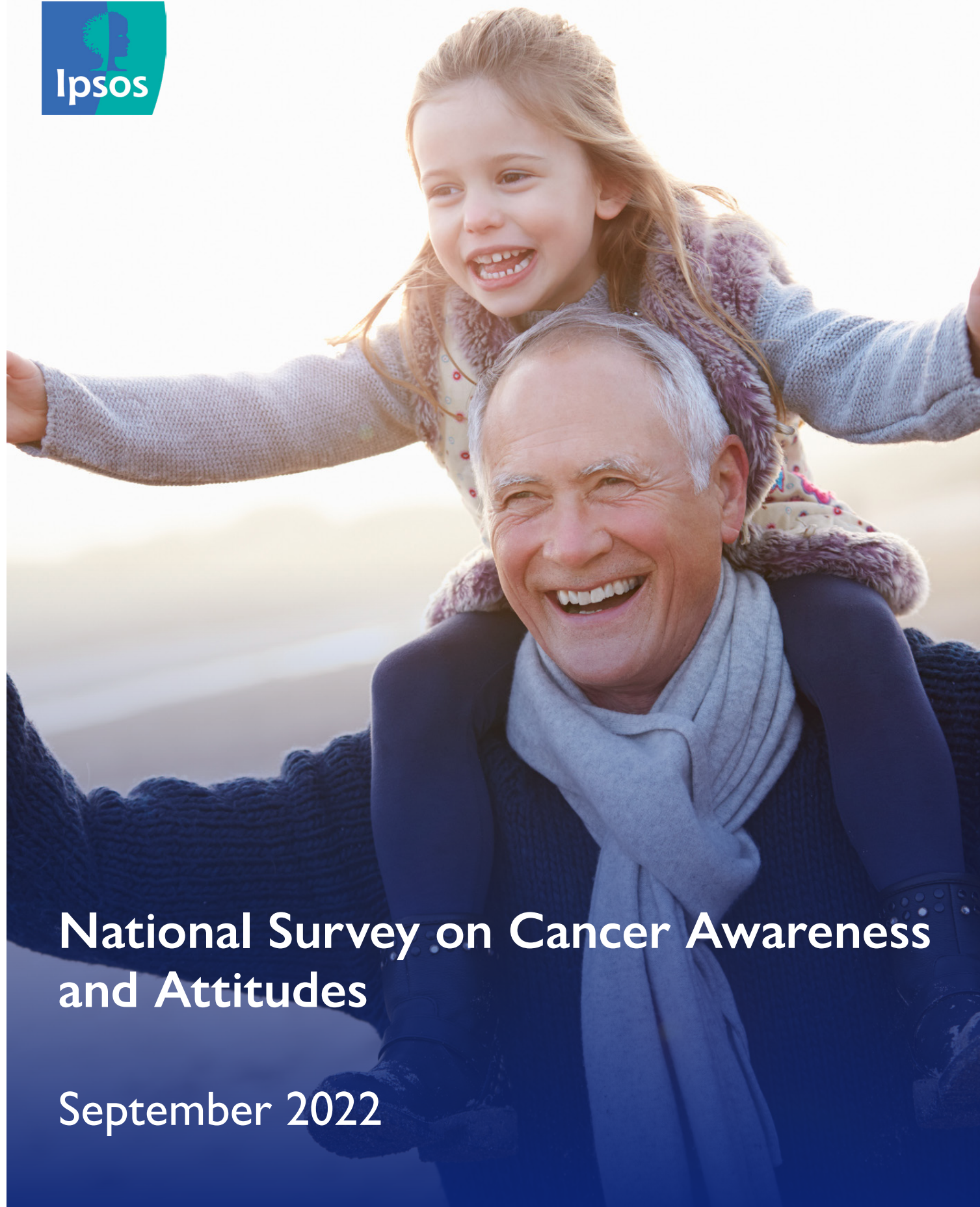




National Survey on Cancer Awareness and Attitudes

September 2022

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INTRODUCTION

This report details the key findings of a nationwide research survey commissioned by the HSE National Cancer Control Programme (NCCP), carried out by Ipsos among those aged 18 and over in the population living in Ireland on the topic of cancer awareness and attitudes.

There are over 24,000 incident invasive cancers (excluding non-melanoma skin cancer) and over 9,000 cancer deaths per year in Ireland¹. 1 in 2 people living in Ireland will be diagnosed with some form of invasive cancer (excluding non-melanoma skin cancer) in their lifetime¹.

It is estimated that 30-50% of all cancers are preventable². A key and effective measure in the prevention of cancer is to reduce exposure to modifiable risk factors³. These include behavioural factors e.g. tobacco smoking and alcohol consumption, metabolic factors e.g. overweight and obesity and environmental factors e.g. exposure to radon.

The NCCP is tasked with implementing recommendations of the Department of Health's [National Cancer Strategy 2017 -2026⁴](#) (NCS). Cancer prevention is the most cost-effective long-term approach to cancer control and is highlighted as the cornerstone of the strategy. The NCS recommends *'The NCCP will develop a cancer prevention function, working in conjunction with the broader Healthy Ireland initiative, and will lead in relation to the development and implementation of policies and programmes focused on cancer prevention'*.

For those who do develop cancer, early diagnosis is key to improving survival rates, reducing treatment severity, and improving quality of life. Initiatives to improve early diagnosis of cancer include improving symptom awareness and confidence to act on potential early signs/symptoms of cancer in the population. The NCS emphasises the importance of improving early diagnosis of cancer in Ireland, recommending: *"The NCCP and the HSE Health & Wellbeing Directorate, in partnership with the voluntary sector, will develop a rolling programme of targeted multi-media based public awareness and education campaigns, aimed at the early detection of specific cancers and with particular focus on at-risk populations."*

National population-based surveys of cancer awareness and attitudes have been undertaken in jurisdictions including the United Kingdom (The Cancer Awareness Measures⁵), Denmark, Norway, Sweden, Canada, Australia (Awareness and Beliefs about Cancer⁶) and France (The French Cancer Barometer⁷). No comparable large scale national measure has been undertaken in Ireland to date. Addressing this knowledge gap will provide the baseline data required to inform development of effective cancer prevention and early detection initiatives, monitor the impact of these initiatives, and support better understanding of policy priorities⁸.

¹ National Cancer Registry Ireland (2021) Cancer in Ireland 1994-2019: Annual report of the National Cancer Registry. NCRI, Cork, Ireland.

² Wild, C. P., Weiderpass, E., & Stewart, W. (2020). *World Cancer Report: Cancer Research for Cancer Prevention*. Lyon: International Agency for Research on Cancer

³ World Health Organisation. (2020). Cancer Prevention. Retrieved from Cancer: https://www.who.int/health-topics/cancer#tab=tab_2

⁴ Department of Health. (2019). National Cancer Strategy 2019-2025. Dublin: Department of Health.

⁵ https://www.cancerresearchuk.org/sites/default/files/cam_questionnaire_items_2008-2020.pdf

⁶ Simon AE, Forbes LJL, Boniface D, et al An international measure of awareness and beliefs about cancer: development and testing of the ABCBMJ Open 2012;2:e001758. doi: 10.1136/bmjopen-2012-001758

⁷ <https://www.e-cancer.fr/Comprendre-prevenir-depister/Reduire-les-risques-de-cancer/Barometre-Cancer>

⁸ European Commission . (2005). Guidelines for the development and criteria for the adoption of Health Survey Instruments. Luxembourg: European Communities

The aims of the research were to:

1. Assess beliefs about cancer
2. Assess knowledge of signs/symptoms of cancer
3. Assess health-seeking behaviours, including barriers and enablers to seeking medical advice
4. Inform development of cancer prevention and early diagnosis initiatives

The research survey was conducted amongst a representative sample of adults aged 18 and over living in Ireland. Ethical approval was provided by Research Ethics Committee at the Royal College of Physicians of Ireland. A total sample size of 2,874 was achieved, with interviews conducted by telephone between January and May 2022 inclusive. Where necessary, data were weighted in line with the most up to date Central Statistics Office (CSO) estimates of the population for age by gender, region and education. Parameters on age, gender and region were taken from Census 2016, while education parameters were taken from Labour Force Survey (LFS) Q1 2022.

The results of this survey will support the development of cancer prevention and early diagnosis initiatives. Results also provide a baseline against which the impact of such interventions can be measured. This study expands on research commissioned by the NCCP and carried out by Ipsos on lung cancer awareness among those aged 50 and older, published in early 2020⁹.

Research such as this ensures that high quality, representative data are available for NCCP and other organisations to inform the development and implementation of interventions aimed at reducing the impact of cancer on the population of Ireland.

Percentages throughout this report may not sum to 100% and “net” figures may not sum to the total of their constituent elements. This is due to individual figures being rounded to whole percentages.

⁹ <https://www.hse.ie/eng/services/list/5/cancer/pubs/reports/national-survey-on-lung-cancer-awareness-report-january-2020.pdf>

SURVEY METHODS AND TECHNICAL OVERVIEW

Questionnaire Design

The aim of the survey was to inform the development of cancer prevention and early diagnosis initiatives. In light of this aim, the questionnaire was designed to gain accurate and relevant information from the desired population, and to maximise survey participation. The questionnaire was designed by the NCCP and research advisory group, in consultation with Ipsos, utilising internationally validated questionnaires. Development of the questionnaire was informed by The Cancer Awareness Measure¹⁰, the Awareness and Beliefs about Cancer measure¹¹ and The French Cancer Barometer¹², and the final questionnaire included elements of each of these. Demographic questions were adapted from the national Healthy Ireland Survey. A copy of the survey can be found in the appendices (Appendix A), along with details of the National Survey on Cancer Awareness and Attitudes Advisory Group who guided the research development (Appendix B).

As cancer can be a sensitive or difficult topic to discuss, questions were worded to minimise stress or worry among respondents. Consideration was also given to ensuring that the resulting data would be comparable to other relevant national and international data sources.

Before finalising the questionnaire, it was tested using Ipsos's internal piloting processes to confirm that the questions were acceptable to respondents and understood correctly.

Sample Design

The specifics of the desired sample in this survey required a tailored approach to sample selection.

It was calculated that a sample size of 2,090 would be required to detect a prevalence of 32%, with a precision of 2% and a Type I error rate of 5%. This was considered the minimum acceptable sample size for the study. A prevalence rate closer to 50% would require a sample of 2,400, with the same parameters. Increasing the sample size to 2,850 resulted in a slight improvement in the precision to 1.8%.

A target of 2,850 interviews were to be conducted among a representative sample of those aged 18 and over in Ireland.

¹⁰ https://www.cancerresearchuk.org/sites/default/files/cam_questionnaire_items_2008-2020.pdf

¹¹ Simon AE, Forbes LJL, Boniface D, et al. An international measure of awareness and beliefs about cancer: development and testing of the ABCBMJ Open 2012;2:e001758. doi: 10.1136/bmjopen-2012-001758

¹² <https://www.e-cancer.fr/Comprendre-prevenir-depister/Reduire-les-risques-de-cancer/Barometre-Cancer>

The methodology aimed to ensure the broadest possible representation of the target population, including marginalised cohorts. A robust sampling and data collection methodology was required based on principles of random selection and implementation of response rate maximisation techniques. Additionally, the survey needed to be accessible to all groups in the population.

In light of the ongoing COVID-19 pandemic, a face-to-face interviewing approach was deemed inappropriate. A telephone survey was chosen to avoid potential disruption to the survey due to any change in COVID-19 public health guidance and to account for public acceptability of a telephone call rather than an in-person interview during a pandemic. Furthermore, adopting a telephone approach meant that the methodological robustness necessary for a survey of this nature would be maintained.

Telephone surveying involved a two-stage random digit dialling approach. With near universal ownership of mobile phones (98% of adults aged 18+ in Ireland personally have and use a mobile phone handset¹³) it was decided to use a sample consisting only of mobile phone numbers. This eliminated any biases that arise through mixed mobile and landline samples where individuals with access to both a mobile and a landline have an increased probability of selection. As mobile handsets are personally owned by an individual, it removes the potential for any selection bias that can arise when selecting an individual from a shared landline phone in a household.

A national sample of potential residential telephone numbers (mobile phone only) was generated using Random Digit Dialling (RDD). The RDD sampling methodology involves generating a random selection of national telephone numbers using known number stems issued by ComReg.

Randomly generated mobile numbers were contacted by survey interviewers through Ipsos's Computer-Assisted Telephone Interviewing (CATI) unit in Dublin. In order to maximise participation rates, if a number was not answered at the first attempt, multiple attempts were made (up to a maximum of 3) at different times of the day and on different days of the week.

Upon answering the phone, the person was provided with a brief introduction to the survey and were then screened to ensure that they were aged 18 or older and were eligible for the survey. They were then provided with key points from the survey information sheet and asked if they would be willing to take part in the survey. The interviewer then addressed any queries that the individual had, and all individuals were offered a copy of the survey information sheet. This was accessible to all through the Ipsos website, and the respondent could be provided with a copy by email or post upon request.

The individual was then informed that they would receive a follow-up call in the coming days to conduct the interview. Any specific comments made by the individual were noted in the sample file (e.g. preference to be interviewed on a particular day, not to call them during working hours etc.).

¹³ Source: Commission for Communications Regulation, Mobile Consumer Experience Survey of Consumers Summer 2019

On contacting a respondent, the interviewer first obtained informed consent from the individual. Once this was achieved, the survey interview proceeded or was rescheduled to a later date or time if the respondent wished.

Interviewer Briefing and Training

While Ipsos's interviewers have extensive experience in conducting similar projects, ongoing training is required to maintain high quality standards. Every interviewer on this survey was briefed fully by relevant members of the Ipsos research team on the questionnaire and techniques to maximise response rates while also gathering relevant, high quality, usable data. Given the sensitive nature of cancer as a topic, a sensitivity training session was provided for interviewers, arranged by the NCCP and carried out by the Irish Hospice Foundation.

Many respondents may have had experience with cancer either personally or through friends and family. Interviewers were trained in how to approach respondents with the appropriate tone, how best to manage instances where respondents had an emotional reaction to questioning and where to direct respondents if they had any concerns. Respondents were reassured that they had been chosen at random and care was taken to ensure that interviewers were particularly attentive to the needs of respondents and actively listened to their answers. Care was also given to ensuring that interviewers themselves were able to manage any potential stress they may experience in the course of interviewing.

Survey Fieldwork

Survey fieldwork was completed between January and May 2022 inclusive. In total 2,874 telephone interviews were completed nationwide.

A number of quality control checks were utilised to ensure the highest standards of data collection were maintained. These included recording key parts of the survey interview (with respondents' consent). These recordings were reviewed by field management staff to ensure that questions were asked as intended and responses recorded accurately.

Data Cleaning and Validation

As the survey was conducted through CATI (Computer Assisted Telephone Interviewing) the survey routing and many of the survey logic checks were automated and completed during fieldwork. This minimised the extent of data cleaning that was required post-fieldwork. However, extensive data checking was conducted following data collection and appropriate editing and data coding were conducted to ensure the accuracy of the final dataset.

Data Weighting

Whilst the sampling process is designed to deliver a representative sample of individuals aged 18 and over throughout the country, differential response rates mean that the survey sample is not a fully accurate representation of the population. As such, the aim of survey weighting is to align the profile of respondents with the population profile. Survey non-response can cause bias if the individuals who do not participate are systematically different to the individuals who take part.

