Attitudes to radiation

An Amárach Briefing on behalf of:

October 2020/S20-168
Research Methodology

- A number of questions were placed on the Amárach Research **October** online omnibus. Research was carried out using Amárach’s SmartPoll panel. Due to the high proliferation of the internet among the Irish population, the Amárach omnibus is completed fully online.

- A total sample of **1,149** was achieved. Quotas are set on gender, age, social class and region and data is weighted to achieve a sample aligned with national population.

- Fieldwork took place from **7th - 9th October 2020**.
Sample Profile

(BASE: All respondents – 1149)

**GENDER**

- Male: 49%
- Female: 51%

**SOCIAL CLASS**

- Higher Social Grades: 48%
- Lower Social Grades: 52%

**AGE**

- 18-24: 11%
- 25-34: 18%
- 35-44: 21%
- 45-54: 18%
- 55+: 32%

**REGION**

- Con/Ulster: 18%
- Leinster: 26%
- Munster: 27%
- Dublin: 29%
Nearly 3 in 10 Irish adults are concerned about radiation in Ireland – 55+, Conn/ Ulster residents and C2DEs are more likely to be concerned

(BASE: All respondents – 1149)

Q1. To what extent are you concerned about radiation in Ireland?

Concerned

| Very concerned | 7% |
| Fairly concerned | 21% |
| Not very concerned | 46% |
| Not concerned at all | 21% |
| Don’t know | 6% |

**DEMographics for Concerned**

**Gender**
- Male: 23%
- Female: 33%

**Region**
- Dublin: 26%
- ROL: 25%
- Munster: 28%
- Conn/Ulster: 37%

**Age**
- Under 35: 20%
- 35-44: 26%
- 45-54: 28%
- 55+: 37%

**Social Class**
- ABC1: 19%
- C2DE: 36%
Q2. What aspects of radiation are of concern to you?

Nuclear plants abroad, damage to the environment and radon gas are the main concerns when it comes to radiation (BASE: All that are concerned – 322)

- How nuclear plants abroad affect Ireland: 59%
- Pollution or damage to environment: 57%
- Radon gas: 55%
- Mobile phone masts: 46%
- International transportation of nuclear materials: 43%
- 5G wireless technology: 40%
- Electricity powerlines: 34%
- Mobile phones: 32%
- Use of radiation equipment in hospitals or x-rays: 24%
- Wi-Fi: 20%
- Other: 1%
Q3. In your opinion, rate each of the following on a scale of 1 to 5 where 1 poses no risk at all and 5 poses a very high risk to your health?

Radon gas and nuclear plants abroad are considered high risk to health. Every day technology are considered less risky.

(BASE: All respondents – 1149)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>No risk at all (1)</th>
<th>(2)</th>
<th>(4)</th>
<th>Very high risk (5)</th>
<th>Neither/Nor (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radon gas in the home</td>
<td>16</td>
<td>24</td>
<td>17</td>
<td>17</td>
<td>27%</td>
</tr>
<tr>
<td>Nuclear plants abroad</td>
<td>15</td>
<td>24</td>
<td>17</td>
<td>14</td>
<td>30%</td>
</tr>
<tr>
<td>Mobile phone masts</td>
<td>31</td>
<td>29</td>
<td>12</td>
<td>9</td>
<td>20%</td>
</tr>
<tr>
<td>Electricity powerlines</td>
<td>36</td>
<td>30</td>
<td>10</td>
<td>6</td>
<td>18%</td>
</tr>
<tr>
<td>5G wireless technology</td>
<td>41</td>
<td>25</td>
<td>8</td>
<td>8</td>
<td>17%</td>
</tr>
<tr>
<td>Mobile phones</td>
<td>33</td>
<td>33</td>
<td>8</td>
<td>4</td>
<td>21%</td>
</tr>
<tr>
<td>Chest x-rays</td>
<td>37</td>
<td>34</td>
<td>8</td>
<td>3</td>
<td>19%</td>
</tr>
<tr>
<td>Wi-Fi</td>
<td>54</td>
<td>26</td>
<td>42</td>
<td></td>
<td>14%</td>
</tr>
</tbody>
</table>
8 in 10 Irish adults have heard of radon gas – Males and those in the older age groups are more likely to have heard of radon gas

(BASE: All respondents – 1149)

Q4a Have you heard of radon gas?

