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The Scottish Health Survey

2020 edition - telephone survey | volume 1 | main report

An Experimental Statistics Publication for Scotland

CONTENTS

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Editors' acknowledgements

Firstly, we would like to thank the 1,920 adults across Scotland for giving up their time to participate in the 2020 telephone survey and for allowing our interviewers to call their homes to complete the survey.

We would also like to thank those colleagues who contributed to the survey and this report. In particular, we would like to thank:

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Joanne McLean, Lisa Rutherford and Victoria Wilson.

Foreword from the Chief Medical Officer

This report presents the findings of the 2020 Scottish Health Survey – Telephone survey, presenting results for the period August/September 2020.

The survey provides us with immensely valuable information on cardiovascular disease and related risk factors including smoking, alcohol consumption, diet, physical activity and obesity. Questions on general health, mental health and dental health were also included. This information provided by the survey is more important than ever in the context of the COVID-19 pandemic and its impact on our physical and mental health and daily lives. A shortened version of the survey questionnaire focussing on key indicators was adopted together with additional questions about some perceived changes since the UK went into nationwide lockdown in March and whether the respondent was at high clinical risk of COVID-19 (the group previously advised to shield).

The restrictions necessitated by the pandemic meant that the survey could not be conducted in the usual way of interviewing people within the home and, as such, was adapted to an opt-in telephone model enabling key information to continue to be collected at this time of immense change. Shifting a complex household survey to an alternative methodology and in such a short period of time was a significant undertaking and experimental in nature. Lessons have been learnt which are being used to inform the approach for 2021 as we continue to work within the context of the pandemic.

The survey was commissioned by the Scottish Government and produced by a collaboration between ScotCen Social Research, the MRC/CSO Social and Public Health Sciences Unit at the University of Glasgow and the Public Health Nutrition Research Group at Aberdeen University.

I am pleased to welcome this valuable report and to thank the consortium led by ScotCen Social Research for their cooperation and support in developing the survey and for conducting the survey and preparing this report. Most importantly, I would also like to thank the 1,920 people who gave their time to participate. The information they have provided is invaluable in developing and monitoring public health policy in Scotland at this time.

Dr Gregor Smith
Chief Medical Officer for Scotland
Scottish Government Health Directorates

INTRODUCTION

Joanne McLean, Lisa Rutherford and Victoria Wilson

POLICY CONTEXT

As a study of public health, the Scottish Health Survey (SHeS) plays an important role in assessing health outcomes and challenges in Scotland. With aims to reduce health inequalities and improve Scotland's life expectancy status, currently one of the lowest in Western Europe (including in the UK)[1], improving the health and wellbeing of Scotland's population continues to be a key policy focus both at local and national level.

In 2018, the Scottish Government launched six inter-related public health priorities designed to improve the health of the population and reduce health inequalities[2]. These priorities were accompanied by the publication of a revised National Performance Framework (NPF)[3] which covers the eleven National Outcomes that help to describe the kind of Scotland the Framework aims to create. The NPF also links with a number of the United Nation's Sustainable Development Goals[4] and helps to measure progress towards the NPF vision for Scotland, including that 'we are healthy and active'.

The context for public health in 2020 presented unique and unprecedented challenges with the emergence of the COVID-19 pandemic. Flexible, fast-paced and responsive health guidance and initiatives were required given the continuously changing circumstances and developing scientific understanding of the virus. This was guided by the Chief Medical Officer and through liaison with the governments within the UK, the World Health Organisation (WHO) and the international community[5], both following the initial nationwide lockdown and during the subsequent route map out of lockdown[6] as restrictions were eased or reintroduced as necessary.

COVID-19 has resulted in unprecedented disruption to healthcare services and life in general. All areas of society have been affected as individuals, teams and communities have had to adapt to meet these new challenges. Many services have been necessarily paused, stepped down or have undergone significant reconfiguration during the period of the COVID-19 pandemic. While safe and incremental resumption of many of these services began over the summer period, the resurgence in cases over the autumn alongside the concurrent risks associated with winter have meant that the balance between COVID and non-COVID services has had to be kept under constant review, with a need to measure restarting paused services against the need to keep the virus under control.

The Scottish Government is following an evidence-based, cautious and phased approach to achieving that balance and re-mobilising NHS services, working closely with Health Boards and their partners to minimise the impact on patients going forward while also being able to respond to ongoing COVID-19 requirements as necessary.

The effects of the COVID-19 pandemic are likely to be felt for some time, not only in relation to physical health but also mental and emotional wellbeing, as well as existing health inequalities. In such a context, continuing to collect data on the health of Scotland's population remained paramount. However, the circumstances of lockdown and associated physical distancing requirements meant that an alternative way of sourcing such information was needed than the face-to-face approach previously used. As such, the decision was taken to collect data for key measures from SHeS via a telephone survey, whereby potential respondents aged 16 and over were contacted by letter and asked to opt-in to an interview conducted over the phone. No interviews were conducted with or about children aged 15 and under.

At the time of interviewing (5th August to 23rd September 2020) COVID-19 cases had reduced after the first wave of the pandemic and restrictions relating to time outside of the home, social interactions and businesses that could open had been eased. Those previously advised to shield had been told they no longer had to from 1st August[7].

This shorter SHeS 2020 telephone survey was undertaken in order to capture data on key survey measures as quickly as possible and to add to the growing evidence base on public health during the pandemic. Of particular interest were the national indicators relevant to health[8] including:

- Wellbeing
- Healthy Weight
- Health Risk Behaviours
- Physical Activity
- Food insecurity

Each of the chapters included in this volume addresses an aspect of health that relates either directly or indirectly to the Scottish Government's objective that 'we are healthy and active'[9].

The accompanying technical report for the SHeS 2020 telephone survey provides further information on the method used for this survey. While every effort was made to retain questions that were consistent with the face-to-face surveys as far as possible, it should be noted that due to a change in the mode used to collect the data (from face-to-face to telephone collection) and the shorter data collection period (August – mid September 2020), this data is not directly comparable with the previous findings from face-to-face SHeS surveys. It is, however, a useful snapshot into the health of the population during the COVID-19 pandemic and a useful exercise in aiding the development of the SHeS approach for data collection in 2021

THE SHeS SERIES

SHeS has been carried out annually since 2008 and prior to this was carried out in 1995[10], 1998[11], and 2003[12]. Fieldwork for SHeS 2020 (the sixteenth face-to-face survey in the series) was suspended towards the end of March 2020 as the UK went into a nationwide lockdown at the outset of the COVID-19 pandemic.

Commissioned by the Scottish Government Health Directorates, the SHeS series aims to provide regular information on aspects of the public's health and factors related to health which cannot be obtained from other sources. The specific aim of the telephone survey was to provide national level data on health, health conditions and the prevalence of certain risk factors associated with these health conditions for adults over a specified period of time during the COVID-19 pandemic.

The SHeS 2020 telephone survey methods differ from the usual SHeS methods in a number of ways which are likely to impact the responses received and so affect comparability with previous SHeS data. For more information on the questions and measures covered by the SHeS series using the face-to-face approach, see the SHeS 2019 Technical report[13].

THE SHeS 2020 TELEPHONE SURVEY

The SHeS 2020 telephone survey was undertaken by ScotCen Social Research. Due to the testing of a new methodology for SHeS (already a well-established survey programme) within the context of the COVID-19 pandemic, the survey results in this report are presented as experimental statistics. This means that the survey reported upon was in a testing phase and that users should be aware of the mode differences and potential impact on results (see individual chapters and section 1.1.4 in the technical report for more detail).

Analysing and publishing this experimental statistics allows the method and data reported to be evaluated for its suitability as a potential method for use in the future and an assessment to be made on whether the survey vehicle delivers data that meets the needs of the Scottish Government and other users of the SHeS data, particularly in light of ongoing restrictions related to the COVID-19 pandemic.

The results of the telephone survey are not directly comparable to SHeS results for previous years for three main reasons. Firstly, the difference between levels of response by deprivation was greater than usual, with fewer people in deprived areas taking part than is usually the case. The survey weighting was amended to adjust for this as far as possible but the indication is that there were an insufficient number of interviews amongst the very deprived to make the results fully representative. Hence, for some indicators that are generally higher in deprived areas it is possible that the telephone survey results may underestimate true prevalence.

The second reason is that some of the more sensitive questions in the survey (such as those on mental health, food insecurity and loneliness) are usually included in a self-completion form which participants complete themselves rather than the interviewer asking the questions. Self-completion formats may illicit a more accurate response from some participants who feel more comfortable answering sensitive questions privately. Hence, for these indicators the telephone survey may less accurately reflect true prevalence (see Volume 2: Technical Report for more information).

Lastly, the short data collection period, selected to facilitate rapid data collection, means that it was not possible to monitor changes in indicators that can occur as a result of seasonality or whether changes occurred as restrictions have been eased or reintroduced.

Topics

The SHeS 2020 Telephone Survey was intended to provide a snapshot of the health of Scotland's population, both physical and mental, during a short period within the COVID-19 pandemic. The questionnaire was shorter than the usual SHeS survey and, as such, the scope of the survey was broad rather than permitting a detailed focus on particular topic areas. In addition to interest in general health, long-term conditions and health risk behaviours, mental health (including social capital and loneliness) has also been a topic of particular interest throughout the pandemic and in turn, featured in the SHeS 2020 telephone survey. Cardiovascular disease (CVD) and related risk factors (smoking, poor diet, lack of physical activity, obesity and alcohol use) remained a key focus of the survey, as covered in chapters 4-7. The main components of CVD are ischaemic heart disease (or coronary heart disease) and stroke, both of which are clinical priorities for the NHS in Scotland[14,15].

The other chapters in this report focus on health conditions and experiences which have the potential to influence health outcomes in the short-term and in later life - general health, long-term conditions and caring (Chapter 1), mental wellbeing (Chapter 2), social capital and loneliness (Chapter 3) and dental health (Chapter 8).

It is important to note that the data presented in this report is for a short period in 2020 and that it was not possible to capture data at the very start of the lockdown period when restrictions were at their most wide-ranging.

Sample

The Scottish Health Survey series was designed to yield a representative sample of the general population living in private households in Scotland every year. Due to the opt-in approach for the telephone survey (see Fieldwork), achieving a representative sample was harder to control for. See sections 1.6.4 and 1.7 of the technical report for more information on variations in the sample profile and the weighting approach used to attempt to adjust for these differences.

In line with annual surveys in the series, a random sample of addresses (11,000 addresses) was selected from the Postcode Address File (PAF), using a multi-stage stratified design. The number of addresses in the sample was more than would usually be sampled for a survey of this length as it was estimated that the response rate would be lower when using an opt-in method. Participating households included in the survey were those from which a respondent or respondents contacted ScotCen to opt in to taking part. All adults aged 16 and over within these opt-in households were also given the opportunity to take part once initial telephone contact had been made.

As for the Scottish Health Survey in previous years, those living in institutions were outwith the scope of the survey. This should be borne in mind when interpreting the survey findings as respondents living in these settings are more likely to be older and, on average, in poorer health than those in private households.

Fieldwork

A letter stating the purpose of the survey was sent to each sampled address inviting all adults aged 16 and over to opt in to the telephone survey, either via an online portal, by email or by calling the survey freephone number. An interviewer from ScotCen then contacted, by telephone, those who opted in to complete the interview. Any adult living in a household where someone opted in to take part was eligible to participate. As a thank you, each participating adult received a £10 Love2Shop gift voucher.

Interviewing was conducted using Computer Assisted Telephone Interviewing (CATI), where the questionnaire answers were input directly to a laptop. The content of the interview and full documentation are provided in the accompanying technical report.

Towards the end of the interview self-reported height and weight measurements were taken from those who were willing to provide them. Unlike the face-to-face survey (where blood pressure, waist circumference and saliva samples are taken for a subset of the adult sample), no interviewer-administered biological measurements were taken as part of the telephone survey.

Survey response

Between 5th August 2020 and 23rd September 2020, interviews were conducted with 1,920 adults (aged 16 and over) across 1,384 households. Although the issued sample was much larger than for the usual face-to-face surveys to allow for the lower levels of response generally achieved by opt-in surveys, response levels were particularly low for those living in the most deprived areas and amongst younger adults. Further details on survey response are presented in the technical report.

Ethical Approval

Ethical approval for the 2020 SHeS telephone survey was obtained from the Research Ethics Committee (REC) for Wales (reference number 17/WA/0371). Approval was sought from REC Wales as this is the Committee which approved SHeS under the current contract.

DATA ANALYSIS

Weighting

Since addresses and individuals did not all have equal chances of selection and respondents self-selected by opting in to the survey, the data had to be weighted for analysis. A detailed description of the weights is available in the accompanying technical report.

Weighted and unweighted data and bases in report tables

All data in the report are weighted. For each table in the report both weighted and unweighted bases are presented. Unweighted bases indicate the number of participants involved. Weighted bases indicate the relative sizes of sample elements after weighting has been applied.

Standard analysis variables

As in all previous SHeS reports, data for men and women are presented separately where possible. Survey variables are tabulated by age groups and where possible, by other questions in the survey. This includes presentation of several key indicators by whether or not respondents had received a letter/text advising them to shield. The age profile of the shielding group is generally older and the majority of people in this group have at least one long-term condition. This should be borne in mind when comparing results with those for people who have not received a shielding letter or text.

Statistical information

The SHeS 2020 telephone survey used a stratified multi-stage sample design. In addition, weights were applied when obtaining survey estimates. One of the effects of using the complex design and weighting is the standard errors for the survey estimates are generally higher than the standard errors that would be derived from an unweighted simple random sample of the sample size. The calculations of standard errors shown in tables, and comment on statistical significance throughout the report, have taken the stratifications and weighting into account. Full details of the sample design and weighting are given in the technical report.

Presentation of results

Commentary in the report highlights differences that are statistically significant at the 95% confidence level. Statistical significance is not intended to imply substantive importance. A summary of findings is presented for each chapter, along with a visual infographic summary. A description of the methods and key definitions can be found in the accompanying technical report. A link to the tables showing the results discussed in the text is included at the end of each chapter.

Due to the change in mode of administration and the different approach to sampling, no trends have been presented in this report since data collected in these different ways are not directly comparable. See section 1.1.4 of the technical report for more information on the differences in survey modes that are likely to impact on the responses received and comparability with previous SHeS data.

Availability of further data and analysis

As with surveys from previous years, a copy of the SHeS 2020 telephone survey data will be deposited at the UK Data Archive.

CONTENT OF THIS REPORT

This volume contains chapters with a summary of results from the SHeS 2020 telephone survey, and is one of two volumes based on the survey, published as a set as 'The 2020 Scottish Health Telephone Survey':

Volume 1: Main Report

1. General Health, Long-term Conditions & Caring
2. Mental Wellbeing
3. Social Capital & Loneliness
4. Diet, Obesity & Food insecurity
5. Physical Activity
6. Alcohol
7. Smoking
8. Dental Health

Volume 2: Technical Report

Volume 2 includes a description of the survey methods including: survey design and response and sampling and weighting procedures.

Both volumes are available on the Scottish Government website: https://www.gov.scot/collections/scottish-health-survey.

References and notes

[1] Scottish Government: Population Health Directorate. *Health improvement.* [Online]. Available from: https://www.gov.scot/policies/health-improvement/

[2] Scottish Government: Population Health Directorate. *Scotland's Public Health Priorities.* [Online].Available from: https://www.gov.scot/publications/scotlands-public-health-priorities/pages/1/

[3] See: http://nationalperformance.gov.scot//

[4] United Nations (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development.* [Online]. Available from: https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf

[5] Scottish Government. *Coronavirus in Scotland.* [Online]. Available from: https://www.gov.scot/coronavirus-covid-19/

[6] Scottish Government (2020). *Coronavirus (COVID-19): Scotland's route map through and out of the crisis.* Edinburgh. Available from: https://www.gov.scot/publications/coronavirus-covid-19-framework-decision-making-scotlands-route-map-through-out-crisis/

[7] *Coronavirus (COVID-19): Scotland's route map.* Edinburgh: Scottish Government (2020). Available at: https://www.gov.scot/collections/coronavirus-covid-19-scotlands-route-map/

[8] See: http://nationalperformance.gov.scot//

[9] See: https://nationalperformance.gov.scot/national-outcomes/health

[10] Dong W and Erens B. *The 1995 Scottish Health Survey.* Edinburgh: The Stationery Office. 1997. Available from: https://www.sehd.scot.nhs.uk/publications/sh5/sh5-00.htm

[11] Shaw A, McMunn A and Field J. *The 1998 Scottish Health Survey.* Edinburgh: The Stationery Office. 2000. Available from: https://www.sehd.scot.nhs.uk/scottishhealthsurvey/sh8-00.html

[12] Bromley C, Sproston K and Shelton N [eds]. *The Scottish Health Survey 2003*. Edinburgh: The Scottish Executive. 2005. Available from: https://www.webarchive.org.uk/wayback/archive/20141129163333/http://www.scotland.gov.uk/Publications/2005/12/02160336/03367

[13] McLean, J and Wilson, V [eds]. *The Scottish Health Survey 2019 edition: Volume 2 Technical Report*. Edinburgh: The Scottish Government. 2020. Available from: https://www.gov.scot/publications/scottish-health-survey-2019-volume-2-technical-report/

[14] *Heart Disease Improvement Plan*. Edinburgh, Scottish Government. 2014. www.gov.scot/Publications/2014/08/5434

[15] *Stroke Improvement Plan*. Edinburgh, Scottish Government. 2014. www.gov.scot/Publications/2014/08/9114

NOTES TO TABLES

1 The following conventions have been used in tables:

n/a	no data collected
-	no observations (zero value)
0	non-zero values of less than 0.5% and thus rounded to zero
[ ]	small sample bases (unweighted base is between 30 and less than 50)
*	very small sample bases (unweighted base is less than 30)

2 Because of rounding, row or column percentages may not add exactly to 100%.

3 A percentage may be quoted in the text for a single category that aggregates two or more of the percentages shown in a table. The percentage for the single category may, because of rounding, differ by one percentage point from the sum of the percentages in the table.

4 Values for means, medians, percentiles and standard errors are shown to an appropriate number of decimal places. Standard errors may sometimes be abbreviated to SE for space reasons.

5 'Missing values' occur for several reasons, including refusal or inability to answer a particular question; refusal to co-operate in an entire section of the survey (such as a self-completion questionnaire); and cases where the question is not applicable to the participant. In general, missing values have been omitted from all tables and analyses.

6 The population sub-group to whom each table refers is stated at the upper left corner of the table.

7 Both weighted and unweighted sample bases are shown at the foot of each table. The weighted numbers reflect the relative size of each group in the population, not numbers of interviews conducted, which are shown by the unweighted bases.

8 The term 'significant' refers to statistical significance (at the 95% level) and is not intended to imply substantive importance.

9 Within the report figures have generally been produced using data rounded to the nearest whole number. There are a small number of figures which show data to the nearest decimal place to aid interpretation.

Chapter 1

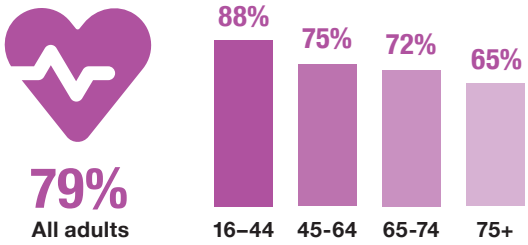
General Health, CVD and Diabetes

CHAPTER 1

General Health, Long-term conditions & Caring

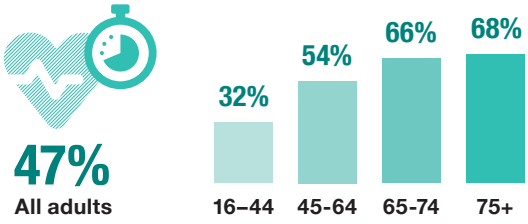
This summary covers data collected between the 5th August 2020 and the 23rd September 2020.

The proportion of adults who assessed their general health to be 'good' or 'very good' decreased with age.

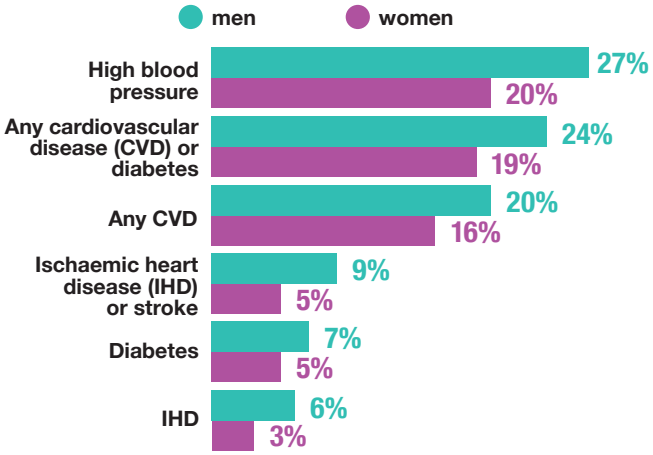


Women were more likely than men to report providing regular unpaid care.

