

# Indiana IAQ

November—December Issue 2012

## About Indiana IAQ:

A new kind of newsletter that addresses the concerns of everyone interested in Indoor Air Quality (IAQ) in Indiana. From the many questions and concerns received this newsletter and the ones to follow are developed from specific concerns. Information is collected and applied this way to the articles published.

Who can write in? Anyone! Contractors, mitigation technicians, restoration and remediation technicians, real estate professionals, banks, doctors, lawyers, insurance professionals, investors, anyone with an interest in IAQ.

To submit an idea for an article, write to:

IndianaIAQ@solutionsiec.com.

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## Is This A Water-damage Or A Mold Contamination Issue?



A lot of people take it for granted that if it is associated with a water leak or flood that it must be a water-damage, so they call a restoration company or use their insurance company's restoration company to perform a water "drying and clean up". The problems with that are many, but let me start by saying this: There are standards of care for water-damage and mold remediation - and they aren't the same thing! In fact, in the IICRC S500 Standard & Reference Guide for Professional Water Damage Restoration it says, "for situations involving visible or suspect mold, refer to IICRC S520 Standard and Reference Guide for Professional Mold Remediation", meaning the standard writing body for water-damage restoration says that it is a mold remediation project - not a water-damage project. Before I go on, allow me to emphasize their language: "visible or suspect mold"; this is an important note. If you have someone with no training in mold assessment (qualified like an industrial hygienist or indoor environmental consultant) and all you have are water-damage restoration technicians then you may not be getting the proper work performed.

This really emphasizes the need for building owners, managers, maintenance professionals and others to be prepared to handle losses as they arise, and do so properly. One of the most important things you can do to help prepare is build a team of qualified professionals and develop an emergency response plan. Train your family and co-workers in this plan and make sure that you have an insurance policy that coincides with that plan (not the other way around). In order to do this understand the necessary components to your team: You are the most important; anyone in your workplace or home that will be working with you to assure your plan will be followed through; your insurance company (like I said you want one that fits your plan not the other way around); an industrial hygienist or indoor environmental consultant and/or safety and health professional; a water-damage restoration company; and, a mold remediation company (keeping things on the subject at hand). ... (continued on page 2)

## Caring For Sick Occupants of Moldy Structures

Toxicity of mold is discussed in so many different ways, with people looking at various by-products of mold production, like microbial Volatile Organic Compounds (mVOCs), spores and mycotoxins for examples, and different types of building

disasters, like floods for example; many making extrapolated conclusions on experiences of occupants without doctors' review or scientific evidence to support claims. But, does that mean we can dismiss the symp-

toms of poor health by occupants when those same occupants do not experience ill health in other structures?



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## Fungal Meningitis Outbreak is Considered Uncharted Medical Territory

The fungal meningitis outbreak infecting those who have received tainted injections for back pain is being classified as uncharted medical territory, according to NBC News. This type of fungus has never before caused meningitis, making it hard for doctors to diagnose it.

Researchers have determined that black mold called *Exserohilum rostratum*, commonly found in dirt and grass, is responsible for this fungal meningitis outbreak that has infected over 300 people and has killed 24.

Bacterial and viral forms of meningitis have obvious symptoms that appear quickly, but fungal meningitis forms very slowly and is difficult to detect and diagnose. Treatment options are also limited for fungal men-

ingitis because there are not many antifungal drugs that can be absorbed into the central nervous system. Finally, fungal cells and human cells have many similarities, making it difficult for medicine to attack fungal cells without also affecting human cells.

Scientists believe the black mold is infecting healthy individuals because steroid injections near the spine reduce swelling, which the immune system uses as a defense against contamination. Then the mold is able to grow undetected until enough builds up and creates a small hole in the spinal canal. Once the mold reaches the fluid inside the spinal canal, it has a direct pathway to the brain.

A new treatment has been implemented since the outbreak was first discovered using a drug named voriconazole. This drug is

said to have fewer side effects than the original treatment.

