

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

CHIGGERS

WHAT ARE CHIGGERS?

Chiggers are not insects but mites in the *Trombiculidae* family. Though their bites can lead to intense itching, chiggers are generally harmless as they do not spread disease. Humans are accidental victims of chiggers. Most chiggers feed on reptiles and birds. They are attracted by the carbon dioxide that humans and animals exhale.

Chiggers pass through four life stages: egg, larva, nymph, and adult. It is the larva that bites humans and animals and is commonly referred to as a “chigger”.

- ❖ Larvae cannot be seen easily by the naked eye. Adults are 1-2 mm in length with a bright red or red-brown velvety appearance.
- ❖ Chiggers prefer long grasses that are 7-12 inches tall and shady areas. They are not very hardy in short grass and direct sun. They also enjoy a moist environment.
- ❖ Chiggers usually bite during the late spring, summer, and early fall seasons when the air is moist and temperatures are above 60°F. They do not survive at temperatures below 42°F.

WHAT ARE THE SYMPTOMS?

Chigger bites are painless. After piercing the skin with jaw-like structures, larvae inject digestive enzymes into the skin. The skin hardens and a feeding “tube” develops, known as a stylostome. If undisturbed, the larvae can feed on the skin for a few days using this tube.

Contrary to popular belief, chiggers do not burrow into the skin.

- ❖ Chiggers can bite anywhere on the body, but they prefer to feed in areas where the skin is slightly thin and wrinkled, such as the ankles and waistline. Other common bite sites include the elbows, groin, genital area, armpits, and the skin behind the knees.
- ❖ Chigger bites usually appear as intensely itchy small red bumps or blisters. They may also appear as flat red areas or raised red hives.
- ❖ The bites tend to cluster, suggesting that chiggers migrate until they find a suitable place to feed.
- ❖ Itching typically begins hours after a bite, is worst during the first 1-2 days, then resolves over a few days. The bites usually heal in 1-2 weeks.

WHAT ARE TREATMENT OPTIONS?

Treatment for chigger bites is aimed at decreasing itching and discomfort:

- ❖ **Antihistamines:** Oral antihistamines are frequently used to relieve itching.
 - Claritin (loratadine), Zyrtec (cetirizine), and Allegra (fexofenadine) are non-sedating antihistamines taken by mouth once daily. They are typically taken in the morning to control itching during the day.
 - Benadryl (diphenhydramine) and Chlor-Trimeton (chlorpheniramine maleate) are also effective but usually cause drowsiness. They are often taken at bedtime if symptoms are affecting sleep.
- ❖ **Topical Treatments:** A variety of topical treatments can help relieve itching and irritation.
 - Corticosteroid creams are effective treatment options:
 - Hydrocortisone 1% cream is available over-the-counter. Stronger corticosteroid creams are available by prescription.
 - Apply a thin layer of the medication twice daily. Avoid prolonged or excessive use, which can lead to thinning and lightening of the skin.
 - Topical anti-itch compounds made of camphor, phenol, menthol, and/or eucalyptus are available over-the-counter. Examples include Sarna Anti-Itch Lotion and Vicks VapoRub.

- Calamine lotion, colloidal oatmeal baths, cool baths, and cool compresses can also be helpful.

❖ **Other Recommendations**

- Wash clothing worn during the time of exposure in hot water.
- Vigorously scrub your skin with soap and water to remove potential chiggers. However, once symptoms are present, chiggers are usually no longer attached to the skin, so efforts to remove them after bites appear may not be helpful.
- Attempts to “suffocate” chiggers are also not effective because they do not burrow into the skin. Home remedies like nail polish, bleach, and turpentine should not be used.
- Avoid scratching because this can increase the risk of a bacterial skin infection. See your medical provider if you develop any signs of infection (such as pain, redness, swelling, warmth, and pus-like discharge).

HOW CAN I PREVENT CHIGGER BITES?

- ❖ Avoid long grass and shady areas when possible.
- ❖ Wear long pants, socks, and closed-toe shoes. Tuck pants into boots or socks.
- ❖ Long-sleeve tops and a belt can also help.
- ❖ If it is too hot to wear long clothing, stop every half hour and gently rub your skin and clothing to dislodge chiggers that may have jumped onto you from the grass.
- ❖ Insect repellents can reduce your risk of chigger bites.
 - Apply DEET 25% to 30% or a picaridin-based insect repellent to exposed skin.
 - Avoid combination insect repellent and sunscreen products because you may need to apply the sunscreen more frequently than the insect repellent.
 - Permethrin spray is an insecticide that can be applied to clothing. It is important to follow directions carefully. Do not spray permethrin on your skin.
- ❖ If you prefer not to use an insect repellent, consider using sulfur powder (sulphur), which is available at garden supply stores and online.
 - The powder can be sprinkled on the outside of your socks, boots, and pants.
 - Sulfur powder may stain your clothing and oxidize metal. It also has a strong odor.
 - This product should not be applied to your skin.
- ❖ Lemon eucalyptus oil is the only natural product that is proven to have some effectiveness in repelling chiggers.
- ❖ Shower as soon as possible after being outdoors. Vigorously scrub your skin with a washcloth to remove potential larvae.
- ❖ Wash clothing worn outdoors in chigger-prone areas in hot water.
- ❖ Remove mosquito breeding areas (like standing water) around your home because adult chiggers feed on the eggs of mosquitoes and other small insects.
- ❖ Mow your lawn regularly.

RECOMMENDED WEBSITES: emedicinehealth.com, my.clevelandclinic.org