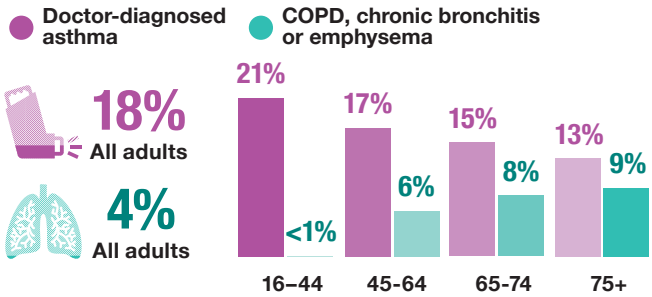
Almost half of all adults reported living with a long-term condition, with prevalence increasing with age.



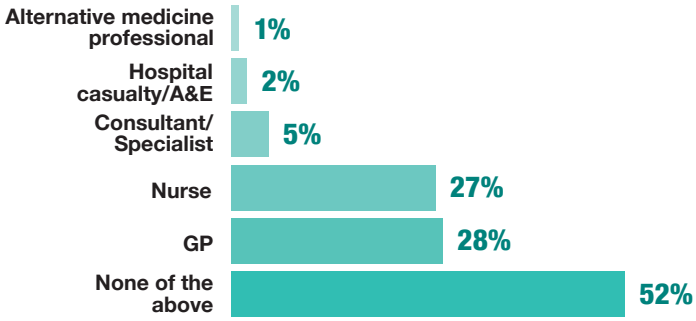
Higher proportions of men than women reported having / ever having:



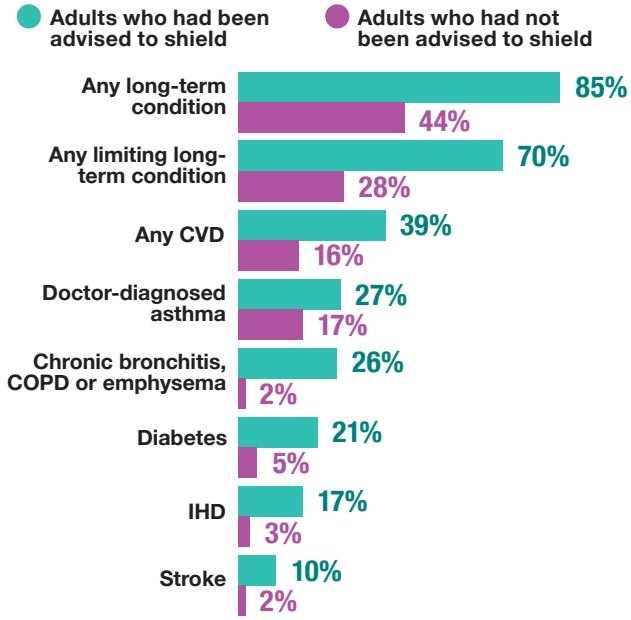
Prevalence of chronic obstructive pulmonary disease (COPD), chronic bronchitis or emphysema and doctor-diagnosed asthma varied by age but with differing patterns.



Among adults with doctor-diagnosed asthma, treatment was received* from:



Higher proportions of adults who received a shielding letter or text reported having / ever having:



* In the last twelve months.

1 GENERAL HEALTH, LONG-TERM CONDITIONS AND CARING

Line Knudsen

1.1 INTRODUCTION

Population measures of self-reported health are evidenced to be good predictors of mortality, morbidity or use of health care[1], reflecting subjective experiences of both diagnosed and undiagnosed illnesses (physical and mental) which can be overlooked by more objective measurements.

The prevalence of long-term conditions places considerable and unsustainable strain on healthcare provision[2], with further challenges presented by ongoing inequalities in health outcomes and an ageing population[3,4].

Providing unpaid care for a relative or friend is a role that can have a negative impact on physical and mental health and wellbeing[5]. In particular, during the pandemic, many carers have faced additional pressures while some services have been closed or operating at reduced capacity. Others have been providing care for the first time, to help family and friends limit their risk of infection.

The Scottish Government's strategic policies focus on promoting and improving general health and wellbeing, as well as supporting those living with long-term illnesses/conditions and those who provide unpaid care. The six **Public Health Priorities for Scotland**[6] are aimed at improving the health of Scotland and are supported by a number of specific strategies covering long-term conditions overall[7], specific conditions such as heart disease[8], stroke[9] and diabetes[10] and embedding the rights of carers under The Carers (Scotland) Act 2016[11].

Around 180,000 people considered at the highest clinical risk from COVID-19 received a letter towards the start of the pandemic[12] advising them to stay at home and avoid face-to-face contact with those outside their household (shielding)[13].

Shielding was paused on the 31st July 2020 and at the time of data collection for this survey, easing of restrictions related to time outside of the home, social interactions and businesses that could open had been introduced including those previously advised to shield being told they no longer had to[14].

This chapter presents findings on self-assessed general health, the prevalence of long-term conditions (including cardiovascular disease, diabetes and respiratory conditions) and caring prevalence. Due to survey length, not all of the usual questions on long-term conditions were included, therefore some measures presented in this report were calculated differently to previous SHeS reports. Information on methods and definitions can be found in the Volume 2: Technical Report.

1.2 GENERAL HEALTH, LONG-TERM CONDITIONS & CARING

The fieldwork period referenced in the following analysis covers from the 5th August 2020 to the 23rd September 2020.

As prevalence of 'good' or 'very good' self-assessed health tends to be lower in deprived areas where response to this survey was lower than usual, the results in section 1.2.1 below may overestimate true prevalence. Conversely, prevalence of long-term conditions tends to be higher in deprived areas and hence the results in sections 1.2.2 to 1.2.6 below may underestimate true prevalence. In interpreting these results, also note section 1.9.2 of the technical report.

1.2.1 Adult self-assessed general health, August/September 2020, by age and sex

During fieldwork, around eight in ten (79%) adults described their health as 'good' or 'very good', while just 5% described their health as 'bad' or 'very bad'. There were no significant variations by sex in the proportions that assessed their health to be either 'good' or 'very good' (78% among men and 80% among women).

Younger age groups were more likely to describe their health as 'good' or 'very good', with the proportion who did so decreasing from 88% among those aged 16-44 to 65% among those aged 75 and over. Similar patterns were found for men and women.

Figure 1A
Proportion of adults with 'good' or 'very good' self-reported general health, August/September 2020, by age and sex

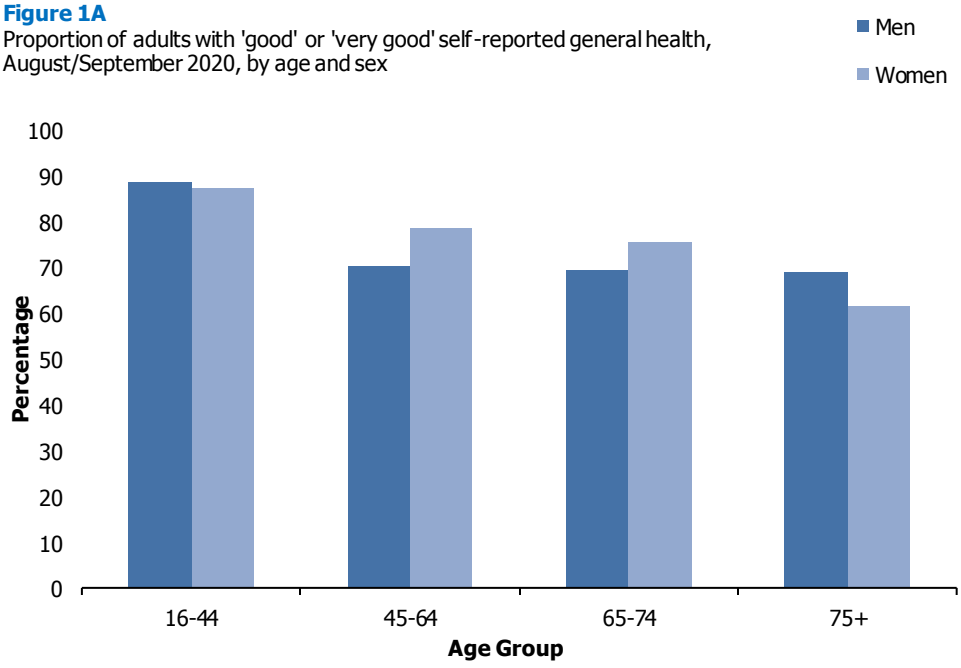


Figure 1A, Table 1.1

1.2.2 Prevalence of long-term conditions, August/September 2020, by age and sex

Just under half of adults (47%) reported that they were living with a long-term health condition, with 31% reporting that they lived with a limiting long-term condition, with no significant variations by sex.

The prevalence of any long-term condition (limiting and/or non-limiting) increased with age, from 32% among those aged 16-44 to 68% among those aged 75 and over. This pattern by age was similar among men and women. **Table 1.2**

1.2.3 Prevalence of cardiovascular disease (CVD), diabetes and high blood pressure, August/September 2020, by age and sex

Around one in five adults (18%) reported having any CVD during the fieldwork period, with prevalence higher among men (20%) than among women (16%). The prevalence of any CVD increased with age from 7% of all adults aged 16-44 to 45% among those aged 75 and over. Similar patterns by age were evident for both men and women.

Diabetes was reported by 6% of adults, with prevalence slightly higher among men (7%) compared with women (5%). There were also variations by age, with those aged 16-44 less likely than those in older age groups to have diabetes (2% compared with 9% - 12% among those aged 45 and over).

Among all adults, just over one in five (22%) reported that they had either any CVD or diabetes, with a higher prevalence recorded among men (24%) than among women (19%). Prevalence increased with age from 9% among those aged 16-44 to 50% among those aged 75 and over. Overall similar patterns by age were found for men and women although a sharper increase in prevalence between the 45-64 age group and the 65-74 age group was evident for men (16 percentage point increase for men compared to a two percentage point increase for women).

The prevalence of ischaemic heart disease (IHD) among all adults during the fieldwork period was 5%, with a significant increase by age from 0% of those aged 16-44 to 20% of those aged 75 and over. The pattern by age differed for men and women with a stepped increase for men from 0% among those aged 16-44 to 21% among those aged 75 and over whereas for women prevalence remained between 0% and 5% for those aged 16-74 before a sharp increase in prevalence between the 65-74 age group (5%) and the 75 and over age group (19%).

Just 3% of adults reported that they had ever had a stroke, with no significant difference by sex. Prevalence increased with age from 0% among those aged 16-44 to 13% among those aged 75 and over with a similar pattern found for men and women.

Prevalence of ever having either IHD or a stroke was 7% among all adults with higher prevalence among men (9%) than women (5%). This increased with age for both men and women, with significantly higher prevalence recorded among men aged 45-64 (12%) and 65-74 (19%) than women in the same age groups (4% and 8% respectively).

During the fieldwork period, more than a fifth of all adults interviewed reported ever having high blood pressure (23%), with a significant increase with age from 5% of those aged 16-44 to 52% of those aged 75 and over. Prevalence was higher among men (27%) than among women (20%). The pattern of high blood pressure prevalence by age differed for men and women. For women, prevalence increased gradually from 5% among women aged 16-44 to 55% among women aged 75 and over, whereas for men there was no clear pattern with an increase from 5% among those aged 16-44 to between 40% and 55% among those aged 45 and over.

Figure 1B
Prevalence of CVD, diabetes, IHD and high blood pressure, August/September 2020, by age

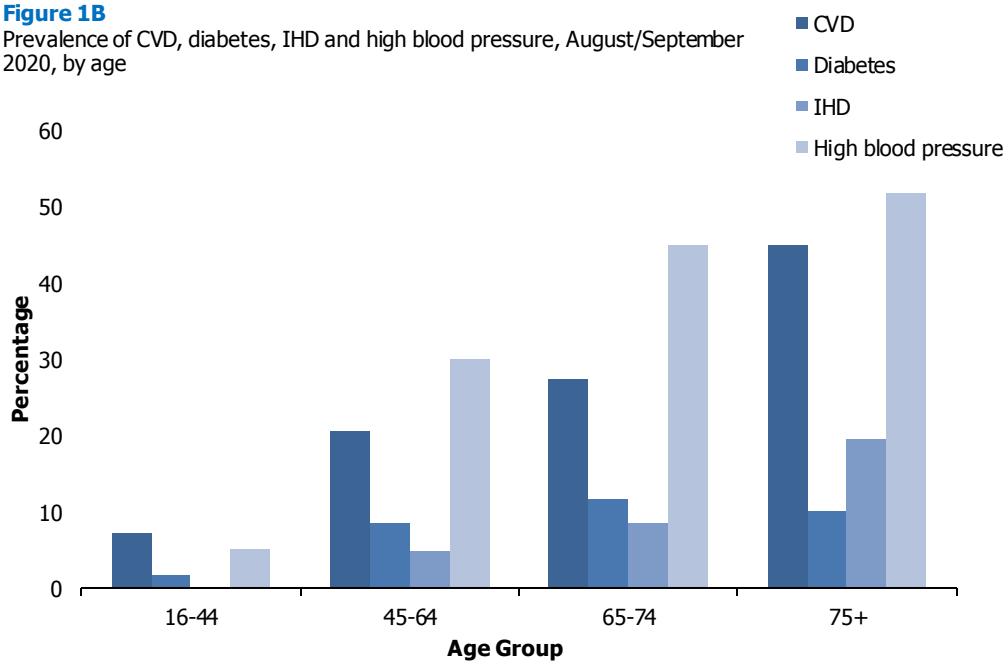


Figure 1B, Table 1.3

1.2.4 Prevalence of asthma and chronic obstructive pulmonary disease (COPD), chronic bronchitis or emphysema, August/September 2020, by age and sex

During the fieldwork period, 4% of adults reported ever having COPD, chronic bronchitis or emphysema and 18% reported doctor-diagnosed asthma. Both conditions were significantly associated with age but with differing patterns. The prevalence of COPD, chronic bronchitis or emphysema increased with age from <1% among those aged 16-44 to 6% - 9% among those aged 45 and over, while doctor-diagnosed asthma prevalence decreased with age from 21% among those aged 16-44 to 13% – 15% among those aged 65 and over. The pattern by age for doctor-diagnosed asthma was similar for men and women and

differed only very slightly for COPD with a gradual increase by age for women but a less clear pattern for men. **Table 1.4**

1.2.5 Asthma treatment, August/September 2020, by age and sex

During the fieldwork period, around three in ten adults with doctor-diagnosed asthma reported having received treatment from their GP (28%) and/or from a nurse (27%) in the last twelve months. Less than one in ten adults with an asthma diagnosis had seen a consultant or specialist (5%), visited A&E (2%) and/or used alternative medicine (1%).

Over half of adults diagnosed with asthma (52%) had not received treatment from any of the above sources in the last twelve months. Younger adults and men were more likely not to have received treatment from any of the above sources during this period (63% among those aged 16-44 compared with 40% - 41% among those aged 45 and over and 60% of men compared with 44% of women). **Table 1.5**

1.2.6 Prevalence of long-term conditions, cardiovascular disease (CVD) and respiratory conditions, August/September 2020, by whether received shielding letter/text and sex

Of those who received a shielding letter or text, the vast majority (85%) had one or more long-term health conditions, with 70% reporting limiting long-term conditions compared with 44% and 28% respectively of those who had not received a shielding letter or text.

The largest variations in prevalence of long-term conditions between those advised to shield and those who were not were reported for COPD, chronic bronchitis or emphysema (29% and 2% respectively) and any CVD (39% and 16% respectively). These were followed by diabetes (21% among those advised to shield compared to 5% among those not advised to shield) and IHD (17% among those advised to shield compared to 3% among those not advised to shield). Smaller but still significant variations were also recorded for doctor-diagnosed asthma (27% and 17% respectively) and stroke (10% and 2% respectively).

Figure 1C
Proportion of adults with long-term conditions, August/September 2020, by whether advised to shield or not

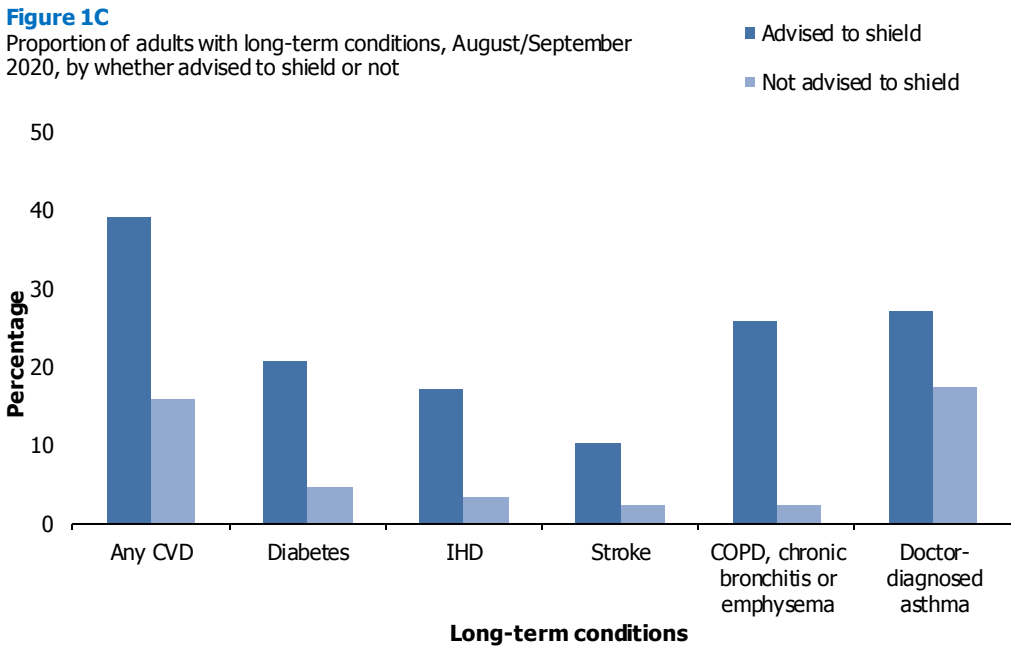


Figure 1C, Table 1.6

1.2.7 Caring prevalence, August/September 2020, by age and sex

During the fieldwork period, almost one in five (19%) adults reported that they provided regular unpaid care, with women more likely to do so than men (23% and 14% respectively). Caring prevalence also varied by age, increasing from 12% of those aged 16-44 to 28% of those aged 45-64, before decreasing to 14% - 18% among those aged 65 and over. A similar pattern was found for women, however, for men there was no clear pattern by age.

Figure 1D
Proprotion of adults that provide regular unpaid care, August/September 2020, by age and sex

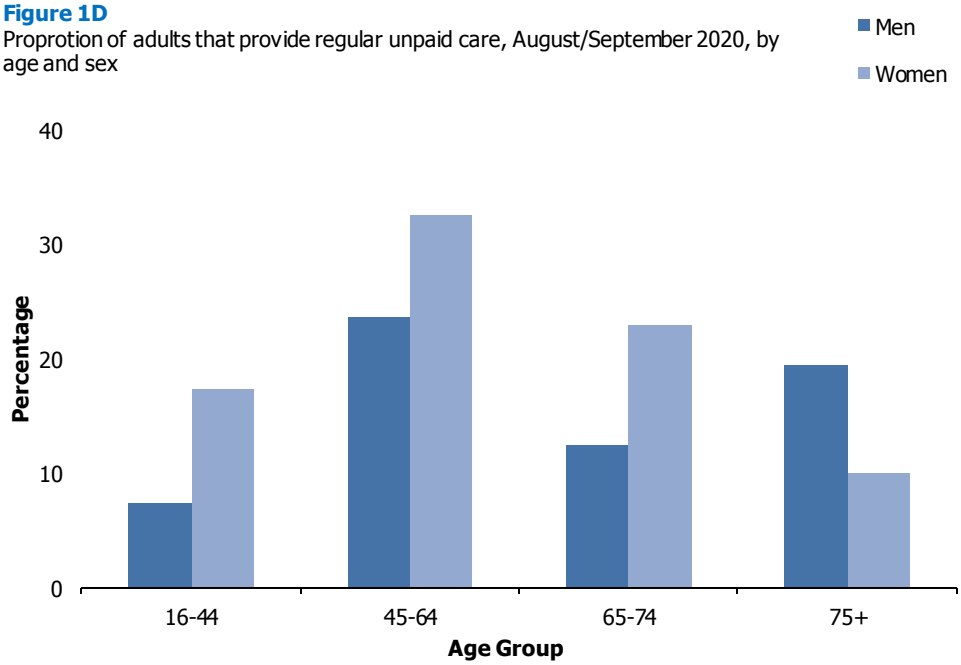


Figure 1D, Table 1.7

Table List

The tables can be found in the main report page under supporting documents.

