

Insec(tc)ure*:

Are you insecure about your insect cures?

A UT Urban IPM Lab Newsletter for the Pest Management Industry

Will Suspect Delusional Infestations Increase Following This Cold Weather?

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Picture your clients experiencing this. They live on a road that isn't plowed and have spent the last few days snowbound in their home, which reminds them of the pandemic and their feelings of isolation. It's been much colder than usual; some places were at or close to negative temperatures, so their heat has been running longer, dries their skin, lowers the humidity, and builds up static electricity. They ran out of moisturizer, but the stores were too crowded before the snowstorm arrived, so they decided to avoid the hysteria and forego a trip to the store. As the temperatures crept above freezing, they decided to clear the car and driveway of snow, but didn't dress well enough to prevent their skin's exposure to the cold. All of these stresses, such as isolation, wondering if they'll get stuck in the snow, feeling helpless, the drying of skin, exposure to environmental conditions that exacerbate dry skin, and lack of moisturizer, may increase the number of clients with suspected delusional infestation you encounter as the conditions of the storm abates.

Delusional infestation (DI) is a condition in which a person insists they are infested with insects, mites, other parasites, or even fibers, regardless of evidence to the contrary. They describe the sensation of being bitten in, on or under their skin or elsewhere. DI can be primary or secondary. For a doctor or similar medical personnel to diagnose someone with primary DI, they must meet several criteria including having no other sources of the sensation. These other sources can be other medical conditions. When other conditions are responsible for the sensation of parasitism, this is called secondary delusional infestation. In cases of secondary DI, if the primary condition is resolved, often the DI is also resolved.

In the scenario described in the first paragraph, the environmental conditions of low humidity could cause fibers to be static electrically charged, hitting the dry skin and leaving behind a red raised area with a tiny sensation of pain, similar to an insect bite. This is sometimes referred to as illusory parasitosis.

As you determined from reading above, DI is a medical condition and not something an Extension specialist or pest management professional can diagnose. Our job is to determine if an arthropod capable of causing these sensations is present. To do so, we suggest asking the client to place clear tape over the skin when the sensation is felt. The clear tape can be folded over to create a "microscope slide of sorts". A lint roller sheet could also capture arthropods on the skin. Another option is to place glue boards or sticky traps in areas of the room where the sensations occur. We suggest limiting the sample number to five. Be careful not to accept samples repeatedly over time as this may reinforce a delusion. Specimens should be placed in a clear bag or something similar and indicate where the specimen was collected (on skin, on the windowsill in the bedroom, etc.) on the bag. Samples can be dropped at your [local county Extension office](#).

Be aware that UT Extension personnel will not accept vacuum cleaner bags, or items originating from the human body (scabs, skin, blood, or other body fluids) because we are not trained to handle these safely. If they believe the specimen is in their body or body fluids, they can see a medical professional to isolate the arthropod and preserve it in alcohol. Then, it can be brought to the Extension office. Always wear gloves or other PPE when handling specimens!

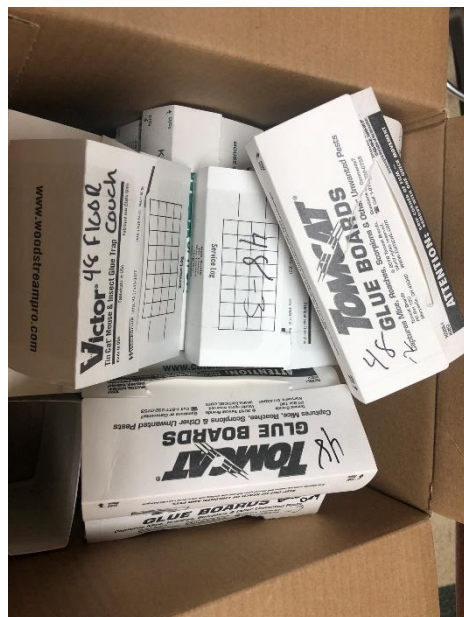


Figure 1. Glue boards (left) and bags of clear tape samples/lint roller sheets (right) from individuals suspecting an arthropod-caused skin irritation. Labeling three different glue boards as “48” is not helpful. Each specimen should have a unique identifier that describes where it was collected.

The University of Tennessee One Health Initiative Delusional Parasitosis Working Group and the Southern Region Delusional Infestation Working Group have been developing factsheets describing DI and unknown skin irritations, and protocols for Extension agents to follow when working with individuals suspected of having DI.

DI is too complicated to describe in much detail in this article. I will discuss DI and the materials we developed at the Chattanooga Area Pest Control Association meeting (Feb. 15), Tennessee Pest Control Association’s Winter Conference (Feb. 27), and ETPCA’s Smoky Mountain Conference (possible Mar. 7 makeup date). In addition, I’ll also be discussing DI in more detail at Extension Agent In-service Trainings (Feb. 20 [West Tennessee Research and Education Center], Feb. 21 [Rutherford County Extension Office] and Feb. 22 [Eastern Region Extension Office in Knoxville]). If you want to attend these morning (9 am - noon) in-service trainings, contact me at kvail@utk.edu. These in-depth trainings will describe how to prepare for the initial contact with someone with unknown skin irritations suspected as caused by arthropods. We’ll discuss the sample in-take process, characteristics of an individual with delusional infestation, questions to ask to identify potential arthropod causes of the skin sensations, and checklists and guides describing arthropods that can bite people and common arthropods found in homes but unrelated to skin sensations. We also provide a list of the many medical conditions that cause skin irritations that the individual can share with their healthcare provider. If no arthropods are found, we discuss how to work with these individuals with care and respect, and to suggest they work with their healthcare provider to find the cause of these sensations. Remember, they are suffering, and need medical support to identify and resolve the cause of their skin irritation. You may be the one that puts them onto the path to their recovery.

References:

- SRDIWG. 2024?. Extension Agent Protocol for Unknown Skin Irritations. SIPM Center (in press)
SRIPMWG. 2024?. Unknown Skin Irritations: A General Guide. SIPM Center (in press)

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