

MOLD-FREE HOME MAINTENANCE

Your mold growth plates have determined that your home is contaminated with mold. Your doctor has determined that you or someone in your family is suffering from either:

Eosinophilic Fungal Rhinosinusitis,

or,

Mixed Mold Mycotoxicosis,

or,

Fungal Exposure Endocrinopathy.

These are serious conditions. They are not merely “mold allergies.” Mold toxins, as well as your immune system’s super-reaction to molds, are damaging to your brain, to your immune system, to your liver, to your kidneys, and can cause virtually any autoimmune disease such as diabetes, lupus, rheumatoid arthritis, thyroiditis, and so on. The single most important action you must take to restore your health is to get mold counts in your home down to below 4 colonies per 1 hour mold plate exposure. Some extremely reactive patients must have the mold count down to 2 colonies per hour. Why spend money on medications, surgery, and immune-supportive nutrient supplements, then choose not to breathe clean air?

Essential Rules:

1. Humidity must be kept low --- 45% if possible, but in no case over 55%. Use a humidity gauge to monitor relative humidity. Mold will grow anywhere humidity exceeds 55%. (Dust mites will thrive anywhere humidity exceeds 50%.)
2. If possible, integrate a central dehumidifier with your HVAC system. The dehumidification system must enter the HVAC system before the air conditioner’s filter. If you choose to rely on room dehumidifiers you will pay more in the long run, and, they absolutely must be emptied at least once daily, and the bucket sprayed with non-toxic disinfectant.
3. In times of high humidity, use an air conditioner and/or dehumidifier with the windows closed. Special air conditioner filters can be added to help trap airborne spores and other allergens. AprilAire 5000 is the best filter.

4. If you are extremely mold-sensitive, or, if your home is old, or prone to dampness, you will also want to use a HEPA filter to clear the air of mold spores. IQAir Health Pro is the best HEPA air filter. Hunter Quiet Flow HEPA or Whirlpool HEPA filters are a distant second choice. All other HEPA filters are unacceptable, as their design actually allows them to become breeding places for mold.
5. Never use humidifiers.
6. Do not incorporate an air exchanger as part of your HVAC system. The President of one of the leading indoor hygiene companies in the country states, "I have never seen one that isn't full of mold."
7. Your HVAC system must not have a variable speed blower motor. (Your HVAC contractor will tell you that you are crazy. He loves the variable speed motors because they are energy efficient, but, they always cool the air below the dew point for 48 hours or more at a time, thus causing mold growth within your ventilation system.)
8. The duct work of your HVAC system must be a non-fibrous material. All fiberglass duct liner must be removed. Once fiberglass duct liner is contaminated with mold, cleaning is not sufficient to prevent regrowth, and there are no EPA-registered biocides for the treatment of fibrous duct material.

If your duct work is metal, it must be bathed with trisodium phosphate (TSP). Sheet metal plenums and main trunk lines insulated on the exterior with foil-faced fiberglass insulation material is the best option for duct work. Metalized insulated flexible air ducts for the branch ducts work fine, but care must be taken not to tear them when making duct connections during installation such that the fiberglass inner lining is exposed to the air stream.

9. Do not install UV lights within your HVAC system. Ultraviolet light severely damages polymer (plastic) materials, as well as posing a personal safety risk to the skin and eyes of anyone exposed to the light. Polymer materials commonly found in HVAC equipment susceptible to deterioration include insulation on electrical wiring, fan belts, thermal insulation, and most fasteners and bushings. Degradation of these materials cannot only cause serious (and expensive) damage to the equipment, but the resulting dysfunction of the equipment increases the chance of mold contamination.
10. Fiberglass insulation must be removed from the entire house. Neither should you use spray-in insulation. Old insulation should be replaced with Johns Manville Comfort Therm insulation, which is wrapped in plastic.

