Mold Testing Standards and Thresholds

There. And from. From talking to you and working with me on Nathan on that mole plate. If we see one or more kind of. Or if we see two or more counts of Aspergillus for cerium, Penicillium or alterna area, or one plus one of any of those, like one for cerium, one for psyllium or one Penicillium, one alternate area.

Or if we see high levels of bacteria, then I want them to reach out to somebody like you to to look more deeply at what might be going on. I agree 100%.

And there's kind of the gold standard do er sample do SD auger plates, this poor chap analysis do an army have a mold inspector come in and do all this right.

That's gold standard chef. That's a $6,000. I can't afford that. Okay, let's go to the auger plates. You only have to send them in, you know, $3 a plate.

What area is showing the most mold in the house? Visually, I must try to help walk you through there. So there's. There's a gold standard. I wish everybody did every one of these things that's up on the screen right now.

And that would be the best thing. Yeah. The problem is, how many people in your field are going to pay 6 to $10,000 are actually 6 to $12,000 to have that done.

So people scan that. Some people can't and they still need to move forward and have health. Right. And to me, at the end of the day, it's all about finding those elephants, those problems inside your house and fixing either takes them or flee from them.

And that's what I love about your approach is that if somebody has the budget for it, let's do all of it and let's let's get in there. But if they don't have the budget that you can still help them find a way through.

Exactly. Right. Exactly. The thank you. Thank you so much for that. So I know you've got some pictures you're going to show us here. You bet. So let's quickly go through the inspection phase of what I look at.

Inspection. Some things are obvious, right. You know, that's even more just crawling all over the back of that teddy bear. That's not rocket science. This this is a personal story for me.

You know, the kid who's five, he's. He had a pacifier in his mouth and in a diaper at five. His eyes are all glassed over. I got told because he was going into seizures.

He thinks I'm taking a picture of his race car. Bet I'm not. I'm taking a picture of the muscle growth there where he sleeps right behind his head every night.

You know, that's. That's obvious. So. But in my world, things are generally hidden. You know, here's a sleep number bed that had mold growth all inside the bed.

And this is where they sleep every night. And that was asked for Jill's penicillin group that was showing up at high levels in that bedroom. You test that this is an atrium inside of a house.

In the bottom of that atrium is a lead liner. It had about, I don't know, two, three inches of standing water in it. I actually had to put on a mask when I got close enough that to document what was in there, it was just nasty.

And the, the sweet girl that was actually on the couch, and I can't zoom this in. I have a picture of her from a couple months ago. She's doing so much better.

But she was lying down on that couch waiting for the nurses to come give her an ice bath. Oh. Oh, God. I knew. Can we talk about plans for just a second?

Yes. People are going to ask, do I have to get rid of all my plants? Great question. In this case, this this this atrium is a elephant, not a red flag.

In most cases, they are red flags. They're a contributor to your toxic load, but not the reason why you're sick. So that makes sense. This was the reason.

Yeah. This. So this had flowers all in the bottom of it. So soil in the bottom of it saying water in it. Every type of mold that you can probably imagine was growing into that thing.

That is a huge elephant. Now, what about just regular house plants where somebody has it in a pot and it dries out in between? Yeah. So my job is to protect you, right?

So now most plants go into what I call the red flag category. They're a contributor to your toxic load. No matter what, they're going to have a swarm microscope form into the soil.

Then you got creative. You put wood sticks to hold up your IVs, and you put those plants in a wicker basket. Well, once that gets wet and doesn't dry out, there's your Aspergillus Penicillium.

You're starting to see what those are, toxic molds.

Inspecting Hidden Mold Sources

I had a lady said, Jeff, you know, I only had this one plant. And I look at it, it's a wicker basket. And I pulled it up and the whole bottom side of it is completely black.

Yeah. This is, you know, your office where you said eight hours a day. That's a a major contributor. When you get that much mold that most of the time, if you will limit your plants and you don't have them in your master bedroom, your eight hour day sanctuary, I'm going to tell you about it because it's a red flag.

But is that why you're sick? The answer is no. NASA uses, you know, plants to take up in the space shuttle to remove toxins out of the air. Great. For a lot of people.

I suggest no light plants, but it's not a must that somebody gets rid of them. So I think about if somebody is really attached to the plants, then the succulents that need to dry out really well might be a better bet.

And the key? I actually keep a little list of sorry. Go ahead Jeff. Yeah, I put a list of succulents in my reports. Hey, if you're going to have plants, here's the plants to use.

Don't use wicker baskets, use clay pots. Change after soil. Yearly maybe. And put some little small rocks over the top of the soil. So there's things that you can do to help minimize that, but make sure your drains make sure it drains well.

Yep. Exactly. Right. Or I see a lot of people, they'll put them on those plants on wood floor. They over water the floor. Now there's mold all into that wood floor or the carpeting underneath it.

Yeah. And we we did end up getting rid of our plants because of, my sensitivities to mold. And but I do keep one aloe, so one aloe that I keep in a window, and I make sure it dries out and stays, doesn't stay moist at all.

Yeah. So in this house particular, I'm going to win that battle. No plants there. Because it's basically an atrium of just a ton of different plants. In your normal house, if I win the battle of not keeping them in your master bedroom, that's the battle I want to win.

Other than that, I don't care if I win that battle. Thank you. Jeff. You bet. So carpeting in the bathroom, I say, has a lot of carpeting in general. You know, you pull back the carpet, and that is solid black mold that's growing up underneath on that.

Some flooring a lot of. And that was hidden. You couldn't see it with the naked eye that you pull that back in. That's why carpeting, especially in a bathroom, is a bad idea.

