

MOLD

Megan Keating, M.S.

Health Educator

Bureau of Community and Environmental Health

OBJECTIVES

- Help address statewide mold concerns
- Reduce caller frustration

OUTLINE

- General information about mold
 - Definition
 - Types
 - Health Effects
 - Moisture Sources
 - Prevention
 - Testing
 - Cleanup
- Types of mold calls received
- Typical mold call
- Addressing mold questions
- Resources available to public

WHAT IS MOLD?

- Molds are microscopic organisms that are found indoors and outdoors.
- Molds are fungi (like mushrooms and yeasts) and they are needed to break down dead plant and animal material and recycle the nutrients in the environment.
- Molds can grow wherever there is a moist environment and a food source (i.e., leaves, wood, paper).



WHAT IS MOLD?

- Molds produce by making spores that are very light and can float everywhere in the air.
- Molds come in different shapes and sizes and range in color.



TYPES OF MOLD

- There are thousands of mold species.
- Most molds are not a concern to healthy individuals (everyone inhales some mold spores every day without apparent harm).
- Given the right conditions, some can produce toxins called mycotoxins and VOC's (musty smell).

TOXIC MOLD



- No evidence to support that there are “toxic” or “non-toxic” molds.
- No evidence to support a distinction between “toxic mold” health effects or health effects associated with other molds.

HEALTH EFFECTS

- Sensitive populations include:
 - small children
 - elderly
 - immunocompromised persons (cancer, HIV, etc.)
 - pregnant women
 - those with respiratory diseases (i.e., chronic obstructive pulmonary disorder, asthma).



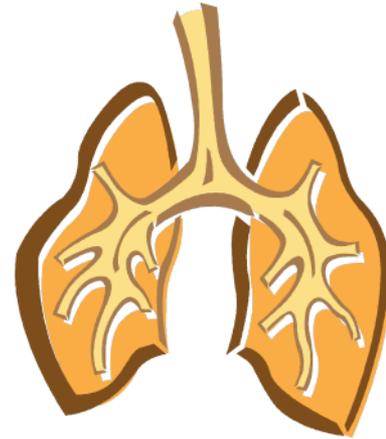
HEALTH EFFECTS

□ For some people mold can:

□ trigger asthma attacks

□ cause allergic reactions

□ cause fungal infections among those with suppressed immune systems



HEALTH EFFECTS

- Typical symptoms:
 - ▣ Respiratory problems, such as wheezing, difficulty breathing, or shortness of breath
 - ▣ Nasal or sinus congestion
 - ▣ Eye irritation (burning, watery, or reddened eyes)
 - ▣ Cough
 - ▣ Nose or throat irritation
 - ▣ Skin rashes or irritation

MOISTURE SOURCES

- ❑ Above grade exterior moisture (rain, melted snow)
- ❑ Below grade moisture
- ❑ Poor foundation drain
- ❑ Flooding
- ❑ Breathing, bathing/showering, cooking
- ❑ Leaky roofs, doors, and windows



