Mold & Mildew: A Creeping Catastrophe

By Everette L. Herndon, Jr. and Chin S. Yang, Ph.D.

In February 2000, a Texas grand jury found reason to continue a criminal investigation of child endangerment charges against an insurance company for its handling of a water damage claim. This investigation was prompted by a criminal complaint filed by the policyholder and follows the filing of a $100 million lawsuit in 1999 against the same insurance company for its handling of the claim. The policyholders say that the insurance company did not act properly or in a timely manner following the water damage claim. The allegation is that the house is now uninhabitable.

The family claims that, following the water damage, and while they were still living in the house during repairs, they were coughing up blood. The husband, the family claims, is now suffering from a cognitive dysfunction, among other injuries.

The problem? Mold. *Stachybotrys chartarum* (a.k.a. *atra*) to be specific. The mold developed following a water damage loss in 1998. The policyholders allege that neither the insurance company nor the company's expert informed the family that the home contained the deadly mold until their health was irreversibly damaged.

Is the Texas case merely an extreme example? Or is it a harbinger of things to come?

Many lawsuits have been filed and are being filed around the country involving the improper handling of covered water damage losses that have resulted in mold growth so extensive and severe as to present potentially serious - and in too many cases, actual - health hazards, not only to the occupants of the building involved but possibly to anyone who unwittingly enters the structure. Furthermore, mold growth can cause damage to building materials, such as paper and wood products. Mold contamination and growth may also pose a disclosure issue during a real estate transaction.

According to the Insurance Information Network of California and the Western Insurance Information Service, both sponsored by insurance companies, water damage from frozen and broken water pipes ranks second, behind hurricanes, in terms of the number of homes damaged and the amount of claim costs in the U.S. Damage from water is the most prevalent, yet least recognized, catastrophe. In addition to broken and frozen water pipes, we have to include losses from flood, rain, leaks and surface water, as well as water damage from putting out fires.

Some of these losses are covered, some are not. If the water damage is the result of a covered

loss, the resultant damage, mold (including fungi, mildew, etc.), is probably also covered and must be considered in preparing the scope of damages and costs of repair.

The consensus of opinion from the EPA, FEMA, the Centers for Disease Control (CDC), mycologists and microbiologists is that mold may start to grow and spread within 24 to 48 hours in structures damaged by water. Mold can grow exponentially, given the right conditions of temperature, moisture and food sources, such as sheetrock.

Know your enemy

Fungi are a group of organisms with nuclei and rigid cell walls, but without chlorophyll. They may be unicellular or in multicellular filaments. The filaments are called hyphae. A fungus may produce a system of branching filaments, called the mycelium. The filamentous fungi are sometimes called molds. Unicellular fungi are often called yeasts. Some fungi may produce
both yeast and mycelial mold phases. Mildew, in layperson's terms, describes the staining, and likely the degradation of the materials, caused by fungi or molds. Mildew is also used by plant pathologists to identify plant diseases, such as "powdery mildew," caused by fungi.

Mold, mildew and fungi are hardly new problems. In the book of Leviticus, chapters 13 and 14, there is reference to a plague, also called mildew in some translations. The description seems to fit that of a toxic mold. In Leviticus, the solution was to try cleaning: "Watch the plague and if the plague spreads, the unclean item or property must be removed and destroyed."

Stachybotrys chartarum was first identified and described by a scientist from wallpaper collected in a home in Prague in 1837. The toxic effects of *Stachybotrys* have been reported as early as the 1920s.

Reports and surveys on mold in homes have been published since at least the late 1970s. In 1986, the injurious effects of trichothecenes - a mycotoxin produced by *Stachybotrys chartarum* and a few other molds - were reported from a study of a family in Chicago. That report, by W.A. Croft, said that Stachybotrys could be commonly found in homes with water damage, could grow undetected behind walls and could grow profusely on sheetrock.

In 1993, the New York City Department of Health's Bureau of Environmental & Occupational Disease Epidemiology convened a panel of experts to study a growing and noted problem. Their report, "Guidelines on Assessment and Remediation of *Stachybotrys Atra* in Indoor Environments," was issued in 1994. An updated report, "Guidelines on Assessment and Remediation of Fungi in Indoor Environments," was issued in April 2000. The scope of the report was expanded to include all mold or fungi.

These guidelines serve as the accepted standard on how to deal with mold. The initial 1994

report focused on *Stachybotrys*, but was revised in 2000 to include all mold (fungi). The authors highly recommend that concerned readers download and print out copies for reference, which run about 17 printed pages. (For more information, contact he N.Y.C. Department of Health at (212) 788-4290.)

Mold & medical problems

A wide variety of symptoms have been attributed to the toxic effects of different molds. The medical problems may be caused by toxic gases produced by the molds or by reactions to the mold particles themselves. Many allergies are also attributable to mold and fungi.