Non-response adjustments were made using known population statistics published by the CSO (Census 2016 and Labour Force Survey Q1 2022). The variables used in this respect were: age by gender, region and education.

Margins of Error

Illustrative margins of error for the survey sample size of 2,874 are shown in the table below. The margin of error differs depending on the sample size and prevalence.

Sample Size	Prevalence		
	10% or 90%	30% or 70%	50%
2,874	0.8%	1.4%	1.8%
1,500	0.5%	1.5%	2.5%
1,000	0.6%	1.9%	3.1%
500	0.9%	2.6%	4.3%
200	1.4%	4.2%	7.0%

Analysis Approach

The approach taken to analysis involved analysing each question in the survey by a range of socio-demographic variables including gender, age, region, educational attainment, working status, ethnicity and nationality.

Observational differences (or lack thereof) are noted throughout this report. However, where differences were noted as being significant these were identified by use of the appropriate statistical test. Significance was set at $p < .05$.

SUMMARY OF KEY FINDINGS

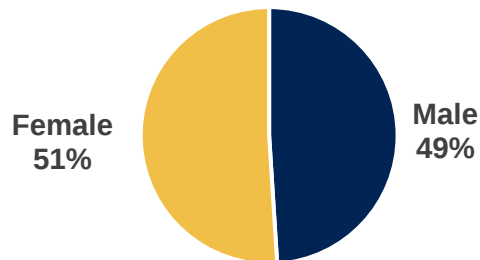
- Overall, 86% know at least one person who has been diagnosed with cancer, with 42% overall reporting this was someone in their immediate family and 41% saying it was a member of their wider family. Around 1 in 16 (6%) say they themselves have been diagnosed with cancer, with 15% of this group (0.9% of the total population surveyed) currently undergoing cancer treatment at the time of the survey.
- Public perceptions of a cancer diagnosis are optimistic overall; large majorities believe that people with cancer can continue with normal activities/responsibilities (87%), and that cancer is often curable (86%).
- When asked about the extent to which they agree or disagree with various statements about the risks of cancer, the vast majority of respondents agree that there are actions they can take to reduce their cancer risk. Overall, 9 in 10 agree with the statement *“There are things I can do to reduce my risk of cancer”*. Agreement levels are strongest among those aged under 65.
- There is strong consensus on the potential for certain risk behaviours to cause cancer, especially those related to tobacco smoking and sun exposure. There are lower levels of recognition of cancer risk associated with alcohol consumption, dietary factors, physical activity, body weight, breast feeding, and factors related to ‘health conditions, medicines and treatment’.
- Strong majorities recognise the link between tobacco smoking and cancer risk. This is observed across all demographic groups and regardless of smoking status. The only exception is in regard to the statement *“Smoking can only cause cancer if you are a heavy smoker over a long period of time”*, which is incorrect, but with which a significant minority (27%) agree.
- Perceived risk of second-hand smoke is high overall. However, it is notable that one in ten smokers do not agree that second-hand smoke increases cancer risk.
- Beliefs regarding the link between alcohol and cancer vary. 50% agree with the correct statement that *“Drinking alcohol, even moderately, increases the risk of developing cancer”*, while 37% disagree. 45% agree with the incorrect statement that *“Drinking alcohol can only cause cancer if you drink a large amount over a long period of time”*, while 46% disagree.
- Reported use of sun protection measures (Using sunscreen of at least factor 30, wearing long sleeves, a hat, or sunglasses, and limiting time spent in the sun) during the summer in Ireland is high: 95% report that they use at least one of the three measures listed, with 75% reporting that they use sunscreen of at least factor 30. This figure is even higher for parents/guardians of children aged under 12, 99% of whom report they use sun protection for their child.
- There are significant differences in spontaneous versus prompted awareness of cancer signs and symptoms. Spontaneous recognition of signs or symptoms of cancer is low, with all but one symptom (unexplained lump or bump) spontaneously cited by less than 50% of respondents. Sociodemographic variation in spontaneous symptom recognition was observed, with lower prevalence of recognition among men, people aged 65 years and older and people with lower levels of education. Increasing knowledge of cancer signs and

symptoms is key to improving early diagnosis of cancer, particularly among people aged 50 years and older, as advancing age is the leading risk factor for cancer.

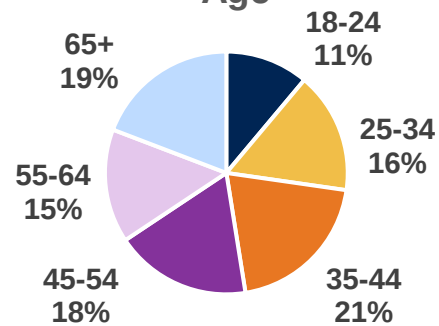
- A strong majority of respondents (72%) report that they would speak to their doctor first if they noticed a physical sign of cancer. 14% of respondents would discuss it with someone close to them first, 8% would conduct their own research and 5% would wait to see if the symptoms go away on their own.
- Barriers to acting on a potential sign or symptom of cancer differ by age and medical literacy, with younger age groups and those with lower levels of medical literacy less likely to discuss with a doctor first.
- A small proportion cite potential barriers to attending a GP in response to possible cancer signs or symptoms. The most commonly cited barriers relate to an inability to get an appointment with a particular doctor (16%) or at a particular time (14%), as well as the financial cost of attending a GP (13%). Those aged under 35 are more likely to report barriers to seeing a GP in relation to cancer symptoms compared to older cohorts.

PROFILE OF SURVEY RESPONDENTS

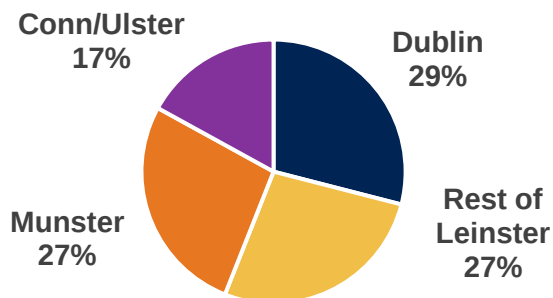
Gender



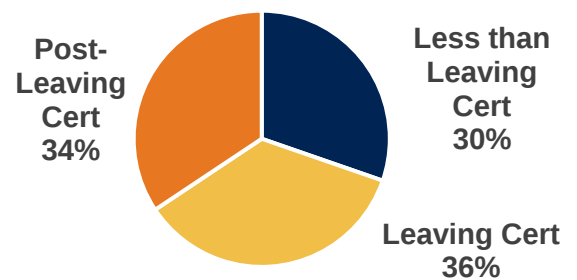
Age



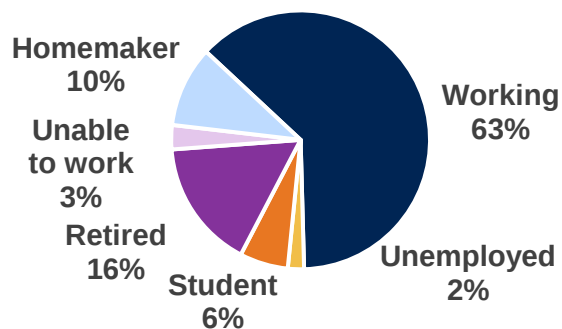
Region



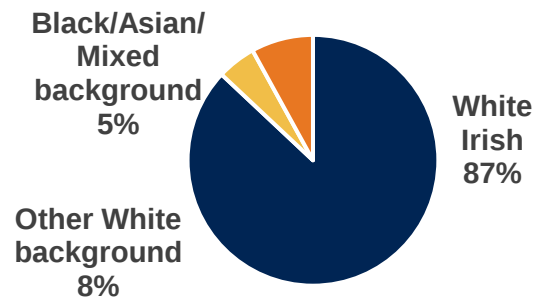
Education



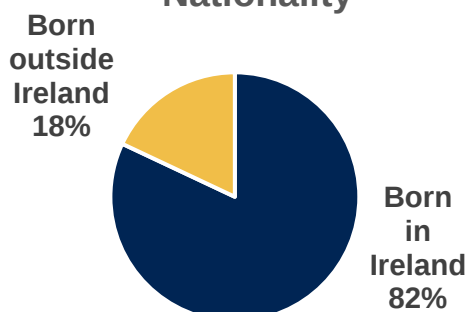
Working Status



Ethnicity



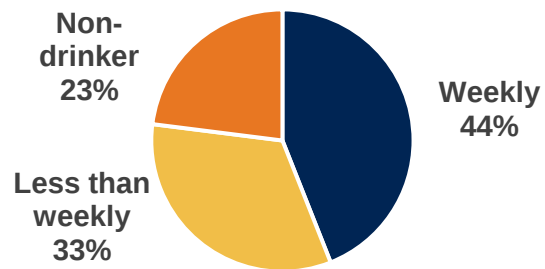
Nationality



Smoking Status



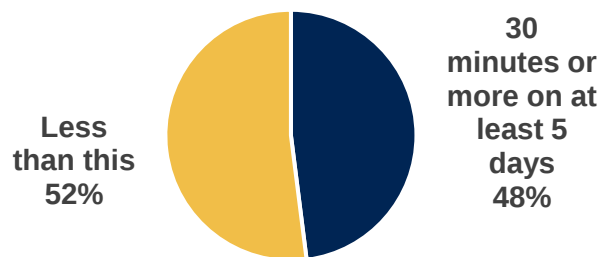
Alcohol Consumption



Fruit & Vegetable Consumption



Weekly Activity Levels

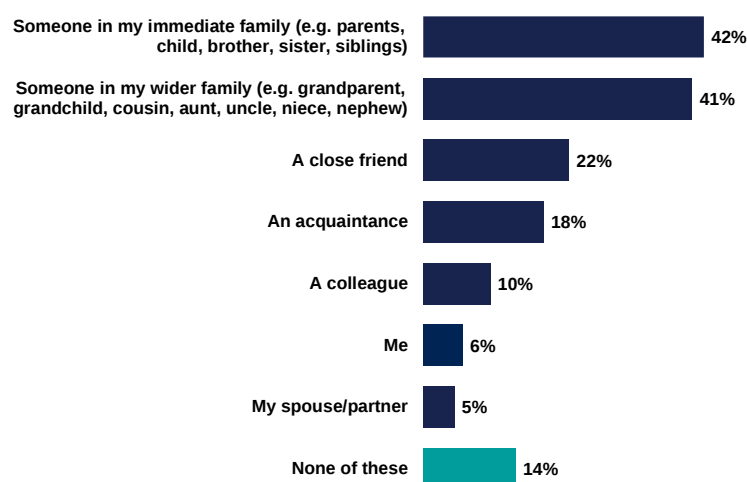


GENERAL ATTITUDES TO CANCER

In order to design interventions aimed at reducing the prevalence of cancer risk behaviours among the population and improving early detection of cancer, it is vital to begin with a strong understanding of baseline public attitudes to cancer. The survey therefore commenced with a number of questions designed to identify respondents' experiences of and general attitudes towards cancer.

Respondents were first asked whether they themselves or anyone among their family or friends had been diagnosed with cancer (Figure 1). Overall, 86% know at least one person who has been diagnosed with cancer, with 42% of respondents reporting this was someone in their immediate family and 41% saying it was a member of their wider family. Around 1 in 16 (6%) say they themselves have been diagnosed with cancer, with 15% of this group (0.9% of respondents overall) currently undergoing cancer treatment at the time of the survey.¹⁴ It is clear that cancer has affected the lives of the majority of people in Ireland in some capacity.

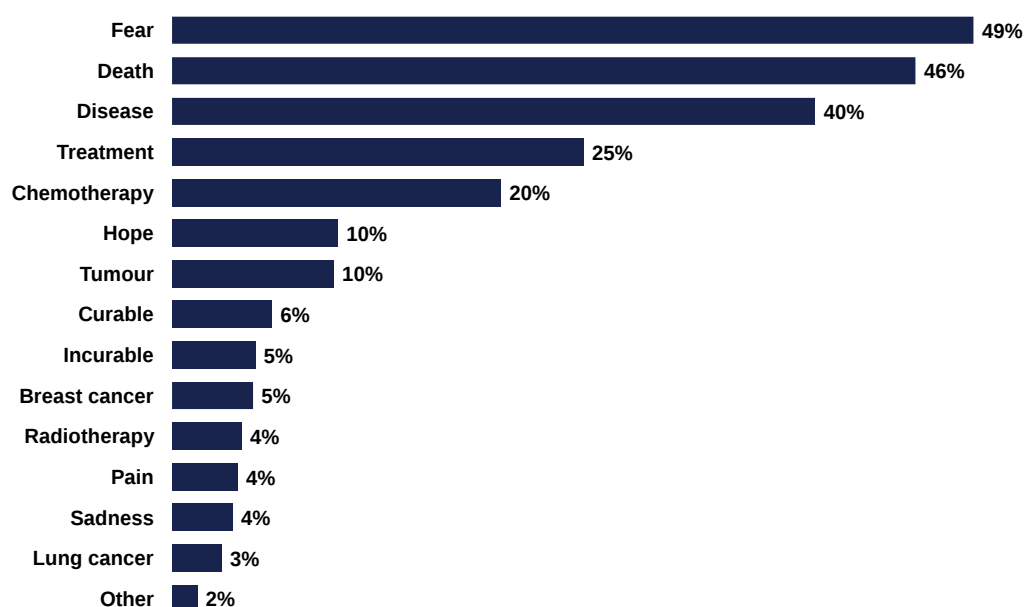
Figure 1 – Personal experience with cancer



¹⁴ This means that 1% of the total sample were undergoing cancer treatment at the time of survey.

Respondents were then asked the first three words that came to mind were when they heard the word ‘cancer’ (Figure 2). The responses cited are generally negative, with the word ‘Fear’ cited by nearly half of all respondents (49%), followed by ‘Death’ (46%) and ‘Disease’ (40%).

