Swiss National Radon Action Plan Addresses New Challenges

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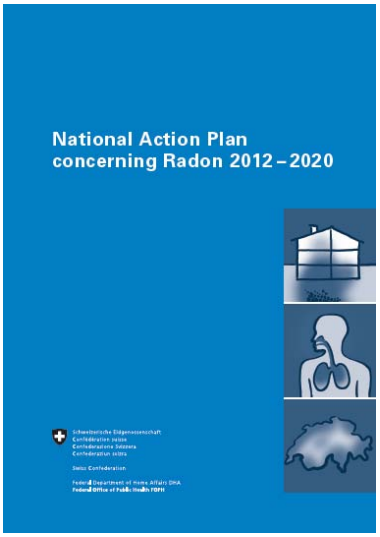

It is helpful to be aware of what other countries are doing to address the risk of radon exposure. The following is my summary of the Swiss Federal Office of Public Health's new radon plan. I am very impressed with the efforts of our Swiss colleagues and I hope you also will be inspired. Switzerland has a significant radon challenge (average indoor concentration of 78 Bq/m^3 or 2.1 pCi/L), a very small but very effective radon program, and has demonstrated international radon leadership over the past two decades.

On May 25, the Swiss Federal Office of Public Health released a **new eight year national plan to address the World Health Organization's findings or elevated risk associated with indoor radon**. The plan speaks of **radon** in a variety of clear ways: **"It can penetrate insidiously into homes and dwellings ...".**

The plan includes a summary of the health risk data that is clearly summarized in the following statement: **From the pooling of European residential radon and lung cancer case control studies "corroborated by similar studies carried out in North America and China, demonstrate that the risk associated with prolong exposure to radon in residences is more serious than was foreseen by extrapolating the risk observed for (underground) miners . . .".**

"This programme complied to the state of knowledge regarding radon at the time (1994) but has been fundamentally called into question by the epidemiological findings of the last 15 years on exposure in households." This new situation requires enactment of measures concerning seven objectives:

- Revision of legal regulations
- Extending knowledge of radon exposure in dwellings
- Promotion of protection policy against radon in buildings
  - Including awareness of the radon problem into the process of energy remediation
- Integrating the problem of radon into the training of construction specialists and the promotion of possible solutions
- Improving public awareness to health problems caused by radon
- Development of programmes on scientific and technical aspects.

The program calls for a two year legislative adoption phase followed by a six year implementation period.

Expanded discussion about extending knowledge of radon exposure in dwellings clearly notes that **more lung cancer due indoor radon exposure is found in areas of moderately elevated indoor radon since a larger population is exposed in these regions**.

The Swiss plan clearly underscores **the need for a "safety policy" to be required in the planning of new buildings including radon testing after construction especially in low-energy houses**.

<u>The plan calls for increasing the number of homes mitigated by a factor of ten</u> as well as radon testing. Also, recruitment of component professionals and a major effort to train architects, civil engineers and other building experts is specified.

In real estate transactions and rental leases, the plan states that a possible method that needs to be considered is required specification of radon test results. **The development of short-term radon detection methods and rapid radon measurements in property transactions are areas needing attention**. This is a very important statement inasmuch as it represents the importance of both short- and long-term radon measurements.

The plan discusses the need for financial support and to reinforce staffing.

The plan concludes: **"The effective and lasting protection of the health of the Swiss population against radon is in balance and it is urgent to control this risk if we take into consideration the recent scientific findings and the consequential new reference levels. It is clear today that in Switzerland a consequential number of cases of lung cancer attributable to radon will only be avoided by acting on concentrations above 100 Bq/m^3 …"**