I don't like carpeting overall. You know, mold spores build up over time excess. And then we have pets inside the house. Whatever the case. Then you get all those mold spores, dust, dirt and debris.

Allergens get trapped in that carpet. Carpet ways when you put brand new carpet in, when you take it out to change it out on average, that that carpet you're taking out weighs eight times more than what you did when you put it in.

You don't want to breathe that. That's gross. So so good. That now mentioned, every time you walk across that carpet, you're putting a little pot of junk up into the air every time you're disturbing it.

Ooh, let's talk about carpet a little bit more. Yeah. And I also want to know one when we did a Facebook Live Jeff, which was just loaded with good information and people want more, they can they can go there and we've got more mold remediation in our, MCC 360 precision mold course, but when we did that Facebook Live, we talked about carpet cleaning and not over saturating the carpet because that can be a way that mold that pad or mold.

Can you talk about that? And then how can people safely, shampoo their carpets? You bet. The key is goes all back to drying that carpet out within 48 hours.

Now, generally, if a professional company is doing it, they have the equipment to suck out the excess moisture content and have it dried out within within that 48 hours naturally.

May I have a rug, doctor? I bought one from Sam's, and I use it on my carpets every six months to a year. When I do it, I don't saturate. You know, I did quick, not quick, but that semi quick passes over the carpet, so I'm not saturating my carpet.

Then when I am done, I actually get down on my hands and knees with the towel and do a quick wipe over on the top of the carpet, and it it always dries out within that 48 hour time period.

The other thing that you could do is get a fan or the ceiling fan, make sure and turn it on in there. In my house, I actually had a couple dehumidifiers because I live in Oklahoma.

And I'll put that one of the dehumidifiers in that living room to make sure that it dries out quicker. So the key is make sure that it's dried, that touch, especially after that first 24 hours.

If it's not, get some dehumidifiers, get some fans. Let's get that thing dried out. And I know there's a method called dry shampooing. And that's what I've used because they use a lot less liquid.

And then we're going to talk about a solution here at the end that people can use for the carpets as well. But what do you think about carpet in general with mold and mold issues?

So it's a if it's not currently a problem, it's a problem waiting to happen. So as an investigator, when I come to how sometimes I visibly see these heavy stains and it's not a suggestion, I'm telling you to remove the carpet in there.

But even in those areas where I don't see any visible damage, it's countless times you pull up that carpet and there's visible mold growth on the subfloor because, oh, yeah, that's where I spilled, you know, a gallon of water that one time.

Or there's where we had the my daughter's dogs over and the urine got into that and cast mold. So it's amazing

what you can't see that it's hidden either on the backside into that pad, the subfloor, or actually deep into those fibers of carpeting material.

So when you're using a dry shampoo or, Kim Dry, something like that, generally it doesn't get deep enough and get into the pad or deep into the carpet to be able to pull out excessive stuff that's hidden deep into the carpet.

That's why I like hot water extraction the best. We just have to make sure that it's dried out within that 48 hours. And that's a great tip. And then we'll talk about the solution people can use as well.

If people are able to replace it. And everything about in our house, we have some carpet here and I'm particularly concerned about the carpet in the finished basement.

What what what are some of the best flooring types for people to avoid? Mold. So my my first two are the best. Number one stamper stain concrete. You take that concrete in there.

So sophisticated with that today, they can make that concrete look just like a wood floor. It's beautiful. Some of the results that I've seen. So stamper stain concrete is number one for the same reason why number two is, ceramic tile.

So those first two, you get those wet. Are you if just right back out is rare that you ever have to pull up a ceramic tile, it does happen, but it's extremely rare.

And obviously if you stamper stain your concrete, all you have to do is try it out. There's, you know, you don't have any stain water, mulch, not going to correct everything.

The on that you're going to have to remove and replace if it gets wet. So my next in my in Kansas room you'll see her room where she had carpet before.

But now it had it's had three wood floors. So those final plank wood floors, if they do get wet, they're going to have to come up. But at least they don't trap excessive mold spores.

They're starting to break. I just have to clean the surfaces of them. So anything other than carpet. Okay, so because I know a lot of people are so sensitive to things like VOCs, and I was saying about some of the less toxic options.

Yes, yes. And that's nice. You know, a bunch. Yeah. So, so now it's researching any place wood floors that don't or give off little or no VOCs. Okay. Great.

Those are wonderful tips. What's this? Does this image. So that's going to be visible water damage on the ceiling ceilings a lot of people will look at that and say you know Jeff that's just water damage.

Well I'm looking at a ceiling and I'm looking at 10% of the problem.

Plants, Carpets, and Flooring Risks

The other 90% is on that other side where it's water stood in insulation that has 15 times its moisture content before the belt, where the mold begins to grow.

Then finally it shows itself on the other side with water staining. So anytime you see water staining, that means that it's been there for more than 48 hours.

That material needs to be removed. If else, like some people just cut out the stained part. But I know you talk about going further out than that. Good general rule of thumb is to feet past invisible molder water damage.

Mold hyphae can extend up to about six inches that you can't see with the naked eye. So I always tell people go to

put past invisible staining. Thank you.

And here's another area that people don't realize. Here's here's, you know, this is a fire hazard too, but you got all this excess of moisture from a dryer dumping into your attic.

There's actually visible mold growth on a lot of the wood decking as well. So in these cases and say, okay, I'm going to remove every bit of insulation that is into this attic, I'm going to treat this wood with 12% hydrogen peroxide.