Commonly reported symptoms include runny noses, eye irritation, congestion, aggravation of asthma, headaches, dizziness and fatigue. More severe symptoms may include reports of profusely bloody runny noses, the coughing up of blood, severe headaches, fibrous growth in the lungs and - at least in one reported instance - cognitive dysfunction and loss of memory.

In the previously described water damage and mold claim in Texas, a mold expert in the case underestimated the danger involved. The expert found himself throwing up for hours after spending just 30 minutes in the house. He has a severe hearing loss in one ear from his exposure to the mold.

In 1993 and 1994, a doctor from the Cleveland area attributed 37 cases of pulmonary hemorrhage and hemosiderosis in young infants to *Stachybotrys*. Twelve of the infants died. A recent CDC report questions the scientific validity of the doctor's conclusions and the causal linkage of the infant deaths to the toxic effects of *Stachybotrys*. However, the CDC does recognize that moldy homes are unhealthy for human occupancy. Other reports claim to confirm the linkage of *Stachybotrys* to instances of infant deaths in other locations.

Some of the most extreme cases of mold-related health problems, the so-called "yellow rain" attacks in Southeast Asia during the late 1970s, and the Iraqi attacks on some Kurd villages in the 1980s and 1990s have been attributed to use of mycotoxins produced by molds.

The conclusion to be reached from all of these dramatic cases is that molds are potentially dangerous and cannot be ignored. *All* molds should be removed. If the mold is attributable to a covered loss, it is the responsibility of the adjuster to include removal of the mold as part of the loss.

Immediate response required

While all claims should be responded to and handled promptly, timeliness on covered water damage claims is especially critical. A prompt response and an immediate commencement of cleanup and drying is essential in reducing or eliminating further damage, particularly by

mold. The sooner the water is removed and the property properly dried out, the less property damage there will be and any related claim will also be correspondingly minimized. Water damage that is not addressed within 24 to 72 hours may result in the growth and spreading of mold which could be toxic.

A visual inspection is the most important step in identifying possible mold contamination. The inspection should include any areas damaged by water, e.g., behind cabinets, in attics, under carpets, inside wall cavities and any area with porous material or soft goods exposed to high humidity (over 60 per cent) or water for a period in excess of 72 hours.

The general rule of thumb is very simple: If you can see mold or smell mold, you have to remove it. Once you find and start removing the mold-damaged or contaminated materials, such as sheetrock, you should keep on removing the material until you find no more mold, either on the face of the sheetrock or on the back side of the sheetrock next to the studs. If the studs have mold contamination, you must consider the edge of the stud on which the other or exterior wall is attached.

Since the N.Y.C. Department of Health's panel of experts concluded that it was not possible to determine safe or unsafe levels of exposure for people with varying degrees of susceptibility, the guidelines essentially call for the removal of all visible mold.

The New York City guidelines state that in looking for mold following water damage, bulk sampling or air monitoring is not required. Remediation of *all* visibly identified mold contamination should proceed without further evaluation. However, if mold is not visible but is suspected because of circumstances such as water damage and unexplained illness, it may become necessary to test in order to rule out mold or to verify its presence. Porous materials, such as ceiling tiles, insulation and wallboards, with more than a small area of mold contamination should be removed and discarded. A small isolated area is defined as 10 square feet or less. A small area may be cleaned safely if done properly, without problems, and a check reveals no more mold.

Removal of the mold-contaminated material is only the first step. A certified mold remediation specialist should then remediate or decontaminate the structure and personal property involved.

Depending on such variables as the length of time from the initial water damage, the amount of water in the structure, the cleanliness of the water and the type of property involved, it may be necessary to remove carpets, pads and any other wet items (especially clothing and other soft goods) from the premises for proper drying, cleaning and treatment. Damp or wet carpets, pads or other items may provide a medium for potentially dangerous mold growth.

Flooding of property, pipe breaks in ceilings or walls, or standing water necessitates removing sheetrock that has been water-damaged, up to at least a foot or more above the high-water mark. Removal of at least some sheetrock may also be necessary to allow the

wall cavities to drain and dry properly. Wet insulation, in the ceiling or walls, must be removed and replaced. Wet or damp insulation, especially in dark places like wall cavities is a breeding ground for mold. The insulation value is also reduced.

Prompt response and appropriate action is necessary to minimize damage in a water loss. A quick response will also allow the adjuster to determine if the mold is pre-existing or a result of the water damage. If the adjuster can inspect the loss within 24 or 48 hours of the initial damage, it is likely that any visible or detected mold may be the result of a pre-existing water problem, possibly a long-term leak. However, if the loss is not inspected or properly dried within 72 to 96 hours, it may be more difficult to determine if the mold was a pre-existing problem or a result of the covered loss, and thus also covered. The longer the delay in inspecting the loss, the more difficult it becomes to prove the mold was not caused by the covered loss.

