

Impact of updated Radon Risk Maps for Ireland

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National Radon Forum
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Thanks



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Logistic regression model for detecting radon prone areas in Ireland



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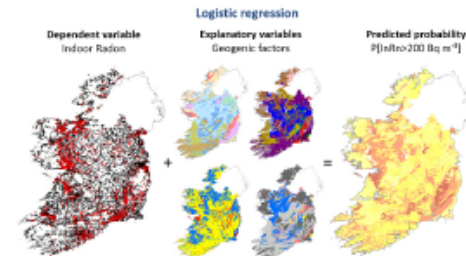
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HIGHLIGHTS

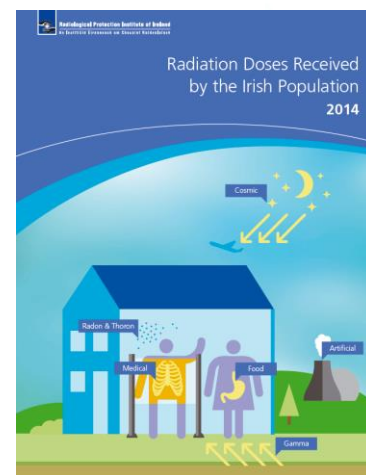
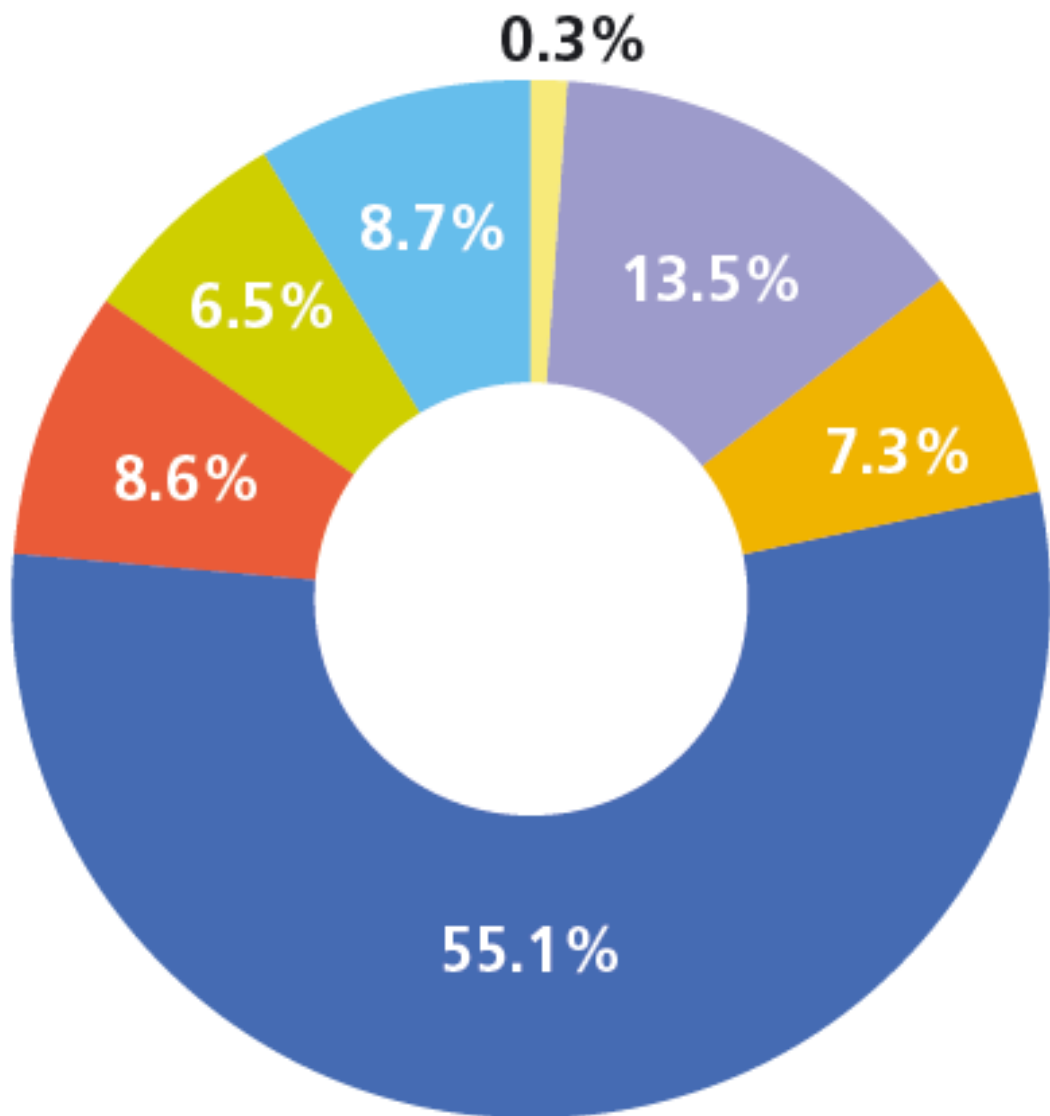
- A new high spatial resolution radon risk map of Ireland has been developed.
- Logistic regression models were evaluated for radon mapping.
- Indoor radon measurements and relevant geological information were used.
- Probabilities of having an indoor radon concentration above 200 Bq m^{-3} were predicted.
- About 10% of the total Irish population may be affected by high indoor radon levels.

