# Addressing and Detecting Hazards from Mold Transcript

Topic 4: Types of Assessment

Slide 1: Title Slide – Types of Assessment

Slide 2: Topic 4: Types of Assessment

Welcome to Topic 4 of the training on Detecting and Addressing Hazards from Mold. In this segment, we will discuss types of mold assessment.

## Slide 3: Topic 4 objectives

Under this topic, we will discuss the difference between an intrusive and non-intrusive assessment and what you should look for when doing your assessment.

## Slide 4: Types of assessments

There are two primary forms of assessment used to detect mold. The first is a non-intrusive visual assessment. You walk in and you inspect mainly with your eyes. A non-intrusive visual assessment is considered the lowest level of confirmation of mold.

When a visual confirmation cannot be made, the next level of assessment of mold is scientific, which includes swabs, tapes, bulk samples, and air sampling.

Swabs, tapes, and bulk samples are the most basic form of scientific confirmation as they only address a small, localized area of possible mold growth. Swabs, tapes, and bulk samples are capable of identifying mold types, but typically do not indicate the extent of mold contamination.

Air sampling not only confirms the presence of mold spores and types, but it also quantifies the amount of mold spores in the air.

## Slide 5: Purpose of non-intrusive assessments

Let's talk more about non-intrusive assessments, because these are the types of assessments that maintenance staff typically perform.

Maintenance staff typically use non-intrusive assessments to report moisture intrusion, to note water damage, to note apparent mold growth, to record the presence of musty odors, and to report conditions conducive to mold growth. Bulging drywall, blistering paint, or discolored wood could be signs of conditions conducive to mold growth.

# Slide 6: What is involved in a non-intrusive assessment

In a non-intrusive assessment, the inspector conducts a thorough visual assessment and may take pictures. They may also test an area for moisture using a moisture meter and/or take temperature readings around the unit. They do not cut into walls or building materials or take samples.

## Slide 7: Non-intrusive assessment

A non-intrusive assessment would reveal mold along this window. What's the cause? In a singled paned window, which this photo shows, the condensation is likely caused by large temperature differences between the inside and the outside. A double paned window is supposed to prevent that from happening, but if the seal in a double paned window is compromised, you can get condensation between the two panes.

Slide 8: Moisture testing of building materials.

So how do you test for moisture on walls and other building materials as part of a non-intrusive assessment? Moisture Content can be determined by using a moisture meter. Using a moisture meter on your skin, you get about a reading of 80%. On a dry wall, it will read very low – usually below 20% -- unless there is moisture behind the wall.

To prevent mold growth on lumber and wood, the moisture content needs to be below 20%, but the target moisture content for building materials may vary based on the material and location. So, you may need to do some additional research to interpret what you are seeing on the moisture meter.

As part of a non-intrusive assessment, you might walk into a building and smell something or see a wet spot on the wall. You can test the moisture content and inspect the room to see if you can identify the cause of the dampness. You might not be able to identify the cause of the dampness or see the mold, but the odor suggests there might be mold hidden somewhere. In this case, you will want to have an intrusive or scientific assessment to understand what is going on and whether there is mold.

#### Slide 9: Intrusive assessment

Here are some images that could be from intrusive assessments. An intrusive assessment means the mold assessor will penetrate selected walls, ceilings, or floors to examine the conditions behind those surfaces.

Intrusive assessments may include selective demolition. Selective demolition means taking things apart, disturbing the conditions of the unit.

Here's a scenario. You get tired of cleaning a spot on the ceiling and pull down the wallpaper and see something like you see on the right. What's next? You would probably pull down all the wallpaper and look for the moisture source or reason for the mold growth. If you still don't see anything, you might tear down part of the wall. At that point, if you can't find the source you will definitely want to seek the assistance of a qualified third party. What you don't want to do is tear down the wall and put up new sheetrock without discovering the moisture source that caused the mold. Odds are, it's going to come back if you didn't discover the source. The bottom line is if you can't find the moisture source, call a third party to assist. It's a waste of your time, effort, and materials if you don't address the reason for the mold growth.

Remember: if there has been water damage in the unit, there may be mold growth. Wood components, drywall, carpeting, plaster, wallpaper, and many other building materials provide favorable conditions for mold growth.

Maintenance staff should report all moisture intrusion, water damage, musty odors, mold-like substances, and conditions that could encourage mold growth.

