



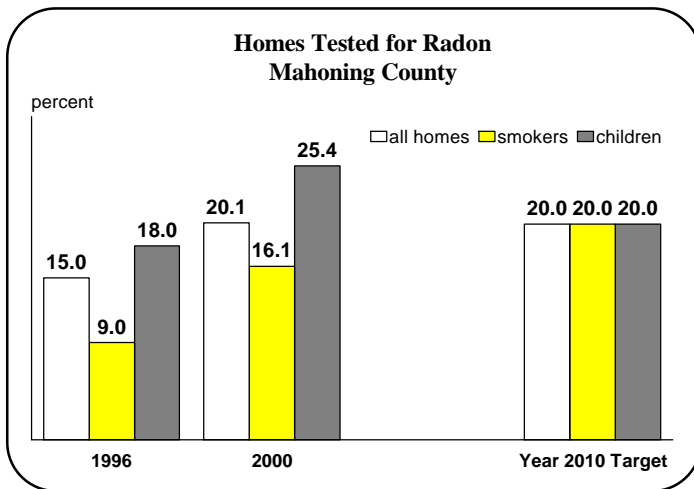
# District Board of Health Fact Sheet

January 2007 is Radon Action Month

## Radon in Mahoning County

Radon exposure is the second leading cause of lung cancer after cigarette smoking. The U.S. EPA estimates that radon exposure may cause between 7,000 - 30,000 deaths each year in the U.S., making it, as the graph on the next page shows, the environmental toxin responsible for more cancer deaths than pesticides, hazardous waste and air pollutants combined.

Radon gas - measured in picocuries per liter (pCi/L) - comes from the radioactive decay of uranium in soil. The gas can seep into a house through dirt floors, cracks in concrete floors and walls, floor drains, sumps, joints, and tiny cracks or pores in hollow-block walls. Radon gas can also enter water in private wells and be released into a home when the water is used.



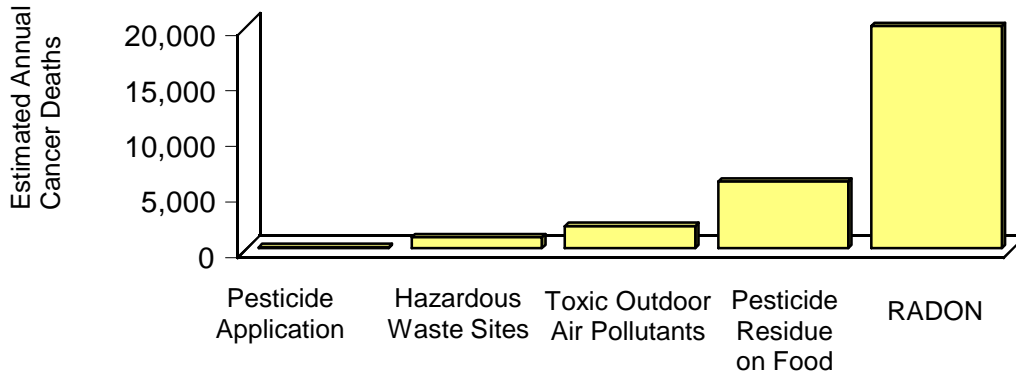
As this graph shows, more and more local homeowners are testing their homes for radon since this environmental hazard became a source of public concern in the 1980's. The test results from government agencies, university researchers, and commercial testing companies have been compiled by the Ohio Radon Information System at the University of Toledo. Their results show average radon levels in each Ohio zip code.

