INFORMATION
ANALYSIS
DIRECTORATE

Health Survey (NI)
Technical report 2020/21

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Health Survey (NI): Technical Report 2020/21

Public Health Information & Research Branch, Information Analysis Directorate

Department of Health
Castle Buildings, Belfast BT4 3SQ
☎Tel: 02890 522 340
☎Ext: 22340

🖂 Email: phirb@health-ni.gov.uk
Health Survey Northern Ireland

Information Analysis Directorate (IAD) sits within the **Department of Health (DoH)** and carries out various statistical work and research on behalf of the department. It comprises four statistical areas: Hospital Information, Community Information, Public Health Information & Research and Project Support Analysis.

IAD is responsible for compiling, processing, analysing, interpreting and disseminating a wide range of statistics covering health and social care.

The statisticians within IAD are out-posted from the Northern Ireland Statistics & Research Agency (NISRA) and our statistics are produced in accordance with the principles and protocols set out in the UK Code of Practice for Official Statistics.

About Public Health Information and Research Branch

The role of Public Health Information and Research Branch (PHIRB) is to support public health policy development through managing the public health survey function while also providing analysis and monitoring data. The head of the branch is the Principal Statistician, Mr. Bill Stewart.

In support of the public health survey function, PHIRB is involved in the commissioning, managing and publishing of results from departmental funded surveys, such as the Health Survey Northern Ireland, All Ireland Drug Prevalence Survey, Young Persons Behaviour & Attitudes Survey, Patient Experience Surveys and the Adult Drinking Patterns Survey.

The branch also houses the NI Health and Social Care Inequalities Monitoring System which covers a range of different health inequality/equality based projects conducted for both the region as well as for more localised area levels. In addition, PHIRB is responsible for the production of official life expectancy estimates for NI, and areas within the region.

PHIRB provides support to a range of key DoH NI strategies including Making Life Better, a 10 year cross-departmental public health strategic framework as well as a range of other departmental strategies such as those dealing with suicide, sexual health, breastfeeding, tobacco control and obesity prevention. It also has a key role in supporting the Departmental Alcohol and Drug Strategy, by maintaining and developing key departmental databases such as, the Substance Misuse Database, Impact Measurement Tool and the Census of Drug & Alcohol Treatment Services, which are all used to monitor drug misuse and treatments across Northern Ireland. In addition to Departmental functions, PHIRB also support the executive level Programme for Government and its strategic outcomes through a series of performance indicators.

Technical Notes

Fieldwork

The fieldwork for the survey was conducted from June 2020 to March 2021. Due to the coronavirus pandemic face-to-face interviewing, or CAPI (Computer Assisted Personal Interviewing), was put on hold. This was replaced by telephone interviewing, or CATI (Computer assisted Telephone Interviewing). An additional consequence of the pandemic meant that survey interviewers could no longer call to sampled addresses to try and encourage people to participate in the survey. Instead, there was a reliance on individuals responding to postal invites (advance letters) by either phoning the office or using digital forms to make an expression of interest (EOI).

Sample

The sample for the survey consisted of a systematic random sample of addresses from the Northern Ireland Statistics and Research Agency (NISRA) Address Register (NAR). The NAR is developed within NISRA and is primarily based on the Land & Property Services (LPS) POINTER database. Each address within the NAR is given an address score ranging from 0 to 10 by NISRA which is based on information gleaned from other address based datasets and/or administrative sources. A score of 10 indicates the highest likelihood of the property being an occupiable domestic address.

A total of 6,240 addresses were selected for interview. From an eligible sample of 5,364 addresses*, 980 households took part, giving a response rate of 18%. At each household, everyone aged 16 or over was selected to participate in the survey. A total of 1,408 interviews were achieved.

** As survey interviewers could not call to sampled addresses during the 2020-21 survey to determine eligibility (and encourage people to participate in the survey), the ineligible response for the 2019-20 survey year was used.*

The achieved response rate on the survey in telephone mode is a lower response compared to the normal achieved response rate of 55% in face-to-face mode. This has reduced the number of cases at the household and individual levels; the final achieved sample was 1,408 individuals. The precision of the survey estimates in the 2020-21 year is thus reduced compared to previous findings, in particular when broken down by sub-groups of the population; the accompanying trend tables outline the survey estimates and the respective confidence intervals.

Weighting

The results are based on information that has been weighted by age-group, sex and deprivation quintile in order to better reflect the composition of the general population of NI.

The demographic profile of the achieved sample has changed in comparison with previous years including more of an under-representation of people aged 16-44 and there are fewer households from the most deprived areas and more households from the least deprived areas. To account for this, a weight based on sex, age and Multiple Deprivation Measure (MDM) was applied to the data. Whilst this weighting should reduce bias in the results, it cannot eliminate all forms of bias which may be

present in the data. It should be noted that this is the first year MDM has been incorporated into the health survey weight variable. The weights for previous years were based on sex and age.

From 2018/19, as part of an ongoing methodological review, a revised weighting methodology has been adopted. For comparison purposes, the trend tables accompanying the report have been updated to reflect the revised methodology.