Then I'm going to put a sealant over that wood. So, and that's one of those things, how often are you in your attic baths? It's one of those things that you don't generally see, but your attic.

And we'll talk about this in a minute. Attic or behind your walls. Crawlspace. Those airs contain about ten times higher mold contaminants than your breathable air without a water intrusion.

Now, you add a water intrusion. You add visible mold growth. At this. Add a chance. Now there is Irish in your attic is communicating with your breathable air.

You're getting sick and you don't know why. The same way with the crawl space. What people miss a lot of times is the soil contamination. You can see in this photo where you can visibly see the soil is wet.

There's an Hvac system down there. That Hvac system is pulling 5% of the air directly around it. This nasty crawlspace air is getting dumped into the rest of the house.

And I found that a lot of people don't know what a crawl space is. And this is actually a pretty tall one. Really tall. Can you talk about what that is and then how that actually gets into people's homes?

Because they also don't realize the air exchange that's happening there. Yeah. So in this particular case, let's say this is the nicest Hvac system in the world that's sitting back in there.

That means that it's about 95% contained. That means 5% of the air directly around it every time it comes on, get sucked into that unit and now goes through the Hvac system.

But even without an Hvac system down there or in Hvac system in your house, there's stack effect. There's, you know, pipes, holes. You see all these pipes, their water lines going up underneath the kitchen sink.

Those aren't sealed around. And every time, air goes up, imagine that green gas going into those pipes. Holes next crannies, behind your wall cavities.

Now it's coming through the outlet. It's just so easy for that crawl space air to to communicate with the air above it. In so many ways. And most people have their Hvac systems, you know, in the main, main level of the house or the attic. So.

But every time in the Hvac system comes on, it creates a great amount of negative air pressure. It's a suction, a vacuum. It'll pull air from your attic and crawl space, air behind the walls.

And now suck that into your breathable air. I don't want you to breathe that air, and the spores may not be getting through where the mycotoxins are so much smaller than the spores.

Yep, that this is where it may not show up on an Ermey or a mold play, because those are spore testing. Is that right? You're exactly right. So this is where we need to get somebody to go in and take a look in that crawlspace, or put a mold plate in that crawl space.

A few more plates in there, see what's going on. Yeah. Yeah, that crawlspace is musty, but there's no visible mold. Oh, okay. You know, you know, there's a problem.

And if you have a crawlspace, more than likely you have a problem. Period. But they can be fixed. So there are lots of ways to encapsulate that, to seal it.

So these things are fixable. All these things are fixable. Exactly. Right now here you're seeing a Hvac system that, you know, most people don't look inside their X factor systems.

The bottom right picture is actually mold growth that's actually on the articles themselves. It's actually two different Hvac units. The the one that's setting up on the left actually has water jumping at the bottom of it.

There's just a big pool of water underneath that Hvac system, and there's more growth on the wood all around it. So that one was pretty. But Hvac systems, yeah, especially in Texas.

I got a call from a guy in Texas this morning, and his Hvac system was his problem that usually in Texas, that's the first place that I look, because you go up in the attic in this top left picture, that's mold growth just growing all over that.

Outside of the unit that mold can't eat anything on that metal, but it's just growing on the outside because of the humidity, right? The humidity is ever so high.

And if we've got is it over 50%, then mold can grow just from that humidity in the air. Exactly right. In this other one, the one on the right, this mini split unit.

And this is inside of a school, and you open up the mini split unit itself. No small growth, just all over the spindle wells. You know how many people look there?

I mean, you can see the big water standing and on the top of that one, one top picture. So the multiple issues that were going on there that that Hvac systems are just a wonderful place for mold behind and people don't know it.

So number one reason why people get sick from mold exposure, in my experience, is dirt floor crawl spaces. Number two is actually a swamp cooler. Same thing.

You don't see this, but here's what a swamp cooler looks like. Generally, a couple inches of standing water is always in the bottom of that. So mold virus bacteria are going to start to grow into that stain.

Water mold will actually go up the side of the, the, filters that they put inside of those. And then they dump that air inside the house so you can. And the reason why it's called the swamp cooler is the word swamp smells like a swamp because all the mold in it.

And these are really popular in out West and more in the South is that right? Even in Denver, I run in I'm in Denver every other week working in, a ton of swamp coolers in Denver.

Okay, okay. And these are also called evaporative coolers. Correct. So, a little bit about some of the equipment when you're using it. This is a specific case that was in Oklahoma, moisture or dosimeter that, that it's an air sniffer.

Right. So looking for volatile organic compounds, that number really shouldn't be about one part per million. This number is at 1351. I've never seen it that high.

I walked into the house and turned it on immediately. It was at 16. And you know it's a snip or something. Get trapped in the end of that hose. So I was mad at my my, VOC meter.

So I took it outside to, to clean it out and immediately it registered zero. It's not my meter that has the problem. Is the house right? House was roughly 72% humidity.

Then I finally get up into the attic. And it's pictures never describe how really bad it looks, but you can see a line down the middle of this wood. That is where the joists above are raining and coming down.

And it's raining in that attic. Just because there's no ventilation at the humidity was so high, and that's why the VOC meter was that high. Moisture meters.

This is, moisture meter in pin list mode. So I'm checking for moisture content behind the shower cavity. So I can't see that with the naked eye, but it is maxing out my meter, so I know that there's going to be excess moisture behind those tiles, and there's going to be a significant mole problem behind that master shower.

You know, infrared cameras, everything has a heat signature pattern to it. This is a basement in Denver. You see the nice red up top, then on the green.

Then we have blue. When I pull all this stuff back and look at the bottom of that wall, all where that blue is, that's where water is actually standing.

