ERMI: Should homeowners be taking their own ERMI samples?

I recently was introduced to a client that has received instructions on how to take their own ERMI tests. Based on those tests, a protocol was written by a person who never visited the home... As a matter of fact, the person writing the protocol is 3,000 miles away!

Thoughts?

22 days ago

John Ingram • This is not professional or a good practice. Could lead to problems and false sense of security.

21 days ago• Unlike• Like

Cassidy Kuchenbecker, MS • You know, if a person is hell-bent on taking do-it-yourself sampling, I'd rather see them do ERMI than a Petri dish. But, naturally it goes without saying that an actual assessment is needed if there person has actual complaints or concerns beyond just being curious.

21 days ago• Unlike• Like
Agreed, purpose of sampling is critical information missing.

Hi Blaine –

As you know the ERMI is an interpretive model, not a sampling or an assessment model. That is, it is rather like submitting a list of names and body weights to a statistician and asking for descriptive statistics for the sample group. However, no matter how good the statistician may be, the data set CANNOT, cannot, cannot, cannot, cannot, answer the question being posed which is: “Is Johnny overweight?” Since virtually nothing is known about Johnny other than his weight was one of those submitted in the data set.

The ERMI is merely an interpretive tool that cannot be used outside the context of the data collected or submitted, and CANNOT, cannot, cannot, cannot, cannot, be used to answer the question “Does this house have a mould problem?” Since nothing within the sample being provided describes the house being sampled, and ten samples thus collected from the exact same house, may have ten different ERMI scores.

Don’t get me wrong – I like Steve Vesper, he is a nice guy and good researcher, but the ERMI remains a marketing tool, not a serious investigative tool, (as it is usually deployed). An ERMI score is like the famous “Magic Eight Ball (®Mattel Inc.) It’s a lot of fun, but nobody should take it seriously, and it should NEVER be used for a legitimate decision making process.

ERMI analyses, like Petri dishes, or home “radon” kits are fun, but not science.

Cheers!
Caoimhín P. Connell
Forensic Industrial Hygienist
www.forensic-applications.com

(The opinions expressed here are exclusively my personal opinions and do not necessarily reflect my professional opinion, opinion of my employer, agency, peers, or professional affiliates. The above post is for information only and does not reflect professional advice and is not intended to supercede the professional advice of others.)

AMDG

21 days ago

BTW –

I went to the web-based Magic Eight-Ball (http://8ball.tridelphia.net) and posed the following question: “Is the ERMI method valid?” And the “Magic Eight Ball” replied “You may rely on it.” So, I stand corrected, and considering that most people who are sampling for moulds have as much confidence in their data, you can ignore my previous post and believe the Eight-Ball.
Cheers!
Caoimhin

21 days ago

Blaine Parry • I have got to get one of those 8-ball prediction devices!

Seriously - the person I reference above has been ill for over 10 years and it is believed that she may have biological markers or something that make her more susceptible to microbial related sickness - MCS I think? Bio toxin illness or something I think she said?

Anyway, she has now connected with a couple of guys that very well may be blazing the trail so to speak but I am not so sure... She was instructed to perform her own ERMI tests, send the stuff in for analysis and based on those results - an extensive 15 page protocol was written by a person over 3,000 miles away! Without ever setting foot in the property!

Besides being ethically wrong in my opinion - would any member of this group approve of a method like this?

21 days ago • Unlike • Like

Caoimhin P. Connell • Good morning, Blain –

The short answer is “No.”

The longer answer is this: If the person is ill, then a legitimate investigation should be performed that doesn’t involve the two individuals who are involved since one of them is a known kook, and the other is mostly rejected by his medical colleagues, and the only trail they’re are blazing is into the pocketbooks of gullible victims. Neither of these individuals carries a lot of credibility with legitimate peers.

MCS is not a recognized disease, it is psychological “chemophobia” disorder that is used by the unscrupulous consultant as part of a long “autointoxication syndrome” whereby the “consultant” (the Savior), validates the fears of the “Victim.” MCS is the diagnosis of choice when nothing else is scaring the mark sufficiently to get her to release her money. MCS can be found under a long list of names such as “Idiopathic Environmental Disease” “Environmental Intolerance Disorder” or (apparently, now) “Bio toxin illness.”

The scam artists will always be there. Fortunately, legitimate fact-based practitioners will also be there to do battle.

Cheers,
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AMDG

21 days ago

Dennis Francoeur, Jr. CIH CSP • We had a case out here where a student's family required a school district to ERMI test the classrooms before transferring the student from one school to another. But once it was requested that the parents also test the student's home, the request for school testing was dropped.

21 days ago• Unlike• Like

Rob Rottersman • "Should homeowners be taking their own ERMI samples?"
No

20 days ago• Unlike• Like

Cassidy Kuchenbecker, MS • I have to nearly disagree with Caiomhin's comments regarding both MCS and general inflammation being induced by exposure to damp and water-damaged buildings.

Caiomhin, I know your ability to sustain long on-line discussions. I won't be continuing this discussion past this message. I just wanted to make sure that any newer people to IH or IAQ don't stumble on this thread and read only one side of the coin.

There are plenty of credible consultants and researchers that believe MCS is related to the nervous system and it has both organic and phycosomatic components. In my own experience, the key is determining if a person's phycosomatic symptoms far outweigh the organic symptoms or vice versa.
As for the idea that uncontrolled inflammation can be induced in genetically susceptible people in water-damaged, and damp buildings, the evidence is extremely strong. Do most people have these reactions? No. I only see a couple people out of a few hundred a year that actually have these symptoms. I have also personally witnessed several people go through the treatment protocols with local physicians and become better.

My opinions come from my professional work and research. I completed several years of research into this topic for a Master's thesis and have the correct collegiate degrees in microbiology and immunology to discuss a strong opinion on the topic.

20 days ago • Unlike • Like

Caoimhín P. Connell • Good morning, Mr. Kuchenbecker –

My statement was "MCS is not a recognized disease." This is an objectively factual statement. If I’m incorrect, and you have a newer version of the ICD9 Classification please provide a reference to the contrary. I agree that many people “believe” in MCS – however, that does not make it a recognized disease. MCS is merely recognized as an emotional disorder associated with irrational fear of moulds, or chemicals, or EMFs or … fill in the blank. MCS has NEVER been shown to be associated with a clinical exposure, and in fact, quite the contrary has been demonstrated where a person’s reaction is based exclusively on their belief of exposure.

Regarding your comments to some allusion about general inflammation being induced by exposure to damp and water-damaged buildings, I have no idea what you are referring to since you haven’t provided any information.

However, for my part, my opinions are exactly the same as those found in the IOM 2004 report (Institute of Medicine (IOM), National Academy of Sciences Damp Indoor Spaces and Health, Washington DC, IOM, 2004) as well as the World Health Organization 2009 report (Damp, Indoor Spaces and Health World Health Organization Guidelines For Indoor Air Quality Dampness And Mould (ISBN 798 92 890 4168 3), 2009 WHO Regional Office for Europe, Scherfigsvej 8, DK-2100 Copenhagen Ø, Denmark) and indeed the full body of science. Apparently you think the IOM and WHO and others are incorrect, but you haven’t explained how or why and since you said you won’t discuss the matter, I guess we will never know what you mean to accomplish with your “hit-ad-run” post.

Cheers!
Caoimhín P. Connell
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AMDG

20 days ago
Mike Brown • Wouldn't Tarot cards be a lot cheaper to the average homeowner than do-it-yourself ERMI samples? And they could also be used to decide whom to vote for and where to invest savings, too. Not as profitable for the Marketeers, though.

20 days ago • Unlike • Like

• Reply privately

Greg Weatherman • How many cultures or spore traps can show you high levels of A. penicilloides which only grows in humidity rather than damp conditions? It takes 2 weeks to grow in DG-18 and the lab needs to be really good to separate this from A. restricturs which also needs the same nutrient agar and time. It also grows under the same conditions if you read John Pitt. I see Caoimhin is still a trying to get business as a professional contrarian. Answer to question in reverse: could there be a humidity problem from lack of AC and/or a crawlspacone? Maybe there is more information to take more samples if necessary. Maybe two other companies preceded me and I read reports and estimates so I could ask some pointed questions.

Maybe someone 3,000 miles away needs east coast help due to professional contrarians muddying the waters. Maybe the ERMI taken by a customer gives the investigator more information to go hunting for sources. I have been working with PCR sampling since 2004. It and the ERMI score are not perfect but, they do have less warts on their pointing finger. Maybe my remediation methods have shown success according to blood biomarker testing that does pass muster in court. Maybe Dr. Shoemaker believes in results more than credentials. Maybe other doctors do the same.

HLA genotyping has been used to see risk of death for organ transplant patient for certain drugs derived from microbial sources more than 2 decades ago (plural if your counting). As a CIH, how much training have you had with neurotoxicology including hormone and T cell dysfunction? I guess you may have missed the memo on personalized medicine vs. classical medicine while ignoring genetic susceptibility.

I take it as a badge of honor to be insulted by Caoimhin P. Connell. It really is the golden seal of scientific honesty. If Dr. Ritchie Shoemaker is so wrong, why is he Daubert certified in several states? Even the DC ruling was overturned in VA at the Suprem Court level. Why don't you save the world from him with your keen medical knowledge? Ask your friend Ed Light why the City of Portland would not let me near the old site of the Scotia Prince cruise lines after counsel asked permission.

20 days ago • Unlike • Like
I was wondering when you would find this site.

For those readers who don’t know Mr. Weatherman allow me to make an introduction:

Greg Weatherman is a first class nutter who got his start on a forum called “Toxlaw” wherein Mr. Weatherman made so many hysterically bizarre claims, that I actually started to collect them.

Here are some of Mr. Weatherman’s amazing scientific pronouncements:

Mould is killed by light.

Mould is killed by air.

