

By Francis Skalicky, Metro Media Specialist, Missouri Department of Conservation tep aside, ticks. Move over, poison ivy.
You may have thought they were the chief causes of summer itching, but nothing generates more irritation than the chigger.

Skin rashes caused by poison ivy can be severe, but most people only get a bad case of poison ivy once or twice in a summer if at all. Ticks can also be itch-causers, as well as disease carriers, but most are plucked or washed off before they cause problems.

Chiggers, however, are more than a periodic annoyance. Some folks will have little red welts somewhere on their bodies all summer. From early May until October, many people, especially in rural areas, will have at least one chigger bite they can't keep from scratching.

What Are They?

The itching caused by chiggers is well-known, but the creature, itself, isn't. Chiggers are the larval form of the Trombiculidae family of mites. Chiggers are close relatives of ticks, but are much smaller. They are less than 1/150th of an inch in diameter, making them virtually invisible to the naked eye. People who say they've seen a chigger very likely have seen clumps of these tiny creatures. When several chiggers cluster together near an elastic waistband or another snug-fitting area, their bright red color is visible.

What's for Dinner?

Ironically, humans are accidental hosts for chiggers. The itching reaction human skin has to chigger bites occurs because we are not their correct hosts. Although most North American chiggers feed on mammals, their preferred hosts are reptiles and birds. To humans, it's irrelevant what a chigger's preferred target is — our bodies are the locations where many of them end up dining.

There are a few misconceptions surrounding what a chigger does once it finds itself upon a

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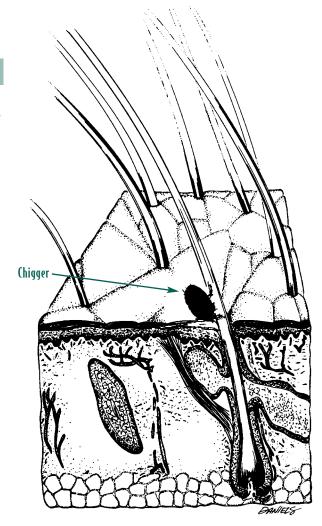


Illustration courtesy of the Missouri Department of Conservation



human. Contrary to popular beliefs, chiggers don't burrow into our skin and they don't suck blood. Chiggers attach themselves by inserting specialized mouth parts into skin depressions, usually at skin pores or hair follicles. A chigger's piercing mouth parts are short and delicate and can penetrate only thin skin.

It's not the bite that causes the itch. It's your skin's reaction to the chigger's feeding process. Here's what happens: The chigger injects saliva into its host after attaching to the skin. This saliva contains a powerful digestive enzyme that dissolves skin cells. It is this liquefied tissue — not blood — that chiggers ingest for food. A chigger usually goes unnoticed for one to three hours after it starts feeding. After a few hours, your skin reacts by hardening the cells around this saliva path. This eventually forms a hard tubular structure called a stylostome.

Your body's defensive reaction to the stylostome is what irritates and inflames the surrounding tissue and causes the characteristic red welt and intense itch. The longer the chigger feeds, the deeper the stylostome grows and the larger the welt will eventually be. The welt does not grow and engulf the chigger. The small red dot seen at the center of a welt is the stylostome — not the chigger's body.

If undisturbed, chiggers commonly take three or four days (and sometimes longer) to complete their feeding. In a perfect chigger's world, the chigger completely gorges itself, then drops off its host and continues to develop to the next stage of its life. On humans, however, chiggers seldom get the chance to finish a meal. They are usually brushed away, scratched off or washed off before they're finished feeding. A chigger that is removed before it has fully engorged cannot bite again and will eventually die. This is small consolation to most of us. The chiggers on us may not live to bite again, but they live long enough to give us an irritating red welt.

The Cure

The best cure for chiggers is to be proactive. When you come indoors from an outing that had chigger-potential, take a warm, soapy bath with plenty of scrubbing as soon as possible. A bath will remove chiggers that are still scurrying about looking for a place to attach and it will remove chiggers in the initial phase of attachment and feeding. Warm, soapy water is all that is necessary to remove chiggers. There is no need to apply kerosene, turpentine, salt, cleaning fluid or any other home remedy that may have been pitched to you by a well-meaning, but misinformed, friend.

Attached chiggers are removed by light rubbing. If you are on a camping trip and are removed from the comforts of your home, frequent rubbings with a towel or cloth should keep you chigger-free.

Lotions and other types of over-the-counter remedies may provide some relief from itching, but no substance is completely effective. Since there is nothing you can do to dislodge the stylostome, which is the true cause of the itching, the ultimate cure is time.

The most effective repellent for chiggers is sulphur. Powdered sulphur, called sublimed sulphur or flowers of sulphur, is available through most pharmacies. Dust the powdered sulphur around the openings of your pants, socks and boots. If you have not used sulphur before, try it on a small area of your body first to make sure it will not cause any type of skin irritation.

Insecticide sprays may provide temporary reduction of chiggers in some areas, but may not be the safest solution in homes with children and/or pets. Regular mowing and brush removal around your home is the cheapest — and safest — method of creating a less-favorable environment for chiggers.