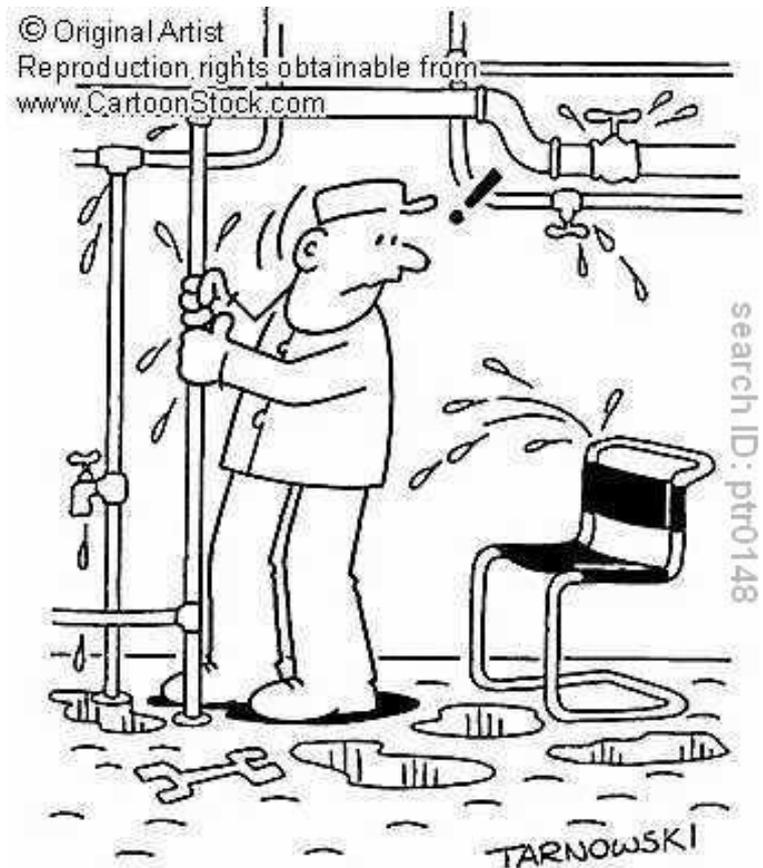
MOISTURE SOURCES

- ❑ Poorly insulated walls
- ❑ Continuous plumbing leaks
- ❑ Plants, fish tanks
- ❑ Backed-up sewers
- ❑ Unvented appliances (dryers, ranges, water heaters)
- ❑ Damp or wet basements and crawlspaces

Note: You must address all sources of moisture to avoid mold growth

PREVENTION

- ❑ Mold growth in buildings **always** occurs because of moisture problems
- ❑ You have a 24 - 48 hour period to dry something out before mold will grow.
- ❑ Stop water leaks



PREVENTION

- ❑ Increase air circulation inside home
- ❑ Keep large objects a few inches away from ext. walls
- ❑ Use exhaust fans in bathroom, kitchen, and laundry room
- ❑ Vent clothes dryer to outside
- ❑ Heat all rooms during winter
- ❑ Use double or triple-paned windows
- ❑ Cover pots when cooking



PREVENTION

- Clean and dry water damaged carpets, within 24-48 hours
- Vacuum and clean home regularly
- Clean refrigerator drip pans regularly
- Use air conditioner or dehumidifier during humid months

PREVENTION

- ❑ Place plastic cover over dirt in crawlspace
- ❑ Avoid carpeting basements and bathrooms
- ❑ Don't hang wet laundry indoors
- ❑ Install high-efficiency air filters in air-handling systems
- ❑ Prevent seepage into home by correcting roof, gutter, and drainage problems



PREVENTION



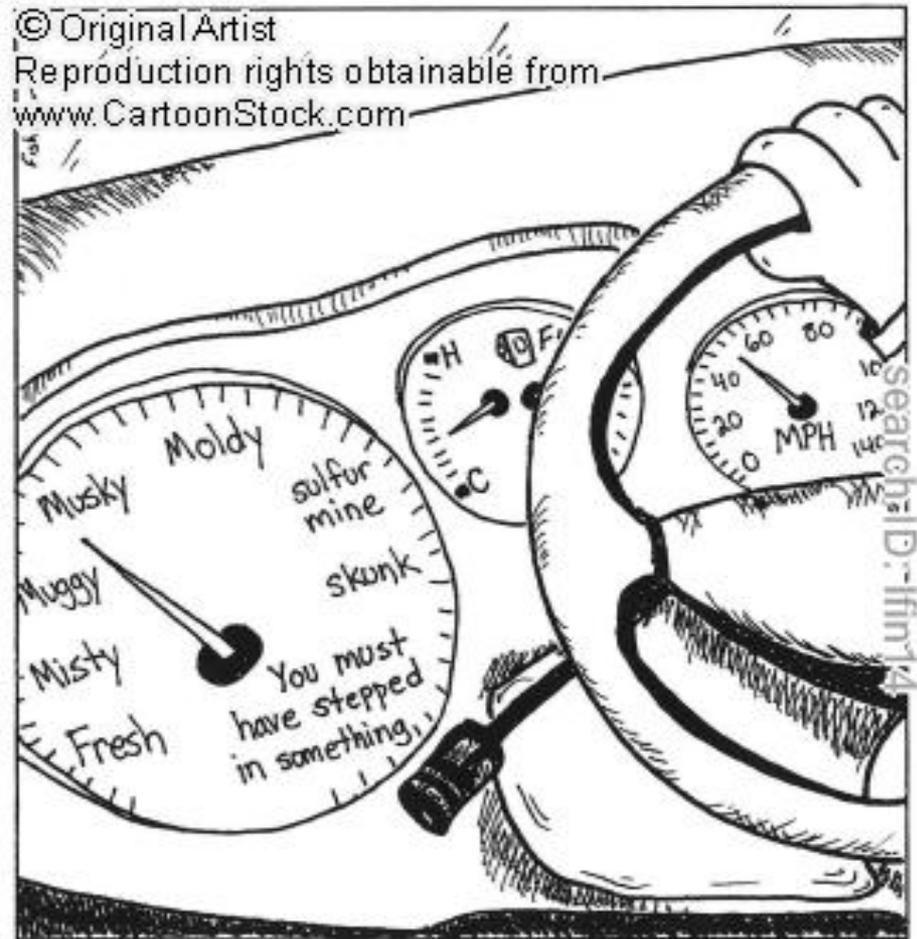
- Look for roof drainage stains
- Look for mold growth on exposed soil, slab, and foundation
- Keep bushes away from house, slope dirt away from house
- Install drainage system when building