Because water sitting up against the foundation. And that's things that you just can't see with the naked eye. So that wasn't water inside the wall. That was water on this outside wall of the house.

Because I was standing up. Yep. Drainage was was allowing water to stand against the foundation. Now it's absorbing moisture into those cylinder block walls that's behind that sheetrock.

Now that insulation is wet. Now the bottom of that sheetrock was completely wet as well. Yeah. That's that's an area that gets missed a lot in these mold inspections.

Oh yeah. And I always tell everybody, if you're hiring a mold inspector, I don't want a guy who just comes in and does air testing. I air testing is a tool and I love that tool.

Please use it. But I need at least infrared cameras and moisture meters to help them identify and come in that house and find where these elements are at.

Know there's high ground butters that we use. You know it's 58% humidity in this one area that we're looking at.

Water Damage in Ceilings, Attics, and Crawlspaces

Here's a moisture meter in pin mode. This guy is there's a guy's leaning down in the corner. And what he's doing is going up the up that wall two foot and cutting it out.

Well, I don't know who told you to cut up two foot because you're moist all the way, 4.5ft high. So I need to go two foot past that. Okay, so you're finding that there's moisture in that wall that's damage to the drywall all the way up that high.

And when we took it out there, small growth all over the backside of that sheetrock. You know, Jeff, all of this is making so much sense because I worked with so many people that they come in and they tell me I've had comprehensive mold inspection, we did remediation, we got it all.

And then there's still so sensitive. They're still so sick. We've worked together for six months. They're not getting anywhere. And with the methods that I use with six months, people should be getting some improvements.

And I'll often say to them, I think something was missed. And they'll they'll usually because you know, I've been through so much with it, they don't want to hear me.

And I understand why, and it certainly makes sense. But if people haven't had this depth of an inspection, it's highly likely if they're still sensitive after doing six months of our methods, that there is still something there and something that that's the missing piece, because if you're still exposed to mold all the time, your limbic system can't calm down, the mast cells can't calm down.

And all the things that I'm trying to do can only take them so far. And there's really sensitive people who come in,

Jeff, and they they can't take anything.

They can't tolerate supplements. They're down to just a few foods. I've seen this time and time again. And then when they're finally ready to take a look at it, at this kind of depth that you're describing, that we always find something.

Yeah. And I dress at three different ways. And, and most of the time, when I started doing this, you know how long I've been doing this? 18 years. When I started doing this, I, when I did my my thought process, when I go into this house, I'm looking for the elephant.

Right. There's an elephant in this house. We need to find this elephant. I find an average of three elephants in every house I go to. So one, you probably missed an elephant.

Number two, and I love analogies, so I'll use it. And this is outside of where I live, probably 20 miles from me. Did the mold inspection on the house.

The doctor actually had them do petri dishes from all plates, and it they weren't high. They were extremely high. Aspergillus penicillin in the 30s of each in every room.

Right. So it's a significant problem. I go to do the inspection. I'm pretty good at what I do. There's nothing. I mean, there's a water stain underneath a water softener system that was in.

And we sit down at the table and my inspections for about 15 minutes, going over medical data, history in the house, just talking, getting background information.

No, I don't know any past water problems. Yeah. Okay. Well, and I talked to you on the phone. I imagined that I was going to meet her, and she's going to be 85.

Right. Because I get a vision of somebody when I talk to them on the phone. Jeff, I walk into the walls of my hair salon. I have nosebleeds every morning for the last two years.

I have to wear CPAp every night. This goes on. I pull up to her house. There's a, Corvette in the driveway. I like corvettes, that's my. Really? You know who's visiting her, you know?

So knock on the door. You know, she's 35. Wow. This doesn't make sense, right? Go see the house. Nothing's there. And I sit back down and said, you know, I went to your house.

You're either hiding something from me or I'm flat out missing something. And she ducks her head. What? What are you lying about? Okay, Jeff, there was a leak in the attic from the Hvac system in between my living room wall and my kitchen wall.

But they took that out last month. Who took it out? Jimmy down the street. Jimmy down the street. Took it out. Not under proper containment. Threw all those mold spores in the air.

She's sicker now than she was before. They tore it out all we had to do was treat the air, get the success, and force mycotoxins back into control by treating there until she didn't have a nosebleed the next morning.

Hadn't had one since she got off her CPAp within two weeks. Just immediate that day change. All because we did the right steps. Now that's a great example.

And it also a good example sometimes, you know, sometimes there are a lot of steps, but sometimes it's a simpler solution. I you're exactly right. So you know, either we missed an elephant, we just didn't treat the air or this house was so significantly impacted from a major intrusion that it's kind of like I always had, you know, somebody smoked in your house meth before you bought it.

You you smell it. Yes. It gets it gets into everything. But micro toxins are like that too, except for a lot of those. You don't smell the mycotoxins.

So it was this huge, sticky, monstrous issue that those mycotoxins just deeply embedded into all these items. And there's just no way to recover in that house.

It's rare that that can still happen. So usually it's one of those three things. And usually it's they missed an elephant. Yeah. Yeah. Which is so common.

And, you know, understandable that a lot of people aren't going to have this kind of level of detective experience and, and know what's going to make people like us, the all the canaries in the coal mine, so sick or like you, like your daughter.

And I found that mom specters almost have to have had some personal experience with it to really understand how in-depth they need to be looking right.

You need somebody good at the job, and they're not easy to find. This looks like a little Yorkie that's had a lot of messes on the floor. Yeah, he close. So that is not a dog.