GRAPHICAL ABSTRACT



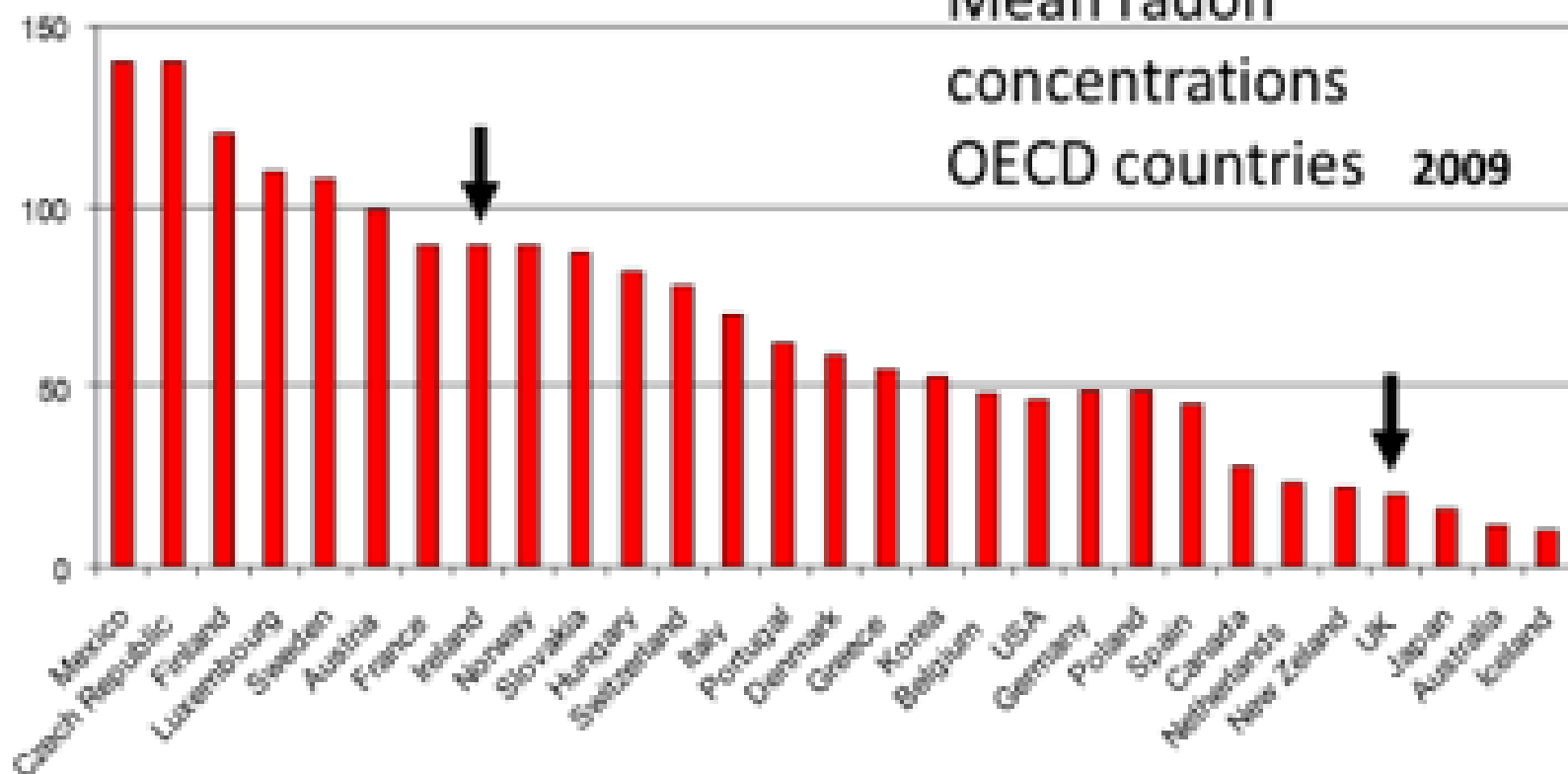
- Trinity College Dublin
- Geological Survey of Ireland
- Economic and Social Research Institute
- My own colleagues in EPA

