

## Patient Action Discussion Guide for Physicians to Use With Lung Cancer Prevention Through Radon Risk Communication

Anyone can get lung cancer; in fact, about 1 in 7 individuals who do develop lung cancer have never smoked. The top two causes of lung cancer are smoking (no. 1) and radon exposure (no. 2). We cannot undo risks associated with past smoking and radon exposure, but there are some steps we can take to reduce risk going forward. To maximize risk reductions remediate your home for radon AND stop smoking if you smoke; doing these together is more beneficial than one or the other alone.

Anyone can get cancer and some individuals are more at risk of lung cancer due to their genetic make-up. The sooner you reduce radon exposure, the greater the risk reduction. Compared with treatment for lung cancer, the cost of radon remediation is low (for example, similar to the cost of a minor home repair) and provides the benefits of reduced radon exposure for everyone living in the house.

### Patient History Taking Dialogue:

**You may have heard that exposure to radon gas is the second leading cause of lung cancer.**

Your actual risk of lung cancer varies according to radon concentration, how long you've been exposed to the radon, as well as other risk factors like whether you smoked in the past.

- ***Have you tested your home for radon?***
  - If no, Recommended action: Either obtain a do-it-yourself radon test kit or hire a radon professional to test the home to assess radon gas concentrations.
  - If yes,
- ***Was the radon test result in your home at or above 4 pCi/L?***

The current EPA recommended reduction level is 4 picocuries of radon per liter of air (pCi/L). Technically, there is no safe level of radon exposure as all exposure carries some risk; however, the EPA action level is the guideline used in the US.

  - If no; It is suggested you retest your home's living spaces periodically, such as every 5 years or after any major home renovation or change to the heating or cooling system of the home.
  - If yes; If your test result is above 8 pCi/L, it is suggested that you install a mitigation system. At levels between 2 pCi/L and 8 pCi/L it is suggested that you make another radon measurement to improve the reliability of the estimate for your long term radon exposure. You can take another short-term screening test. Or another option at these levels is a long-term radon measurement in your highly occupied living space that spans a heating (cooling) and non-heating (non-cooling) season will give you a very good estimate of your true residential radon exposure.
- ***Have you taken steps to reduce your home radon level to acceptable levels?***
  - If no, Recommended action: In order to reduce the lung cancer risk from radon exposure in your home, it is suggested that you install a radon mitigation system to reduce the indoor radon value in your living spaces to less than the EPA action level of 4 pCi/L or the WHO reference level of 2.7 pCi/L.
  - If yes; Have you conducted a radon test to confirm the radon concentration in your home has been reduced to below the EPA action level? You should also conduct a radon test once every 2 years to ensure the radon concentration continues to be controlled.

Resources are available at \_\_\_\_\_[State/Local Contact Info]\_\_\_\_\_