You're correct that it's not a dog that is a Yorkie. That is Sophie. So we all have issues. This is my own house. This is Mackenzie's bedroom behind children's bedroom.

So if you look at the picture on the right, to the left of the Yorkie, all the way to the back of that wall, there's a tankless hot water heater in my garage.

The picture on the left is that filter to that hot water tank, and it exploded. Why didn't her, back then she had pocket yanked the carpet out. So after that, probably two weeks later, I had this beautiful wood floor down there on on her floor.

Two weeks later, that same closet, the line that's behind the wall. If you look on this left picture, there is the red hot water heater line at the corner.

That's a 90 degree. And they use nickel as that 90 degree. Then put two different metals as the clamps to hold it on. Water is the conduit because there's two different metals at corroded out the other water line that is behind the wall.

And that that line started leaking, got underneath that brand new wood floor, had to replace it less than six months later, she had a leak in the master or her shower, which is, behind that, that picture and water got all up underneath that wood floor.

So Kinsey's had three brand new floors. So it happens to us all. We all have have issues. So it's a matter of finding. Thank you. Popping up to take our rural water filter, reverse osmosis water filter under the sink.

Developed a link leak. This is before I knew to put the plastic tray under all the sinks in case there's something leak. And it leaked down into the wood.

Under the cabinet. And I knew to get that wood out right away, I knew not to let that sit. So we had to tear all that out, dry it out, and then put a new wood base down.

Yeah. So we're all going to have problems. It's knowing the four steps to fixing them. And we'll go over those four steps in a minute. But we talked a little bit about your attic air, air behind the walls, communicating with your breathable air.

And I threw these in sideways. And these are hard to see because these actually came off videos. But this is my own house. Two Hvac systems in my attic.

I went fogged my attic, came downstairs, turned on my Hvac systems, and I should not see fog coming out anywhere in this picture on the left. That's fog coming out my door jamb going into my kitchen.

A base plate isn't sealed, and every time I turn on that Hvac, hot or cold, that is sucking attic air and throwing it into my kitchen same way with my canned lights above, there's actually a bunch of fog coming out, that specific canned light, and I need to seal my canned light, air behind the walls.

This is infrared. Looking at this camera, see this blue, which is cold air coming out of that, outlet cavity. So we seal those up. So the air behind the walls, my attic air, crawlspace air does not communicate with my breathable air.

So some things are best are just going to be obviously anywhere. Some are not the the thing you're the key we have to look at is we have to identify where these problems are, find them and fix them, because if not, the problems are just going to come back in this.

People are going to be sitting just like we're talking about before. So when we get their property, we want to look and find the elements and red flags that are there, all contributors to your toxic load and minimize those as much as we can.

We want too minimize red flags, and we want to get rid of the elements or flee from the elements. Here's a problem that I've run into.

HVAC, Swamp Coolers, and Moisture Detection

It's not as prevalent as it was before, but when we have mold damaged materials, there is no substitute for removing and replacing damaged materials. There's some caveats in there, but there is not a dry fog.

There is not a chemical to put on sheet rock to get rid of it. It physically has to come out. Now you can use the dry fog to clean up there afterwards, but there's not any substitution with removing and replacing damaged materials or making those proper corrections.

No, I can't remove a crawlspace, but I can make proper corrections to fix it. I would if it's not wet rot. Dry rot, I can treat and seal it. But if it's sheetrock insulation, if it's got to be removed and somebody is telling you, hey, we can do this and just treat the air, treat that with something, that that's not problem solving.

That that is making somebody worse and so forth. They talk about why can you tell? Can you tell us why that you can't just spray it with something or treat it with something like the drywall or the wood and move on?

Yeah, I love analogies. So the analogy I have for you when I think about is the apartment complex that I walked in to open the bathroom door. It was stocky boxers, three foot high by about four foot wide all over the wall.

And I looked at that, looked at him, is the maintenance guy there? And he said, Jeff, that's dead. Okay. I know you don't realize that mold spores or dead mold can still produce market toxins.

I'm not even going to get into that argument with you. Be happy to, since your lab and see what the lab says, which I did. But let's just look at it from a human standpoint of view.

I'm renting out that apartment from you. I see it visibly on the wall. You can't. There's no way you can tell me that. That's not a problem. Okay, Jeff, I put bleach on it.

Well, Clorox themselves will tell you they kill two different types of molds of 100,000 species. A thousand birds, indicative to your indoor environment.

They kill two. One of those is an athlete's foot fungus. Now I'm down to one. It is a legitimate type of that's jealous. But they'll tell you it will only kill it on hard, non-porous surfaces.

So like tile or like ceramic. Yeah, yeah. And why didn't I just use soap and water to wipe it up? Right. That's the case. But it does remove the pigmentation.

It looks like it's gone. So they think the problem is actually gone. So and if somebody treats something said, well this killed it. The encapsulated it.

No, there is no substitution for removing and replacing damaged materials or making proper corrections. Nothing that you could hear or on. It's going to work.

I've had people tell me that, well, I had a water jug leak on my wood floor, so then I sprayed it down with hydrogen peroxide. When I saw mold growing and I don't see any mold anymore.

And my my response was, well, you may not see it on the surface, but because that water sat there for a week before you caught it, now you have mold growing in and feeding on the wood itself, so all that wood needs to be cut out.

That was damage otherwise. Thank you. Laying out the spores, putting out the mycotoxins. Yes. So you chilled and treated what was on the top, but you didn't address what was below.

Same way with Kinsey's room that that carpet that was all wet that you showed or that I showed. You know, the second time when she had the second leak, I was like, I dried all this out.