Radiation Dose to Irish Population



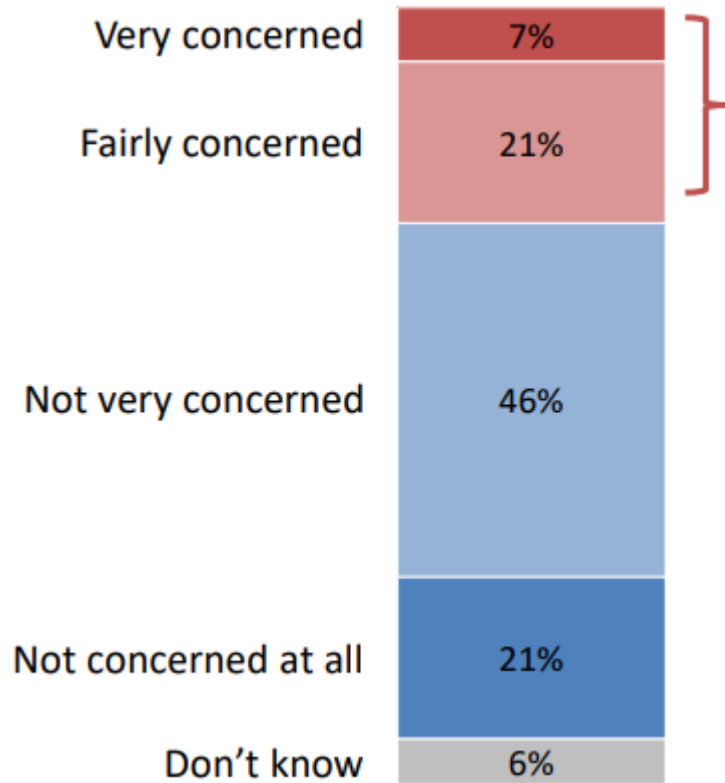
Radon, Ireland and the International Context

