_content/mosquito_repellents.pdf
- Iowa Department of Public Health. *DEET Fact Sheet*. Rev. 5/05. Available online: http://www.idph.state.ia.us/adper/cade_content/epi_manual/deet.pdf
- U.S. Environmental Protection Agency. *How to use insect repellents safely*. Available online: <http://www.epa.gov/pesticides/factsheets/insectro.htm>, 2005.



First Aid for Insect Bites and Stings



Insect bites are irritating and may cause discomfort for children. Usually insect bites go away in one or two days and do not require a medical provider's treatment. Children usually complain of itchiness and develop minor redness and swelling from insect bites. The childcare provider can use simple first aid to relieve a child's discomfort from insect bites. If a child continues to experience discomfort from an insect bite, the child's parent should be notified.



First Aid Tips



Wash the affected skin with cool water and soap. Then pat the skin until dry.



Apply a cool compress. Soak a cloth or paper towel in cold water. Wring the excess water from the cloth or towel. Apply the cloth or paper towel directly to the skin. This process can be repeated as needed to relieve itching and swelling.



Consult a parent before using an over-the-counter product (such as Calamine® lotion) to relieve itching.



Consult the parent if the child complains of severe itching. The parent may choose to consult with their child's medical provider about using a product that contains cortisone or an antihistamine.



If a stinger is visible, remove the stinger by gently scraping the stinger off horizontally. Do not attempt to pull the stinger out because you may accidentally squeeze the venom sac and inject more of the venom into the child's skin.



Keep the child's fingernails short and clean to decrease the risk of infection from scratching.



If infection occurs, the bite area will usually become red and swollen. Red streaks or yellow liquid may also be present near the bite area, and prescription medication may be indicated...



When to Call the Doctor



Some children may have severe allergic reactions to insect bites and stings and require emergency medical treatment.

Call 911 or the local rescue squad if a child has any of the following symptoms:

- Tingling around the mouth or face
- Difficulty breathing or swallowing
- Weakness, sweating, collapse or unconsciousness
- Hives or itching all over the body
- Swelling in the joint near the bite or overall joint swelling
- Extreme swelling near the eyes, lips, or penis that makes it difficult for the child to see, eat, or urinate

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