

Mold Links

Stachybotrys atra (pronounced Stack-ee-bot-ris) is an especially lethal mold. It's part of a family of molds (others are *Memmoniella* and *Aspergillus versicolor*) that produce airborne toxins, called mycotoxins, that can cause serious breathing difficulties, memory and hearing loss, dizziness, flulike symptoms, and bleeding in the lungs. [from [USA WEEKEND](#)]

Mold Litigation Reports <http://www.mealeys.com/mold.html>

Stachybotrys chartarum (also known as *Stachybotrys atra*) is a type of mold that has been associated with health effects in people. It is a greenish-black mold that can grow on materials with a high cellulose content - such as drywall sheetrock, dropped ceiling tiles, and wood - that become chronically moist or water-damaged, due to excessive humidity, water leaks, condensation, or flooding. [from [New York City Department of Health - Environmental & Occupational Disease Epidemiology - Facts About Mold](#)]

Some of the most common molds are *Alternaria*, *Aspergillus*, *Aureobasidium*, *Botrytis*, *Cladosporium*, *Epicoccum*, *Fusarium*, *Ganoderma*, *Helminthosporium*, *Leptosphaeria*, *Mucor*, *Penicillium*, *Rhizopus*. Each of these molds reproduce by releasing literally millions of spores into the air. As with pollen, mold spores are unique to each species of mold and vary in size and shape. Also, like pollen, mold spores are extremely small and can stay suspended in the air almost indefinitely. For these reasons mold spores are difficult to filter from the air and require high efficiency filter medium. In the long run, it's usually easier to prevent mold growth than to effectively eliminate spores from the air. [from [Mold and Asthma - Asthma](#)]

Used as a biological weapon by the Russians, the neurotoxin is responsible for the recent deaths of 16 infants in Ohio. [from [Click2Houston - Dangerous Mold Forcing People Out Of Their Homes](#)]

Articles

[CBS News | An Insidious Mold](#) Melinda Ballard says her dream house was invaded by a dangerous mold.

[CBS News | Invisible Killers](#) Melinda Ballard's million-dollar dream house became a biohazard after it was invaded by toxic mold.

[CBS News | Is Your Building Sick?](#) The Stachybotrys mold can cause sick building syndrome.

[Click2Houston - Dangerous Mold Forcing People Out Of Their Homes](#) Mold is commonplace in homes and businesses, but for one Houston family a deadly form of mold forced them out of their homes. The Slim family moved out of their Kingwood home after a deadly mold called Stachybotrys was found in their home. "It was black gook. It was nasty," Lynn Slim said. The greenish-black mold became a nemesis for the family and others like them. Used as a biological weapon by the Russians, the neurotoxin is responsible for the recent deaths of 16 infants in Ohio.

[Containing Noxious Mold \(5/3/99\) COVER STORY](#) Mold stinks. No argument. Feed the fungi, water it, keep it in the dark and it will prosper. Disturb it and it will attack. No arguments there, either. Beyond that, in the wars against the most prolific building pest of the 1990s, almost everything else is up in the air. One big exception: The cost of abating extensive building mold growth--at best an irritant, at worst a killer--can be "astronomical."

[Dallas Observer Online -- dallasobserver.com | News | Planet Mold](#) The latest environmental hazard in Dallas and the country is displacing homeowners, covering walls and pets, and making lawyers even richer. Welcome to the weird world of toxic mold. Attack of the Black Mold by Rose Farley.

[Earth Watch - Toxic Homes](#) Your home. It's the place where you feel safest and most relaxed. It could also be the place that is making you sick. Indoor pollution is on the increase and poses serious health hazards that cause or contribute to a number of medical problems, especially for children, the elderly and the chronically ill.

[Homeowners Against Deficient Dwellings HADD Sick Homes with Mold](#) Sick Homes: Mold is Becoming a Huge Problem - Homeowners Against Deficient Dwellings HADD has compiled the following links to news stories, victim stories, and web sites dealing with toxic molds in homes and office buildings.

[Household mold hide-and-go-seek - 2/20/2000 - ENN News - Environmental News Network - Your leading news source on the environment](#) Award winning producer of environmental news. ENN offers a variety of online services including daily feature stories, a free press release service, environmental news published throughout the day seven days per week, live chats with top environmental authors and panelists, weekly polls and daily streaming webcasts.

