

MCPS Radon Testing and Mitigation Program Update

History of Radon Testing, Mitigation, and Prevention in MCPS Schools

Since the late 1980s, Montgomery County Public Schools (MCPS) has implemented strategies to prevent indoor radon. An intensive period of systemwide testing and remediation was accomplished in the late 1980s through the mid-1990s to ensure that all schools complied with U.S. Environmental Protection Agency (EPA) guidelines for radon. Since that era, radon prevention measures such as sub-slab vapor barriers, proper sealing, and sub-slab vents, have been incorporated into all new construction.

In 2016, MCPS enhanced the radon prevention program to include periodic radon testing of all facilities and conducted systemwide radon testing in all MCPS facilities. Periodic retesting of MCPS facilities is conducted on a five-year frequency. For facilities that previously had elevated test results, periodic testing is conducted on a two-year frequency. All testing results are provided on the [MCPS Radon Testing and Mitigation Program](#) web page.

General Information on Radon and Testing for Radon

As a basic introduction, radon is a naturally occurring radioactive gas that comes from the natural breakdown (decay) of uranium, which is found in soil and rock all over the United States, including the State of Maryland and Montgomery County. Since radon is an invisible, odorless gas, the only way to determine radon levels is through testing.

Even though radon exposure levels and testing is not required, MCPS follows the EPA recommended guidelines for testing and mitigation outlined in EPA Publication EPA 402-R-92-14: *Radon Measurement in Schools (Revised Edition)* http://www2.epa.gov/sites/production/files/2014-08/documents/radon_measurement_in_schools.pdf.

In the event that radon is detected above 4.0 pCi/L, a second test will be completed to determine if remediation is necessary. Using methods suggested by the EPA, remediation typically involves the installation of venting systems that vent radon gas from the ground beneath the building to the outside air. In accordance with EPA guidelines, schools with levels above 10 pCi/L have higher priority for retesting and remediation. If test results show radon levels near 100 pCi/L or greater, the EPA recommends relocation of that classroom until the radon levels can be reduced. No MCPS classrooms have had test results close to this level. MCPS also coordinates post-remediation radon testing to ensure the effectiveness of the radon mitigation system.

Because a child's exposure in a particular classroom represents a small part of their exposure over the whole year, continued use of the classroom during a period of retesting is not a health problem unless radon levels are extremely high. It is important to put into perspective that people, particularly children, spend more of their time at home. In fact, children typically spend less than 20 percent of their time in school, compared with more than 75 percent of their time spent in the home environment. Since people, especially children, spend most of their time at home, the U.S. Surgeon General recommends that all homes should be tested for radon. According to the EPA, Montgomery County, Maryland, has been designated as an area where there is a predicted average radon level at or above the EPA 4.0 pCi/L action level.