

Mold Education for Real Estate Professionals

Continuing Education Class

Presented by

ServiceMaster Total Cleaning

Home InSight & From the Ground Up

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Misconceptions About Mold

- If you can't see it, it doesn't exist
- It always has an odor
- It doesn't hurt me, it won't hurt you
- Just clean it, everything will be OK
- Seal it up, everything will be OK
- OK, it's bad stuff; send in the contractors and tear it out.

Real Estate Professionals

- Real Estate Agents
 - Brokers
 - Sales Agents
- Inspectors
 - Home Inspectors
 - Real Estate Inspectors
- Appraisers
- Builders & Remodelers

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Mold Fiduciary Responsibilities

- Mold may be toxic
- Mold affects individuals differently
- High concentrations must be remediated
- No insurance coverage for mold
- Refer to mold professionals

What Does Remediation Mean?

- Remediation means:

“to cure, or remedy”

- Mold remediation

Remove mold without contamination to people and non-contaminated areas

Mold Remediation Benefits

- Healthier people
 - Physically and emotionally
- Less property destruction
- Saves money
 - Avoids legal issues.

Waiting or Failing to Remediate

- Increased property damage
 - Mold is a growing organism
- Increased liability
- Litigation issues
 - People
 - Property

Liability Scenario

- Mold is known or suspected
- Real Estate Professional is negligent
 - Unconcerned or uneducated
- Buyer proceeds with purchase
- Family, friends, or visitors get sick
- Buyer's sues everyone involved
- Fortunes lost in defense/judgements

Results of Uncorrected Mold

- Sick people
- High, no, or cancelled insurance
 - Mortgage unattainable or lost
- Unsellable house
- More costly correction

Invisible Killers

- 48 Hours: “Invisible Killers”



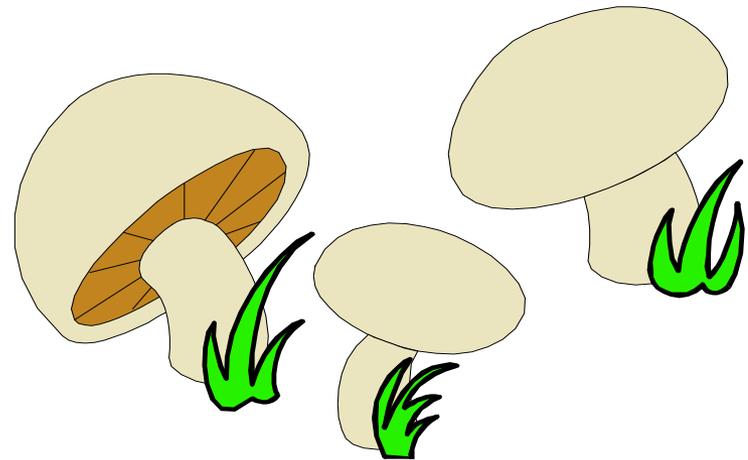
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What Is Mold?

Fungi Kingdom!

- Moss
- Mushrooms
- Mold

Nature's recycling agents



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Types of Mold

- Over 100,000 types (species)
- Common household locations:
 - Bread
 - Cheese
 - Shower stall
 - Athlete's foot
 - Nail fungus

Major & Common Mold Irritants & Allergens

- Aureobasidium
- Cladosporium Sphaerospermum
- Fusarium
- Penicillium\Aspergillus
- Stachybotrys & Memnoniella
- Trichoderma
- Ulocladium

Mold Health Effects

- Allergenic reaction
- Asthmatic reaction
- Hypersensitivity pneumonitis
- Irritants
- Opportunistic infections
- Mycotoxic
- Glucans (flu-like symptoms)

Mold Environment

- Outdoor environment
 - Natural
- Indoor environment
 - Unnatural
- Indoor \leq Outdoor mold



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Health Effects of Mold

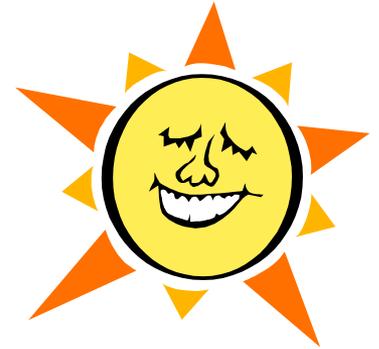
- Mold mycotoxins
- People at risk
 - Infants
 - Seniors
 - Immune Suppressed
 - Asthma sufferers
 - Allergy sufferers



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Mold Red Flags

- Health & sensitivity complaints
- Visible mold
- Odor
- Water infiltration
- Construction defects
 - Structure, HVAC, Plumbing, Grade



Stand Up Break

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Mold Looks Like?