There's no way mold is underneath here. And I could smell it. That and I'm like, you're kidding me. So I popped everything up. And that's how I knew there was another leak.

But, you can get what's on the top and on the surface all you want. It looks magical. But if you if that wood floor is both buckled, anything of the sort, it has to come out because you have got to treat what's on the backside of that.

I had a guy that had a swimming pool inside of his house. Yeah, I know, but it leaked seven years ago. The waterfall leaked to it seven years ago, and he had water underneath his wood floor from seven years ago.

Is a major mold issue underneath this wood floor. Well, I'll never have something like a swimming pool inside a house. Yeah, I see it all. So basically, there's four things that everybody needs to know.

Number one, you have got to stop moisture intrusion, whether that's humidity above 50% or ongoing water leak. If we cannot stop moisture, we cannot stop the mold.

Number two, removing damaged materials and making proper corrections. Again, there's no substitution for that. We have got to find those elephants. And if they didn't find them, the first time, we need to go back and figure out where those elephants still exist in the house.

Third step treat the air to get the success of mold spores back under control. And that's what we do at bio balance. The GSE base grapefruit seed extract, lemon, lime, tangerine extract.

So it's not a chemical that's going to hurt you, but going in and treating that air. Then after you treat the air, do a good general cleaning of your horizontal surfaces to remove any dead mold spores that could still be there, that could still be producing mycotoxins.

So that way we've got everything in the air. We've removed any dead mold spores, and we've removed the sources. A turnkey way to making sure that that that house or that property is back under control.

Then you know that four step. Well, we got to detox that body to get those excess toxins back out of the system. So this is so important. I just want to recap here.

If there's any moisture intrusion and that could be a leak. But that could also just be humidity. We've got to get that

community down ideally under 50%.

We've got to stop any kind of leaking roof, leaking pipe, leaking water, you know, leaking from a drain, things like that, that cut out the damaged materials and go out two feet beyond any kind of visible staining to make sure that you cut out all the high Fe, because mold is kind of like a starfish.

If you go a little bit left in that material, it'll just keep growing. So you've got to make sure you get all of it. And then this third step, I find that people either miss this step or they hope that they can only do that step, but we have to treat them the air to get rid of the mold spores and what you're talking about using to treat the air.

We've used quite a bit. And our clients views quite a bit. And this air treatment that we're talking about will help neutralize the spores, neutralize the mold, the mycotoxins and you can do that as a maintenance thing as well.

We've had I just want to share, a story here, just that we had some clients who I was working with, their 14 year old daughter, and she was having anaphylaxis every time she ate, no matter how low histamine the food was, she would eat the freshest carrots, steamed, have anaphylaxis.

She would eat a piece of broccoli, have anaphylaxis. This didn't matter what it was. She'd have fresh lettuce, anaphylaxis. And they had a mold inspection.

And they did some mole plates and did the Ermey. And they had huge amounts of mold underneath all of the floors. So for them, they were one of those rare cases where it was going to cost more to remediate than to move.

So they decided they were going to move and you can't just move the next day, you know, and they they weren't able to they didn't have the funds to keep paying their mortgage and move into, a hotel or something like that.

So what they did was they started spraying and fogging that air with the bio balance while they were getting ready to move. And the next stage, for anaphylaxis stopped and didn't return, even though the mold was still there.

So just wanted to share that story that this this doesn't replace remediation. You absolutely have to have to remediate and do steps one and two, but it can buy you the time you need to move or the time you need to remediate.

And I could we don't have time for it. But I've got, you know, 50 stories like that of people who were able to get their symptoms a little under control while they were getting that remediation handled.

Yeah. And obviously I don't buy a balance. And I always tell everybody if you're using it in this case, as long as you know, it's a Band-Aid and it's not the fix because I hate, I hate no, no substitutions.

But yes, you know, I'm in an apartment complex. I had three more months on my lease. I can't afford to fix the problems. What can I do to treat the, Yeah, I can get it night and day better than what it was immediately overnight.

And let's talk about a couple of questions that we've seen in the past about, you know, Jeff, when I treat the air, I can disturb mold or mycotoxins and make the environment worse.

I've done this for 18 years professionally. I've worked with countless doctors across the country. I had never seen that be the case. And kind of when I look at things physically, if you're using a dry fog bath and so go back to mold, you know how it depends itself or puts that mold spores and mycotoxins.

It's like a dandelion out in the yard. So as soon as you kick it load to start with things, it's going to die. Throws at small spores that regenerate somewhere else.

But it you've seen the dry fog and you see this dry fog. You hold out your hand. You cannot feel that dry fog land on your hand. It is not disturbing that.

And, then you're knocking things out of the air and you're able to do a good general cleaning afterwards to get rid of any dead mold spores. So you're not disturbing anything or making that problem worse?

Remediation Principles and Why Surface Treatments Fail

I've never seen that in 18 years. Doing this profession. Now, if I was using some of these chemicals, my size, germ size, fungicides, ozone in high doses.

And let's talk about those a little bit, too. Now, I can definitely see a reaction from those harsh chemicals. One, a reaction to the chemical itself, because a lot of those have a 7 to 10 year half life.

So that chemicals in your house for like 7 to 10 years and half strength. But, using a chemical or even using something wet, something that could disturb that mold, then yes, you can have that happen.

But I certainly don't see that in a dry fog situation. And so if we lost two slides here, let's take just a second. Get your slides back up. What do you know, Jeff, that I'm very data driven, and I've probably driven you crazy with my questions.

And I'm very research driven, and I want to know, because of the population that we work with, I want to know, first of all, that something really is effective, and I need to know how to time that it's not toxic for people because I'm making a recommendation that people that are so sensitive and so sick.