Mould grows in wall cavities because there is no air and no light in wall cavities.

(Then after Mr. Weatherman was ridiculed for his position, which he STAUNCHLY defended by referencing papers and books he never read, he changed his opinion.)

When I was using the word “air,” what I REALLY meant to say was “oxygen” and all you have to do to kill mould is expose it to “oxygen” and light, because “oxygen” is toxic to moulds.

If you breath in a mould spore it will grow in your blood.

Ahh… those were the days…. Sigh…

In 2004, Mr. W. called me and I spent close to an hour on the phone with Mr. W trying to explain to him what :”mould “ was, since although Mr. W liked to call himself a mould expert, it turns out he didn’t even know what mould was, and he didn’t realize there was a difference between moulds and Bacteria.

When Mr. Weatherman learns a new word, watch out, because it will be used obsessively with reckless abandon and disregard for context. Apparently his latest is “contrarian” (I will need to look it up, since I’ve never heard it before) – but in any event, in the last week he has now made several (almost identical) posts on several fora containing the same argument as found here.

Allow me to share with you a post I made to Mr. Weatherman back on March 18, 2004 (I told I started saving his stuff). Mr. Weatherman had discovered the IAQ Board (back when it was respectable), and was being hammered by real experts in moulds (in fact some of the very folks who are now members of this board, and others like Michael Corbett, Ron Gotts, and several others), and he was complaining that he was being “insulted” by experts even though he was just trying to help out and he felt is was unfair that real experts kept “insulting” him. He said “OK, I’m not a mold expert, but I am an expert mold killer.” (Which of course was predicated on air killing moulds.)

Here was my response back in March 2004, and it would be as applicable then as it is today!

http://forensic-applications.com/moulds/weathermanontween.pdf

Cheers!
Caoimhin P. Connell  
Forensic Industrial Hygienist  
www.forensic-applications.com

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AMDG

19 days ago

Greg Weatherman  •  Mr Brown,

On a lighter note, I would offer this thought for you:

I prefer the Fool or Joker card. It is the only Tarot card I use....."said the joker to the theif".

19 days ago  •  Unlike  •  Like

Greg Weatherman  •  Caoimhin or Irish Kevin,

I have a jingle in my mind that goes something like this:

"Get to another state, State Farm".

I'll get back to your lies and dirtortions later. I'm easy to find. Juries aren't blind. I can let lawyers hit you where the sun doesn't shine.

Maybe I should right jingles while moonlighting in another state of mind.

I do litagation research and expert witness work.

19 days ago  •  Unlike  •  Like
Andrew Cutz, CIH • Sunday, December 11, 2011

Dear Blain Parry et al.,

I took the liberty and forwarded this "thread" to the Flood Relief Aid List with copy to the IEQ List both on Yahoo Groups, as I was not sure on how to share the same on other LinkedIn Groups. Although I had not the opportunity to use the EMRI test personally, I am curious to compare it to other sampling tools available and used by us.

It is my personal belief that the EMRI test should be incorporated into a broader epidemiological survey (study). I would be happy to be the contact person for Ontario.

With best regards,

Andrew Cutz

Blaine Parry • Hi Andrew,

What is your opinion regarding this discussion topic? Do you believe it is "good business" to have your homeowner take their own samples? Is it generally acceptable practice to write a protocol for a property you have never seen? Isn't there more to a mold problem than the test results - say how did the mold get there in the first place?

I would like to hear your opinion.

~Blaine~

John P. Lapotaire, CIEC • Blaine
I guess we will never be able to stop anyone from collecting their own samples. However a professional IEP should never encourage a client to collect their own samples and should never provide an indoor environmental diagnosis without actually visiting the site. That’s another story altogether.

For the EPA ERMI Test dust samples are collected by vacuuming specific area for a specific amount of time. No randomness here.

According to the EPA, a composite sample can be created by sampling the floors of 2 primary rooms, the common living area and a bedroom. In the common living area, mark a 3-foot by 6-foot (18 square foot) rectangular sampling area with tape next to the sofa (or large chair). Vacuum this rectangular area for 5 min starting at one corner of the marked sampling area and slowly sweeping over the sampling area back and forth with slight overlapping on each pass until the entire area is vacuumed. (Care was taken not to disturb the tape.) The process is then repeated in the bedroom next to the bed.

The specific ERMI sampling area and time allows each home to be compared to other homes that have been sampled in the exact same way. Apples to apples if you will. Any deviation to the ERMI specific sampling protocol of area and time would then be a comparison of apples to oranges…grapes…or watermelons.

That’s not to say that someone couldn’t collect dust and have it sampled in the same mold-specific quantitative polymerase chain reaction (MSQPCR) the highly specific DNA-based method for quantifying mold species that ERMI uses. It just means that the resulting data couldn’t be used to place the home sampled on the ERMI index and correctly compare it to other homes on the ERMI index.

ERMI info directly from the EPA website
A research tool, called the Environmental Relative Moldiness Index (ERMI), has been developed and is being evaluated in research studies by the U.S. Environmental Protection Agency (EPA).

The DNA results are then used to characterize the concentrations of the molds in the dust sample. The sample results are then compared to the ERMI, an index or scale of moldiness. The analysis can be used by researchers in the U.S. to estimate the amount of mold in a home as well as indicate some of the types of mold that are present. As research continues, the index will be refined.

EPA’s mold remediation guidance is based on physical inspection for mold and water damage.

EPA does not recommend that homes routinely be tested or sampled for mold. Testing may be performed to support research activities. Testing may also be useful to help identify or characterize the magnitude of specific mold problems in some indoor environments.

ERMI food for thought...
Just my opinion

17 days ago• Unlike• Like

Greg Weatherman • John,

A doctor with 6,000 plus patients may have some internal data to argue what you are saying. Dr. Ritchie Shoemaker tells his patients to take their own samples. He got tired of the myriad ways samples are taken that could not track to blood biomarker testing with any degree of statistical confidence. The IH
industry has done themselves a huge disfavor by not comparing notes and listening to outlier populations.

My opinion is the ERMI is not perfect but, it does give great information. As yet another example: there are organisms in the Group 2 list that may suggest HVAC issues if you know the normal levels and you use the same lab. Physiology information is vital and often ignored. I think the exclusive or over-reliance of spore trap testing the reason due to vague results information ruining learning opportunities for professional field experience.

There are interlaboratory differences. Results from Mycometrics can be different than EMSL. I understand from a local colleague chemical analysis at labs can be different even when they claim they are using the same EPA method.

I can take the results and inspect the HVAC to find the mold I know is there 90% of the time based on test results. If a customer wants, I can take further samples from the HVAC unit to justify getting a modern HVAC system properly sized.

I always encourage physical inspections by professionally insured professionals. I can not help if I point the customer to individuals and they seem disinterested in doing anything to the level necessary for medical reasons or they irritate the customer. I can not be part of the problem by defending aloof behaviour of professionals.

As unscientific as it sounds, "the customer is always right". We can decide to walk away. I do it on a semi-regular basis. I also know customers are smarter than we give credit. It just taks longer and more work to find the truth compared to a professional. taking a simple sample also empowers the client so they don't think there is smoke and mirrors if they are willing to pay the extra expense. If you are very ill, your financial threshold is very different compared to property value concerns.

Operating like the top of the cave in the "Myth of the Cave" is doomed to exposure by the curious. The IH industry should not act like priests claiming only they can interpret a book of religion.

I operate in the Washington DC area. I know my hypothetical customer may not know the subject material they hired me to do but, they may have colleagues who are adept if they spend time searching. This keeps a person honest.

17 days ago• Unlike• Like

Caomhin P. Connell • From now on, I'm going to start including a “Greg W Gem-O-the-Day;” a quote from Mr. W that underscores his amazing abilities. For not only has Mr. W argued that air and light kill mould, but he has also made some other remarkable "scientific" pronouncements.

Here is today’s Greg Weatherman Gem-O-the-Day (from 6/25/03):

“Biotoxins - whether they are mycotoxins are (sic) other biologically derived toxins - are very similar in chemical composition to the industrial organic solvents like chemicals used for dry claning. (sic)"

And there you have it from authority – Toxins, typically large macromolecules (which aren’t even chemically similar to each other) and typically weigh in at several hundred g/mole (to the weighty ricins at 34 kDA) are not, as all previous chemists had presumed (divergent) but are in fact, actually very similar to perchloroethylene! Weatherman science at its best!
Now, on to the response – readers new to Mr. W will find that he has difficulty in presenting an argument without an obligatory mention of two things 1) his general liability insurance and 2) Ritchie Shoemaker (Mr. W used to slavishly worship at the throne of another of his deities until during a case in Florida, I exposed his hero for being a fraud, and I pointed out that his PhD in Toxicology didn’t actually exist, but was a self-awarded degree).

Readers will also notice that Mr. W’s posts are mostly comprised of text strings that are usually not relevant to the discussion and usually not even relevant to each other. Also, he relies heavily on non sequiturs and seldom supports anything that he says.

So, Mr. W, because you didn’t notice, nobody is discussing Ritchie Shoemaker, and the reference isn’t relevant. “A doctor with 6,000 plus patients may have some internal data to argue what you are saying.” is an unsupported non sequitur.

“He got tired of the myriad ways samples are taken that could not track to blood biomarker testing with any degree of statistical confidence.” This is a non sequitur.

Followed by:
“The IH industry has done themselves a huge disfavor by not comparing notes and listening to outlier populations.” Which lacks foundation.

On to the second paragraph which contains a string of “clauses” that are appropriately meaningless and are otherwise easy to read whatever one wants into them.

The third paragraph is axiomatic. Duh…

The fourth paragraph is fun:

GW says: “I can take the results and inspect the HVAC to find the mold I know is there 90% of the time based on test results.”

Well, I say: I can sample an HVAC system and find mould 100% of the time, and it doesn’t even have to be PCR based.