Figure 2 – Word association with “cancer”



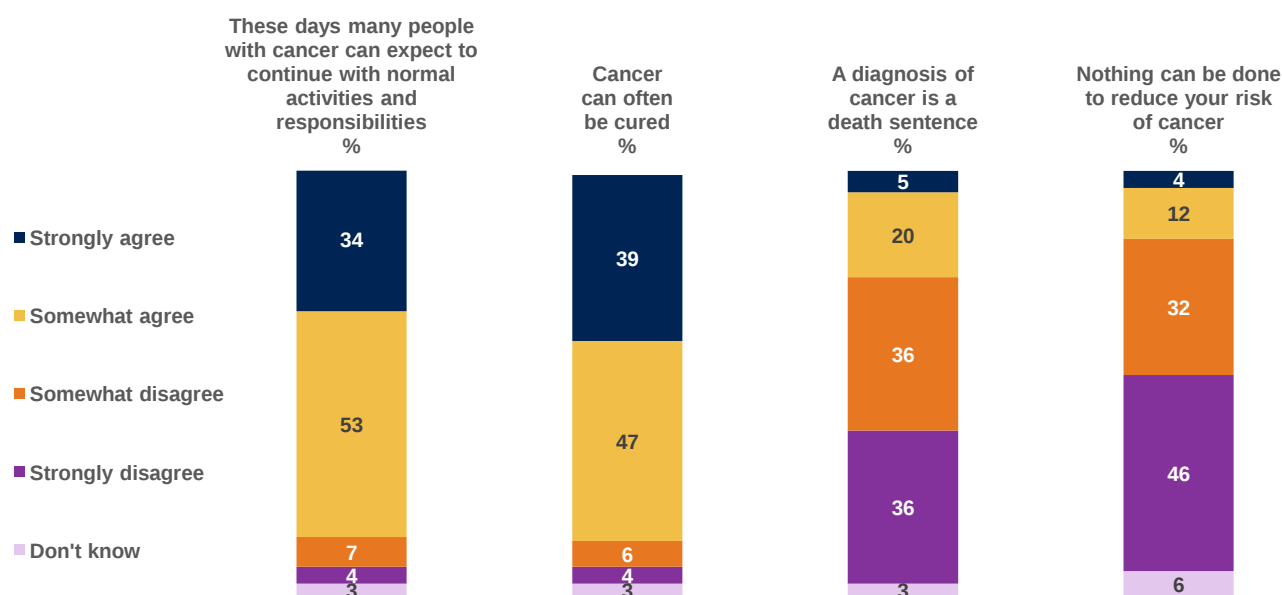
Few meaningful demographic trends are observable here, although women (54%) are more likely than men (45%) to associate with the word ‘Fear’ with cancer, while those aged under 35 (49%) are more likely to associate cancer with ‘Disease’ than those aged 55 and older (29%).

While the word ‘cancer’ tends to provoke a negative initial response, public perception of cancer prognosis, and the potential for risk reduction, is optimistic overall. Respondents tend to view cancer as a disease that is curable and survivable and agree there are things they can do to reduce their risk of developing cancer.

As Figure 3 below illustrates, 87% of respondents agree with the statement “*These days many people with cancer can expect to continue with normal activities and responsibilities*”, while the same proportion (86%) agree that “*Cancer can often be cured*”. Similarly, a large majority (72%) disagree that “*A diagnosis of cancer is a death sentence*”, although it should be noted that a significant minority (1 in 4) agree with this statement.

Sixteen percent of respondents believe that *“Nothing can be done to reduce your risk of cancer”*; however the large majority that disagree with this statement is a positive sign in terms of the potential to reduce the prevalence of modifiable cancer risk health behaviours, a topic discussed in more detail later in this report.

Figure 3 – Attitudes to cancer



The most apparent demographic difference observed here is in terms of age (as shown in figure 4), with older people, and particularly those aged 65 and older, tending to hold the most negative perceptions of cancer. Understanding how older respondents perceive cancer diagnoses is of particular importance, with more than half of cancer diagnoses and three-quarters of cancer-related deaths occurring among people aged over 65.¹⁵

People aged 65 and older are around twice as likely (20%) as those aged under 25 (11%) to agree with the incorrect statement that *“Nothing can be done to reduce your risk of cancer”*.

Perceptions of cancer prognosis in people aged over 65 are somewhat contradictory. Nearly a third (32%) of respondents aged 65 and older agree that *“A diagnosis of cancer is a death sentence”*. However, older respondents are as likely as younger ones to agree that *“Cancer can often be cured”* (87% of respondents aged 65+ agree with this statement), while they are also the most likely group to support the idea that those diagnosed with cancer *“can expect to continue with normal activities and responsibilities”* (92%).

¹⁵ Source: Ageing and Public Health – an overview of key statistics in Ireland and Northern Ireland (2020)

Figure 4 – Attitudes to cancer by age (% agree)

	18-24	25-34	35-44	45-54	55-64	65+
These days many people with cancer can expect to continue with normal activities and responsibilities	85%	79%	87%	88%	88%	92%
Cancer can often be cured	77%	86%	88%	88%	90%	87%
A diagnosis of cancer is a death sentence	16%	24%	21%	26%	24%	32%
Nothing can be done to reduce your risk of cancer	16%	24%	21%	26%	24%	32%

Some other demographic trends of note here include those born in Ireland (88%) being more likely to agree that “*Cancer can often be cured*” than those not born in Ireland (80%), while the statement that “*Nothing can be done to reduce your risk of getting cancer*” gains significantly more traction among those who finished school before completing the Leaving Certificate (26% agree; Leaving Cert or higher: 11%;) and with lower levels of medical literacy¹⁶ (23% agree; Higher literacy: 14%;).¹⁷

¹⁶ Note: Low medical literacy is defined as responding ‘difficult’ or ‘very difficult’ at Q.30 (Finally, how easy or difficult would you say it is to understand the instruction leaflets that come with medicine?). High medical literacy is defined as responding ‘easy’ or ‘very easy’. It is important to note that this a simplistic measurement and results should be treated with caution.

¹⁷ Note: Lower levels of education and lower medical literacy are strongly correlated with age, such that older people are more likely to have school before completing the Leaving Certificate and have lower medical literacy. As such, analyses involving these variables should be treated with caution.

AWARENESS OF CANCER RISK FACTORS

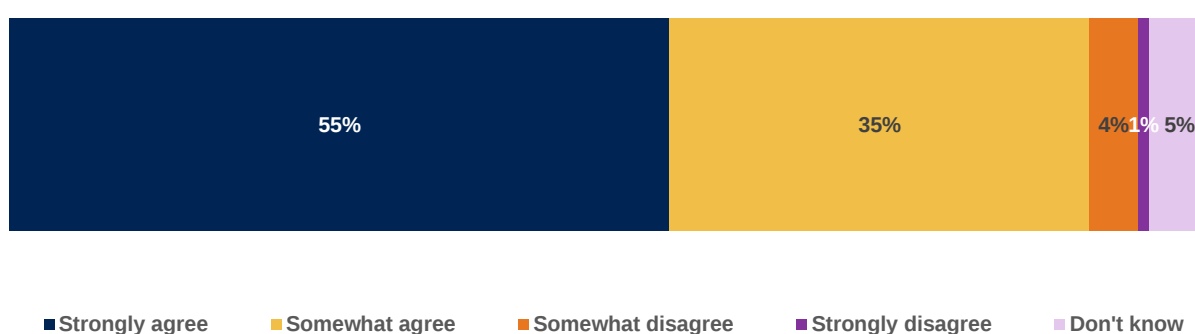
One of the key goals of this research is to develop a better understanding of public knowledge of cancer risk factors. Ascertaining which types of health behaviours respondents believe pose the greatest risk of causing cancer, as well as any variance across demographic groups, will enable the NCCP and other organisations to better plan cancer risk reduction initiatives and enable targeting of at-risk groups.

Firstly, it is important to understand to what extent people believe they have the ability to reduce their risk of cancer at all. This section therefore begins with an analysis of the extent to which respondents agreed or disagreed with the statement: “*There are things I can do to reduce my risk of developing cancer*”.

It is a promising sign that nine in ten (90%) of respondents agree with this statement, including more than half (55%) strongly agreeing. Of some concern, 5% disagree that they can take action to reduce their cancer risk, while the same proportion say they ‘Don’t know’.

Figure 5 – Attitude to reducing risk of developing cancer

Q.3 To what extent do you agree or disagree with the statement:
“There are things I can do to reduce my risk of developing cancer?”



The high level of agreement here means that there is little variation across demographic groups in terms of the proportion who agree that they can take action to reduce their cancer risk. However, some differences are observable in terms of the proportion who ‘strongly agree’.

As shown in Figure 6, those in the oldest age bracket (65+) are less likely to 'strongly agree' with the above statement. Just under half (49%) of people aged 65 and older provide this response, compared to 56% of those aged under 65. No significant difference exists with respect to gender or education.

Figure 6 - Attitude to reducing risk of developing cancer (by various demographics)

Q.3 To what extent do you agree or disagree with the statement: "There are things I can do to reduce my risk of developing cancer?" (% 'Strongly Agree' by age, gender and education level)

	18-64	65+	Men	Women	Less than Leaving Cert.	Leaving Cert.	Post-Leaving Cert.
There are things I can do to reduce my risk of developing cancer (% strongly agree)	56%	49%	55%	55%	52%	55%	58%

Other characteristics where variance is observed include activity level and medical literacy, with those who are active 5 or more days a week (59%) and those with high medical literacy (57%) more likely to strongly agree that they can take action to reduce their cancer risk.

The next question aimed to measure awareness of cancer risk factors. Respondents were first asked to spontaneously name as many things they could think of that could increase a person's chance of developing cancer. They were then read a list of 32 behaviours/exposures, and asked whether they thought each behaviour/exposure could increase a person's risk of getting cancer.¹⁸ These behaviours were divided into five categories: smoking; sun and other environmental factors; diet, drinking and exercise; health conditions, medicines and treatments; other factors. Most of the factors cited do increase cancer risk, but some do not (e.g. mobile phone use, aerosol use). These were included to guard against people responding yes to all, and to inform potential myth busting initiatives.

¹⁸ While the majority of risk factors included have been established to be linked with cancer, some behaviours were also included which do not increase cancer risk.

Figure 7 – Awareness of cancer risk factors

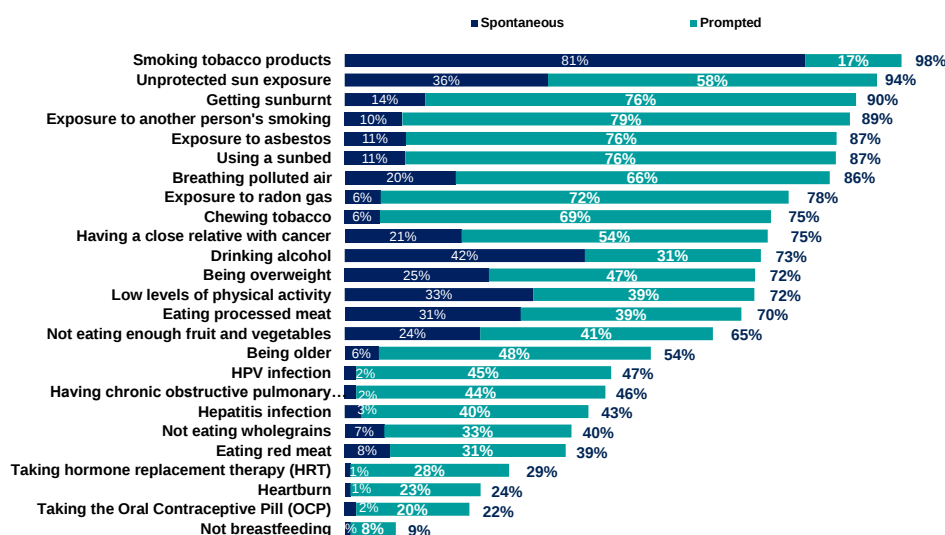


Figure 7 illustrates the responses for those factors which have been proven to increase a person's risk of developing cancer. A number of risk factors achieve large majorities of 80% or more, indicating very high recognition of these behaviours as increasing the risk of developing cancer.

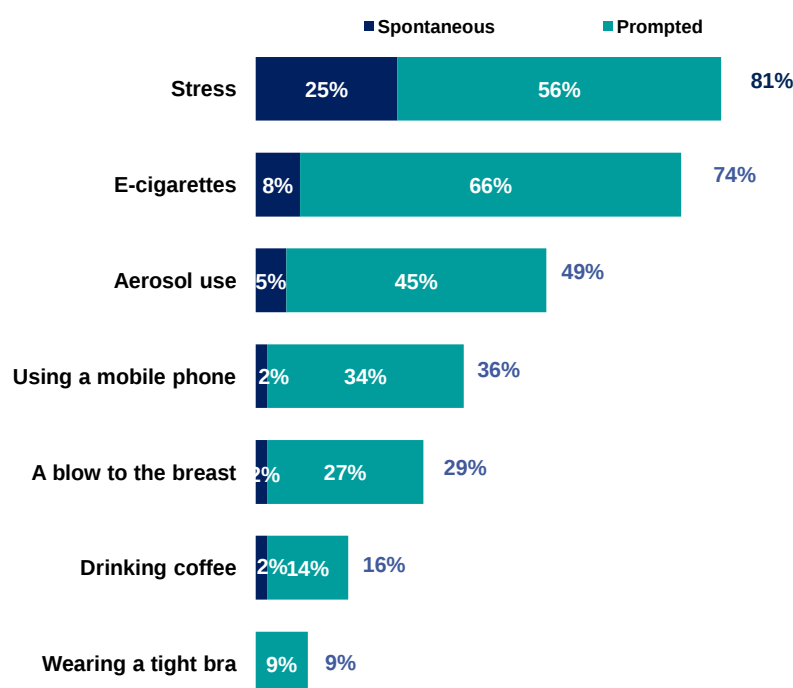
Factors related to smoking tobacco are the most commonly mentioned in terms of their potential to elevate cancer risk. Virtually all respondents (98%) agree that smoking tobacco products increases your risk of developing cancer, by far the most well-recognised risk factor, with 81% mentioning it spontaneously. 9 in 10 respondents (89%) agree that exposure to another person's smoking ('second-hand smoke') can cause cancer, although only 1 in 10 spontaneously mentioned this. No differences exist between smokers and non-smokers in recognition of the risks of developing cancer from smoking.

Factors related to exposure to ultraviolet radiation also rank highly. Unprotected sun exposure is mentioned by 94% of respondents, getting sunburnt by 90% and using a sunbed by 87%. There is little difference across demographic groups here, although women (92%) are slightly more likely than men (88%) to believe that getting sunburnt increases cancer risk.

Improving awareness of the association between alcohol consumption and increased cancer risk has become a policy priority in recent years. Encouragingly, findings of this survey indicate that the majority of the population do recognise the link between alcohol consumption and cancer. Nearly three-quarters (74%) name drinking alcohol as a cancer risk factor. It is interesting to note that, with the exception of smoking, this the only risk factor for which more of those mentioning it did so spontaneously (42%) than when prompted (31%). Those most likely to recognise alcohol as a cancer risk factor, once spontaneous and prompted responses are combined, include women (77%; men: 70%) and those with high medical literacy (75%; low medical literacy: 67%).

Of the behaviours/exposures measured, some had no proven association with cancer risk (stress, aerosol use, using a mobile phone, a blow to the breast and wearing a tight bra). These are shown in Figure 8.