[Indoor air and bacteria, odors, dust and mold. Facts about stachybotrys, cladosporium](#) According to a Government Accounting report, 20% of the USA's 80,000 public schools have indoor air quality problems. Microbiological contaminants - particularly molds - account for half of indoor air health complaints. That means as many as 7,500 public schools have indoor air problems related to mold. Mold can start growing any time water leaks, and schools, many of which have flat roofs that collect water, are "notorious" for leaks. Chronic leaks can turn ceiling tiles, wallboard or wood into ready-to-eat mold food.

[Miles & Stockbridge Law Offices: Mold Could Cost You Millions If You're Not Careful](#) In June 1999, at least 125 New York tenants filed suit against their apartment building owners for \$8 billion in personal injury and wrongful death damages. Last year after finding a Delaware apartment building owner and property management company negligent, a jury awarded a former resident over

\$1 million. In early 2000, a former tenant sued a California apartment complex owner and its individual employees for personal injury and wrongful death damages. The primary culprit in this small sampling of "sick building" cases? Mold.

[Mold Alert - SecurityWorld.com](#) A mysterious illness is befalling many people across the nation. They are suffering from such symptoms as breathing difficulties, memory and hearing loss, dizziness, flu-like symptoms and bleeding in the lungs. The cause of this illness, a lethal version of household mold known as *Stachybotrys atra*. This illness is not new, however; the written history of microbial contamination dates clear back to the Bible. A passage from the book of Leviticus instructs the priest to tear out the contaminated stones from a building and throw them into an unclean place outside the town. If the mildew has spread, the entire house should be torn down. The system has changed little in thousands of years.

[Mold Found In Girl's Lungs; Pupils' Illness Adds To Portables Controversy](#) The little girl had a poisonous mold growing in her lungs, a mold that researchers with the state Department of Health Services say has appeared in portables around the nation - though tests, so far, show no signs of its spores in Santa Clarita classrooms, where at least five children and two teachers have tested positive for the poisonous *stachybotrys*. Their symptoms range from headaches to nosebleeds, lethargy to upper respiratory distress. Initial blood and urine tests show high levels of residue from the formaldehyde, inorganic arsenic and other chemicals used routinely in plywood, carpeting and pressed board paneling that can fill the air in a poorly ventilated portable classroom, said Dr. Gary Ordog, head of toxicology at Henry Mayo Newhall Memorial Hospital. "This is a highly toxic mold, and it can affect any area of the body," Ordog said. "And with any kind of prolonged exposure you can see a wide range of symptoms." The mold, Ordog said, can harm the neurological system, cause headaches and nerve and memory problems. It also can affect the immune system, alter the chemicals in the blood and damage the hormone systems, muscles, joints and lungs.

[Mold Its Not Just Unsightly](#) In the last five to ten years a body of scientific and anecdotal data has grown which points to interior mold contamination as a potentially serious health threat.

[Mold Menace Forces School Evacuation](#) Over 400 students and 30 staff members had to be evacuated from a midwestern elementary school for nearly five months as a result of health complaints from mold, mildew and chemicals.

[sacbee Inside Business: Mold puts gloom in real estate: Lawsuits, remedies costly](#) A Foresthill couple burn down their house. The owner of a 190-unit Antelope apartment complex kicks out all the tenants. And the state's biggest pension fund excludes certain industrial buildings from a major real estate purchase. At the root of all these recent incidents was a tiny organism -- mold -- that's causing big problems for one of California's biggest industries: real estate.

[sacbee Local News: Sick of mold, they torch home: Illnesses and lack of money lead family to raze ailing dream house in Foresthill](#) Steve and Karen Porath of Foresthill celebrated Valentine's Day in front of a fire. But it wasn't a romantic, crackling fire in a fireplace. They purposely had the local Fire Department burn their house -- including furniture and other belongings -- because the home was saturated with toxic molds. The dream home, which the Poraths purchased two years ago as a repossessed house from the U.S. Department of Veterans Affairs, went up in flames. The Poraths said the molds infected them and their two small children, leaving everyone suffering respiratory problems, nose bleeds, rashes and other illnesses.

