

TerranearPMC Safety Share

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Week of March 19, 2018 – Ticks and Chiggers

Spring is finally here (and that includes the NE US after four Nor'easters this past month!). And it is the start of the season where insects inhabit meadows and wooded areas. Many years ago when I was a teenager, I found myself at the Lake of the Ozarks in Missouri. My friends and I began walking towards the lake when some locals told us to protect ourselves from ticks and chiggers. Being kids from NYC, we never heard of ticks and chiggers. What were these creatures that we were so ignorant about?

Ticks are small arachnids – the same taxidermy class as spiders. They are implicated in the transmission of a number of infections caused by pathogens such as bacteria, viruses and protozoa. Diseases such as Rocky Mountain spotted fever, Lyme disease, and tick-borne meningoencephalitis, have been associated with tick bites. Not all ticks are infected with pathogens, as attachment of the tick and a long-feeding session seem to be necessary for transmission of these diseases to take place. Thus tick bites often do not lead to infection, especially if the ticks are removed within 36 hours.

Adult ticks can be removed with fine-tipped tweezers or proprietary tick removal tools, and disinfecting the wound. It is also possible to freeze them off with a medical wart remover. If the tick's head and mouthparts break off during removal, they can be removed with tweezers like a splint.

Chiggers are tiny larvae – also members of the arachnid family - and are sometimes called red bugs. Although the larvae are extremely small in size, their bites pack a powerful punch. They're so tiny that you probably won't notice when they jump from that tall blade of grass onto your skin. You won't feel it as they hitch a ride right into your home. When you eventually do feel them, however, they can be extremely itchy.

Chiggers live in tall weeds and grass, in berry patches, and in wooded areas. They may be in your backyard, by the lake, and clustered along your favorite hiking trail. They are most active on spring, summer and fall afternoons, when temperatures are warm and inviting.

They can quickly attach to your skin if you walk by and brush up against vegetation where they live. When the temperature falls below 60°F (16°C), chiggers become inactive. They die off when the temperature falls below 42°F (6°C).

Chiggers are very tiny and it generally takes a magnifying glass to see them. Adults are about 1/60 of an inch and have eight legs. The larvae are red, wingless, six-legged creatures that measure less than 1/150 of an inch. Because of their red color, you might be able to spot the larvae when they cluster together. After they feast on human skin, they turn a yellowish color.

Only the larvae bite humans. They tend to choose warm, moist areas of the body. Chiggers have claws that help them grab onto skin. The chigger then attaches its mouth to the skin and injects saliva. The saliva contains an enzyme that breaks skin cells down to liquid form.



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Your body responds by hardening skin cells around the saliva, creating a tube, or a stylostome through which the chigger sucks the host's body fluids. Chiggers can stay attached and feeding for several days. Usually they last about 4 days before falling off.

Usually several chiggers are able to latch onto a person walking through an infected area. When the chigger falls off, you are left with reddish bumps. You may notice a bright red dot in the center — this is a remnant of the tube your skin formed in response to the chigger's saliva. The bumps may look like welts, blisters, pimples, or hives.

Chiggers can stay latched to the same spot for several days, and it's common to be bitten by more than one. So bites will generally appear in groups and get larger for several days to a week. Their bites are uncomfortable, itchy, annoying, and can make it difficult to sleep. In most cases, chigger bites don't cause any harm to your health. Chiggers feed on skin cells, but not on blood. They don't carry or transmit disease. It's a common misperception that chiggers burrow under the skin. They don't, so there is no need to try to remove them.

Many insects tend to bite exposed skin that's easy to get to. Chiggers like to bite in folds of skin as well as places where clothing fits tightly. Most chigger bites occur around the ankles, waist, armpits, crotch, or behind the knees. You won't feel it when the chigger latches on, and you probably won't feel a thing when it bites. However, most people report symptoms within hours of the bite. The most problematic symptom of chigger bites is the intense itching and desire to scratch. Chigger bites on the penis can cause severe itching, swelling, and painful urination.

It can take anywhere from one to three weeks for chigger bites to heal. If you suspect you have chigger bites, immediately wash with soap and water. This will get rid of any remaining chiggers on your body. Then apply an antiseptic to any welts.

In the meantime, try to avoid scratching, as this can cause infection. Should this happen, it is important to contact your doctor if you have swelling, fever, or other signs of infection. You may use over-the-counter anti-itch medications like hydrocortisone cream or calamine lotion. You can also apply ice to the bites to relieve the itch. However, chigger bites can become infected from too much scratching.

Spring, summer, and fall are prime time for chigger bites. When you're in wooded areas that may be chigger-infested, try not to brush up against vegetation. When hiking, walk in the center of trails, rather than along the sides.

Wear long sleeves and long pants that can be tucked into your socks or shoes. Use insect or tick repellent (many experts also recommend mosquito repellent), especially around the tops of your shoes, shirt neck, cuffs, and waistband. Shower as soon as you go indoors. Wash your clothes in hot water.

There is nothing worse than a sharp image of a fuzzy concept

Ansel Adams