PREVENTION

Remember, mold growth in buildings always occurs because of moisture problems. Prevent moisture and you prevent mold growth.

TESTING FOR MOLD

- Testing is usually not needed or recommended - your nose and eyes can be the best indicator
 - Look for discoloration (walls, tile, carpet)



The dashboard odormeter

TESTING FOR MOLD

- There are no exposure guidelines for mold
- Mold exposure and symptom correlation data is uncertain
- Sampling cannot be used to check if a building complies with a mold standard because there is no EPA, or other federal or state limit for mold spores in the air.

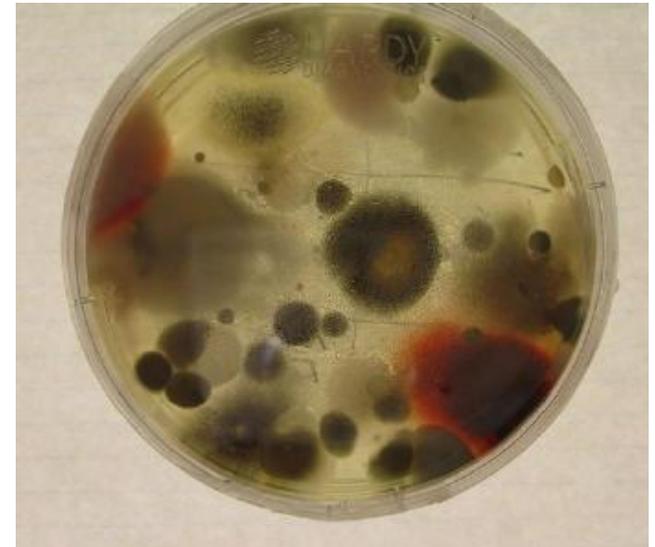
TESTING FOR MOLD

- EPA does not certify or license mold inspectors
- If you do decide to test for mold it should be done by a professional.
 - The professional should follow the American Industrial Hygiene Association, the American Conference of Governmental Industrial Hygienists or other professional organizations recommended testing methods.

TESTING FOR MOLD

2 types of mold testing:

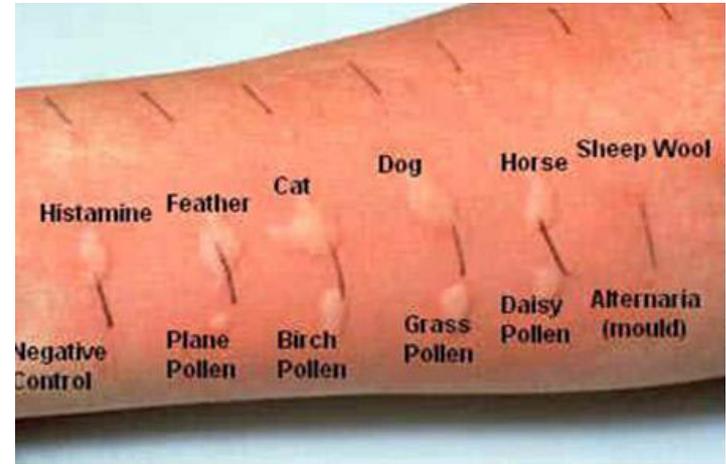
- 1) Air sampling – measures spores in the air at the time of the sample
- 2) Bulk sampling – mold species identification (send to lab, takes about 2 weeks)



TESTING FOR MOLD

Testing a person for mold :

- Skin pricks or blood tests can identify if a person is allergic to mold.