[Sick Building Syndrome / Victims Of Mysterious Illness Suffer From Public Ignorance](#) It goes by many names. Sick Building Syndrome (SBS) occurs when you feel temporarily sick while occupying a building contaminated with one or more chemicals or organic compounds, such as "outgassing" emissions from new carpeting or floating spores from moldy air ducts, to which you are especially sensitive. On occasion, the exposure can render a victim chronically ill for years afterward, which is called Building Related Illness (BRI). Both belong to an

alphabet soup of similar disorders, such as Multiple Chemical Sensitivity (MCS), Toxicant-Induced Loss of Tolerance (TILT), Environmental Illness (EI) and becoming Chemically Injured (CI). Victims can suffer from a broad range of symptoms, such as chronic fatigue, nausea, vision problems and memory loss.

[Sick Building Syndrome Part 2 / Tips For Keeping Your Home Healthy](#) People who develop an acute sensitivity to one or more of these toxic "outgasses" can contract an "environmental illness," such as Sick Building Syndrome, with symptoms that range from chronic fatigue and nausea to vision problems and memory loss. Even people without an acute sensitivity can suffer from milder symptoms, such as a vague feeling of tiredness or lack of energy while indoors. So no matter what your state of health, you can improve your overall sense of well-being by improving the quality of the indoor air that you breathe.

[Sick Building Syndrome Part 3 / Sufferers Start To Raise Voices, Take Action](#)

You may not realize it, but the buildings that we live and work in have the capacity to make people sick. A few agencies, such as the World Health Organization and the U.S. Environmental Protection Agency, have attempted to educate the public about the dangers of poor indoor air quality. But Sick Building Syndrome and related illnesses receive far less attention than smoking, auto exhaust and other more well-known forms of air pollution. What is new is that the people who get sick are also starting to get mad. Slowly, sometimes haltingly, they are also starting to organize.

[Sinus News #4 \(Mold Health Hazard, Chronic Illness, Sick Building Syndrome\)](#)

"Deena Karabell had lived in her New York City apartment for 15 years, so when she fell ill in 1983, she never suspected that her apartment itself could be to blame. Over the next 15 years she grew progressively weaker. Finally, in the spring of 1998, she lost 30 pounds and went into anaphylactic shock three times. She literally lay dying in her bedroom when a hired nurse noticed a strong odor of mold in the closet. Suddenly things clicked. Karabell's family moved her out

immediately. Today-at a safe distance from the mold-she is almost back to normal..."

[Stachybotrys](#) Over the past several years, there have been a number of young infants (most under 6 months old), in the eastern neighborhoods of Cleveland, who have been coughing up blood due to bleeding in their lungs. Some infants have died and more infants continue to get ill. This bleeding, a disorder called Pulmonary Hemorrhage appears to be caused by something in their home environments, most likely toxins produced by an unusual fungus called *Stachybotrys chartarum* or similar fungi.

[Stucco-Pro.com June, 18 2000](#) No one could tell that David and Renee Saunders' stately Woodbury home was rotting away -- not even its owners -- until a cluster of mushrooms sprouted from a wall in the master suite. The couple faces an estimated \$400,000 in repairs to replace mold-infested walls in a house that cost \$550,000 to build seven years ago. "We see [mushrooms] in numerous homes," said Mike Happ, an investigator for the state building codes and standards division. The Saunders' home is a local example of a national problem: Moisture is creeping into houses across the country, causing walls to rot and destroying the house's basic structure. . . . A critical change in the way houses are built came in response to the energy crisis of the 1970s. Builders began constructing tighter houses to reduce energy costs and make houses more comfortable. Meanwhile, new engineered wood products, typically sheets of wood chips and glue, replaced traditional wood boards for construction. Along the way, one of life's necessities -- water -- became a villain.

[USA WEEKEND](#) Special Report: IT STARTED with a series of leaks. Within a year, Melinda Ballard's 11,500-square-foot Texas dream home was quarantined; her 3-year-old son, Reese, was on daily medication to treat scarred, asthmatic lungs; her husband, Ron Allison, had lost his memory along with his job; and the family was living out of suitcases and locked in a seemingly endless battle with their insurance company. The problem? Household mold.