DEMOGRAPHICS FOR YES

<table>
<thead>
<tr>
<th>Gender</th>
<th>Yes %</th>
<th>Region</th>
<th>Yes %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>90%</td>
<td>Dublin</td>
<td>76%</td>
</tr>
<tr>
<td>Female</td>
<td>73%</td>
<td>ROL</td>
<td>79%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>Munster</td>
<td>86%</td>
</tr>
<tr>
<td>Under 35</td>
<td>63%</td>
<td>Conn/Ulster</td>
<td>87%</td>
</tr>
<tr>
<td>35-44</td>
<td>81%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td>92%</td>
<td>ABC1</td>
<td>82%</td>
</tr>
<tr>
<td>55+</td>
<td>93%</td>
<td>C2DE</td>
<td>81%</td>
</tr>
</tbody>
</table>
Of those aware of radon gas, 1 in 4 are concerned about the presence of radon gas in their home. As with those concerned about radiation in Ireland (Q1), 55+, Conn/ Ulster residents and C2DEs over index.

(BASE: All that heard of radon gas – 938)

- Very concerned: 6%
- Fairly concerned: 19%
- Not very concerned: 47%
- Not concerned at all: 26%
- Don’t know: 3%

**Concerned** 25%

**Gender**
- Male: 23%
- Female: 27%

**Region**
- Dublin: 22%
- ROL: 24%
- Munster: 23%
- Conn/Ulster: 31%

**Age**
- Under 35: 22%
- 35-44: 22%
- 45-54: 22%
- 55+: 29%

**Social Class**
- ABC1: 22%
- C2DE: 27%

Q4b To what extent are you concerned about the presence of radon gas in your home?
Two thirds of those aware of radon gas are unlikely to have their home tested for it...

(BASE : All that heard of radon gas – 938)

Q5. How likely are you to have your home tested for radon gas?

Unlikely 66%

Very likely 10%
Quite likely 18%
Not very likely 41%
Not at all likely 25%
Don’t know 6%

DEMOGRAPHICS FOR UNLIKELY

Gender
Male 70%
Female 62%

Age
Under 35 66%
35-44 69%
45-54 69%
55+ 64%

Region
Dublin 72%
ROL 70%
Munster 65%
Conn/Ulster 57%

Social Class
ABC1 68%
C2DE 64%

Concerned about radiation (Q1)
Yes 36%
No 81%
Q6. Why are you not likely to have your home tested for radon gas?

...the main reason being ‘believe my home to be unaffected by radon gas’

(BASE: All that heard of radon gas and unlikely to have home tested – 623)

Believe my home to be unaffected by radon gas 19%
Heard of it but don’t know enough about it 14%
Low risk area 14%
New home or radon barrier 14%
Not a priority at the moment 11%
Unaware of how to do it 8%
Don’t own my own home or not responsible for home 7%
Unaware of who to go to 6%
Don’t believe it’s dangerous to my health 3%
Too expensive to test 3%
Too expensive to get fixed 2%
Too disruptive to get fixed 1%
Afraid of the consequences if the test results are high *
Other 2%
Over 55s are the most likely to be concerned about radiation, and the most likely to have their home tested for radon gas

**DEMOGRAPHIC PROFILE FOR THOSE CONCERNED ABOUT RADIATION (Q1)**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Region</th>
<th><strong>Base: 272</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Under 35</td>
<td>Dublin</td>
<td>40%</td>
</tr>
<tr>
<td>Female</td>
<td>35-44</td>
<td>ROL</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>45-54</td>
<td>Munster</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>55+</td>
<td>Conn/Ulster</td>
<td>60%</td>
</tr>
</tbody>
</table>

**DEMOGRAPHIC PROFILE FOR THOSE LIKELY TO HAVE HOME TESTED FOR RADON GAS (Q5)**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Region</th>
<th><strong>Base: 262</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Under 35</td>
<td>Dublin</td>
<td>49%</td>
</tr>
<tr>
<td>Female</td>
<td>35-44</td>
<td>ROL</td>
<td>51%</td>
</tr>
<tr>
<td></td>
<td>45-54</td>
<td>Munster</td>
<td>49%</td>
</tr>
<tr>
<td></td>
<td>55+</td>
<td>Conn/Ulster</td>
<td>51%</td>
</tr>
</tbody>
</table>

Q1. To what extent are you concerned about radiation in Ireland?
Q5. How likely are you to have your home tested for radon gas?
23% agree the risk of radon in Ireland is greater than the risk of a nuclear accident somewhere near the country, however 41% did not provide an opinion. It is widely disagreed that phone masts or new technologies (i.e. 5G) are bad for your health.