## Slide 10: Use Your Senses

So, what should you be looking for in your everyday work? Look for substances that appear cottony, velvety, granular, or leathery, and have varied colors, including white, gray, brown, black, yellow, or green. Mold often appears as discoloration, staining, or fuzzy growth on the surface of building materials and furnishings.

You will want to inspect the inside and outside, and don't forget your sense of smell! If you enter a unit and smell a musty odor, you may want to consider a mold assessment. Sometimes maintenance staff can get tunnel vision, meaning they go into a unit and focus on fixing just what they were called in to do. Those maintenance calls are also a good opportunity to check other aspects of the unit that could be problematic. Like a musty odor.

In general, use your everyday work to be alert to potential hazards of mold. As a maintenance professional, you see things every day that tell you if your buildings are functioning properly. You know what a healthy unit smells like and what an unhealthy unit smells like. You also speak with residents on a daily basis and receive information about living conditions. By simply using your senses during your daily routine, you can gather a wealth of information related to the health of the building and its residents.

## Slide 11: What to look for outside the building

If you suspect mold, you will want to inspect the outside of the property for sources of moisture.

In particular, check the grading around the building and how water discharges from rain spouts and into storm water collection systems. Grading that doesn't slope away from the building is going to cause a problem, and downspouts should run three feet away from the building.

Also, check the condition of exterior siding and trim around windows and doors. Trim on doors and windows should be watertight. It usually is not but deferring that maintenance will create greater problems.

Look behind overgrown foliage for evidence of rodent and pest intrusion or pooling water.

## Slide 12: Deferred maintenance on a roof

Here we see evidence of deferred maintenance on a roof. The roof is the number one building component that we pay the least amount of attention to and that has the most potential to allow water to get into the unit.

You can evaluate the roof either from the ground with binoculars, from the eaves on a ladder, or by accessing the roof surface. You also want to check the attic or crawl space under the roof surface.

Another job often deferred is addressing foliage and landscaping. If there is overgrown vegetation around the property, it could be concealing problems you need to see. Conditions that could be damaging the foundation of your building.

## Slide 13: What to look at inside the unit

Inside the property, you'll want to examine any patched surfaces and look for stains and water marks. You should also inspect bathrooms by running the water at all fixtures. In kitchens and bathrooms, check for leaks and signs of previous leaks and repairs. Also check exhaust fans, dryer vents, and the locations where they discharge.

#### Slide 14: What to look at inside the unit (continued)

You should also check HVAC systems, humidifiers, and dehumidifiers, including drip pan and coils fins. You may want to enter crawlspaces that might have pipes or duct work to ensure adequate ventilation and no condensation. Inspect basements, check masonry walls, and sump pumps. Also, check attics for proper ventilation and insulation. Finally, again, note any musty odors as they could be signs of mold or pest intrusion.

#### Slide 15: When to Bring in a Third Party

You should be aware of your agency's capacity to handle different levels of assessment and mold intrusion. Call in a third party when it's unhealthy for your staff to perform the assessment; when the source of the mold is uncertain; when the mold has an effect on the structure or aesthetics of the building; when litigation is involved; or when residents have health concerns.

The mold professional will conduct a scientific assessment, which collects samples and has them tested in a laboratory. The scientific assessment helps provide evidence of the scope and severity of a mold problem.

The third party will likely conduct a scientific assessment that can diagnose the scope and severity of the problem.

#### Slide 16: Topic 4 Key Takeaways

From this portion of the training, you have learned something about how to conduct a noninvasive, visual assessment of the readily accessible, visible, and installed systems and components. The first takeaway is that you will want to conduct a non-invasive assessment whenever you receive a complaint or concern about possible mold.

Another takeaway is that you can and should use your senses to look for mold hazards in your everyday work.

Third, you don't want to guess about mold – not everything that looks like mold is mold. It could be something that is as simple as lint from a blocked dryer hose, landing on the furniture or sticking to the walls.

Fourth, never try to diagnose or comment on possible mold-related health problems. We talked about this in the last session as well.

Finally, know the limitations of your agency and when to seek advice from a licensed or certified mold inspector or assessor.

## Slide 17

That completes training Topic 4, Types of Assessments. Please continue to the next video for Topic 5, which provides an introduction to mold remediation.