Informative Resources

[A Beginner's Guide to Reviewing EHS Issues at Your School](#) Environmental, Health and Safety

[Advisory on Relocatable and Renovated Classrooms](#)

[Air Filters and Cleaners](#)

[An Overview of Stachybotrys](#)

[Asthma Triggers- Molds](#)

[Biological Pollutants in Your home](#) EPA

[Biological Pollutants in Your Home](#) Consumer Product Safety Commission

[Causes and Symptoms of Mold and Dust Induced Respiratory Illness](#)

[Causes and Symptoms of Mold and Dust Induced Respiratory Illness - NASD](#)

[Clear Your Home of Asthma Triggers](#)

[Controlling Asthma Triggers](#) American Lung Association

[CPSC ISSUES ALERT ABOUT CARE OF ROOM HUMIDIFIERS](#) Consumer Product Safety Commission

[Dr. Fungus: The World of Fungi](#) comprehensive resource for fungi and the infections that they cause

[Facts About Mold and Moisture](#)

[Fungi & Indoor Air Quality - E H I B - c u r r e n t . t o p i c s](#)

[Fungi \(mold\)](#)

[Health Effects of Toxin-Producing Indoor Molds in California - E H I B - c u r r e n t . t o p i c s](#)

[Health information related to fungi \(mold\) environments](#)

[Home IAQ Remedies](#)

[Improving Air Quality in Your Home](#)

[iaq](#) INDOOR ENVIRONMENTAL QUALITY GUIDANCE AND REFERENCE MANUAL

[Inaccurate Interpretation of Serology involving Toxic Molds](#)

[Indoor Air Facts - Residential Air Cleaners](#) EPA

[Indoor Air Pollution](#) American Lung Association

[Indoor Air Pollution - An Introduction for Health Professionals](#) EPA

[Indoor Air Pollution: Introduction for Health Professionals](#) Consumer Product

Safety Commission

[Indoor Air Quality Health Effects](#)

[EHS - Indoor Air Quality](#)

[Facts About Mold and Moisture](#)

[Is Indoor Mold Contamination a Threat to Health?](#)

[Managing Allergies and Asthma](#)

[Managing Asthma in the School Environment - IAQ Tools for Schools](#) EPA

[Microbiological Contamination of Residential Indoor Air](#)

[Mold and Asthma - Asthma](#)

[Mold and children](#)

[Mold and Moisture - IAQ Tools for Schools Kit](#)

[Mold, dust mites, fungi, spores, and pollen: Bioaerosols in the human environment](#)

[Mold/Fungi](#)

[Mold in Homes](#)

[Mold in My Home: What Do I Do?](#)

[Mold in My Home: What Do I Do? - California Department of Health Services](#)

[Mold in Your Home - Page 1 of 4](#)

[Molds in the Environment - 1988 NCEH Factsheet](#)

[NASD: Causes and Symptoms of Mold and Dust Induced Respiratory Illness](#)

[NYC Dept of Health - DOH Environmental Investigations - Facts About Mold](#)

[NYC Dept of Health - Environmental & Occupational Disease Epidemiology - Facts About Mold](#)

[NYC Dept of Health - Environmental & Occupational Disease Epidemiology - Guidelines on Assessment and Remediation of Fungi in Indoor Environments](#)

[OHD CEHS ESC: FACT SHEET: Household Mold](#)

[PEOSH Indoor Bioaerosols](#)

[Questions and Answers about Stachybotrys chararum and other molds](#) CDC

[Reducing Indoor Air Pollution -- Brochure](#)

[Residential Air-Cleaning Devices - A Summary of Available Information](#) EPA

[Residential Air Cleaning Devices: Types, Effectiveness and Health Impact](#)

[Residential Indoor Air Quality - Main Menu](#)

[Should you have the air ducts in your home cleaned?](#)

[SICK BUILDING SYNDROME](#)

[Sick Building Syndrom - EPA Fact Sheet](#) EPA

[Stachybotrys chartarum \(atra\): A mold that may be found in water-damaged homes](#)

[Stachybotrys Guide](#)

