Itching and Infestation: What’s Attacking Me?

Integrated Pest Management for Homes, Structures, Gardens, and Landscapes

The sensation feels like bugs, worms, or mites that are biting, crawling over, or burrowing into, under, or out of your skin (Figure 1). They must be there, because you can feel them, and you are even pretty sure that you can see them. You may also believe that your home or furniture is infested, but you may be the only one who knows they are there. No one seems to think they exist except you. Nothing seems to get rid of them. So what’s attacking you?

And what if your condition seems to be spreading to other family members or to your friends? What if, after trying every reasonable approach and helpful hint from friends, your problem persists? If this situation sounds familiar, then it’s time to read the rest of this publication, consider possible causes for your condition, and potentially seek the appropriate type of professional help.

WHO SHOULD I CALL ABOUT UNEXPLAINED ITCHING?

The first person to contact should be your family physician or primary health care provider. Medical professionals are the only individuals who are licensed to diagnose your condition and recommend specific treatments. Dermatologists, in particular, are trained to deal most effectively with disorders of the skin and their causes, including parasites. If a parasite is causing the disorder, most physicians or their technicians can recognize the most common ones if they are present (Figures 2 and 3).

If necessary, the physician can submit medical specimens to entomologists, parasitologists, or other biologists for verification or identification. These experts not only can identify or rule out various kinds of parasites that may be causing your condition, but they can also provide additional biological information that may greatly assist you and your physician in arriving at a satisfactory diagnosis and treatment. Many entomologists are skilled in identifying various life stages of insects or mites and can use the diagnostic keys and scientific references to determine accurate identification. Medical entomologists, in particular, spend their careers working with insects, mites, and ticks that attack people. Parasitologists study these and other groups of organisms such as parasitic worms, protozoans, and other invertebrates that live at the expense of their animal hosts.

Initially, you may have tried to solve the problem by consulting nonmedical professionals. However, by foregoing medical advice, you may miss the opportunity to be properly diagnosed, which will only increase the duration of having to suffer with the issue. In some instances, the discomfort is not attributed to arthropods (including insects, mites and spiders) or other internal parasites at all. If you have consulted with any, or perhaps several, of the above mentioned professionals and still no one can pinpoint an offending organism, it is unlikely that all of them are wrong. This would be the time to reassess your situation and look for a cause other than a pest organism.

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WHAT CAN CAUSE ITCHING SENSATIONS?

Itching, crawling, or burrowing sensations may be the result of many unrelated medical conditions, including:

- Diabetes mellitus
- Drug abuse, particularly methamphetamines and opioids
- Hypothyroidism or hyperthyroidism
- Multiple sclerosis
- Nerve damage
- AIDS/HIV
- Hepatitis B, C
- Liver disease
- Parkinson’s Disease
- Lupus erythematosus
- Peripheral neuropathy
- Stress
- Alcoholism
- Anemia
- Autoimmune disease
- Carbon monoxide poisoning
- Cerebrovascular disease
- Cirrhosis of the liver
- Dry skin
- Mechanical irritants, such as fiberglass filaments and paper dust
- Menopause
- Niacin overdose
- Rheumatoid arthritis
- Skin cancers
- Vitamin, protein, or other deficiencies in your diet

Aside from a medical illness, there are number of commonly prescribed drugs that are known to have side effects which may result in skin irritation; such as chronic itching, crawling, or pinching sensations. To rule out medications as possible causes, it is worthwhile to take a complete list of prescriptions and dosages to your pharmacist to find out if possible side effects or negative drug interactions could be causing problems.

Thorough testing, including a complete physical checkup by a perceptive physician, should lead to an accurate diagnosis for most sensations of infestation caused by the metabolic disorders or other medical problems listed above. If samples are required, they should be taken directly by the physician and submitted to the experts. Only a proper diagnosis will lead to the appropriate treatment. If thorough allergy and medical testing result in no answers and a clean bill of health while symptoms continue, it is time to consider the possibility that the sensations you are experiencing are in fact not caused by any arthropod or other parasite.

WHAT IF NO PARASITES ARE FOUND?

The medical disorder in which a patient has a mistaken belief of being infested by parasites such as mites, lice, fleas, spiders, worms, bacteria, or other organisms is called delusional infestation. This belief is based on the very real and disruptive sensations felt in or on the skin, which, regardless of home remedies used and scratching of the itches, never go away. More scratching leads to rashes, open wounds and sores, and possible infections. Failure to obtain relief from

What about insects or other pests?

Some potential causes of skin irritation include bed bugs, fleas (Figure 4), mites, and mosquitoes. These pests can cause bite marks, swelling, and itching. However, correct and conclusive identification of a specimen by a trained entomologist is needed to confirm that an insect or mite is the cause of the bites or itching.

For more information about these biting insects, spiders, and mites, visit the resources below.