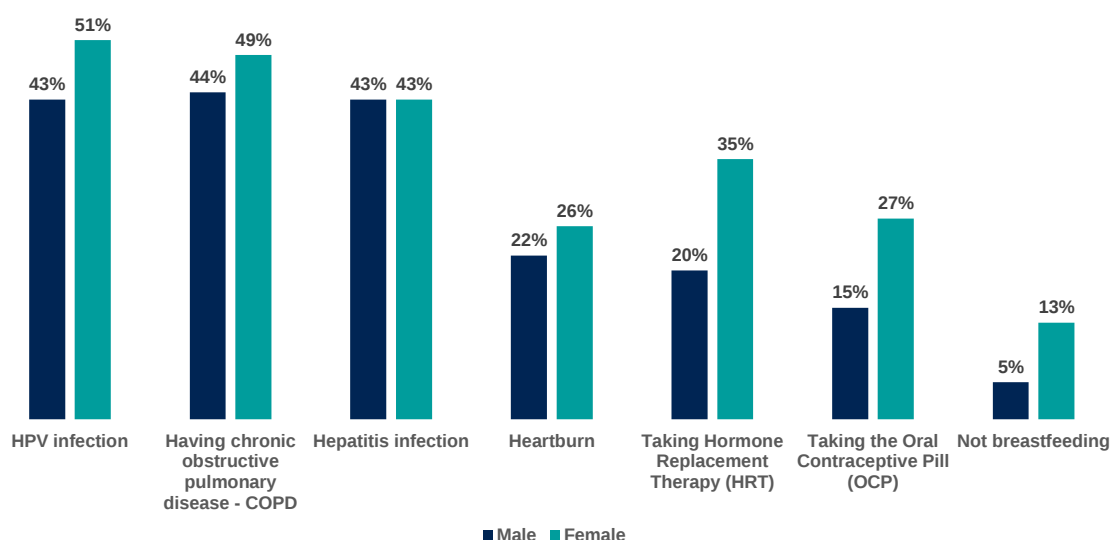
Figure 8 – Awareness of cancer risks (those with no proven link to increased cancer risk)



The proportion of respondents identifying these behaviours/exposures as associated with increased cancer risk is noteworthy, as it highlights some of the misperceptions around cancer risk.

Of particular interest, approximately half of respondents link aerosol use with cancer risk, a third of respondents falsely perceive an association between mobile phone use (36%) and a blow to the breast (29%) and increased cancer risk. Notably, some of the factors related to women's health – a blow to the breast and wearing a tight bra – receive particularly high association levels among women with 37% and 13% respectively of women incorrectly identifying these as posing a cancer risk.

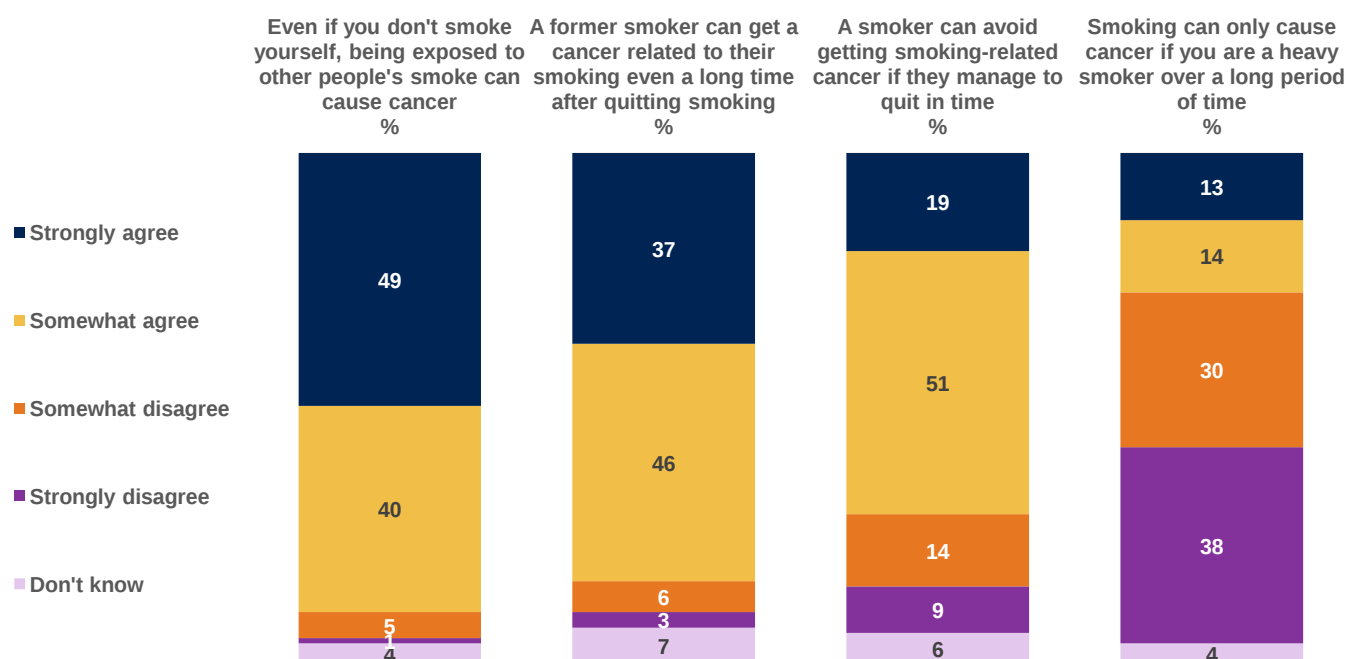
Figure 9 – Awareness of cancer risks (those associated with health conditions, medicines, treatments and women's health).



Tobacco Smoking

The link between tobacco and cancer has been highly publicised in recent decades, and the strong level of spontaneous recognition of "Smoking tobacco products" as a cause of cancer attests to the success of these campaigns. In order to further explore public sentiment in this area, respondents were presented with a number of statements regarding the link between smoking and cancer and asked to what extent they agreed or disagreed. The results are presented in figure 10 below.

Figure 10 – Link between smoking and cancer



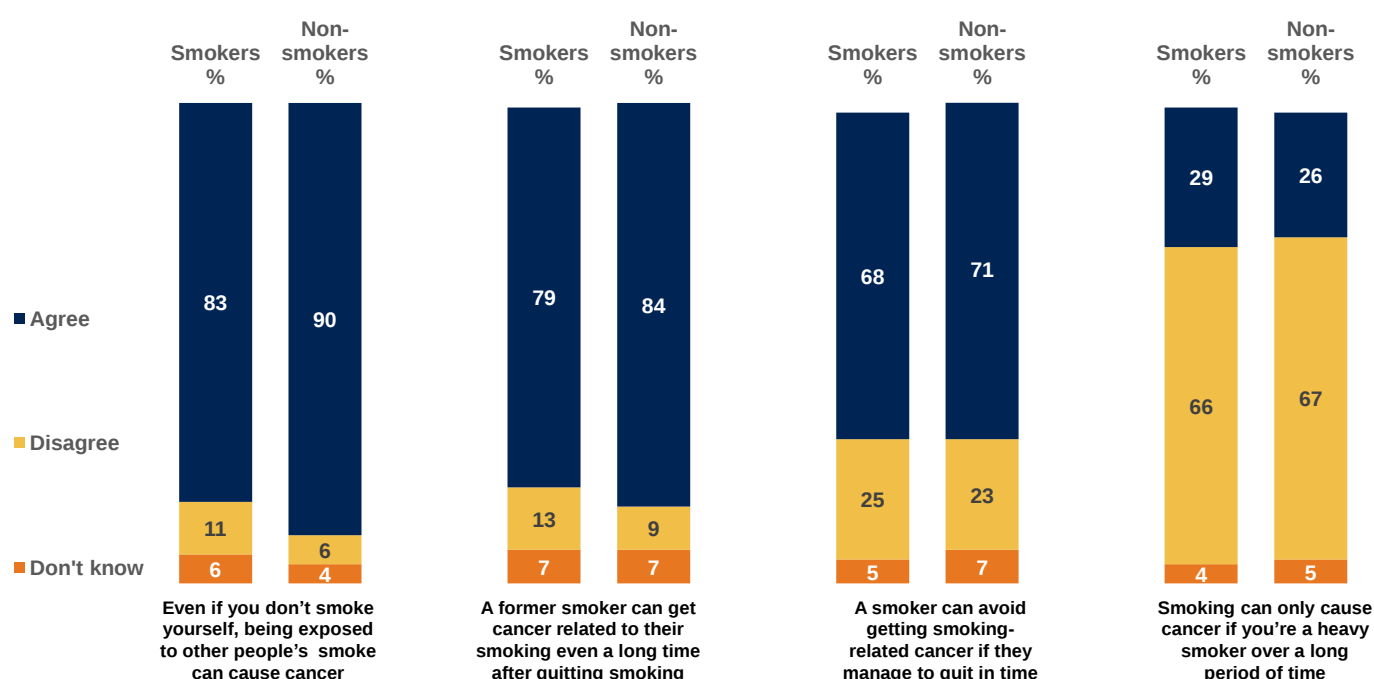
The strong majorities reported, particularly across the first three statements, demonstrate strong public understanding of the multifaceted link between smoking and cancer.

When analysing awareness of the link between smoking tobacco and cancer, perhaps the most vital element is to understand what perceptions smokers themselves have here.

Across all four statements mentioned above, smokers are slightly less likely to perceive the link between smoking and cancer (figure 11), although this difference is only statistically significant for two of the statements.

Smokers are somewhat less likely to believe that second-hand smoking causes cancer, with 10% of smokers disagreeing with the statement “Even if you don’t smoke yourself, being exposed to other people’s smoke can cause cancer” (Non-smokers: 6%). Similarly, 13% of smokers disagree that “A former smoker can get cancer related to their smoking even a long time after quitting”, with the corresponding figure for non-smokers being 9%.

Figure 11 – Link between smoking and cancer (by smoking status)



Some statistically significant differences also exist across demographic categories in terms of levels of agreement with these statements. Those with higher education levels, from white ethnic backgrounds, and of Irish nationality were slightly more likely to agree that there is a link between smoking and cancer, these variations are small.

However, smoking prevalence is also lower across these groups meaning that the association may be linked to their smoking behaviours rather than other factors.

Analysis of smokers across different demographic groups identifies a key difference in respect of attitudes to second-hand smoking. Smokers aged 55 and older are less likely than younger smokers to agree with the statement “Even if you don’t smoke yourself, being exposed to other people’s smoke can cause cancer” (18-54: 86% agree; aged 55+: 75% agree).

However, there is no statistically significant variance between smokers of different gender, age or education across all four statements in terms of their stated perceptions of the link between tobacco and cancer.

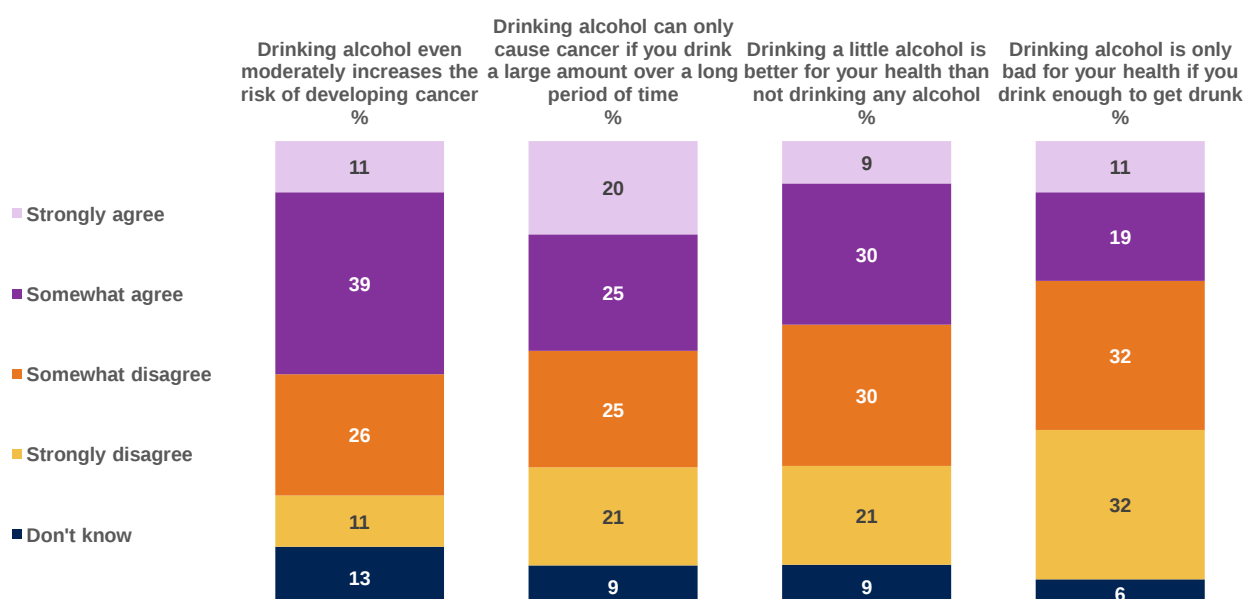
Alcohol

There has been strong scientific consensus regarding the link between consuming alcohol and cancer for a number of years, with a direct causal link established between alcohol intake and at least seven types of cancer.¹⁹ At the same time, public awareness of this link has lagged, and is well behind the very high levels of recognition observed for smoking tobacco. For example, results from the Department of Health (2016) Healthy Ireland Survey finds that while 90% of participants correctly identify liver disease as being a potential risk of drinking heavily, awareness of other risks varies quite extensively, with 40% identifying bowel cancer and 21% identifying breast cancer.

Improving public knowledge regarding the link between alcohol and cancer has therefore become a public health priority in recent years, with the Public Health Alcohol Act outlining cancer warning labels should be added to alcohol products.

In this context, the survey included a number of questions aimed at measuring perceptions of the link between alcohol consumption and cancer/other health outcomes. These questions took the same format as those for smoking tobacco above, with respondents presented with four statements and asked to what extent they agreed or disagreed.

Figure 12 – Link between drinking alcohol and cancer



¹⁹ Alcohol and Cancer in the WHO European Region (2020)

As figure 12 shows, beliefs about the link between alcohol and cancer vary significantly across the population.

While half of respondents (50%) agree that “Drinking alcohol, even moderately, increases the risk of getting cancer”, a significant minority (37%) disagree with this statement. Further, only 11% ‘strongly agree’ here, while 13% say that they ‘Don’t know’, indicating high levels of uncertainty even among those who acknowledge the connection between alcohol and cancer.

When it comes to the statement “Drinking alcohol can only cause cancer if you drink a large amount over a long period of time”, the findings here provide further illustration of uncertainty surrounding this issue; while 46% disagree with this statement, a similar proportion (45%) agree.

The key demographic variances in the understanding of the link between alcohol and cancer are age and education (figures 13-16). Older people, and particularly those aged 65 and older are significantly less likely to perceive the link between alcohol consumption and cancer, while education level also correlates negatively with believing that alcohol causes cancer.

Figure 13 - Link between drinking alcohol and cancer (by demographic groups)

*Drinking alcohol, even moderately, increases the risk of developing cancer
(by age and education level)*

Drinking alcohol, even moderately, increases the risk of developing cancer	18-24	25-34	35-44	45-54	55-64	65+	Leaving Cert. or lower	Post- Leaving Cert.
Agree (NET)	58%	57%	54%	50%	48%	35%	47%	56%
Disagree (NET)	32%	29%	34%	36%	39%	46%	39%	33%

Figure 14 - Link between drinking alcohol and cancer (by demographic groups)

Drinking alcohol can only cause cancer if you drink a large amount over a long period of time (by age and education level)

Drinking alcohol can only cause cancer if you drink a large amount over a long period of time	18-24	25-34	35-44	45-54	55-64	65+	Leaving Cert. or lower	Post-Leaving Cert.
Agree (NET)	40%	43%	42%	42%	48%	54%	47%	41%
Disagree (NET)	51%	48%	50%	49%	44%	33%	43%	51%

More than half of those aged under 45 (56%) agree that moderate alcohol consumption increases cancer risk, compared to 50% of those aged 45-64 and just 35% of those aged 65 and older. At the same time, a majority of people aged 65 and older (54%) agree that only heavy, long-term drinking can cause cancer, with the equivalent figure being 43% for those aged 18-64.

