Most people are aware that outdoor air pollution can affect their health. But did you know that indoor air pollution can also have significant health effects? Environmental Protection Agency (EPA) studies show that the levels of many pollutants may be two to five times higher in indoor air and occasionally more than 100 times higher than outdoor levels. These indoor air levels are of particular concern because it is estimated that most people spend as much as 90% of their time indoors.

This fact sheet contains information on asbestos, lead, mercury, mold and radon. The St. Clair County Health Department does not conduct testing for asbestos or mold. Testing for lead-based paint can be conducted for a fee. Radon test kits are available at the St. Clair Health Department for $5.00/test kit. For information on these or other indoor air quality issues, contact Kevin McNeill, St. Clair County Health Department Sanitarian, at (810) 987-5306.

More information on these topics can be found as these websites:
- Environmental Protection Agency (EPA) – Indoor Air Quality http://www.epa.gov/iaq
- Center for Disease Control (CDC) – Environmental Health Topics http://www.cdc.gov/nceh/ehs/Topics/default.htm
- U.S. Dept of Housing and Urban Development (HUD) - Healthy Homes Program http://www.hud.gov/offices/lead/hhi/index.cfm
- Columbia University and Lawrence Berkley National Laboratory Radon Project http://www.stat.columbia.edu/radon/

Asbestos
Asbestos has been linked to lung cancer and other diseases of the lungs. The fibers are only a health threat when they are released into the air. It is better to leave asbestos in good condition alone.

The following is a partial list of possible asbestos containing materials. *(Note: This list does not include every product/material that may contain asbestos. It is intended as a general guide to show which types of materials MAY contain asbestos).*

<table>
<thead>
<tr>
<th>pipe wrap insulation</th>
<th>Wall and ceiling insulation</th>
<th>wall board</th>
</tr>
</thead>
<tbody>
<tr>
<td>boiler insulation</td>
<td>Ceiling tiles and panels</td>
<td>cement pipes</td>
</tr>
<tr>
<td>HVAC duct insulation</td>
<td>Elevator brake shoes</td>
<td>fire doors</td>
</tr>
<tr>
<td>duct work flexible fabric connections</td>
<td>Fire proofing materials</td>
<td>exterior wall siding</td>
</tr>
<tr>
<td>floor tile</td>
<td>Sprayed insulation</td>
<td>shingles</td>
</tr>
<tr>
<td>construction mastic (floor tile, carpet, ceiling tile, etc.)</td>
<td>fuse boxes and gaskets</td>
<td>Electrical panel partitions</td>
</tr>
</tbody>
</table>
Names of qualified asbestos inspectors and removal contractors may be obtained from the Michigan Department of Consumer and Industry Services at (517) 373-1820.

**Lead-Based Paint**

The Environmental Health Division investigates referrals of lead poisoning. Investigations involve testing paint and other items in the home to determine if any of those items contain lead. If lead is present, recommendations for abatement are provided and children are referred for medical treatment if necessary. The St. Clair County Health Department can provide lead-based paint testing of your home for a charge. The County also has a HEPA vacuum available free for public use.

**Mercury**

Mercury is a toxic substance that can be found in many household items, including old thermostats and thermometers. To reduce your exposure to mercury, avoid buying items that contain mercury and use substitutes whenever possible.

Mercury is a dangerous and potent neurotoxin that affects the central nervous system, kidneys, and liver. Short-term exposure to high levels of mercury vapor can cause nausea, shortness of breath, pneumonitis and bronchitis. Extreme levels can cause tingling sensations in the fingers and toes, a numb sensation around the mouth, and tunnel vision. Long-term exposures can lead to personality changes, memory loss, stupor, and coma. In pregnant women, mercury can pass through the placenta where it affects fetal development by preventing the brain and nervous system from developing normally.

**Mold**

Mold describes a wide range of fungi found virtually everywhere indoors and outdoors. Mold can grow in and on plants, foods, dry leaves, other organic material, and in soil. In nature, molds play an important role in helping break down, or decompose, dead material. Molds produce microscopic cells called spores, which act like seeds to form new mold growths (colonies) when they find the right conditions. These spores are very lightweight and spread easily through the air. When molds grow indoors, spores become concentrated, and can cause health problems when they are inhaled in large numbers.

For more information on mold related issues including mold cleanup and moisture control/condensation/humidity issues, you can call the EPA Indoor Air Quality Information Clearinghouse at (800) 438-4318 or visit them at [www.epa.gov/iaq/molds](http://www.epa.gov/iaq/molds).

**Radon**

Radon is second only to smoking as the cause of lung cancer in the US, causing an estimated 14,000 deaths per year. The risk of lung cancer is greatly increased if your home has high levels of radon and you are a smoker or live with a smoker.

The St. Clair County Health Department Environmental Health Division sells home radon test kits for $5.00/text kit, and also offers information on radon reduction techniques and lists of contractors that conduct radon testing and mitigation.