But here’s the kicker… get ready!

GW says: If a customer wants, I can take further samples from the HVAC unit to justify getting a modern HVAC system properly sized.

HVAC ENGINEERS TAKE NOTE!! Because this will someday become a Weatherman “Gem-O-The-Day”! Greg W has just made the scientific discovery that by taking a mould sample from an HVAC system he can determine if the system is properly sized!!!! (OMG is he FUNNY or what?)

Folks, the more you read Mr. W’s posts, the more you will prove you have a sense of humor, because you will find yourself laughing a lot! And most particularly, if you REALLY read his posts carefully, because what you think was a once-off bizarre mistake is in fact, a thoroughly believed position that Mr. Weatherman will defend with references he has never read, taken from scholastic texts he can’t understand, and using words he hopes sound sufficiently scientific to fool Mrs. Jones.

To use a quote from your earlier post - “Maybe I should right jingles while moonlighting in another state of mind.”

Indeed, Mr. W… perhaps you should.

Cheers!
Greg Weatherman • * ridiculous claim made by you was my over-simplification for those who don't need to know the all the chapters to judge a bad book. I guess Tide detergent never had issues with red skin whelps from toxins derived from Fusarium.

Some of my reference sources are John Pitt and Ailsa Hocking in "Fungi and Food Spoilage", KF Neilsen (sp?), and other studies dealing with water activity and mycotoxin production on food or building material. Samson, Flannigan and Miller have a great book. Only a true kook reads this type drama.

You know, I was reading that lovely mold webpage of yours. This would be the same webpage that has very little change since a decade or more ago. Apparently, you did not get the memo from Joe Lstiburek or Terry Brennan about pollutants, pressure and pathways. Joe Lstiburek is prominently featured in the ACGIH book, "Bioaerosols: Assessment and Control (1999). Paragraph 6 looks very desperate in scientific terms.

Maybe you could get a lounge singer act doing Chuck Berry's "My ding-a-ling". I don't need to write a jingle that's been written:) http://www.lyricsdepot.com/chuck-berry/my-ding-a-ling.html

17 days ago• Unlike• Like

• Reply privately

John P. Lapotaire, CIEC. • Greg

I'm curious as to how and where you and Dr. Shoemaker have clients and patients take their own samples that allows the tracking of blood biomarker testing with any degree of statistical confidence?

Always willing to listen to something new.

17 days ago• Unlike• Like
Todd Crawford • I have only had one case where mold sampling and analysis was informative - the data was from spore traps, not ERMI. I regularly receive lab reports from the public with requests to interpret the data: invariably I have to inform them that they have not formulated a hypothesis which would justify sampling (I put that in layman's terms on the phone and in emails). We will never be able to stop people from collecting samples, because most of us have a fascination with numbers. However, I think Joe Lstiburek put it nicely when he commented on the “tricorder” method of IAQ investigation - there is no instrument that we can wave around and then state “The air is safe to breathe Jim”.

16 days ago• Unlike• Like

Greg Weatherman • Todd:

ERMI is a tool. I have seen instances where the test was faulty due to factors unique to the environment and test location. Taking samples where people walk (high traffic areas) may be telling you they walk outdoors. Taking samples with a Swiffer cloth on horizontal surfaces will tell you what they are breathing long term. The test is just a variation on the "rank order" method proposed in the ACGIH book, "Bioaerosols: Assessment and Control" (1999 - Janet Macher).

Air sampling has huge problems. Rudimentary knowledge of aerosol physics leads you to question air sampling. Check "Aerosol Technology" by WC Hinds. He is an AIHA Fellow and a professor at UCLA and formerly Harvard. This textbook is in it's second edition for post graduate studies or anyone who want to sharpen their intellectual skills. Specifically, ask yourself how the orientation of spores or conidia (not spherical in shape) are affected by "curvilinear motion"? Caoimhim P. Connell (The Professional Contrarian) will claim this is my new word to wear-out.

I'm sure you could check with attorneys in NY for public schools where Dr. Ritchie Shoemaker has testified if you really want to support anyone's comments about Tricorders. My wife is a Trekkie and you do need to calibrate your Tricorder. I'm sure you could check with King-eh Lin at Mycometrics for references in NY. You could also check with Peter Ashley at HUD's Healthy Homes Initiative.

16 days ago• Unlike• Like

Todd Crawford • Thanks Greg. If you read the NY Toxic Mold Task Force Report, you will see that I am familiar with Dr. Shoemaker's research - although when we talked on the phone he felt it was given short shrift in our report.
As for tools - I like to compare mold investigations to framing a house: to frame a house you need a hammer more than you need a mass spectrometer - in fact, most people would agree that you don't need the MS at all!

Frankly, mold hasn't changed a lick since our grandparents were cleaning it off their houses. I am not going to recommend that we change our approach by making mold seem more complicated than it really is.

16 days ago • Unlike • Like

Greg Weatherman • Todd,

I have 2 question for the litmus test to take ERMI samples:

1) Are there health complaints?

2) Is the client willing to pay the cost?

Many grandparents died from various health effects with no known cause. I prefer to find solutions rather than support budget officials or hide liability for children's health. Defense attorneys love spore trap air samples for their vagueness. Look at the spectacular peer-reviewed paper (with Dr. Ronald E. Gotts as lead author) using spore trap air samples to argue Canadian governmental guidelines for mold based on culturable air samples. Now there's some real science.

Spore traps may be a start but, sometimes negative results with health complaints need to be verified. The only thing about mold that has changed since your grandparents is knowledge.

16 days ago • Unlike • Like

Joe Tudor, MPH, CIH, CSP • I don't have much experience in the mold business (shocking, I know - but I can tell you more than you want to know about methyl bromide and nickel carbonyl sampling :). So, after reading all this discussion, I had to go look up ERMI and try to educate myself. The first hit in my Google search led to the EM Lab website (http://emlab.com/s/services/ERMI_testing.html). There are a few descriptive comments there that I have either totally misunderstood, or...well...this just appears to be a stupid method for determining anything.

First - the name "Environmental Relative Moldiness Index." Relative to what? Other environments? I know there are no exposure limits for mold, but who cares if my house is moldier than yours? All I want to do is get rid of the water intrusion problem and clean the place up. Why do I need this index number?

Next: "The ERMI test involves the analysis of a single sample of dust from a home"
Really?? A single sample? When have we (the IH community, or any other scientific community) ever
determined anything of value from a single sample? Where would you take this one sample? Greg Weatherman indicated earlier that the sample result could be questionable if you take it from the 'wrong' location - so where do you take it?

The EM Lab website states: "The ERMI helps to make an assessment if a home is more or less likely to have "unhealthy" mold conditions. Especially residents sensitive to molds should consider using the ERMI to evaluate their indoor environment. Also home buyers can use this tool to predict if their new home is likely to have a history of water damage."

Unhealthy mold conditions? Isn't that, well, water intrusion that feeds the mold? Fix that, clean up the mess, and the mold dies. Right? And if there is a "history of water damage," but that water damage was fixed and the source eliminated, who cares? Or, if it wasn't fixed, do you need a "mold sample" to know that?

I guess what I'm asking for is a continuation of the flame war - Greg Weatherman to tell me why this is a good, reliable method and what the benefits are, and Caoimhín Connell to tell me what I already suspect. (P.S. I'm not a fan of air sampling for molds, either - for the same reasons; I don't need an air sample to tell me where the water is coming in)

16 days ago• Unlike• Like

John P. Lapotaire, CIEC. • Greg / Joe / Todd

Regardless of the reason for the collection of dust and the use of mold-specific quantitative polymerase chain reaction (MSQPCR). The minute you go outside the EPA ERMI sample collection protocol for EPA ERMI it is no longer EPA ERMI.

As is often the case, use of the sample identification “EPA ERMI” is often used to raise the value of one’s sampling. Lend a sense of credibility to the sample collection by calling it EPA ERMI. The reality is that the collection of dust using mold-specific quantitative polymerase chain reaction (MSQPCR) is just that unless you follow the EPA ERMI protocol. Any lab will take a sample and run the mold-specific quantitative polymerase chain reaction (MSQPCR) ERMI test and collect your money. That doesn't make it EPA ERMI.

As I stated earlier according to the EPA, an ERMI sample consist of sampling the floors of 2 primary rooms, the common living area and a bedroom in a 3-foot by 6-foot (18 square foot) rectangular sampling area vacuumed for 5 minutes.

The specific ERMI sampling area and time allows each home to be compared to other homes that have been sampled in the exact same way. Again, apples to apples if you will. Any deviation to the ERMI specific sampling protocol of area and time would then be a comparison of apples to oranges…grapes…or watermelons.

What is hard for me to wrap my mind around is how, with all of the reference material thrown back and forth can we ignore the fact that “EPA ERMI” does not fall into the variation of the "rank order" method proposed in the ACGIH book, "Bioaerosols: Assessment and Control" (1999 - Janet Macher).

Once the collection process is altered the “EPA ERMI” and the “EPA ERMI Index” are OUT. The sampling is simply a variation of the dust collection and mold-specific quantitative polymerase chain reaction
(MSQPCR) identification of molds.

Nothing against the 6000 patients that Dr. Shoemaker has, but they all have mold-specific quantitative polymerase chain reaction (MSQPCR) identification of molds and not EPA ERMI unless the samples were collected using the EPA ERMI protocol. The patients all have good data just mislabeled data. The question would be, why is the data continuing to be mislabeled? The data collection is sound just not ERMI.

Just looking for a straight answer without a lot of name calling and an unnecessary dust up.

16 days ago • Unlike • Like

JoeUnfollow Follow Joe

Joe Tudor, MPH, CIH, CSP • So - the EM Lab web page, then, appears to mis-represent the EPA method. Where, then can I find the actual EPA method? (15+ minutes of searching the EPA website, and nothing but general guidelines, papers on the application of the method, etc., etc., but no actual method).