This generational divide may be reflective of a number of factors, including a persistent myth that “a little bit of alcohol is good for you” as well as changes in public health communications regarding the health risks of alcohol and the definition of safe consumption limits over the past few decades. It is perhaps therefore unsurprising that the oldest generation perceives a markedly lower cancer risk from alcohol.

An educational divide also exists, with this split most apparent between those who have completed post-Leaving Certificate education and those who have not. More than half (56%) of those with a post-Leaving Certificate education agree that moderate alcohol consumption increases cancer risks (Leaving Certificate or lower: 47%), while the former group are more likely to correctly disagree that “Drinking alcohol can only cause cancer if you drink a large amount over a long period of time” (51% and 43% respectively).

It should be noted that while the oldest age groups and those with lower levels of education demonstrate the lowest levels of awareness with regards to the link between alcohol consumption and cancer, there remains a significant divide across all age and education categories. Tackling the substantial uncertainty about the alcohol-cancer link across all demographic groups is a key policy priority moving forward.

Views on the impact of alcohol on wider health outcomes are similarly mixed. As shown in figure 15, while a slightly majority (51%) disagree with the statement “*Drinking a little alcohol is better for your health than not drinking any alcohol*”, nearly two in five (39%) agree here. In the same way, while 64% disagree that “*Drinking alcohol is only bad for your health if you drink enough to get drunk*”, a sizeable minority (30%) agree with this statement.

The same key demographic differences are observed in terms of views on the wider health effects of alcohol as that observed for its link with cancer, with older people and those with a Leaving Certificate education or less perceiving lower risk.

Figure 15 - Link between drinking alcohol and cancer (by demographic groups)

Drinking a little alcohol is better for your health than not drinking any alcohol (by age and education level)

Drinking a little alcohol is better for your health than not drinking any alcohol	18-24	25-34	35-44	45-54	55-64	65+	Leaving Cert. or lower	Post-Leaving Cert.
Agree (NET)	25%	32%	38%	42%	45%	47%	43%	32%
Disagree (NET)	66%	57%	55%	51%	46%	39%	48%	59%

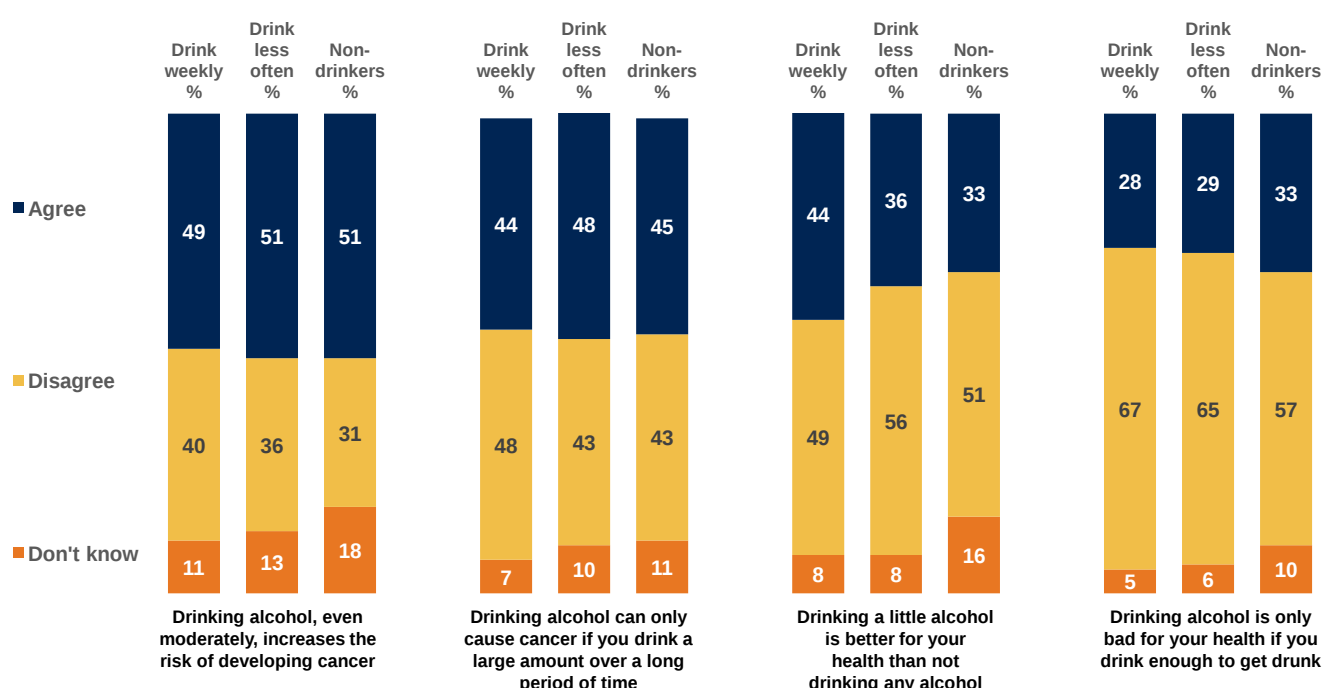
Figure 16 - Link between drinking alcohol and cancer (by demographic groups)

Drinking alcohol is only bad for your health if you drink enough to get drunk (by age and education level)

Drinking alcohol is only bad for your health if you drink enough to get drunk	18-24	25-34	35-44	45-54	55-64	65+	Leaving Cert. or lower	Post-Leaving Cert.
Agree (NET)	19%	24%	29%	30%	32%	38%	33%	22%
Disagree (NET)	76%	69%	66%	64%	63%	52%	60%	72%

As was the case for smoking risk factors, it is important to have an understanding of how views on the link between alcohol and cancer vary between those who drink alcohol and those who do not. For the purposes of this analysis, respondents are divided into three categories: those who consume alcohol at least once a week, those who consume alcohol less than weekly, and those who never consume alcohol (figure 17).²⁰

Figure 17 – Perceptions of the link between drinking alcohol and cancer (by alcohol consumption)



In response to the statement “*Drinking alcohol, even moderately, increases the risk of developing cancer*” 2 in 5 (40%) of those who drink alcohol weekly disagree here, compared to 36% of those who drink less often and 31% of those who never drink alcohol. However, this difference is largely due to the latter two groups being more likely to say that they “Don’t know”, with Non-drinkers (18%) particularly likely to provide this response.

²⁰ Alcohol consumption was measured by asking respondents: “In the past 6 months, how often if at all have you consumed alcohol?” Those who have not drunk alcohol in the past 6 months, but did so longer ago, are therefore defined as ‘non-drinkers’.

In contrast, however, those who drink alcohol weekly are more likely (48%) than those who do so less often or never do so (both 43%) to disagree with the statement *“Drinking alcohol is only bad for your health if you drink enough to get drunk”*, although again a portion of this gap is found in differences in the proportions responding “Don’t know”.

There is little of note in terms of trends, therefore in terms of attitudes on drinking alcohol and developing cancer by drinking status; differences are small and run in conflicting directions across the two statements.

Larger variation by drinking status is observed in terms of attitudes towards wider health outcomes, highlighting a gap in knowledge. There is an almost even split among those who consume alcohol weekly on whether a drinking a little alcohol is better for your health; 44% agree, while 48% disagree, well above the corresponding figures for those who consume alcohol less often or never. However, this trend is again reversed, when it comes to the statement “Drinking alcohol is only bad for your health if you drink enough to get drunk”: around two-thirds of those who drink weekly (67%) or drink less often (65%) disagree here, a greater proportion than the 56% of non-drinkers providing this response.

The conflicting trends observed by drinking status across these four statements therefore may indicate that similarly to smoking status and tobacco use, drinking status is again not a strong indicator of attitudes towards the health effects of alcohol. While those who drink alcohol weekly perceive somewhat lower alcohol risk for the first and third statements, those who drink less often perceive lower risk at statements two and four. This further exemplifies the public’s conflicted views on the health effects of alcohol, and demonstrates that significant uncertainty exists among drinkers and non-drinkers alike.

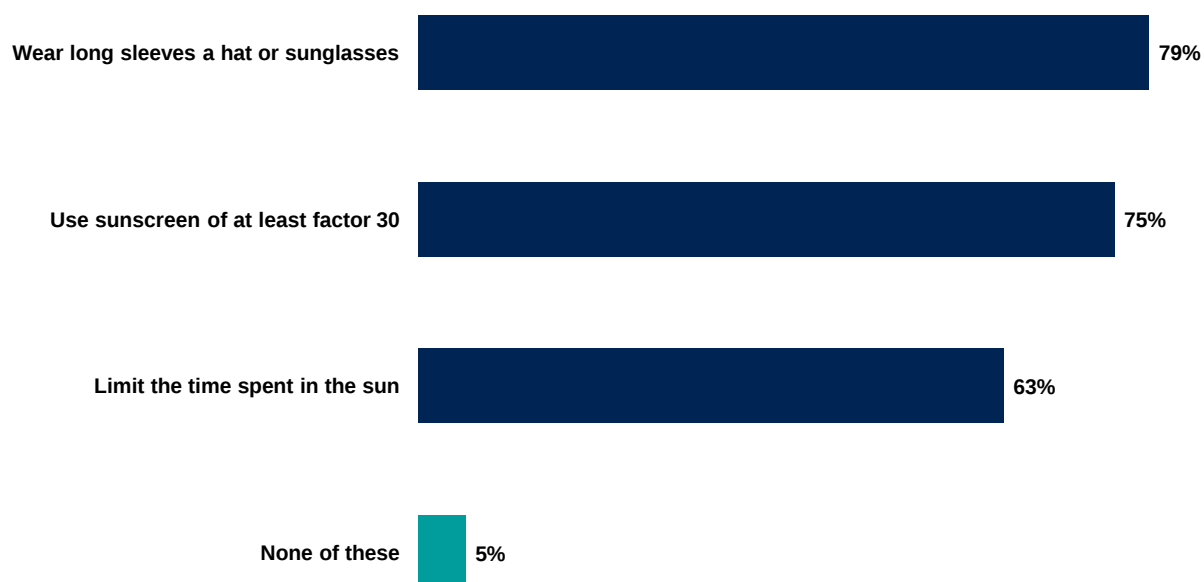
As is the case with smoking, little difference exists across drinkers with different demographic profiles with respect to their attitudes towards the health effects of alcohol. Older drinkers and drinkers with lower levels of education remain those with the lowest levels of awareness about the health and cancer risks of drinking alcohol, although there is little difference in attitudes among these groups when compared to non-drinkers of similar age or education status.

Sun protection

As discussed above, factors related to exposure to the sun are among the most highly recognised cancer risk factors. With this in mind, the survey included a question aimed at measuring to what extent respondents take action to reduce this risk. Respondents were asked to identify from a list which, if any, of three forms of sun protection methods they use frequently during the summer in Ireland.

As shown in figure 18, 95% report using at least one form of sun protection. The most commonly used form of sun protection is wearing long sleeves, a hat or sunglasses, with 79% reporting that they do so. This is followed by using sunscreen of at least factor 30 (75%), with limiting the amount of time spent in the sun (63%) the least commonly used of the three.

Figure 18 – Reported use of various sun protection methods during the summer in Ireland



Certain demographic groups are somewhat less likely than others to report using sun protection during the summer in Ireland (figure 19). The groups most likely to report that they use 'None of these' include those of non-Irish nationality (10%) and men (7%).

Figure 19 – Non-usage of sun protection methods

	Men	Women	Leaving Cert. or lower	Post-Leaving Cert.	Irish	Non-Irish
Proportion saying they use none of the three forms of sun protection listed	7%	3%	3%	6%	4%	10%

Differences also exist across demographic groups in terms of the types of sun protection used, with the largest differences observed by age, gender and nationality (figure 20).

Figure 20 – Types of sun protection used by demographic groups

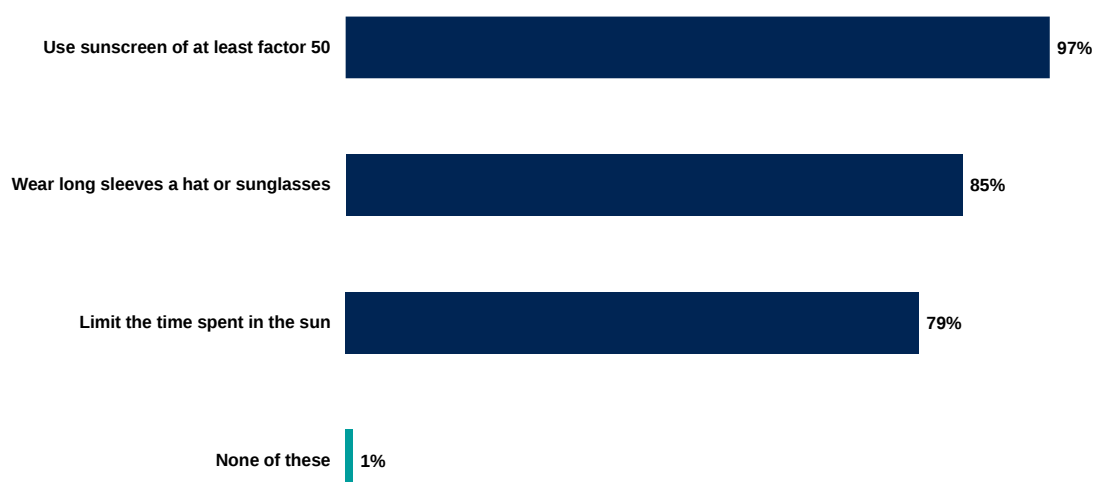
	18-64	65+	Men	Women	Irish	Non-Irish
Wear long sleeves, a hat or sunglasses	78%	81%	78%	79%	80%	74%
Use sunscreen of at least factor 30	77%	67%	66%	84%	77%	66%
Limit the time spent in the sun	61%	74%	58%	68%	65%	56%

As was the case for alcohol consumption, the strongest age divide is found between those aged 65 and older and all other age groups. In particular, over 65s are less likely than younger respondents to use sunscreen of at least factor 30, but more likely to report limiting the time spent in the sun.

In terms of gender, the largest difference is observed in sunscreen use: 84% of women say they do this, compared to just 66% of men. Women are also more likely to report limiting the amount of time they spend in the sun (68% and 58% respectively). Use of sun protection is also higher among those born in Ireland than those born outside of Ireland across all three categories.

Those who are the parent/guardian of a child aged under 12 were further asked which types of sun protection they use for their child during the summer in Ireland (figure 21). Almost all parents/guardians (99%) report that they use at least one form of sun protection method for their child, including 97% who say that they use sunscreen of at least factor 50.

