



RADON

AT HOME AT WORK

Don't live with the risk

PROTECTING PEOPLE | PREVENTING HARM | PREPARING FOR THREATS



Contents

What is radon?	1
The risk to your health	2
Radon areas	3
Radon at home and at work	5
Assessing your risk	6
Reducing your risk	8

This booklet gives you the basic facts about radon, and helps you decide whether you are at risk and what action you should take. More detailed information is available in our fact sheets and on our website:

www.UKradon.org



WHAT is radon?

Radon is a radioactive gas. We can't see, smell or taste it: you need special equipment to detect it. It comes from the rocks and soil found everywhere in the UK. Outdoors the gas disperses into the atmosphere, so the level in the air we breathe is generally very low.

Radon collects in enclosed spaces, such as houses, workplaces and other buildings. Levels vary and in some parts of the country radon occurs at higher concentrations. Prolonged exposure to high levels of radon is dangerous: it increases your risk of lung cancer.

Because of this, it is important that people living or working in higher-risk areas should be aware of radon, and decide whether they need to take any action to protect their health.

The only way to be sure is to measure the levels of radon. Radon levels are measured in Becquerels per cubic metre of air (Bq m^{-3}).

“**Radon**
is dangerous”



THE RISK to your health

High levels of radon are dangerous.

Radon produces tiny radioactive particles in the air we breathe. Radiation from these particles damages our lung tissue, and over a long period may cause lung cancer. The higher the radon level and the longer the period of exposure, the greater the risk.

Radon is the second-greatest cause of lung cancer, after smoking. It is estimated to cause 1,000 to 2,000 cases of the disease each year. Smoking greatly increases the risk from radon.

“**Radon can**
cause lung cancer”





RADON areas

Radon is everywhere.

HPA conducts radon surveys which show which parts of the country are more likely to have buildings with high radon levels. You can look at the latest maps of radon Affected Areas on our website **www.ukradon.org**.

You can find out if your home is in a radon Affected Area by doing a postcode search on the same website.

“**Find out**

if your home is in a radon Affected Area
at www.UKradon.org”







RADON at home and at work

Buildings naturally draw air in through the cracks and gaps in the floors, and this air may contain radon. Indoor radon can rise to hazardous levels, but levels often vary from building to building in the same area.

If you live in a radon Affected Area, you should visit www.UKradon.org where you can order a radon testing kit.

If you are buying a home, ask whether or not it has been tested for radon, and see our factsheet *Radon and Property Sales*.

Employers have special responsibilities: health and safety legislation requires them to protect staff and others from risks, including exposure to radon. It is important that employers assess risks from radon in their workplaces. Certain environments, for example where part of the building is below ground, may have a higher level of risk.

Ask for our factsheet *Radon in the Workplace*.

“**You can**
order a radon testing kit by visiting www.UKradon.org”



ASSESSING your risk

Should you measure?

- Find out if you are in a radon Affected Area (visit www.ukradon.org)
- In radon areas, measurements should be made.

How to measure?

- HPA recommends measuring over three months
- You can order and pay for a radon testing kit online from www.ukradon.org or by telephone on 01235 822622

Should you act?

- If the average radon level is well below the Action Level, no action is needed.
- If the average radon level is approaching the Action Level you may wish to take action
- If the average level is above the Action Level you should take action to reduce it

“check, measure, act
to protect your health”





REDUCING your risk

If your measurement shows high radon levels, we will give you advice on what action to take.

There are several ways to reduce radon in buildings: the most effective is a radon sump. The air in the soil under the building is collected and expelled to the outside using a fan and a pipe. This will often reduce the radon to less than one-tenth of its previous level.

Other methods include:

- increasing underfloor ventilation
- installing a positive ventilation system to blow air into the house.

The effectiveness of these methods varies according to the structure of the building and the level of radon present.

Always obtain professional advice from, for example, your local council or a radon education day about the most appropriate method of reducing radon in your building.

Requirements under the building regulations protect new buildings and extensions against radon in the highest risk areas.

“**Radon remedies**
are simple and effective”

www.UKradon.org

- Search by postcode
- Get advice on protective measures
- Order a measurement pack





The Health Protection Agency is an independent body that protects the health and well-being of the population: the Radiation Protection Division carries out work on ionising and non-ionising radiations. We make measurements, conduct surveys and define the areas at risk from radon. We provide impartial advice and authoritative information to the public, professionals, local authorities and the government.

Radon Services

Health Protection Agency

Centre for Radiation, Chemical and Environmental Hazards

Chilton, Didcot

Oxon OX11 0RQ

For radon queries during office hours call 01235 822622



Our aim is to protect, conserve and promote the natural environment and built heritage for the benefit of present and future generations.

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An Agency within the Department of the
Environment
www.doeni.gov.uk



**INVESTORS
IN PEOPLE**