15 days ago • Unlike • Like

Todd Crawford • I have not found any EPA ERMI documents. Vesper did the work at EPA but published the results in Journal of Environmental Monitoring (2004, v.6, pp.615-620).

15 days ago • Unlike • Like

Greg Weatherman • I apologize if my banter with Caoimhim P. Connell has offended anyone. He and I play rough. I take no real offense anymore than an argumentat about the Redskins vs. Cowboys at the bar. He is Irish. I am worse. I am Irish decendency raised in Louisiana. Unfortunately, La Tech's mascot is the bulldog for a reason. I'll try to restrain from growling at the food bowl in the backyard.

Microbiology is not chemistry most of the time. ERMI samples are polymerase chain reaction analysis with a statistical score per milligram of dust. The lab I use does use a biochemist to run the analysis. The owner has a PhD in microbiology. He also holds patents on some PCR primers developed in his own genetic research. The owner of the lab has done work with EPA and NASA.
A lab will give me results in CFUs per M³ whether I take an air sample with culture plates in an impactor or use a liquid impinger.

A lab will give me results in CFUs per gram whether I give a bulk sample or a swab with an unknown measurement for surface area.

The problem with cultured samples are competition, overloading the plates, dilution issues that may obscure the presence of organisms with a lesser presence, small sample size areas compared to PCR/ERMI and analysis time for the lab. It takes 2 to 3 weeks to identify some relevant species of mold. It makes a world of difference to know if you are dealing with Aspergillus restrictus, Aspergillus versicolor or Aspergillus niger.

The most critical reason is the ability to identify microbial fragments that can not be cultured or recognized with a microscope to the species level. These fragments are the most likely to cause health effects if you understand nano medicine or nanotoxicology. This is why I also use a Swiffer cloth since the carpet casselettes have 40 micrometer pores and the vacuum lift may not overcome the particle adhesion forces. Vibration forces from wind or other sources has way of overcoming this problem so people can inhale what the carpet sampler missed.

I just want to know the organisms since surface or air sampling can not tell you what the person inhaled at any reasonable dose relationship due to environmental factors and test limitations. One of my local colleagues is a PhD Environmental Engineer who specializes in inhalation toxicology. He gave up on air sampling for mold a long time ago for dose response purposes.

ERMI has a similarity with EM Lab’s Mold Score. It gives a person a rough guide to see how the sample may compare to other samples from other people. This may lead you to investigate further with or without other sampling for confirmatory sampling to find hidden microbial reservoirs. Can other sampling methods help you find old, dry reservoirs where window were replaced by previous owners?

There is a network or MDs who can use this sample with an environmental challenge study using blood biomarker testing to win in court. You can argue statistics but, MDs are the only ones who can give a diagnosis.

My customer base is people with health complaints. The original reason for this post was someone asking if a homeowner is qualified to take this simple sample.

15 days ago • Unlike • Like

Todd Crawford • Greg - you are tiring me. In NY, most states and at the federal level, we don't recommend testing for mold - just as we don't recommend testing for cockroaches or for West Nile virus or a myriad of other organisms. We always recommend mitigating the circumstances that cause amplification of these organisms. Nobody can selectively mitigate biological components to the species level - if you are going to clean, then everything will be cleaned.

Some doctors have a very lucrative business testing patients and characterizing their exposures to biological agents, but none of them have suggested that individual exposures should be treated differently between patients. However, it is important to acknowledge that many patients will have a better outcome when they are told there is a diagnosis - and many doctors benefit from providing care to those patients. To that end, any testing that actually puts the patients mind at ease and puts them on the road to
recovery is useful. If ERMI makes them feel better then do it, or (to answer the original post way back when) you can have the client do it - just don't expect me or other state and federal officials to get excited about your test reports.

Enough, I am done.

15 days ago • Unlike • Like

Luke Garard • When I was teaching RRP classes, I met several contractors who would, for a reduced fee, stand over a homeowner's shoulder while the contractor coached the homeowner on how to install windows in their own home. They offered this service because these particular homeowners wanted to save money and do the installation themselves. The contractors felt comfortable that they could direct the work onsite. Imagine if these same contractors phoned in the directions. How many windows installed by an unlicensed homeowner sight unseen would end up put in wrong. Contractors are licensed in an effort to prevent people who have no business swinging a hammer creating problems of varying severity. I would tend to hold industrial hygienists to a higher standard than a lot of other professions. If contractors don't even feel comfortable having a homeowner perform construction activities sight unseen, why should we feel comfortable having a homeowner attempt science sight unseen.

I can not think of many instances where I would feel comfortable with Joe Homeowner off of the street collecting samples of anything. Maybe I feel this way because a homeowner can call either Caoimhin or Greg and get diametrically opposed answers to the same question asked of both. How can the uneducated make a decision on what is right? Maybe I feel this way because I believe that if the homeowner can perform the sampling the right way, they don't need outside help. Either way, my answer to the original question is No...not a good idea.

The more interesting of the dialogue contained within this thread revolves around the question unasked - Is ERMI worthwhile for sampling methodology? Having never actually researched or even collected an ERMI sample, I am not familiar enough to give a sound opinion on the subject (I just recently looked it up like Mr. Tudor). My initial reaction to what I am seeing is that ERMI is an attempt to create a solution for a problem where it has no relevance.

15 days ago • Unlike • Like

Blaine Parry • I sure am glad I asked this question - it seems like there are a couple different opinions here, I figured there would be.

From a realistic standpoint, I need to ask another question of the group: If I know there is mold in a home or building, do I really need to know if the strain is Aspergillus restrictus, Aspergillus versicolor or Aspergillus niger? Are there different removal methods for each type?

I look at mold as I would look at a weed in my yard. I really don't care what type of weed it is - all I know is
that it is not grass and not supposed to be there so I get rid of the weeds, whatever kind they are.

The type of mold in a structure really does not change the remediation plan but may help to identify how much time the material has stayed wet and how wet it has been.

Remove the affected material, stop the water source, clean and dry the area in question, etc...

Condition 3,2,1

15 days ago  Unlike  Like

JesseUnfollow Follow Jesse

Jesse Phillips  •  Agreed. That's how I see it too.

15 days ago  Unlike  Like

Greg Weatherman  •  I have not met many mold remediators who understand knowing the physiology or the characteristics for growth and possible mycotoxin production can be very important in some cases. This could be to find hidden sources or show a sick homeowner the reason more dehumidification or mechanical upgrades are worth the money. You can point them to mechanical engineers for the design reasons they probably won't understand. ERMI is an investigation tool and another way to post test for sensitive populations.

Spore trap air samples can not tell you if the remediator cross-contaminated Aspergillus versicolor. The test does not change remediation methods. It does keep everyone honest. I think that is what some remediators fear the most. The same thing happened over a decade ago with spore traps when restoration companies realized spraying biocides and leaving wasn't going to pass the test. "Ochratoxin A found in household Dust" really changed the dynamics of dealing with mold in 1999.

Nice to see you Jesse. I am on the other side of the state in Arlington. Your neighborhood is amazing as far as the view in the mountains.

14 days ago  Unlike  Like
Knowing the genus or the species that is present virtually never enters into the decision making process vis-à-vis remediation. Although the flim-flam con-artists, made a big deal out of it, it is merely part and parcel of their con-job on their victims.

Which, brings me to the Weatherman Gem-O-The-Day:

“The most common chemical or microbial VOC isolated in moldy structures is geosmin which comes exclusively from Streptomyces. (1/25/05)”

These snake-oil salesmen have done so much harm to the legitimate IAQ assessment profession by muddying the waters through the use of fear and scientific sounding goo that the average consumer is confused.

Take the above Gem-O-the-Day; until I had used the terms “geosmins” and “Streptomyces,” in an internet post, Mr. W. had never heard of either – and then suddenly he started using those words with reckless abandon and invented his own “science” otherwise unknown to legitimate scientists. So, how is poor Mrs. Jones to know the difference? Especially when, at the time, Mr. W. was pairing up with a fraud in Florida who was running around telling people that he had a PhD in toxicology (which was a lie).

In human exposure issues that have a “autointoxication” element (MCS, biotoxin illness, etc). There are two competing “industries:”

1) Anti-science, fear mongering, snake-oil industry that uses “almost science” as typified by statements like:

“Stachybotrys has a low need for nitrogen therefore, it grows where there is little airflow - such as between the surfaces where wallboard backing is applied to structural wall studs. I even gave a reference at the time (below again since you (sic) are so busy reading). (Greg Weatherman, 02/13/04)”

And,

2) The legitimate science practitioner who actually knows what these words mean, how to use them, and their general application in a particular question that needs to be answered. Our words kind of sound like this:

“Sampling for mold is not part of a routine building assessment. In most cases appropriate decisions concerning remediation and need for personal protection equipment (PPE) can be made solely on the basis of visual inspection. (The CDC Mold Work Group, National Center for Environmental Health, National Center for Infectious Diseases, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, 10/05)”

For my part, I have contempt for frauds and cheats who take people’s money in return for goo. I don’t apologize for my contempt, and believe that real pros have an obligation to address these frauds in public.

So for example when you hear gobbledygook like “I have not met many mold remediators who understand knowing the physiology or the characteristics for growth and possible mycotoxin production can be very important in some cases.” it may sound like science, but in fact, it is not likely that Mr. W. (who according to Mr. Weatherman is NOT a mould expert) has ever actually encountered a situation where mycotoxin production was important, and if it was, it is clear that he wouldn’t know – after all, remember: according to Mr. W., mycotoxins are chemically very similar to dry cleaning solvents.

So, Blain – you are not confused, you are correct. The more common sense one has, and the greater their analytical thought process, more goofy the Greg Weatherman’s of the world appear.
Cheers!

