

RADON IN HOMES

Radon is a colourless, odourless and tasteless gas arising as a by-product of the decay of Uranium, which is present in geological strata. Radon arises in minute quantities in the environment, being in all rocks and soils, but under certain circumstances the gas can build up in buildings causing a potential health risk to people exposed to the gas over an extended period. Radon is a cause for concern because exposure to the gas over time increases the risk of lung cancer, particularly among smokers.

The **National Radiological Protection Board (NRPB)** was tasked by the (then) Department of the Environment (now DEFRA) in the early 1990's to undertake a country-wide survey of radon, in homes. The results were expressed, statistically, as the % of homes in an area at risk of exceeding the Government Action level, which is 200 Becquerels per cubic metre (Bq/m³) (for residential properties.)

From the survey, the report shows that Warwick District area is generally at low risk (< 1%) There are specific areas within the District having a 1-3% risk. To put this into context, this relates to approximately 10,000 dwellings (19% of total housing stock). There is a very small area to the east where there is a 3-5% risk, with less than 100 dwellings potentially falling into this probability band.

LINKS

1. DEFRA web site, with information regarding Radon:

<http://www.defra.gov.uk/environment/radioactivity/radon>

2. National Radiological Protection Board web site:

<http://www.nrpb.org/radon/index.htm>

3. View the Radon Map of England via:

http://www.nrpb.org/radon/radon_maps/index.htm

Note: Whilst part of WDC area is listed as a **NRPB** Radon affected area this is **not** an affected area designated under the **Building Regulations**. Special construction measures to limit ingress of Radon from the ground into homes are therefore not legally required.

In a limited survey the highest readings measured in the Warwick District were in post code areas CV34 and CV32, with the highest reading at 130 Bq/m³, (below the Action Level), with the average of 59 measurements being 35 Bq/m³.

As the NRPB undertook testing at a small, random number of homes in each area the only means of determining levels in a specific property is by undertaking Radon measurement at that property (Cost at the time of writing of the order of £50).

In 1991 NRPB announced a validation scheme for laboratories making radon measurements in homes. The validation scheme requires rigorous tests of the laboratory, and requires that measurements in homes are carried out over at least a three-month period.

With grateful thanks to Rob Chapleo for technical advice

LINK The list of validated laboratories is available at:

<http://www.nrpb.org/services/radon/validation.htm>

If, following measurement, the results show Radon above the Action level, advice is available to understand what this means, and how to reduce Radon concentrations in the home. This involves work which could be undertaken by local builders, with the cost of remedial works, in most circumstances, being less than £1000. If a property was deemed unfit due to high Radon levels, there could be consideration for a means-tested grant for remedial works

LINKS

1. Advice on remedial works is on:

<http://www.bre.co.uk/radon/index.html>

2. Addresses and contact telephone numbers for NRPB and Building Research Establishment (BRE)

<http://www.defra.gov.uk/environment/radioactivity/radon/info.htm>

3. Address to obtain free leaflets and booklets providing advice to members of the public and professionals in the housing market

<http://www.defra.gov.uk/environment/radioactivity/radon/publictn.htm>

Enquiries can be made directly to Pollution Division, Environmental Health, via the "Contact Us" button on the home page of WDC website. Copies of the information leaflets and booklets can also be provided.