- Microscopic “plants”
- What you see is the mold colony
- Spores are reproductive “seeds.”

Mold Looks Like?

- Microscopic “plants”
- What you see is the mold “colony”
- Spores are reproductive “seeds”

Mold Growth

- Mold needs food and water to grow
- 48-72 hours you may see or smell it
- Logarithmic growth rate
- Like tiny apple trees in 3 days.



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Mold Spores Must Be Contained

- Spore size
 - Spores are 5-7 microns in diameter
 - Newsprint period “.” \approx 100 microns
 - Human hair \approx 70 microns
 - The eye can't see below 50 microns
- Therefore
 - Hard to remove/clean invisible spores

Mold Spore Characteristics

- Aerodynamics
 - Released when disturbed
 - Stays airborne for long periods of time
- Spread by indoor air flow
 - Air ducts
 - Ventilation (e.g., exhaust fans)
- Settled spores wait for food & water
- Reactivates where it left off

Mold Life Cycle

- Mold is either dormant, active or dead
 - Dormant means waiting to grow
 - Active means growing
 - Dead means unable to grow
- Implications
 - When food or water is removed, mold goes dormant
 - Dormant, active, & dead mold have mycotoxins

Should Mold Be Removed?

- The New York City Guidelines
- EPA Guidelines
- IICRC S520,
 - Mold Remediation Standard
- Certification Classes
- The Bible
 - Leviticus 14: 33-45



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Mold Detection and Assessment

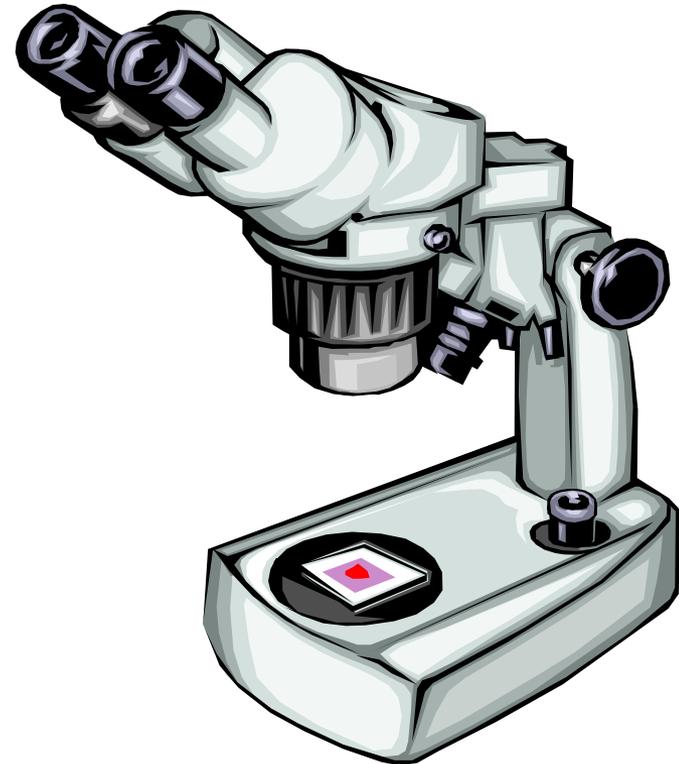
- Find & fix water source
- Locate mold
 - Where is the food supply?
 - Where is or was the water?
- Domain of
 - Industrial Hygienists
 - Certified Mold Inspectors (CMIs)
 - usually Home/Real Estate Inspectors



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Use Industrial Hygienists or CMI's

- Liability issues
 - Independence
 - Strict protocols
- Proof required
 - Problem exists
 - Problem resolved
- Clearance Letter



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Mold Correction Process

- Suspect or see mold
- Locate water source
- Take samples
- Correct source of water infiltration
- Remediate mold
- Get clearance letter

Mold Inspection Process

- Alerted by “Red Flags”
- Look for water source / verify correction
- Collect samples
 - Spore traps, tapes, swabs, bulk
- Expedite samples to lab
- Receive reports
- Distribute reports to clients

Clients' Responsibilities

- Request inspections
- Verify credentials
- Receive reports
- Contact labs with questions
- Provide results to experts
 - Doctors, remediators, industrial hygienists
- Correct source of water infiltration
- Arrange mold remediation

Qualifying Mold Inspectors

- Professionally trained Home Inspector
- Certified Mold Inspector (CMI)
- Errors & Omissions Insurance
- Liability Insurance
- Business License

Qualifying Mold Remediators

- Certified Mold Remediator
- Pollution Coverage
- Certified Mold Technicians
- Business & Liability Insurance
- References

Remove or Clean It?