Caoimhin P. Connell

(The opinions expressed here are exclusively my personal opinions and do not necessarily reflect my professional opinion, opinion of my employer, agency, peers, or professional affiliates. The above post is for information only and does not reflect professional advice and is not intended to supercede the professional advice of others.)

AMDG

14 days ago

Greg Weatherman • Caoimhin,

Question of the day for Caoimhin: If mold is not a health concern, why do remediators need to wear respirators? Maybe you could educate those folks at OSHA.

I can arrange for you to speak to a customer of mine who was the president of The FOP in Prince Georges County MD (borders Washington DC). You can run your theories by him - especially the fear mongering with mold in marijuana grow rooms. He'll love that one.

I have often thought it was sad police have the toughest jobs and are subjected to horrible environmental conditions by a County Executive (Jack Johnson) now in deep water with the Feds. Prince Georges County did not like Dr. Ritchie Shoemaker either. Can you imagine that? What would you say about 5 or 6 police officers having lupus at the same precinct? I will be glad to arrange the introduction as long as you tell the truth afterwards to other police officers. In fact, you may be able to spend some time breathing in the old police station. It may still be there with all the mold. Jack Johnson or the county wanted to turn it into a children's daycare center.

I am not claiming lupus is caused by mold. Vitamin D deficiency seems to play a huge role. It is interesting Dr. Shoemaker notes some of his patients having a problem with converting vitamin D into the active form in the blood if you read "Surviving Mold". Nothing gets investigated in your "no health effects" world.

It's just not right to tell a person there never are health issues with mold. I never said there is always an issue with mold.

I worked on a lawsuit where Dr. Ritchie Shoemaker was able to show a person was affected by mold from a water damaged house (stucco). This person had a great medical history previously. This person worked at a garden nursery for several years prior to living in the moldy house and worked there after the home builder decided to buy the home from said sick person. Your favorite PhD toxicologist from Florida was also involved in this case. If you exposed him, how does he still get work?

Much has changed with MVOC research. My use of the word "exclusively" was wrong with geosmin and Streptomyces. I can admit some mistakes. That's certainly not on par with claiming mold in a wall is not an issue.
My reference to Stachybotrys was absolutely correct if you consider growing under "low oxygen tension" which has been proven. A university researcher used filter paper in culturing to create "low oxygen tension" to make it easier to distinguish between Stachybotrys and Memnoniella. If you don't understand "low oxygen tension", you can read some John Pitt literature such as "Fungi and Food Spoilage". I also have a paint failure study from Harvard that may be interesting for the same subject matter. Apparently, A. versicolor has a similar ability.

Remediators can't choose the particles they remove by cleaning but the consultant and customer have every right to know more problems were not created in the process. I also think it is sad to misinform a remediator and give a false sense of security about what may lead to future legal trouble.

14 days ago - Unlike - Like

John Paciulli • An ERMI as stated by parties above is an index of housing stock. Information obtained from the ERMI can often be misinterpreted by even practiced hygienists. Data obtained is a cumulative measurement, not an atmospheric grab sample.

In my experience ERMI's consistently identify elevated Wallemia sebi concentrations in the samples. This organism is rarely isolated using optical microscopy methods. Therefore ERMI may also be useful in more fully defining the flora of a particular project.

In my opinion, one could not possibly develop a scope of microbial remediation from 3000 miles away. This is a hands on, eyes on profession. All water damage/mold colonization encountered must be thoroughly defined in structure/finish materials. Mechanical systems must be examined, substrates moisture contents ascertained, basic atmospheric conditions measured, etc. to make any type of qualified judgement as to where remediation begins and ends.

10 days ago - Unlike - Like

Greg Weatherman • All the facts were not presented by the original person who posed the question. 2 local companies came through to give and inspection. From 3,000 miles away, you can look at someone report make note of obvious omissions such a crawlspace and use your prior knowledge of dealing with sensitive clients. You can also use wording to say how to approach other problems that may be discovered in the process. Anyone with remediation experience knows the contractor can find other issues due to the limits of deconstructive testing such as a leaking window. I would not stick my neck out there or insurance policy into a situation without a good way to box the bet so to speak. The sad fact is people with extreme medical problems are ignored or worse by many in the industry that look at all jobs through the same rose colored glasses. I guess time will tell.

10 days ago - Unlike - Like
Professionally I would never attempt to provide a remediation protocol that assumes to identify a crawl space as the source of mold in a home that I have never inspected.

Many homes have crawl spaces and not all of them contribute to indoor environmental problems. I would need to identify any actual issues with the crawlspace such as improper ventilation and/or grade, etc...etc... I would also want to determine if there is an actual and not perceived air infiltration of the crawlspace into the living space. I always use my manometer and smoke to establish air flow and indoor pressure of the home in each room as compared to the attic and crawl space both with the AC on and off.

Before I do anything I always measure the indoor environment with the AC at rest (off) and active (running). I do this by using a laser particle counter to measure the airborne PM, temperature, and humidity. I then measure VOC’s and if the home has gas I measure combustible gas and carbon monoxide. I measure these variables in each room of the home first with the home at rest and then let the AC run for an hour and re-measure. The actual collection of this information is invaluable to me in performing an indoor environmental assessment.

I have followed behind dozens of inspectors that have missed issues in homes by simply collecting a few samples and prescribing corrective action based on past experience with a similar home such as one with a crawlspace. I feel that’s simply a disservice to the client. To say the least.

Greg you said “The sad fact is people with extreme medical problems are ignored or worse by many in the industry that look at all jobs through the same rose colored glasses.” Isn’t that exactly what you did for this client?

You based your opinion on a sample collected by someone else and the mere fact that the home has a crawlspace. Sounds like your own personal rose colored glasses to me. Where is the concern for your personal liability when you’re taking money from a client for a “Sight Unseen” assessment and protocol?

A professional truly concerned about any client, regardless of their sensitive, would conduct a complete indoor environmental assessment of their own. I also strongly recommend stressing the 7 principals of healthy homes so the client can better understand and maintain their indoor environment.

Who knows Greg maybe it isn’t even mold that’s the issue. As an indoor environmental consultant I am always concerned with the mold inspector that professes to cure all with the identification of mold while ignoring all other potential contributors. Maybe not just rose colored glasses but rose colored glasses with mold blinders.

9 days ago • Unlike • Like

Medical diagnoses trumps environmental opinions.

9 days ago • Unlike • Like
Trey Manning • Impressive John. Good Info. Thanks! What are the 7 principals of healthy homes?

I don't think an investigation such as the one John described relies on opinions.

9 days ago • Unlike • Like

John P. Lapotaire, CIEC • Indoor environmental assessment using a holistic approach, the National Center for Healthy Housing (NCHH) 7 Principals of Healthy Housing.

1. Dry,
2. Clean,
3. Pest-Free,
4. Safe,
5. Contaminant-Free,
6. Ventilated, and
7. Maintained

9 days ago • Unlike • Like

Blaine Parry • "Medical diagnoses trumps environmental opinions"

Greg, How many of your mutual patients with Dr. Shoemaker have you both actually seen in person? Can you say that Dr. Ritchie has seen these folks at least once prior to giving medical diagnosis? Do you also give medical diagnosis? It sure seems like you have no problem giving the cure - like the magical elixir that used to be peddled in the old days - fixed whatever plagued ya!

Environmental opinions? Pot calling the kettle???

I feel bad for the people that are sinking every penny they may have in to your miracle cure - no Santa for you this year :(

9 days ago • Unlike • Like
Caoimhin P. Connell • I tried to warn you...the man is completely incompetent in any aspect of IAQ/moulds or human exposure issues and is a raging nutter. It's nut-jobs like him that have given the IAQ industry a tainted reputation.

If it weren't for comedic relief, I'm not sure there would be ANY reason to read his posts. (You should see the REALLY wacky personal emails he sends me... YIKES!)

Cheers!

Caoimhin P. Connell
Forensic Industrial Hygienist
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(The opinions expressed here are exclusively my personal opinions and do not necessarily reflect my professional opinion, opinion of my employer, agency, peers, or professional affiliates. The above post is for information only and does not reflect professional advice and is not intended to supercede the professional advice of others.)

AMDG

9 days ago

Greg Weatherman • Attacking the person rather than the philosophy is a sure sign of intellectual defeat. I think your problem is ERMI testing invalidates your theories. You doth protest too much to paraphrase Shakespeare.

Happy Holidays!

8 days ago • Unlike • Like

Greg Weatherman • Blaine,

I travel to most or 95% of my "customers" who are Dr. Ritchie Shoemaker's "patients". I am happy to work with local consultants and contractors to show them areas they may not be as experienced for sensitive populations. This can be very important for commercial/public properties. Dr. Ritchie Shoemaker and I have the opinion blood biomarker testing should be the gold standard for testing. Environmental testing
has issues. ERMI has been the best environmental comparison but, not perfect. Dr. Ritchie Shoemaker works with statisticians. Dr. Harriet Amman is listed on one of his peer reviewed papers. It is kind of funny how Dr. Amman the toxicologist disagrees with Dr. Harriet Burge the microbiologist even though they co-wrote material for "Bioaerosols: Assessment & Control".

I think I have pointed to the issue of the unreliability of data for small particles if you don't test for small particles which means your remediation methods may not address small particles which means you may be making the situation worse not better. Please read the basis for nanomedicine and nanotoxicology. Cleanrooms control small airborne particles.

Approximately 25% of the population carries the HLA-DR genotypes identified by Dr. Ritchie Shoemaker as significant to health concerns for mold in chronic water damage buildings. This does not include people suffering from asthma, COPD or RADS.

Do you have some spare lumps of coal to re-gift to me?

Happy Holidays.

8 days ago  •  Unlike  •  Like

Blaine Parry  •  Hey Greg,

Sorry man - no coal to share this year. Perhaps I will need it this year! Coal is better than nothing on Christmas morning - at least I will know I was not completely forgotten :)

No argument intended here - just more questions as I am still trying to understand a few of your points which sometimes really do not make sense to me. I am just a water guy...

