

# Healthy Ireland Survey 2018 Technical Report Prepared by Ipsos MRBI



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# 1. Introduction

The Healthy Ireland Survey is an annual interviewer-administered face-to-face survey commissioned by the Department of Health. It is part of the Healthy Ireland Framework to improve the health and wellbeing of people living in Ireland.

The objectives of this survey are to:

- Provide and report on current and credible data in order to enhance the monitoring and assessment of the various policy initiatives under the Framework.
- Support and enhance Ireland's ability to meet many of its international reporting obligations.
- Feed into the Outcomes Framework for Healthy Ireland and contribute to assessing, monitoring and realising the benefits of the overall health reform strategy.
- Allow targeted monitoring where necessary, with an outcomes-focussed approach, leading to enhanced responsiveness and agility from a policymaking perspective.
- Support the Department of Health in ongoing engagement and awareness-raising activities in the various policy areas and support better understanding of policy priorities.

This report relates to the fourth wave of this survey. Reports relating to previous waves have already been published.

The fourth wave consists of 7,701 interviews conducted with a representative sample of the population aged 15 and older living in Ireland. Respondents were selected using a probability-based methodology and interviewed in their homes. Survey fieldwork was conducted by Ipsos MRBI between September 2017 and June 2018.

### **Background**

The Healthy Ireland Survey uses an interviewer-administered questionnaire with interviews conducted on a face-to-face basis with individuals aged 15 and over. This is the fourth wave of the survey conducted between September 2018 and June 2019. It involves 7,701 interviews with a representative sample of those living in Ireland. It follows the first three waves conducted between 2014 and 2017.

Topics covered by this survey wave include:

- Smoking
- Tobacco packaging
- Alcohol
- Diet and nutrition
- General health
- Health service utilisation
- Oral health

Approval to conduct the study was provided by the Research Ethics Committee at the Royal College of Physicians of Ireland.

### **Development of Survey Instruments**

#### 3.1 Questionnaire Design

A core objective of the Healthy Ireland Survey is to provide a source for current and consistent data on a variety of aspects relating to the health and wellbeing of the population in Ireland. In order to ensure consistency in these measurements some elements of the questionnaire are not changed between survey waves. However, a degree of flexibility exists to introduce changes to other elements of the questionnaire in order to allow for exploration of additional areas of interest.

The process of revising the questionnaire for the 2018 survey wave took place between May and August 2017. This took into account new survey modules requested by the Department of Health as well as revisions to existing modules.

# 3.2 Differences Between Questionnaires Used in 2018 & 2017 Surveys

The table below outlines the key differences between the questionnaires used in the 2018 and 2017 surveys. A copy of the questionnaire used in the 2018 survey is included in the Appendices.

Section	Changes made
General Health	Addition of questions on GP and nurse visits (previously asked on waves 1 and 2).
	Enhanced questions relating to utilisation of emergency care services.
	Addition of questions relating to blood pressure measurements, teeth and flu vaccine.
Smoking	No changes
Alcohol	No changes
Diet and nutrition	Enhanced question relating to consumption of different types of drinks. Addition of question on folic acid supplements.
Weight management	Unchanged
Tobacco packaging	New module
Socio-demographics	Unchanged
Sexual health	Removed from survey
Usage of antibiotics	Removed from survey
Breastfeeding	Removed from survey
Physical activity	Removed from survey
Physical measurements	Removed from survey

#### 3.3 CAPI Scripting

All interviewing was conducted through Computer Assisted Personal Interviewing (CAPI). Following agreement on changes to be implemented to the questionnaire, it was converted into a CAPI script suitable for interviewing.

As with previous waves of the survey a range of procedures were put in place to ensure that the data were suitably validated, further enhancing the quality of the data. Examples of key procedures used were as follows:

- Survey routing to ensure that respondents are only asked those questions relevant to them. For example, only those who smoked were asked questions in relation to quitting.
- Text substitutions in question wording to ensure questions are worded effectively and easily understood. For example, changing the tense of questions relating to employment to reflect current working status.
- Not allowing contradictions at certain questions. For example, the
  interviewer was not permitted to record that the respondent never
  drank six or more standard drinks, if it had already been recorded that
  the respondent typically drank a higher amount than this.

The survey used Dimensions software which is designed with ease of use and minimal training in mind. Question wording and instructions were clearly displayed at the top of the screen, and answer options at the bottom of the screen.

#### 3.4 Questionnaire Testing

In advance of commencement of fieldwork, the questionnaire and CAPI script underwent a period of extensive testing. This rigorous piloting procedure ensured that the questionnaire presented questions to respondents in a meaningful way that could be easily understood and were logical in context of earlier answers given.

The survey script and stimulus materials were subsequently refined based on feedback from this process.

