Insect Bites McKenzie Pediatrics, 2009

There are many tiny creatures in this world, and an active child is likely to come in contact with any number of them, especially during the months of spring and summer. This review attempts to educate parents about the most common types of insect bites, and what to do about them when they occur.

Bee Stings

Most children will be stung by some sort of bee at least once during their childhood. Types of bees include honeybees, bumblebees, hornets, wasps, and yellow jackets. More than 90 percent of bee stings are from yellow jackets, which are very aggressive in defending their territory, especially in the late summer. Honeybees and bumblebees die upon stinging, therefore will seldom sting unless provoked or stepped upon.

Bee stings cause immediate, painful, and often itchy bumps. The pain will usually subside over a few hours, but the swelling may last up to 24 hours. <u>All</u> children experience a small amount of swelling in reaction to a bee sting – this does <u>not</u> mean that they are allergic. Some children will experience a "large local reaction", with swelling well beyond the sting site though within the same body region.

And 1 percent of children will experience some form of anaphylaxis, with symptoms including wholebody hives, and/or itching, or even wheezing and difficulty breathing. These symptoms need <u>immediate</u> medical attention...call 911. While waiting for care, quickly give your child a dose of Benadryl[™]. After the reaction is medically reversed, your doctor will prescribe an EpiPen[™] (containing epinephrine, also known as adrenaline) for immediate use in the event of any future bee stings.

Multiple stings (especially more than 10) can cause vomiting, diarrhea, headache, and perhaps a lowgrade fever. This is a toxic reaction related to the amount of venom, and not an allergic reaction.

If you see a little black dot within the bite, the stinger is still present (which only occurs with honeybee and bumblebee stings). Remove it by putting a piece of Scotch tape over the site, or a drop of craft glue, and soon peel it away. A pair of tweezers can also be useful to remove a stinger. Quickly place an ice cube, or some meat tenderizer, on the site. For large local reactions, a dose of Benadryl[™] will help to reverse the swelling, and ease the itch. Topical cortisone may also alleviate the itch.

Help to prevent bee stings by wearing shoes and not sandals when outside during warmer months. Avoid brightly colored clothing, which attracts bees. Avoid wearing perfume, or perfumed lotions. Keep food and drinks taken outdoors covered when not in use. Keep garbage cans tightly covered.

Chigger Bites

Chigger mites are common throughout the United States, including the Pacific Northwest, though especially in the Midwest and South. They are most active during the warmer months, when temperatures average above 60 degrees F. They are most commonly found in grasses and weeds, therefore young children who like to roll and play in the grass are most susceptible.

Chigger mites, which are quite tiny and difficult to see with the unaided eye, cause an intensely itchy rash on exposed areas of skin. The rash usually appears as small hives, usually no larger than a pencil eraser. Sometimes, small nodules or fluid-filled vesicles seen follow.

The rash is often easily mistaken for mosquito bites, flea bites, or sand flea bites. It can also appear similar to bedbug bites, and sometimes to scabies infestations. However, a recent history of playing in the grass, or playing in dense vegetation (such as tall grasses and weeds) along lakes and in wooded areas (such as with camping), is a clue that chigger mites are responsible for an itchy rash that appears soon after.

Chigger mites do not suck blood, nor burrow into the skin, but their larvae feast on our skin cells. After a few days of feeding, the larvae spontaneously drop off. The enzymes used by the mite larvae trigger a local immune reaction, which we see as a rash and feel as an intense itch. Humans are not natural hosts for mites, therefore our immune reaction to them is very strong.

The rash and itch generally worsen and peak during the second day of attachment, and may last up to 1-2 weeks after the larvae detach. Scratching may lead to scabbing, or even secondary bacterial infections (impetigo).

Treatment involves relieving the itch, by use of topical cortisone up to three times daily, and/or an oral antihistamine such as Zyrtec[™] (once daily), or Benadryl[™] (every 4 to 6 hours as needed). Severe cases may require a short course of oral steroids, such as prednisone.

Prevention is through avoidance of direct contact with grasses or weeds during the summer months. I nsect repellants containing the active ingredient DEET are somewhat effective at preventing chigger mite larvae from attaching.

Mosquito Bites

Not much is needed said about mosquito bites, which result after outdoor play (especially during the evening hours) during the warmer months. Everyone reacts to mosquito bites, some more than others, therefore the itchy rash does <u>not</u> represent an allergy. Treatment includes topical cortisone or antiitch sprays, and oral anti-histamines such as Zyrtec[™] and Benadryl[™]. Usually the itch and rash resolve within 2-3 days.

BedBugs

These are more common than people realize, and while bedbug infestations are most common in poor hygiene conditions, they may occur in any household. Bed bugs are increasingly becoming a problem within residences of all kinds, including homes, apartments, hotels, dormitories and shelters.

Bed bugs are small wingless insects that feed solely upon the blood of warm-blooded animals. Hatchling bed bugs are about the size of a poppy seed, and adults are about 1/4 of an inch in length. Because they never develop wings, bed bugs cannot fly.

Bed bugs seek out people and animals, generally at night while these hosts are asleep, and painlessly sip a few drops of blood. While feeding, they inject a tiny amount of their saliva into the skin. Repeated exposures to bed bug bites during a period of several weeks or more causes people to become sensitized to the saliva of these bugs; additional bites may then result in mild to intense allergic responses.

The skin lesion produced by the bite of a bed bug resembles those caused by many other kinds of blood feeding insects, such as mosquitoes and fleas. The offending insect, therefore, can rarely be identified by the appearance of the bites. Treatment is the same as for other insect bites: cortisone, and antihistamines. And, of course, removal of the mattress from the bedroom!