Is Your Home Making You or Your Family Sick?
An Introduction to Indoor Air Quality

_Mold Mini-Lesson Leader’s Guide_

**Objectives:**
As a result of this program, participants will:
- Develop a greater awareness of issues related to indoor air quality.
- Identify problems in the home that can trigger asthma, allergic reactions, and other health problems.
- Evaluate and make changes in their home to improve indoor air quality.

**Additional Information for Presenter:**
This leader’s guide focuses on _mold_. The overall indoor air quality program includes three mini-lessons. These lessons can be taught in succession or individually, and include information on general indoor air quality issues, mold, and radon. Each mini-lesson can be taught in 15-20 minutes. Activities times vary (see activities for more information). For the leader’s guide on general indoor air quality or radon contact your county Extension agent or Ashley Osborne, Extension Associate, at 859-257-2505 or ashley.osborne@uky.edu.

**Teaching Points:**
Excerpts of the information provided in the “teaching points” section were taken from U.S. Environmental Protection Agency’s Mold Resources website (see references).

**Ten Things You Should Know About Mold**

1. Potential health effects and symptoms associated with mold exposures include allergic reactions, asthma, and other respiratory complaints.
   - Molds produce tiny spores that travel through the air and either settle on surfaces to create new mold colonies or are inhaled creating allergic reactions or asthma in certain people.

2. Molds can be found almost anywhere; they can grow on virtually any substance, providing moisture is present. There are molds that can grow on wood, paper, carpet, and foods.

3. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.
   - Stress to participants that the key to controlling mold growth is controlling moisture.

4. Fix the source of the water problem or leak to prevent mold growth.
   - Fix leaks and other water problems right away.

5. Reduce indoor humidity (to 30-60%) to decrease mold growth by: venting bathrooms, dryers, and other moisture-generating sources to the outside; using air conditioners and de-humidifiers; increasing ventilation; and using exhaust fans whenever cooking, dishwashing, and cleaning.
6. Clean and dry any damp or wet building materials and furnishings within 24-48 hours to prevent mold growth.

7. Prevent condensation: Reduce the potential for condensation on cold surfaces (i.e., windows, piping, exterior walls, roof, or floors) by adding insulation.
   - Remind participants that if they see condensation on windows, walls, or pipes to dry the area quickly and try to reduce the source of moisture.
   - According to the U.S. EPA, “condensation can be a sign of high humidity”. Note that #5 discusses ways to reduce indoor humidity.

8. In areas where there is a perpetual moisture problem, do not install carpeting.
   - Kitchens and bathrooms are examples of areas that may have moisture problems, especially around sinks, toilets, and bathtubs.

9. If mold is a problem in your home, you must clean up the mold and eliminate sources of moisture.
   Notes to presenter: Print out one copy of the U.S. Environmental Protection Agency’s guidelines for cleaning up mold (found online at [http://www.epa.gov/mold/pdfs/moldguide.pdf](http://www.epa.gov/mold/pdfs/moldguide.pdf)) to pass around and show participants.

10. Clean mold off hard surfaces with water and detergent, and dry completely. Absorbent materials such as ceiling tiles, that are moldy, may need to be replaced.
   - Remember before cleaning up mold in your home measure the size of the area that is moldy. If the area is less than 10 square feet (roughly 3 ft by 3 ft area) then you may be able to clean the area yourself.
   - Refer to the U.S. Environmental Protection Agency guidelines to walk you through cleaning up the area safely. (Guide discussed earlier in #3)
   - However, if you or a family member have a health concern consult a health professional before beginning cleanup.
   - Professional remediation services are recommended if mold is present in areas larger than 10 square feet, areas with significant water damage, inside heating/ventilation/air conditioning (HVAC) systems, or areas with damage caused by sewage or contaminated water.
   - Ceiling tiles, carpet, and other absorbent materials that are moldy may need to be thrown away. These type of items are very difficult to clean and removing all the mold may be impossible.

**Handouts for Participants:**
Below are education materials available for the lesson. Two factsheets have been provided for the topic. Depending on your audience and your printing capabilities you may only want to print out and provide the shorter factsheet(s) to participants, then provide the longer factsheet/booklet for those that request more information.
- Mold and Mildew (HHF-LRA.168) Factsheet – 2 pages
- Ten Things You Should Know about Mold Factsheet – 2 pages

**Activity Information:**
- Particulate Pollution Activity
  - In this activity, participants pretend to be cilia, tiny hairs that protect and filter out dust and other particles in the lungs. As cilia, participants wave their arms and smack away particulate matter in the form of paper wads.
Evaluation:
1. Give each participant an evaluation form to complete and turn in.
2. Give each participant an envelope. Have participants write their name and mailing address on the envelope. In 6 months, send a follow-up evaluation (and self-addressed envelope) to participants using the addressed envelope. Ask participants to complete the follow-up evaluation and mail back to you.

References:


This leader’s guide was prepared by Ashley Osborne, Environmental and Natural Resource Issues. January 2014.

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