Skin Allergy Test

- No blood, urine, or other clinical tests have been widely accepted as valid methods to determine if a person has been exposed to mold or the amount of mold to which someone was exposed.

TESTING FOR MOLD

It is usually not necessary to test for mold. It can be expensive and it is best to use money for clean up.

MOLD CLEAN UP

- Most small jobs can be cleaned by occupants (less than 10 sq ft).



- Large jobs may need to be cleaned by professionals (Fire and Water Damage Restoration Companies – ask for references).

MOLD CLEAN UP



- Identify moisture source and correct it.
- Seal off area from rest of house, cover heat registers and furniture, open windows to help ventilate room.
- Wear goggles, gloves, and breathing mask

MOLD CLEAN UP

- ❑ Bag all moldy materials to be discarded.
- ❑ Dampen moldy area to avoid spreading mold spores or, if area is still wet, collect excess water with sponge, mop or wet/dry vacuum.
- ❑ Wash area with mild soap and water.



MOLD CLEAN UP

- If necessary, disinfect with diluted bleach water.
 - Using spray bottle, disinfect area using 1/4 to 1/2 cup bleach per gallon of water. Let sit for 20 minutes before collecting excess solution with mop, sponge, or wet/dry vac.
- Dry area thoroughly.

MOLD CLEAN UP

Permeable and washable

items (clothing, bedding, etc.) - can be laundered.

MOLD CLEAN UP

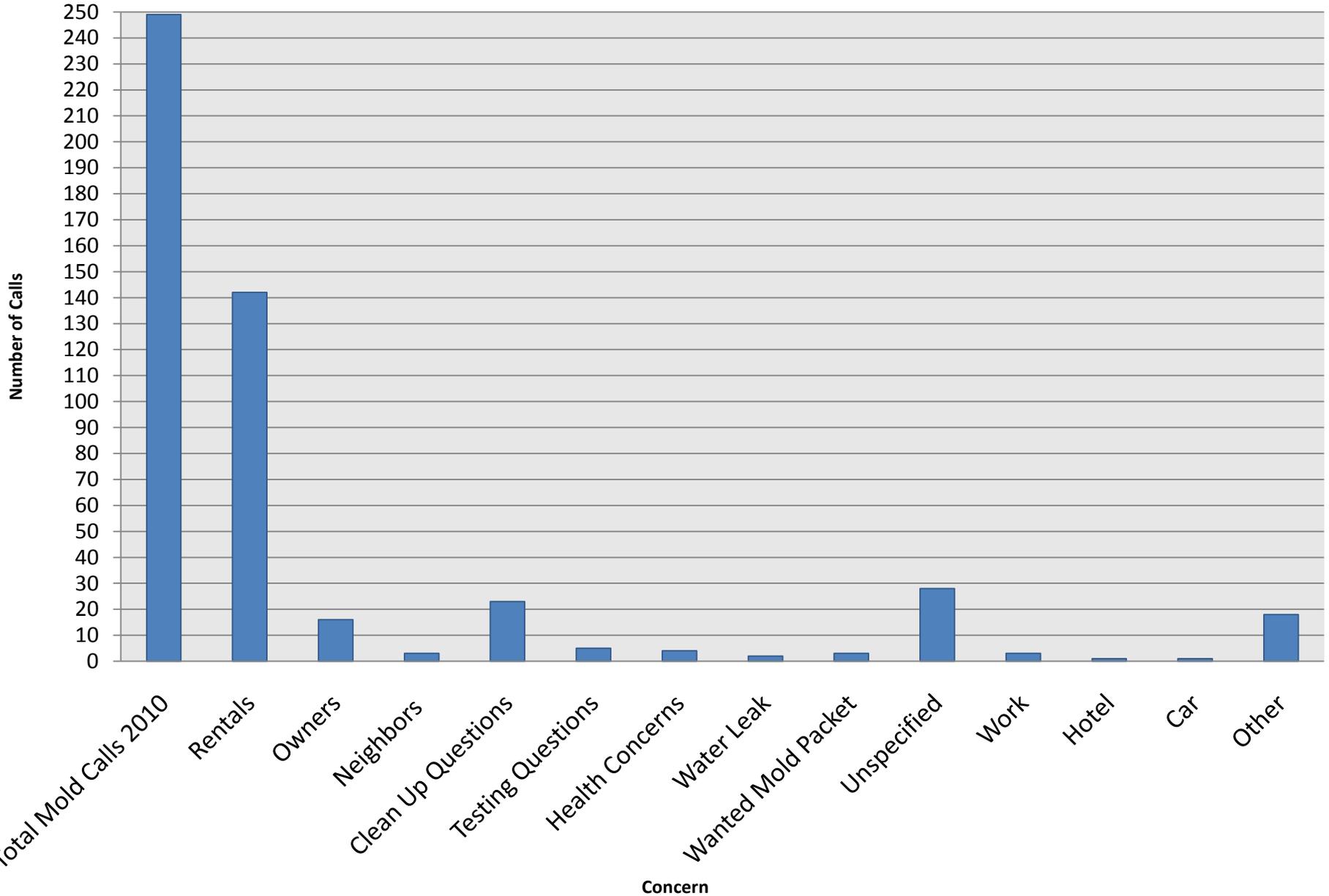
Non Permeable and washable items (wood, plastic, glass) - wipe down with solution of bleach and water.

