

CIRS - CHRONIC INFLAMMATORY RESPONSE SYNDROME: AN EPIDEMIC OF OUR TIME

By Dr. Suzanne K. Gazda

YOUR MOLD RECOVERY PLAN



GUIDELINES OVERVIEW

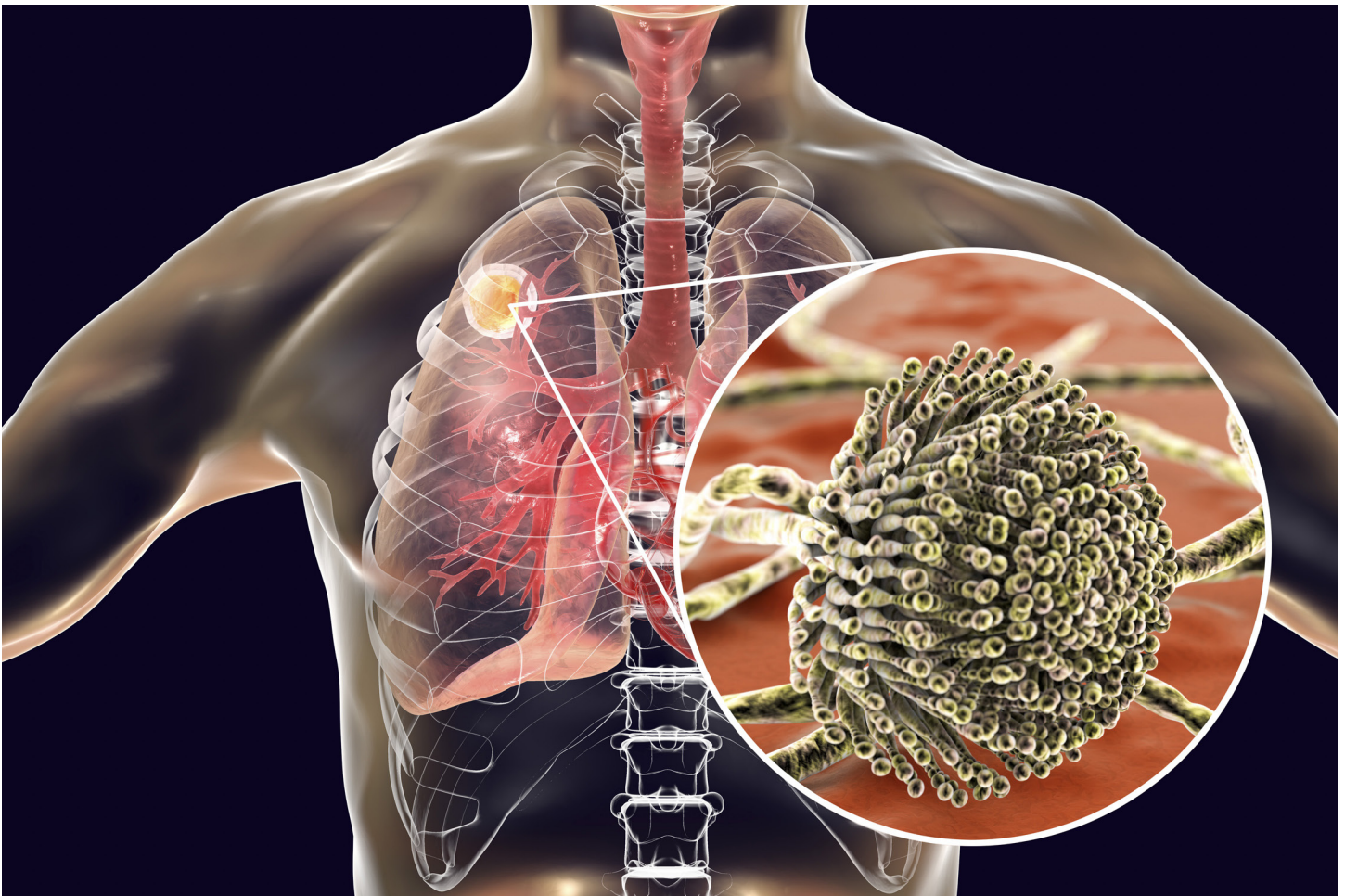
- *Is my brain moldy?*
- *Symptoms of Mold Exposure and should I be worried?*
- *So know what do I do if I want to check further?*
- *What to do if you are diagnosed with MOLD?*
- *What to do when we travel & Keeping our homes mold free*

WHAT IS CIRS (CHRONIC INFLAMMATORY RESPONSE SYNDROME)

Is my brain moldy?

