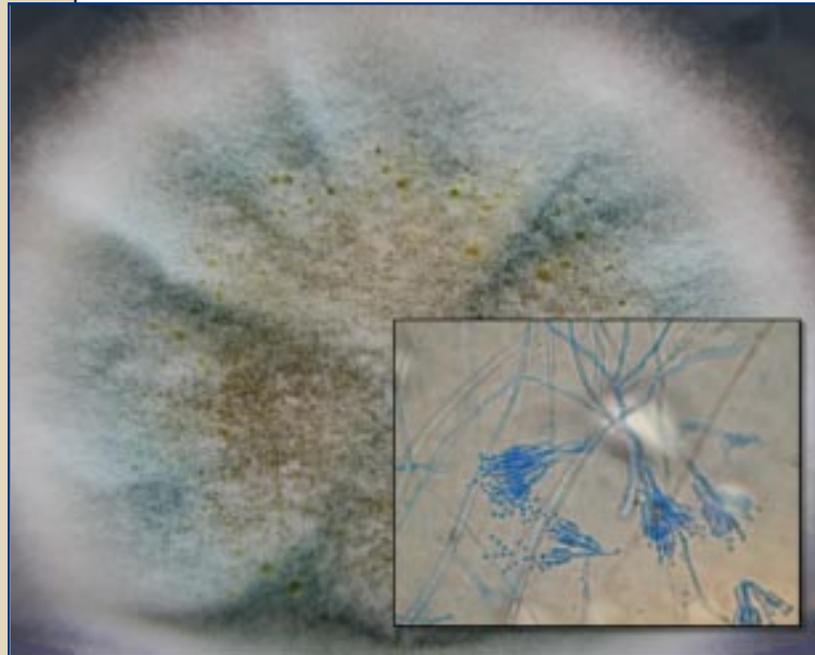


The Legal Corner

Private insurance coverage for mold is being dramatically restricted. In the past year, the insurance industry has limited or excluded mold coverage in many new and renewing policies. Twenty-nine of thirty-one state regulatory insurance commissions reporting indicate that insurers have filed requests to exclude mold. To date, Texas dwarfs all states in the number and magnitude of mold claims – up 581% in 2001 — and its insurance sector leads the way in aggressively limiting coverage for mold.

The reason for the insurance industry's action is clear enough: litigation over molds is sharply increasing and very expensive (many multi-million dollar jury awards), while returns from investments of premiums in the stock market are sharply down. Hence, home insurance

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MYSTERY MOLD — *Answer on page 2*

Many species of this common genus are found in houses growing on and in walls and also on various foods. Although allergies are common, many toxins are produced, and one species infects humans (not in the US), members of this genus have also found beneficial uses in the generation of certain foods and as a source of antibiotics (go way back).

Inside...

- *New mold*

- *Current News*

- *Mold FAQs*

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Welcome to Mold Busters...

Gordon Mycology Laboratory, Inc. (GML) specializes in culturable mold analyses of airborne and surface samples collected by industrial hygienists and other environmental professionals. Non-viable mold spore evaluations are also performed. Of special interest to these clients, GML is pleased to announce our participation in the AIHA EMPAT program for fungi.

Gordon Mycology Laboratory, Inc. (GML) also focuses on investigating indoor environments for mold. Other clients include real estate agents, various construction outfits, insurance companies, doctors, lawyers, property owners & managers, and remediators. For these we offer a comprehensive investigation including collection and analysis of indoor air and surface mold samples, full report and discussion of qualitative and quantitative results, and suggestions concerning remediation. The expert staff at GML is a phone call away for follow-up consultation. As we perform the analyses ourselves and answer all of your questions, we provide the most comprehensive service of any local company.

This publication from GML continues coverage of a wide range of practical topics relating to mold. In particular, this issue updates the continuing saga of insurance, government, and litigation.

GML Case File...