YOUR STATEMENT:
"I think I have pointed to the issue of the unreliability of data for small particles if you don't test for small particles which means your remediation methods may not address small particles which means you may be making the situation worse not better."

Is it reasonable to assume that the often missed small particles are a part of everyday life and part of the normal ecology for whatever area you happen to live in? Is it reasonable to assume that the removal of these small particles in an environmentally controlled work environment ensures that it will remain that way once exposed to the "real world"? I would also argue that the "normal fungal ecology" will differ greatly by region, city, neighborhood, etc. In my area, one block could be nestled in a forest-like setting while a block away may be a mall with no trees. So how is it possible to gather enough solid data to classify "normal"?

Out of these 25% of the population that carries whatever you say above, wouldn't certain environments benefit these folks over others? Say Phoenix vs. Seattle for example? Is it also possible that the geographical location in which a person chooses to live also could create issues that could be avoided if they moved to a place more suited for their individual health needs?

8 days ago  •  Unlike  •  Like
John Ingram • I think this is poor logic. If you hire a carpenter to repair your home would he let you help with the finish work? Is this science or not.

7 days ago • Unlike • Like

Greg Weatherman • Here is a news story from a situation at a naval facility in the Norfolk VA area. Norfolk is not far from Dr. Ritchie Shoemaker:


He does genetic research. He has a BS in an area of microbiology. He was runner-up for national doctor of the year when he starting treating people for exposure to a toxin producing organism in the waterways. Governor Paris Glendenning did not think Dr. Shoemaker was a MD to ignore. If Dr. Ritchie Shoemaker is so wrong, why doesn't the federal government do something about it or any of the state medical review boards where his data and testimony has lead to legal opinions agreeing with him?

Does anyone here have the ability to identify the 25% who could be in danger?

Do you ignore what is necessary if health complaints are given by the customer?

Have you read the legal disclaimer for whatever standard/guideline you claim to follow?

How many clients are not concerned about health effects?

Does anyone want to answer these questions in testimony?

Why can't a financially distressed customer clean and HEPA vacuum if they use PPE, their doctor allow and they sign a liability waiver for the remediation contractor?

7 days ago • Unlike • Like

Greg Weatherman • John Lapotaire,

Crawlspaces are subject to high moisture levels. Moisture levels in the growth substrate is the biggest predictor of mycotoxin production if you read KF Neilsen (sp?). Crawlspaces are not subject to the laminar air boundary or sunlight. Crawlspaces are subject to the chimney effect unless they are sealed to
prevent air communication into the living space. Most mold and bacteria in nature are common to the soil to allow for biodeterioration.

In short, water activity is very important. Pressurization and pathways have been discussed ad nauseum for eons by Joe Lstiburek and Terry Brennan.

I can find mold in a refrigerator. I can find Aureobasidium pullulans on paint above most showers. This organism is very important to Listerine Breathstips: [http://www.primaryinfo.com/pullulan.htm](http://www.primaryinfo.com/pullulan.htm)

Is this mere presence of mold really significant for the investigation?

7 days ago • Unlike • Like

John P. Lapotaire, CIEC • Greg

Please don’t address anymore of your attempts to justify your “Off Site” assessments directly to me. You have no chance gaining my support for your blind conclusion that a crawl space you have never seen is the cause of your client’s indoor environmental issues. Let alone prescribing costly remediation protocols for the assumed cause and origin of possible mold amplification based on Dr. Shoemake’s blood test and an ERMI test that was collected without following the ERMI protocols.

Please don’t quote Joe Lstiburek and Terry Brennan or anyone else who will confirm that a crawl space has the ability to be the cause and origin of mold amplification in a home.

Greg, we all know that any crawl space has the potential to impact a home. We just believe that it’s up to the IEP to establish conclusively whether or not there actually is an issue with the crawl space that is impacting the home.

The more you post the more you show that you are willing to provide sight unseen conclusions and protocols to your clients based on Dr. Shoemaker’s blood test without visiting the site. And you continue to defend this unprofessional behavior to your ultimate demise.

Understand this Greg. I am not challenging Dr. Shoemaker’s research or his findings. What I am pointing out is that I don’t believe anyone can or should provide an indoor environmental assessment without actually visiting the property.

I believe doing so is simply unprofessional Greg. You won’t change my mind.

You can continue to ramble on about the many possible ways an indoor environment and be compromised but the true professional conducts the actual site assessment to confirm a cause and origin or hypothesis. Once the professional IEP has conducted the site assessment the IEP may establish a sampling plan to confirm their hypothesis.

As an example Greg the indoor dust sample collection in this case would be to confirm your hypothesis that the mold you physically identified in the crawl space (confirmed with direct sample collection) is actually impacting the home via the areas of air infiltration you identified by using a manometer and smoke. No guessing, the IEP actually assesses the property. There is a bit more to it than that but it all requires the physical site assessment. Like I said before it may not even be a mold issue from the home. It may be a work or recreation activity related exposure. The physical site assessment would either
confirm your hypothesis that the crawlspace is the cause and origin or completely exclude it.

That's just the way I conduct my assessments Greg. No offence but if you want to continue to provide your assessments your way do it. Just don't try to justify it with me.

One last thing Greg, this has nothing to do with Dr. Shoemaker or his research, water molecules, nanotechnology, HLA genotyping, Food Spoilage, Vitamin D deficiency, ERMI, cleanrooms, or the flu.

It is specifically regarding my personal opinion about someone advising a client to collect their own samples that are then used to provide an assessment and remediation protocol on a property that was never visited.

7 days ago • Unlike • Like

John P. Lapotaire, CIEC. • As for you're absolutely ridiculous question; Is this mere presence of mold really significant for the investigation? Well, Yes Greg it actually is.

Especially if you are claiming that the client is being significantly impacted by mold and you are basing your assessment and the need for costly "Mold Remediation" on the mere presence of mold. I would think that confirming the actual presence of mold would be very significant.

I would say that you should be able to show that there was more than a mere presence of mold. I would want you to prove that the mere presence of mold was actually impacting the client and be able to prove how so you can then provide a protocol to make the necessary corrections.

7 days ago • Unlike • Like

Joe Tudor, MPH, CIH, CSP • Uh-oh!
Back to the original question - Should homeowners be taking their own samples? - check out this article just published in the Journal of Occupational and Environmental Hygiene:

"Efficacy of Occupant-Collected Dust Samples in the Evaluation of Residential Allergen and Fungal Levels"
http://oeh.informaworld.com/soeh/content~db=all~content=a942927588~frm=titlelink

7 days ago • Unlike • Like
John P. Lapotaire, CIEC. • Joe

That's a great article that stresses that residents collection of samples can be used to identify homes with a potential mold or moisture problem that may need further evaluation.

The key is the "potential mold or moisture problem" and "that may need further evaluation."

I believe that it would be safe to assume the “further evaluation” would be from a qualified IEP by means of a site assessment to confirm the "potential mold or moisture problem" cause and origin, extent of actual damage, and establish a written report and protocol.

Thanks Joe

7 days ago • Unlike • Like

Greg Weatherman • John,

I post responses so others can see information like the crawlspace issue or the other issues such as Dr. Shoemaker. You are not the whole audience, John. Most people sit back, read and do their own research. I don't mind the argument because it provides learning opportunities. I can read the link provided by Joe Tudor as an example.

I don't expect anyone to agree with my rare instance of providing remediation planning for a distant client who was given 2 different paths by IEPs as you like to say. This is not unusual for a person to do from a distance for risk assessment. I think there are many IHs reading this thread who have done the same for a variety of issues.

It is possible for people to get bad advice like spending a lot of money for an attic with no HVAC located in the attic. I'll quote Joe Lstiburek on that one too. I think he is more than able to defend his words publicly. His rationale was air moves upward most of the time - chimney effect. The air from a crawlspace does consequently move upward in the same house I'm addressing from a distance. I presently have someone local looking at other issues with the 3,000 mile away house since I can't be there.

This whole thread never represented the whole truth. It represented someone's horror from a customer who misunderstood direction. Blaine decided to go nuclear instead of calling to ask some basic questions or allow of alterations based on new data. I usually work with someone onsite and just make adjustments so the independent person is in a better position.

I think it makes some people uncomfortable to think their work may get a second opinion even from a distance. I can guarantee you insurance carriers have lawyers and IEPs (your phrase) review anything out of the ordinary from a distance and direct activity from a distance. I live in "the government town" where everything is scrutinized under a microscope (Washington DC). It does not phase me in the least.
Todd Crawford • Strangely, I have to agree with some of Greg's comment. Some of us have to do our work at a distance. My office at NYSDOH cannot investigate every mold call that we receive. We talk to the callers and try to evaluate the underlying conditions leading to mold growth, and then advise the callers about the best methods to mitigate the problems. Of course, I am not telling people to take samples, so Blaine still has a point in his original question... but John's justification for on-site investigation represents Regulatory Nirvana for me! (Unfortunately, when we did perform site investigations, the VAST majority of the complaints couldn't be substantiated.)

Blaine Parry • MY APOLOGIES TO THE GROUP
I posted this earlier and never received an answer but really need to have this question addressed - please. I pasted my question a few line up again here - directed to Greg.

YOUR STATEMENT:
"I think I have pointed to the issue of the unreliability of data for small particles if you don't test for small particles which means your remediation methods may not address small particles which means you may be making the situation worse not better."

Is it reasonable to assume that the often missed small particles are a part of every day life and part of the normal ecology for what ever area you happen to live in? Is it reasonable to assume that the removal of these small particles in an environmentally controlled work environment ensures that it will remain that way once exposed to the "real world"? I would also argue that the "normal fungal ecology" will differ greatly by region, city, neighborhood, etc. In my area, one block could be nestled in a forest-like setting while a block away may be a mall with no trees. So how is it possible to gather enough solid data to classify "normal"?