Mean radon concentrations
OECD countries 2009

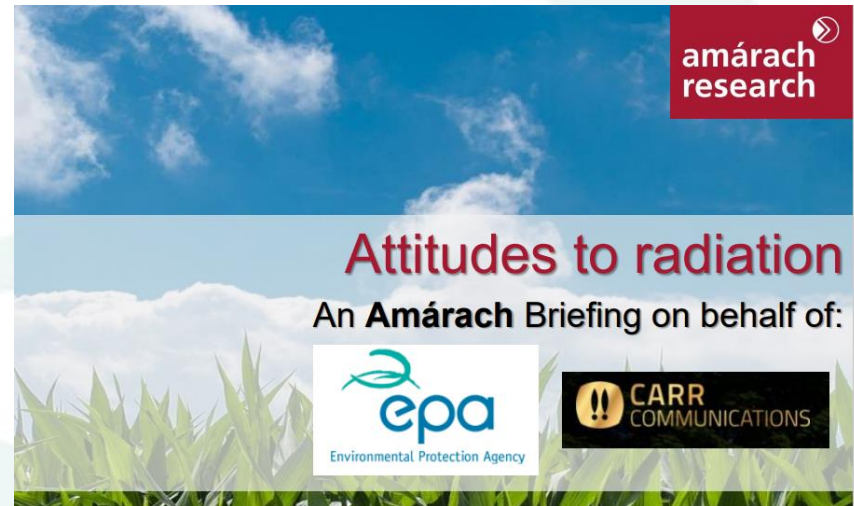


Awareness and Attitudes

1149 Respondents



Radon gas



- 15% of population concerned about Radon

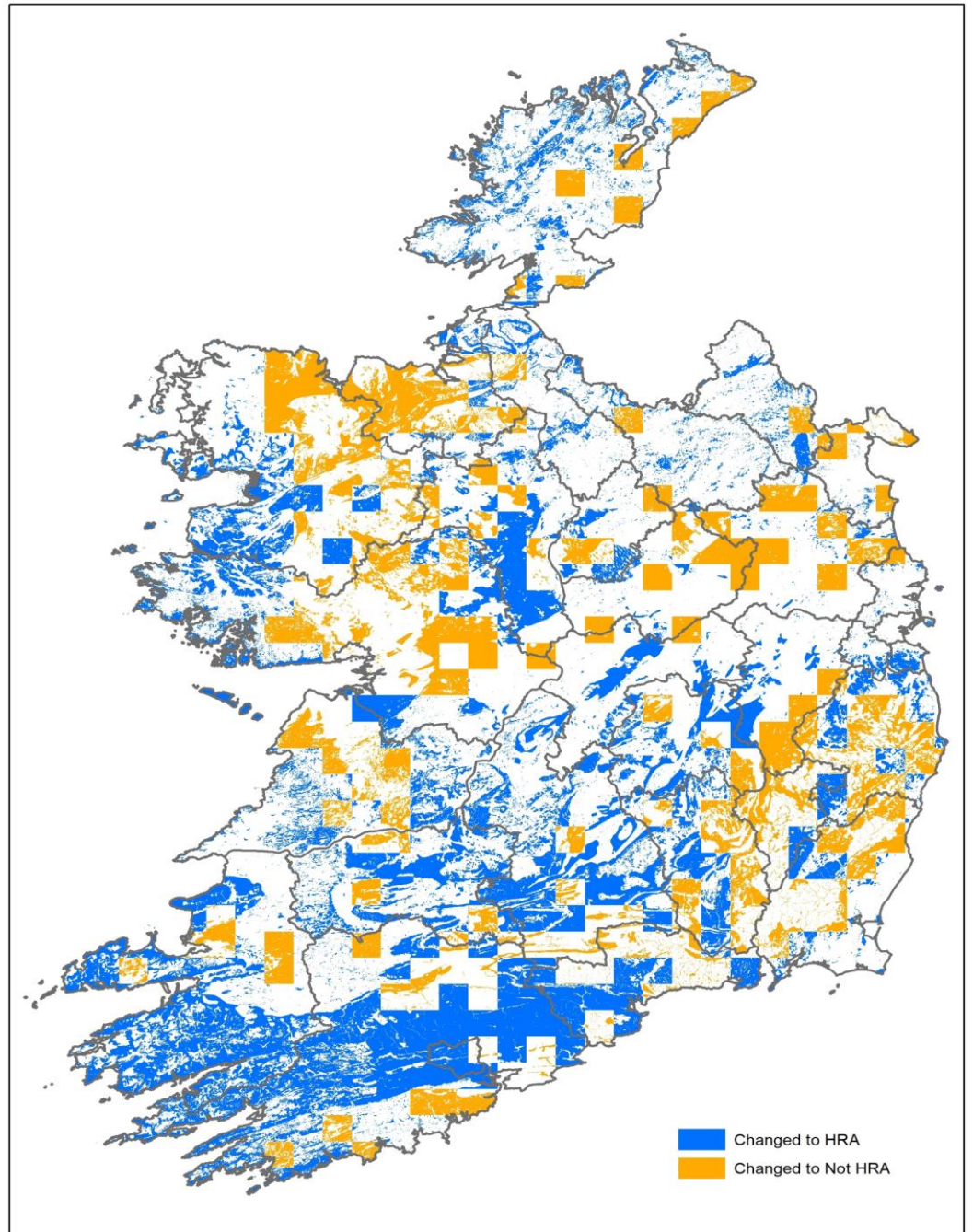
Awareness and Attitudes

- 8 out of 10 Irish adults (82%) have heard of radon
- Of those aware, **1 in 4 (25%) are concerned about the presence of radon gas in their home** and
- Two thirds (66%) are unlikely to have their home tested for radon gas –
- The main reason why they are unlikely to have their home tested is **thinking their home is ‘unaffected by radon gas’**

Change

	Estimated no. of homes above reference level	Estimated population in homes above reference level
Pre-existing map	126,000	349,000
Updated map	170,000	470,000