Exposure to mold and mold components are well known to trigger inflammation, oxidative stress, and inflammatory reactions in both human and animal studies and have frequently been found in association with air found in water-damaged indoor environments.

Rough estimates for the number of Americans affected by chronic inflammatory response syndromes of one type or another range between 10 and 20 million. The number is expected to grow because the syndrome is linked to chemical-induced environmental changes that cause more species to form toxins as part of their adaptive response to the threats posed to them by man-made chemicals.

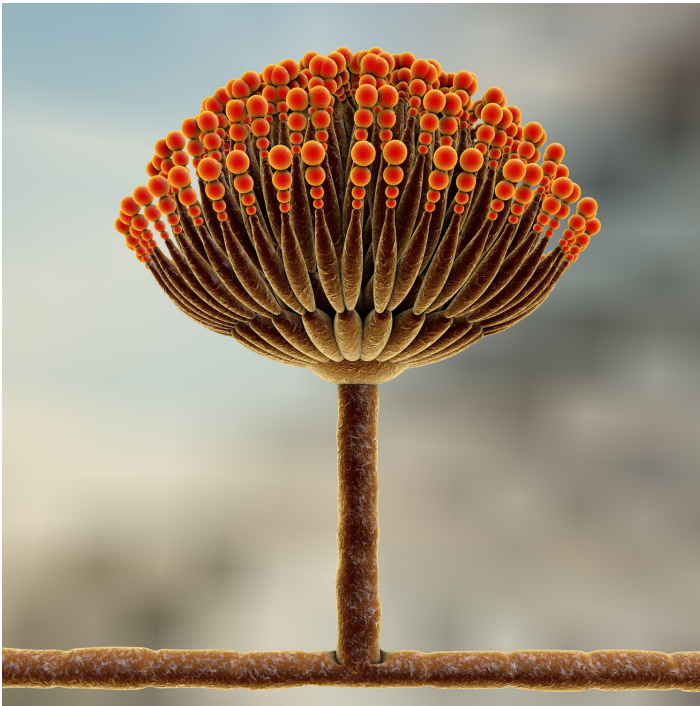


CIRS is an acute and chronic, systemic inflammatory response syndrome acquired following exposure to the interior environment of a water damaged building with resident toxigenic organisms, including, but not limited to fungi, bacteria, actinomycetes and mycobacteria as well as inflammagens such as endotoxins, beta glucans, hemolysins, proteinases, mannans, c-type lectins and possibly spirocyclic drimanes, plus volatile organic compounds. The resulting mold illness is a multi-system, multi-symptom immunological illness. Black mold is the best-known offender in this category, and it is dangerous, but toxic mold can be any color and can grow anywhere with enough water and humidity. **JUST BECAUSE YOU DON'T SEE MOLD. . . . THIS DOES NOT MEAN THAT THERE IS NO PROBLEM.**

The immunological changes result in predictable and measurable lab markers that in addition to client symptom pattern support diagnosis and chart treatment progress. It is immune response that is the key to the illness, because not everyone who is exposed to mold or other biotoxins becomes chronically ill.

Illness resulting from exposure to water-damaged building can be caused by infection, toxicity, allergy, and inflammatory responses triggered by exposure to one or more of the agents present in waterdamaged buildings and are often mediated by oxidative stress. Types of disorders that can be seen resulting from water-damaged environments, mold, mycotoxins and bacteria include, infections and mycoses, chronic and fungal Rhinosinusitis, IgE-mediated sensitivity and Asthma, other hypersensitivity reactions, Pulmonary Inflammatory Disease, immune suppression and modulation, autoimmune disorders, mitochondrial toxicity, carcinogenicity, renal toxicity, neurotoxicity, and DNA adducts to nuclear and mitochondrial DNA causing mutations.