[Targeting Indoor Air Pollution - EPA's Approach and Progress](#) EPA

[The Inside Story - A Guide to Indoor Air Quality](#) EPA

[The Inside Story: A Guide to Indoor Air Quality](#) Consumer Product Safety

Commission

[The Sci.Engr.Heat-Vent-AC F.A.Q. - faq1.htm](#) Indoor Air Quality

[Use and Care of Home Humidifiers](#) EPA

Downloadable files:

[Advisory on Relocatable and Renovated Classrooms](#) [pdf file] This document summarizes the indoor environmental quality (IEQ) considerations regarding the purchase/lease of relocatable classrooms (or "portables") and the contracting for renovation of existing space. It is provided to advise school facility managers how to minimize potential health impacts from IEQ problems with cost-effective practices. The key IEQ concerns address design, construction/installation, first-use, and maintenance; some of the issues apply both to "portables" and renovated classrooms. Related documents where further technical details may be found are also listed.

[Bioaerosols and Green-Waste Composting in California](#) [doc file] Review of medical literature regarding biological agents and their metabolic or degradation products that are produced during the composting of yard waste (grass clippings, shrubbery, leaves, etc.). Common types, sources, exposure levels and potential health effects of biological agents such as *Aspergillus fumigatus*, bacterial endotoxins and thermophilic actinomycetes are described. The occurrence of these bioaerosols in the natural environment and at large municipal composting facilities is discussed.

[Clear Your Home of Asthma Triggers: Your Children Will Breathe Easier](#) [pdf file] Learn about simple steps you can take to reduce the five most common asthma triggers in your home to improve your and/or your children's asthma. This brochure educates readers about environmental asthma triggers, and highlights the importance of controlling them in order to avoid provoking asthma episodes. It describes five asthma triggers, and suggests simple measures to help curb their presence in the home. The brochure is suitable for a broad audience, with a particular emphasis on parents and care givers of asthmatics. EPA Document Number 402-F-99-005, July 1999.

[Controlling Mold Growth in the Home](#) [pdf file]

[Fungal Contamination in Public Buildings: A Guide to Recognition and Management](#) [pdf file] * 88 pages from Health Canada

[Improving Air Quality in Your Home](#) [pdf file] Research has shown that the quality of indoor air can be worse than that of outdoor air. Many homes are built or remodeled more tightly, without regard to the factors that assure fresh and healthy indoor air. Our homes today contain many furnishings, appliances and products that can affect indoor air quality.

[Indoor Air Pollution](#) [doc file] American Lung Association

[Mold - How to Make Your Home Mold Free and Keep it That Way](#) [pdf file]

[Mold in My Home: What Do I Do?](#) [pdf file]

[Reducing Bacteria in Clothing and Textiles \(Flood Fact Sheet\)](#) [pdf file] Clothing and textiles that have been in contact with floodwater need to be sanitized because floodwater may be contaminated with sewage wastes. Bacteria from floodwater can remain alive on fabrics for a long time. A disinfectant destroys harmful bacteria.

[Respiratory Risks for Farmers: A Guide for Doctors and Health Care Professionals](#) [pdf file]

[Rid Your Home of Mildew](#) [pdf file]

[Stachybotrys chartarum \(atra\) — a mold that may be found in water-damaged homes](#) [doc file] A fact sheet designed for general audiences describing growth characteristics of the mold, Stachybotrys chartarum. Also describes possible health effects from exposure to this mold, methods to prevent occurrence and recommendations for clean-up methods.

[Stachybotrys chartarum: The Toxic Indoor Mold](#) [pdf file]

How to protect your home from unhealthful molds

- Keep water out. Fix any leaks within 24 hours.
- Be on the lookout for discoloration of walls, ceiling, or anything made of wood or paper. Mold growth can be almost any color: white, black, green, fluorescent.
- Look behind cabinets or pictures on cold outside walls, where condensation can occur. Keep furniture away from outside walls.
- Check around air handling units (air conditioners, furnaces) for stagnant water. Keep these units serviced with regular cleaning of ducts and air filters.
- Be aware of odors. Mildew has been described as pungent, or "aromatic."
- Know the symptoms of mold-related illness, which can range from chronic sinus infections and asthma to nosebleeds, extreme fatigue, severe headaches, dizziness, rashes and central nervous system problems. Do the symptoms get better when you go on vacation and worse when you come home?
- To get your house checked for mold, contact the American Industrial Hygiene Association for a referral to a certified industrial hygienist (703-849-8888, or <http://www.aiha.org/>). Testing costs \$200-\$500.