(BASE: All respondents – 1149)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree strongly (1)</th>
<th>Agree strongly (5)</th>
<th>Neither/Nor (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The use of x-rays in hospitals is very beneficial</td>
<td>5 5</td>
<td>20 60</td>
<td>10%</td>
</tr>
<tr>
<td>Generating electricity from nuclear power is better for the environment than generating electricity from fossil fuels</td>
<td>16 14</td>
<td>20 20</td>
<td>30%</td>
</tr>
<tr>
<td>The risks from radon in Ireland are greater than the risks from a nuclear accident in a country close to Ireland</td>
<td>14 21</td>
<td>13 10</td>
<td>41%</td>
</tr>
<tr>
<td>The radiation from phone masts causes cancer</td>
<td>29 28</td>
<td>10 8</td>
<td>25%</td>
</tr>
<tr>
<td>New technologies such as 5G are bad for your health</td>
<td>36 24</td>
<td>8 8</td>
<td>24%</td>
</tr>
</tbody>
</table>
Health risks from phone masts and new technologies (i.e. 5G) is a greater concern for the older age groups, C2DEs and those living in Conn/Ulster

<table>
<thead>
<tr>
<th>Concerned about radiation (Q1)</th>
<th>Gender</th>
<th>Age</th>
<th>Social Class</th>
<th>Region</th>
<th>% Agree (score 4 or 5)</th>
<th>Heard of radon gas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL</td>
<td>Male</td>
<td>Female</td>
<td>Under 35</td>
<td>35-44</td>
<td>45-54</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concerned</td>
<td>80%</td>
<td>82%</td>
<td>79%</td>
<td>80%</td>
<td>80%</td>
<td>78%</td>
</tr>
<tr>
<td>Not concerned</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>40%</td>
<td>54%</td>
<td>26%</td>
<td>38%</td>
<td>33%</td>
<td>40%</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Q7 Rate each of the following statements on a scale of 1 to 5 where 1 means you do not agree at all and 5 means you agree strongly? 1 = Disagree strongly, 5 = Agree strongly
In the event of a nuclear accident close to Ireland, the majority would follow government and/or scientific advice (BASE: All respondents – 1149)

- Follow government advice: 74%
- Follow advice from scientific organisations: 63%
- Go home and stay indoors: 42%
- Travel to another part of the country: 9%
- Follow advice on social media: 3%
- Go to a friend’s house: 1%
- Other: 2%
- Don’t know: 9%

88% would follow advice from the government and/or from scientific organisations.
Irish adults are most likely to turn to the Department of Environment followed by EPA if they need information on radiation

(BASE: All respondents – 1149)

- Department of Environment: 64%
- Environmental Protection Agency (EPA): 52%
- Department of Health: 44%
- Health Service Executive (HSE): 30%
- Local Authority or County Council: 15%
- Other Government Department: 8%
- Other: 4%
- Don’t know: 13%

Q.9 If you needed information on radiation where would you go to search for / request this information?
Two thirds indicated an interest in information about radiation from the EPA, after prompting, especially the risks and its impacts on them and the environment.