For some, the symptoms that ensue are systemic and include neurological deficits, musculoskeletal pain and weakness, respiratory and gastro-intestinal symptoms to name but a few. Many people experience exposure to mold, but how some people succumb and experience such devastating symptoms is largely down to existing functional capacity/level of homeostasis (such as imbalance in complement immune activity, detoxification capacity etc), genetics at the time of



exposure and the type, level and length of that exposure (although it is important to note that CIRS mold illness is immunological and is not dose dependent or toxicological). CIRS patients are unable to adequately tag and clear biotoxins so the immune system remains unregulated and therefore imbalanced, which has a knock on effect to many other body-wide systems.

More than half of the currently identified symptoms constituting CIRS are related to the brain. These are neurological, cognitive and psychiatric including tremors, memory and focus issues, mood swings, dysautonomias, decreased ability to assimilate new information and hypothalamic pituitary axis dysregulation. Some of the most distressing symptoms encountered by patients following exposure to water-damaged indoor environments and toxigenic molds include neurocognitive disturbances. A disturbing study, conducted in Poland, measured IQ scores in children exposed to indoor mold for greater than two years, showed statistically significant IQ deficits in children exposed to indoor mold.

These are neurological, cognitive and psychiatric including tremors, memory and focus issues, mood swings, dysautonomias, decreased ability to assimilate new information and hypothalamic pituitary axis dysregulation. An article written by Dr Mary Ackerly in 2014 is an excellent

resource to delve into mold and the brain (Brain on Fire). Dr. Dale Bredesen's article Inhalation Alzheimers discusses the role mycotoxins can play in inducing cognitive decline in susceptible individuals. (Aging (Albany NY). 2016 Feb; 8(2): 304-313.2016 Feb 10. <https://www.aging-us.com/article/100896>)

Roughly 25% of the population is genetically prone to develop CIRS if exposed to sufficient amounts of biotoxin. An estimated 2% of the population have genes that render them highly susceptible to disabling symptoms from prolonged or recurrent exposure to biotoxins. Some of us believe that the risks are much higher than what these numbers suggest.

Because CIRS-causing biotoxins track to fatty tissues and membrane structures, they function first and foremost as neurotoxins. Once inhaled, ingested, or absorbed through broken skin or mucous membranes, they circulate briefly before moving out of capillaries into cell neighborhoods. They seem more drawn to tissues with rich nerve supplies. The brain appears to be a common target. Due to their small size, ionophore neurotoxins may gain easy entry into the brain, perhaps more easily in the presence of weak spots in the blood-brain barrier.

Cardiovascular and gastrointestinal systems are also targets, perhaps due to their rich supply of autonomic nerve connections. Biotoxic ionophores are not easily dislodged from their locations outside of the circulation under ordinary circumstances. When the host immune system fails to produce an effective immune response upon exposure, you can imagine how the toxic burden would accumulate over time in cases of exposure to water-damaged buildings.

Mold is a big problem in our society these days. It can affect children and adults. The shocking statistic is that the average American spends 93% of their time indoors! This is partly because of the way homes are built in making everything air tight, and because of poor building techniques and products. We spend way too much time indoors and mold is estimated to be a problem in 50% of building in America. Also, our overall TOXIC load is higher today than 20 years ago due to over abundance of toxic chemicals, heavy metals, unhealthy diets, GMO's, non organic foods, etc. Life today is very very different from a toxic load standpoint than the old days of our ancestors.



When should I be worried?

WHAT ARE THE SYMPTOMS OF MOLD EXPOSURE?

Here are the top mold exposure symptoms:

1. Fatigue and weakness
2. Headaches, light sensitivity
3. Poor memory, difficult word finding
4. Difficulty concentration
5. Morning stiffness, joint pain
6. Unusual skin sensations, tingling, and numbness
7. Shortness of breath, sinus congestion or a chronic cough
8. Appetite swings, body temperature regulation, weight gain
9. Increased urinary frequency or increased thirst
10. Red eyes, blurred vision, sweats, mood swings, sharp pains
11. Abdominal pain, diarrhea, bloating
12. Tearing, disorientation, metallic taste in your mouth
13. Static shocks
14. Vertigo, feeling lightheaded

SO, NOW WHAT DO I DO IF I WANT TO CHECK INTO THIS FURTHER:

1. Check your home and office

If you have a mold related illness, trying to get well WHILE living or working in a moldy environment is virtually impossible. The analogy I use, is that of...trying to get clean in a dirty bathtub.

