

Frequently asked questions about radon and schools

1. Does radon cause headaches, eye irritation or sick-building syndrome?

No.

2. Do children have a greater risk of cancer from radon exposure?

Children usually are more sensitive to environmental pollutants. However, no current data concludes that children are more at risk than adults from radon exposure.

3. Is there a hazard from touching/being near the radon test kit?

No, although kits should be kept away from very young children (toddlers) so they don't eat or chew on them.

4. Do building materials emit radon?

The primary source of radon in a building or home is from the soil underneath it. However, a few building materials such as granite, concrete, gypsum board (sheet rock), bricks and field stone may emit small amounts of radon gas. This is rarely the case because most of these materials are very dense. This means that if there is radon-producing radium in these materials, only a small amount of the radon gas near the surface ever makes it out into the environment.

5. Should testing be delayed if the school is planning major renovations to the building or the HVAC system?

Initial and follow-up tests should be conducted prior to major HVAC or building renovations. Testing can show if a radon mitigation system needs to be installed as a part of renovation. Testing must also be done after renovation.

6. Should upper floors of a school or building be tested? Does this mean that upper floors never have elevated levels?

Upper floors may indeed have elevated levels of radon. However, measurements in ground floor rooms are likely to be a good indicator of radon levels for all floors.

7. In schools with a basement level (below ground level), the first floor is often built at ground level. It is, therefore, in contact with the soil along its outside edge. Should this floor be tested?

This floor appears to have limited contact with the soil. However, the outside rooms may have openings permitting radon entry and should be tested if they are frequently occupied. ORS 332.166-167 requires testing of all frequently occupied rooms in contact with the soil or above a basement or crawlspace.

8. Nearby homes and schools have reported no elevated levels of radon. Should we still test?

Yes, radon levels vary with geology, building structure, HVAC systems, etc. The only way to know if radon is present is to test. ORS 332.166-167 states school buildings should be tested every 10 years; current national guidelines (ANSI/AARST, 2014) recommend that school buildings be re-tested every five years (or whenever there is significant renovation or change to a building's HVAC system).

9. What are the costs of radon testing in schools?

The cost may depend on the number of rooms to be tested and the type of test kit used. The average cost of radon testing in Oregon schools is approximately \$10 per tested room. This assumes schools purchase short-term test kits in bulk and that school staff perform the testing.

10. If a room's short-term initial test result is very high (e.g., above 100 pCi/L), should a follow-up measurement be taken?

Yes, follow-up measurements, even if the initial ones are high, are recommended before making any further decisions.

11. Should a room be retested if there is evidence the test has been moved or tampered with in any way?

Yes.

12. How do you place radon test kits in large, open spaces such as cafeterias, gymnasiums or auditoriums?

Test kits may be hung from the ceiling and or wall using string and masking/duct tape. Be sure to hang them per the "Test Kit Placement Guide" in Appendix A of the "Testing for Elevated Radon in Oregon Schools" protocol and plan.

13. How do we test partitioned classrooms?

Classrooms with movable partitions should be individually tested.

14. Can you test during unusual weather conditions (heavy rain, snow or wind)?

Avoid testing during these conditions.

15. Should we take quality assurance duplicates and blanks during the follow-up tests?

Yes, per the "Quality assurance" section, starting on on page 29 of the "Testing for Elevated Radon in Oregon Schools" protocol and plan. However, there are generally fewer samples taken for follow-up testing.

16. When two devices (duplicates) are placed in a room during initial testing, which measurement result is taken as the test result?

Both tests are recorded, but the average is taken as the test result.

17. What should be done if a device is picked up late or handled incorrectly?

Handle all test kits in accord with manufacturer's instructions. If there is any discrepancy or problem, the device's serial number should be recorded and noted to the laboratory doing the analysis. Include in the log the actual time device was picked up and a brief description of how the device was mishandled.