References and notes

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Chapter 2

Mental Wellbeing

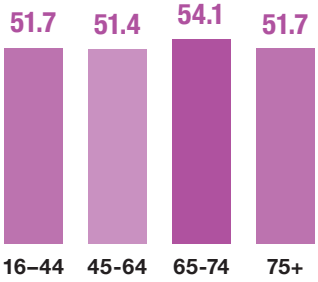
CHAPTER 2

Mental Wellbeing

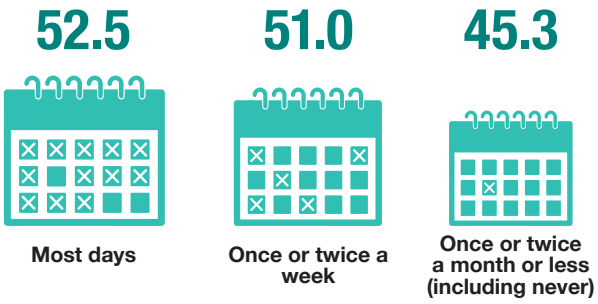
This summary covers data collected between the 5th August 2020 and the 23rd September 2020.

Mental wellbeing (WEMWBS mean score*) varied by age with a significantly higher score among those aged 65-74.

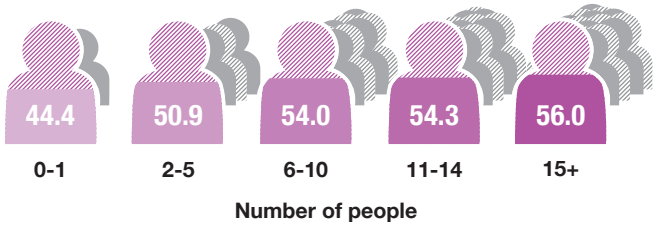
51.9
WEMWBS mean score for all adults



Mental wellbeing (WEMWBS mean score*) increased with frequency of contact with friends, relatives or neighbours.



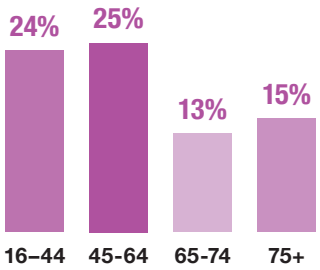
Mental wellbeing (WEMWBS mean score*) also increased with the number of people adults felt they could turn to in a crisis.



Adults who were advised to shield reported lower mental wellbeing (WEMWBS mean score*) than those who were not.

The prevalence of adults with a GHQ-12 score of four or more** was lower in the older age groups.

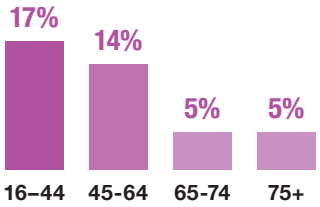
22%
of all adults had a GHQ-12 score of four or more



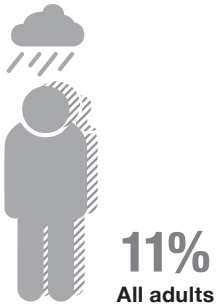
Adults who were advised to shield were more likely to report a GHQ-12 score of four or more** than those who were not.

Adults aged 64 and under were more likely to report two or more symptoms of anxiety.

13%
All adults



Around one in ten adults reported two or more symptoms of depression.



* WEMWBS scores range from 14 to 70. Higher scores indicate greater wellbeing.
** Indicative of a possible psychiatric disorder.

2 MENTAL WELLBEING

Victoria Wilson

2.1 INTRODUCTION

Mental health is defined by the World Health Organization as a state of well-being in which every individual realises their own potential, can cope with the stresses of life, can work productively, and is able to make a contribution to their community[1]. Positive mental health encourages better quality of life overall, healthier lifestyles, better physical health, improved recovery from illness, better social relationships, and higher educational attainment[2].

The impact of the COVID-19 pandemic is likely to be felt widely at both societal and individual levels, impacting on mental health. In response to this, the **Mental Health – Scotland's Transition and Recovery Plan**[3] sets out the mental health needs resulting from the pandemic and lockdown and how the Scottish Government will address these.

The plan's commitments focus on areas or groups of people where COVID-19 is likely to have particularly impacted on mental health. Each area of focus includes responses that span multiple types of need including:

1. Promoting and supporting conditions for good mental health and wellbeing at a population level
2. Providing accessible signposting to help, advice and support
3. Providing rapid and easily accessible responses for those in distress, and
4. Ensuring safe, effective treatment and care for those living with a mental illness[3].

The plan acknowledges a range of pandemic-related pressures that may have impacted on mental wellbeing. That includes inequalities, employment, impacts on particular groups such as children, young people, families, older people, and those with long-term conditions or disabilities[3].

Additionally, the plan lays out government action to provide the right help and support for mental illness. In particular, it illustrates the government's vision for the renewal of mental health services, including CAMHS and psychological therapies[3].

At the time of data collection for this survey, easing of restrictions on time outside of the home, social interaction and businesses that could open had been introduced, although some restrictions on the number of people that could meet were reintroduced during the fieldwork period[4].

This chapter presents findings related to adult mental health and wellbeing in Scotland in August and September 2020. Information on methods and definitions can be found in the Volume 2: Technical Report.

2.2 MENTAL WELLBEING

The fieldwork period referenced in the following analysis covers from the 5th August 2020 to 23rd September 2020.

In interpreting these results, note that, in this survey these questions were asked as part of the main interview. Questions on mental health are potentially sensitive in nature, and in the usual format of a Scottish Health Survey interview in the home they are included in a self-completion form which the participants complete themselves rather than the interviewer asking the questions. Self-completion formats may illicit a more accurate response from some participants who feel more comfortable answering sensitive questions privately. For this reason and as indicators of poor mental health tend to be higher in deprived areas where response to this survey was lower than usual, the following indicators may underestimate poor mental health and overestimate mental wellbeing. See section 1.9.3 of the technical report for further details.

2.2.1 Adult WEMWBS mean score, August/September 2020, by age and sex

Wellbeing is measured using the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS). This uses 14 positively worded statements to assess overall mental wellbeing, with 14 the lowest score possible and 70 the highest. For more information, see section 1.9.3 of the Volume 2 Technical report.

The average WEMWBS score for all adults during the fieldwork period was 51.9. Mental wellbeing was significantly higher among those aged 65-74, with an average score of 54.1 recorded compared with scores in the range 51.4 – 51.7 recorded among those aged 16-64 and 75 and over.

Similar patterns by age were evident for both men and women with no significant variations by sex.

Figure 2A
Adult WEMWBS mean score, August/September 2020, by age and sex

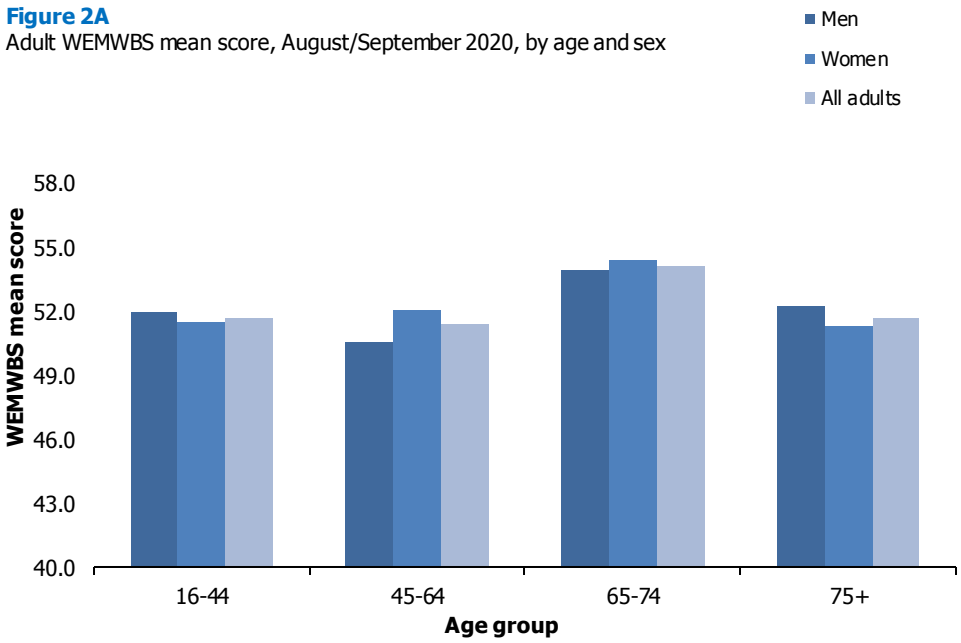


Figure 2A, Table 2.1

2.2.2 Adult WEMWBS mean score, August/September 2020, by contact with other people and sex

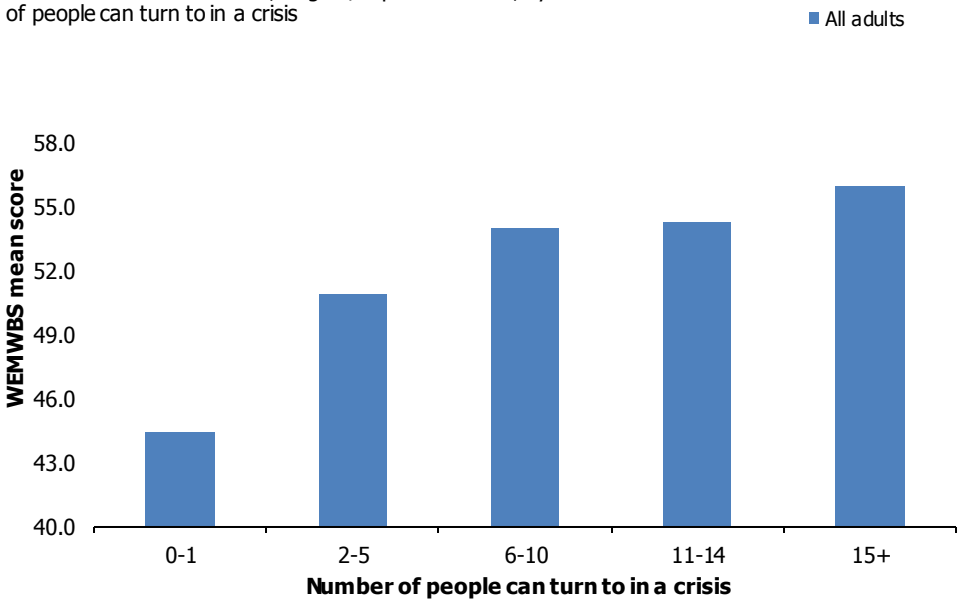
Mental wellbeing increased with frequency of contact with other people[5] reported during the fieldwork period, with a linear increase in the mean WEMWBS score from 45.3 among those who reported being in contact with friends, relatives or neighbours 'once or twice a month or less often (including never)' to 52.5 among those in such contact on 'most days'.

Table 2.2

2.2.3 Adult WEMWBS mean score, August/September 2020, by number of people can turn to in a crisis and sex

Mental wellbeing increased with the number of people adults felt they could turn to in a crisis. The mean WEMWBS score increased from 44.4 among those who reported having no one or just one other person to turn to for support in a crisis to 50.9 among those with between two and five people to turn to and 54.0 – 56.0 among those who reported having six or more people to turn to.

Figure 2B
Adult WEMWBS mean score, August/September 2020, by number of people can turn to in a crisis



No significant variations were evident by sex, with similar patterns for both men and women. **Figure 2B, Table 2.3**

2.2.4 Adult WEMWBS mean score, August/September 2020, by whether received shielding letter/text and sex

Those who had been advised to shield (either by letter or text) were likely to have lower mental wellbeing than those who had not (WEMWBS mean scores of 48.5 and 52.3 respectively). This pattern in mental wellbeing by shielding status was evident for both men and women with no significant variations by sex. **Table 2.4**

2.2.5 GHQ-12 score, August/September 2020, by age and sex

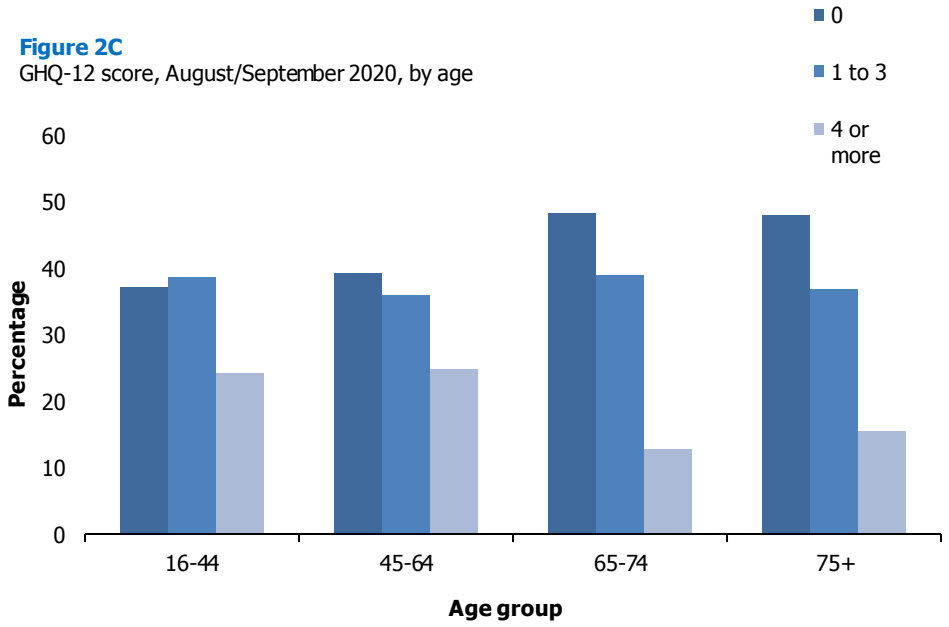
General Health Questionnaire-12 (GHQ-12)[6] is a widely used standard measure of mental distress and mental ill-health consisting of 12 questions on concentration abilities, sleeping patterns, self-esteem, stress, despair, depression, and confidence in the previous few weeks. These scores are combined to create an overall score of between zero and twelve. A score of four or more (referred to as a high GHQ-12 score) has been used here to indicate the presence of a possible psychiatric disorder. In interpreting these results, in addition to the point noted at the start of section 2.2, it is possible that some people may have answered 'less so than usual' or 'much less than usual' to the GHQ-12 question 'Have you recently been able to enjoy your normal day to day activities' because they were not able to undertake their usual activities because of the pandemic restrictions rather than because they were enjoying their day to day activities less than usual. This may have impacted upon their overall GHQ-12 score.

For more information, see section 1.9.3 of the Volume 2 Technical report.

Just over a fifth (22%) of all adults recorded a GHQ-12 score of four or more (indicative of a possible psychiatric disorder). The proportion of adults with a GHQ-12 score of four or more decreased with age from 24% - 25% among those aged 16-64 to 13% - 15% among those aged 65 and over.

The reverse was evident for the proportions that recorded a score of zero which rose from 37% - 39% among those aged 16-64 to 48% among those aged 65 and over.

Figure 2C
GHQ-12 score, August/September 2020, by age



No statistically significant variations by sex were observed, including for the patterns of GHQ-12 score of four or more by age recorded for both men and women. **Figure 2C, Table 2.5**

2.2.6 GHQ-12 score, August/September 2020, by whether received shielding letter/text and sex

Among all adults, the proportions with a GHQ-12 score of four or more (indicative of a possible psychiatric disorder) varied by whether or not adults had been advised to shield. Among those who were advised to shield (by letter or text) around a third (32%) had a score of four or more, compared with around a fifth (21%) of those who were not advised to shield.

Similar patterns were recorded for both men and women, with no significant variations by sex. **Table 2.6**

2.2.7 CIS-R anxiety and depression scores, August/September 2020, by age and sex

Details on symptoms of depression and anxiety are collected via a standardised instrument, the Revised Clinical Interview Schedule (CIS-R). The CIS-R is a well-established tool for measuring the prevalence of

mental disorders[7]. The complete CIS-R comprises 14 sections, each covering a type of mental health symptom and asks about presence of symptoms in the week preceding the interview. Prevalence of two of these mental illnesses - depression and anxiety were included in the telephone survey. For more information, see section 1.9.3 of the Volume 2 Technical report.

Just over one in ten (11%) adults reported two or more symptoms of depression during the data collection period. The proportion increased from 11% among those aged 16-44 to 13% among those aged 45-64 before decreasing to 7% among those aged 75 and over, although this difference was not statistically significant. There was no significant difference in the proportion reporting two or more symptoms of depression between men and women (12% and 10% respectively) and the pattern by age for men and women was also not significantly different.

Among all adults, 13% recorded two or more symptoms of anxiety. Significant variations by age were evident, with two or more symptoms of anxiety recorded for 14% - 17% of adults aged 16-64 compared with 5% of adults aged 65 and over. No significant variations by sex were evident, with similar patterns recorded for men and women when analysed by age.

Figure 2D
Two or more symptoms of anxiety, August/September 2020, by age and sex

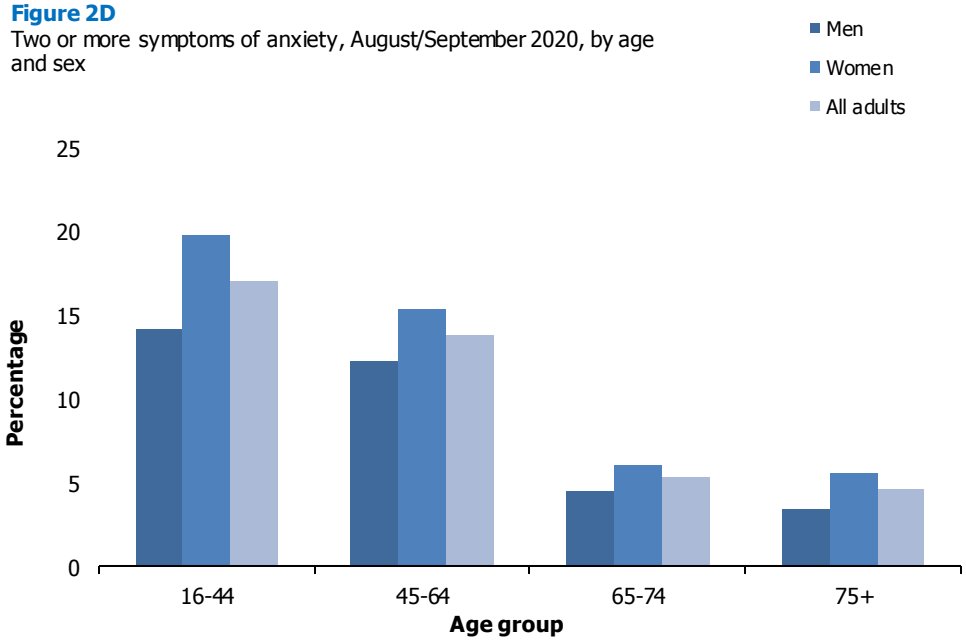


Figure 2D, Table 2.7

2.2.8 CIS-R anxiety and depression scores, August/September 2020, by whether received shielding letter/text and sex

A higher proportion of adults who received a letter or text advising them to shield recorded two or more symptoms of depression than those who were not advised to shield (17% and 11% respectively), although this difference was not statistically significant. While the gap by shielding

status was larger for men (19% and 11% respectively) than for women (15% and 10% respectively), these differences by sex were also not statistically significant.

The proportions of adults with two or more symptoms of anxiety did not differ between those who were advised to shield and those who were not (17% and 13% respectively). Similar patterns were recorded for both men and women, with no significant variations by sex. **Table 2.8**

Table List

The tables can be found in the main report page under supporting documents.

References and notes

[1] World Health Organization (2018). *Mental Health: strengthening our response*. [Online] Available at: https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response

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Chapter 3

Social Capital & Loneliness

CHAPTER 3

Social Capital & Loneliness

This summary covers data collected between the 5th August 2020 and the 23rd September 2020.

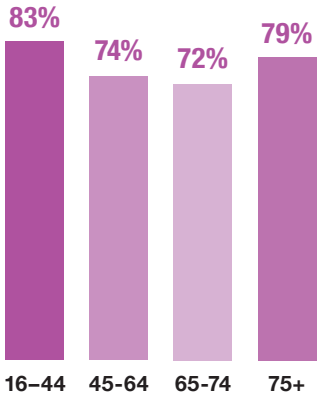
Women were more likely than men to report that they contacted friends, relatives or neighbours* on 'most days'.