### **Sample Design**

In selecting a sample design strategy before commencing the first wave of this survey, consideration was required in terms of a key objective of the study – to provide data that is in line with best international practice. In this regard, it was decided to utilise a probability sample.

The sampling approach used in this wave directly replicates that used in all previous waves, and a summary of the steps taken are outlined below.

The study uses the An Post/Ordnance Survey Ireland GeoDirectory as the primary sampling frame. GeoDirectory is a complete database of every building in the Republic of Ireland. Each of the 2.2 million addresses contained in GeoDirectory includes an accurate standardised postal address, usage details for each building (commercial or residential), a unique 8-digit identity number, Eircode, and geo-coordinates which accurately locate the centre point of each building to within one metre.

A two-stage equal-probability sample of addresses was drawn, with the aim of attempting to interview a randomly selected individual at each selected address.

The sample was issued in Electoral Division clusters. In line with good sampling practice, all Electoral Divisions containing fewer than 500 addresses were combined with adjacent sectors before the first stage of sampling (i.e. before clusters are selected). This ensured that each cluster covered a sufficiently large geographic area.

The sample was stratified by region and within this by relevant variables. Stratification is effective to the extent that variables chosen as stratifiers correlate with key survey variables. In the light of this, stratified within region, by urban/rural and proportion of owner occupiers.

A total of 686 clusters were selected with probability proportional to address count. Addresses selected for the previous survey waves were removed from the sample, and twenty addresses were then selected systematically (random start and fixed interval skip) from the list of addresses in each PSU, thereby ensuring a spread of addresses across the cluster.

With 10.5% of addresses anticipated to be ineligible and a target 60% response rate (which is considered the gold standard on population studies such as this one) this would deliver an average of 10.74 interviews per cluster.

Summary of sample design	
Number of clusters	686
Number of addresses per cluster	20
Gross sample of addresses	13,720
Estimated number eligible (89.5%)	12,277
Anticipated number of completed interviews	7,366
(60% response rate)	

#### Selecting households and adults

In the cases where an address generates more than one household, one was selected by the interviewer in the field using a random selection method. This method was simple for the interviewer to apply and has a minimal impact on design effects.

In each selected household, individuals aged 15+ were listed and the interviewer selected one eligible individual through a randomised approach (KISH Grid). This is the only individual within that household that could be interviewed, and the interviewer could not seek a replacement if that individual was unwilling to participate.

#### **Fieldwork Procedures**

#### 5.1 Briefing and Training Of Interviewers

A total of 80 interviewers worked on this wave of the Healthy Ireland Survey. This includes 71 interviewers who also worked on a previous wave of the survey.

Interviewers received extensive briefing and training, including a personal briefing by the Project Director at Ipsos MRBI and receiving a detailed interviewer manual.

Topics covered by the briefings included:

- Background to the study
- Questionnaire coverage
- Social class coding
- Sampling and Contact Sheets
- Ethical considerations
- Maximising survey response
- Project administration

In addition to the personal briefing received, all interviewers were also provided with detailed written instructions on all aspects of the project. This included instructions for individual questions to assist interviewers in addressing respondent queries.

Interviewers also had ongoing access to telephone support from field management staff throughout the fieldwork period.

#### 5.2 Interviewer Materials

Upon completion of interviewer training, all interviewers were issued with their initial assignment of twenty addresses as well as a workpack containing the necessary fieldwork materials. This workpack included:

- Survey materials
  - o Interviewer manual
  - A paper copy of the CAPI questionnaire
  - Assignment sheets
  - o Contact sheets including KISH grid selection
  - Showcards and information sheets

#### Advance communications

- Letter of introduction for each household (2 copies of each letter)
- Call back cards
- Appointment cards
- o Garda introduction and form
- o Copy of Healthy Ireland letter to household

#### Respondent materials

- Consent form
- Thank you slips

#### **5.3 Undertaking Survey Fieldwork**

Whilst the interviewing methodology is relatively straightforward to administer, ensuring it is done in the correct manner requires the implementation of specific strategies to ensure respondents understand what is involved in the survey and can provide informed consent. Details on the specific strategies used on this study are provided below.

#### 5.3.1 Sending advance letters to potential respondents

Two advance letters were provided to all households that were selected to take part in the study. One letter was issued on Department of Health/Healthy Ireland headed paper. It informed the household that it had commissioned Ipsos MRBI to undertake this study and that their household had been selected to take part. It also provided an overview of what was involved in taking part in the study. The second letter was printed on Ipsos MRBI headed paper and provided further detail on the survey process and a respondent information sheet providing information on the household selection process and survey content.

Both letters were sent together in the week prior to an interviewer commencing work on that particular assignment. Where the selected address was identified on GeoDirectory as being unique (i.e. it did not share its address with other households), these letters were despatched centrally by post.