MOLD CLEAN UP

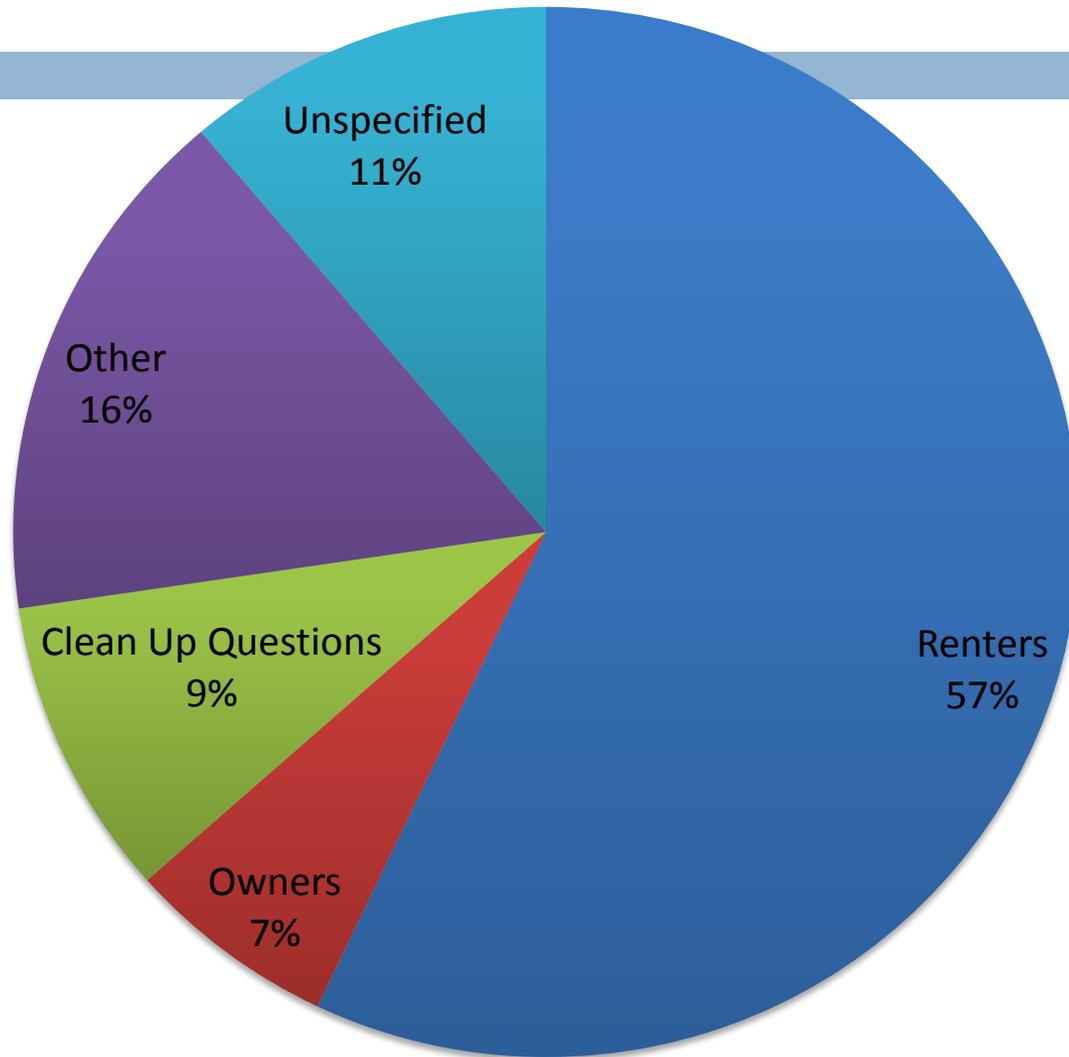
Permeable but not washable

items (beds and furniture) - Try vacuuming and airing out. If you still notice odor or see mold growth, may need to discard.