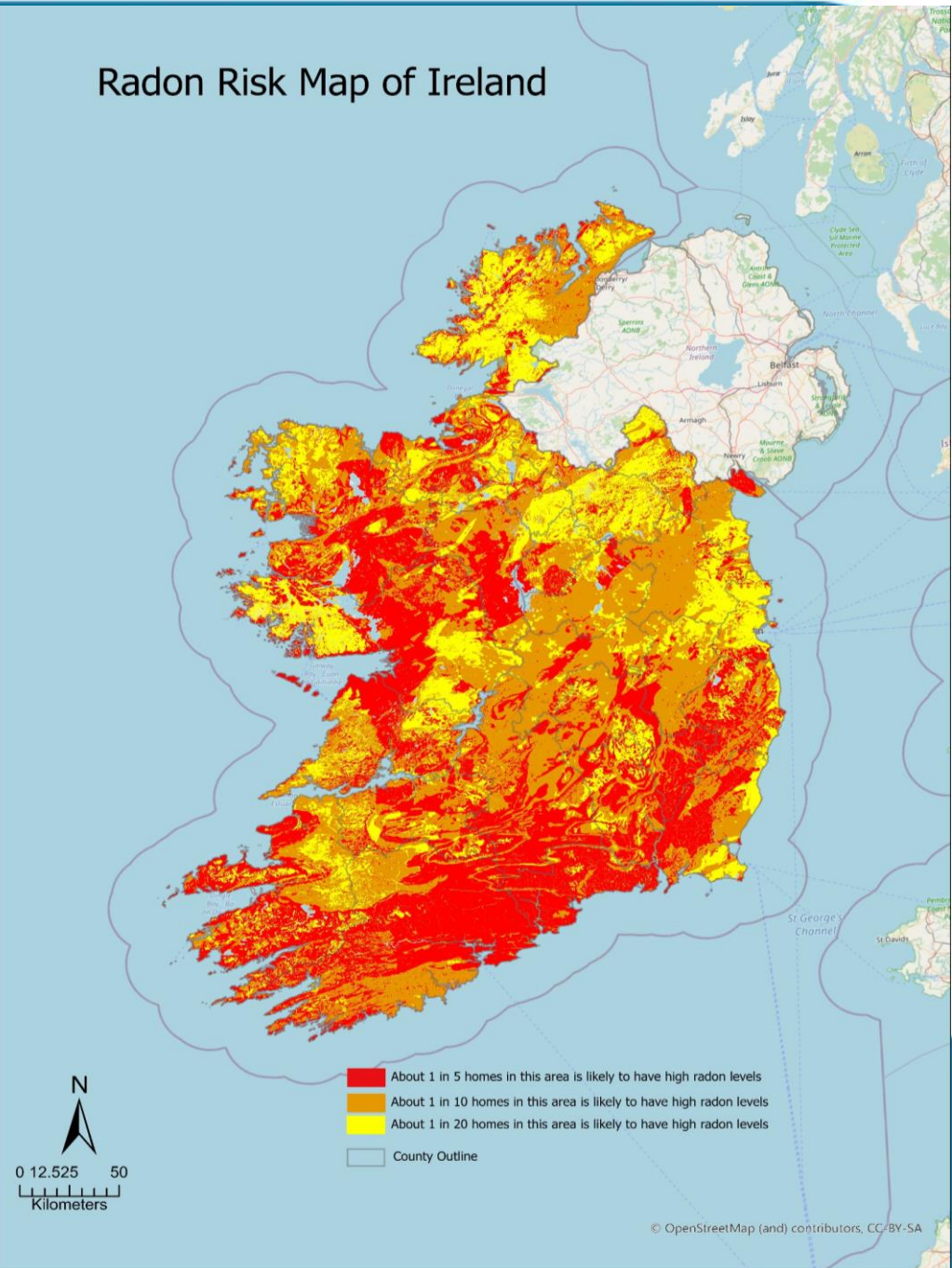
Change



Impact

- **9%** more High Radon Area in Ireland
- **Half a million citizens** living in High Radon Area
- Growing population in Ireland