In the case of non-unique addresses, interviewers themselves delivered the letters by hand.

In addition, as some households may not recall receiving the letters, interviewers had copies of the letters to show to respondents in households.

This practical step provides reassurance to the occupants of the household, as they will be forewarned about the survey and had both Ipsos MRBI's and Healthy Ireland's details. It also formalises the process lending weight to the notion of a 'preselected address' where no other address could be substituted in its place.

#### 5.3.2 Informing the Garda Síochána

In advance of commencing the fieldwork Ipsos MRBI sent a letter to the Garda Headquarters to inform them of the nature of the survey and that interviewers would be working throughout the country. In addition, interviewers were required to visit local Garda stations in the areas they were working in and deliver a form that informed the local Gardaí that they would be working in the area during a particular time period. This form provided information about their car as well as contact details for the interviewer and the Project Manager. This was accompanied by a copy of the letter that was sent to Garda Headquarters.

This step ensured that Gardaí could provide reassurances about interviewers visiting their area, in particular given that a car they do not recognise may be driving around the area and visiting different households.

#### 5.3.3 Informed consent

Verbal consent was obtained from all participants. In providing this consent, respondents were informed that their participation in the survey was voluntary, that they are free to refuse to answer any particular question, to stop the interview at any point and to request that all data they provided to Ipsos MRBI be destroyed. Signed consent from the parent/guardian of those aged under 18 was received prior to approaching a minor to request their participation in an interview.

#### 5.3.4 Additional forms of communication

In addition to the information provided to respondents through a variety of written and verbal communication from Healthy Ireland, Ipsos MRBI and the interviewer, respondents could request further information through a variety of forms of contact. All materials provided to respondents included a telephone number and email address to make contact with the project management team. In addition, the Ipsos MRBI website included a dedicated section with an outline of the study and a contact form should further detail be required.

#### 5.3.5 Multiple contacts with households

Interviewers carried out up to five calls – an initial call, plus four call-backs – at each address for each potential respondent in each household, at different times and days. In practice, some addresses would have received more calls in order to convert "soft refusals" and to follow-up on appointments with other members of the household.

Interviewers also left appointment cards at households where a respondent was not at home. This card provided brief details of the study and a name and telephone number to call either to arrange an interview at a time most convenient to them or to find out more about the study.

#### **5.4 Fieldwork Quality Controls**

Ipsos MRBI's ISO 9001 certified fieldwork management procedures were used to ensure timely and effective completion of interviewing. This involved a number of specific procedures:

- Ongoing contact with interviewers and field management to monitor progress across individual sampling points and regions;
- Completed interviews were uploaded by interviewers on a daily basis to ensure that interim data files could be produced to check the quality and integrity of the data;
- Interviewers had the support of head office field management staff throughout the project, ensuring a swift resolution to any problems that emerged.

In order to monitor progress, and calculate response rates, interviewers completed a contact sheet for each address that was issued to them. These contact sheets were prefilled with household address and sample identifier numbers, and required interviewers to record details of each visit to the household and outcomes for individual household members.

A key element of the quality control process involves randomly selecting a minimum of 10% of all assignments and contacting each household. In doing so, householders are asked a series of questions including:

- Whether an interviewer has called to their house recently
- What the subject of the survey was
- How long the survey took in total
- Overall rating of the interviewer
- Verification of selected survey questions

A total of 107 interviewing assignments were randomly selected and contacted by telephone. In order to maximise the number of households contacted, each telephone number was attempted up to three times. All who were contacted verified the survey information that was collected. As such no changes were made to the data as a result of these quality checks.

# 6. Fieldwork Response

In order to conduct the Healthy Ireland survey, 13,720 addresses were preselected in advance of fieldwork in line with the sampling procedures outlined in section four of this report. In order to maximise the robustness of this approach it is crucial to achieve a high response rate. A core requirement of the Healthy Ireland Survey is to achieve a response rate of 60% amongst all eligible households.

Table 6.1 below details the response rate for each household that was sampled.

Table 6.1 Overview of fieldwork response

Category	Outcome	Cases
Complete		
interview	Full interview	7,701
Unproductive	No reply after five contacts	1,858
address	Address inaccessible/dangerous	225
	Address not found	100
	Appointment not maintained by respondent	9
	Partial interview	9
	Other reason unproductive	371
Refusal	Upfront refusal to interviewer	1,990
	Respondent refusal by contacting head office	153
Ineligible	Property vacant	852
	Occupied, but not main residence (e.g. holiday	
	home)	172
	Non-residential address	186
	Communication difficulties	94
Total		13,720

The response rate is calculated by dividing the number of complete interviews by the sum of all addresses minus ineligible addresses. The response rate therefore is 62.0% (7,701 divided by 12,416). This is higher than what was achieved on previous waves.

