

## Handout B

### Case study – “RadonSmart 2020”

Your public health unit has been asked to comment on and participate in implementing some aspects of the provincial RadonSmart 2020 program. Initiatives include an information campaign and easier access to test kits to increase the number of households testing for radon. The target is to have half the buildings in BC tested by 2020. Your health unit would be responsible for informing all residents in your region about the risks of radon and how to access kits. \$28 million has been allocated over five years for information, administration and subsidies for test kits.

#### Some facts about radon in the Canadian and BC contexts:

- Radon is an invisible, odourless, naturally-occurring gas that can infiltrate homes from beneath.
- Radon exposure accounts for 16% of lung cancer deaths in Canada (Health Canada, 2012) killing an estimated 3000 Canadians per year (Canadian Cancer Society, 2014).
- 6.9% of Canadian homes (3.9% in BC) have unsafe radon levels (Health Canada, 2012).
- 96% of Canadian homes have not been tested for radon (Canadian Cancer Society, 2014).
- Risks to smokers are multiplied: for a lifelong smoker, the risk of developing lung cancer is 1/10. Adding in exposure to a high level of radon increases that risk to 1/3 (Health Canada, 2015a).
- There is no legal requirement for landlords to test their buildings (Health Canada, 2015a).
- There is no legal requirement for landlords to take any remedial action to lower radon levels in buildings that have been tested by tenants or others (Health Canada, 2015a).
- Remedial action costs on average \$1500-\$3000 (Health Canada, 2015a). Test kits and lab analysis are relatively inexpensive at \$50-\$100 (Health Canada, 2015b).
- In BC, the percentages of affected households vary widely by region. For example, very high rates are found in the Kootenays (29%), the East Kootenays (19%) and the Northern Interior (12%), while the South Fraser Valley and Richmond (0%), Vancouver Island (0.9%-1.8%) and Vancouver (1.2%) have very low rates (Health Canada, 2012).

#### Sources:

Health Canada. (2012). *Cross-Canada survey of radon concentrations in homes*.

Retrieved on May 11, 2015 from: <http://www.hc-sc.gc.ca/ewh-semt/radiation/radon/survey-sondage-eng.php>

Health Canada. (2015a). *Radon frequently asked questions*.

Retrieved on May 11, 2015 from: [http://www.hc-sc.gc.ca/ewh-semt/radiation/radon/faq\\_fq-eng.php](http://www.hc-sc.gc.ca/ewh-semt/radiation/radon/faq_fq-eng.php)

Health Canada. (2015b). *How to test for radon?*

Retrieved on May 12, 2015 from: <http://www.hc-sc.gc.ca/ewh-semt/radiation/radon/testing-analyse-eng.php>

Canadian Cancer Society. (2014). *96% of Canadians have not tested their homes for cancer-causing radon gas, Canadian Cancer Society survey shows*. Retrieved on May 11, 2015 from: <http://www.cancer.ca/en/about-us/for-media/media-releases/national/2014/radon-survey/?region=on>



# Introduction to Practical Ethics for Public Health

CPHA 2015

Using the framework outlined below, please discuss this case in small groups (+/- 30 min.). We would like one person per group to summarize the group's responses to the following questions:

- A. After an ethical examination of the program, would you approve it? For what reasons?
- B. Would the program have to be modified to make it ethically acceptable? Why?
- C. What was most helpful in the framework you used?
- D. Did the framework fail to highlight anything important?

To guide the discussion, your public health unit is using an adapted summary of the ethical framework by Baum et al. (2007).<sup>1</sup> It has two parts, and it goes as follows:

First part (priority) – consider the following six dimensions and related questions: (20-25 min.)

<b>Population-level utility</b>	Does the program advance the well being of those affected? By how much? Does the program respond to the expectations, values and needs of the community?
<b>Evidence</b>	Is the program's effectiveness supported by the best available evidence?
<b>Justice/fairness</b>	Will the expected benefits and burdens of the program be equitably distributed in the community?
<b>Accountability</b>	Will the assumptions, justifications, and reasoning behind the program be made public? Within the context of this program, are the funds being used responsibly?
<b>Cost/efficiencies</b>	What are the costs associated with the implementation and with the maintenance of the program? Could this money be used more efficiently on another public health program?
<b>Political feasibility</b>	Is the program politically feasible? What is the community's degree of acceptance of the program?  Note: "Incorporating political feasibility into decisions does not, however, mean limiting options to popular ones" (p. 662).

Second part (secondary) – consider whether there are additional issues that arise relating to autonomy, non-maleficence and beneficence (three well-known principles from medical ethics): (5-10 min.)

<sup>1</sup> Baum, N. M., Gollust, S. E., Goold, S. D., & Jacobson, P. D. (2007). Looking ahead: Addressing ethical challenges in public health practice. *Global Health Law, Ethics, and Policy*, 35(4), 657-667.