78% All adults

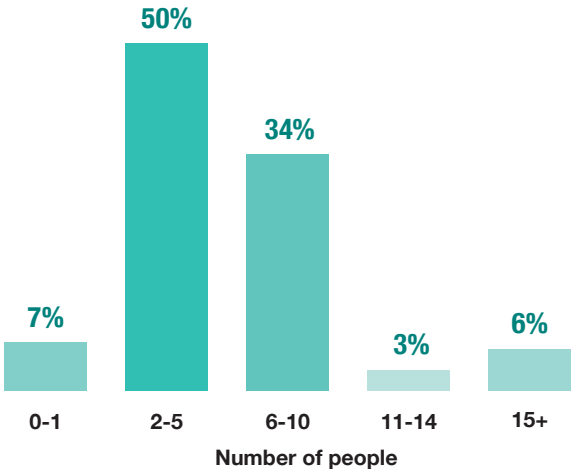
85% Women

71% Men

Adults in the youngest and oldest age groups were most likely to report contacting friends, relatives or neighbours* on 'most days'.



Half of adults reported they could turn to two to five people for support in a crisis.



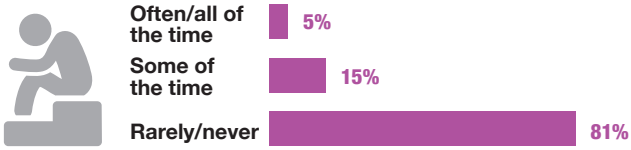
*In person, by phone, letter, email or through the internet.
**Due to rounding the percentages do not add up exactly and exceed 100%.

Men were more likely than women to report that they had no one or only one person to whom they could turn to for support in a crisis.

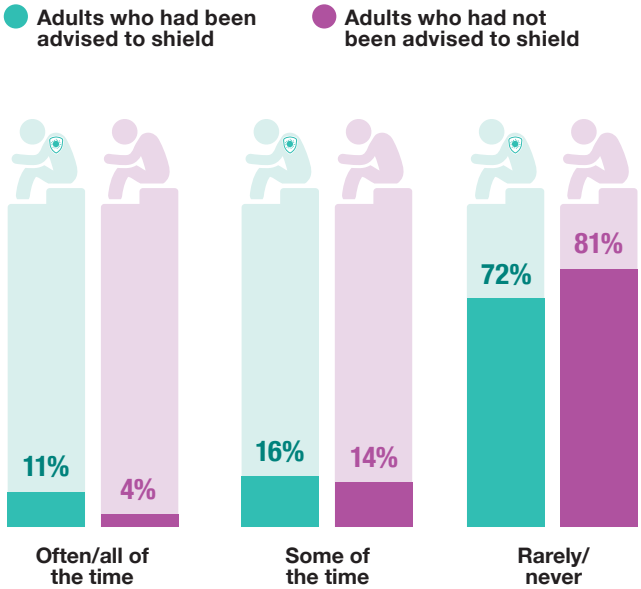
9% Men

5% Women

Almost a fifth (19%)** of adults reported that they felt lonely 'some of the time', 'often' or 'all of the time' in the last two weeks***.



Adults who had been advised to shield were more likely to report having felt lonely 'some of the time', 'often' or 'all of the time' in the past two weeks***.



***Prior to being interviewed.

3 SOCIAL CAPITAL AND LONELINESS

Jessica Shields

3.1 INTRODUCTION

Social capital is a term used to describe the social connections that provide support (social networks, workplaces etc.) and that are beneficial to the quality of life, health, safety, economy and wellbeing of individuals and the neighbourhoods in which they live. Such social connections promote a sense of individual and collective wellbeing as well as strengthening communities, offering a source of support and providing opportunities to meet others[1].

Loneliness and social isolation are increasingly recognised as significant public health matters[2] with the potential to impact significantly on mental wellbeing[3,4]. They can affect people of any age and in any circumstances, although key groups identified as being at increased risk include those with poor mental and/or physical health, those living in poverty, those with disabilities, those from LGBTI or minority ethnic communities and carers[5,6] and younger adults[7].

Before the COVID-19 pandemic, loneliness and social isolation were identified as priorities for the Scottish Government and in December 2018 **A Connected Scotland**[8] was published. This strategy sets out key priorities for tackling social isolation and loneliness and a roadmap for their collaborative implementation within communities. This accompanies both the **Mental Health Strategy: 2017-2027**[9] and **Mental Health – Scotland's Transition and Recovery**[10] which aim to address problems with and support the mental health and wellbeing of the population of Scotland, of which social capital and loneliness are of direct relevance.

At the time of data collection for this survey, easing of restrictions around time outside of the home, social interactions and businesses that could open had been introduced, although some restrictions on the number of people that could meet were reintroduced during the fieldwork period[11].

This chapter examines social capital in relation to social contact and support networks and also loneliness among adults in Scotland in August and September 2020. Information on methods and definitions can be found in the Volume 2: Technical Report.

3.2 SOCIAL CAPITAL AND LONELINESS

The fieldwork period referenced in the following analysis covers the period from the 5th August 2020 to the 23rd September 2020.

In interpreting these results, note that in this survey these questions were asked as part of the main interview. As questions on social capital and loneliness are potentially sensitive in nature, in the usual format of a Scottish Health Survey interview in the home they are included in a self-completion form which the participants complete themselves rather than the interviewer asking the questions. Self-completion formats may illicit a more accurate response from

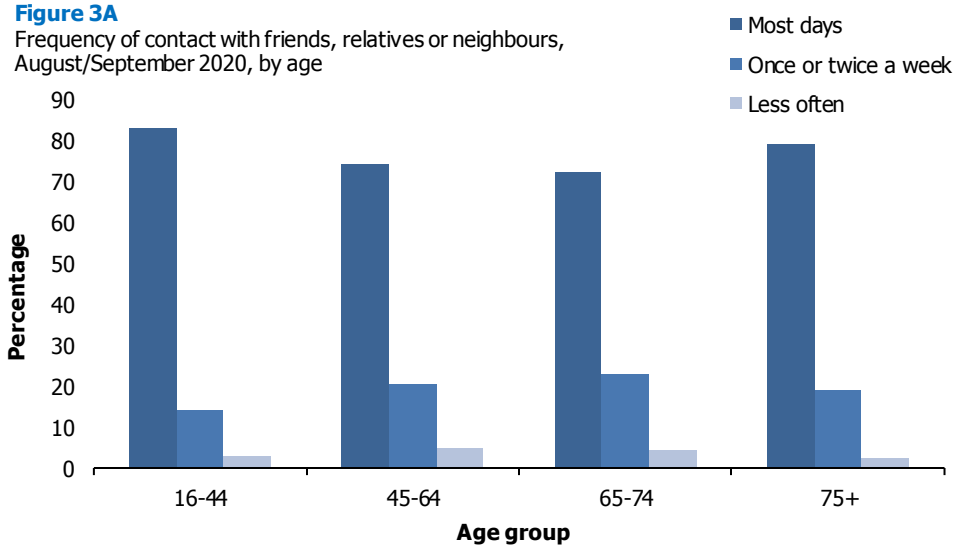
some participants who feel more comfortable answering sensitive questions privately. For this reason and as levels of loneliness tend to be higher in deprived areas where response to this survey was lower than usual, the following results may underestimate loneliness. See section 1.9.4 of the technical report for further details.

3.2.1 Social capital, August/September 2020, by age and sex

Over the fieldwork period, 78% of adults reported that they contacted[12] friends, relatives or neighbours 'most days' and a further 18% reported that they did so 'once or twice a week'. Only 4% of adults reported that they had contacted friends, relatives or neighbours 'once or twice a month or less (including never)'.

Women were more likely than men to report that they contacted friends, relatives or neighbours 'most days' (85% and 71% respectively), while men were more likely than women to contact friends, neighbours or relatives 'once or twice a week' (24% and 12% respectively). Adults in the youngest and oldest age groups were more likely to report having contacted others on 'most days' (83% among those 16-44 and 79% among those aged 75 and over) than those aged 45-74 (72% - 74%). There was no significant difference in the pattern by age for men and women.

Figure 3A
Frequency of contact with friends, relatives or neighbours, August/September 2020, by age



During the fieldwork period, 7% of adults reported they had no one or only one person to whom they could turn to in a crisis, this was higher among men than women (9% and 5% respectively). Half of adults (50%) reported that they could turn to two to five people in a crisis and a further 34% that they could turn to between six and ten people for support with 9% able to turn to 11 or more people. The number of people respondents felt they could turn to in a crisis did not differ significantly by age. **Figure 3A, Table 3.1**

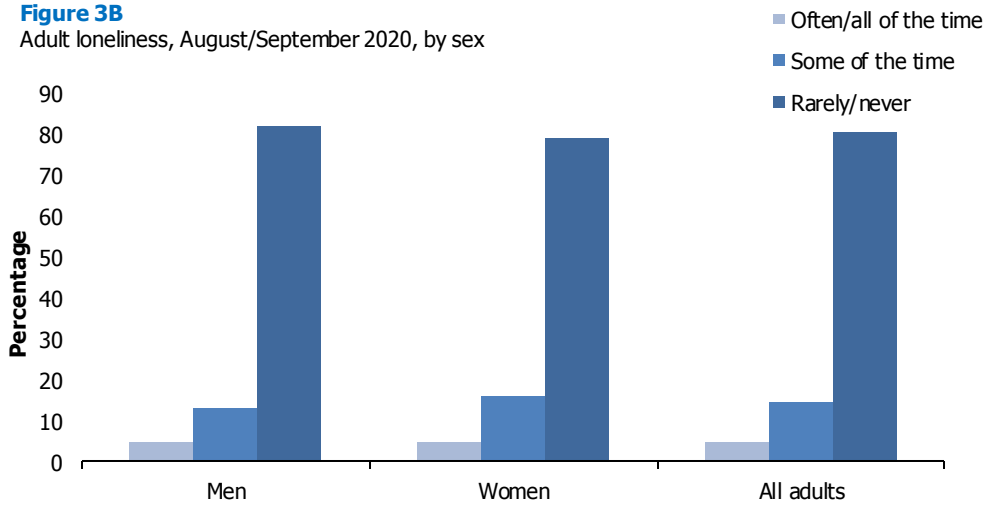
3.2.2 Social capital, August/September 2020, by whether received shielding letter/text and sex

On both measures, social capital did not differ among those who had received a shielding letter or text and those who had not. However, the proportion of women having no one or only one person to turn to for support in a crisis was higher among women who had received a shielding letter or text (11%) than those who had not (4%). **Table 3.2**

3.2.3 Adult loneliness, August/September 2020, by age and sex

During the fieldwork period, 5% of adults felt that they were lonely 'often' or 'all of the time' and 15% reported that they felt lonely 'some of the time', while the majority of adults reported that they had 'rarely' or 'never' felt lonely in the two weeks prior to being interviewed (81%).

Figure 3B
Adult loneliness, August/September 2020, by sex

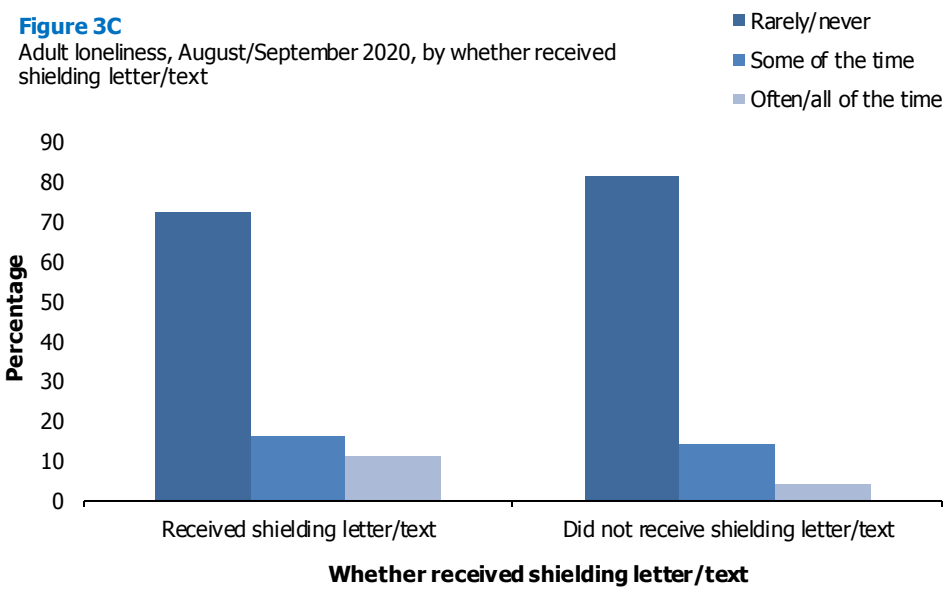


Reported experiences of loneliness in the two weeks prior to interview did not vary significantly by age or sex. **Figure 3B, Table 3.3**

3.2.4 Adult loneliness, August/September 2020, by whether received shielding letter/text and sex

The frequency with which adults reported having felt lonely in the two weeks prior to being interviewed differed by whether they were advised to shield or not. Just over one in ten of those who had received a shielding letter or text reported that they felt lonely 'often' or 'all of the time' (11%), compared with less than one in twenty of those who had not received a shielding letter or text (4%). A reverse pattern was evident for the proportion in each group who reported having 'rarely' or 'never' felt lonely over the past two weeks, which was higher among those who had not received a shielding letter or text (81%) than among those who had (72%).

Figure 3C
Adult loneliness, August/September 2020, by whether received shielding letter/text



Similar patterns were evident for both men and women, with no significant differences by sex. **Figure 3C, Table 3.4**

Table List

The tables can be found in the main report page under supporting documents.

References and notes

[1] *Social capital in Scotland: report.* Edinburgh: Scottish Government (2020). Available at: https://www.gov.scot/publications/social-capital-scotland-measuring-understanding-scotlands-social-connections/

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[11] *Coronavirus (COVID-19): Scotland's route map.* Edinburgh: Scottish Government (2020). Available at: https://www.gov.scot/collections/coronavirus-covid-19-scotlands-route-map/

[12] This includes contact in person, by phone, letter, email or through the internet.

Chapter 4

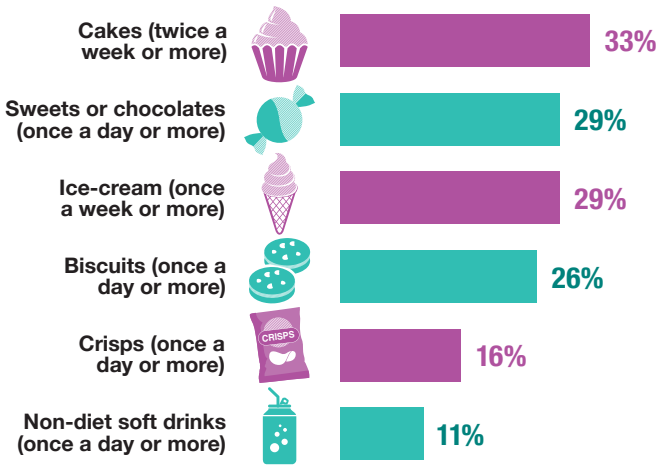
Diet, Obesity & Food Insecurity

CHAPTER 4

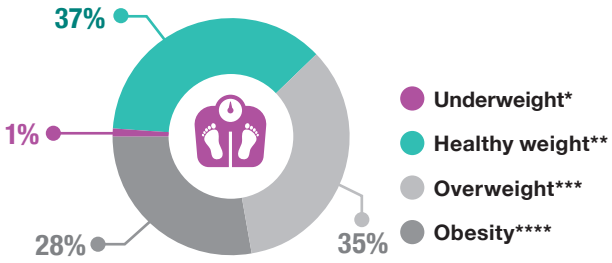
Diet, Obesity & Food Insecurity

This summary covers data collected between the 5th August 2020 and the 23rd September 2020.

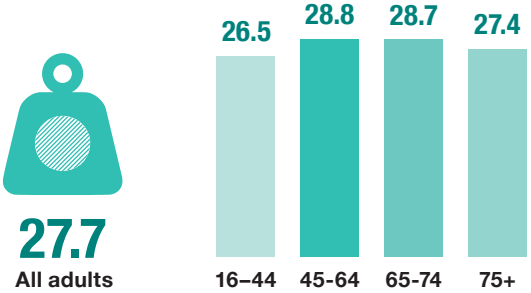
Among all adults, the most commonly consumed discretionary foods were:



Just over a third of adults were within the healthy weight range◊.

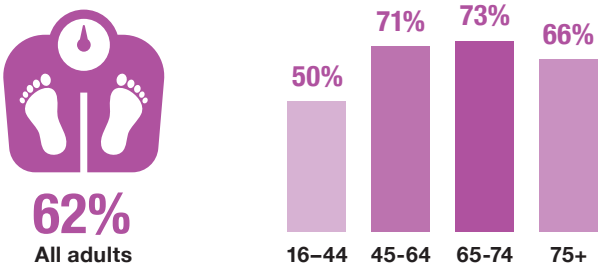


Mean BMI‡ was highest among those aged 45-74.

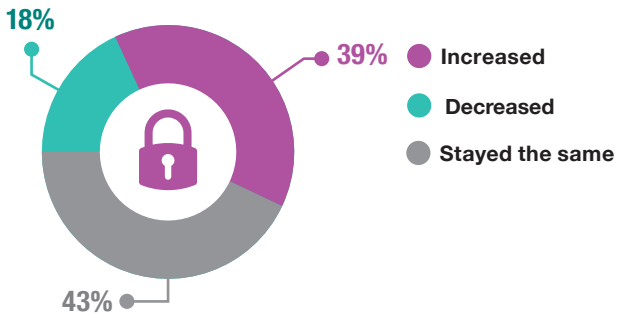


◊Due to rounding the percentages do not add up exactly and exceed 100%.
*BMI of less than 18.5 kg/m²
**BMI of 18.5 to less than 25 kg/m²
***BMI of 25 to less than 30 kg/m²
****BMI 30 kg/m² and over
‡The BMI calculations have been adjusted on the basis of work undertaken previously on the Health Survey for England (see technical report for more information).

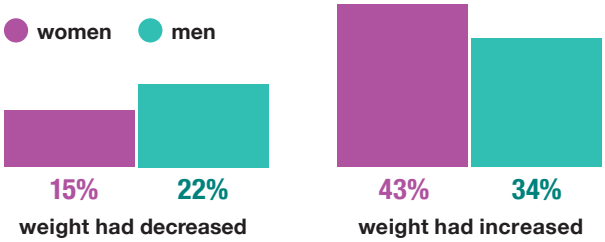
Prevalence of overweight (including obesity)† was higher among those aged 45 and over.



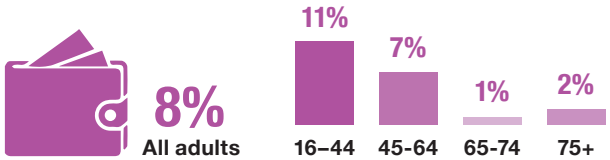
Just over half of adults reported changes to their weight between the start of lockdown†† and the date of the interview.



Women were more likely than men to report that their weight increased since the beginning of lockdown††.



Food insecurity††† was more prevalent among younger adults.



†BMI 25 kg/m² and over
††Lockdown began on the 23rd March 2020.
†††Worried would run out of food in the last 12 months because of a lack of money or other resources

4 DIET, OBESITY & FOOD INSECURITY

Joe Rose

4.1 INTRODUCTION

Globally, poor diet is a leading risk factor for ill health[1] while obesity has been linked to a range of comorbidities including diabetes, cardiovascular disease (CVD), hypertension and certain cancers[2,3]. Such conditions could be prevented and/or the risk reduced by improvements in the nutritional content of diets (increasing fruit and vegetable intake[4], decreasing salt, saturated fat and sugar[5]) and overall reductions in body mass[6]. Research also suggests a reciprocal link between obesity and mental health problems such as depression and anxiety[7,8,9]. More recently, evidence suggests excess weight is associated with an increased risk of serious COVID-19 outcomes[10].

A 'whole system approach', including eating well, maintaining a healthy weight and regular physical exercise, is a key public health priority for Scotland. **A Healthier Future: Scotland's Diet and Healthy Weight Delivery Plan**[11], published in July 2018, sets out a wide range of actions that support people to eat well and maintain a healthy weight, while reducing diet-related inequalities.**The Scottish Dietary Goals**, revised in 2016[12], provide the basis for a healthy balanced diet that include meeting the World Health Organisation 5-a-day recommendation for adults and reducing average salt, red meat, fats, sugars and total carbohydrate intake. Alongside these, the Scottish Government is committed to monitoring household food insecurity[13] and have committed over £130 million to tackling food insecurity since the onset of the pandemic. This is underpinned by a cash-first approach and bolstered further through investment to tackle financial insecurity, including through the Scottish Welfare Fund.