When my daughter developed a fungal pneumonia in our home, my first thought was MOLD! I know first hand how scary this whole scenario is and how utterly devastating it is to leave your home. But there is NO value you can put on your health and had we not left our home with the clothes on our back, I doubt she would be alive today.

a. Do an ERMI test or have an environmental inspector come and test for mold (Mycometrics ERMI)

In my opinion, the ERMI test is far superior as a screening exam and heres why: The ERMI test is a DNA analysis of dust samples. Mycotoxins are not living in the air; they have settled onto something like dust, your clothes, your sofa, anything porous. The cost is about \$300. to \$400. and you order a kit online at mycometrics.com.

When it comes to your home, you shouldn't tolerate ANY mold growth – the key word being "growth". There will always be mold spores in any home, but if you have conditions that are allowing mold – regardless of color, type, or placement – to grow, you need to take care of it or you are risking serious health problems for you and or your family. Homeowners can clean small areas of mold – less than 10 square feet – with soap and water. But mold growth should be replaced. Wear a protective mask to avoid inhaling any spores. If you have a mold allergy or suspect you suffer from CIRS, have someone else remove the mold. The EPA recommends disposing of any material or furniture that has been wet for more than 48 hours.

Remember, if you have lived or worked in a moldy environment AND you have the genetics that you do NOT clear biotoxins, YOU WILL CARRY THE MYCOTOXINS WITH YOU IN YOU. It is imperative to get tested and to determine what your TOXIC LOAD IS in order to optimize your health and prevent future medical problems.

b. Get tested for mold exposure

1. Comprehensive lab testing (most is covered by insurance)
2. Urine mycotoxin test (either through Real Time Lab or Great Plains lab)

Do a Visual Contrast Sensitivity Test <https://www.vctest.com>
Visual contrast sensitivity testing measures your ability to see details at low contrast levels and is often used as a nonspecific test of neurological function. With CIRS or mold illness, you will fail this test due to decreased blood flow to the retina. This is also a test that we can use to judge your improvement with treatment. The Visual Contrast Sensitivity Test costs \$10.00.

WHAT DO YOU DO IF YOU ARE DIAGNOSED WITH MOLD?

1. Get out of the environment that is making you sick
2. Clean up your air

a. There is no doubt that the air INSIDE our homes is much more toxic than the air outside.

Even if your home and office pass the mold inspection, there are tons of other indoor air contaminants worth worrying about, including volatile organic compounds, gram negative and positive bacteria, glucans, endotoxins, microbial particulates, nonmicrobial volatile organic compounds, and microbial volatile organic compounds. I recommend using a really good quality air filter in your bedroom and living room. These are triple element air filters including HEPA, carbon, and zeolite to help minimize exposure to particulates and VOCs, especially in the bedroom and I like these:

Austin Air <https://austinair.com>

Molekule <https://molekule.com>

IQ Air Filters <https://www.iqair.com>

b. Improve Home Cleanliness and Indoor Air Quality With a HEPA-Filtered Vacuum

(<https://www.verywellhealth.com/best-vacuums-for-allergies-4173661>)

Use triple element air filter including HEPA, carbon, and zeolite to minimize exposure to particulates and VOCs, especially in the bedroom. I recommend Austin Air Healthmate Plus (<https://austinair.com>) or IQ Air filters. (<https://www.iqair.com>)

c. Air filters for HVAC:

Invest in quality HEPA filters for your HVAC and change them at least every 5 months. The cheap filters do not capture anything and these air filters for HVAC are recommended :

(<https://www.airpurifiers.com/pages/air-purifiers-for-mold-top-5-as-rated-by-experts>)