Figure 21 – Sun protection methods used by children (reported by parents of children aged under 12)



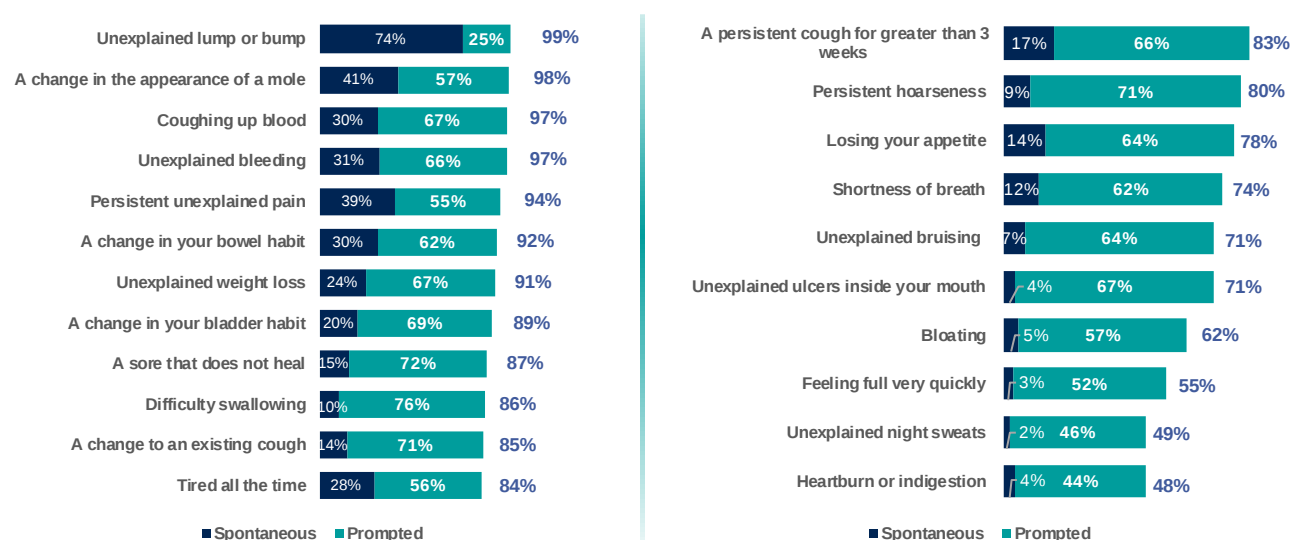
AWARENESS OF CANCER SIGNS AND SYMPTOMS

A key goal of this study is to collect data on baseline public awareness of cancer warning signs and symptoms, and how individuals would respond should they notice a sign or symptom of cancer. This information will inform interventions to improve the early diagnosis of cancer in Ireland. This section builds on the findings of the Lung Cancer Awareness Report²¹ produced by Ipsos on behalf of NCCP two years previously.

The survey therefore included a number of questions aimed at gauging awareness of cancer warning signs and symptoms, how respondents would react if they were to notice a potential sign/symptom of cancer, as well as attitudes towards, and barriers to, attending a GP.

The first question in this section asked respondents to name as many cancer warning signs and symptoms as they could think of. This question took the same format as that for cancer risk factors, with respondents first spontaneously listing out as many warning signs and symptoms as they could, before being presented with a list of cancer signs/symptoms and asked whether they thought they could indicate cancer.

Figure 22 – Awareness of various cancer warning signs



As figure 22 shows, most cancer warning signs achieve high levels of recognition when prompted. It is important to note that, as was the case for cancer risk factors, spontaneous recognition of most cancer warning signs and symptoms is relatively low.

Spontaneous recognition of cancer signs/symptoms is important for early diagnosis, as individuals need to recognise the potential significance of their symptoms and self-refer to a GP in a timely manner. Being cognisant of cancer signs/symptoms for which spontaneous recognition is low, and incorporating these into communications strategies, is a key priority in this area.

²¹ <https://www.hse.ie/eng/services/list/5/cancer/pubs/reports/national-survey-on-lung-cancer-awareness-report-january-2020.pdf>

In terms of ability to identify cancer warning signs and symptoms, the main area of demographic variance (figure 23) is by gender with women more likely than men to correctly identify many signs and symptoms. Notable differences between the genders exist in terms of correctly identifying unexplained bruising, feeling full very quickly, bloating and heartburn or indigestion.

Analysis by age finds that those in the oldest age group (aged 75 and older) are less likely to correctly identify a number of signs or symptoms of cancer. These include unexplained mouth ulcers, shortness of breath, being tired all the time and unexplained bruising. As advancing age is the leading risk factor for cancer it is important to address these lower levels of awareness among older people.

Figure 23 - Awareness of various cancer warning signs (by gender and age)

		Gender		Age			
	Total	Male	Female	Under 50	50-64	65-74	75+
Unexplained lump or bump	98%	98%	99%	98%	99%	99%	100%
A change in the appearance of a mole	97%	97%	98%	96%	99%	99%	100%
Coughing up blood	97%	96%	98%	97%	98%	98%	99%
Unexplained bleeding	96%	96%	97%	96%	98%	96%	99%
Persistent unexplained pain	94%	93%	95%	94%	93%	94%	94%
A change in your bowel habit	92%	91%	94%	90%	94%	96%	97%
Unexplained weight loss	91%	91%	91%	91%	92%	90%	89%
A change in your bladder habit	89%	90%	89%	89%	91%	91%	88%
A sore that does not heal	87%	85%	90%	86%	89%	89%	91%
Difficulty swallowing	86%	83%	89%	84%	90%	88%	86%
A change to an existing cough	85%	83%	88%	83%	88%	90%	86%
Tired all the time	84%	83%	85%	85%	86%	81%	74%
Persistent cough for greater than 3 weeks	83%	81%	85%	82%	85%	83%	82%
Persistent hoarseness	80%	79%	82%	79%	86%	79%	78%
Losing your appetite	77%	77%	78%	77%	82%	73%	74%
Shortness of breath	74%	74%	74%	76%	77%	67%	61%
Unexplained bruising	71%	66%	76%	73%	70%	70%	61%
Unexplained ulcers inside your mouth	70%	68%	73%	71%	74%	70%	56%
Bloating	61%	57%	66%	61%	65%	57%	62%
Feeling full very quickly	55%	51%	60%	56%	55%	56%	52%
Unexplained night sweats	49%	45%	52%	51%	48%	44%	44%
Heartburn or indigestion	48%	44%	52%	45%	52%	54%	47%

Across a few key cancer warning signs and symptoms listed, women are significantly more likely than men to be able to spontaneously identify them. Warning signs where a significant gender gap exists in spontaneous mentions are listed in the grid below:

Respondents were next asked what they would do if they were to notice a physical sign suggestive of cancer. Given the importance of early detection to cancer survival rates, it is highly important to encourage people to attend their GP without delay should they notice a potential sign/symptom of cancer.

Figure 24 – First action taken if noticed a physical sign suggestive of cancer

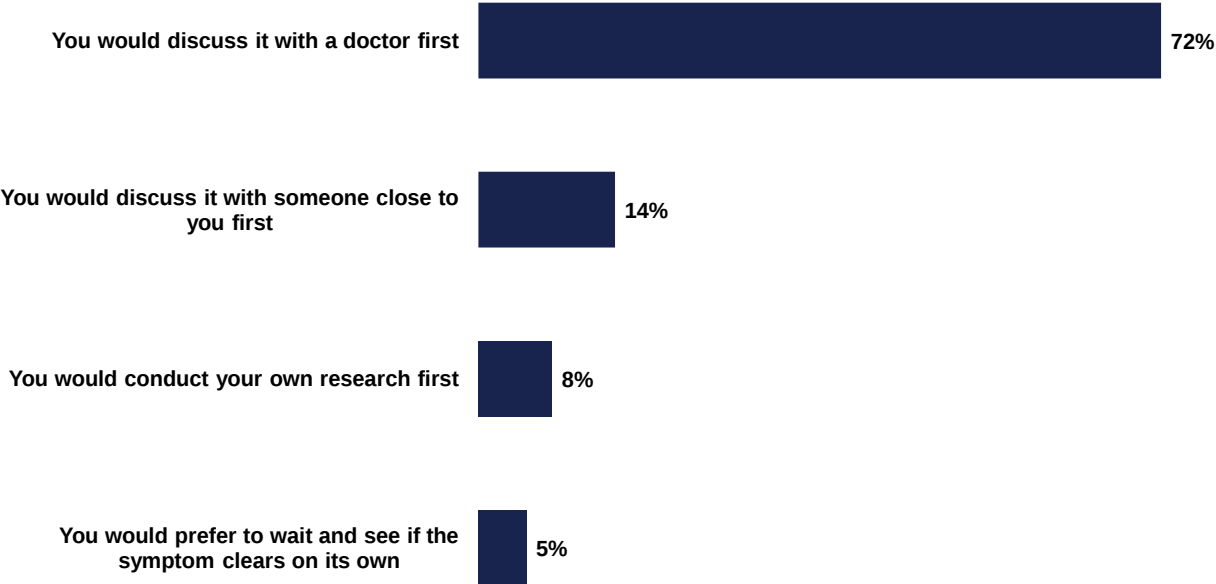


Figure 24 shows that the majority (72%) report that they would discuss it with a doctor first if they were to notice a physical sign suggestive of cancer. While actual behaviour may differ from reported future behaviours on a survey, it is in any case encouraging that such a large proportion of respondents' report that they would prioritise visiting a GP.

One in seven (14%) say they would discuss it with someone close to them first, 8% say they would start by doing their own research, and 1 in 20 (5%) report they would wait to see if the symptoms clear on their own.

Significant differences are observed in terms of reported response to cancer symptoms by age (figure 25). A greater proportion of older respondents, and particularly those aged 55 and older, report that they would prioritise discussing the issue with a GP, with younger people relatively more likely to say they would discuss it with someone close to them or do their own research. This may be because those aged under 55 face greater barriers to attending a GP, such as financial or time constraints, an issue discussed further later on in this report.

There is little variance across age groups in terms of those reporting they would wait to see if the symptom clears on its own, although this response is marginally more common among the 25-34 year old age group.

Figure 25 - First action taken if noticed a physical sign suggestive of cancer (by age)

If you were to notice a physical sign suggestive of cancer, what would you do first?	18-24	25-34	35-44	45-54	55-64	65+
You would discuss it with a doctor first	63%	67%	69%	70%	83%	81%
You would discuss it with someone close to you first	23%	14%	15%	15%	10%	11%
You would conduct your own research first	12%	11%	11%	7%	2%	3%
You would wait to see if the symptom clears on its own first	2%	8%	4%	7%	5%	5%

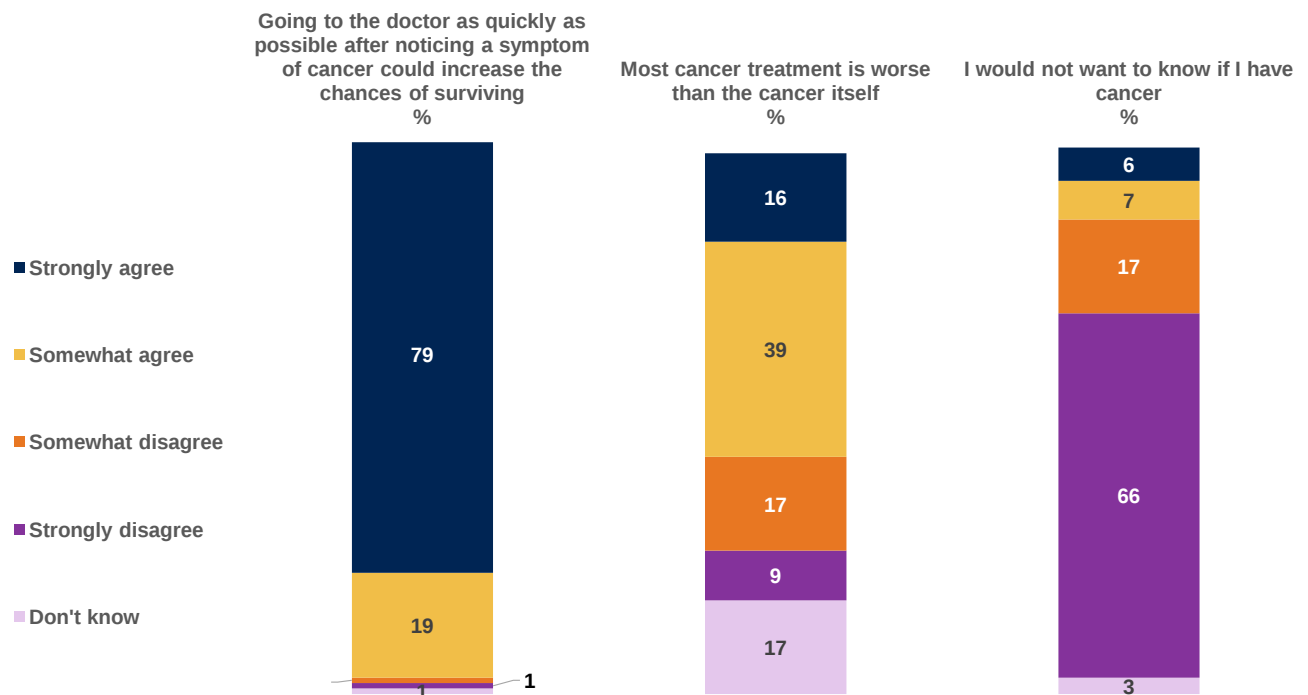
Other than age, a number of other factors are linked with higher likelihood to prioritise visiting a doctor. These include being drinking less frequently, eating 5 or more fruit and vegetables a day and having higher levels of medical literacy (figure 26). This may indicate that likelihood to visit a GP is associated with better health behaviours in general, as well as higher socio-economic status. It is notable that no gender differences are observed here, with 71% of men and 73% of women saying they would visit a doctor first, a difference which is not statistically significant.

Figure 26 - First action taken if noticed a physical sign suggestive of cancer (by health behaviours)

If you were to notice a physical sign suggestive of cancer, what would you do first?	Drink alcohol weekly	Drink alcohol less often/ never	5+ fruit/ veg a day	Less than 5 fruit/ veg a day	High medical literacy	Low medical literacy
You would discuss it with a doctor first	69%	75%	79%	67%	74%	67%
You would discuss it with someone close to you first	16%	13%	12%	16%	14%	14%
You would conduct your own research first	9%	7%	4%	11%	7%	12%
You would wait to see if the symptom clears on its own first	5%	5%	4%	6%	5%	8%

A number of attitude statements were also included on the topic of cancer treatment and survival (figure 27).

Figure 27 – Selected statements related to cancer treatment



Virtually all respondents (98%) agree that “Going to the doctor as quickly as possible after noticing a symptom of cancer could increase the chances of surviving”. This includes 79%, or four in five, who strongly agree with this statement. There are no significant demographic differences here, with high levels of agreement found across all groups.

Perceptions of cancer treatment are, however, significantly more negative. This is characterised by the finding that a majority of respondents (55%) agree with the statement “*Most cancer treatment is worse than the cancer itself*”. As shown in figure 28, agreement with this statement is highest among women, almost 61% of whom agree here, and those aged 65 and older (60%).

Figure 28 – Proportion agreeing that most cancer treatment is worse than the cancer itself (by age and gender)

	18-24	25-34	35-44	45-54	55-64	65+	Men	Women
Most cancer treatment is worse than the cancer itself (% agree)	47%	52%	53%	57%	62%	60%	49%	61%

Finally, respondents were asked to what extent they agreed or disagreed with the statement: *“I would not want to know if I had cancer”*. While agreement with this statement overall is low, at 13%, elevated levels of agreement are reported by certain groups. Those particularly likely to agree here include those aged over 65 (17%) and smokers (19%). This is shown in figure 29.