And one of the things I've really appreciated about the bio balance is that it's essential oil based. It's not toxic for people. Some people who can't tolerate the smell of essential oils may have to have somebody else fog.

They have to it may have to be gone for several hours. But it's been incredibly rare for me to have anybody have any trouble with it. And we have people in our practice, Jeff, who can't drink water.

And we actually want to practice who are down to chicken and rice. I can only two foods. So we have a really sensitive population, and I can only think of two people that struggle to.

So in my practice, that is an amazing statistic. Because I would say about 30, 35, 40% of a practice can't even take quercetin. And so this has been extremely well tolerated.

Then effect has not been well tolerated. Can you help me understand why? Yeah. And I won't use name on products, but either you have the bio size, germ size or fungicides, or you have a tri salt based.

So no matter if you use the tri salt base, which is is the least toxic, but it's still going to throw inflammatory markers into your bicep. Those results are inflammatory for your body.

So what are what are tri salts? Great question. And I don't know if I'm going to educate answer this correctly. So the chemical that you're trying to use is salt based.

And when they're adding those three salts and throwing those into the air, then for whatever reason they're having and I've had this happen thousands of times, that they have an inflammatory response to those salts. Why?

I, I honestly don't know. Now I can educate, let's say, okay, biocides, germicidal, fungicides. They're having a reaction to that chemical inside their body.

But, but any time you create what I call a chemical change, where no matter what process, that you use it through that chemical change, usually your super sensitive patients or your serious patients, your natural patients are going to have a reaction to that.

That's why we stay away from that. As much as humanly possible. On the cleanup process, using 12% hydrogen peroxide instead of a biocide a genocide or fungicide.

Why we use grapefruit seed extract, in a fog form instead of using ozone? Because any time you create a chemical change, there's going to be some type of byproduct.

Usually that byproduct that is ozone. You know, Remy halos loves UV lights. A lot of your air purifiers that have an ionization feature, that ionization produces ozone that it can't produce for a positive ionizer.

Correct. So I would say if you can smell a side effect, it's not something that I want to use there. There's a specific brand out there that Scott slammed in the media recently.

But I smell it, man. It actually smells good to me. I like the device personally, but I cannot recommend that device because it obviously creates a chemical change.

So when I look at any thing that I am going to use to clean up with, whether that's hydrogen peroxide to spray on, let's say your wood studs that had had damage on them, then putting a sealant over it, even that sealant.

I'm going to use a no VOC sealant just because I don't want that chemical outgassing and that odor that can cause people to have a reaction physically, inside of the body.

Now, Jeff, I have also heard I don't have evidence for this. I don't have like a study that I can point to, but I have heard people talking about that.

The biocides, the germicidal, the fungicides and the ozone are actually seen as a threat to the the molds and they can produce even more mycotoxins. Is response to that.

Is that something you see or can you talk to that? I don't have data on it either. But here's the two things that I see. If you're using bombs besides germ size fungicides, you're using that more than likely in a forced wet wet spray.

So it is forceful. You stick your hand out, you're going to feel it on your hand. Unlike a dry fungus. That makes sense. Yeah. So I am throwing water or spraying water on a colonization, a mold.

It's going to think it's going to die, and it is going to throw mold spores and produce mycotoxins to defend itself. So that's one way I see, physics wise, why using that could be a problem.

Secondly is the like we talked about before, the chemical aspect, how it affects the mold and mold thinks that chemical it's reacting to. I really don't know.

But physics wise, I would say at least in the body is going to have a reaction to the chemical, probably more than the mold will itself. But anytime you do any type of what they call fogging with a biocide German side of or a fungicide, it is a ULV form, which is a wet form, which means that you have to forcibly put molecules, wet molecules in the air that you would feel in your hand if you stuck it out.

So that's a moisture source for the mold, which is going to be a food source kind of like using bleach on mold and a porous material, or using 3% hydrogen peroxide.

You really just watering the mold in the long run, especially if it can't dry with dry out within 48 hours. Yes. Now, bleach in particular, you can leave a phosphate residue behind, which is like a fertilizer for mold.

Mold loves that. So there are some chemicals that can leave those residues behind that can feed the mold. Okay, that makes sense. So you have some other solutions and options for people.

Yes. So we use bio bounce. So GSC based bio balance now.com. I always, always put kind of a maintenance program together for people. So so we talked about the four steps training there to get those excess and muscle sports back under control.

That's the the Haven for bio balance now.com. That's what we used to treat the air. Now I treat my own house

every year. Bath no matter what excess I'm all sports build up.

I have Kinsey over here. Even though she's in apartment now, she still comes home quite a bit. So this house is going to have the cleanest air I can. So how do I do that?

You know, I'm going to use the Haven pond once a month, and I use that Haven mist around the house once a month to help maintain what's into the air and what's into my belongings.

Now, there's other strategic go ahead. Well, I just want to share with people because I know we're talking about some products now, one that you're one of our supporters for the sponsor.

And I just want to really thank you for that because you've helped make our our summit possible. And to I'm all I'm always skeptical first and, very protective of our audience.

And one of the things I've really appreciated about you, Jeff, and your team is that whenever I've called you and said, Jeff, this is what's going on, I'm thinking they need this bigger package or they need to, you know, go do this.

If they don't really need it, you tell me. And you don't let people spend money that they don't need to spend. And that is worth, so much. And I just want to tell you that I appreciate that, but also to let people know, that that helps in that increased my trust in you guys.

