

MOISTURE BASICS

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Do you know the five signs of water damage?



Bubbling



Buckling & Separating



Peeling & Cracking



Rust & Efflorescence



Staining

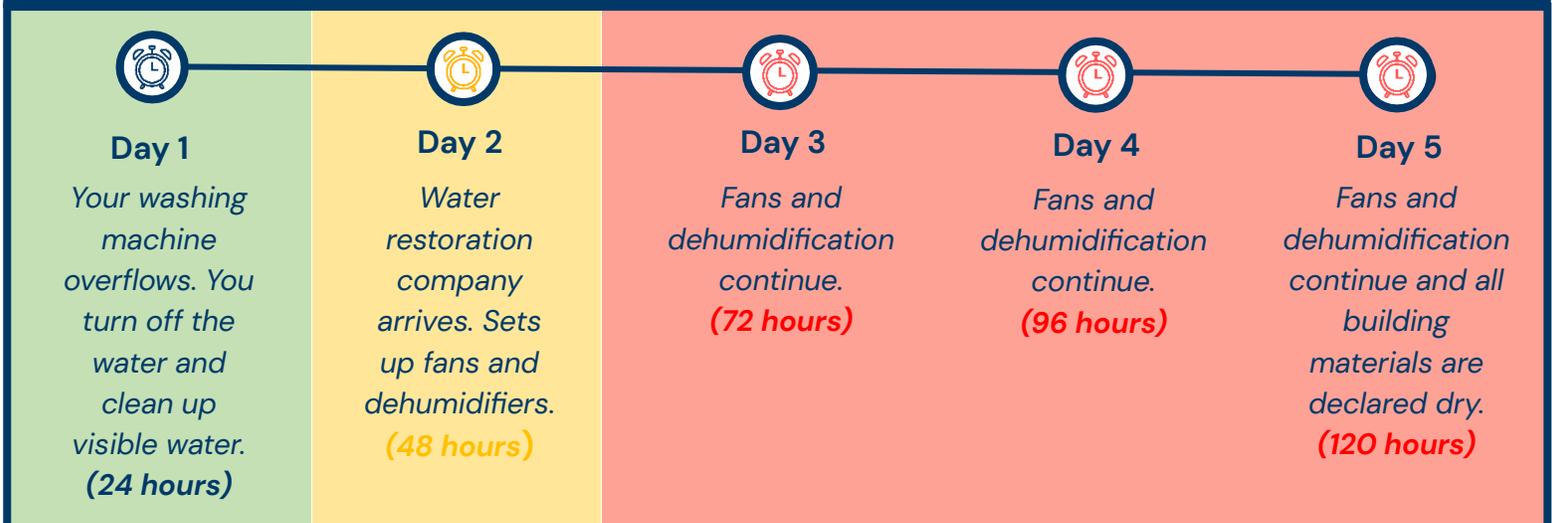
Did you know the secret to looking for hidden mold is to look for water damage?

Moisture can lead to mold and other microbial growth. Under the right circumstances, mold can grow in as little as **24–28 hours**. Bacteria can grow even sooner. Stop the moisture, stop the growth!

The clock starts the moment the building material gets wet...

- ✗ NOT the moment you discover the leak.
- ✗ NOT the moment the water restoration company finally gets to your house.
- ✗ NOT three days later when the building material final starts to dry out.

MICROBIAL GROWTH TIMELINE



Note: "Dry" is always a measurement! It's an actual number. Dry cannot be determined by look or touch. The moisture content (MC) of a material is influenced by conditions such as relative humidity, climate, and season. So, when determining if something is dry, use a tool like a moisture meter to confirm the material is dry at the surface and at the center of the material. See page 3 for more details.

SOURCES OF MOISTURE IN A HOME

Water damage isn't restricted to obvious sources such as leaky pipes and flooding; it can come from other sources too. Mold does not discriminate! Slow, hidden, and relatively small water events can lead to mold and other microbial growth and shouldn't be overlooked or dismissed. Mold doesn't disappear once the moisture source has dried up. Unfortunately, dry or dormant mold may continue to pose a health hazard.



Three Categories of Water

The [IICRC S500](#) defines three categories of water. With time, Category 1 water can become Category 2 or 3.

Category 1: "Clean Water"

"Water originates from a sanitary water source and does not pose substantial risk from dermal, ingestion, or inhalation exposure." Examples include water supply lines, rain, snow, toilet bowls with no contamination, etc.

Category 2: "Grey Water"

"Water contains significant contamination and has potential to cause discomfort or sickness if contacted or consumed by humans." Examples include dishwashers, toilet bowls with urine, etc.

Category 3: "Black Water"

"Water is grossly contaminated and can contain pathogenic, toxigenic, or other harmful agents." Examples include sewage, flooding, toilet bowls with feces, rain from hurricanes, and tropical storms, etc.

HELPFUL TOOLS FOR HOMEOWNERS



1. Eyes

A strong visual inspection can be very effective, especially when you know what you are looking for, like the five signs of water damage (see page 1). Remember, the secret to looking for hidden mold is to look for water damage.



2. Flashlight \$

This tool is simple, effective, and likely already owned by most people. The type of lighting and the time of day can influence the appearance of a material. Sometimes, it's not until an area is examined using a different angle of light that a problem reveals itself.



3. Hygrometer \$

This affordable tool is used to measure the amount of relative humidity (moisture) in the air. Humidity can vary day-to-day and room-to-room, and is influenced by many things like cooking, showering, and even breathing! Aim to keep relative humidity below 50% to prevent microbial growth.



4. Moisture Meter \$\$

This moderately priced tool can be helpful when determining the moisture content of various building materials. Models can be pin, pinless, and all-in-one. Each type of meter works in a slightly different way, and false positives are possible. Always read the owner's manual. Overall, this is a helpful tool for detecting moisture, especially after a water event.



5. Thermal Imaging Camera \$\$\$\$

This tool is used to detect temperature differences (not mold) that can be caused by various factors such as missing insulation and moisture. Thermal cameras can quickly scan a room but the high cost and learning curve mean they aren't always practical for the average person.

*For step-by-step support navigating the inspection and remediation process, visit our **"Start Here"** tab at [ChangeTheAirFoundation.org](https://www.ChangeTheAirFoundation.org)*

Additional Resources

- "Five Signs of Water Damage"
- "Checklist: Where to Look for Mold & Water Damage"
- "Steps to Inspecting & Remediating Your Home for Mold & Water Damage"
- "Questions to Ask When Hiring an IEP"
- "Questions to Ask When Hiring a Remediation Company"
- "Remediation at a Glance"

[ChangeTheAirFoundation.org/free-downloads](https://www.ChangeTheAirFoundation.org/free-downloads)