1. Trion 255649 Air Bear Supreme
2. Aprilaire 410 Filter
3. Lennox X6672

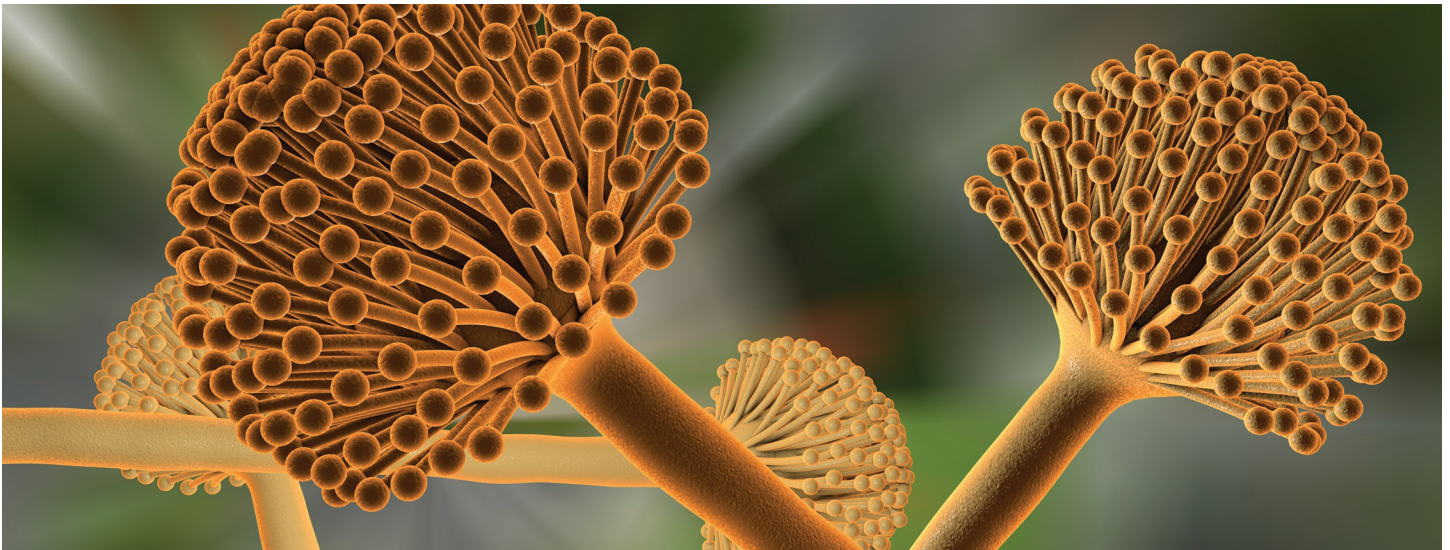
Consider whole-house filtration systems like the ones offered by Aprilaire and IQ Air, especially if you are highly allergic to molds.

(<https://www.iqair.com/home-air-purifiers/wholehouseairpurifiers/perfect16>)

d. Keep moisture levels low in house and have HVAC checked regularly.

If you see moisture or condensation...don't ignore it. Consider getting a dehumidifier to keep humidity down (<https://learn.allergyandair.com/dehumidifier-benefits>). It's important to maintain the proper humidity levels in your home and workplace to keep a comfortable, healthy space. Indoor humidity levels should be between 30-50% with the ideal level being about 45%.





e. REDUCE YOUR TOXIC LOAD

Use environmentally safe cleaning products for example: Earthview® is founded upon the principles of delivering the best, safest, least reactive, and environmentally friendly products to its customers and is also a company focused on the specialized needs of those customers— environmentally harmed, chemically sensitive individuals.

You can also clean household with non-toxic items like baking soda, vinegar, Bon Ami non-chemical abrasive cleaner and 20 Mule Team Borax. baking soda, vinegar. Borax can also be added to laundry.

f. Daily, Weekly, and Monthly “Cleaning” Routines for a Healthier Home

1. Remove shoes before entering
2. Use EC3 Laundry Additive on all of your clothing, bedding, and washables in every load, every day (<https://microbalancehealthproducts.com>) and spray shoes in cubbies by garage with EC3 Mold Spray at the end of the day and spray bookbags with EC3 Mold Spray.

g. Reduce EMF

EMF (electromagnetic frequency) makes mold 400X more aggressive.

1. Reduce EMF exposure: (<https://www.defendershield.com/defenderpad-laptop-radiation-heatshield>) or (<https://lessemf.com>)
2. Keep the bedroom clear of as many EMFs as possible. You spend a lot of time there and technologies can affect your sleep as well as your DNA.

- Avoid halogen and fluorescent lighting. (24) Put RED lights in your bedroom / it is the BLUE Light we want to avoid
- If you do use Wi-Fi instead of ethernet internet in the home, unplug it when it’s not in use and be sure to keep the router away from areas where you or family members spend a lot of time
- Unplugging appliances when not in use. This not only avoids wasting energy, it will reduce the levels of EMFs emitted in your home
- Use a manual toothbrush instead of an electric one
- Use a towel instead of a hair dryer
- Ditch the microwave
- Replace compact fluorescent bulbs with incandescent or LED
- Blue-Light blocking glasses if working on computer or watching TV at night to block blue light (TrueDark is the brand I like)
- Create a “bedroom sanctuary.” It should be an uncarpeted room with healthy, noncontaminated bedding and sleep-ware. Minimize exposure to dust-catching item such as books, stuffed animals, and knick-knacks, or keep these items primarily in solid wood or glass cabinets. Consider charcoal blanket if concern about off gassing from bed linens or mattress.