Hidden Mold

We imagine that most people on vacation worry at least a little about what disaster might be happening back home. The standard cliché is, "Did I remember to turn off the stove?" But there are so many other things one could worry about, and one of them happened to a couple living in Worcester, MA. While they were away in Florida, a radiator pipe of the forced hot water heating system that had been quietly rusting in a bedroom finally broke, flooding that side of the house. Water vapor from the break 'steamed' the rest of the house. The disaster was discovered by the housekeeper on her weekly visit, meaning that the flood could have been going on for several days. Fortunately, there was insurance coverage. Not wishing to return to handle the paperwork and file claims, the owners called a Public Insurance agent (one who works for the claimant), who called GML. Our visit required more caution than usual, as the hardwood floors in the flooded room and adjacent hallway were severely buckled as if from some deep geological event or a bad TV movie. There was a strong 'mold' odor, although visible mold was not especially abundant on the walls in this area. Elsewhere in the house, the effect of the 'steam' was dramatic: ceiling paint was peeling; mold was growing on bookshelves, wallpaper, kitchen drawers, attic floor, basement concrete walls; etc.

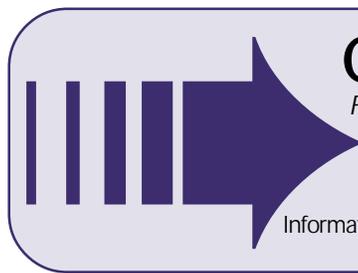
Air sampling of the room with the leak showed high levels of mold spores as

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Penicillium

Penicillium is the mystery mold

The 200 or so known species of *Penicillium* (from the Latin for brush, referring to the characteristic spore-forming structures) are ubiquitous in soil, decaying plant material, and all too often in houses. The wall surfaces of water-damaged buildings are especially favorable habitat, where *Penicillium* thrives on wallpaper glue, plasterboard, fabrics and even paint. Also found in humidifiers, refrigerators, AC units, carpets, and dust. Besides being a common uninvited guest on cheese, bread, cereal, seeds, onions, apples & oranges, etc., some species are deliberately employed, as in making Roquefort, Brie, Stilton and Camembert cheeses. And, of course, *Penicillium* was the source of the 'first antibiotic' penicillin (Fleming 1929). But *Penicillium* growing on your walls and putting spores and VOCs into your indoor air is not good. Some people, asthma and hay fever sufferers especially, may be hypersensitive to spores. And everyone should avoid ingesting mycotoxins in foods. Other diseases where *Penicillium* may play a role include pneumonitis, keratitis, and ear, lung & urinary tract infections. So, as with *Aspergillus* and other molds, identify the mold in order to check for specific health problems, but especially identify the source of the mold and eliminate it. ■



Check out our web-site
For the latest information or news please contact us at:
www.gordonmycologylab.com
The Gordon Mycology Laboratory, Inc. Web site features Technical Information, Frequently Asked Questions, What's New, and direct e-mail access.



Could This Health Food Make You Sick?

Quorn, a meat substitute sold in England for 17 years, has been available since January 2002 in American grocery stores. Quorn Foods claims that the main ingredient in its frozen Quorn nuggets, tenders, cutlets and lasagna—a fungus known as *Fusarium venenatum*—is "mushroom in origin". It has real-meat texture and excellent nutritional profile (high in protein and fiber, low in saturated fat.) But The Center for Science in the Public Interest asked the FDA to ban it, claiming it's made dozens of Americans ill, and demands that Quorn be relabeled to reflect its fungal origin: "fungus", or "processed fungus" or even "processed mold". GML notes the name confusion and clarifies for the non-

biologist: The category Fungi (occupying the same level as Plant or Animal) includes many types of organisms, including mushrooms, yeasts, and molds. Calling a mold a mushroom is like marketing grasshoppers as "crustacean in origin". Yes, both are arthropods (broad group including insects, crustaceans, spiders, centipedes, etc.), and both may be perfectly edible and nutritious, but in American cuisine, only crustaceans (lobsters, crabs and shrimp) have a favorable image. But in contrast with this analogy, each fungal type harbors species with positive culinary connotations – yeasts in breads and alcoholic beverages, molds in aged cheeses – so Quorn needn't have opted for a euphemism. ■

Mold FAQs

If there is mold growth on attic plywood, does the winter cold kill it?