Evidence is suggestive of varying impacts of the pandemic on diet and physical activity, with both positive and less beneficial actions adopted by individuals in response to their own and national circumstances, sometimes interchangeably[14]. Several reports have also highlighted the negative impact on food insecurity and the widening of existing inequalities with an 89% increase in demand for emergency food parcels in the UK in April 2020 compared with the same period in 2019 and foodbank demand more than doubling during the same period[15].

This chapter presents findings on the eating habits of adults in the Scottish population in August/September 2020, body mass index (BMI) [16], and self-reported changes in weight since the start of the lockdown period, as well as on food insecurity. Information on methods and definitions can be found in Volume 2: Technical Report.

4.2 DIET, OBESITY AND FOOD INSECURITY

The fieldwork period referenced in the following analysis covers from the 5th August 2020 to the 23rd September 2020.

In interpreting these results, note that, in the usual format of the Scottish Health Survey, interviewers undertake height and weight measurements. As this was not possible in the telephone survey, respondents were asked to provide these measurements themselves. Other studies have shown that self-reported measurements tend to overestimate height and underestimate weight on average. To help address this, adjustment factors based on a comparison study undertaken for the Health Survey for England were used to adjust the self-reported measurements. However, for women, levels of overweight including obesity tend to be higher in deprived areas where response to this survey was lower than usual (the pattern for men is less clear), hence the results in sections 4.2.2 and 4.2.3 may underestimate true prevalence.

While consumption of discretionary foods tends not to show a clear pattern by deprivation, consumption of non-diet soft drinks has been reported to be higher in deprived areas, hence the results in section 4.2.1 may underestimate true prevalence of consumption.

As questions on food insecurity are potentially sensitive in nature, in the usual format of a Scottish Health Survey interview in the home, they are included in a self-completion form which the respondents complete themselves rather than the interviewer asking the questions. Self-completion formats may illicit a more accurate response from some participants who feel more comfortable answering sensitive questions privately. For this reason and as levels of food insecurity are generally higher in deprived areas where response to this survey was lower than usual, the results in sections 4.2.4 and 4.2.5 below may underestimate true prevalence.

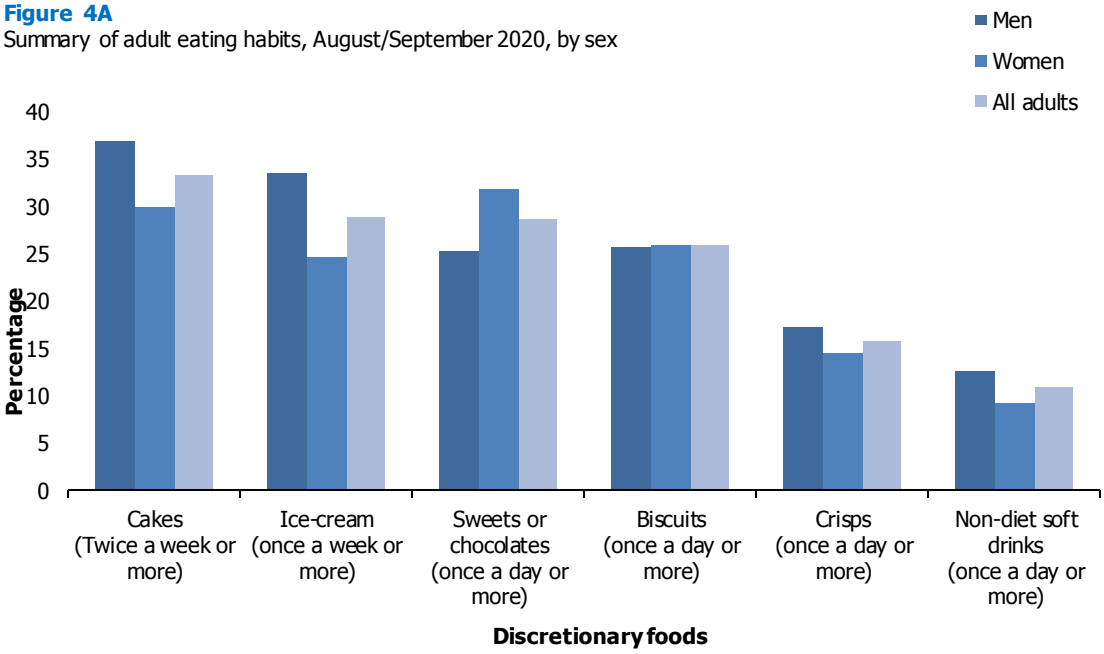
See section 1.9.5 of the technical report for further details on diet, obesity and food insecurity.

4.2.1 Summary of adult eating habits, August/September 2020, by age and sex

During the fieldwork period, 33% of all adults reported eating cakes twice a week or more, followed by sweets or chocolates (once a day or more) and ice-cream (once a week or more) (both 29%). These foods were closely followed by consumption of biscuits (26%), crisps (16%) and non-diet soft drinks (11%), all consumed once a day or more.

Men were more likely than women to consume cakes twice a week or more (37% compared with 30% respectively) and ice-cream once a week or more (33% compared with 25% respectively) while women were more likely than men to consume sweets or chocolate once a day or more (32% compared with 25% respectively). No other variations in the consumption of discretionary foods by sex were found.

Figure 4A
Summary of adult eating habits, August/September 2020, by sex



Differences in the consumption of several discretionary foods were evident by age. The proportion of adults consuming crisps once a day or more decreased with age (19% among those aged 16-44 compared with 9% - 10% among those aged 65 and over) as did the proportion consuming non-diet soft drinks once a day or more (15% compared with 5% - 6% respectively). Conversely, increases by age were evident for eating biscuits once a day or more (from 16% of those aged 16-44 to 57% among those aged 75 and over) and for consuming cakes two or more times a week (30% and 47% respectively). The consumption of ice cream (once a week or more) was highest among those aged 75 and over (43% compared to 25% - 32% among those aged 16-74). These trends were consistent for both men and women. The consumption of sweets or chocolates (once a day or more) also varied by age but with no clear pattern. **Figure 4A, Table 4.1**

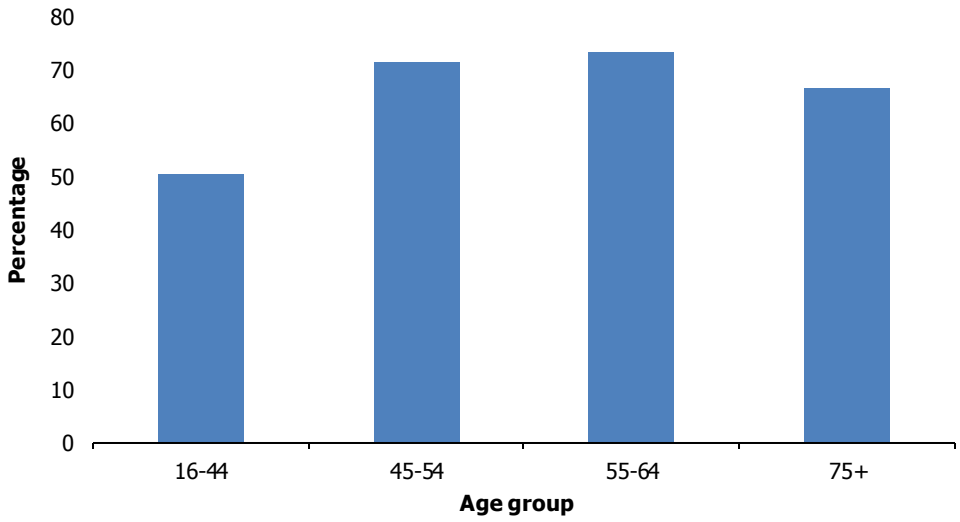
4.2.2 Adult BMI (based on adjusted self-reported measurements[17]), August/September 2020, by age and sex

Just over a third of adults (37%) interviewed during the fieldwork period were within the healthy weight range (BMI of 18.5 to less than 25 kg/m^2), with around six in ten (62%) categorised as overweight including obesity (BMI of 25 kg/m^2 and over). Men were more likely to be overweight than women (38% and 31% respectively), however, there were no significant differences recorded by sex for the healthy weight category or the prevalence of overweight including obesity.

An association was observed between age and BMI, with those aged 16-44 more likely to be within the healthy weight range than those aged 45 and over (48% compared with 26% - 34% respectively), while prevalence of overweight including obesity was higher among those aged 45 and over than among those aged 16-44 (66% - 73% compared

with 50% respectively). Similar patterns by age were observed for both men and women.

Figure 4B
Proportion of adults overweight including obesity (BMI of 25kg/m^2, based on adjusted self-reported measurements), August/September 2020, by age



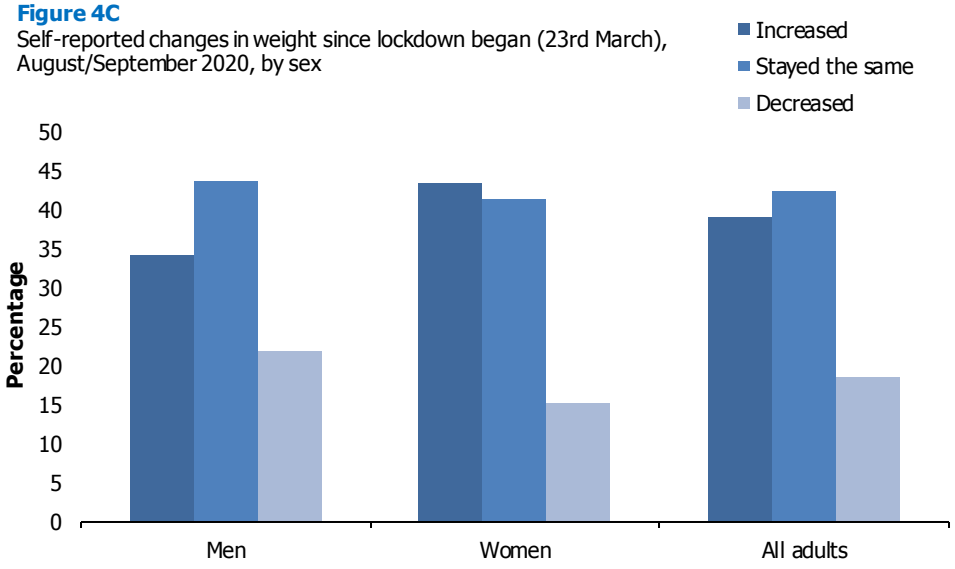
The mean BMI among all adults interviewed during the fieldwork period was 27.7 kg/m^2, with no significant difference by sex (27.5 kg/m^2 among men and 27.8 kg/m^2 among women). Mean BMI varied by age and was lower among adults aged 16-44 (26.5 kg/m^2) and those aged 75+ (27.4 kg/m^2) than among those aged 45-74 (28.7 – 28.8 kg/m^2). A similar pattern by age was found for men and women. **Figure 4B, Table 4.2**

4.2.3 Self-reported changes in weight since lockdown began (23rd March), August/September 2020, by age and sex

Just over two fifths of adults (43%) reported that their weight had stayed the same between the start of lockdown (23rd March 2020) and the date of interview, while just under two-fifths (39%) reported an increase in weight and just under a fifth (18%) that their weight had decreased over this period.

Women were more likely than men to state that their weight increased since lockdown began (43% compared with 34% of men) and were less likely to report that their weight had decreased (15% and 22% respectively). Similar proportions of women and men reported that their weight had stayed the same over the period (41% and 44% respectively).

Figure 4C
Self-reported changes in weight since lockdown began (23rd March), August/September 2020, by sex



The prevalence of adults who reported that their weight stayed the same since lockdown began increased by age from 39% of those aged 16-44 to 55% of those aged 75 and over. Adults aged 75 and over were less likely than younger adults to report an increase in weight over this period (26% compared with 39% - 42% among those aged 16-74).

Figure 4C, Table 4.3

4.2.4 Self-reported changes in weight since lockdown began (23rd March), August/September 2020, by whether received shielding letter/text and sex

Having received shielding letter/text or not had no significant association with any difference in perceived weight change since lockdown began with 42% and 43% respectively having indicated that there had been no change.

Table 4.4

4.2.5 Adult food insecurity, August/September 2020, by age and sex

During the fieldwork period, just under one in ten adults (8%) reported that they worried that they would run out of food at some time due to a lack of money or other resources, 4% of all adults reported having eaten less than they should and 2% that they had run out of food due to a lack of money or other resources during the previous 12 months. No significant difference in food insecurity was observed between men and women. However, it was more prevalent among younger adults, with those aged 16-44 (11%) most likely to report having been worried they would run out of food in the previous 12 months (compared to 7% for those aged 45-64 and 1% - 2% for those aged 65 and over).

Younger adults were also more likely than others to report having eaten less over the same period because of a lack of money or other resources (4% - 7% among those aged 16-64 compared with 1% among those aged 65 and over) and to have run out of food due to a lack of money or other resources (2% - 3% of those aged 16-64 compared with 0% among those aged 65 and over). Similar patterns by

age were recorded for both men and women, with no significant variations.

Figure 4D
Worried would run out of food (last 12 months) due to lack of money or other resources, August/September 2020, by age

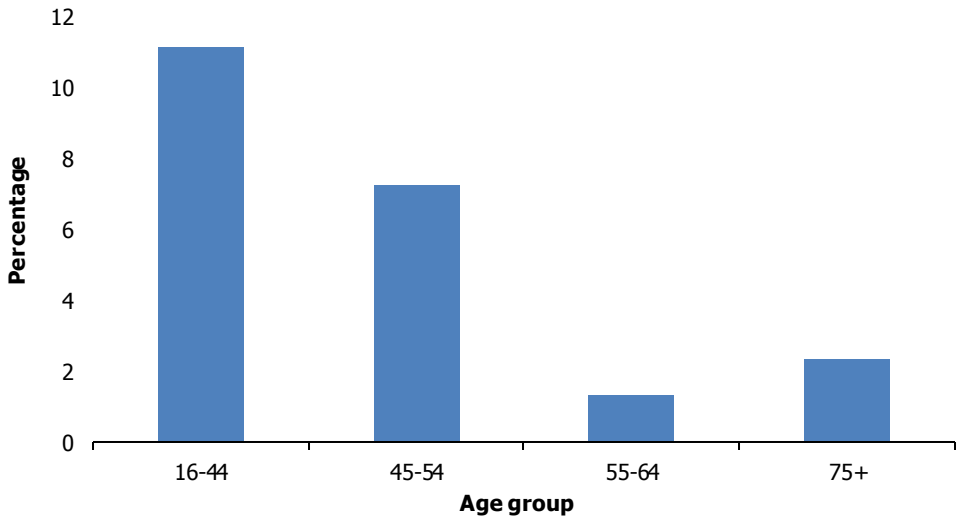


Figure 4D, Table 4.5

4.2.6 Adult food insecurity, August/September 2020, by whether received shielding letter/text and sex

No significant variations in food insecurity prevalence were recorded between those who had been advised to shield and those who had not with 11% and 7% respectively indicating that they had been worried they would run out of food in the last 12 months. **Table 4.6**

Table List

The tables can be found in the main report page under supporting documents.

References and notes

[1] Editorial (2017). Life, Death and Disability in 2016. *The Lancet;* 390(10100): p1083-1464.

[2] Defined in adults as a body mass index (BMI) of 30 kg/m² or greater.

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[16] Based on self-reported height and weight data.

[17] The BMI data reported here has been adjusted on the basis of work undertaken previously based on Health Survey for England self-reported height and weight data. Further information can be found in the technical report.

Chapter 5

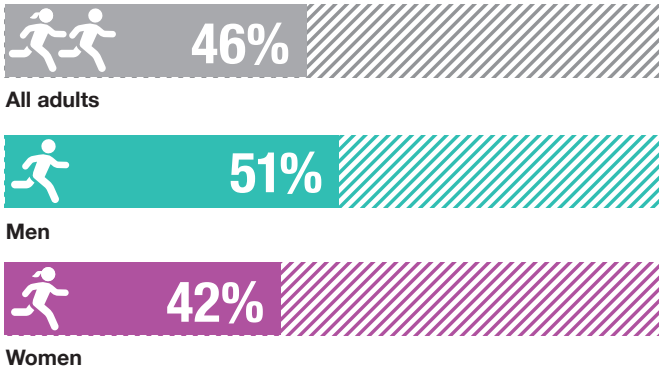
Physical Activity

CHAPTER 5

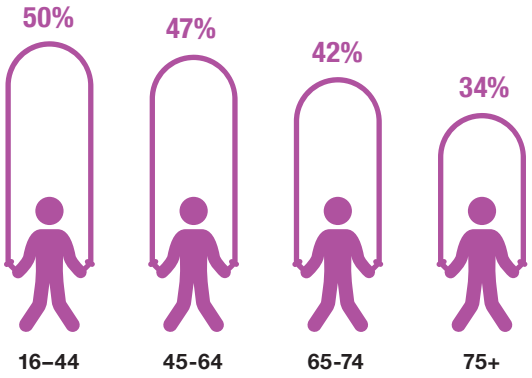
Physical Activity*

This summary covers data collected between the 5th August 2020 and the 23rd September 2020.

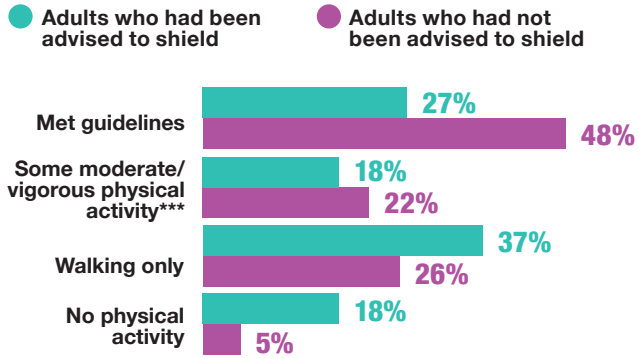
Just under half of adults reported undertaking enough activity to meet the moderate or vigorous physical activity guidelines (MVPA)** with men more likely than women to do so.



The proportion of adults that reported undertaking enough activity to meet the MVPA guidelines** declined with age.

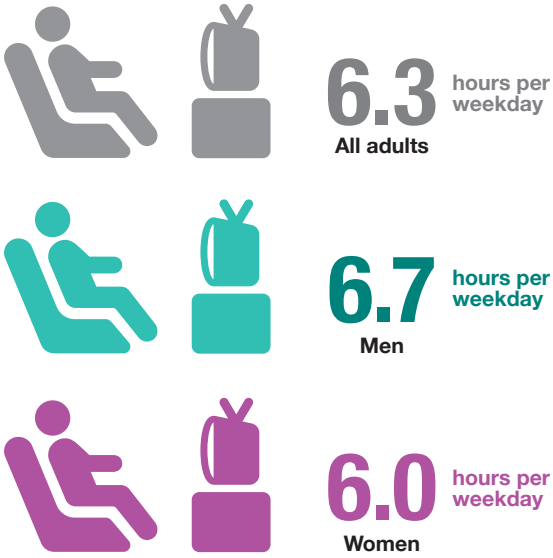


Adults who had been advised to shield reported lower physical activity levels.

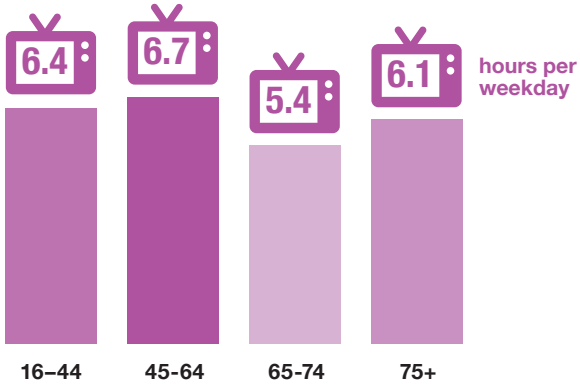


*Information collected using the Short-Form International Physical Activity Questionnaire (IPAQ). This questionnaire defines activity levels based on reported moderate or vigorous physical activity (MVPA) but uses a less detailed set of questions than those included in the face-to-face SHeS surveys and hence it is not comparable with the face-to-face survey approach.

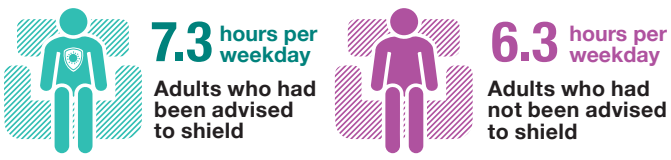
Men were more likely to report having spent a higher amount of time on sedentary† activities than women.



