Article in the Washington Post (January 14, 2013)

Mold growing in flooded basements or other damp spots can cause allergic reactions

Written by Jill U. Adams (includes quotes and comments from Robert Wood, Chief of Pediatric Allergy and Immunology at the Johns Hopkins Children's Center in Baltimore, Maryland. Robert Wood is a mold naysayer/denier.)

January 14, 2013

For anyone who has dealt with a flooded basement — a not infrequent occurrence in the Washington area, even before Hurricane Sandy — pumping the water out is just the beginning. The lingering problem can have serious health repercussions: mold.

"Even with one inch of water, there's enough humidity inside that mold spores can attach to surfaces and begin to grow. Drywall, carpeting, almost anything indoors can have mold growing on it," says Cristina Schulingkamp, director of the indoor air quality program at the Environmental Protection Agency's Philadelphia office. That office has been dealing with the aftereffects of Sandy, which caused billions of dollars in damage along the East Coast in October.

Mold can harm health, most commonly by affecting people who are allergic to it. Mold spores can irritate eyes, nose, skin and airways. The way it happens is this: Mold starts to grow in a damp corner and eventually releases loads of spores tiny enough to float in the air. A person with mold allergies inhales the spores and is soon rubbing itchy eyes and sneezing. If that person is predisposed to asthma, he may start wheezing or have a full-blown asthma attack.

In people with compromised respiratory function — such as those with chronic obstructive pulmonary disease or cystic fibrosis — or immune systems that have been compromised by chemotherapy or AIDS, mold may cause more-severe symptoms, such as a pneumonia-like inflammation of the lungs.

About 10 to 20 percent of the population worldwide is allergic to mold. "So it's relatively common," says Robert Wood, chief of pediatric allergy and immunology at the Johns Hopkins Children's Center in Baltimore. By comparison, he says, the percentages affected by tree pollen and dust mite allergies are more like 25 to 35 percent.

Perhaps a musty smell in your basement conjures up memories of news reports about toxic molds that force people to move out of their homes.

It's true that molds can produce mycotoxins that include a hugely diverse group of chemicals, including penicillin and the poisons in some mushrooms. And those toxins can be life-threatening when ingested, such as by eating moldy food or poisonous mushrooms. But there's no strong evidence for severely toxic

effects in humans from inhaling or touching mold, according to the Centers for Disease Control and Prevention.

In the early 1990s, reports of infants who were bleeding from their lungs were linked to housing contaminated with a toxin-producing mold, but no one could prove that this was the causal agent. Further, Wood says, it's unlikely that someone could inhale enough to receive a toxic dose.

Mold growing out of sight — inside walls, for instance — can still release spores into room air. "The very small mold spores move through cracks, behind baseboards . . . areas like that," Schulingkamp says.

Mold lives outdoors, too, and there's always a little mold everywhere, according to the CDC. So people allergic to mold can suffer from spores that originated from molds growing outside even when they're indoors. Following the advice for pollen allergies can help: Limit time outdoors, keep windows closed and take allergy meds as needed.

Mold may be the quintessential "usual suspect" when things get wet, but other perpetrators of sneeze, wheeze and cough may be to blame. "Other indoor allergens, such as dust mites, also thrive in humid environments," Wood says — as do a host of potential bacterial villains.

What can you do to avoid mold problems? If your basement floods, the most important thing is quick action — drying out damp areas in 24 to 48 hours, according the EPA's mold guide. The longer mold gets warm, humid conditions, the more real estate it can take over — and the more spores it can eventually release into your home.

Clean up any visible mold by scrubbing it off surfaces with detergent and water, and keep your home dry with a dehumidifier to prevent it from coming back. It's a good idea to wear protective gloves and safety glasses while tackling mold cleanup.

You may have to replace drywall, carpets and upholstered furniture that have become moldy. "A sofa is very hard to dry internally," Schulingkamp says.

Meanwhile, if you find you're wheezing or sneezing and coughing a lot and have itchy eyes and a runny nose when you spend time in your basement or areas were mold might be growing unseen, see your doctor. An allergist can figure out what you're allergic to: mold or something else, such as pollen or dust mites.

By no means should you assume that your house will dry out by itself and that the mold will vanish. In 2005, about two months after Hurricane Katrina (and one month after Hurricane Rita), a team of researchers from CDC went to New Orleans to survey water-damaged homes and assess mold exposure. They inspected 112 occupied homes and found heavy mold — defined as covering more than half of an interior wall — in 46 percent of them.

If you aren't able to dry out a flooded home within a couple of days, you might want to seek help from a professional experienced in mold cleanup.

 $Source: \underline{https://www.washingtonpost.com/national/health-science/mold-growing-in-flooded-basements-\underline{or-other-damp-spots-can-cause-allergic-reactions/2013/01/12/d3fd7218-43a9-11e2-8e70-\underline{e1993528222d_story.html}$