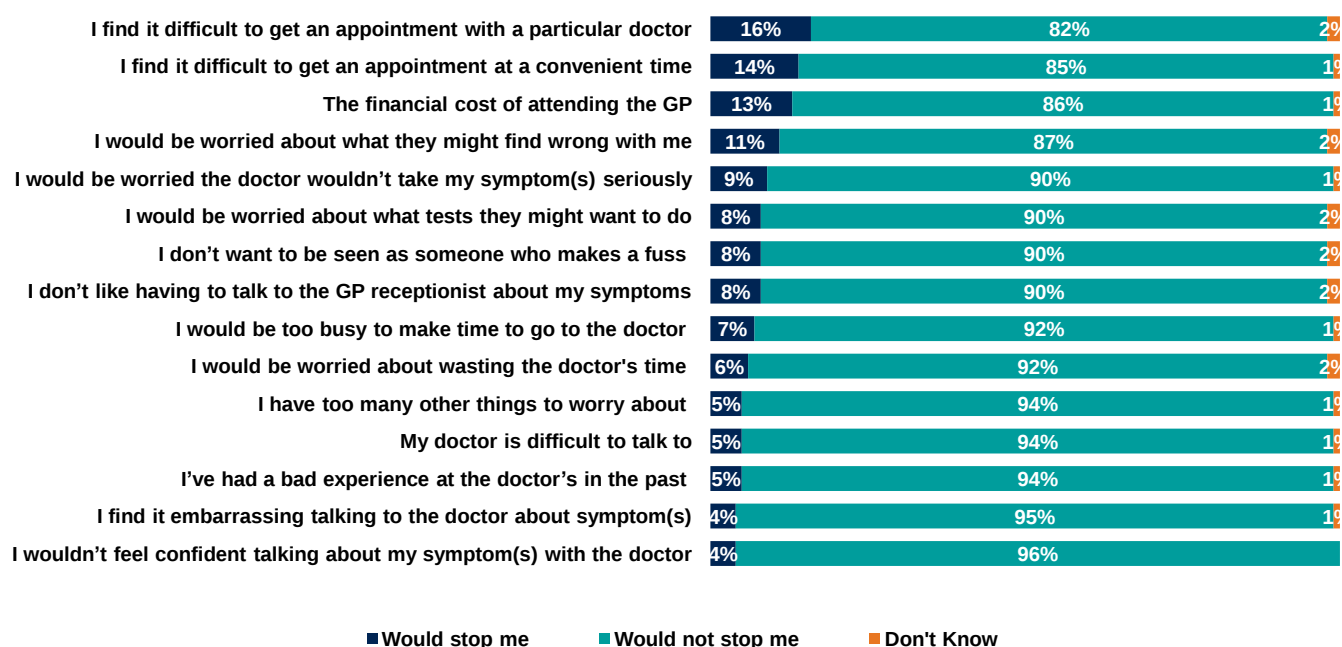
Figure 29 - Proportion agreeing that they would not want to know if they had cancer (by age and smoking status)

	18-24	25-34	35-44	45-54	55-64	65+	Smoker	Non-smoker
I would not want to know if I had cancer (% agree)	12%	11%	11%	13%	14%	17%	19%	11%

The final part of this section examined whether, even if individuals want to attend a GP in response to cancer symptoms, they perceive barriers to doing so.

Overall, as shown in figure 30, reported barriers to attending a GP in relation to cancer symptoms are low, with the majority of potential barriers being mentioned by less than 1 in 10 respondents. Difficulties getting an appointment represent the greatest hindrance, with 16% saying difficulties getting an appointment with a particular doctor would stop them, and 14% referencing difficulties getting an appointment at a convenient time. This is followed by the financial cost of attending the GP, mentioned by 13%.

Figure 30 – Potential barriers to visiting a doctor if noticed a warning sign or symptom of cancer



Barriers to attending a GP are higher for younger people (figure 31). One in five under 35s (19%) report finding it difficult to get an appointment with a particular doctor (65+: 12%). 18-34 year olds are also more affected by the financial cost of attending the GP (21%; 65+: 6%), including one in four under 25s mentioning this as a barrier.

Indeed, a significant age gradient exists across almost all barriers mentioned, with those aged under 35 most likely to say they would be prevented from attending a doctor, and those aged 65 and over least likely. In contrast, there is little difference reported by gender.

Figure 31 - Potential barriers to visiting a doctor if noticed a warning sign or symptom of cancer (by age)

If you were to notice a physical sign suggestive of cancer, what would you do first?	18-24	25-34	35-44	45-54	55-64	65+
I find it difficult to get an appointment with a particular doctor	16%	20%	16%	18%	15%	12%
I find it difficult to get an appointment at a convenient time	17%	19%	15%	16%	10%	6%
The financial cost of attending a GP	25%	18%	13%	12%	9%	6%
I would be worried about what they might find wrong with me	13%	15%	11%	8%	10%	13%
I would be worried the doctor wouldn't take my symptom(s) seriously	11%	14%	9%	8%	9%	5%
I would be worried about what tests they might want to do	11%	10%	6%	7%	8%	8%
I don't want to be seen as someone who makes a fuss	12%	9%	7%	7%	9%	7%
I don't like having to talk to the GP receptionist about my symptoms	6%	10%	8%	8%	9%	8%
I would be too busy to make time to go to the doctor	8%	10%	8%	8%	6%	2%
I would be worried about wasting the doctor's time	7%	6%	6%	6%	7%	6%
I have too many other things to worry about	6%	8%	5%	4%	6%	3%
My doctor is difficult to talk to	3%	6%	4%	5%	6%	5%
I've had a bad experience at the doctor's in the past	4%	9%	5%	3%	5%	4%
I find it embarrassing talking to the doctor about my symptom(s)	6%	3%	4%	2%	4%	4%

APPENDICES

Appendix A
National Survey on Cancer Awareness and Attitudes
Questionnaire – FINAL

CONSENT

We are undertaking this research to learn about the Irish population's understanding of cancer awareness. You have been randomly selected to take part in the survey, along with over 2,500 other people in Ireland.

Unfortunately, as cancer is a common disease, some people participating in the survey have been affected by cancer. I do not want to cause any upset and would like to reassure you that you have been invited to participate at random and the reason for the survey is to improve cancer outcomes in Ireland.

The survey will take approximately 20 minutes to complete.

If you wish, I can provide you with further information before proceeding.

Before we continue I just need to inform you that many of the questions relate to health and to reassure you that all of your answers are completely confidential and your rights under the Data Protection Act will be fully observed, including not answering and choosing to end the interview. Your participation is voluntary. Your responses will be anonymous, therefore once the interview is completed it will be impossible to withdraw from study. The HSE National Cancer Control Programme may use your anonymous words in reports or publications related to this.

For quality control and training purposes this interview may be monitored or recorded.

Q.S4 Are you okay to proceed on this basis?

Yes

1 PROCEED

No.....

2 TERMINATE INTERVIEW

PRE SURVEY DEMOGRAPHICS

Q.A Firstly, have you, anyone in your family or any of your friends had cancer?
PROBE TO PRECODES. MULTICODE.

Me	1
My spouse/partner	2
Someone in my immediate family (e.g. parents, child, brother, sister, siblings)	3
Someone in my wider family (e.g. grandparent, grandchild, cousin, aunt, uncle, niece, nephew)	4
A close friend	5
An acquaintance	6
A colleague	7
Someone else (please specify)	8
None of those.....	9
Prefer not to say.....	10

IF ANSWER '1' AT Q.A, ASK:

Q.B Are you currently undergoing treatment for cancer?

Yes	1
No.....	2

MODULE 1: BELIEFS ABOUT CANCER

I am now going to ask you some questions in relation to your beliefs about cancer. Please note this is not a test and we are simply trying to understand your current awareness of this disease.

- Q.1** When I say the word cancer to you, which three words does this bring to mind?
If subject does not know how to answer, follow up with "In your opinion, what springs to mind when I say the word "cancer" to you?"

INTERVIEWER – RECORD WORDS PRECISELY. IF WORD IS NOT ON THE LIST, THEN USE OTHER SPECIFY CATEGORY

Disease	1
Tumour	2
Breast cancer	3
Lung cancer	4
Death.....	5
Incurable	6
Curable.....	7
Treatment.....	8
Chemotherapy.....	9
Radiotherapy	10
Fear	11
Hope.....	12
Other (specify: _____)	13
Don't Know (DNRO).....	14
Refused (DNRO).....	15

- Q.2** I am now going to read out some opinions that you might hear about cancer. To what extent do you agree or disagree with each one?

ROTATE ORDER. READ OUT

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Don't know	Prefer not to say
These days, many people with cancer can expect to continue with normal activities and responsibilities.....	1	2	3	4	5	6
Most cancer treatment is worse than the cancer itself	1	2	3	4	5	6
I would NOT want to know if I have cancer.....	1	2	3	4	5	6
Cancer can often be cured.....	1	2	3	4	5	6
Going to the doctor as quickly as possible after noticing a symptom of cancer could increase the chances of surviving	1	2	3	4	5	6
A diagnosis of cancer is a death sentence.....	1	2	3	4	5	6
Nothing can be done to reduce your risk of cancer	1	2	3	4	5	6

MODULE 1: CANCER RISK REDUCTION

I am going to ask you some questions in relation to cancer risk factors. Please note this is not a test and we are simply trying to understand your current awareness of this disease.

Q.3 To what extent do you agree or disagree with the following statement ... ?

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Don't know	Prefer not to say
There are things I can do to reduce my chances of developing cancer	1	2	3	4	5	6

Q.4 What things do you think could increase a person's chance of developing cancer?
Please list as many things you can think.

PROBE TO PRECODES. MULTICODE

Smoking

Smoking tobacco products (cigarettes, cigars, pipes, roll your own).....	1
E-cigarettes	2
Chewing tobacco.....	3
Exposure to another person's smoking (second hand smoke).....	4

Exposure to the sun/other environmental factors

Unprotected sun exposure	5
Getting sunburnt.....	6
Using a sunbed	7
Exposure to radon gas	8
Exposure to asbestos.....	9
Breathing polluted air	10

Diet, drinking & exercise

Not eating enough fruit and vegetables	11
Eating red meat.....	12
Eating processed meat, for example bacon, ham, sausages	13
Not eating wholegrains.....	14
Drinking alcohol.....	15
Drinking coffee	16
Low levels of physical activity	17
Being overweight.....	18

Health conditions/medicines/treatments

Taking hormone replacement therapy (HRT)	19
Taking the Oral Contraceptive Pill (OCP)	20
Having chronic obstructive pulmonary disease - COPD	21
HPV infection	22
Hepatitis infection.....	23
Heartburn	24

Other factors

Using a mobile phone	25
Being older	26
Stress	27
Having a close relative with cancer.....	28
Not breastfeeding.....	29
Wearing a tight bra.....	30
A blow to the breast	31
Aerosol use	32

Other (specify: _____)	33
None of these.....	34
Don't Know (DNRO).....	35
Refused (DNRO).....	36

For each of the following can you tell me which, if any, of these you think increase a person's chance of developing cancer. You may have already mentioned some of these.

ROTATE ORDER OF Q.5A-E. DO NOT SHOW ANSWERS GIVEN AT Q.4.

Firstly,...
And next....

Q.5a ...some things related to smoking.
ROTATE ORDER. READ OUT

Smoking tobacco products (cigarettes, cigars, pipes, roll your own).....	1
E-cigarettes	2
Chewing tobacco.....	3
Exposure to another person's smoking (second hand smoke).....	4

Q.5b ...some things related to exposure to the sun and other environmental factors
ROTATE ORDER. READ OUT

Unprotected sun exposure	1
Getting sunburnt.....	2
Using a sunbed	3
Exposure to radon gas	4
Exposure to asbestos.....	5
Breathing polluted air	6

Q.5c ...some things related to diet, drinking and exercise
ROTATE ORDER. READ OUT

Not eating enough fruit and vegetables	1
Eating red meat.....	2
Eating processed meat, for example bacon, ham, sausages	3
Not eating wholegrains.....	4
Drinking alcohol.....	5
Drinking coffee	6
Low levels of physical activity	7
Being overweight.....	8

Q.5d ...some things related to health conditions, medicines and treatments
ROTATE ORDER. READ OUT

Taking hormone replacement therapy (HRT)	1
Taking the Oral Contraceptive Pill (OCP)	2
Having chronic obstructive pulmonary disease - COPD	3
HPV infection	4
Hepatitis infection.....	5
Heartburn	6

Q.5e ...some things related to various factors
ROTATE ORDER. READ OUT

Using a mobile phone	1
Being older	2
Stress	3
Having a close relative with cancer.....	4
Not breastfeeding.....	5
Wearing a tight bra.....	6
A blow to the breast	7
Aerosol use	8

Q.6 I am now going to read out some opinions that you might hear about tobacco. To what extent do you agree or disagree with each one?

ROTATE ORDER. READ OUT

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Don't know	Prefer not to say
Smoking can only cause cancer if you are a heavy smoker over a long period of time.....	1	2	3	4	5	6
A smoker can avoid getting smoking-related cancer if they manage to quit in time.....	1	2	3	4	5	6
Even if you don't smoke yourself, being exposed to other people's smoke can cause cancer	1	2	3	4	5	6
A former smoker can get a cancer related to their smoking even a long time after quitting smoking	1	2	3	4	5	6

Q.7 I am now going to read out some opinions that you might hear about alcohol. To what extent do you agree or disagree with each one?

ROTATE ORDER. READ OUT

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Don't know	Prefer not to say
Drinking alcohol can only cause cancer if you drink a large amount, over a long period of time.....	1	2	3	4	5	6
Drinking alcohol is only bad for your health if you drink enough to get drunk	1	2	3	4	5	6
Drinking a little alcohol is better for your health than not drinking any alcohol	1	2	3	4	5	6
Drinking alcohol, even moderately, increases the risk of developing cancer	1	2	3	4	5	6

Q.8a Which, if any, of these sun protection methods do you use frequently during the summer in Ireland?
ROTATE ANSWERS. READ OUT. MULTI CODE

Limit the time spent in the sun	1
Wear long sleeves, a hat or sunglasses	2
Use sunscreen of at least factor 30	3
None of these (DNRO)	4
Don't Know (DNRO)	5
Refused (DNRO)	6

Q.8b Do you have any children aged under 12 for whom you are a parent or guardian?

Yes	1
No.....	2
Don't Know (DNRO)	3
Refused (DNRO)	4

ASK IF YES AT Q.8B

Q.8c Which, if any, of these sun protection methods do you use frequently during the summer in Ireland to protect your child?

ROTATE ANSWERS. READ OUT. MULTI CODE

Limit the time spent in the sun	1
Wear long sleeves, a hat or sunglasses	2
Use sunscreen of at least factor 50	3
None of these (DNRO)	4
Don't Know (DNRO)	5
Refused (DNRO)	6

MODULE 3: AWARENESS OF CANCER

Next, we would like to ask a few questions about your awareness of cancer. Please note this is not a test and we are simply trying to understand your current awareness of this disease.

Q.9a There are many warning signs and symptoms of cancer. Please tell me as many warning signs and symptoms of cancer as you can think of.

PROBE TO PRECODES. MULTICODE.