The average time spent on sedentary activities varied by age with the lowest levels among those aged 65-74.



The amount of sedentary time reported was higher among adults who had been advised to shield than among those who had not.



** at least 75 minutes per week of vigorous activity or 150 minutes per week of moderate activity (or some combination of the two).
***not a significant difference.
†Includes time spent at work, at home, while doing course work and during leisure time.

5 PHYSICAL ACTIVITY

Claire Elliott

5.1 INTRODUCTION

There is compelling evidence to support the health benefits of regular physical activity for all groups. In adults, there is strong evidence to demonstrate the protective effect on physical activity on a range of many chronic conditions including coronary heart disease, obesity and type 2 diabetes, mental health problems and social isolation. Regular physical activity can deliver cost savings for the health and care system and has wider social benefits for individuals and communities. These include increased productivity in the workplace and reduction in congestion and reduced air pollution through active travel[1].

The four UK Chief Medical Officers jointly issued revised physical activity guidelines in September 2019[1]. The guidelines recommend that, for good physical and mental health, adults should aim to be physically active every day. Any activity is better than none, and more is better still. Each week, adults should accumulate at least 150 minutes of moderate intensity activity; or 75 minutes of vigorous intensity activity; or even shorter durations of very vigorous intensity activity; or a combination of moderate, vigorous and very vigorous intensity activity. The guidelines also recommend that muscle strengthening activities are undertaken on at least two days a week but that any strengthening activity is better than none[2]. Sedentary time should be minimised as far as possible.

A Scotland where we eat well, have a healthy weight and are physically active is one of the six **Public Health Priorities for Scotland** published jointly by the Scottish Government and the Convention of Scottish Local Authorities (COSLA) in 2018[3]. The **Active Scotland Delivery Plan**, also published in 2018, supports this priority and identifies a wide range of actions across all sectors with the overall aim of reducing physical inactivity in adults and teenagers by 15% by 2030 and addressing existing inequalities in access to opportunities for and barriers to participation in physical activity[4].

Evidence is suggestive of varying impacts of the pandemic on diet and physical activity, with both positive and less beneficial actions adopted by individuals in response to their own and national circumstances, sometimes interchangeably[5]. Indoor and outdoor exercise facilities and clubs were closed at the end of March 2020 due to the coronavirus pandemic. Many workplaces were also closed with people encouraged to stay at home, reducing the potential for active travel and increasing opportunities to be sedentary. Throughout the lockdown period, people have been allowed to leave their homes in order to exercise with some restrictions on duration in place during the earlier stages of lockdown. During the data collection period, sport and exercise facilities largely remained closed with outdoor contact sports allowed to resume from 24th August and indoor exercise facilities able to reopen from the 31st of August[6].

This chapter presents findings on summary activity levels[7] and mean sedentary time among the Scottish adult population in August/September 2020. The questions used in the survey to collect this information were very different from

those usually used in the Scottish Health Survey (SHeS)[8], so results are not comparable with other years. Information on methods and definitions can be found in Volume 2: Technical Report.

5.2 PHYSICAL ACTIVITY

The fieldwork period referenced in the following analysis covers from the 5th August 2020 to 23rd September 2020.

In interpreting these results, note that information on physical activity was collected using the Short-Form International Physical Activity Questionnaire (IPAQ). This questionnaire defines activity levels based on reported moderate or vigorous physical activity (MVPA) but uses a less detailed set of questions than those included in the face-to-face SHeS surveys and hence it is not comparable with the face-to-face survey approach.

A further consideration is that, as physical activity levels tend to be lower in deprived areas where response to this survey was lower than usual, the results in sections 5.2.1 and 5.2.2 may overestimate true prevalence. Conversely, sedentary time tends to be higher in deprived areas and hence the results in sections 5.2.3 and 5.2.4 may underestimate true prevalence.

See section 1.9.6 of the technical report for further details.

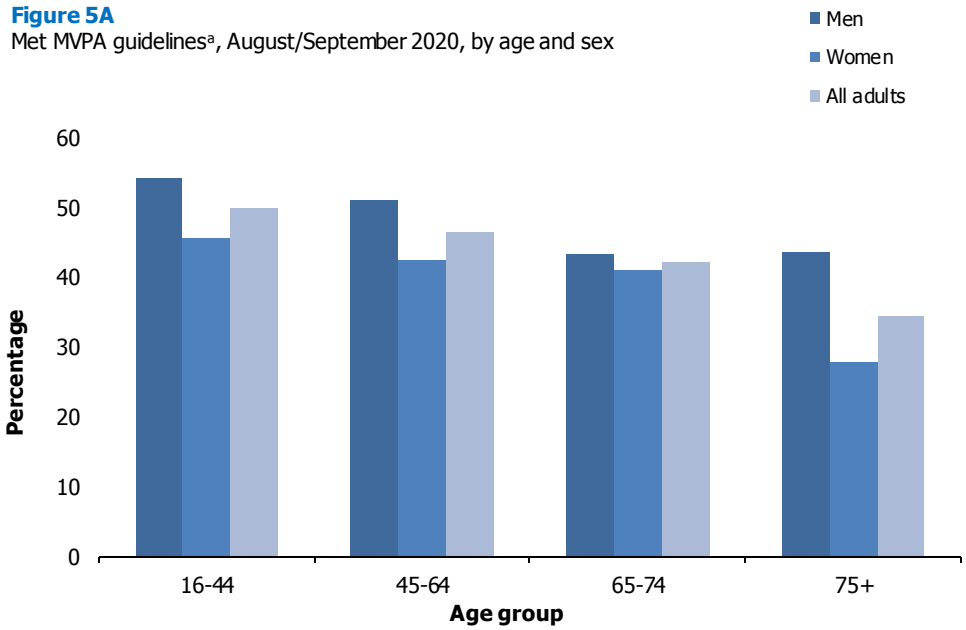
5.2.1 Adult summary activity levels, August/September 2020, by age and sex

During the fieldwork period, nearly half (46%) of all adults met the guidelines for moderate or vigorous physical activity (MVPA) of at least 75 minutes per week of vigorous activity or 150 minutes per week of moderate activity (or some combination of the two). Younger adults were more likely than older adults to meet the MVPA guidelines (50% of those aged 16-44 compared with 34% of those aged 75 and over).

A higher proportion of men met the MVPA guidelines than women (51% compared with 42% respectively) with the gap at its widest among those aged 75 and over (44% of men in this age group compared with 28% of women).

Just 6% of both men and women reported doing no physical activity at all in the previous week. The proportion reporting doing no physical activity in the previous week increased with age from 3% of those aged 16–44 to 13% among those aged 75 and over, with similar patterns for men and women. However, among those aged 75 and over, women were more likely than men to report undertaking no physical activity in the previous seven days (15% compared with 10% respectively).

Figure 5A
Met MVPA guidelines[a], August/September 2020, by age and sex



[a] Those who undertook more than 75 minutes per week of vigorous activity or 150 minutes per week of moderate activity (or some combination of the two).

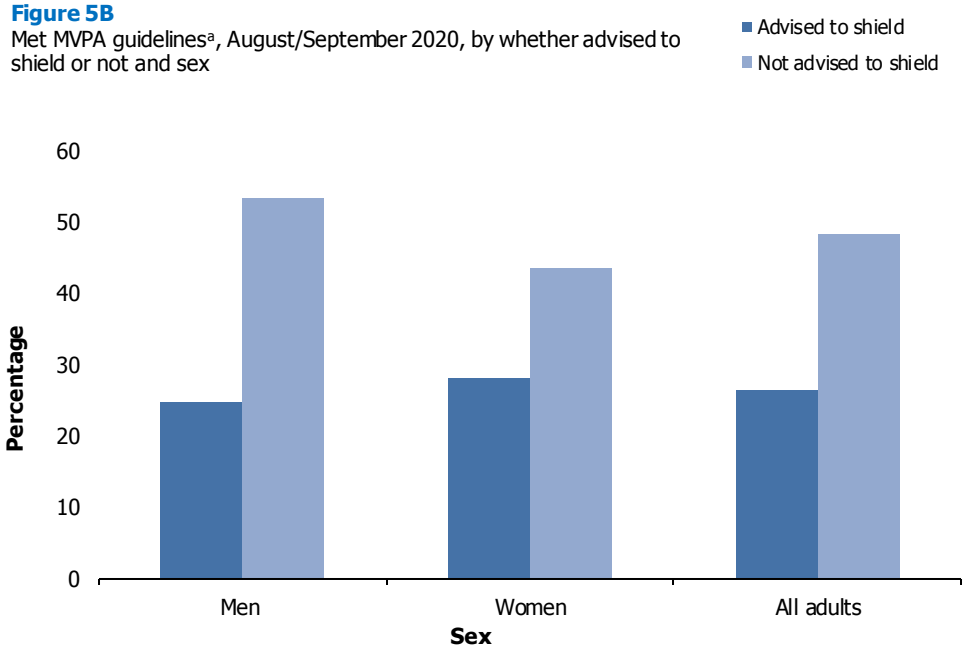
Figure 5A, Table 5.1

5.2.2 Adult summary activity levels, August/September 2020, by whether received shielding letter/text and sex

Those who had been advised to shield (either by letter or text) were less likely to meet the MVPA guidelines than those who had not been advised to shield (27% compared with 48%).

This difference between the proportion of those advised to shield meeting the MVPA guidelines and those not advised to shield was more pronounced for men than for women (25% of men that received a shielding letter/text met the guidelines compared with 53% who had not; the equivalent figures for women were 28% and 44%).

Figure 5B
Met MVPA guidelines[a], August/September 2020, by whether advised to shield or not and sex



[a] Those who undertook more than 75 minutes per week of vigorous activity or 150 minutes per week of moderate activity (or some combination of the two).

Figure 5B, Table 5.2

5.2.3 Adult sedentary time[9] on an average weekday, August/September 2020, by age and sex

During the fieldwork period, all adults recorded an average of 6.3 hours of sedentary time per weekday. The average time spent on sedentary activities varied by age with the lowest levels among those aged 65-74 (5.4 hours compared with 6.1 hours – 6.7 hours among other age groups).

While the average sedentary time per weekday was significantly lower for women than for men (6.0 hours on average compared with 6.7 hours), the pattern by age was similar for both sexes.

Figure 5C
Mean adult sedentary time on average weekday (hours), August/September 2020, by age and sex

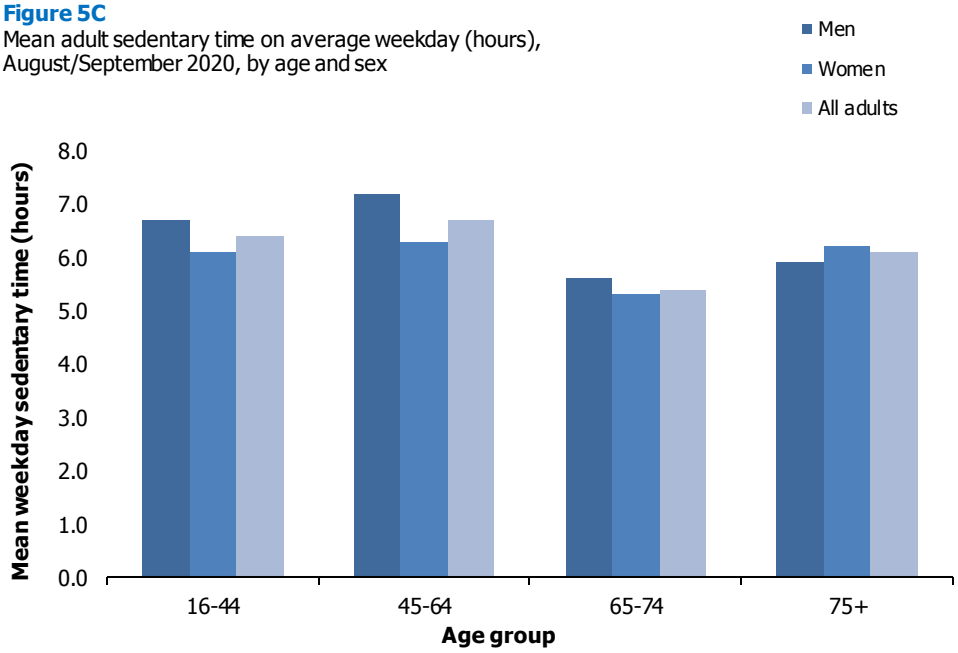


Figure 5C, Table 5.3

5.2.4 Adult sedentary time on an average weekday, August/September 2020, by whether received shielding letter/text and sex

Adults who had been advised to shield (either by letter or text) reported more sedentary time on weekdays than those who had not received such advice (averages of 7.3 hours and 6.3 hours respectively). Similar patterns by shielding status were reported by men and women.

Table 5.4

Table List

The tables can be found in the main report page under supporting documents.

References and notes

[1] *UK Chief Medical Officer' Physical Activity Guidelines (2019).* Department of Health & Social Care, Welsh Government, Scottish Government & Northern Ireland Department of Health. [online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/832868/uk-chief-medical-officers-physical-activity-guidelines.pdf

[2] It should be noted that the SHeS telephone survey did not ask question on or distinguish between activities that could be categorised as muscle strengthening.

[3] *Public Health Priorities for Scotland (2018).* COSLA & Scottish [online]. Available at: https://www.gov.scot/binaries/content/documents/govscot/publications/corporate-report/2018/06/scotlands-public-health-priorities/documents/00536757-pdf/00536757-pdf/govscot%3Adocument/00536757.pdf?forceDownload=true

[4] See: https://www.gov.scot/publications/active-scotland-delivery-plan/

[5] Ingram, J, Maciejewski, G and Hand, C. (2020). *Changes in Diet, Sleep, and Physical Activity Are Associated With Differences in Negative Mood During COVID-19 Lockdown.* Frontiers in Psychology. Available from: https://www.frontiersin.org/articles/10.3389/fpsyg.2020.588604/full

[6] *Coronavirus (COVID-19): Scotland's route map.* Edinburgh: Scottish Government (2020). Available at: https://www.gov.scot/collections/coronavirus-covid-19-scotlands-route-map/

[7] While the guidelines differ for those aged 16 to 18 years old, for the purposes of SHeS, the activity of these participants is included in the all adult calculations.

[8] Information on physical activity was collected using the Short-Form International Physical Activity Questionnaire (IPAQ). See the technical report for further details.

[9] Includes time spent at work, at home, while doing course work and during leisure time.

Chapter 6

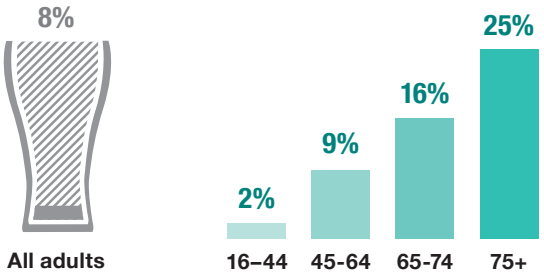
Alcohol

CHAPTER 6

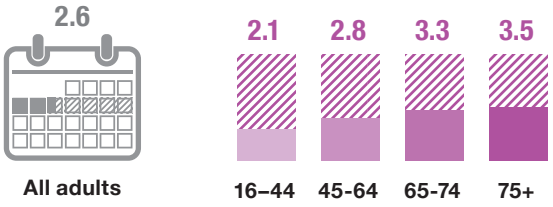
Alcohol

This summary covers data collected between the 5th August 2020 and the 23rd September 2020.

The proportion of adults* who consumed alcohol on more than 5 days in the week prior to being interviewed increased with age.

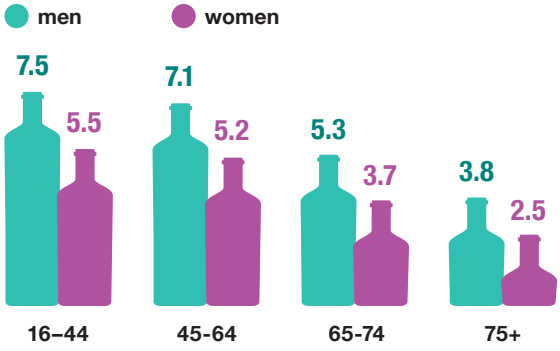


A similar pattern was also evident for the mean number of days on which alcohol was consumed over the past week*.



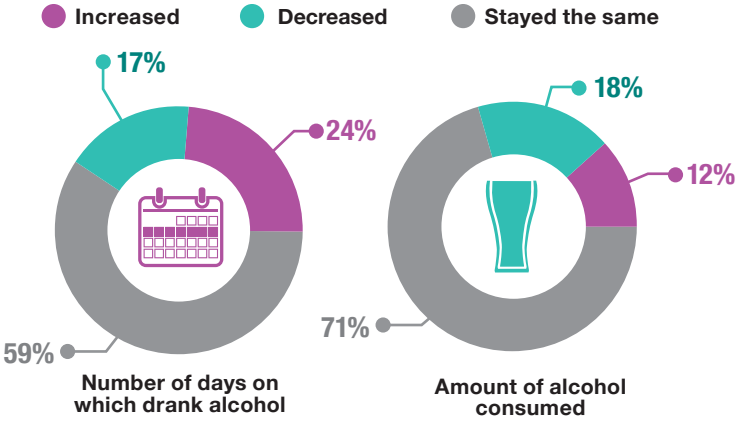
The proportion of men* who drank more than 8 units on their heaviest drinking day was higher than the proportion of women* who drank more than 6 units.

Men were also more likely to have consumed a higher mean number of units per week on their HDD** than women across all age groups*.

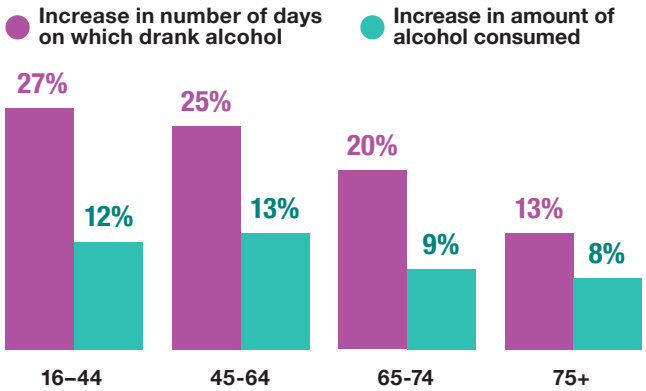


*Among those who had consumed any alcohol in the past week.
**Heaviest drinking day.

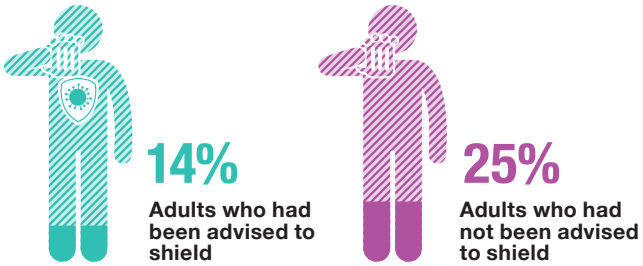
Significant proportions of people reported changes to their drinking habits between the start of lockdown*** and the date of the interview.



Younger adults† were more likely to report an increase in the frequency and quantity of alcohol consumed since the beginning of lockdown***.



Adults† who had been advised to shield were less likely to report an increase in the number of days on which they drank alcohol since the beginning of lockdown***.



***Lockdown began on the 23rd March 2020.
†Adults who consumed alcohol at all nowadays.

6 ALCOHOL

Alex Scholes

6.1 INTRODUCTION

Harmful alcohol consumption is recognised as a major, long-lasting public health challenge in Scotland, carrying with it a risk of physical and mental health problems, as well as social and economic losses to individuals and society[1]. In 2019, 9.9 litres of pure alcohol were sold per adult in Scotland (same as in 2018), equivalent to 19.1 units per adult per week, representing enough alcohol for every adult to substantially (by 36%) exceed the low risk weekly drinking guideline (14 units), despite being the lowest level seen since 1994[2]. The UK Chief Medical Officers (CMOs) published revised guidelines on alcohol consumption in January 2016, advising both men and women that it is safest not to regularly consume more than 14 units of alcohol per week, to spread the amount drunk over a number of days and to limit consumption in a single session[3].

In the financial year 2019 to 2020, alcohol-related problems resulted in 35,781 stays in general acute hospitals[4] and in 2019, there were 1,020 alcohol-specific deaths[5]. Existing inequalities mean that the burden of alcohol-related morbidity and mortality is greatest among those living in the most deprived areas[6,7].

The **Alcohol Framework 2018: Preventing Harm**[8] endorses the WHO Safer initiative of evidence-based strategies to tackle alcohol-related harm[9] and includes actions related to putting the voices of children and young people at the heart of alcohol preventative measure development; reducing alcohol consumption through affordability; supporting families and communities, keeping the licensing system and statutory guidance under review and consulting on marketing restrictions.

