

A Practical Guide on How to Test for Mold in a House

Walking into a home and catching a musty smell is one thing. Knowing where that smell comes from and whether it means trouble is another. Over the years, I have seen homeowners tear out drywall on a hunch, only to find nothing, while others ignored a small patch of discoloration that turned into a major health concern. The difference often comes down to understanding how to test for mold in a house before you start cutting holes or calling contractors.

Mold is not always visible. It can hide behind baseboards, inside wall cavities, under flooring, or in the dark corners of an attic. That is why a proper approach matters. Learning how to test for mold in a house is not about buying the first kit you see at the hardware store. It is about matching the method to the situation. Let me walk through the common techniques, the tools involved, and the judgment calls that separate a useful test from a waste of time.

Why Testing Matters More Than Guessing

I have been inside hundreds of homes in the St. Louis area, many of them with moisture problems that were not obvious from the living room. Basement mold is especially common here because of our clay soils and aging foundation drains. Attic mold shows up when roof vents are blocked or bathroom fans exhaust into the wrong space. Bathroom mold is the one everyone thinks they can clean with bleach, but that only addresses the surface.

A mold inspection is not the same as a quick visual check. A trained inspector uses tools and lab analysis to find what the nose detects and the eye misses. The goal is to identify the species present and the extent of the contamination. That information drives the remediation plan. Without it, you might scrub a patch of *Cladosporium* off a shower wall while *Aspergillus* thrives behind the tile.

The Main Approaches to Mold Testing

There are several ways to collect samples, and each has a specific use. I will cover the ones I see most often in residential work.

Air Quality Testing

Air quality testing is the standard for evaluating the indoor environment. A calibrated pump pulls a measured volume of air through a cassette that captures spores. The cassette goes to a lab, where a technician counts and identifies the spores. This method tells you what is floating in the air you breathe. It is especially useful when symptoms like headaches or coughing suggest a problem but no visible growth is present.

One caveat: air sampling is a snapshot. Spore levels vary with activity, weather, and time of day. A single test might miss a hidden source if the HVAC system is off or the windows are open. That is why experienced inspectors often combine air sampling with other methods.

Surface Sampling

Surface sampling is straightforward. You press a sterile tape lift or a swab against a visible patch of suspected mold. The sample is then examined under a microscope or cultured in a lab. This approach confirms whether a stain is mold or just dirt, and it identifies the genus. For example, *Stachybotrys*, often called black mold, has a distinct appearance but needs a surface sample to confirm.

Surface sampling works well for bathroom mold around caulking or for patches on drywall. It does not tell you about airborne spores, so it is best paired with air quality testing.

Petri Dish and Mold Test Kits

Petri dish kits are the ones you see in hardware stores. You open a dish, expose it to the air for an hour, then close it and wait for growth. Some kits also include a swab for surface sampling. These are cheap and easy, but they have serious limitations.

A Petri dish captures whatever settles onto it, which includes harmless outdoor spores tracked in on shoes. It cannot distinguish between a minor background level and a hidden infestation. The instructions are simple, but the interpretation is not. I have seen homeowners panic over a dish full of *Penicillium*, only to find that the outdoor air had the same count. For a rough screening, a mold test kit can give you a reason to call a professional. For a definitive answer, you need controlled sampling and lab analysis.

Tools That Support a Mold Inspection

Beyond the sampling methods, professionals use instruments to locate moisture before mold even starts growing.

Moisture Meter

A moisture meter measures the water content in building materials. It has pins or a sensor that you press against drywall, wood, or concrete. If a reading is high in a spot that should be dry, you have a leak or condensation problem. Moisture meters do not test for mold directly, but they are the best early warning system. Every home inspection for mold should start with one.

Borescope

A borescope is a tiny camera on a flexible cable. You drill a small hole and snake the camera into a wall cavity or behind a baseboard. This tool lets you see mold without tearing anything open. It is a huge time saver.

Common Mold Species and What They Tell You

When a lab report comes back, the species list tells a story. Here are a few I see regularly in St. Louis homes.

- **Cladosporium** is common on damp wood and fabrics. It is often found in attics with poor ventilation.
- **Aspergillus** shows up in dust and on water-damaged drywall. Some species can cause respiratory issues.
- **Penicillium** likes carpets and wallpaper. It spreads quickly and often indicates chronic humidity.
- **Alternaria** is typical in basements and around windows. It is a common allergen.
- **Stachybotrys** requires sustained moisture. Finding it means there has been a leak for a long time.

Each species has its preferred environment. Knowing what grew tells you where the moisture source is likely hiding.

When to Bring in a Professional

I am a strong believer in DIY for many home tasks. Mold testing is not always one of them. If you see a small patch on a shower wall, clean it and fix the ventilation. But if you smell something musty and cannot find the source, or if someone in the house has allergies or asthma, it is time for a professional mold inspection.

A company like Gateway Water & Mold in St. Louis offers services that go beyond what a homeowner can do alone. They use calibrated pumps, moisture meters, and lab analysis. They also interpret the results in the context of the house. For example, a high count of *Cladosporium* in a basement might point to a slow leak behind the drywall. A professional can recommend the right mold remediation, not just a quick cleanup.

The Role of the HVAC System

Your heating and cooling system can spread mold spores throughout the house. If the air handler pulls from a damp crawlspace or the ductwork has condensation, spores travel to every room. An air quality test can reveal whether the HVAC system is circulating mold. If it is,

the remediation must include cleaning the ducts and addressing the moisture source. Ignoring the HVAC system is a common mistake that leads to recurring problems.

Interpreting Test Results Honestly

A lab report will give you a spore count per cubic meter or per square centimeter. It will also list the species. The tricky part is knowing what is normal. Every home has some mold spores. The question is whether the levels are elevated compared to the outdoor baseline.

I once tested a house where the homeowner had already thrown away furniture and was planning to move out. The lab report showed *Penicillium* levels that were only slightly above the outdoor sample. A quick cleanup and better dehumidification solved the problem. The moral is that a test result without context is just a number. That is where experience matters.

Practical Steps You Can Take

If you are still wondering [how to test for mold in a house](#), here is a simple process that works for most situations.

1. Start with a visual inspection and a moisture meter. Check the basement, attic, bathroom, and around windows.
2. If you see or smell something, use a mold test kit or a surface sample to get a preliminary idea.
3. If the problem seems widespread or someone is sick, hire a professional for air quality testing and a full inspection.
4. Send samples to a lab that uses the SPOREZ method or similar analytical standard for accurate identification.
5. Based on the results, plan mold remediation that fixes the moisture source, not just the visible growth.

Knowing how to test for mold in a house is a skill that saves money and protects health. It is not about being paranoid. It is about being practical. A careful approach lets you separate a minor cosmetic issue from a hidden structural problem.

Mold testing is a tool, not a cure. The real fix is always moisture control. But without testing, you are flying blind. Next time you walk into a room and catch that earthy smell, you will know exactly what to do.