

How does the project work?

IRP working groups:

- Risk Assessment
- WHO Exposure Guidelines
- Cost Effectiveness
- Measurement and Mitigation
- Risk Communication
- Coordination and Evaluation

Network and working group meetings

Production of Radon-related databases, reports and recommendations

Project coordination through WHO

Time to act

The largest contribution to environmental radiation in many countries comes from radon

■ The science is clear: the dangers of radon exposure are well established

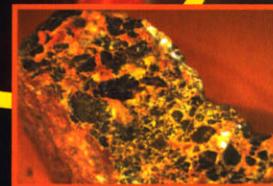
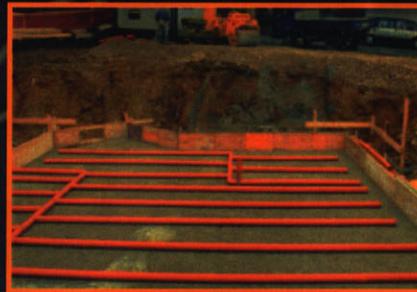
■ Effective ways to reduce radon levels are available

The challenge

Translating scientific knowledge into public health action to minimize the health risks for the population.

■ The WHO IRP project will contribute to this through a concerted effort of partners from all over the world.

Membership is open to any WHO member state government, i. e. department of health, or representatives of other national institutions concerned with radiation research and protection.



A global project to increase awareness on **radon** and health support action to decrease **radon** levels in homes



Radiation and Environmental Health Unit
Protection of the Human Environment

World Health Organization
20, avenue Appia
1211 Geneva 27, Switzerland
Tel. : +41 22 791 3964
Fax : +41 22 791 4123
e-mail: radiation@who.int



World Health
Organization

The problem:

Radon is the most prominent source of environmental radioactivity and a major risk factor for lung cancer. It is a natural gas that escapes from the ground. Radon is found to a varying extent all over the World. While there usually is a rather low outdoor air concentration of radon, it tends to concentrate in houses. This leads to exposures for the inhabitants.

Why the concern:

Ionizing radiation damages cells and can lead to cancer in the long term. Radon emits a type of ionizing radiation called alpha-particles. Because Radon is inhaled during breathing and alpha-particles do not reach far, it is the lung which obtains most radiation. Thus lung cancer is the main health risk. Radon is responsible for 6-15% of all lung cancers.



The evidence

Much of what we know about lung cancer and radon has been derived from studies among underground miners. Miners may be exposed to very high radon levels. However, a series of new studies show that also the lower radon levels found in homes increase the lung cancer risk.

Radon and smoking:

Smoking causes the majority of lung cancers. A reduction of both smoking and radon levels can therefore be of greater benefit than one approach alone.

Reducing radon levels

Radon levels can be measured with simple devices. The key to low indoor radon levels lies in blocking entry paths into houses (sealing of cracks and junctions) and in increasing ventilation to vent radon out.

The WHO project

The Radiation and Environmental Health Unit of WHO brought together scientists, public health professionals and legislators from over 20 countries to establish the International Radon Project (IRP).

Project Objectives:

- Raise the public and political awareness of the problem
- find effective strategies for reducing the health impact of radon
- promote sound strategies and programmes to national authorities
- estimate the global health impact of radon exposure in homes.

