MOLD INSPECTION CHECKLIST

Inside Cabinets

Any place that is dark, and where moisture can accumulate, is a potential breeding ground for mold.

Beneath Drywall

When mold grows within wall cavities (which it often does) the nearby drywall is usually infected as well. If toxic mold does become engrained in the drywall, it should be replaced (after the mold is cleaned up and the source of excessive moisture is resolved).

If your walls show signs of mold (cracked/peeling paint, bulging behind the paint, discoloration of walls), then that section of drywall should be torn out and inspected.

Behind Floor Baseboards

The space between the wall and the baseboards serves as a great growing ground for mold. Since it is a fairly sealed off space, it traps moisture. Plus, a lot of dirt ends up here, providing the mold colonies with plenty of nutrients to thrive.

Basements/Crawl Spaces

If you suspect that you have a mold problem, then you should be especially conscientious of the basement or crawl space of your house. This level has more of a chance of fostering mold growth than any other level in the home.

In basements and crawl spaces, just look for any evidence of dampness. Be especially aware of any black mold growth that might be taking place in wooden building materials, especially in the framing, since this is the best path for mold to take to other parts of the home. It can also lead to the weakening of beams and other bearing walls that are crucial in the stability of the structure.

Water-Damaged Areas
Any areas where flooding, leaks, or other types of water damage have occurred are prime candidates for toxic black mold growth.

**Rooms / Areas with High Relative Humidity**

If the relative humidity in a certain room or area is commonly **above 55%**, then over time, there is a strong likelihood a mold problem will occur. In which case, it is important to monitor areas with high humidity on a regular basis.

**Above Ceiling**

Just as mold in the wall cavities can lead to mold growth in interior walls, the same can happen in the spaces above ceilings. Especially since a common source of water infiltration - **roof leaks** - start from above.

If you see any evidence of water damage or biological growth in your ceilings, then you should investigate right away.

**Beneath Bathroom/Kitchen Sinks**

This is yet another place where **moisture** is commonly a problem, and therefore another place where mold can often be found.

**Behind Wallpaper**

The **glue** from the wall paper attracts a lot of organic material (such as dust) that serves as a **favorite nutrient** of mold.

**Moist Window Frames**

The window frame is in a position where **warm air commonly meets cold or cooler air**, as a result of the temperature difference outside and inside. This formula leads to **condensation**, which leads to mold growth.

Look for biological growth in the seal where the window frame meets the wall.

**Inside Wall Cavities**

This is another place where **warm air meets cooler air**, especially the walls around the perimeter of the home or building.

Plus, wall cavities are good at **trapping moisture**. In addition to all this, **pipes often leak in between walls**, where we are not aware they are occurring.

If mold is present inside mold cavities, it will eventually manifest its presence by working its way to the outside of the walls, where it will be visible. If signs of excessive
moisture and mold begin to show on your walls, you can smell the musty odor, and you or others in your home or building are showing health effects from mold, then it is likely growing in your wall cavities.

If this is the case, then you will need to remove the drywall in places where you suspect the mold is growing within the wall. Then, you will need to clean and remove the mold.

**Particle Board Material**

This material is another desirable source of **nutrition** for mold.

**Fiberglass Insulation and/or Backing and other Insulation Material**

Mold does not live and grow on the insulation itself. However, fiberglass and other types of insulation **collect a lot of dust** and other organic particulate. It is this dirt and grime that are able to make insulation a nice home and breeding ground for mold.

Exposed insulation in the **ductwork**, attacks, and basements/crawl spaces are most susceptible to mold growth.

**Flooring**

Just as moisture and dirt become trapped between walls and above ceilings, they also become trapped beneath the floor. **Tile** and **carpet** make great environments for mold since they collect a lot of dust and other organics for mold to feed on. Carpet can become especially ideal for mold growth since it also holds in moisture.

**Ductwork/HVAC Systems**

In addition to the insulation (if present), mold can grow in a variety of other places in the ductwork/HVAC system. Other than the insulation, the two other places mold is most likely to grow is the condenser or cooling coil and the drain pan. In central air systems, these are located in the air handler (by the fan).

The **cooling coil** cools the air that comes into the system below the dew point, to remove the condensation from the air. As a result, condensation builds up on the coil itself, making it vulnerable to biological growth, including mold.

The **drain pan** is located beneath the coil, and collects the condensation that drips off the coil. Naturally, the water in the drain pan can become the perfect environment for mold growth, especially if the pan is not sloped. If it is flat, then the water will become stagnant, increasing the likelihood of mold growth.

