

# U.S. Department of Energy

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# Maryland Department of Housing and Community Development

- Codes Administration
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**Indoor Air Quality:  
Are We Making It Worse?**  
or  
*Look What the Cat Dragged In!*

# Pollutant Sources

- Gases
- Particles

# Pollutants we bring into the home

- Volatile organic compounds
- Toxic gases
- Biological contaminants
- Respirable particles
- Pesticides

# Volatile Organic Compounds

- combustion by-products -benzene, benzo(a)pyrene
- paint, wax, cleaners, disinfectants, cosmetics, hobby projects, dry cleaning, moth repellents, fuels, automobile products

# Toxic Gases

- radon, CO, NO<sub>2</sub>, mercury
- these are not organic chemicals, but are toxic
- examples of sources
  - unvented heaters, automobile in garage, thermometers

# Biological Contaminants

- microbiological -  
salmonella, campylobactor, vibrio
- micro organisms -  
house plants, toxins
- molds, viruses, animal dander, cat saliva,  
house dust mites, cockroaches, pollen

# Respirable Particles

- lead based paint
- asbestos
- tobacco smoke
- sanding - home maintenance and hobbies

# Pesticides

- Insecticides, rodenticides, fungicides,
- Common ones -  
sprays, liquids, sticks, crystals, powders,  
foggers

# Health Effects

- diseases caused by pollutants
- effects of high humidity and temperature
- biological triggers

# Building Design Remedies

- proper air distribution
- proper system design
- exhaust fans
- sealed combustion appliances

# Life Style Remedies

- reduce water vapors
- keep humidity at 30% to 50 %
- reduce exposure to products
- clean regularly
- limit quantities brought into home

# Other Changes in Lifestyle

- eat right
- wash plants
- care for plants correctly
- reduce shower and cooking times
- get rid of *stuff* as soon as possible

# Future

- need more research
- change lifestyle until then
- read directions of products carefully
- ventilate, ventilate, ventilate
- lower humidity

# CODE LYNX web site

- *www.dhcd.state.md.us*
  - click on *Maryland Building Codes*
  - click on *Code Lynx*
- or
- *Google.com*
  - type in *code lynx*, and click on *Code Lynx*

# Thanks for listening!

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