Unexplained lump or bump	1
Persistent unexplained pain	2
Unexplained bleeding (blood in poo, pee, bleeding after sex, bleeding after the menopause, bleeding between periods) ...	3
Unexplained bruising	4
A persistent cough for greater than 3 weeks	5
Persistent hoarseness.....	6
Losing your appetite	7
Feeling full very quickly	8
A change in your bowel habit	9
A change in your bladder habit	10
Difficulty swallowing	11
A change in the appearance of a mole	12
A sore that does not heal	13
Unexplained weight loss	14
Bloating	15
Coughing up blood	16
Shortness of breath	17
Tired all the time.....	18
A change to an existing cough	19
Unexplained night sweats	20
Unexplained ulcers inside your mouth	21
Heartburn or indigestion	22
Other (specify: _____)	23
Don't Know (DNRO).....	24
Refused (DNRO)	25

Q.9b Which of the following, if any, do you think could be warning signs or symptoms of cancer?
ONLY SHOW THOSE NOT SELECTED AT Q.9A
ROTATE. READ OUT.

	Yes, I think this could be a sign of cancer	No, I don't think this could be a sign of cancer	Don't know/ not sure
Unexplained lump or bump	1	2	3
Persistent unexplained pain	1	2	3
Unexplained bleeding (blood in poo, pee, bleeding after sex, bleeding after the menopause, bleeding between periods).....	1	2	3
Unexplained bruising	1	2	3
A persistent cough for greater than 3 weeks	1	2	3
Persistent hoarseness.....	1	2	3
Losing your appetite	1	2	3
Feeling full very quickly	1	2	3
A change in your bowel habit	1	2	3
A change in your bladder habit	1	2	3
Difficulty swallowing	1	2	3
A change in the appearance of a mole	1	2	3
A sore that does not heal	1	2	3
Unexplained weight loss	1	2	3
Bloating	1	2	3
Coughing up blood	1	2	3
Shortness of breath	1	2	3
Tired all the time.....	1	2	3
A change to an existing cough.....	1	2	3
Unexplained night sweats	1	2	3
Unexplained ulcers inside your mouth	1	2	3
Heartburn or indigestion	1	2	3

IF NOT CURRENTLY UNDERGOING TREATMENT OR NEVER TREATED FOR CANCER

Q.10 If you were to notice a physical sign suggestive of cancer, what would you do first?
PROBE TO PRECODES. SINGLE CODE.

- You would discuss it with a doctor first 1
- You would discuss it with someone close to you first 2
- You would conduct your own research first 3
- You would prefer to wait and see if the symptom clears on its own 4
- Other (specify _____) 5
- Don't Know 6
- Refused..... 7

ASK ALL

Q.11 For each of the following, can you tell me whether it would stop you or would not stop you from visiting a doctor if you noticed a warning sign or symptom of cancer?

ROTATE. READ OUT.

	Would stop me	Would not stop me	Don't know
I find it embarrassing talking to the doctor about symptom(s)	1	2	3
I would be worried about wasting the doctor's time	1	2	3
My doctor is difficult to talk to	1	2	3
I find it difficult to get an appointment with a particular doctor	1	2	3
I find it difficult to get an appointment at a convenient time	1	2	3
I would be too busy to make time to go to the doctor	1	2	3
I have too many other things to worry about	1	2	3
I would be worried about what they might find wrong with me	1	2	3
I wouldn't feel confident talking about my symptom(s) with the doctor	1	2	3
I've had a bad experience at the doctor's in the past	1	2	3
I would be worried the doctor wouldn't take my symptom(s) seriously	1	2	3
I would be worried about what tests they might want to do	1	2	3
I don't want to be seen as someone who makes a fuss	1	2	3
I don't like having to talk to the GP receptionist about my symptoms	1	2	3
The financial cost of attending the GP	1	2	3

Q.12 Is there anything else that might put you off going to the doctor?

No..... 1

Yes 2

WRITE IN

MODULE 4: LIFESTYLE

Thank you for your answers so far. We would now like to ask a few questions about your day to day life.

Q.13 Do you smoke tobacco products?

- | | |
|-------------------------|---|
| Yes, daily..... | 1 |
| Yes, occasionally | 2 |
| No..... | 3 |

GO TO Q.14

Q.14 Did you ever smoke tobacco products (in the past)?

- | | |
|-------------------------|---|
| Yes, daily..... | 1 |
| Yes, occasionally | 2 |
| No..... | 3 |

Q.15 In the past 6 months, how often if at all have you consumed alcohol?

- | | |
|---|----|
| Daily | 1 |
| 5-6 times a week | 2 |
| 4 times a week | 3 |
| 3 times a week | 4 |
| Twice a week | 5 |
| Once a week | 6 |
| 2-3 times a month | 7 |
| Once a month..... | 8 |
| Less than once a month..... | 9 |
| I did not drink in the last 6 months but I drank longer ago | 10 |
| I have never consumed alcohol | 11 |
| Don't know (DNRO) | 12 |
| Refused (DNRO)..... | 13 |

Q.16 Each day, how many portions of fruit do you eat, on average? A portion is an apple, a pear, orange or similar sized fruit. **RECORD NUMBER OF PORTIONS DAILY**

- | | |
|------------------------|----|
| Don't Know (DNRO)..... | 99 |
| Refused (DNRO)..... | 98 |

Q.17 Each day, how many portions of vegetables do you eat, on average? A portion is one medium tomato or carrot, 3 heaped tablespoons of peas or mixed vegetables. **RECORD NUMBER OF PORTIONS DAILY**

- | | |
|------------------------|----|
| Don't Know (DNRO)..... | 99 |
| Refused (DNRO)..... | 98 |

Q.18 In the past week, on how many days have you done a total of 30 minutes or more of physical activity which was enough to raise your breathing rate?

- | | |
|------------------------|----|
| Don't Know (DNRO)..... | 99 |
| Refused (DNRO)..... | 98 |

POST SURVEY DEMOGRAPHICS

I would now like to ask you a few questions for classification purposes.

Q.19 What is your gender?

Male.....	1
Female	2
Other (specify: _____)	3
Prefer not to say.....	4

Q.20 And, may I ask what is your actual age?

WRITE IN

Refused (DNRO)..... 98

ASK ALL REFUSED Q.20

Q.21 To ensure we interview a wide cross section of the public, could I first ask what age group you fall into?

18-19	1
20-21	2
22-24	3
25-29	4
30-34	5
35-39	6
40-44	7
45-49	8
50-54	9
55-59	10
60-64	11
65-69	12
70-74	13
75+	14
Refused (DNRO).....	98

Q.22 In which county do you live?

SINGLE CODE.

LIST OF COUNTIES	
Don't know (DNRO)	99
Refused (DNRO).....	98

Q.23 How would you define your current situation with regard to work?

Working for payment or profit.....	1
Looking for first regular job	2
Unemployed	3
A student or pupil	4
Retired from employment.....	5
Unable to work due to permanent sickness or disability	6
Looking after home or family.....	7
Other (specify: _____)	8
Don't know	99
Refused.....	98

Q.24 What is the highest level of education/training (full-time or part-time) which you have completed to date?

INTERVIEWER: PROBE TO PRECODES

No formal education or training	1
Primary education (FETAC Level 1 or 2 Cert. or equivalent). NFQ levels 1 or 2	2
Lower secondary education (Junior/Inter/Group Cert, Fetac Level 3 Cert, FÁS Introductory Skills, NCVA Foundation Cert. or equivalent. NFQ level 3	3
Upper secondary education (Leaving Cert. (including Applied and Vocational programmes) or equivalent. NFQ levels 4 or 5.....	4
Technical or Vocational , FETAC Level 4/5 Cert., NCVA Level 1/2, FÁS National Craft Cert., Teagasc Farming Cert., CERT Professional Cookery Cert. or equivalent. NFQ levels 4 or 5.....	5
Advanced Certificate / Completed Apprenticeship, FETAC Advance Cert., NCVA Level 3, FÁS National Craft Cert., Teagasc Farming Cert., CERT Professional Cookery Cert. or equivalent. NFQ level 5.....	6
Higher Certificate , NCEA/HETAC National Cert. or equivalent. NFQ level 6	7
Ordinary Bachelor Degree or National Diploma. NFQ Level 7	8
Honours Bachelor Degree /Professional qualification or both. NFQ Level 8	9
Postgraduate diploma, Masters Degree or equivalent. NFQ Level 9	10
Doctorate (Ph.D) or higher. NFQ level 10	11
Prefer not to say (DNRO)	12

Q.25 To which one of the following ethnic groups do you consider you belong?

INTERVIEWER: FIRST READ OUT WHITE, BLACK OR BLACK IRISH, ASIAN OR ASIAN IRISH OR ANOTHER BACKGROUND. THEN PROBE ACCORDINGLY.

White	Irish	1
	Irish Traveller	2
	Roma	3
	Any other White background (specify)	4
Black or Black Irish	African	5
	Any other black background (specify)	6
Asian or Asian Irish	Chinese	7
	Indian	8
	Pakistani	9
	Bangladeshi	10
	Any other Asian background (specify)	11
Other including mixed background	Arabic	12
	Mixed/Other (specify)	13

Q.26 In what country were you born?

Ireland	1
UK (including Northern Ireland)	2
Poland	3
Lithuania.....	4
Latvia.....	5
Nigeria.....	6
Romania.....	7
India.....	8
Philippines.....	9
Germany	10
USA.....	11
China.....	12
Slovakia.....	13
France	14
Brazil	15
Hungary.....	16
Italy.....	17
Pakistan	18
Spain	19
Czech Republic.....	20
South Africa.....	21
Other (specify)	22
Refused (DNRO).....	99

ASK ALL NOT BORN IN IRELAND

Q.27 For how many years have you lived in Ireland?

WRITE IN

Don't know (DNRO)	98
Refused (DNRO).....	99

Q.28 How many other adults, if any, do you currently live with?

WRITE IN

Don't know (DNRO)	98
Refused (DNRO).....	99

ASK ALL LIVING WITH OTHER ADULTS

Q.29 And what is your relationship to these other adults?

Spouse/partner.....	1
Adult child.....	2
Parent.....	3
Other relation	4
Non-relation.....	5
Other (specify)	6
Refused (DNRO).....	7

ASK ALL

Q.30 Finally, how easy or difficult would you say it is to understand the instruction leaflets that come with medicine?
Would you say it is....

FLIP ORDER. READ OUT.

Very easy	1
Easy	2
Difficult.....	3
Very difficult.....	4
Don't know (DNRO)	5

Appendix B

National Survey on Cancer Awareness and Attitudes Advisory Group membership

Name	Organisation
Triona McCarthy (Chair)	Director of Public Health, National Cancer Control Programme
Áine Lyng	Cancer Prevention Officer, National Cancer Control Programme
Maria McEnery	Cancer Prevention Officer, National Cancer Control Programme
Una Kennedy	GP Advisor, National Cancer Control Programme
Katharine Harkin	Specialist in Public Health Medicine, National Cancer Control Programme
Heather Burns	Specialist in Public Health Medicine, National Cancer Control Programme
Louise Mullen	National Lead for Cancer Survivorship, National Cancer Control Programme
Celia O Hare	SpR Public Health Medicine National Cancer Control Programme
Paul Brosnan	Health and Wellbeing Programme, Department of Health
Ciaran Murphy	Cancer Policy Unit, Department of Health
Noreen Murtagh	Patient/public representative
Claire Collins	Director of Research & Innovation and Director of People & Culture Irish College of General Practitioners
Deirdre Murray	Director, National Cancer Registry Ireland
Helen Deeley	Interim AND HSE Health & Wellbeing
Ciara Reynolds	Public Health Development Officer, Institute of Public Health
Helen McAvoy	Director of Policy ,Institute of Public Health
Laura Heavey	Specialist in Public Health Medicine, National Screening Service
Kathleen Bennett	Head of the Data Science Centre RCSI / Associate Professor of biostatistics
Margaret Fitzgerald	Public Health Lead for HSE Social Inclusion/ Vulnerable Groups
Muireann De Paor	SpR Public Health Medicine, Area A
Grainne Begley	Project Manager, Social Inclusion / Public Health
Fiona Mansergh	Assistant Principal, Health and Wellbeing Programme, Department of Health
Anna Gavin	Consultant in Public Health, Director NI Cancer Registry & Professor, Queens University Belfast

Note: The Irish Cancer Prevention Network, consisting of the National Cancer Control Programme, the Irish Cancer Society, The Marie Keating Foundation, Breakthrough Cancer Research, the HSE National Screening Service and The Irish Skin Foundation were consulted during the development of the research.

Appendix C

National Survey on Cancer Awareness and Attitudes

Advisory Group

Terms of Reference

Purpose

The National Cancer Control Programme (NCCP) is establishing an inter-disciplinary group to advise on the development and implementation of a National Survey on Cancer Awareness and Attitudes. The project is being co-ordinated by the NCCP Cancer Prevention Function.

Background

Information regarding baseline cancer knowledge, awareness and attitudes amongst the population living in Ireland is required to inform development of effective cancer prevention and early detection initiatives. National population based surveys to gather this information have been completed in the UK (The Cancer Awareness Measures), Europe (Awareness and Beliefs about Cancer) and France (The French Cancer Barometer).

The aim of this project is to undertake and publish results of a National Survey on Cancer Awareness and Attitudes amongst adults (aged 18+) living in Ireland to

- Assess public knowledge/awareness of risk and preventive factors for cancer, including non-modifiable and modifiable factors.
- Assess attitudes and behaviours in relation to cancer risk factors.
- Assess knowledge of early signs/symptoms of cancer.
- Assess health seeking behaviour, including barriers and enablers to seeking medical advice.
- Inform development of cancer prevention and early detection initiatives.

The survey will be designed with input by the NCCP Survey Advisory Group, using the 'Cancer Awareness Measure 2019', the "Awareness and Beliefs about Cancer Measure" and the "French Cancer Barometer. Methodology for data collection is to be decided through the procurement of an experienced marketing and research consultancy firm through the Office of Government Procurement with input from the advisory group. Ethics approval will be sought from the Royal College of Physicians Ireland (RCPI).

Data collection is planned for Q3-Q4 2021 and final report to be published Q2 2022. Data will be further analysed and articles drafted for submission to relevant journals.

Membership Expectations and Frequency of Meetings

Members of the advisory group are expected to actively offer feedback/advice on

1. Survey content design
2. Awarding of tender to marketing and research consultancy firm
3. Consultation with stakeholders
4. Ethics submission to RCPI
5. Data analysis
6. Production of final report
7. Submission of articles to relevant academic journals
8. Dissemination of findings

Meetings will be held virtually via Cisco Webex, with communication between meetings via email to support work progression.

Meeting schedule will be agreed at the advisory group first meeting. If unable to attend, apologies would be appreciated at least 48 hours in advance of the meeting. Do consider nominating an alternative to attend if appropriate.

Administration

Administrative support will be provided by the NCCP. Brief notes and action points will be circulated after each meeting.

Governance

The advisory group will be chaired by the NCCP Director of Public Health. The group will provide advice and guidance to the NCCP Cancer Prevention and Early Detection Function who are undertaking the actions to deliver the project. Each action and output to deliver the project will be signed off by the NCCP Director of Public Health, with guidance from the advisory group.

The NCCP Cancer Prevention Function is led by the NCCP Director of Public Health, who reports to the NCCP Director and NCCP Executive for final sign off on project deliverables.

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