If your system has an **in-duct humidifier**, then it can add too much moisture into the ductwork. When this added moisture combined with dirt and grime, mold can germinate in the ducts.
Evaporative Coolers (a.k.a. Swamp Coolers)

Evaporative coolers increase humidity in the home or building. They cool the air by evaporating water (which has a cooling effect), then blow this air inside. In which case, the air has increased moisture content.

As a result, evaporative coolers increase the potential for mold growth, especially nearby the unit.

Refrigerators

The drain pan beneath the refrigerator should be regularly checked for mold and other types of microbiological growth.

Plant Pots

The fact that plants need to be watered regularly, and that the soil contains valuable nutrients for mold, equals a haven for mold.

Cracked/Peeling Paint

This is a sign that there is excessive moisture within the wall, meaning that there could also be mold growth nearby.

Sweating Pipes

When this happens, track where the moisture is accumulating. This can lead you to mold growth.

Shower Curtains

Between the dirt and grime we wash off ourselves, and the water that can usually be found on shower curtains, mold is often to be found as well.

How you know if what you've found is Mold

Visible Characteristics

Black, grey-brown, grey-green, white & orange spots, or even pink or purple splotches if growing behind vinyl wallpaper. Stachybotrys is commonly a dark, slimy, greenish-black mold.

Smell

Mildewy/Musty
Mold Testing

By sending a sample of the biological growth to a lab, they may be able to determine whether it is mold, and what species of mold. You would need to use a surface sampling technique that allowed the species to be identified.

What's Next?

Once you find mold, then the next step is to Clean and Remove the Mold.

1. Resolve Moisture Problem

Most importantly, the source of the water accumulation must be identified and fixed or fungal growth will continue to occur. If you have a high relative humidity in a room or area (55% or higher), then you should strongly consider a dehumidifier. To determine the relative humidity, you will need a relative humidity sensor, also known as a moisture meter or hygrometer.

If you experienced severe flooding or a water leak, then you want to remove or pump out the standing water, followed by drying the area. If the area is really wet, you will want to use fans and dehumidifiers. You may also want to move wet items away from walls and off floors.

The quicker you address the problem, the less extensive the damage will be since it may only take 24-48 hours for toxic mold to germinate and grow. Prompt remediation of contaminated areas and materials should be the primary response to water intrusion and indoor fungal growth.

2. Minimize Dust and Seal off Area (Negative Pressure)

Before you begin cleaning and removing the mold, it is critical to make sure that you take measures to prevent the mold spores from spreading to other areas of the house or building. Since mold spores will likely be stirred, becoming airborne during the cleaning process, you need to properly contain each area being cleaned, while also minimizing dust (a primary means of transportation for mold spores).

Containment:

Each room or area should be cleaned separately, one at a time. Before cleaning each room or area, you should seal it off as best as you can. This will prevent the mold from disseminating to other areas of the home or building while it is being cleaned, since cleaning can disturb and stir up the mold, causing mold spores to become airborne.
Once they become **airborne**, they can **spread to other areas** to germinate and colonize, unless the **area being cleaned** is **properly sealed**. Use Caltex LVLP technology to kill & Remove mold without stirring the mold as it is being cleaned.

**Properly sealing** (or **containment**) of a room or area consists of using plastic sheeting sealed with duct tape to cover doorways, vents, and other openings to occupied areas of the home or building.

If possible, you should place an **exhaust fan** next to an open (or partially open) door or window that is open to the outdoors. This will create **negative air pressure**, which will direct air flow outside, and therefore mold spores that have been stirred during cleaning will also be **channeled outside**. Just make sure the door or window is not near an air exchange that brings outdoor air into the home.

You should also **turn off the HVAC system** before cleaning mold.

**Minimizing Dust:**

Maintain dust levels as low as possible during cleaning to prevent spores from becoming airborne and spread to other areas. This will reduce the risk of exposure for those who are cleaning while reducing the potential for the mold spores landing and germinating in other parts of the home or building.

You may want to use an **air purifier**/scrubber to minimize the airborne particulate, which allows mold spores to disperse to other areas of the home or building.

**Ionizers** are typically better than air filters, since they can remove smaller particles from the air, and do not rely on particulate passing through them in order to remove them from the air.

3. **Cleaning the Mold**

If the surface(s) you are cleaning are dry, or mostly dry, you should **lightly mist** them **with Calbrite** before cleaning the mold. If the mold is too dry, then the mold spores will have a much better chance of becoming airborne while being disturbed during the cleaning process.

Once the surface is lightly misted (if necessary), then **clean** the affected area(s) with **Calbrite** to remove as much of the mold as possible, and then **apply a second time if necessary to kill mold spores** that are left behind. Thoroughly clean all surfaces in the area that contain visible mold, and even surfaces that do not have visible mold, since **mold spores are microscopic very durable**, and can remain dormant for months or even years.