(BASE: All respondents – 1149)

Q10a The Environmental Protection Agency (EPA) is an independent public body with responsibility for a wide range of licensing, enforcement, monitoring, and assessment activities associated with environmental protection and protection of people from the harmful effects of radiation. What information about radiation if any would you like to receive from EPA?
6 in 10 would like to receive this information from EPA via a website. Nealy half suggested TV and one third each for direct mail and radio (BASE: All respondents – 1149)

<table>
<thead>
<tr>
<th>Method</th>
<th>Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website</td>
<td>59%</td>
</tr>
<tr>
<td>TV</td>
<td>45%</td>
</tr>
<tr>
<td>Direct mail</td>
<td>32%</td>
</tr>
<tr>
<td>Radio</td>
<td>31%</td>
</tr>
<tr>
<td>Social media</td>
<td>23%</td>
</tr>
<tr>
<td>Online news</td>
<td>22%</td>
</tr>
<tr>
<td>Online newsletter</td>
<td>19%</td>
</tr>
<tr>
<td>Newspaper</td>
<td>19%</td>
</tr>
<tr>
<td>Hard-copy newsletter</td>
<td>12%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
</tbody>
</table>

Do not want to receive information from the EPA | 3%
Preference for EPA information via a website is largely driven by U35s and ABC1s. There are some differences between gender when it comes to radio, social media and online news. U35s are more open to social media/online news to receive information

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Age</th>
<th>Social Class</th>
<th>Region</th>
<th>Concerned about radiation (Q1)</th>
<th>Heard of radon gas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL</td>
<td>Male</td>
<td>Female</td>
<td>Under 35</td>
<td>35-44</td>
<td>45-54</td>
</tr>
<tr>
<td>Website</td>
<td>59%</td>
<td>61%</td>
<td>58%</td>
<td>66%</td>
<td>56%</td>
<td>61%</td>
</tr>
<tr>
<td>TV</td>
<td>45%</td>
<td>47%</td>
<td>43%</td>
<td>44%</td>
<td>39%</td>
<td>46%</td>
</tr>
<tr>
<td>Direct mail</td>
<td>32%</td>
<td>30%</td>
<td>34%</td>
<td>25%</td>
<td>33%</td>
<td>32%</td>
</tr>
<tr>
<td>Radio</td>
<td>31%</td>
<td>35%</td>
<td>28%</td>
<td>32%</td>
<td>27%</td>
<td>29%</td>
</tr>
<tr>
<td>Social media</td>
<td>23%</td>
<td>19%</td>
<td>27%</td>
<td>36%</td>
<td>24%</td>
<td>20%</td>
</tr>
<tr>
<td>Online news</td>
<td>22%</td>
<td>19%</td>
<td>25%</td>
<td>33%</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>Online newsletter</td>
<td>19%</td>
<td>20%</td>
<td>17%</td>
<td>16%</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>Newspaper</td>
<td>19%</td>
<td>21%</td>
<td>17%</td>
<td>18%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Hard-copy newsletter</td>
<td>12%</td>
<td>11%</td>
<td>13%</td>
<td>9%</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Do not want to receive information from the EPA</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>4%</td>
<td>2%</td>
<td>4%</td>
</tr>
</tbody>
</table>
Concerns of radiation in Ireland
- Nearly 3 in 10 (28%) Irish adults are concerned about radiation in Ireland
  - Those aged 55+, live in Conn/ Ulster and those who are in a lower social grade are more likely to be concerned
- The main concerns of radiation are: How nuclear plants abroad affect Ireland (59%), Pollution or damage to the environment (57%) and Radon gas (55%)

Awareness and concern of radon in Ireland
- 8 in 10 Irish adults (82%) have heard of radon gas
  - Males and those in the older age groups are more likely to have heard of radon gas
- 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’
- 23% agree that the risks from radon in Ireland are greater than the risks from a nuclear accident in a country close to Ireland. However it’s important to note that 41% were unsure
Perceptions and attitudes to various technology/radiation/nuclear energy
- Radon gas in the home and nuclear plants abroad are considered to pose a high risk to health. Every day technology, such as: 5G, mobile phones, x-rays and Wi-Fi are considered less risky
- Majority of people agree that X-rays in hospital is beneficial and generating electricity from nuclear power is better for the environment than from fossil fuels
- It is widely disagreed that phone mast and new technologies (i.e. 5G) are bad for your health

Sources for information on radiation
- Irish adults are most likely to turn to the Department of Environment (64%) followed by EPA (52%) if they need information on radiation
- Majority would like any information available about radiation (18%), especially the risks and its impacts on them and the environment (20%)

Anticipated actions in the event of a nuclear accident somewhere abroad near Ireland
- In the event of a nuclear accident close to Ireland, majority (74%) would follow government and/or scientific advice.