Out of these 25% of the population that carries what ever you say above, wouldn't certain environments benefit these folks over others? Say Phoenix vs. Seattle for example? Is it also possible that the geographical location in which a person chooses to live also could create issues that could be avoided if they moved to a place more suited for their individual health needs?
Blaine Parry • Hi Todd,

I must say - I am surprised to read your post above. As a research scientist - how can you possibly analyze anything over the phone? Not to mention advising the caller to mitigate the problem? I mean no disrespect Todd but I am shocked to read this from a research scientist working for the New York Department of Health!

Perhaps I am overreacting here - thoughts of the group?

7 days ago • Unlike • Like

Greg Weatherman • Blaine,

I've been doing this for 15 years. Fungal ecology is a big phrase with many parts. I will use a few examples that have nothing to do with geographic location.

*Penicillium chrysogenum* is very common in the outdoor air most of the year in most of America and Canada.

*P. chrysogenum* will not produce any known mycotoxins unless it has high water activity higher than 0.9 Aw. On cellulose or cereal it produces penicillic acid. On salami it produces penicillin the toxic antibiotic.

*P. chrysogenum* is in any refrigerator unless it is new since it is a common food contaminate.

Arizona has mold just like Seattle since the food spoilage is the same and the water damaged building material is the same. The organisms in the soil are the same depending on the depth you dig. I have done some work in Arizona also. The residence had a walkout basement with water penetrating through the basement block walls into the paper-faced gypsum board with vinyl wall covering (decorative vapor barrier). I did the inspection, took the samples, wrote the remediation plan and passed the project to a consultant I trusted to see it through. This was another Dr. Shoemaker deal.

Stephen Vespers, PhD microbiologist or ERMI guy, at EPA found mold in Ohio was essentially the same species and rank order in Manchester England. The only changes I see with mold from Florida to Maine is more closely tied to temperature requirements than anything else.

You could argue mold in a tropical or sub-tropical region is different species due to extreme temperature differentials with high water activity. Those species still produce mycotoxins at high water activity levels. This is why I pay attention to chronic high water activity sources.

Mold is everywhere. Water damage is not everywhere. Crawlspace are a huge issue on the East Coast, Tennessee, Ohio and the West Coast. I have traveled to many places to do these inspections for medical referrals. I try to help the financially challenged - especially when they are getting medical care and can't get help around them.

I had a customer who had great health until living in a construction defect home with bad stucco and window installation. The customer worked at a large plant nursery for years with no problems. The customer moved to a good house and healed while working at the plant nursery in the DC area. Plant nurseries are loaded with mold. They do not have water damaged building materials or unsealed crawlspaces under them.
Bottomline: Water activity is more important than geographic region or refrigerators would never have food spoilage - which primarily comes from mold.

You can read "Fungi and Food Spoilage' by John Pitt and Ailsa Hocking if you want to see a wide amount of information on mold. This includes everything from culturing to physiology (temperature, water activity, pH, etc) to ecology (where it's found). You won't find Stachbotrys in this book but there are other sources for this organism.

7 days ago • Unlike • Like

Blaine Parry • Never mind Greg - you didn't answer my question - THAT'S WEIRD!!!

It has been great playing in your sandbox but I gotta go now - enough is enough

I would like to thank all who have participated in this discussion - it has been a very good topic for a couple weeks now. I have learned quite a bit - most unexpectedly but have gathered enough to determine that for me - I will not recommend the long distance protocol plan or advise homeowners to take their own samples anymore than I would tell a home owner how to remediate their own problem that I have never seen.

To be honest, some of the comments in this discussion are disturbing on many levels.

Thanks again and Merry Christmas to the group! I look forward to more intriguing discussions in this group!

~Blaine~

7 days ago • Unlike • Like

Todd Crawford • Thanks for your comment Blaine. I will admit that I am frustrated that I can't follow up on every complaint (I can't speak for my compatriots) - but on the other hand, very few complaints require any investigation. While the first word on the phone call might be "mold", the whole conversation is much more likely to be about landlord-tenant law, health effects of mold, why mold is not regulated as an environmental contaminant, and the big one (drum roll please), the relationship between mold growth and water damage! Of course, we would love to have a more active role in responding to these problems, but the vast majority of calls are not really about mold.

6 days ago • Unlike • Like
Hello Blaine –

Same here, and I agree with Todd (which is not to agree with Mr. Weatherman). I receive close to four or five phone calls per week regarding indoor moulds. 99% of the time (virtually always) after a few minutes on the phone, we have “diagnosed” the problem over the phone (sometimes from across the country), to the extent that the caller usually learns they have been unnecessarily frightened by a Certified Mould Inspector, or Home Inspector or a weather man giving them crazy, insane “toxic mould” misinformation.

By the end of the conversation, the caller is usually learns that their “sampling data” is useless, and the fear mongering “mould inspector” is relying on junk science. Or alternatively, the caller learns they have a water intrusion problem that they can just take care of without any further considerations about moulds.

Similarly, we can easily “diagnose” problems from afar when, based on the totality of the circumstances, the caller gives sufficient information: For example, a caller says the CO level in their warehouse is 75 ppm – my first question is “Do you use propane fork trucks?” Answer: “Yes, how did you know?” “Diagnosis:’ Better check the emission of your fork-trucks.”

However, this is entirely different than the nutty stuff of Mr. Weatherman, who, based on the remarkably incompetent information in his posts, would lead one to surmise his inability to diagnose a problem regardless of his proximity to the site.

Which brings me to the Greg Weatherman “Gem-O-The-Day.” In this scenario, there was a very simple issue of chloramines in the air of an indoor swimming pool and Mr. Weatherman was “helping” out a woman by explaining how oxidizers in the pool water deplete the O2 concentration in the air:

“Maybe the air in the indoor pool should be tested to see if there is an oxygen deficiency due to displacement with pool vapors and lack of ventilation. I have never seen the lifeguards sample the air. (4/27/04)”

(Folks, I swear I’m not making these crazy quotes up …. Mr. Weatherman really is so incompetent that he can come up with insanely stupid statements that he tries to pass off as legitimate knowledge, and of course he will defend them to the teeth with big words, and references he has never read and cannot understand.)

Cheers!

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AMDG

6 days ago
Trey Manning • Merry Christmas to all!

6 days ago • Unlike • Like

Greg Weatherman • Blaine's questions were answered but he does not understand since he still does not see the properties of mold can change during growth or microbial respiration due to food, water activity, temperature, pH and other factors. Geographic regions only have minimal changes. I guess I could put it in these simple terms but, people like Caoimhin will do the professional contrarian thing with arguing qualifiers for the statements. I give examples for this reason so people can do their own research for independent confirmation.

Another instance of Caoimhin misconstruing the facts for journalistic slant. A person with breathing problems will have issue in that kind of environment even when others don't. The lifeguard was fine for obvious reasons. I think there are probably some IHs that have been called to investigate indoor swimming pools if you ask around. His goal is to get people to ignore the science I have cited for this thread of discussion.

I was reading Caoimhin's marijuana and mold article. I notice he referred to himself as an "international mold expert" in that article or another. I always thought an "international mold expert" would be someone like Robert Samson, Chin Yang, John Pitt, JC Frisvad, Marin Klich, etc. These are people who did the original research or wrote the laboratory manual cited around the world as the authority. Am I off-base to have such a definition? Would a professor cite Caoimhin P. Connell for mold? Did Caoimhin discover something nobody else knew about mold? May he can educate us with this missing link.

JC Frisvad has some really great research about mycotoxin production for Penicillium roquefortii with 3 different subspecies consistently producing different mycotoxins apparently due to the subspecies differences. I still eat Bleu cheese and gorgonzola since food production is tightly regulated in this area. I wonder if anyone uses P. roquefortii as an always harmless mold example in the environment. I don't call people. People call me after medical referrals or someone they know with the same health complaints. It's kind of hard to scare a scared person. It's even harder to reason with a scared person told all mold is bad or all mold is harmless or all people react the same. I really do have customers who have no health complaints and do not need every stone turned in their houses.

Happy Holidays - even for those with years (maybe decades) of sticks and coal to warm their hearts.
Blaine Parry  •  Greg - I do understand more than you think! No need to put things in simple terms that I can understand - dummy down your superior knowledge. You did NOT answer my question. Get away from your mirror and read my question again - then read your answer to my question... good grief, you are tiring to say the least!

You told me that warm air holds more water than cold air and that is was basic psychrometrics. Funny things is that air does NOT HOLD WATER!!!! What happened? How could you miss such a basic principle Greg? Leads me to believe that you may be way off base on many other positions you "plagiarize"

It is my opinion that you look forward to your copy & paste all day and just can't wait to paste something else - I am finished with this conversation and this discussion. You have spoke volumes to me Greg...

Thanks again to the group for your participation!

6 days ago  •  Unlike  •  Like

Wane A. Baker, P.E., CIH  •  How wonderfully entertaining this thread has been! Wish I had the time to contribute....

Best wishes to all in this holiday season.

6 days ago  •  Unlike  •  Like

John Paciulli  •  I concur with Wane

5 days ago  •  Unlike  •  Like

Greg Weatherman  •  Blaine,
I do not know where you are going with this point. I cite my sources so, this can not be "plagiarism". I thought I would provide this link from Ohio State University where they seem to indicate that warmer air does hold more water if you read the paragraph starting with "Relative humidity" under "Air Properties". Maybe you could explain the "junk science" for me. I'm always open to learning.

http://ohioline.osu.edu/aex-fact/0120.html

I suppose things change in extreme atmospheres I'm not accustomed to encountering.

2 days ago• Unlike• Like

Caoimhín P. Connell • Good morning, Greg –

Although it may be your stock in trade, Greg, to reference links to documents you have never read and are not likely to understand, it is not otherwise a valid form of argument.