Types of Mold Calls in 2010



Mold Calls 2010



TYPICAL MOLD CALL

Can they see or smell mold?

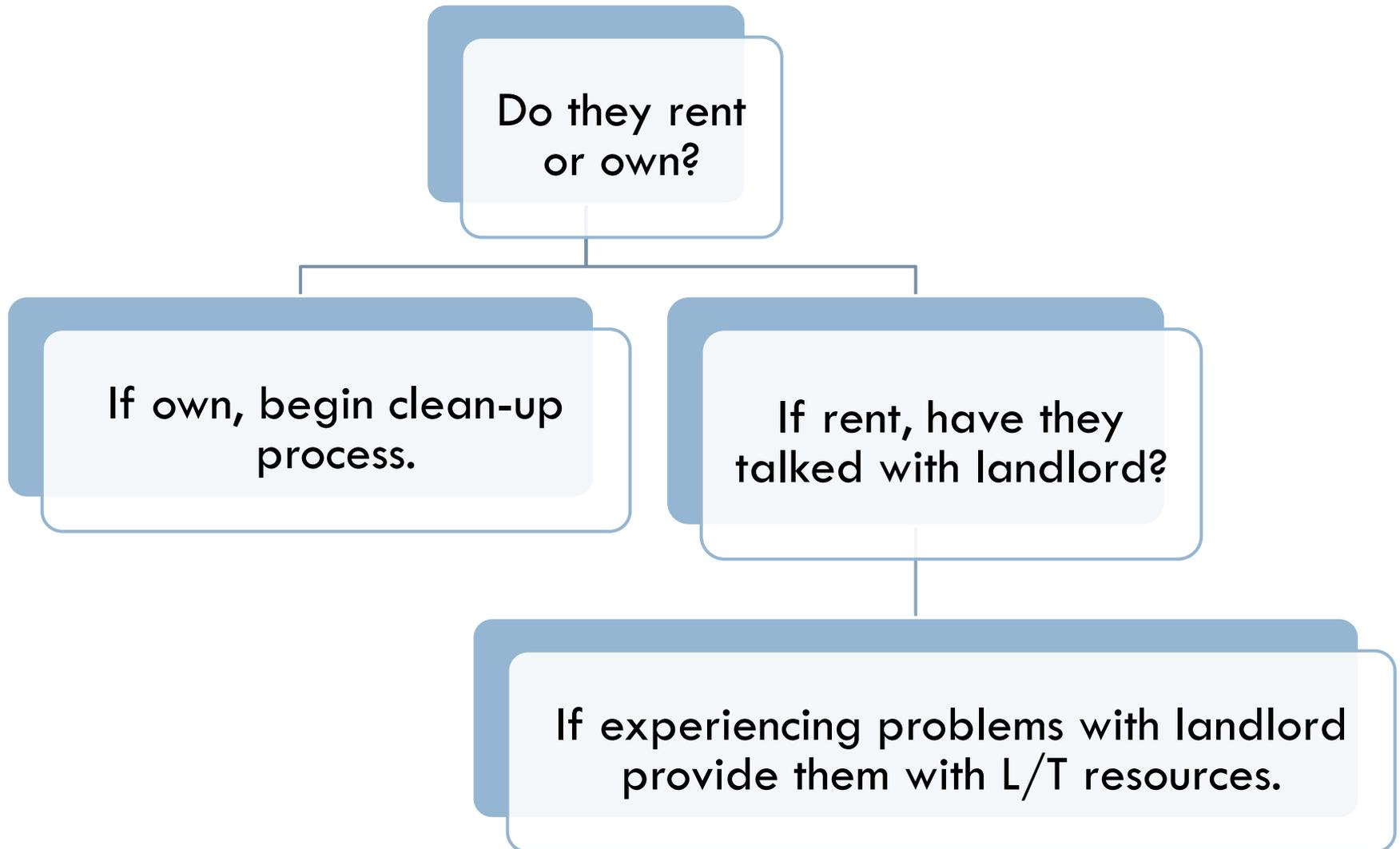
If no, are they experiencing typical mold health effects?