Radon Risk Map of Ireland



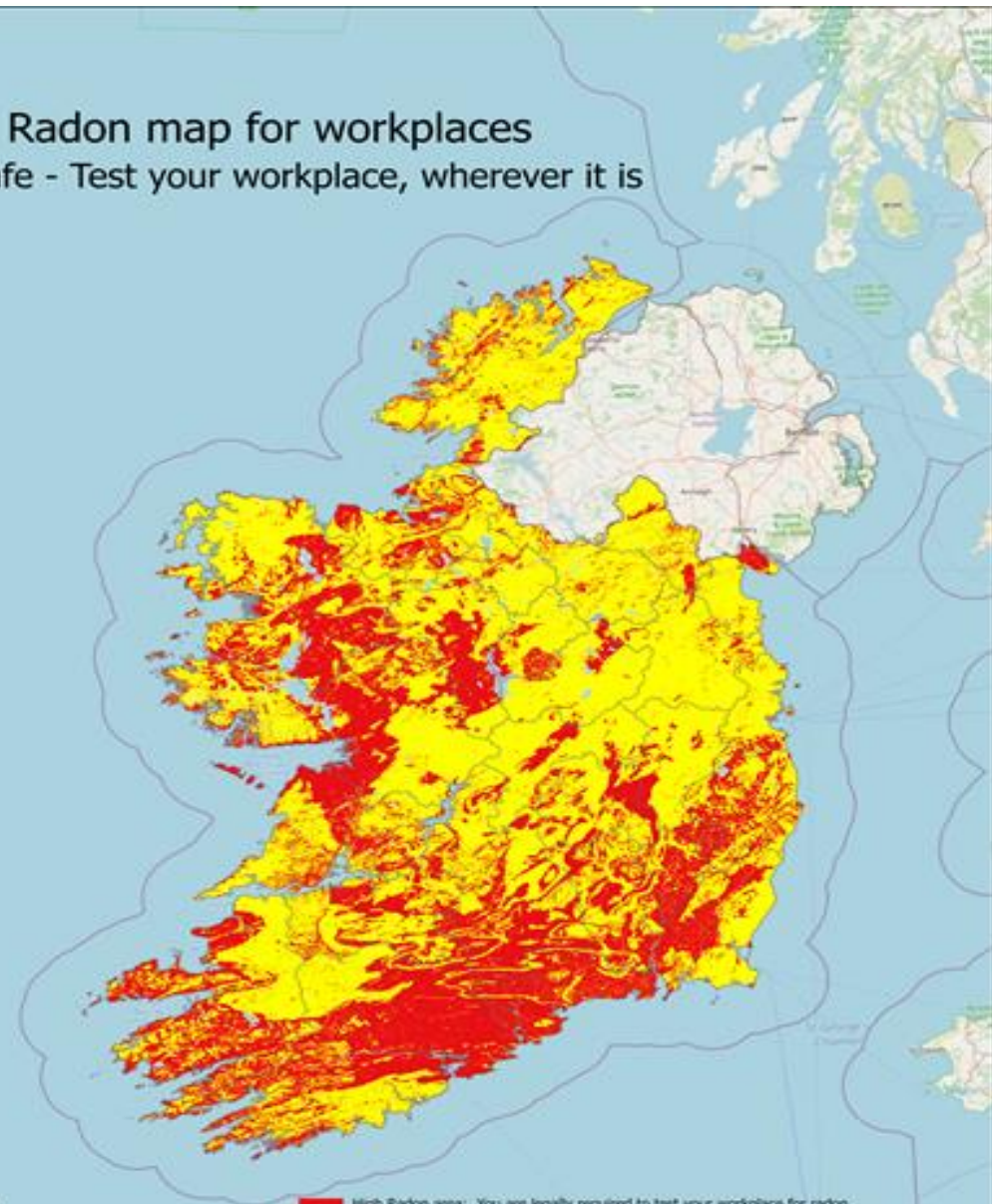
Impact

- All counties contain High Radon Areas
- 18 Counties have more High Radon Area based on updated maps
- Counties with most High Radon Area:

■ Waterford	83%
■ Carlow	70%
■ Cork	62%
■ Kerry	50%
■ Kilkenny	50%
■ Tipperary	47%

■ Effective from Today

Radon map for workplaces
Be safe - Test your workplace, wherever it is



■ High Radon area: You are legally required to test your workplace for radon
■ Other area: The EPA recommends a radon test.
□ County Outline



Impact ?

- 1 in 5 homes in this area are likely to have High Radon
- 1 in 10 homes in this area are likely to have High Radon in High Risk Areas
- 1 in 20 homes in this area likely to have High Radon in Low Risk Areas

Impact of the new Maps

- More people in High Radon Areas
- More businesses in High Radon Areas
- With a growing population the population at high risk will grow.
- EPA will continually promote with all audiences
 - use of map “Much better functionality and resolution”.
 - testing for radon in all areas
 - for remediation where needed

Nationally and more locally (with a focus on change map)

Impact of the new Maps

- Impact of the maps is dependent on all of us in this room and all parties to the National Radon Control Strategy Coordination Group
- So, Please please please...
 - **engage with your own audiences, circulate social media and advocate for testing and remediation.**

MORE INFORMATION ON RADON ON WWW.RADON.IE



epa Environmental Protection Agency
An tSionannaireacht um Chaomhnaí Comhshleáil

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Home > Environment and You > Radon

Radon

Radon is a radioactive gas that causes lung cancer. It is formed in the ground by the radioactive decay of uranium which is present in all rocks and soils. You cannot see it, smell it or taste it. It can only be measured with special detectors. Radon can cause lung cancer when exposed to high levels over a long period of time. Every year in Ireland, radon causes about 300 cases of lung cancer.

Test your home for radon
Every home has different amounts of radon so even if your neighbours have tested their home for radon, you should still test your home.

Do you live in a High Radon Area?
Check your risk from radon on our map. A High Radon Area is an area where it is predicted that 10% or more of homes will exceed the national reference level.