Generally, if conditions are favorable for mold to have grown in the attic and the mold is still alive, cold winter temperatures will slow or stop the mold from growing. However, molds produce spores with resilient outer coatings that allow many of them to remain alive through harsh conditions including long dry spells and cold temperatures. Thus, when the attic warms up again, and sufficient moisture is present, growth resumes. This cycle will continue until the mold has been removed and favorable growth conditions remedied.

Why does the mold odor in a basement usually go away in the winter?

The 'moldy' odor is produced by actively growing molds that are metabolizing (breaking down) a food source (wallboard, wood, cardboard, etc.). While the molds are feeding on the materials, they produce mold volatile organic compounds or mVOC's, which are simply chemicals that travel easily in the air and therefore disperse throughout a house or building. Because basement air continually exchanges with outside air, which is drier in the winter, mold is relatively starved now for moisture and metabolizes more slowly.

Can mold contamination inside a wall cavity be identified?

Yes. After a basement has flooded and the water extracted, the carpeting is generally removed and the floor disinfected. But the moldy odor may still be present and the mold source not easily recognizable. Wallboard, paneling, plaster, and insulation that make up the walls in the basement most likely wicked moisture up into the wall cavity and mold populations became established. Wall cavity samples are collected through 1/4" drilled holes, cultured, and analyzed similarly to traditional ambient air samples. Collection of a control wall cavity sample in a wall that had not been affected by the moisture is recommended for evaluation and planning remediation.

Why do airborne mold samples sometimes not indicate that mold contamination is present, even when there is visible surface mold?

Mold growing on a surface is not necessarily producing airborne spores, especially in an area that has little or no activity in it such as an unfinished basement used primarily for storage. Also, if the surface that the mold is growing on is still damp or wet, the mold spores will not become airborne as easily. GML has found cases of significant amounts of active mold growth on wallboard without the companion air samples showing elevated mold spores. ■

Gordon
Mycology
Laboratory, Inc.



The Legal Corner

Continued from front page

premiums are going up (7%/year expected), claims are being denied, and coverage for the most expensive problems is being curtailed. But public health experts specializing in mold say setting such limits might be impossible.

The reasons for the increase in litigation are less clear. Mostly it seems to reflect an increased publicity, nationally and locally. While claims of illness due to mold contamination are increasingly common, there is little scientific backing for these claims, nor is there much scientific evidence against them. And no state government has set specific health standards regarding molds. Within the last few months, mold contamination has hit the front page of the Boston Globe and been featured in its Real Estate section. Recently (Feb. 17), the lead article of the Business section discussed the issues of escalating litigation, lack of standards, and exclusion of coverage.

Federal and State legislation has been passed or introduced to rectify this situation. The "Melina Bill" (H.R. 5040: The United States Toxic Mold Safety and Protection Act), introduced by Congressman John Conyers Jr. last June, directs an assortment of Federal agencies (CDC, NIH, EPA, HUD) to determine the effects of various molds on human health and to establish guidelines for sampling, identification, prevention and remediation.

Recently, the State of California passed State Senate Bill 732 to act on these various mold-related issues and Cal/OSHA (California's division of Occupational Safety and Health Association) was directed to address mold in the workplace. In May, California's Senate Insurance Committee approved legislation that would force insurers to cover mold resulting from a covered event, such as a fire or broken pipe. The industry, of course, predicts higher policy premiums and cites, for example, one insurer hit with \$26 million in liability costs for 300 mold claims in nine months. Back in Texas, the Department of Health has been working toward developing standards for mold levels, remediation and testing. Maryland, Pennsylvania, New Jersey, and Nevada are also taking action.