My favorite safe green and environmentally safe mattress are:

- a. Saavta
- b. Avocado Green Mattress
- c. Plush Beds
- d. Brentwood Home
- e. Zenhaven
- f. Dream Haven

Linens:

- a. Biome (linens)
- b. Holy Lamb Organics: They make mattresses, comforters, sheets, pillows
- c. Coyuchi has you covered on a number of fronts from towels, duvets, shower curtains, table cloths, even bath robes.
- d. Grund: 100% GOTS certified organic cotton sheets

h. Use glass or ceramic-lined cast-iron cookware.

Avoid non-stick/Teflon coating and aluminum. Stainless steel may leach nickel, which can be problematic for some with allergies and autoimmune conditions.

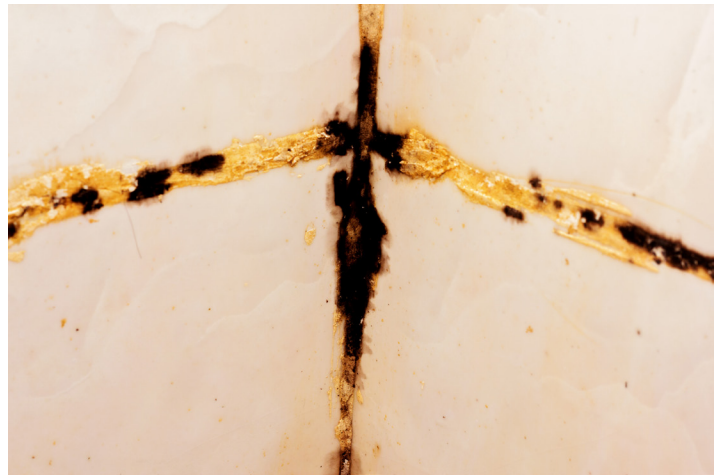
i. EAT REAL FOOD

Eat 100% certified organic to avoid chemicals and pesticides.

- 1) Eat a low mold diet.
- 2) Gluten-free and dairy-free diet recommended (Avoid wheat, rye, barley, spelt)
- 3) Trial of nightshade-free diet especially if you suffer from joint pain (Avoid tomatoes, potatoes, eggplant and peppers except black pepper)
- 4) Fermented foods may be helpful to those who do not have histamine sensitivity or intolerance (Homemade yogurts or kefir, sauerkraut, kimchee)

j. Drink Clean Water

Lets face it... most tap water in America is just not safe to drink. We need clean AIR, clean FOOD, AND clean Water! Tap Water Toxicity is the presence of toxins in our water supply – things like dangerous chemicals, compounds, pharmaceuticals and metals are in our water supply. In fact, in 2009 a three-year study conducted by the Environmental Working Group found 316 chemicals in tap water throughout the country. Filter drinking, bathing and washing water. A whole house water filter with additional drinking water filter is best. Alternatively, drinking filtered water and if possible install a water filter for your bath or shower. I recommend the countertop Berkey Water Filtration System or AquaTru Countertop Reverse Osmosis Water Purifier. Better yet, install a filtration system in your home (<https://www.waterfiltermag.com/best-whole-house-water-filter-reviews>)



Remember, ALL filtration systems remove minerals from water so be sure and supplement with minerals as part of your daily plan. I like the Core Minerals from Researched Nutraceuticals. Also, Pellegrino and other mineral waters are good to drink every now and then.

For the shower or bath: filter the water you bathe in with (<https://www.waterfiltermag.com/bestshower-filter-for-hard-water-reviews>) or for the bathtub: (<https://www.cwrenviro.com/bath-tubfilter>)

Tap water toxicity is the presence of toxins in our water supply – things like dangerous chemicals, compounds and metals. In fact, in 2009, a three-year study conducted by the Environmental Working Group found 316 chemicals in tap water throughout the country.

