

## Guidance on Radon

### What is radon?

Radon is a radioactive gas, formed by the decay process of uranium. Uranium is present in rocks and soil around us and therefore radon naturally occurs in the atmosphere. Usually, radon is dispersed in the air and the levels we breathe in are not high. However, high concentrations of radon may build up in enclosed indoor or underground areas. Some areas are particularly prone to radon build-up:

- Areas with high levels of uranium in their geological make-up
- Indoor areas with poor or no ventilation
- Underground areas e.g. basements, mines

When radon is inhaled, it increases the risk of developing lung cancer.

### Legislative requirements for employers

*The Health and Safety at Work Act 1974 & Management of Health and Safety at Work Regulations 1999:*

Employers are required to ensure the health and safety of their employees. This includes carrying out a suitable and sufficient risk assessment. An assessment of radon levels in the working environment should form part of this risk assessment. The Health and Safety Executive (HSE) advises that radon should be identified as a hazard under the following circumstances:

- If the workplace is in a radon affected area
- If the workplace has a basement area that is occupied for more than c.50hrs per year
- If the workplace is a mine, cave or other underground environment
- If the workplace has a suspected radon source e.g. ground water or geological samples

*The Ionising Radiations Regulations 2017:*

If annual average radon levels in a workplace exceed 300 Bq/m<sup>3</sup> the employer **must always** provide notification to the HSE. In addition, a Radiation Protection Adviser (RPA) with relevant radon experience should normally be contacted. Possible remedial measures that can be put in place to disperse radon depend on the levels of radon present and works should be carried out by a specialist radon removal contractor.

The radon risk assessment flow-chart on the next page shows the actions taken during radon risk assessment and the possible actions required to reduce radon levels in the workplace.

### References and useful links

[Radon in the workplace \(hse.gov.uk\)](https://www.hse.gov.uk/radon/)

<https://www.ukhsa-protectionservices.org.uk/radon/sectors/employers>

<https://www.ukradon.org/information/ukmaps>

<https://www.ukhsa-protectionservices.org.uk/radon/>

<https://www.gov.uk/government/publications/radon-in-homes-in-england-2016-data-report>

<https://www.gov.uk/government/publications/radon-in-homes-in-scotland-2016-data-report>

<https://www.gov.uk/government/publications/radon-in-homes-in-wales-2016-data-report>

<https://radonassociation.co.uk/>

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## Radon Risk Assessment flow chart