"Doctors have made it clear that treating the infection before the fungus reaches the spinal canal is critical; therefore anyone experiencing headache, dizziness, fever, slurred speech, or loss of balance after receiving an injection should see a health care professional," states Diane Miszkowski, MPH.

When first results are critical you can count on SOLUTIONS Indoor Environmental Consulting and EMSL Analytical to offer comprehensive environmental analysis of contamination.

To learn more visit:

[www.emsl.com](http://www.emsl.com) or [www.solutionsiec.com](http://www.solutionsiec.com)

## Is This A Water-damage Or A Mold Contamination Issue?

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... Once you get this team together (and it is important that they get to know one another and are willing to work with you and each other on your plan) have them understand your goals in developing your plan and have them help you generate your plan.

Once you have a plan in place responding to any loss will be quicker, less costly (because you're responding quicker and in proper methodology), safer in its processes, and involve less stress (because you would have already established a plan that you trust rather than relying on others you don't know or trust).

### Knowing Where To Draw The Line:

Suspicion of mold can be broad and hinder a lot of water-damage processes. Let's touch on that now.

In the Institute of Inspection, Cleaning and Restoration Certification's (IICRC) S520: Standard and Reference Guide for Professional Mold Remediation there are definitions, called Conditions, for a damaged indoor environment as it relates to

mold:

\* Condition 1: This is where the fungal ecology is normal. In such a case as this mold remediation is not necessary. Now, you may ask what this means for water-damage technicians who suspect mold where there is no measurable or appreciable mold problem. An "independent Indoor Environmental Professional" (IICRC S500 and S520) should determine the Condition of the environment and, where that environment is cleared of contamination, aid the water-damage technicians determine a proper response to the water-damaged environment. This will assure you that nothing is overlooked (besides just being worried about mold) and that your structure is safely restored from your water-damage.

\* Condition 2: This is where there are measurable increases in the fungal ecology. This could mean there are abnormal accumulations of spores and hyphal fragments on surface materials and/or elevations or moisture indicator organisms in the air - whether

"active or dormant, visible or hidden" (IICRC S520).

\* Condition 3: This is where actual growth is seen and spores are abnormal. This actual growth "is active or dormant, visible or hidden".

Notice that the two Conditions that represent a problem include mold that is active or not, visible or hidden. So, (1) it doesn't matter if the mold is living or not, producing spores or not, or capable of either/or, nor (2) does it matter if you can see it or not, whether it is in a wall cavity or out in the open on the ceiling fan or building materials. This creates an issue for technicians, building owners and managers, maintenance teams, and others who do not possess the aid of an industrial hygienist, indoor environmental consultant, or other safety and health professional (what the IICRC calls an "independent Indoor Environmental Professional"). Unique to their training and various other resources, these safety and health professionals operate to define the type and level of ... (continued on page 4)

## Caring For Sick Occupants Of Moldy Structures

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“Absolutely not!” answers Jason Yost, of SOLUTIONS Indoor Environmental Consulting. “While there may not be clear evidence in research or by a doctor’s review, that occupant’s symptoms are from mold, when we know that ecology is abnormal, and we should respond in a way that remedies that abnormality.”

“That doesn’t mean the symptoms will always go away,” Jason continues. “The symptoms may very well be from other sources, but the abnormal [mold] ecology must be addressed as this is an issue of concern...”

“Mold exposures can, regardless of the organism’s viability, trigger asthma and allergy symptoms, so regardless of its toxicity or infectious abilities, abnormalities in fungal ecologies should always be remedied.”

But how this is done is not always made clear to home and building owners after floods or other water-damage situations, and assumptions are made as to who should do the cleaning. “That is why I support proactive team-building” Jason states. “Having a team and a plan in place to assure your response to Sick Building Syndrome or a Building Related Illness or any other suspicion of mold contamination allows building owners, managers, or safety and health professionals to respond in a way that is responsible, efficient and effective, without assumptions to any of the building occupants’ sensitivities, symptoms or potential for exposures... Part of this team and plan should always include a safety and health professional—independent your restoration and remediation companies.”