- Bed bugs [ipm.ucanr.edu/PMG/PESTNOTES/pn7454.html](ipm.ucanr.edu/PMG/PESTNOTES/pn7454.html)
- Fleas [ipm.ucanr.edu/PMG/PESTNOTES/pn7419.html](ipm.ucanr.edu/PMG/PESTNOTES/pn7419.html)
- Mosquitoes [ipm.ucanr.edu/PMG/PESTNOTES/mosquitoes.html](ipm.ucanr.edu/PMG/PESTNOTES/mosquitoes.html)
- Spiders [ipm.ucanr.edu/PMG/PESTNOTES/pn7442.html](ipm.ucanr.edu/PMG/PESTNOTES/pn7442.html)
- Ants [ipm.ucanr.edu/PMG/PESTNOTES/pn7411.html](ipm.ucanr.edu/PMG/PESTNOTES/pn7411.html)
- Head lice [ipm.ucanr.edu/PMG/PESTNOTES/pn7446.html](ipm.ucanr.edu/PMG/PESTNOTES/pn7446.html)
over-the-counter or prescribed medications often drives the sufferer to apply unconventional and sometimes highly toxic compounds to the body in a desperate attempt to alleviate symptoms. Skin conditions can worsen or become much more complicated.

In some cases the parasites appear to be visible to the afflicted person, but they cannot be caught. In a desperate attempt to discover the causative agent, some sufferers submit pieces of tissue or bodily fluids to medical or other professionals in an attempt to produce samples of the pests. Such wounds can become serious medical problems.

**HOW CAN STRESS AFFECT FEELINGS OF INFESTATION?**

Very often a corollary problem associated with a delusional infestation is stress. Stress often manifests itself in people as a nervous habit or “nervous tic,” but those conditions usually aren’t overwhelming. Delusional infestation, however, can become debilitating because it tends to amplify the emotional and physical stress level and the condition worsens, greatly impacting the activities and quality of life.

Stress is known to be associated with many health problems in Americans, but stress may also result from numerous life experiences; including job-related pressures, personal relationships, divorce, loneliness, financial problems, and loss of friends, relatives, or pets. Reducing or managing stress may coincide with a rapid reduction or elimination of symptoms associated with delusional infestation.

Your doctor usually can assist in finding ways to reduce the impact of stress in your daily life. However, when delusional infestation is persistent, your physician may want to prescribe medications to help alleviate symptoms while more permanent solutions are sought. If your physician determines that further counseling is needed, you may be referred to a psychiatrist. Psychiatrists may prescribe medicines that can successfully treat this disorder. Delusional infestation is a real affliction, and with professional help it can be medically managed or eliminated altogether.

More information on delusional infestation may be obtained from professionals working in county health services offices; from county agricultural commissioners; or from the Bohart Museum of Entomology, University of California, Davis website delusion.ucdavis.edu.

**REFERENCES**


Pest Notes: Itching and Infestation: What’s Attacking Me?

REFERENCES


Warning on the use of pesticides

Pesticides are poisonous. Some pesticides are more toxic than others and present higher risks to people, nontarget organisms, and the environment. A pesticide is any material (natural, organic, or synthetic) used to control, prevent, kill, suppress, or repel pests. “Pesticide” is a broad term that includes insecticides, herbicides (weed or plant killers), fungicides, rodenticides, miticides (mite control), molluscicides (for snails and slugs), and other materials like growth regulators or antimicrobial products such as bleach and sanitary wipes that kill bacteria.

Always read and carefully follow all precautions and directions provided on the container label. The label is the law and failure to follow label instructions is an illegal use of the pesticide. Store all chemicals in the original labeled containers in a locked cabinet or shed, away from food or feeds, and out of the reach of children, unauthorized persons, and animals. Never place pesticides in food or drink containers. Consult the pesticide label to determine active ingredients, correct locations for use, signal words, and personal protective equipment you should wear to protect yourself from exposure when applying the material.

Pesticides applied in your garden and landscape can move through water or with soil away from where they were applied, resulting in contamination of creeks, lakes, rivers, and the ocean. Confine pesticides to the property being treated and never allow them to get into drains or creeks. Avoid getting pesticide onto neighboring properties (called drift), especially onto gardens containing fruits or vegetables ready to be picked.

Do not place containers with pesticide in the trash or pour pesticides down the sink, toilet, or outside drains. Either use all the pesticide according to the label until the container is empty or take unwanted pesticides to your local Household Hazardous Waste Collection site. Contact your county agricultural commissioner for additional information on safe container disposal and for the location of the Hazardous Waste Collection site nearest you. Follow label directions for disposal of empty containers. Never reuse or burn the containers or dispose of them in such a manner that they may contaminate water supplies or natural waterways.

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This and other Pest Notes are available at ipm.ucanr.edu.

For more information, contact the University of California Cooperative Extension office in your county. See your telephone directory for addresses and phone numbers, or visit: ucanr.edu/County_Offices.

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