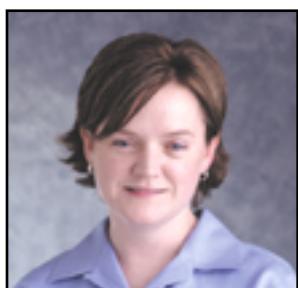


# STRUCTURAL BUILDING COMPONENTS MAGAZINE

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## WTCA QC & Minimizing Mold by Brigit Frank

The case summary shown on the right, from the Centers for Disease Control (CDC), rationalizes some homeowner reactions to recent media coverage surrounding [toxic] mold. It is a legitimate fear. It can cause physical harm to sensitive people who are exposed to it. But, the type and amount of harm are uncertain.

Compare the story of the babies in Cleveland, with Erin Brockovich's complaints of "exhaustion, swelling and rashes" because of her exposure to the mold found in her million-dollar home. Obviously, Brockovich's symptoms are not life threatening, but she is suing her builder for faulty construction because of the problems that she and her family have allegedly suffered due to mold.

The vast difference between these two incidents underscores the main problem that the medical community and the courts are having with molds, "...Molds may cause health symptoms that are nonspecific" (CDC, 2000). These nonspecific complaints, everything from a runny nose to lung disease, are making it difficult to determine if mold is the cause of these illnesses and if anyone should be held accountable for its presence.

### WHAT IS MOLD?

"Molds are microscopic fungi that live on plant or animal matter. No one knows how many species of fungi exist but estimates range from tens of thousands to perhaps 300,000 or more. Most are filamentous organisms and the production of spores is characteristic of fungi in general. These spores can be air-, water- or insect-borne" (CDC, 1999).

In homes, the air-borne spores produced by molds are the issue. Residents of homes containing mold breathe these air-borne spores, and if they are susceptible, they may begin experiencing a number of allergy symptoms.

There is a growing concern among homeowners and health officials that, in addition to allergy symptoms, these spores could cause long-term damage or even death. However, this connection has not yet been determined. One important fact needs to be established first: Are some strains

"In November 1994, private physicians and public health officials in Cleveland, OH, and the CDC reported a cluster of eight cases of acute pulmonary hemorrhage/hemosiderosis that had occurred...among infants in one area of the city... All infants lived within seven contiguous postal tracts in eastern metropolitan Cleveland. Pulmonary hemorrhages recurred in five of the infants after they returned to their homes shortly after hospital discharge; one infant died...findings documented an association between acute pulmonary hemorrhage/hemosiderosis in this cluster of cases and mold growth in their water-damaged homes." (CDC, 1997)

of mold more dangerous to people than others?

One strain of mold that is getting a great deal of attention recently is *Stachybotrys chartarum* (also known as *Stachybotrys atra*). It is the leading suspect in pulmonary hemorrhage in infants, as well as a number of other acute health problems such as brain damage. The health agencies caution that the association between *Stachybotrys* and these conditions "have not been proved," and recommends further studies.

While medical science tries to establish links between symptoms and strains of molds, the courts are hearing a growing number of cases between homeowners and builders. Law firms posting web sites like [www.toxic-mold-news.com](http://www.toxic-mold-news.com), that describe the danger of mold, are counting on an increase in the number of suits.

In many cases, litigation is centered on deciding who should bear the costs of professional mold remediation. This is proving to be extremely expensive. An article in the Chicago Tribune estimates that remediation may be more expensive than asbestos abatement. This article sites cases such as a high school in St. Charles, IL where testing alone has run to nearly \$750,000, and a 120,000 square foot County Courthouse where remediation will cost \$10.5 million (\$1.5 million more than the original cost of the building) (Spencer, 2001).

A decision by a Texas court may indicate the direction of future judgments. A family was awarded \$32 million in a suit against their insurance company. The family claimed that mold in their home made them ill and sued their insurance company for not paying them enough money to repair water leaks in their basement. The insurance company plans to appeal the court's decision.

The general public is already beginning to fear the worst. The popular media has produced stories about the potential health hazards and large court judgments and homeowners are anxious to learn if they or their homes are in any danger. This is creating new concerns for the component industry.

## WHAT COMPONENT MANUFACTURERS SHOULD KNOW

Mold is everywhere. The thought that a wood product, or any organic product, is not susceptible to mold is not realistic. Many building products, such as paper, cardboard, ceiling tiles, gypsum board, drywall, insulation, carpet and wallpaper, are excellent hosts for molds because they are composed of cellulose materials.

Wood, like these other building materials, is vulnerable to many different types of mold growth. "A very common type that surfaces [on lumber] in the summer months is pink mold, which is due to improper kiln drying" (Layman, 2001). Moisture is the primary factor in controlling the growth of any type of mold. Pink mold, for instance, may be found in wood with a moisture content of 23 to 25 percent. This level of moisture can also affect the structural properties of the lumber.

To minimize any adverse effects from mold, WTCA recommends following the guidelines of its *WTCA QC* program. The lumber inspection portion of the QC program can be used to ensure that

incoming lumber is monitored for moisture content. Documenting lumber information will help provide the feedback that is needed to better understand moisture and any related mold issues.

Because lumber supply purchases are not part of the actual manufacturing process, lumber inspection is not a required step in the quality control process. It is, however, a recommended step. *WTCA QC* advises component manufacturers to inspect lumber, before using it in a product, for a number of physical attributes, including moisture content, which the program recommends is at no higher than 19 percent.

The *WTCA QC* program, as well as WTCA's newest installment in its Truss Technology in Building series, "Facts About Mold," will help component manufacturers document that a quality product is being created in a regulated atmosphere. Health care officials and the courts are working to answer the questions about mold and its affects on humans. Until these questions are answered, it may be better to stress precaution than to have to provide a cure.

If you would like more information about WTCA QC or the new TTB that discusses mold, please visit our web site at [www.woodtruss.com](http://www.woodtruss.com). Another good source for industry updates on mold issues is [www.moldupdate.com](http://www.moldupdate.com).

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