If yes, stop source and begin clean-up process.

If yes, do they know what the moisture source is?

If no, ask if water bill has increased (may indicate leak in pipe). Talk about other possible moisture sources.

TYPICAL MOLD CALLS



ADDRESSING MOLD QUESTIONS

Can you come inspect?

- No, there is no state agency that will inspect for mold.

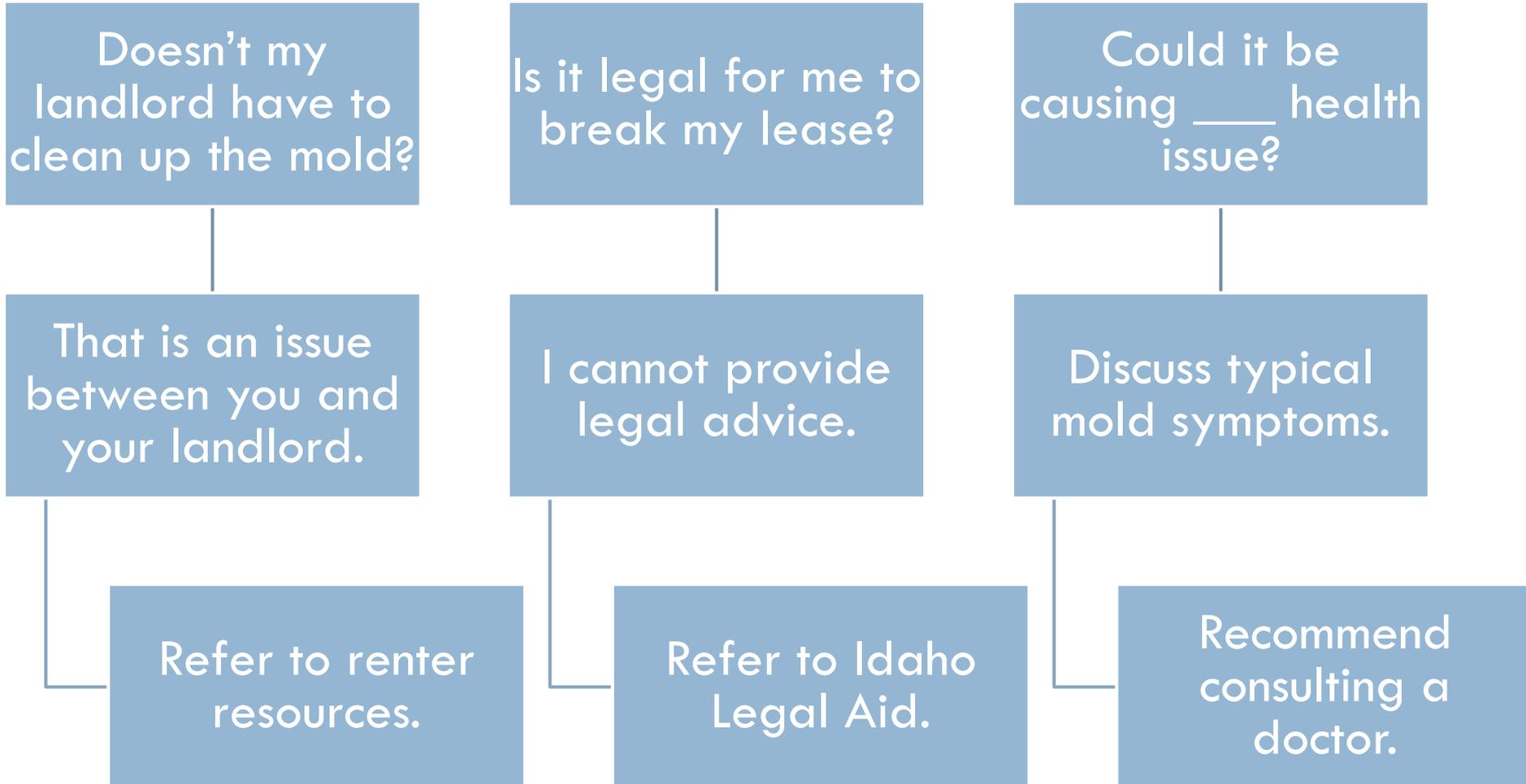
Can you test my apartment for mold?