It is not yet clear what the wider impact of the COVID-19 pandemic will have been on alcohol sales and harm at a population and sub-group level. The Scottish Government is working with Public Health Scotland to better understand this and a report will be published in due course. Evidence to date is suggestive of varying impacts of the pandemic on alcohol consumption[10,11]. On-trade licensed premises were closed during the initial lockdown period, however, purchasing alcohol from some parts of the off-trade, such as supermarkets was still possible. Since 15th July 2020 and throughout the period of data collection, lockdown restrictions were eased and indoor hospitality could open (subject to physical distancing rules and guidance) however, as virus cases increased, variable restrictions were put in place again[12].

This chapter reports on the number of days in the previous week on which adults drank alcohol, and the mean number of units on the day they drank the most, as well as any self-reported changes to the amount they consumed since lockdown began. Information on methods and definitions can be found in Volume 2: Technical Report.

6.2 ALCOHOL

The fieldwork period referenced in the following analysis covers from the 5th August 2020 to the 23rd September 2020.

In interpreting these results, note that, in this survey these questions were asked as part of the main interview. However, in the usual format of the Scottish Health Survey, younger adults aged 16-17 are only asked about alcohol consumption as part of the self-completion questionnaire rather than the interviewer asking the questions and younger adults aged 18-19 are offered the opportunity to complete these questions as part of the self-completion questionnaire rather than as part of the main interview. The self-completion format enables younger adults, particularly those living within the family home, to answer these questions privately should they wish to do so.

In addition, patterns of drinking behaviour tend to vary by deprivation and as response to this survey was lower than usual in deprived areas this may have impacted upon the estimates presented here. See section 1.9.7 of the technical report for more on the alcohol measures used in the survey.

6.2.1 Number of days on which adult drinkers drank alcohol in the past week, August/September 2020, by age and sex

Just under one in ten adults reported that they had drunk alcohol on more than five days in the week prior to being interviewed (8%) with no significant difference by sex. Significant differences were evident by age with proportions increasing from 2% of those aged 16-44 to 25% of those aged 75 and over. Similar patterns by age were observed for men and women.

On average, adult drinkers drank alcohol on 2.6 days in the past week; with the figure for men (2.7) being slightly higher than for women (2.5). There was a positive correlation between the mean number of days on which alcohol had been consumed in the past week and age, rising from 2.1 days among adults aged 16-44 to 3.5 among those aged 75 and over.

Figure 6A
Mean number of days on which drank alcohol in the past week, August/September 2020, by age and sex

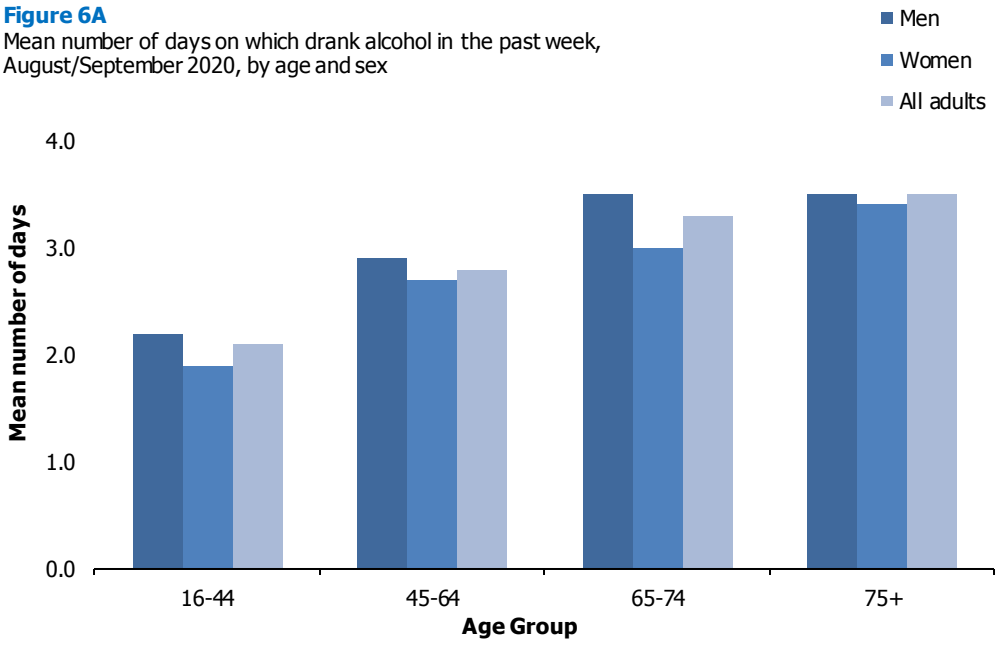


Figure 6A, Table 6.1

6.2.2 Estimated units consumed on heaviest drinking day, August/September 2020, by age and sex

During the fieldwork period, the proportion of men who drank more than four units on their heaviest drinking day (37%) was higher than the proportion of women who drank more than three units on their heaviest drinking day (30%). The proportion of adults that reported having consumed three or four units on their heaviest drinking day decreased from 34% - 39% of adults aged 64 and under to 15% among those aged 75 and over.

The proportion of men drinking more than eight units on their heaviest drinking day was higher than the proportion of women drinking more than six units on their heaviest drinking day (19% compared with 11% respectively). Variations in prevalence by age were evident in the proportion of adults estimating having drunk over six or eight units on their heaviest drinking day, with the lowest proportion reported among those aged 75 and over (3%) and the highest among those aged 16-64 (17% - 18%).

Among adult drinkers, the mean number of units consumed on their heaviest drinking day was 5.9 with male drinkers consuming, on average, more units than female drinkers (6.7 compared to 4.9). The mean number of units consumed by drinkers on their heaviest drinking day decreased with age from 6.6 among those aged 16-44 to 3.2 among those aged 75 and over. Similar patterns were found for men and women.

Figure 6B
Estimated mean units consumed on heaviest drinking day, August/September 2020, by age and sex

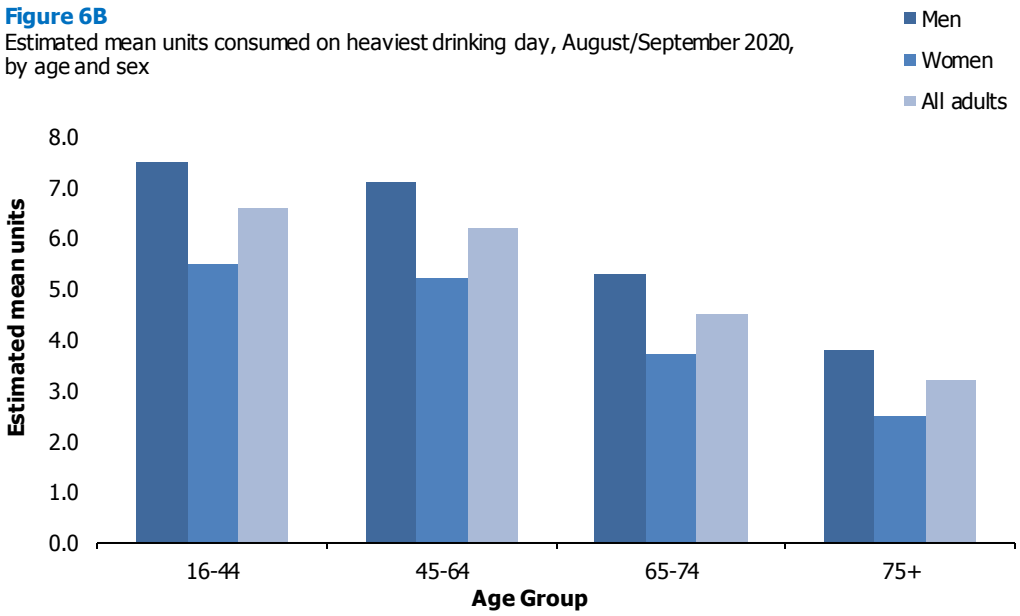


Figure 6B, Table 6.2

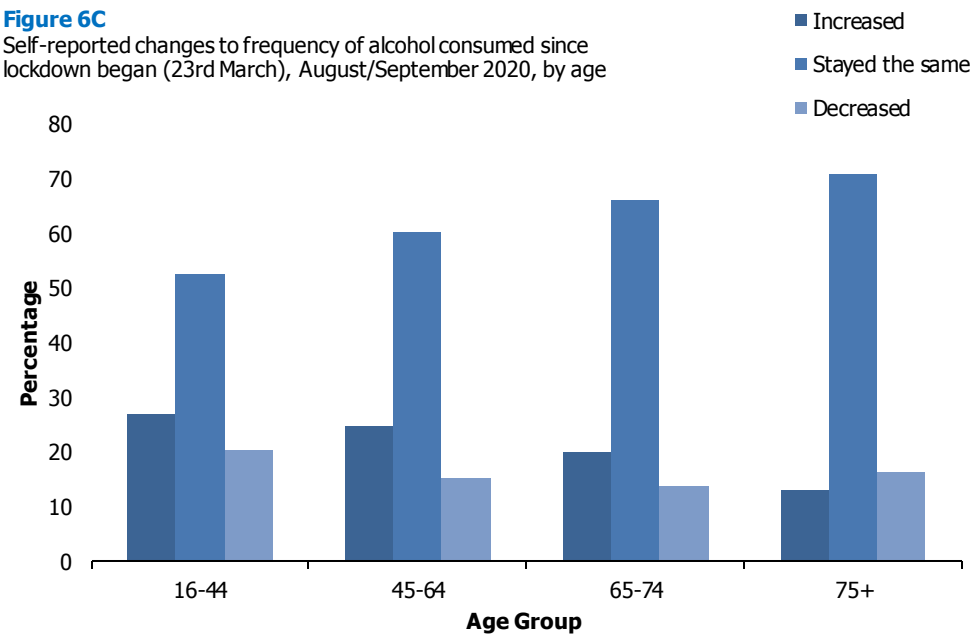
6.2.3 Self-reported changes to frequency or amount of alcohol consumed since lockdown began (23rd March), August/September 2020, by age and sex

The majority of adults reported that the number of days on which they drank alcohol and/or the amount of alcohol they consumed on a typical day had stayed the same (59% and 71% respectively) between the 23rd March 2020 and the fieldwork period.

While 24% of adults reported that the number of days on which they drank alcohol per week had increased between the start of lockdown and the fieldwork period, 17% reported it had decreased with no significant differences by sex.

Younger adults were more likely to report an increase in the number of days on which they drank alcohol since lockdown began (proportions decreased from 27% among those aged 16-44 to 13% among those aged 75 and over). Similar patterns by age were found for men and women.

Figure 6C
Self-reported changes to frequency of alcohol consumed since lockdown began (23rd March), August/September 2020, by age



Just over one in ten adults (12%) reported that the amount of alcohol they consumed on a typical day had increased between the start of lockdown and the fieldwork period while just under two in ten (18%) reported a decrease. There were no significant differences by age or sex. **Figure 6C, Table 6.3**

6.2.4 Self-reported changes to frequency or amount of alcohol consumed since lockdown began (23rd March), August/September 2020, by whether received shielding letter/text and sex

Those who had received a shielding letter/text were less likely (14%) than those who had not received one (25%) to report that the number of days on which they drank alcohol per week had increased between the beginning of lockdown and the fieldwork period. Similar figures were found for men and women.

There was no significant difference reported regarding changes to the amount of alcohol consumed since lockdown began between those who had or had not received a shielding letter/text (7% and 12% respectively). **Table 6.4**

Table List

The tables can be found in the main report page under supporting documents.

References and notes

1 World Health Organization (2018) *Alcohol Fact Sheet.* Available at: www.who.int/news-room/fact sheets/detail/alcohol

2 Public Health Scotland (2020) Monitoring and evaluating Scotland's Alcohol Strategy (MESAS) Available at: http://www.healthscotland.scot/media/3103/mesas-monitoring-report-2020.pdf

3 See: www.gov.scot/Topics/Health/Services/Alcohol/safer-drinking

4 *Alcohol related hospital statistics Scotland financial year 2019 to 2020*, Edinburgh: Public Health Scotland, 2020. Available from: https://beta.isdscotland.org/find-publications-and-data/lifestyle-and-behaviours/substance-use/alcohol-related-hospital-statistics/

5 See: https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/alcohol-deaths

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7 Katikireddi SV, Whitley E, Lewsey J, Gray L and Leyland AH (2017). Socioeconomic status as an effect modifier of alcohol consumption and harm: analysis of linked cohort data. *Lancet Public Health;* 2: 267–76.

8 Scottish Government. (2018). Alcohol Framework 2018: Preventing Harm. Available at: https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2018/11/alcohol-framework-2018-preventing-harm-next-steps-changing-relationship-alcohol/documents/alcohol-framework-2018-preventing-harm-next-steps-changing-relationship-alcohol/alcohol-framework-2018-preventing-harm-next-steps-changing-relationship-alcohol/govscot%3Adocument/00543214.pdf

9 *World Health Organization (2018) SAFER initiative.* Available at: https://www.who.int/substance_abuse/safer/launch/en/

10 Ingram, J, Maciejewski, G and Hand, C. (2020). *Changes in Diet, Sleep, and Physical Activity Are Associated With Differences in Negative Mood During COVID-19 Lockdown.* Frontiers in Psychology. Available from: https://www.frontiersin.org/articles/10.3389/fpsyg.2020.588604/full

11 Alcohol Focus Scotland. (2020). *Scots report changing drinking patterns during coronavirus lockdown.* Available from: https://www.alcohol-focus-scotland.org.uk/news/scots-report-changing-drinking-patterns-during-coronavirus-lockdown/

12 *Coronavirus (COVID-19): Scotland's route map.* Edinburgh: Scottish Government (2020). Available at: https://www.gov.scot/collections/coronavirus-covid-19-scotlands-route-map/

Chapter 7

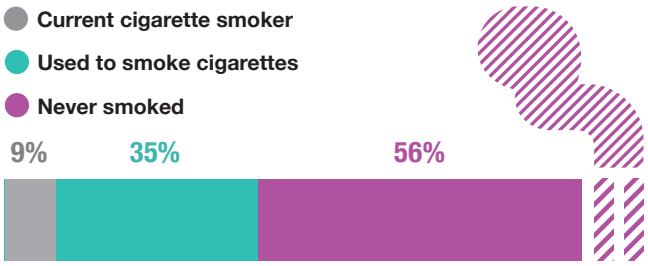
Smoking

CHAPTER 7

Smoking

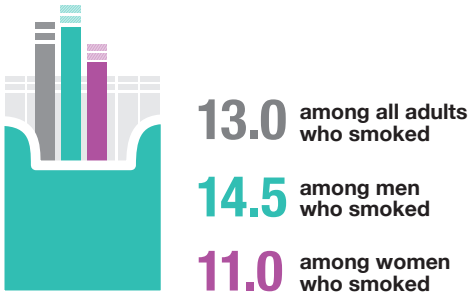
This summary covers data collected between the 5th August 2020 and the 23rd September 2020.

Around one in ten adults identified as a current smoker, with the majority reporting that they had never smoked.

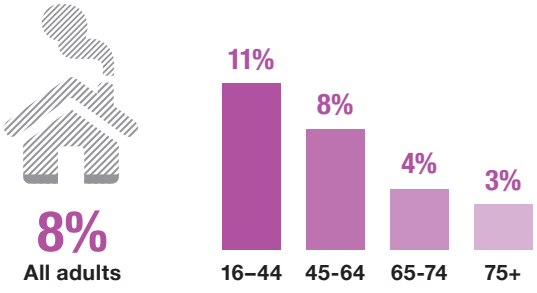


Smoking prevalence was higher among men than women.

Men* also reported smoking a higher mean number of cigarettes per day than women*.

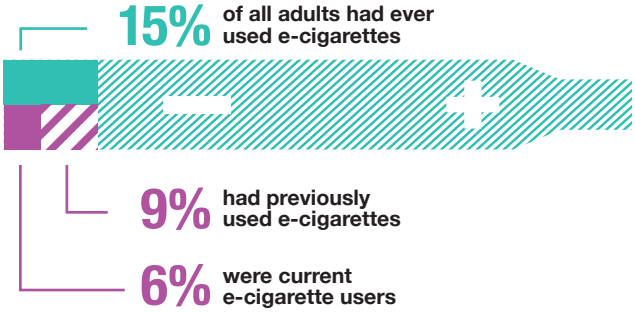


The prevalence of non-smokers that reported being exposed to second-hand smoke** decreased by age.

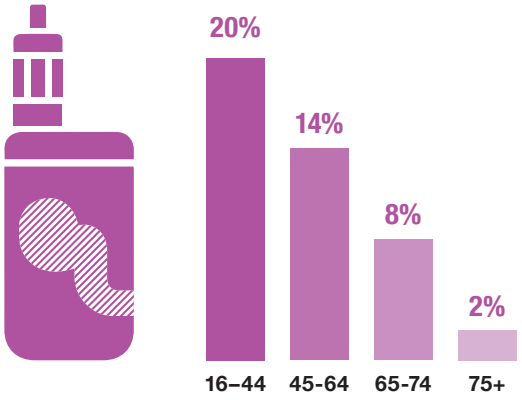


* Among those who identified as a current smoker.
** In own home, other people's homes, in cars/vans, outside buildings, at work, or in other public places.

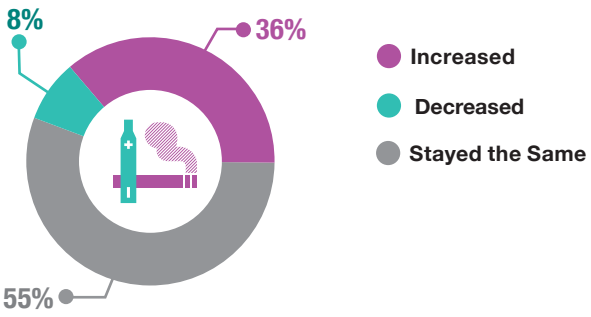
Around 1 in 20 adults were current e-cigarette users.



Men and young adults were more likely to report having ever used an e-cigarette.



A significant proportion of people reported an increase in the amount that they smoked since the beginning of lockdown***.



*** Lockdown began on 23rd March 2020.

7 SMOKING

Claire Elliott

7.1 INTRODUCTION

The World Health Organisation describe tobacco as 'one of the biggest public health threats the world has ever faced'[1]. In Scotland, smoking was associated with around 100,000 hospital admissions in 2018, with a smoking-attributable disease or condition the primary reason for more than half of these[2]. As the cause of around one in five deaths and the primary preventable cause of premature death, smoking represents the chief threat to Scotland's public health[3]. While overall smoking rates have declined in Scotland, differences by deprivation have increased, with rates highest in the most deprived areas, highlighting that smoking remains an ongoing health inequality challenge[4].

Protecting Scotland, Renewing Scotland: The Government's Programme for Scotland 2020-21[5] reaffirms the government's commitment to the action plan outlined in **Raising Scotland's Tobacco-free Generation** published in June 2018[6]. The action plan outlines interventions and policies that aim to ensure Scotland is raising a tobacco-free generation by 2034 (defined as 'a smoking prevalence among the adult population of 5% or lower').

There is a potential for COVID-19 to impact on smoking rates. For example, those with mental health problems such as anxiety or depression are more likely to smoke than the general population[7] and evidence suggests that COVID-19 has led to increased stress and mental health problems in the general population[8]. Also, recent evidence suggests that smoking is associated with increased severity of disease and death in hospitalized COVID-19 patients[9]. At the time of data collection, initially up to 8 people from three households and from the 14th of September and onwards up to 6 people from two households could meet indoors, including in other people's homes. These restrictions could have impacted on rates of exposure to second-hand smoke within other people's homes[10,11]. Finally, due to COVID-19, in-person access to GP services in Scotland for support with smoking cessation was variable and limited, but for anyone wishing to quit, services were available online and pharmacists were able to deliver prescriptions[12].

This chapter presents findings on the prevalence of cigarette smoking and e-cigarette use in the Scottish adult population in August/September 2020 as well as self-reported changes to smoking habits since lockdown began and non-smokers' exposure to second-hand smoke. Information on methods and definitions can be found in Volume 2: Technical Report.

7.2 SMOKING

The fieldwork period referenced in the following analysis covers from the 5th August 2020 to the 23rd September 2020.