Once a surface has been cleaned and disinfected, it should be completely **dried**.
In which case, if mold spores are left behind, and are introduced to moisture again in the future, then you will have another significant mold growth problem on your hands.

**Non-porous material** such as metals, glass, hard plastics, and semi-porous materials include wood, concrete, etc, that are structurally sound with some visible mold growth may be cleaned and reused.

If the contamination is not too severe, **porous material** may be cleaned and reused. If the damage is extensive and the mold growth has visibly destroyed porous items beyond repair, they may need to be removed and replaced. Examples of porous materials are ceiling tiles, insulation, wallboards, carpet, soft furnishings, clothes, papers/books, etc.

All material that has been cleaned should be completely dry and visibly free of mold before it is reused and before sensitive individuals are exposed to it.

**4. Remove the Mold**

Carefully remove and discard mold and mold-infested materials into heavy-duty plastic bags. Do not transport the bags throughout the house, especially other clean areas. Doing so will risk further spreading and regerminating of the mold.

Instead, it is a good idea to get the bags outside through a window or other opening accessible to the room/area being cleaned, if possible. These bags with the mold contaminated materials can be taken to any landfill.

**5. Verifying the Mold Clean-Up Job was Successful**

1. First and most importantly, you must have completely fixed the moisture problem to rid the home of excess water.

2. Mold removal should be complete. If this step is completed properly, there should not be any visible mold and musty/mildewy odors present (mold may cause staining and cosmetic damage).

3. There should not be any more signs of additional moisture/water damage or any recurring mold growth in the home/area. If either of these problems resurface, there may be an underlying or hidden problem and a more extensive investigation of the home is necessary.

4. Physical symptoms of the occupants should be greatly reduced and even ceased.

**Protecting Your Health during Mold Clean-Up**

Exposure to molds can occur during clean-up procedures since mold counts can be extremely high in the contaminated area. However, there are ways you can minimize your exposure to mold during clean-up procedures. It is not recommended for those
who may be at increased risk for experiencing adverse health effects to perform the clean-up procedures or be in or around the area during clean-up, such as those with any kind of lung or allergy-related health conditions (like asthma or allergies).

1. Wear Respirator

Wear a medium-efficiency or high-efficiency filter dust mask or respirator to protect against the inhalation of mold spores. For the best protection, choose a respirator designed for particle removal such as the model N95 or TC-21C particle respirator. We recommend N-100 it is a better respirator.

2. Clothing

Wear protective clothing that is easily removed, cleaned, and that covers all areas of the body to prevent against any dermal (skin) exposure. You may even want to choose a protective outer layer that can be discarded such as a Tyvek suit. Other personal protective equipment that should worn are rubber gloves and eye goggles.

3. Evacuate

Ask any family members or houseguests to leave the area during clean-up, if they are not part of the clean-up process. Especially if they are in a high risk group for experiencing adverse health effects from the exposure to mold.

4. Work in Short Intervals

If the damage is extensive and requires many hours of cleanup, work over short time periods and rest in a fresh air location.

5. Moldy Materials

Enclose all moldy materials in sealed, plastic bags before carrying them away.

6. Seal off Area

Hang plastic sheeting to separate the work area from the rest of the home. Also, use plastic to seal off ducts in the area where you are working, to prevent spores from traveling through the ductwork into other parts of the home or building.

7. Containment

Remove the outer layer of work clothing inside the work area, and wash it separately or bag it for disposal.

8. Air Out / Dry
Air the area out well after cleaning is finished. It may be helpful to use fans and dehumidifiers.

9. Air Purification

Using an air purifier will reduce the spores in the air that can be inhaled, or carried to other parts of the home or building to regerminate.

**Ionizers** air filters Hepavacuum or air scrubbers, can remove smaller particles from the air.

**Cleaning Mold in the HVAC System**

For the most part, the same cleaning procedures listed above apply to cleaning the HVAC system. Here are some additional things to remember though:

1. Clean the cooling coil (using same procedures listed above). If there is any rusting, then it should be replaced.

2. Clean the drain pan (using the same procedures listed above). If there is any rusting, then it should be replaced.

3. Remove and properly dispose of any interior insulation (insulation inside the ductwork).

4. Replace the filter, preferably with a HEPA filter.

5. Have the ducts professional cleaned only if they are very dirty. Make sure your duct cleaning professional does not allow the dirt and dust from the ducts to enter into the rest of the home or building. We are assuming you using subcontractors for duct cleaning.

*What's Next? Prevent further Mold Growth You should also start employing methods to such as using ion mold, humidistat etc*