- Non-Porous Surfaces: Clean It!
 - Metal, Glass, and Hard Plastic
- Semi-Porous Surfaces: Clean or Remove It
 - Wood and Concrete
- Porous Surfaces: Remove It!
 - Ceiling Tiles, Insulation, Drywall, Fabric.



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Mold Remediation Goals

Mold Remediation

Remove mold without contamination to people and non-contaminated areas

- Protect Remediators
 - Use Personal Protection Equipment
- Protect Occupants
 - Contain mold spores

Protection

- Personal Protective Equipment:
 - Gloves
 - Goggles
 - Respirator
 - Bio-suit



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More Protection

- Equipment:
 - 6 mm plastic
 - Containment supplies
 - Utility knife
 - Saw
 - Pry bar
 - Cleaning supplies & chemicals
 - HEPA vacuum
 - HEPA air scrubber



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Two Fundamental Steps

- HEPA Demolition
 - Maintain a clean work area
 - Remove 2 feet beyond visible mold

- HEPA Clean
 - HEPA vacuum
 - Damp wipe
 - HEPA vacuum again

(HEPA: Highly Efficient Particle Arrestor)

Mold Remediation Best Practice

- Assume toxic mold & treat accordingly
 - Personal Protective Equipment:
 - Use a bio-suit
 - Full-face HEPA respirator
 - Full containment and maintain negative air pressure.

Most Important Secret

- Don't let mold start growing!
- Dry personal & real property FAST!
 - Fire
 - Flood
 - Construction defects
- Mitigate all water damage quickly
 - 48 to 72 Hours.

Reasons we say:

“Don’t Wait To Mitigate Water Damage!”

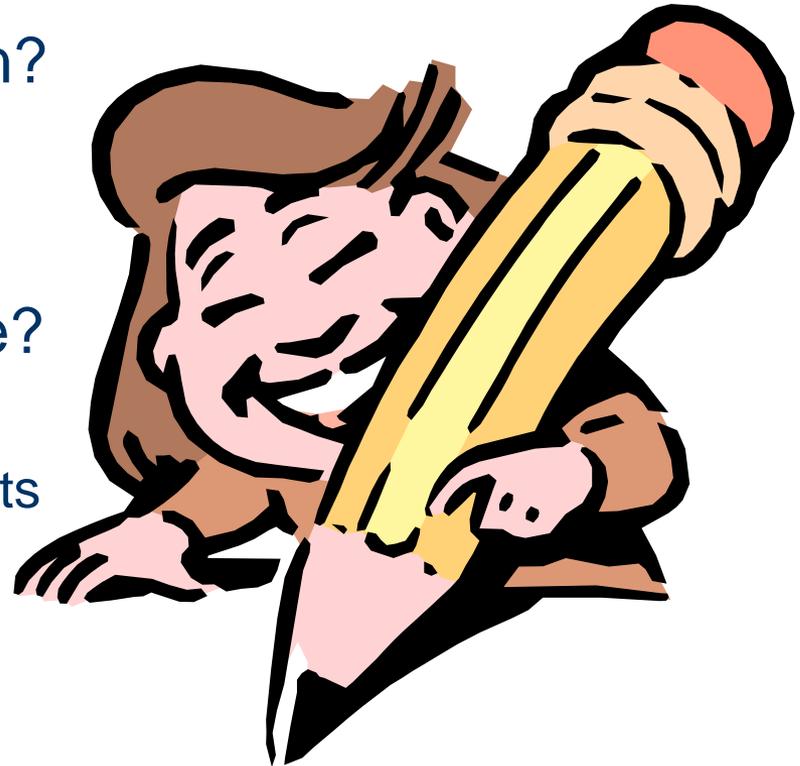


- Health issues
- Saves money
- Customer satisfaction
- Improved loss ratio

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How will Your Behavior Change?

- Encourage mitigation?
 - Buyers
 - Sellers
- Do what you've done?
 - Sell the house
 - Omit mold from reports
 - Declare clean environment



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How to Reach Mold Remediators

- Nationally
 - Laboratories
 - ProLab 1-800-427-0550
 - ServiceMaster **Q.R.V.** (Quality Restoration Vendor)
 - 1-800-RESPOND (800-737-7663)
- Metro Atlanta
 - www.IAQA.org
- Locally
 - ServiceMaster Total Cleaning
 - 770-486-3770



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- Nationally
 - Laboratories
 - ProLab 1-800-427-0550
- Metro Atlanta
 - Georgia Real Estate Home Inspectors
 - 770-578-6464
- Locally
 - Home InSight (Sam Young 404-915-5321)
 - From the Ground Up (Brad Wilkerson 770-312-2573)



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Thank You For Coming

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