[from [USA WEEKEND](#)]

To prevent or eliminate molds, humidity should be kept as low as possible. Central air-conditioning is the most effective way of controlling humidity, however vent openings are prime locations for the buildup of molds, so be sure to keep them clean. Use special filters to help trap airborne allergens and clear mold spores from the air. Books, leather products, wood paneling and wallpaper paste all support mold growth and should be avoided or treated with appropriate mold-killing solutions.

- It is particularly important to clear the sleeping environment of allergens because symptoms tend to worsen at night.
- Wash all bedding blankets, sheets, pillowcases and mattress pad in hot water weekly to kill dust mites. Avoid wool and down covers. Comforters should be

washed every two weeks or encased in allergen-impermeable covers. Avoid feather comforters and pillows and, if possible, remove carpeting, which is a major hiding place for dust mites.

- Keep surfaces smooth and uncluttered with few small objects such as books, knickknacks, CDs, tapes and stuffed animals which can all collect dust. Place them in drawers if possible.
- Check the bed for possible allergens. Fabrics – one boy was allergic to his polyester blanket– detergents and chlorine bleaches are possible irritants. One man was allergic to electricity and had severe problems until he removed clocks, lights and other electrical devices near his bed.
- Animals in the bedroom may have left urine, saliva and hair. Perfumes and potpourri may cause symptoms.
- Clean visible mold from walls and ceilings.
- Use an exhaust fan or open windows to remove humidity after showering.
- Use a squeegee to remove excess water from the shower stall, tub and tiles.
- Wash shower curtain, bathroom tiles, shower stall, tub and toilet tank with mold-killing, mold-preventing solutions.
- Do not carpet the bathroom.
- Although they may appear clean, damp towels rapidly– within 30 minutes– acquire colonies of bacteria and other living organisms. Wash towels weekly, if not more often.
- Air Filters The most effective filter is a high efficient particulate air (HEPA) filter. HEPA systems require no maintenance and their efficacy only increases with use.
- Vacuum Cleaners It is important to know if your vacuum really eliminates dirt and dust from your home or merely recirculates tiny particles. These particles can linger in the air for up to an hour where they continue to provoke allergic and asthmatic reactions. Vacuums are available with HEPA filters that can trap particles as small as .3 microns, far smaller than a hair or dust mite.

from How to Allergy-Proof your Home

Links

[Allergy and Asthma Network / Mothers of Asthmatics Web Site](#)
[Allergy, Asthma, Immunology of Rochester](#)
[American Academy of Allergy, Asthma & Immunology Online](#)
[American Indoor Air Quality Council - IAQ Association](#)
[American Public Health Association - APHA](#)
[American Lung Association -- Air Quality -- Indoor Air Quality Index](#)
[Association of Occupational and Environmental Clinics](#)
[Asthma and Allergy Foundation of America \(AAFA\)](#)
[Asthma and Indoor Environments](#)
[Asthma In America: A Landmark Survey](#)
[California Indoor Air Quality Program](#)
[EPA's Indoor Air Quality \(IAQ\) Home Page](#)
[Fungal Research Group, Inc. \(FRG\)](#)
[Healthy Indoor Air for America's Homes; Indoor Air Quality](#)
[Homeowners Against Deficient Dwellings HADD Sick Homes with Mold *****](#)
[IAQ Tools for Schools Kit](#)
[Indoor Air Quality](#)
[Indoor Air Quality OSHA](#)
[Indoor Air Quality Branch Texas Dept. of Health](#)
[Indoor Air Quality \(IAQ\) - Hotlines and Resources](#)
[Indoor Air Top Page](#)
[Indoor Fungi Resources - DEHS, UMN](#)
[National Jewish Medical and Research Center #1 Respiratory Hospital in America](#)

[Osh.Net Newsletter Article 101900 Summary of Presentation on Mold](#)

[US EPA Office of Air Quality Planning & Standards - TTNWeb Home Page](#)