In light of the private sector's attempted exclusion of mold coverage and the lack of general agreement in the scientific community as to public health, it is important for property owners to read and understand insurance policies (see article next page). ■

Home Owners Insurance —

Insurers are dropping homeowners and raising rates. During the early '90s, average premiums were flat at about \$420/yr, then rose at the rate of inflation. That changed in 2001 when rates shot up and insurers began scrutinizing credit ratings and houses' histories. Poor credit or unresolved mold problems may adversely affect your coverage or premiums.

In this new environment you need to:

- ✓ **Shop Harder** - You probably can find a company willing to offer you a policy including mold coverage, but you may have to scout more, and don't forego comparison shopping.
- ✓ **Check Prior Claims** - Before you buy a new house, ask the sellers for a copy of their Comprehensive Loss Underwriting Exchange (CLUE) report from ChoicePoint. Or call 866-527-2600 and ask, or try <http://www.choicetrust.com>.
- ✓ **Check Your Credit** - Insurers find that people who pay their bills on time take better care of their homes and file fewer claims. Get your credit score at <http://www.myfico.com>.
- ✓ **Raise Your Deductible** - Doubling your deductible from \$250 to \$500 reduces your premium by 15% (typical example), while a \$1,000 deductible may save 35%. A high deductible also insures that coverage renewal will not be denied because of multiple small claims.
- ✓ **Don't Leap and Lapse** - Never let your policy lapse before getting a new one. A new insurer can deny coverage for up to 59 days so don't cancel your old policy until then. ■

GLOSSARY OF ACRONYMS:

AIHA	American Industrial Hygiene Association
CDC	Centers for Disease Control
EMPAT	Environmental Microbiology Proficiency Analytical Testing
EPA	Environmental Protection Agency
FAQ	Frequently Asked Question
FDA	Food and Drug Administration
GML	Gordon Mycology Laboratory, Inc.
HUD	Housing and Urban Development
IAQ	Indoor Air Quality
MOLD	Mostly Organic Livingspace Decomposer (just kidding)
NIH	National Institutes of Health
OSHA	Occupational Safety and Health Administration
VOC	Volatile Organic Compound

GML Case File...

Continued from page 2

expected (mostly *Aspergillus niger*, *Paecilomyces*, and *Penicillium*), but the highest levels of contamination were hidden. Air samples collected from behind the walls in the flooded room were extremely high, with one sample beyond the level that could be counted (same species as in room air). The levels were all 100X or more above the level in a control sample collected from behind a wall far removed from the flooded bedroom. All surface samples of visible mold, except for the peeling paint, yielded culturable mold numbers that were too numerous to count, with 6 more types identified in addition to the above 3.

We recommended having a professional environmental company perform remediation in the house to remove contaminated materials and disinfect items that could not be removed or were considered valuable. In general, the best course of action is to discard affected materials, which in this case would include extensive ceiling, wall, and floor surfaces, as well as the more obvious porous items such as carpeting, drapes, clothes, books, and fabric furniture. On the other hand, the affected sub-flooring, despite significant mold growth on the upper surface, seemed to be structurally intact and did not appear to have mold growth on the underside (as observed from the basement). Therefore, the sub-flooring could be treated and not necessarily removed.

Due to the high airborne mold spore levels and the surface growth observed on many surfaces, we recommended a complete cleaning of contents in the house once the contaminated materials had been removed. If the value of an item warranted, exceptional means of decontamination and restoration were available.

GML does not know if the heating system had been inspected recently or, if so, if the rusty pipe was obvious enough to have been caught. A more common source of broken pipes, especially this winter, is freezing. Both mechanisms can be defeated by adequate attention to the soundness and environment of the heating system. ■

Mold Busters

Each issue contains announcements and other information to keep you up-to-date on prevention of and solutions for mold problems. All Gordon Mycology Laboratory, Inc. clients receive Mold Busters free. If you are not already receiving Mold Busters, and would like to, or you would like to submit an article please call us. Gordon Mycology Laboratory, Inc. reserves the right to edit all submitted articles.

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