11. Plaster walls inhibit mold growth. Dry wall walls might as well be called “wet wall” walls since, with the slightest bit of dampness, they encourage mold growth. If you have dry wall/sheet rock in your house, then apply mold inhibitor to paint before applying.
12. Routinely clean walls, ceilings, floors, and carpets with Benefect Broad Spectrum Disinfectant.
13. Window condensation can lead to moisture and mold growth on the window frame. Clean around windows frequently with non-toxic, anti-mold disinfectant cleaner.
14. The soil of indoor plants can be a source of mold spores. Limit the number of houseplants, and do not over-water.
15. Mold is present in the bark of wood. If you burn wood in a fireplace or stove, do not store the firewood inside. It is best to avoid live Christmas trees, but if you use one, spray it with mold cleaner before bringing it into the house.
16. Do not use cardboard boxes for storage. Cardboard is a favorite growing environment for mold. Instead, use plastic sealable containers such as those made by Rubbermaid.
17. Pets are a source of mold, and pet bedding is a major source of mold. All old bedding should be discarded, and replacement bedding should be treated often with Benefect Broad Spectrum Disinfectant.
18. Holiday decorations are often contaminated with mold. If they are stored in cardboard boxes, the boxes are always contaminated with mold. Throw away old paper or wooden decorations and any cardboard boxes in which decorations have been stored. The decorations you are going to keep should be sprayed with Benefect Broad Spectrum Disinfectant. Store holiday decorations in sealable plastic containers.
19. Old books, papers, newspapers, photo albums, and gift wrapping paper need to be thrown away. Dr. Gary Ordog, writing for [The Mold Source](#), says “Our general rule, which we have seen clinically many times over, is that there are enough mycotoxins in one pieces of contaminated paper to make someone sick for 3 days.” If you absolutely cannot part with certain books or papers, then they must be very lightly misted with Benefect Broad Spectrum Disinfectant, allowed to dry, then stored in sealable plastic containers.
20. Collecting antiques is generally a very bad idea. All you are doing is bringing someone else’s mold into your home environment. The

contamination from an antique requires you to do complete remediation all over again because you have contaminated your home with a living organism that will begin to grow in your carpets, furniture, etc. Even your car will be contaminated from transporting the antique.

21. Do not use bleach in an attempt to kill mold. Bleach only cleans the mold from the surface, but does not kill it, and more importantly it causes the mold to release mycotoxins.
22. You must use a top loading washing machine. Front loading washing machines are always contaminated with mold. Several front loading washing machines are currently involved in a class action lawsuit regarding their contamination of clothes with mold. Leave the lid of your top loading washing machine open when not in use. An open lid is essential in preventing regrowth of fungal spores.
23. If testing shows you have a high mold count, you need to find out where the mold is, why it has been able to grow, and what steps you need to take to rid your home of mold and prevent it from returning. Employ the services of a professional. There are large mold remediation companies staffed by professionals who will thoroughly evaluate your home and give you a free estimate for complete mold remediation. These mold remediation professionals should be able to alert you to areas of mold proliferation such as old leaky roofs, contamination of your HVAC system, a damp basement, poorly ventilated bathrooms, damp closets, leaking plumbing, damp carpets, damp insulation, etc.

While you can rely upon mold remediation professionals to give you a thorough evaluation of sources of mold, you cannot unquestioningly employ their services to rid your home of mold. Understand that mold remediation professionals generally do insurance work after flood and storm damage. They are not health professionals. Many of their recommendations will contradict what you have read above regarding air exchangers, variable speed blower motors, as well as duct work and insulation requirements.

But the biggest problem with mold remediation companies is that they use extremely toxic chemicals to kill the mold in your home. Almost all individuals with an immune system over-reactivity to mold also have multiple chemical sensitivities. Use of toxic chemicals to kill the mold can make your living environment worse --- literally making your home uninhabitable. Mold remediation is very expensive, so you want to do it once, you want to do it right, and you want to do it such that your home becomes a sanctuary of healthful, breathable air.

The only products we approve for mold remediation are:

- Sporidicin Enzyme Mold Cleaner (--- not any other Sporidicin products)
- Benefect Broad Spectrum Disinfectant
- Benefect Impact Carpet & Fabric Cleaner

If a mold remediation company does adequate HEPA vacuuming of all ceilings, walls, and floors, and, uses some combination of the above products to clean all ceilings, walls, floors, fixtures, furniture, rugs, and carpets, your home will be entirely free of mold and you can easily maintain it mold free by following the recommendations in this paper --- provided all the places where mold proliferates have first been eliminated.