Instead of asking Blaine to read something, and then expect him to try to decipher why on Earth you are referencing the links, if you have read the information on the links and understand the content, then why not explain why the information is valid, what does the author say, how is the information germane to the discussion, and how does the information support your argument.

You don’t do that Greg because you haven’t got a clue about the subject matter that you hold yourself out as an expert. Your profound lack of knowledge in these issues of water vapor, air, human exposures and the dynamics of gases is not only legendary but it gives rise to bizarrely incompetent explanation such as the following where you are explaining to a woman how water vapor in an hot-tub displaces the oxygen:

The steam is fine water droplets which can be inhaled. this means the lungs are breathing water droplets and oxidizing chemicals when a hot tub is used. This means the lungs are slowly robbed of the oxygen the body needs (19.5% of normal air). (4/27/04)

Greg, it’s all well and good to stand in front of a homeowner you have frightened with big words, references to universities and researchers and your own invented “science-babble” – but when you enter public fora read by legitimate experts in these areas, and try to bamboozle us with your nonsensical goofiness, it’s just irritating.

In a recent personal email to me you warned me that you are being hired by some unidentified attorneys to read my depositions “…to get questions to corner guys like you.”

Really. I just can’t imagine what kind of questions you could possibly construct to corner guys like me that could be floated across the table without causing uncontrollable laughter.

Cheers!
(The opinions expressed here are exclusively my personal opinions and do not necessarily reflect my professional opinion, opinion of my employer, agency, peers, or professional affiliates. The above post is for information only and does not reflect professional advice and is not intended to supercede the professional advice of others.)

AMDG

2 days ago

Blaine Parry • Greg,

My last post in this thread. You seem to like to reference links quite a bit so I am replying in a way you can understand.


Greg - this should suffice. If you need more info regarding your "junk science" - just look! Junk science - you really need me to explain that to you? How about another link? I know you like the links:

http://en.wikipedia.org/wiki/Junk_science

2 days ago • Unlike • Like

Trey Manning • Blaine,

I am guilty of using the term "Warm air can hold more water."
I have heard instructors at water restoration classes say the same thing.

I would recommend anyone who has said this read the article that Blaine posted from the USA today. This article does a good job at explaining how this statement is not true.

Blaine I did not finish reading because the author was contradicting himself. (In my humble opinion)
"In order to explain this to 4th graders, we won't differentiate between the notion of vapor pressure versus "air capacity." It is probably sufficient to say that the air is like a sponge. When air temperature increases, that sponge grows a little and the air can hold more water vapor. When air temperature decreases, the sponge shrinks and the air can hold less vapor." by Rick Neuherz, meteorology, National Weather Service

I have read the Bad Cloud article in the past but did not understand. Maybe the article was not clear on the point or maybe I was not ready to let go of a misconception.

Thanks for posting Blaine.

1 day ago• Unlike• Like

Greg Weatherman • Arguing semantics does not obscure the original discussion which is what Caoimhin is attempting to do - as usual. We have seen a link to an articles from the AIHA publication. We have heard a government scientist weigh-in. We have not heard a credible reason why a homeowner can't test or why someone can't consult long distance. I respect everyone's opinion. Opinions are opinions until proven otherwise.

Since most of my business is medical referral, I don't think I'm in position to scare customers.

Does a person with weakened lung function benefit from inhaling chlorinated chemicals that inhibit the phospolipid cell surface reaction which relaxes and tightens as respiration occurs? I leave that to MDs but Caoimhin seems to have his wordsmith cape.

I have not read the article but, my understanding of water vapor in the air is due to the Kelvin-Kohler effect (http://physics.nmt.edu/~raymond/classes/ph536/notes/microphys.pdf).

At some point, the water vapors are more subject to diffusion than gravity. In meteorology, this is water droplets sized 10 micrometers in diameter or smaller. The term "super-saturation" is also important. I understand this material enough to explain why common air cleaning methods fail and prove it with analytical testing in the field. A warmer, drier atmosphere (composed of air and other items such as "solutes") does have more fine and ultra-fine material suspended in the atmosphere people breath. Could microbial fragments act as "solutes" to further the process?

People can get out their particles counters which also test for RH and temperature. You can do some air sampling with various microscopy techniques to separate the different types of particles and their sizes. Why listen to anyone when you can test it yourself. Caoimhin wants everyone to think everything is fine. I guess he is trying to put IH's out of work.

I have reports to do since I'm not paid to obfuscate from the "good neighbor's" bully pulpit.

1 day ago• Unlike• Like
Arthur Augusto Nogueira Reis • Acredito que para um bom trabalho de pesquisa neste caso, é mais que vital a presença do pesquisador em campo. Como mencionado, é falta de ética e profissionalismo da parte do relator.

1 day ago • Unlike • Like

Caoimhín P. Connell • Bom dia, senhor Augusto:

Eu concordo. É imperativo ter um pesquisador qualificado no local. Naquela época, o investigador pode determinar as técnicas mais adequados ou métodos. Naturalmente, o profissional treinado não vai empregar o método ERMI de qualquer maneira.

Cheers!

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AMDG

23 hours ago

John P. Lapotaire, CIEC • Concordo com ambos Agusto e Connell

22 hours ago • Unlike • Like
Greg Weatherman • Senhor Augusto,

Por favor, perdoe o meu uso de uma ferramenta de tradução internet. Senor Connell usa a ciência para confundir empreiteiros e outros consultores para que eles irão fazer o seu lance. Maioria de seu trabalho é pago pela defesa legal. Isto inclui proprietários e companhias de seguros. Os consultores e empreiteiros são acusados após a ações judiciais. Os consultores e prestadores de ter uma má reputação. A internet torna impossível esconder.

Eu tento ajudar os pobres e os doentes que estão esquecidos. Isto significa mais do que qualquer oferta na igreja. Eu não ganhar a vida enganando a pessoa comum por causa dos lucros corporativos. A mancha na alma não pode ser lavado com palavras gentis. A mancha na alma não pode ser lavado com palavras gentis.

Espero que suas férias têm corrido bem com a família e amigos,

Greg Weatherman

21 hours ago • Unlike • Like

Jesse Phillips • This is getting ridiculous.

21 hours ago • Unlike • Like

Caoimhin P. Connell • Jesse - from the sublime to the ridiculous comes the hysterical! ...

Mr. Nogueira -

It is rather comical that Greg Weatherman accuses me of "using facts and science to mislead people." As you can see from his various posts, Mr. Weatherman lacks any actual knowledge in the subject matter of IAQ, toxicology, sience in general, and human health issues; relying instead on the use of words and phrases he thinks are "scientific sounding."

From posts on this site, you can see that when Mr. Weatherman “helps” people, it usually means they have been given his normal dose of ignorance and gobbledegook that he thinks passes as knowledge but is usually just meaningless drivel.
Mr. Weatherman has a long standing reputation as a bald-faced liar, as is evidenced by his above post wherein he has simply fabricated the information concerning my clients. Mr. Weatherman has absolutely no idea of who my clients are and so, as is usual for Mr. Weatherman, he just fabricated, with impunity, his assertion without regard to honesty or truth.

This is not the first time, for example, for years he was trying to sell himself as being a member of the American Industrial Hygiene Association; however, the problem was, the AIHA had no record of his membership – this is just another example of his dishonesty.

In his post Mr. Weatherman claims “Eu tento ajudar os pobres e os doentes que estão esquecidos.” And yet, his own posts demonstrate that all he manages to do is mislead and defraud people. For example, he likes to identify himself as a champion of the poor hypersensitive victim… and yet, Mr. Weatherman doesn’t even know the meaning of the word “anaphylaxis” as is evidenced by the following:

Greg Weatherman Gem-O-The-Day!

“All, the steam is fine water droplets which can be inhaled. this means the lungs are breathing water droplets and oxidizing chemicals when a hot tub is used. This means the lungs are slowly robbed of the oxygen the body needs (19.5% of normal air). This leads to slow anaphylaxis for people with respiratory problems even when they seem outwardly healthy.” (4/27/04)

-Greg Weatherman

Reduced oxygen leads to “slow anaphylaxis?” OMG! How funny is that? Not only does Mr. Weatherman “help” people by telling them that breathing the air in a room with an hot-tup will somehow magically reduce the O2 content in their lungs, but that in turns leads to “slow anaphylaxis”!!

The man is legendary for his profound ignorance and dishonesty – which he sells to unsuspecting victims who are duped into buying his snake-oil. In my opinion, such fraud is criminal.

A colleague recently commented on his experience on trying to have a technical conversation with Mr. Weatherman whose scatter-brained opinions are very mixed up – He alluded to Mr. Weatherman as being like a 110v pin-ball machine plugged into a 220v socket! Lots of lights and noise and action, but mostly just a bunch of loose balls randomly rolling around!

Cheers!
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AMDG

20 hours ago
Please read about C4a complimentary protein. Low vasoactive intestinal peptide (VIP) leads to low VO2 (volume of oxygen absorbed in tissues). I think health is more complex than your strict view of chemistry in a test tube. It took time to verify some crude theories based on observation and suffering asthma as a child. I'm sure all your observations were perfect the moment they hit your mind - like mold in walls is not an issue.

19 hours ago

Medical referral customer from 750 miles away just called to report success with a house I never saw. They followed my remediation plan after at least 3 different firms inspected and declared the house was fine. They took the ERMI test before remediation and after remediation they did themselves due to everyone's silly insistence for cleaning the air with HEPA filtered devices.

You can claim conflicts of interest on the homeowner's part for doing remediation and testing. I ask why a person would go through this work and testing at great expense to say they feel much better. This comes from a person with sensitivity to chemicals and mold for many years. It is priceless to hear a chemically sensitive person say they could go to Target to shop for less than an hour without the charcoal mask.

The earth really is not flat and we can get good things done with good observation.

16 hours ago