Bottled water is not that much better. Bottled Water Manufacturers aren't required to disclose the level of contaminants in their water, and in many cases, it is simply tap water anyway. Also, the environmental effect of plastic can not be understated.

Another reason to be wary of bottled water is the amount of chemicals that leach from the plastic bottles. Bisphenol A is one of them. BPAs, as they're known, are found in plastics, including water bottles. They can be transmitted from the bottle to the water, even if the water wasn't originally tainted with BPAs. These chemicals are another endocrine disruptor. In this case, they mimic estrogen, interfering with all hormone levels and genetic messages.

k. Get on a CIRS treatment protocol directed by a physician knowledgeable about these complicated protocols.

You CAN get well. The treatment can be up to 2 years. But without treatment the health consequences can be dire.

This includes

- * Antifungal RX and herbal RX
- * Healing your GUT
- * Detoxification strategies like infrared sauna and epsom salt baths and dry brushing also oral (Glutathione) and IV strategies for detox
- * Binders
- * Mitochondrial and immune support protocols
- * Addressing other underlying chronic infections (lyme, mycoplasma , viruses , CMV, etc.)
- * Optimizing sleep
- * Stress reduction
- * MARCONS eval/nasal sprays
- * Red Light Therapy
- * GET OUTSIDE
- * Movement

WHAT TO DO WHEN WE TRAVEL & KEEPING OUR HOMES MOLD FREE

No doubt...mold is everywhere but when you suffer with a mold related illness you need to realize that when you are exposed to a moldy home or moldy building, that, your symptoms may worsen.

Here are some things that you can do to lessen your exposure when you end up in a moldy hotel room (first thing to do is ask for a different room), live in a moldy dorm, or visit family that might have mold in their house, etc.

- **EC3 Air Purification Candles** – You can easily pack one or more candles in your suitcase to burn in the room where you will be sleeping. Just open the candle, set it inside of the lid and allow it to burn for a few hours. In 3 hours of burning time, it can bring the mold count down in a room from too numerous to count to zero. This is especially important where you are sleeping.

- **EC3 Mold Spray** – Mist the pillows, comforter, bedding, rug, towels, hard surfaces, and anything else in the room or rooms where you will be spending the majority of your time. Concentrate on things and places that will actually come into

contact with your body. These are the things that will cause you the most immediate reactions. MicroBalance Health Products even makes a TSA compliant spray bottle that is perfect for travel.

- **Wein Mini Mate Personal Air Purifier** – If you have to fly or need extra protection from allergens in the indoor spaces where you will be spending time, wear one of these units. It will help to create a barrier between and the allergens and mold that enter through the nose. It may incite some curiosity from family and friends, but just let people know that you have allergies that can make you really sick. The device helps you stay that you can spend more time with them.

- **Travel with a portable HEPA filter** (<https://www.amazon.com/s?fieldkeywords=portable+air+purifier>)

- **CitriDrops Nasal Spray** – This is easy to pack and even easier to use to treat and prevent mold and allergens from entering through your nose. Proactive use will combat issues that could arise from mold exposure.

- **Restore Sinus Spray** (<https://shop.restore4life.com/products/sinus-spray>) - Start your daily beauty and hygiene regimen by gently flushing your sinuses with Restore's proprietary blend of trace minerals suspended in purified water. It's the perfect rinse for the dust, pollen, and other airborne particulates and irritants we are exposed to in our daily environment.

- Wash all of your travel wear immediately and separately from your other clothing with a gentle detergent **EC3 Laundry Additive**. This will prevent contamination in your home from the clothes you wore during your away. Spray your shoes, luggage and coats with **EC3 Mold Spray** before bringing them inside or returning them your closet. This will also prevent contamination.

- Take a hot shower every night.

- Use a saline nasal wash with 2-3 drops of **CitriDrops Dietary Supplement** added to really give your sinus a good and deep rinse. The steam will help to open things up, so you will be able to out mold and allergens better. **Nasopure Nasal Wash System** with CitriDrops provides an effective way to clear mold and bacteria from your sinuses. Get the Nasopure Nasal Wash System Starter Kit at your local pharmacy.

