

U. S. General Services Administration IPM Program

Pest Management Information Bulletin # 8

- PAPER MITES PAPER FLEAS -

There is no such thing as a **paper mite**, a **carpet mite**, **paper fleas** and **carpet lice**. Like alligators in the sewers and rats as big as cats, they all belong to a colorful kingdom of urban animals that live in the imagination and spread by word of mouth.

On the other hand, sudden pinprick-like sensations on the skin are a very real fact of life in some workplaces. These tiny, painful jabs can be an occasional nuisance or they can drive people up the wall. They feel just like insect bites and they often produce itchy welts that look just like insect bites. In fact, it's not uncommon for health care professionals, including physicians, to diagnose the condition as insect bites. Small wonder that "mites" play such a large role in office mythology.

The real culprits, in most cases, they are tiny, irritating particles that constitute a localized air quality problem (at least for susceptible individuals) rather than a pest problem. Assuming right off the bat that it's an infestation of some sort of parasite not only delays corrective action, it inevitably leads to demands that the room be fogged or sprayed with pesticide. And that can lead to far more serious problems if employees then experience adverse reactions to the treatment. **Don't even *think* about pesticides until you *know* that pests are present.**

The purpose of this bulletin is to give you a very brief outline of a very complicated subject. "Paper mite and paper flea" cases are typically difficult to resolve because there are often several things going on at once. For example, it's human nature for an unaffected supervisor to suspect that employees may be exaggerating the problem. On the other hand, it's also perfectly normal for the coworkers of a paper mite and or paper flea victim to develop a heightened sensitivity to their own skin irritations (many of which may be caused away from the workplace) through the power of suggestion. Further confusing the issue may be the presence of small, harmless insects such as fruit flies or fungus gnats that are immediately accused of biting even if they have nothing to do with it. Microscopic house dust mites are sometimes blamed for the problem. These are real creatures, but they cause respiratory distress in susceptible individuals rather than "biting." And finally, although relatively rare, there are indeed troubled people who imagine they are being attacked by unseen bugs – a medical condition known as "delusory parasitosis."

The most important thing for management to remember in paper mite and paper flea cases is that all concerned **must** be treated with sympathy and respect. The most important thing for the affected employees to remember is that identifying the precise irritant is often a time-consuming process. Directions for how to proceed are on the next page.

There are three basic steps to take when paper mites and paper fleas strike:

1. Check for bugs. Of course, there are a number of genuine, little visitors that sometimes bite people in buildings. However, when real parasites are present, they are usually abundant and readily seen. The most common types in office buildings are mites migrating from bird nests outside the windows or rodent nests behind the walls.

Remember, the ability to tell a biting bug from a harmless one is something that the average citizen just can't do. An inspection of the premises **must** be carried out by an experienced pest management professional who understands that pests may not be involved. It is standard procedure in these investigations to place sticky traps around the problem area. Samples of the dust are often taken as well. Finally, all occupants should be instructed to capture anything they suspect is biting them on a piece of clear tape, so that it can be properly identified. All it takes is one actual parasite to justify treatment.

2. Check for sources of particles. Much to everybody's dismay, paper mites and or paper fleas rarely turn out to be anything alive. It's much more typical for one or more types of rogue particles to be implicated. Heading a very long list of potential candidates are shards of fiber glass insulation (such as from batting above drop ceilings in older buildings), fragments from either newly-installed or worn-out carpeting, or paper dust from our endless forms, reports, and cardboard boxes. The dry air of many workplaces not only makes the skin more sensitive to these tiny splinters; it also increases the static electricity that makes the particles "jump" onto exposed arms and legs. Sometimes the static-charged bits are mistaken for living bugs.

Paper mite and paper flea outbreaks are often associated with activities that stir up accumulated dust, such as renovation or maintenance work, the purging of old files, seasonal shifts in the HVAC system, the replacement of furniture and equipment, etc. In cases where there is no obvious explanation, an industrial hygienist may be able to shed more light on the situation. The bad news is that a conclusive "smoking gun" is rarely discovered, since an abundance of minute particles – innocuous to most employees, but potentially irritating to a few – occurs in many indoor environments.

3. First aid. Most measures to provide immediate relief while corrective efforts are underway involve moisturizing either the environment or the skin itself. It is standard procedure to initiate at least a temporary program of frequent, damp cleaning, including carpet washing with water only. Cleaning by vacuuming rather than wiping is likely to result in even more dust becoming airborne, unless the vacuum is equipped with a HEPA filter.

Ideally, identification of the offending particles results in actions to eliminate their source. Unfortunately, this is not always possible. Humidifiers or air purifiers can be of tremendous long term benefit in some circumstances, but it is not always practical to install them. It may be worthwhile for employees to seek the advice of a dermatologist or other medical specialist, since there are simple skin care procedures (such as the use of moisturizers and the avoidance of harsh cleansers) that minimize problems with irritation.