Why? “There are several reasons...” Jason explains. “First. You want someone with no vested interest in remediation or restoration; otherwise, you may fall victim to opportunistic sales. Second. You need someone who can gather adequate information from occupants and use that information to respond appropriately to their health and safety needs; failure to do this can result in further exposures to current occupants as well as expand exposures to future occupants (like restoration contractors or insurance adjusters). Third. You need someone independent of your remediation and restoration company to confirm the work has removed the contamination before you invest in reconstruction and re-occupy; otherwise, how do you trust the word of the contractor testing their own work?”

That is why building your team and developing your plan should begin with understanding the facts and to whom you can get honest answers to situations for the generation of your plan. SOLUTIONS Indoor Environmental Consulting is that kind of source.

- No conflict of interest practices
- Background in toxicology, industrial hygiene management, occupational safety and health, building science, environmental assessments and remediation supervision, and more
- Peer-reviewed, board-awarded, Council-certified experience, training, testing and more that spans more than twenty years in the industry

To learn more visit SOLUTIONS Indoor Environmental Consulting online at [www.solutionsiec.com](http://www.solutionsiec.com) or call toll-free (877) 624-7185 extension 1 or write to [consultants@solutionsiec.com](mailto:consultants@solutionsiec.com).

“You don’t have to take chances with your health and safety anymore,” Jason explains. “We’re here to help empower you with the solutions you need to be prepared and respond effectively to situations as they arise.”





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Indoor Environmental Consulting

*"Don't let problems with poor indoor air quality take control of your life. Empower yourself with SOLUTIONS—Indoor Environmental Consulting—today!"*

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SOLUTIONS IEC is a truly experienced business that, with over twenty years of mitigation, restoration, remediation and hygiene practices, can assist you in determining the Category and Condition of the damaged structure; develop a protocol that is real and specific to the structure; and can provide expertise beyond just an inspector's role. Our staff of professionals have been recognized in both indoor environmental consulting (Council-certified Indoor Environmental Consultants) and indoor environmental remediation supervision (Council-certified Microbial, Moisture, & Environmental Remediation Supervisors) - holding four of the most prestigious awards in the industry today! Don't let poor IAQ take control of your life. Empower yourself with SOLUTIONS—Indoor Environmental Consulting—today!

Serving the Indiana and Illinois states as well as the St. Louis, MO areas!



## Is This A Water-damage Or A Mold Contamination Issue?

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... contamination present, generate protocols for safe and effective remediation and restoration, consult all materially interested parties on claims, verify the successes of remediation efforts, and much more. This is why I started this discussion by describing for you the types of professionals that you'll want on your emergency response team.

### Who are these Indoor Environmental Professionals?

The first thing I would point to is that they are "independent" of the water-damage and/or mold remediation companies (IICRC S500 & S520). The reason for this distinction is to protect consumers from conflict-of-interest practices; after all, you wouldn't be able to trust an inspector who had a restoration or remediation job to sale or a remediation/restoration company who tested their own work; would you?

The IICRC came up with this term, "Indoor Environmental Professional", in order to begin a discussion of qualifications for such professionals. What they say is that these professionals should have "the skills needed to assess other microorganisms [besides just mold], specifically those organisms associated with sewage backflow, mud slides and flooding" furthering this to include situations where (below points are a quotation from the S500 Standard & Reference Guide for Professional Water Damage Restoration):

- \* occupants are high risk individuals;
- \* a public health issue exists;
- \* there is a risk of adverse effects on worker or occupant health;
- \* occupants express a need to determine the identity of a suspected contaminant;
- \* contaminants are believed to have been aerosolized; or

\* there is a need to determine, rather than assuming, that the water actually contains microbial contamination.

\* Also in cases where "post-restoration verification" is requested or required; and

\* "post-remediation verification after microbial cleanup".

If you don't have a plan or team in place, contact SOLUTIONS Indoor Environmental Consulting, and we'll be glad to help. SOLUTIONS Indoor Environmental Consulting is an environmental, safety & health consulting company. Our mission is to empower every client with the knowledge and ability to control and manage their indoor environments for optimum safety and health, by providing affordable testing and consulting services.

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