24. Do It Yourself Mold Prevention: For home cleaning and on-going mold prevention, after complete mold remediation, you will want to replace ordinary cleaning products with the products listed above. There are 6 products you may need:

- Benefect Broad Spectrum Disinfectant (as listed above --- This is your primary cleaner.)
- Benefect Multi-Purpose Cleaner --- This is a concentrate that can be used in dilute form for mirrors and windows and in more concentrated form for greasy or heavy-duty cleaning jobs. But for all other cleaning applications your Benefect Broad Spectrum Disinfectant is your primary cleaner.
- C3 Air Purification candles
- C3 Laundry Additive
- CitriSafe Laundry Liquid Concentrate
- Benefect Impact Carpet & Fabric Cleaner

You can use the candles and the Benefect Broad Spectrum Disinfectant as a temporary fix while you are awaiting professional mold remediation.

Here are the steps you must follow to establish and maintain a mold-free home:

- Clean house. Get rid of all old papers and cardboard. Throw away all rugs and curtains that have ever gotten damp. Throw away old pillows. Throw away old mattresses. Do not carry these contaminated items through your house. Doing so will merely scatter billions of mold spores and fragments through your home. Place these items carefully in plastic bags, and get the bags out of the house through the most direct route. (Throwing them out the window is your best choice.)
- Wash all clothes, towels, bed linens, and curtains in the CitriSafe Laundry Liquid Concentrate and rinse in C3 Laundry Additive.

- After washing all clothes, towels, bed linens, and curtains, store them temporarily in sealable plastic containers while you await complete mold remediation. The clothes, towels, and linens you use while you are awaiting mold remediation and during remediation, will need to be washed and rinsed again immediately upon completion of mold remediation.
- Thoroughly vacuum all rugs, floors, and upholstered furniture. Any rugs or carpets or upholstered furniture that have been damp must be thrown away. Any that have been in a high humidity room or a room with a high mold count should ideally be thrown away, but at least clean them with Benefect Impact Carpet & Fabric Cleaner.
- Buy a 3 gallon lawn and garden sprayer --- the kind used for spraying weed killer or bug killer. (Use a new sprayer --- do not use one that has ever contained poison.) Put 1-3 gallons of Benefect Broad Spectrum Disinfectant in your sprayer. Spray the entire interior of your house with Benefect Broad Spectrum Disinfectant. Spray ceilings, walls, floors, both sides of rugs, furniture, washing machine and dryer inside and out, under the kitchen sink, under bathroom sinks, curtains on both sides, closets and clothes hanging in closets --- every square inch of your house. Benefect Broad Spectrum Disinfectant is completely non-toxic, and will not stain.
- Burn C3 candles in every room where your mold growth plates have shown a mold problem. Burn the candles for 3 hours the first day, and 1 hour every day thereafter for as long as the candle lasts. Rooms larger than 1500 square feet require two candles.
- With Benefect Broad Spectrum Disinfectant, spray the vent covers of your HVAC system twice daily and the filter on your central air conditioning unit once daily for as long as you are burning candles. If you have window air conditioning units, throw them away immediately; they are mold factories. Replace them with an air conditioning split system (Fujitsu and Mitsubishi are two excellent brands), or replace them with Haier portable air conditioners.
- The above suggested cleaning steps will temporarily reduce the mold count to near zero if you are awaiting professional mold remediation, and eliminating many of the mycotoxins. After or in lieu of professional mold remediation, these cleaning procedures should be done every 6 months thereafter to keep your house nearly mold free. Without professional mold remediation, you may need to do the laundering, candles, and spray every three months.

Bedroom:

1. Ideally, carpeting should be removed, and rugs minimized.
2. Pillows must be encased in BedCare Basics Zippered Pillow Encasings. Mattresses must be encased in BedCare Basics Zippered Mattress Encasings or BedCare Vinyl Zippered Mattress Encasings. Box springs must be encased in BedCare DuraTEK Box Spring Covers.
3. Avoid foam rubber pillows and mattresses since they are particularly likely to become moldy.
4. Dehumidifiers and/or air conditioners plus HEPA air filters are particularly important in bedrooms. (Remember --- no window air conditioners.)
5. Mold grows in closets. Mold loves darkness, and mold loves dampness. Dry all shoes thoroughly before placing in the closet. If a closet is particularly prone to dampness, a small closet-sized dehumidifier should be used.