- I am using **Sinus Defense** to continue to increase my mold resiliency. This sublingual spray is homeopathic and contains Transfer Factor to boost cell-mediated immunity to mold and other indoor allergens. It is one of those products that the more you use it, the better it works for you. I have just gotten into the habit of squirting 4-6 sprays under my tongue each night before I go to bed as part of my routine. It helps my body defend against anything I am getting into my nose throughout my day.

HOMEBIOTIC : (<https://www.homebiotic.com>) Each order ships with a Quick Start Guide, which will help you get started using Homebiotic. Begin by spraying a fine mist on all application areas once daily for 7 days, then repeat weekly. Each spray covers 2 square feet. Homebiotic is a probiotic for your home. It restores healthy bacteria, which naturally prevents the growth of mold and mildew, and also helps prevent musty odors, aka "basement smell". Take a hot shower every night.



TAKING CARE OF YOUR HOME

Once you have worked so very hard in "cleaning up your home from toxins and mold etc there are some maintenance things that you should do in addition to the above.

1. FOGGING: Fogging your entire home once a year with the EC3 Mold Solution Concentrate or hire a professional to do this. - Joe Thomas of Pure Mold Solution of San Antonio - 210.904.7909

2. Use a Dehumidifier: Porous surfaces for the mold to feed on like wood, wall board, etc. which we all have. Moisture with humidity 60% and higher. (This is why eliminating and controlling moisture with a dehumidifier helps prevent the formation of mold. But do keep in mind that you'll still need to remove any existing mold.)

How can I tell if my home is humid?

Certain signs point to high humidity, and they are easy to spot. A musty smell in the air is one telltale sign. Discolored areas on the wall or ceiling are other indicators. Excess moisture may also cause paint to crack or wood surfaces to bubble. If you've noticed signs of high humidity, you can get an exact relative humidity readout with a hygrometer. A hygrometer measures a room's moisture level, and it shows the percentage on a needle dial or a digital display. See handout for the Top 5 Dehumidifiers

3. Positive Pressure Ventilation Systems: As the building of houses developed, and properties were made more airtight for heating purposes, so the issues of condensation, damp and mold became more prominent. While newer houses are now built with adequate ventilation and Positive Pressure Ventilation, this was not always the case, and older properties which have been renovated to prevent draughts and better retain heat are particularly susceptible to problems arising from condensation and damp.

4. Maintain your HVAC system: Top 5 basic ways to maintain your HVAC system See the attached article as part of the Gazda Mold Recovery plan for more details.

a.) Install high-quality, pleated filters in your furnace. This is the first and maybe most important preventative measure you can take to ensure proper filtration of your HVAC system. In the past, I used to recommend using filters of a MERV 8 rating or higher. The best filter would be with a MERV 13 rating and make sure the filters are fitted correctly.

b.) Keep your evaporator coil clean. The IAQ professionals I have spoken with suggest having the evap coil cleaned every 6 months with your regular, seasonal HVAC maintenance. A professional should do this work because the coils are delicate and putting the wrong pressure at the wrong place may cause damage.

c.) **Make sure the condensate pan drains properly and stays clean and dry.**

d.) **Make sure ducts are properly sealed and insulated in all non-air-conditioned spaces** (e.g., attics and crawl spaces).

e.) **Make sure that your air conditioning unit is the proper size for your home and that all ducts are sealed at the joints.**

5. Get outside, breath fresh air, keep a constant eye out for leaks in your home. Remember, it takes mold less then 36 hours to grow and any damaged materials need to be replaced and remediation needs to happen immediately by a professional.



6. Home Environment Biotic Systems: (add this to your HEPA/ carbon filter but if using a UV device like Molekule...put on the other side of the room.) <https://betterairus.com> BetterAir is the innovator of the world's first and only probiotic air, surface and object purification systems. Pioneering a way to apply probiotics into the environment and using their natural intelligence to bring balance to indoor living and work places.

7. Take you shoes off at the door

8. Eat real food

9. Reduce EMF (see our handout on EMF)

NOTE: This document was written in 2018 and updated in 2019. Protocols and information may change as more about mold is learned. Be sure to check back for updates.



Dr. Gazda's mission is to serve her patients and humanity. All of the staff at Suzanne Gazda M.D Integrative Neurology welcomes you to be part of this remarkable healing journey. We're here to help, to heal, and to give you hope.

As Dr. Gazda says, Without hope...none of us could survive.

www.SuzanneGazdaMD.com

For more information, contact us at 210.853-3967