Sampling error

As the results are based on data collected from a sample of the population, they are subject to sampling error. This should be taken into consideration when interpreting the results. Differences reported are those that are statistically significant at the 95% confidence level.

Percentages

Percentages may not always sum to 100 due to the effect of rounding or where respondents could give more than one answer.

Age range

Unless otherwise specified, results relate to adults aged 16 and over.

Deprivation Quintile

The NI Multiple Deprivation Measure 2017 (NIMDM) is the official measure of deprivation in NI, and replaces the NIMDM 2010. The NIMDM 2017 allows the 890 Super Output Areas in NI to be ranked in relation to deprivation. Further detail on the measure is available online.

Based on their home address, respondents were allocated to deprivation quintiles throughout this report using the NIMDM 2017. Results from earlier health surveys are based on NIMDM 2010.

Longstanding illness & Limiting longstanding illness

To establish the proportion of respondents with a long standing illness, interviewees were asked if they had 'any physical or mental health condition or illness lasting or expected to last 12 months or more'. If this long-standing illness also reduced a respondents 'ability to carry out day-to-day activities' the long-standing illness was then classified as limiting.

General Health Questionnaire (GHQ12)

The GHQ12 is a screening tool designed to detect the possibility of psychiatric morbidity in the general population. The questionnaire contains 12 questions about recent general levels of happiness, depression, anxiety and sleep disturbance. Responses to these items are scored, with one point given each time a particular feeling or type of behaviour was reported to have been experienced 'more than usual' or 'much more than usual'. A score is then constructed from combined responses to create an overall score of between zero and twelve. A score of 4 or more is classified as a respondent with a possible psychiatric disorder, and referred to as a 'high GHQ12 score'.

General Health Questionnaire (GHQ – 12) ©David Goldberg, 1978

Loneliness

The loneliness questions are based on the three-item version of the UCLA scale. This scale asks indirectly about loneliness using the following questions:

How often do you feel that you lack companionship?

How often do you feel left out?

How often do you feel isolated from others?

Responses to each question have been scored to provide a single loneliness score.

Loneliness score: To calculate a composite score, the answer options of *hardly ever*, *some of the time* and *often* were scored *1*, *2* and *3* respectively, giving each respondent a score between 3 and 9. For the purposes of this analysis, respondents with a score of 6 to 9 are identified as showing signs of loneliness.

Additionally, a direct question on loneliness was included:

How often do you feel lonely?

Wellbeing

Respondents were asked four questions relating to how they felt about certain aspects of their life; satisfaction with life, feeling that the things they do are worthwhile, happiness, and level of anxiety. They were asked to place themselves on a scale of 0 to 10, with 0 being '*not at all*' and 10 being '*completely*'.

Impact of the coronavirus (COVID-19) pandemic on data collection

There are a number of factors which users should take into consideration when interpreting the 2020/21 results and care should be taken when comparing these to previously published findings. Below is a summary of the factors to be considered. Further details on these changes can be found in a document published alongside this bulletin, titled 'Health Survey Northern Ireland 2020/21 - Things users need to know'.

- The change in data collection mode from face-to-face to telephone may have altered how people responded to the survey.
- The change in data collection mode necessitated a reduction in the number of questions and changes to how some questions were asked or presented as well as the response categories associated with them. In particular, the more sensitive topics (e.g. GHQ12 and loneliness) in the survey are usually completed as a self-completion module where the respondent answers the questions directly. This may also have implications for how people responded to the survey.
- The achieved response rate on the survey in telephone mode was 18% and this is a lower response compared to the normal achieved response rate of 55% in face-to-face mode. This has reduced the number of cases at the household and individual levels; the final achieved sample was 1,408 individuals. The precision of the survey estimates in the 2020-21 year is thus reduced compared to previous findings, in particular when broken down by sub-groups of the population; the accompanying trend tables outline the survey estimates and the respective confidence intervals.

- The demographic profile of the achieved sample has changed in comparison with previous years including more of an under-representation of people aged 16-44 and there are fewer households from the most deprived areas and more households from the least deprived areas. To account for this, a weight based on sex, age and Multiple Deprivation Measure (MDM) was applied to the data. Whilst this weighting should reduce bias in the results, it cannot eliminate all forms of bias which may be present in the data. For some topics that are generally higher in deprived areas, it is possible that the findings may underestimate true prevalence. It should be noted that this is the first year MDM has been incorporated into the health survey weight variable. The weights for previous years were based on sex and age.

Any changes within the 2020-21 data compared to previous years have to be considered in the context of all of the above. Caution should be taken in reaching any conclusions based on 2020-21 data and comparisons with previous years as the findings may not be directly comparable with previous years.

Please note that this report is based on findings for 2020/21 and as such, individual responses to some behavioural, attitudinal and health related questions may also be impacted to a degree by which Government restrictions were in place for the pandemic at the time the interviews took place. As interviews were carried out across the period June 2020 to March 2021, the figures in the report can be regarded as a representative average across the whole year.