Further analysis of the response rate indicates a much lower response rate in Dublin compared to other regions (47.2% within Dublin compared to 67.7% outside Dublin). This is comparable to other surveys and is addressed through the post-survey weighting structure that is applied.

Table 6.2 Fieldwork response by region

Category	Outcome	Dublin	Rest of Leinster	Munster	Conn/ Ulster
Complete interview	Full interview	1,613	2,066	2,137	1,885
Unproductive address	No reply after five contacts	723	375	523	237
	Address inaccessible/ dangerous	142	35	36	12
	Address not found	28	15	35	22
	Appointment not maintained by respondent	3	1	1	4
	Partial interview	5	1	2	1
	Other reason unproductive	124	80	122	45
Refusal	Upfront refusal to interviewer	714	434	624	218
	Respondent refusal by contacting head office	67	26	46	14
Ineligible	Property vacant	155	212	258	227
	Occupied, but not main residence (e.g. holiday home)	2	53	69	48
	Non-residential address	73	37	50	26
	Communication difficulties	31	25	17	21
Total		3,680	3,360	3,920	2,760
Response rate		47.2%	68.1%	60.6%	77.3%

Over the course of the fieldwork period, 35,762 contacts were made to the 13,720 households that were selected. This equates to an average of 2.61 contacts per household, with 2,366 households being contacted at least five times before a final outcome was achieved.

Table 6.3 Number of contacts made to each selected household

Number of contacts made to household	Number of households
1	4,703
2	3,070
3	2,151
4	1,430
5	1,450
6 or more	916
Total	13,720

### **Data Preparation**

#### 7.1 Data Processing

As the survey was conducted through CAPI (Computer Assisted Personal 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 was conducted to ensure the accuracy of the final dataset.

Data processing was conducted on an ongoing basis during survey fieldwork. This involved a number of tasks:

- Data entry of contact sheets
- Data entry of self-completion questionnaires
- Merging and validation checks between different data sources (CAPI interview and contact sheet)
- Logic checking of data
- Formatting of values for missing, don't know and refused answers
- Review and recoding of other specify codes
- Allocation of social class coding
- Creating derived variables to facilitate data analysis (for example, calculation of annual number visits to GP/nurse)
- Formatting of variable names to ensure they appear in a sensible manner in the dataset
- Converting final data into SPSS format and checking that transition was made correctly

Whilst some of this process was semi-automated, it also involved an extensive amount of manual checking of data and comparisons between different data sources. Extensive analysis was also conducted at this stage and compared to other population studies and national statistics to ensure comparability with other datasets.

All data processing was conducted by Ipsos MRBI's specialist data management team and data were delivered in SPSS format.

#### 7.2 Data Weighting

A survey of this nature requires data weighting for two reasons. Firstly, differential response rates mean that some groups in the population are less likely to respond to the survey than others. This may be due to them being less accessible (for example, younger males typically spend less time at home than other groups so are less likely to take part in surveys), or are being less amenable to an approach to participate in a survey (for example, those living in large urban areas are typically less likely to take part in surveys than those living in rural areas).

Secondly, the sampling approach used for this survey (one individual selected at random within a household) meant that those living in households with fewer people were more likely to be selected than those living in households with more people. For example, someone living alone in a selected household is three times more likely to be selected than someone living with two other individuals aged 15 or older.

As such, data weighting is used to overcome potential distortions that could arise as a result of these factors.

The first stage in producing these weights is to generate a selection weight. This is done in order to address any issues that may arise due to those living in smaller households being more likely to be selected. In doing so a weight is calculated that is the inverse of the selection probabilities – i.e. those living in larger households had a higher weight applied than those living in smaller households.

The second stage in this process is to overcome discrepancies that arise due to differential response rates. In doing so the weighting variables should relate to both response behaviour (i.e. likelihood of participating) and healthy behaviours. With this in mind, weights were produced by the following variables.

- Age by sex
- Education
- Working status (respondent)
- Region

Population information taken from Central Statistics Office (Census and Quarterly National Household Survey), and a rim weighting process was used.

The weights were checked at each stage and a small number (around 0.5%) of high weights were capped to prevent extreme weights. The final weights were scaled to give a mean of one and ensure the weighted sample size matches the unweighted sample size.

The weighting scheme results in a design effect of 1.42 and an effective base size of 5,430.

### **Appendices**

Appendix A	Final Questionnaire
Appendix B	Showcards
Appendix D	Contact Sheet
Appendix D	Letter of Introduction (Ipsos MRBI)
Appendix E	Letter of Introduction (Department of Health)
Appendix F	Parental Consent Form

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