### Radon Levels in Mahoning County Zip Codes

| Zip Code | Post Office     | Number | Geometric average | Maximum level |
|----------|-----------------|--------|-------------------|---------------|
| 44401    | Berlin Center   | 16     | 2.3               | 7.8           |
| 44405    | Campbell        | 25     | 1.6               | 16.9          |
| 44406    | Canfield        | 198    | 2.1               | 16.3          |
| 44408    | Columbiana      | 56     | 3.2               | 234.2         |
| 44416    | Ellsworth       | 2      | 1.7               | 1.9           |
| 44422    | Greenford       | 2      | 0.8               | 1.7           |
| 44425    | Hubbard         | 85     | 1.8               | 40.1          |
| 44429    | Lake Milton     | 7      | 1.9               | 4.9           |
| 44436    | Lowellville     | 14     | 2.6               | 15.8          |
| 44440    | Mineral Ridge   | 17     | 2.1               | 22.6          |
|          | New             |        |                   |               |
| 44442    | Middletown      | 16     | 2.4               | 8.2           |
| 44443    | New Springfield | 19     | 10.2              | 207.0         |
| 44449    | North Benton    | 7      | 1.4               | 4.8           |
| 44451    | North Jackson   | 36     | 1.6               | 5.4           |
| 44452    | North Lima      | 19     | 2.7               | 7.3           |
| 44454    | Petersburg      | 10     | 3.8               | 26.8          |
| 44460    | Salem           | 104    | 2.5               | 76.7          |
| 44472    | Struthers       | 1      | 4.5               | 5.3           |
| 44501    | Youngstown      | 11     | 1.9               | 4.9           |
| 44502    | Youngstown      | 21     | 1.1               | 9.9           |
| 44503    | Youngstown      | 24     | 7.0               | 50.0          |
| 44504    | Youngstown      | 14     | 1.1               | 2.0           |
| 44505    | Youngstown      | 77     | 1.8               | 7.4           |
| 44506    | Youngstown      | 4      | 3.8               | 8.4           |
| 44507    | Youngstown      | 13     | 0.9               | 3.6           |
| 44508    | Youngstown      | 2      | 1.8               | 1.8           |
| 44509    | Youngstown      | 36     | 1.4               | 9.4           |
| 44510    | Youngstown      | 6      | 1.6               | 3.8           |
| 44511    | Youngstown      | 99     | 1.4               | 12.2          |
| 44512    | Boardman        | 257    | 1.8               | 10.5          |
| 44514    | Poland          | 169    | 1.6               | 12.1          |
| 44515    | Austintown      | 144    | 1.9               | 11.7          |
| 44601    | Alliance        | 112    | 1.5               | 16.3          |
| 44609    | Beloit          | 13     | 1.0               | 3.7           |
| 44619    | Damascus        | 2      | 6.6               | 10.1          |
| 44672    | Sebring         | 6      | 0.7               | 1.8           |

The 932 results from Mahoning County zip codes show that radon levels in Mahoning County are lower than in most Ohio counties (Mahoning ranks 77th of 88 counties), although radon levels tend to increase in the southeastern areas bordering Columbiana County. However, indoor radon levels can vary from one home to another in the same area, so testing your home is important.

## Environmental Risk Comparisons



Homeowners can buy short and long-term (more than 90 days) detectors that measure indoor radon concentrations with different levels of accuracy. Homeowners can also have radon testing done by professional testers licensed by the Ohio Department of Health.

| <b>The risk of cancer from radon exposure compares to:</b> |                                              |                                             |                                                  |
|------------------------------------------------------------|----------------------------------------------|---------------------------------------------|--------------------------------------------------|
| <b>Radon Level</b>                                         | <b>for smokers</b>                           | <b>for non smokers</b>                      | <b>What to do</b>                                |
| 20 pCi/L                                                   | 100 times the risk of drowning               | the risk of being killed in a violent crime | Fix your home                                    |
| 10 pCi/L                                                   | 100 times the risk of dying in a house fire  |                                             | Fix your home                                    |
| 8 pCi/L                                                    |                                              | 10 times the risk of dying in a plane crash | Fix your home                                    |
| 4 pCi/L                                                    | 100 times the risk of dying in a plane crash | the risk of drowning                        | Fix your home                                    |
| 2 pCi/L                                                    | 2 times the risk of dying in a car crash     | the risk of dying in a house fire           | Consider fixing between 2 and 4 pCi/L            |
| 1.3 pCi/L                                                  | average indoor radon level                   | average indoor radon level                  | Reducing radon levels below 2 pCi/L is difficult |
| 0.4 pCi/L                                                  | average outdoor radon level                  | average outdoor radon level                 | Reducing radon levels below 2 pCi/L is difficult |

The EPA recommends that you take action to reduce your home's indoor radon levels if your radon test results are 4 pCi/L or higher. A variety of methods can be used to reduce radon in your home. Most homes can be fixed for about the same cost as other home repairs, like painting or having a new hot water heater installed. More information about testing and reducing radon levels in your home is available from these sources:

- |                                              |                                                                                 |
|----------------------------------------------|---------------------------------------------------------------------------------|
| Ohio Department of Health                    | 800-523-4439                                                                    |
| National Hispanic Indoor Air Quality Hotline | 866-528-3187                                                                    |
| National Radon Hotline                       | 800-767-7236                                                                    |
| National Radon Helpline                      | 800-557-2366                                                                    |
| National Radon Fix-It Line                   | 800-644-6999                                                                    |
| Ohio Radon Information System                | <a href="http://radon.utoledo.edu">http://radon.utoledo.edu</a>                 |
| U.S. Environmental Protection Agency         | <a href="http://www.nsc.org/ehc/radon.htm">http://www.nsc.org/ehc/radon.htm</a> |