- No program, no funding for a program, and we typically don't recommend testing for it.

Can you call my landlord?

- No, we don't have a mold program and we don't have the authority to contact your landlord.

ADDRESSING MOLD QUESTIONS



ADDRESSING MOLD QUESTIONS

Private buildings
with mold issues

- Refer to OSHA

Public
buildings/schools
with mold issues

- Refer to Division of Building Safety

RESOURCES

- Bureau of Community and Environmental Health – mold packet contains:
 - EPA pamphlet and factsheet
 - BCEH factsheets
 - CDC factsheets
 - Article on mold testing

Materials are also available on our website:

www.dhw.idaho.gov A-Z index M for Mold.

RESOURCES

- Idaho Housing and Finance Association
 - ▣ Provide information and education about housing resources and renter rights and responsibilities.
 - ▣ Making referrals to Idaho Legal Aid for landlord/tenant issues.

www.ihfa.org

IDAHO HOUSING AND FINANCE ASSOCIATION CONTACT INFO

Coeur d'Alene Branch Office

610 W. Hubbard, Bay 219
Coeur d'Alene, ID 83814

208-667-3380

Toll-free: 1-866-621-2994

[Rentalassistancecda](mailto:Rentalassistancecda@ihfa.org)

[@ihfa.org](mailto:Rentalassistancecda@ihfa.org)

Idaho Falls Branch Office

506 S. Woodruff
Idaho Falls, ID 83401

208-522-6002

Toll-free: 1-866-684-3756

[Rentalassistanceif](mailto:Rentalassistanceif@ihfa.org)

[@ihfa.org](mailto:Rentalassistanceif@ihfa.org)

Lewiston Branch Office

215 Tenth Street, Suite 101
P.O. Box 342
Lewiston, ID 83501

208-743-0251

Toll-free: 1-866-566-1727

[Rentalassistancelew](mailto:Rentalassistancelew@ihfa.org)

[@ihfa.org](mailto:Rentalassistancelew@ihfa.org)

Twin Falls Branch Office

844 N. Washington, Ste. 300
Twin Falls, ID 83301

208-734-8531

Toll-free: 1-866-234-3435

[Rentalassistancettf](mailto:Rentalassistancettf@ihfa.org)

[@ihfa.org](mailto:Rentalassistancettf@ihfa.org)

Rental Assistance Programs Administration, Boise Office

208-331-4886

Toll-free: 1-800-219-2286

[Rentalassistance](mailto:Rentalassistance@ihfa.org)

[@ihfa.org](mailto:Rentalassistance@ihfa.org)

Family Self-Sufficiency

208-331-4796

Toll-free: 1-800-458-2791

fss@ihfa.org

RESOURCES

- Office of the Attorney General Landlord and Tenant Guidelines

- Idaho legal Aid
 - ▣ *Advice for Renters: Repairs*
 - ▣ *Landlord and Tenant Rights and Responsibilities*

- EPA mold pamphlet
 - ▣ *A Brief Guide To Mold, Moisture, and Your Home*

RESOURCES

- Idaho State Legislatures (we can provide info, but not contact them ourselves)
 - www.legislature.idaho.gov

- Occupational Safety & Health Administration (OSHA)
 - Boise Area Office (208) 321-2960
 - www.osha.gov

- Idaho Division of Building Safety
 - Can help schools – inspection requests 1-800-839-9239
 - www.dbs.idaho.gov

CONTACT INFORMATION

Megan Keating
(208) 334-5929

Keatingm@dhw.idaho.gov