Air Treatment, Maintenance, and Product Options

And in addition, I've seen these before and after meal plates with the just the spraying and the fogging of the bio balance and the differences that that made while people were getting the remediation here.

Yeah. So so great feedback. I appreciate that feedback because not everybody knows who they're talking to or the mold inspector that's coming into their house.

They don't know their integrity or anything else. And I understand that. And I get that, so, so for somebody else to say that that is huge, because that's how I look at every job that I go into, every person that I talk to, I want to give them the, the best and right advice.

Keeps me up at night when I can't find a problem in somebody's house. That's just how I'm built. And it's kind of like using the products, the bio balance.

Today, the only reason I went and bought those patents and the reason why we did is because it worked so well on our medications to the patients. Hey, I, I want that product, and I want to get it out there to the right people.

Money is never been a motivator for me. And that's easy to say, right? But all I care about at the end of the day is making sure that people have the right information to make them not ever need me again.

I always say I'm the nicest guy nobody ever wants to talk to again. And I understand that. And I know that going into it. But, you know, at the end of the day, for me, it's it's why I think I exist is to help people get better.

God's given me that talent to do that. And, man, I more I can share it. The the the better. That is so getting great feedback on on, you know, other people's experiences, other people's results, being able to help people through it and people, you know, see that, at the end of the day, that's what this job is all about to me.

And you're available in both Arkansas and Colorado. But you you have worked with, so many. I'll let you clean that up in a second. You have also worked with so many of our clients remotely who were trying to navigate this process.

You and your team and your business partner, Brandon, and you've really worked with people when they brought the inspection report in. If they're in a different area and they can't get you in, you've helped them navigate this.

And that's been a game changer for people as well, because it's such a confusing area and it's so easy to be taken advantage of. It really is. So it's, it's Oklahoma and Colorado.

I physically go to I live in Oklahoma. Then I drive to the Denver area every other week, but we do virtual inspection. And let's talk a little bit about virtual inspections for just a second.

It is not boots on the ground. It's not me and their equipment. It's not me in there with my nose or intuition. So when I first started doing virtual inspections, I was very leery about it because I would rather and prefer somebody physically be in that house to get the right data.

But going and doing these virtual inspections. And I told you about a guy yesterday just looking at the photos. How did that mold inspector miss that in his crawlspace and how that mold inspector miss all that visible mold growth that was in his attic.

And it it took two minutes of my time looking at a photo, let alone virtual inspections. We spent about an hour with FaceTime or zoom. And literally, you walked me through that house and go around.

It's amazing the difference. I feel I'm able to making those people's lives, just in that hour time frame where, where I'm not even physically there. And it's, it's a it's an affordable option for people as well, which I love it for them.

So if you can get an in-person inspector who's got Jeff skills, if you get Jeff, if you're in his area or you can get somebody with that level of skill, that's ideal.

But if you don't have anybody, then Jeff can jump on. Brandon can jump on with you do these kinds of remote inspections, and can you walk us through some of the different options that we have for people?

We started to talk about the Haven mist, the fog. And I know you've got Haven wipes and you have the carpet cleaner. I have a question. So what? I then know the Haven mist is water based, so what makes that okay when we're talking about these other water based things.

Same thing. Go back to your 48 hour rule. And and on the video there's a really good looking guy showing you exactly how to use that Haven mist. But when you're spraying that, when you're spraying that hidden mist into the air, it's a real fine mist.

And as long as it dries out within 48 hours, we don't have mold issues. So when we're doing the Haven mist as as maintaining and putting on belongings he already knows can dry it in about two hours.

Now let's talk about carpet a little bit. There's haven clean and you vacuum out the carpet. And we talked I think we talked about that earlier is is getting either the equipment or running the fence to make sure dehumidifiers to make sure that that carpet dries out within that 48 hours.

So yes, it is water based. It's wet based, but the answer to any wet based product or anything wet that you do or accident that you have or leak that you have, if you dry it out within 48 hours, you will not have mold.

So that's really helpful. And then can you talk about the Haven wipes? These have been so helpful and people need to do that deep clean. And they seem to be more effective than just using a wet rag. Why?

Why is that? Well, sure. Thanks. So one. Yeah. The ease of use. I'm not having to spray everything down and wipe it. It's already on a cloth ready for you to use it.

I use it for two different ways. So once a year I do the dry fog on my own house. But for somebody else who just did the dry fog, doing a good gentle cleaning of your surfaces to get rid of any excess of mold spores, dead mold spores, or excess of dust, dirt and debris is perfect for that.

I also use them as a general maintenance tool. I use them to clean my countertops with all the time. So instead of

using a Clorox wipes or something else that is more chemical based, I'm using that handily around the house.

So I want to let everybody know that if they they want to look more into this, they can just go over to Marcel three 60.com/summit. We've got the links right there at the top to bio balance.

You can go straight to bio balanced now.com. There's lots of videos on there that show you how to use it. Use the products. You have a great support team.

They can use that website to reach out to you if they need help. And then we've got a coupon code for everybody 10% off over at Marcel three six. You.com/summit.

Thank you for this incredible amount of information. It's hard to find this kind of quality information. And I also want to just thank you again for helping make this summit possible.

It's, a lot of production costs that go into making this. And we so greatly appreciate your support to help us put this out there for people. And at the end of the day, it's all about helping Bethany.

And that's exactly what you do. And that's exactly what we achieved to do. And the more people that we can reach and help and, turn their lives around, that's, you know, that's why we did what we did.

Thank you, Jeff, for your services are so needed. And you've helped many, many, many of our clients. And I know that this is going to help so many people watching this summit.

Thank you so much, Beth, for.