Roles of adjusters, experts

As the expert in claims handling and policy coverages, it is the adjuster's responsibility to seek out and identify any and all damage covered in the loss - either alone or with the assistance of the contractor - and then to extend to the insured any and all benefits available under the policy. This responsibility means including in the scope of damage any visually identifiable mold in a covered loss as possibly a part of the loss. Unless the adjuster can determine that the mold in a covered loss either pre-existed the loss or is not a result of the covered water damage, the mold has to be considered as part of the loss. Denial of the mold contamination as being excluded under the policy, either subject to the standard mold exclusion or as not being part of the covered loss itself, requires that the adjuster prove and document the basis for the denial.

Relative to the insured, the adjuster is operating from a position of superior knowledge on what should be expected in the way of damage, and what damage is or is not covered under the policy. Many adjusters see water damage claims on a frequent basis and have a much better idea than the insured on what might be damaged and where to look for hidden damages. If the adjuster is in doubt or lacks sufficient experience, he or she should work closely with the insured's contractor and make sure the scope of damage is complete.

If the water damage is more than a few days old, be sure and check for mold as a possible hidden damage in wall cavities or other areas damaged by water. Adjusters are not expected to be experts on determining whether or not the mold is dangerous; however, an adjuster is expected to detect visible mold, to look for mold in certain areas (such as water-damaged wall cavities), to include the mold in the scope of damage and to call in the appropriate experts to assist and advise. The job of the experts is to advise the adjuster concerning the mold and how to handle the mold.

A professional restoration consultant should be contacted when more than a small area of mold contamination is involved. Even a mid-sized isolated area - say, 10 to 30 square feet -

requires special handling. Areas of 30 to 100 square feet require professionals, preferably certified in mold remediation and trained in handling hazardous materials. Areas of more than 100 square feet require special containment procedures and negative pressurization. Such areas may require asbestos-like remediation procedures; the removed material must be treated as hazardous waste.

During and after removal or remediation of the mold, it may be necessary to conduct sampling to determine if remediation has been successful.

The future of mold claims

The *Cleveland Plain Dealer*, in August 1998, quoted Dan Zielinski, of the American Insurance Association, as saying, "Insurance companies will not take note of [Stachybotrys atra] until they are faced with numerous losses because if it."

One of the reasons may be the high cost of mold remediation, which should be done only by trained and experienced professionals. Some studies have shown that proper remediation and removal of contaminated building materials is about 10 times as expensive as regular tear-out and replacement. In some cases the remediation cost is more than $150 per square foot.

Insurance companies and adjusters should, however, be taking note of the dangers of mold contamination now. The insurance industry is being faced with numerous losses and lawsuits, some of them far more expensive than any remediation cost. In the last seven years in California, there have been a number of lawsuits involving mold following water damage. Many have settlement figures of more than $500,000. In one suit, the policyholder recovered more than $2.5 million. In another, the policyholder recovered over $9 million.

The case in Texas was filed demanding $100 million. Hardly a figure to sneeze at.

The examples cited above do not even touch on the liability, construction defect and "sick building syndrome" cases. In 1992, for example, a courthouse in Florida developed mold problems due to construction defects. A jury recently awarded more than $40 million in personal injury claims. There were over 200 workers' compensation claims and at least 180 separate lawsuits. In New York City, more than 300 tenants in an apartment complex with mold problems have filed a class action lawsuit in excess of $10 billion.

Previously, such lofty figures were seen only in asbestos or drug-related class actions. Now, we are starting to hear 11-digit figures mentioned in litigation concerning the lowly mold fungi.

While mold does not develop in every water damage loss, the adjuster must be aware of the potential for mold and its inherent costs. The adjuster must look for mold when the circumstances warrant and must call in appropriately qualified experts for guidance as

needed. Mold remediation may be expensive, but failure to remediate a covered damage may be even more expensive, in terms of health as well as dollars.

Everette Lee Herndon Jr. is a claims consultant and expert witness, working primarily in bad faith cases. Based in Rancho Murieta, Calif.. He was an adjuster for more than 25 years and is also a member of the California Bar.
E-mail: herndon@ranchomurieta.org
Http://www.leeherndon.com

Chin S. Yang, Ph.D., is the president, director and chief microbiologist of P&K Microbiology Services, based in Cherry Hill, N.J. Yang, who has worked extensively with allergists, industrial hygienists, and health professionals on microbiology-related problems in buildings, was also a contract consultant to U. S. Public Health Service, Division of Federal Occupational Health.

This article was originally published and copyrighted in *Claims* magazine in August, 2000 and may be found at http://www.claimsmag.com/Issues/aug00/mold.asp
The article was reprinted and distributed at the Mealey's Mold Conference, Marina del Rey, CA, June 25/26, 2001.