Bathrooms:

1. Use an exhaust fan or open window to remove humidity after showering or bathing. Keep the window open only as long as the humidity is higher in the bathroom than it is outside.
2. Exhaust fans must exhaust outside, not to an attic, basement, or crawl space.
3. Even a good exhaust fan rarely removes enough moisture quickly enough. Use an oscillating fan centered on the open shower stall after showering until all the walls, ceilings, and shower curtains are completely dry.
4. Wash shower curtains frequently in CitriSafe Laundry Liquid Concentrate and rinse in C3 Laundry Additive.
5. Use the non-toxic cleaning products recommended above to clean shower stalls, tubs, toilets, toilet tanks, sinks, and floors frequently.
6. Do not carpet the bathroom. Use rugs minimally, if at all.

Kitchen:

1. Use an exhaust fan to remove water vapor when cooking.

2. The cabinet under the kitchen sink is always an area of potential mold growth. Clean it frequently with Benefect Broad Spectrum Disinfectant, and spray even more frequently. (A 32 oz. spray bottle of Benefect Broad Spectrum Disinfectant is handy for routine spraying jobs all over the house.)
3. Mold can grow in refrigerators, particularly around the door seal. Wash the inside of the refrigerator frequently with Benefect Broad Spectrum Disinfectant. Do not let foods spoil in the refrigerator. Empty water pans below self-defrosting refrigerators frequently.
4. Mold grows in garbage containers. They should be emptied frequently and cleaned with Benefect Broad Spectrum Disinfectant. Spray after cleaning and between cleanings.

Attic:

1. Remember the rule against storing old paper, and not to use cardboard boxes for storage. Use plastic, sealable containers.
2. Be certain all fiberglass insulation has been replaced with Johns Manville Comfort Therm insulation.
3. Be certain all roof leaks have been fixed, and that any building materials that were once water damaged have been replaced.
4. Be certain no bathroom exhaust fans exhaust into the attic. They must exhaust outside.

Basement:

1. You must run a dehumidifier in the basement.
2. Carpet should not be laid on a concrete floor. Vinyl flooring is a better choice.
3. Correct sources of flooding problems, remove any previously damp carpet, and replace all building materials that have been damp. If there is a dirt floor, you should cover it with a vapor barrier --- something like a thick sheet of plastic. Before laying down the plastic, rake hydrolyzed lime into the dirt floor. (Do the same lime treatment and cover for crawl spaces. Before applying lime and cover, HEPA vacuum and/or clean with Benefect the underside of the floor above and the walls. Then, be certain the crawl space has cross ventilation. If cross ventilation is not possible, then use an exhaust fan or dehumidifier.)

4. Remember the rule against storing in cardboard boxes.
5. Add a paint mold inhibitor to paint, especially on brick or cinder block walls. Walls that frequently become damp should be sealed with DRY-LOCK.
6. Never put a bedroom on the basement level.

Laundry Room:

1. Do not carpet the laundry room; a vinyl floor is essential. Remove any carpeting that has ever become damp.
2. Keep the top loading washer lid open when not in use. Wash the washer and dryer with Benefect Broad Spectrum Disinfectant frequently. Pay particular attention on the underside of the washer and dryer tops.
3. Vent the dryer to the outside, and not under the house.
4. Dry clothing immediately after washing.

Outside:

1. Prune or cut trees to avoid shading of the home. Eliminate vines.
2. Correct any drainage problems near the house, as standing water greatly increases mold formation.
3. Do not mulch close to the house. Mold will grow in mulch and straw and you will carry it into the house and you will be exposed to it every time you go in and out of your home. Using small gravel is a better alternative immediately around the house.
4. Yard work such as leaf raking, leaf blowing, digging, spreading mulch and straw are all sources of mold. If you are particularly mold-sensitive, you should avoid these jobs. If you do this type of yard work, then, if you are at all sensitive, you should wear a respirator mask. In any case, after such work you must take off the clothes you were wearing and put them in the washing machine immediately upon entering the house. Do not come inside and sit on your furniture with contaminated clothes. After depositing your clothes in the washing machine, ideally you should shower before changing clothes.
5. Some types of mold spores are spread on dry and windy days, others on rainy days.

Automobiles:

1. Your car and its air conditioning system can be a source of mold.
2. Take out any carpeting that has been damp repeatedly over a period of time.
3. Regularly spray the inside of your car with Benefect Broad Spectrum Disinfectant.
4. Turn the AC system on high and let it run for 10 minutes with the doors open after you have sprayed a large volume of Benefect Broad Spectrum Disinfectant into the intake by the windshield wipers.