The holidays have past, and you’re settled into the challenges of a new year – be it with family, work, your home, or your health. And one day, you feel an itch. And then another, and another, and another until you’re sure something’s at work on your bod. Another scenario: you’re on a medication with skin-sensitizing side effects made worse by dry skin (we do live in a desert), stress, allergies, soaps, etc. These and similar situations are recipes for a case of the “mystery itches”.

What Causes Mystery Bites and Itches?

Many of us mistakenly, though regularly, blame 6-legged and 8-legged critters (insects and other arthropods) for inexplicable red spots, lesions, itches, or the sensation of being tickled or nibbled. But in actuality, a great many conditions cause these symptoms, ranging from very minor to the more serious. A few examples of such skin afflictions include:

- **MRSA** – Methicillin-resistant *Staphylococcus aureus* (MRSA) is an antibiotic-resistant form of a common bacterium. Symptoms of MRSA are characterized by red, tender and persistent spots or lesions on skin, which some may attribute to the flesh-deteriorating effects of a nasty spider bite; in reality, such spider bites are exceedingly rare. MRSA may be contracted from contaminated surfaces or individuals, typically through an open wound (a scratch, etc.). Non-hospital (i.e., community contracted MRSA) has become more present in schools lately. Hand-washing with soap and warm water are key to avoiding contracting and spreading MRSA. It is a serious infection and should be addressed promptly in both adults and children. To learn more, visit the Arizona Department of Health MRSA website: http://www.azdhs.gov/phs/oids/epi/disease/mrsa/mrsa_g.htm

- **Scabies** – also called “mange”, is a microscopic mite that burrows in the skin, causing significant itching.

- **Folliculitis** – ingrown hair.

- **Eczema and Psoriasis** – two of several forms of dermatitis which may be painful, itchy, red, etc. Dermatitis is often caused by stress, food allergies, dry skin, reactions to soaps, lotions, or clothing.

- **Hives** – raised red welts typically caused by an allergic reaction.

- **Shingles and chicken pox** – caused by the same virus, the symptoms include raised, red welts with intense itching (chicken pox) and/or pain (shingles).

  **Bottom line:**
  it’s often not a mystery arthropod at work.

In rare cases, mystery itches attributed to arthropods becomes an extreme condition. Even when a medical doctor or entomologist concludes no arthropods are present, the sufferer fervently believes otherwise. Scientists call this condition **Delusory Parasitosis**.

What Is Delusory Parasitosis and Who Gets It?

Delusory parasitosis (DP) is defined by experts as:

“The conviction that insects are crawling on, biting, or burrowing in the skin, when no arthropod is involved...” - Nancy C. Hinkle

Those suffering from this ongoing condition may be your neighbor, a coworker, or the cashier at the store… There is usually no obvious indication from casual conversation that someone has this affliction. The diagnosis is arrived at through medical examination, discussion with a doctor, and a variety of exhibited behaviors which clearly indicate the sufferer has delusions of small creatures at work on their body (sufferers often cite mites, worms, larvae, or even mystery bugs as yet unknown to science). The delusion will persist in spite of medical and entomological proof to the contrary.

DP can develop as a result of a combination of factors, which often include emotional stress, skin irritants, and medication(s). It typically occurs in a very small percentage of people, and may take several years before either the sufferer receives proper help or the contributing factors diminish such that the situation self-corrects.

The itching, burning, or skin-crawling sensations which leads sufferers to believe “bugs” are at work, often result in excessive scratching, picking, or rubbing, thus perpetuating the original symptoms and reinforcing their delusions. Some erroneous skin sensitivities are caused...
by specific medications and dietary supplements.

Two or more of the following characteristics are, more often than not, associated with DP sufferers:

- Emotional stress (loss of a job or a loved one, long term care of a sick family member, recovering from a medical crisis, etc.)
- Being socially isolated (e.g., the elderly)
- Taking medications, especially pain meds and other prescription products which entail physical side effects to the skin or senses
- Being a female
- Having a family member who suffers from DP (or has suffered in the past)
- Use of recreational drugs

Those suffering from DP often present samples of microscopic or minute critters in vials and zip-lock baggies – their “evidence” of the culprit. What is often found, instead of an insect or any arthropod known to science, includes lint, pet or human hair, dust, and scabs. Rarely, hints of a decayed arthropod may be seen – most of the time it’s a non-biting, non-stinging type, usually one of the harmless carpet beetles (the lumbering grazers of the beetle world).

The submitted samples, though bug-less, nevertheless shine light on some of the causes of mystery itches and bites. The lint, pet hair, dust, etc., may cause skin irritations. This is particularly true for those with even minor allergies. With most of us spending the majority of our day inside homes, offices, and schools, there is ample opportunity for irritants to have an effect on our body’s largest organ: our skin.

What Can I Do About Mystery Itches/Bites?

If you have a red lesion or welt that is suspicious or painful, please go to a medical doctor for a proper diagnosis.

1. For those suffering from delusory parasitosis, the condition is best addressed by professional intervention consisting of: a medical doctor (allergist and/or dermatologist), a psychiatrist (to help with emotional stresses), and an entomologist (to ensure there are no arthropods involved).
2. For most people, mystery itches and bites can be addressed through good housekeeping: regular vacuuming, mopping and sweeping to remove pet dander, dust mites, and accumulations of insect exoskeletons. Particular attention should be paid to corners and areas under furniture.
3. Consider changing the soaps and lotions you are using to “sensitive skin” or “fragrance-free” varieties; fabric softeners and laundry detergents can also agitate skin to dryness or dermatitis.
4. Encase mattresses, box spring beds, and pillows in hypoallergenic coverings.
5. Reduce chemical exposure, stay hydrated, and use skin moisturizers.
6. Consider using integrated pest management (IPM) methods rather than resorting to pesticidal products. IPM services are offered by many pest management professionals upon request, and the technique will address pest (or suspected pest) problems in a systematic way that utilizes non-chemical methods first.
7. Use a filter-based air-purifying system (we do not favor the electrostatic systems).
8. Keep an open mind. Follow expert advice and stay positive, most cases are resolved in time.

DO NOT TREAT YOURSELF OR YOUR HOME WITH PESTICIDES BEYOND LABELED RECOMMENDATIONS. YOU WILL EXASERBATE THE SITUATION.

For more information on mystery itches and bites, delusory parasitosis, or IPM, please see contact information for the University of Arizona Urban IPM staff (below).

Arizona Children’s Environmental Health Coalition

Please email us with requests for Pest Press issues on specific topics of interest.

NEXT ISSUE: FERAL CAT MANAGEMENT.

Information sources:

2. Colorado State University. Mystery Bites and Itches.

Authors: Jennifer L. Snyder, Dr. Dawn H. Gouge.
For information on Arizona’s IPM in Schools program contact Dr. Gouge, 520-568-2273, dhgouge@ag.arizona.edu

Few bugs are bad! More than 95% of all insect species are beneficial to humans.