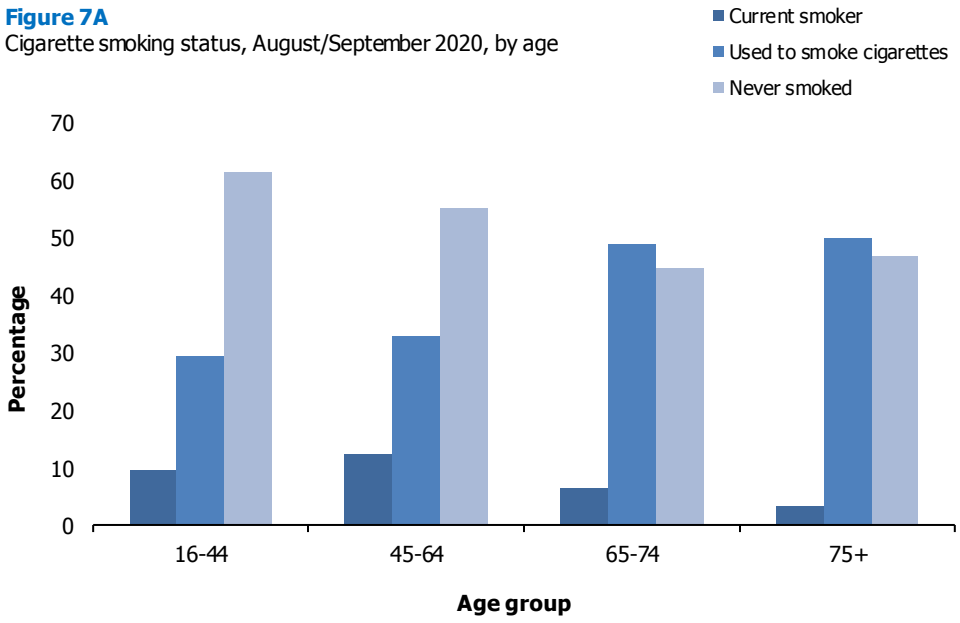
In interpreting these results, note that, in the usual format of the Scottish Health Survey, younger adults are asked about smoking within a self-completion form

rather than the interviewer asking the questions. The self-completion format enables younger adults aged 16-19, particularly those living within the family home, to answer these questions privately. For this reason and as levels of smoking and e-cigarette use tend to be much higher in deprived areas where response to this survey was lower than usual, the following results may underestimate true prevalence.

7.2.1 Cigarette smoking status, August/September 2020, by age and sex

During the fieldwork period, 9% of adults identified as current smokers, with smoking prevalence higher among men (11%) than women (8%). There were also differences in overall smoking prevalence by age with the highest prevalence of current smoking among those aged 45-64 (12%) and the lowest among those aged 75 and over (3%).

Figure 7A
Cigarette smoking status, August/September 2020, by age



On average, among all adults, current smokers smoked 13.0 cigarettes per day; this was higher among male smokers than female smokers (14.5 and 11.0 respectively). There were no significant differences in the mean number of cigarettes smoked by age.

Just over a third of adults (35%) reported that they had smoked cigarettes previously but did not smoke nowadays. Older adults were more likely than younger adults to report that they had previously smoked cigarettes (49% - 50% of those aged 65 and over compared with 29% of those aged 16-44). Men were also more likely than women to report having previously smoked (38% compared with 32%), particularly men aged 75 and over compared with women in the same age group (67% and 38% respectively).

More than half of adults reported that they had never smoked (56%) with the highest proportion among those aged 16-44 (61%) and the lowest among those aged 75 and over (47%). Women were more likely than men to report that they had never smoked (60% compared with

51%), with a 30 percentage point gap recorded between the proportion of women aged 75 and over and men in the same age group who reported that they had never smoked (59% and 29% respectively).
Figure 7A, Table 7.1

7.2.2 Non-smokers' exposure to second-hand smoke, August/September 2020, by age and sex

During fieldwork, just under one in ten adult non-smokers (8%) reported being exposed to second-hand smoke across a range of settings[13] with the highest proportions reported for second-hand smoke exposure either in their own or someone else's home (4%), followed by 'other people's homes' specifically and 'in any public space' (both 3%).

Few significant variations by age or sex were recorded during the fieldwork period with the exceptions of a higher proportion of younger non-smokers reporting exposure to second-hand smoke in any public space (5% of those aged 16-44 compared with 1% of those aged 75 and over) including outside buildings such as pubs, shops and hospitals (4% of those aged 16-44 compared with 1% of those aged 75 and over) and male non-smokers reporting that they were exposed to second-hand smoke at work (2% compared with <1% of female non-smokers).

The likelihood of non-smokers being exposed to second-hand smoke reduced with age from 11% of non-smokers aged 16-44 to 3% of non-smokers aged 75 and over. Similar patterns by age were found for men and women. **Table 7.2**

7.2.3 E-cigarette use, August/September 2020, by age and sex

During the fieldwork period, 15% of adults reported ever having used e-cigarettes, with 6% of all adults self-reporting as current e-cigarette users and 9% reporting that they had previously used them.

Among current e-cigarette users there was no significant difference by sex, however men were more likely than women to have reported previously using e-cigarettes (11% compared with 7%) and women were more likely than men to report never having used e-cigarettes (88% and 82% respectively).

The highest proportion of current e-cigarette users was recorded among those aged 16-44 (8%) with the lowest among adults aged 75 and over (<1%). Similar patterns were found for men and women.

Younger adults were more likely than older adults to have previously used e-cigarettes (12% of those aged 16-44 compared with 2% of adults aged 75 and over) with similar patterns for men and women. Adults aged 75 and over were most likely to report that they had never used e-cigarettes (98% compared to 80% of those aged 16-44).

Figure 7B
E-cigarette use, August/September 2020, by age

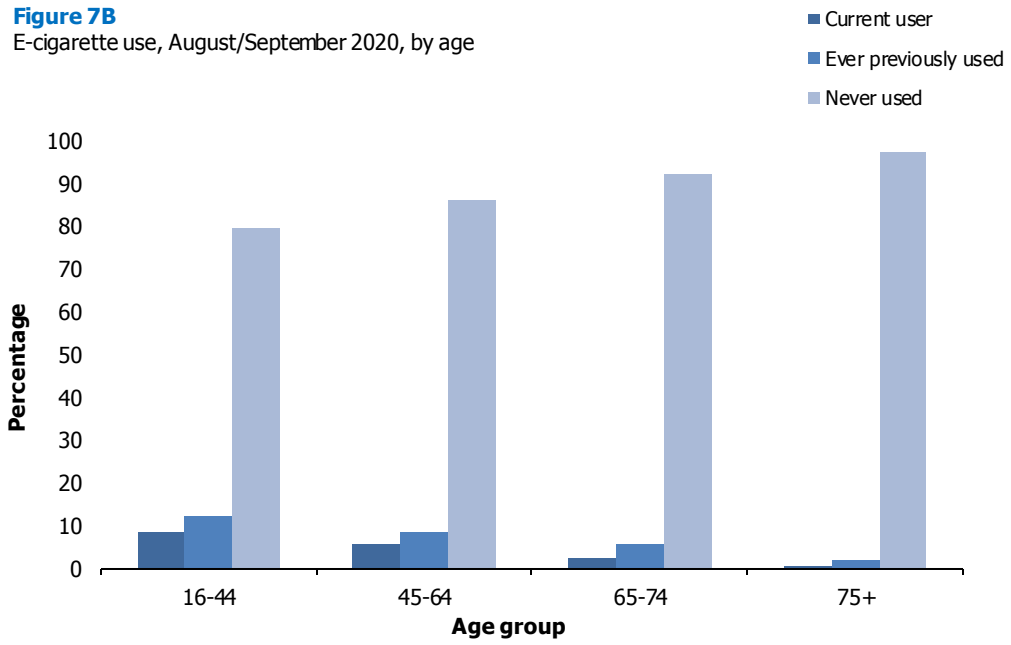
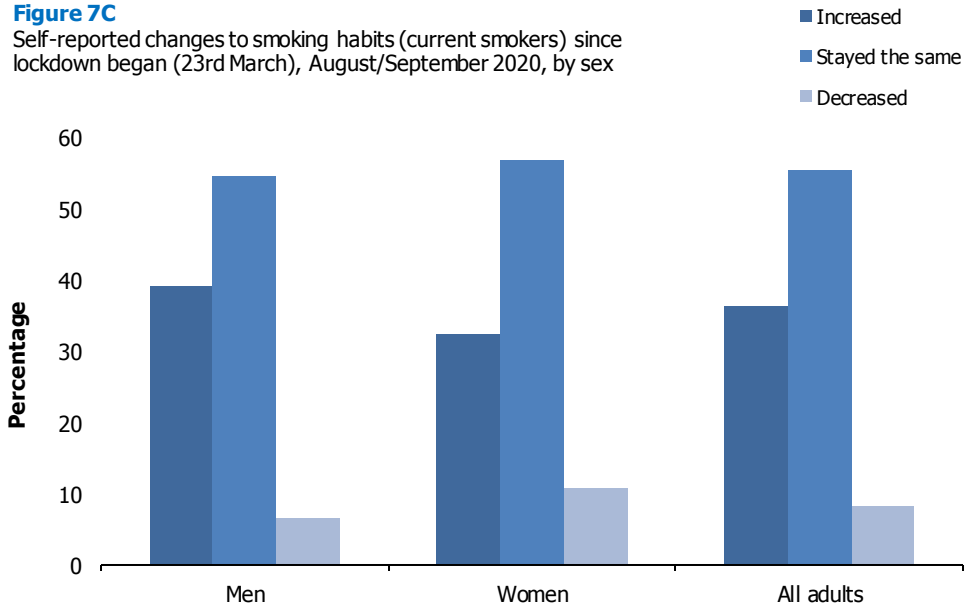


Figure 7B, Table 7.3

7.2.4 Self-reported changes to smoking habits since lockdown began (23rd March), August/September 2020, by age and sex

During the fieldwork period, over half (55%) of adult smokers self-reported that the amount they smoked had stayed the same since the beginning of lockdown (23rd March 2020). Just over a third (36%) reported that there had been an increase in the amount they smoked and fewer (8%) reported a decrease.

Figure 7C
Self-reported changes to smoking habits (current smokers) since lockdown began (23rd March), August/September 2020, by sex



There were no statistically significant differences found in changes to the amount adults smokers smoked since lockdown began by age or sex.

Figure 7C, Table 7.4

Table List

The tables can be found in the main report page under supporting documents.

References and notes

[1] World Health Organisation (2019) *Tobacco.*
See: https://www.who.int/news-room/fact-sheets/detail/tobacco

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[6] *Raising Scotland's tobacco-free generation: our tobacco control action plan 2018.* Edinburgh: Scottish Government, 2018. Available at: https://www.gov.scot/publications/raising-scotlands-tobacco-free-generation-tobacco-control-action-plan-2018/

[7] See: https://www.nhs.uk/live-well/quit-smoking/stopping-smoking-mental-health-benefits/

[8] Salari, N., Hosseinian-Far, A., Jalali, R. *et al.* Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis. *Global Health,* **16,** 57 (2020). https://doi.org/10.1186/s12992-020-00589-w

[9] See: https://www.who.int/news-room/commentaries/detail/smoking-and-covid-19

[10] See: Coronavirus (COVID-19) Phase 3: Scotland's route map update - 9 July 2020 - gov.scot (www.gov.scot)

[11] See: Coronavirus (COVID-19) update: First Minister's speech 14 September 2020 - gov.scot (www.gov.scot)

[12] See https://www.nhsinform.scot/illnesses-and-conditions/infections-and-poisoning/coronavirus-covid-19/healthy-living/coronavirus-covid-19-stopping-smoking

[13] These places defined as: in own home, other people's homes, in cars/vans, outside buildings, at work, or in other public places.

Chapter 8

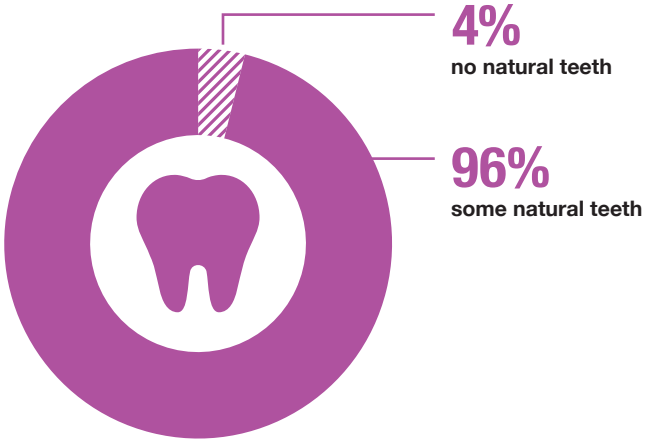
Dental Health

CHAPTER 8

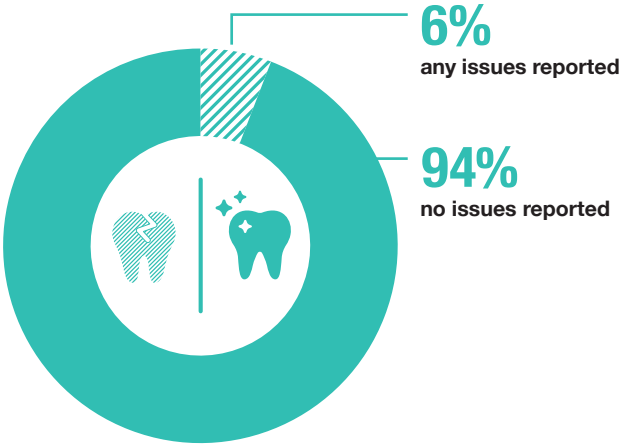
Dental Health

This summary covers data collected between the 5th August 2020 and the 23rd September 2020.

The vast majority of adults reported having at least some natural teeth.

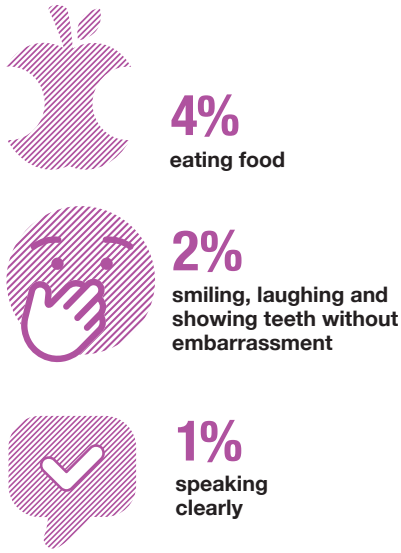


Most adults in Scotland reported having no issues with their mouth, teeth or dentures.

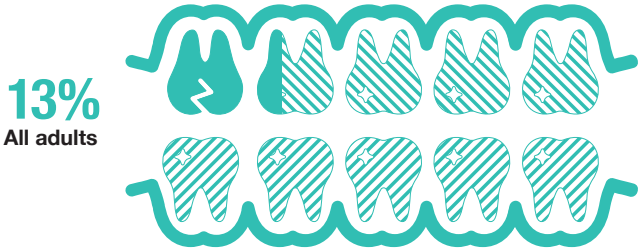


Prevalence of having 20 or more natural teeth was associated with age.

The most common issues adults reported having with their mouth, teeth or dentures were:



More than one in ten adults reported that they had tooth pain in the month prior to being interviewed.



8 DENTAL HEALTH

Hannah Biggs

8.1 INTRODUCTION

Tooth decay is a widespread problem among both children and adults in most industrialised countries[1], yet dental disease is largely preventable. Oral health impacts daily life and wellbeing[2] and in recent years progress has been made in Scotland, with 96% of the population registered with an NHS dentist as at 30th September 2019[3]. However, inequalities remain with around 11% of those aged 75 or over not registered with an NHS dentist as at 30th September 2019[4] and poorer dental health reported among P7 children living in the most deprived areas in 2019[5].

Protecting Scotland's Future: The Government's Programme for Scotland 2020-21[6] reiterates the government's commitment to reform adult dental services to improve the population's oral health. The **Oral Health Improvement Plan**[7], which was published in 2018, set out a move towards preventive care and policy development work to develop this was underway throughout 2019 and early 2020. The intention of the preventive policy, under the New Model of Care, is to refocus NHS dental services on identifying oral health risks and to provide support to patients based on a wider range of indicators, including smoking and alcohol, to ensure that treatments are provided in the most effective way for individual patients.

At the end of March 2020, the closure of high street dental services was required as part of the wider response to the COVID-19 pandemic. The focus on tasks that were immediately impacting on the response to the pandemic meant that policy development of the New Model of Care was paused. At the time of data collection (Phase 3 of the Route Map) most dental services were able to reopen but with limited capacity and were not able to offer all non-urgent treatments[8]. From the 1st of November, patients have been able to receive all the treatments that were previously available through the NHS, nevertheless, there will continue to be a reduced volume of patients accessing treatment due to the necessary public health measures, such as physical distancing and the requirements for personal protective equipment.

As stated in the Programme for Government[6], the government is committed to delivering long-term reforms to NHS dental services, and the period after the 1st of November will allow the government and stakeholders to consider the reform necessary to ensure the sustainability of NHS dental services in the future.

This chapter presents findings on the prevalence of natural teeth and tooth pain in the Scottish adult population in August/September 2020 as well as the impacts of issues with the mouth, teeth or dentures on daily life. Information on methods and definitions can be found in the Volume 2: Technical Report.

8.2 DENTAL HEALTH

The fieldwork period referenced in the following analysis covers from the 5th August 2020 to the 23rd September 2020.

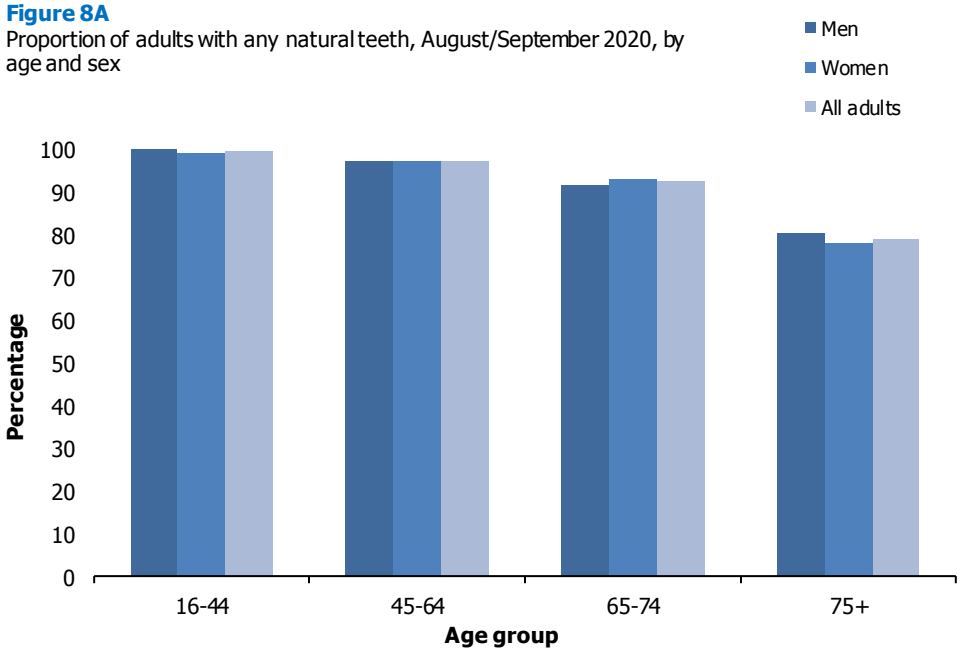
As prevalence of natural teeth tends to be lower in deprived areas where response to this survey was lower than usual, the results in section 8.2.1 may overestimate prevalence. Conversely, prevalence of dental issues tends to be higher in deprived areas and hence the results in sections 8.2.2 and 8.2.3 below may be underestimates.

8.2.1 Number of natural teeth/no natural teeth, August/September 2020, by age and sex

During the fieldwork period, the vast majority of adults reported having at least some natural teeth (96%) while a small proportion had no natural teeth (4%). More than eight in ten adults (85%) reported having 20 or more natural teeth.

Natural teeth prevalence was significantly associated with age. While almost all adults aged 16-74 (92% - 99%) reported having at least some natural teeth, prevalence of natural teeth decreased to 79% among those aged 75 and over. Conversely, adults aged 75 and over were least likely to report having 20 or more natural teeth (41%) while adults aged 16-44 were most likely to report that this was the case (99%).

Figure 8A
Proportion of adults with any natural teeth, August/September 2020, by age and sex



There was no significant difference in natural teeth prevalence by sex with similar patterns by age for both sexes. **Figure, 8A, Table 8.1**

8.2.2 Whether had any tooth pain, August/September 2020, by age and sex

During the fieldwork period, the majority of adults (87%) reported that they had no tooth pain in the month prior to being interviewed. While the

highest proportion of adults that reported tooth pain in the last month was among those aged 45-64 (15%), there was no clear pattern by age.

There was no significant difference in prevalence of tooth pain by sex.

Table 8.2

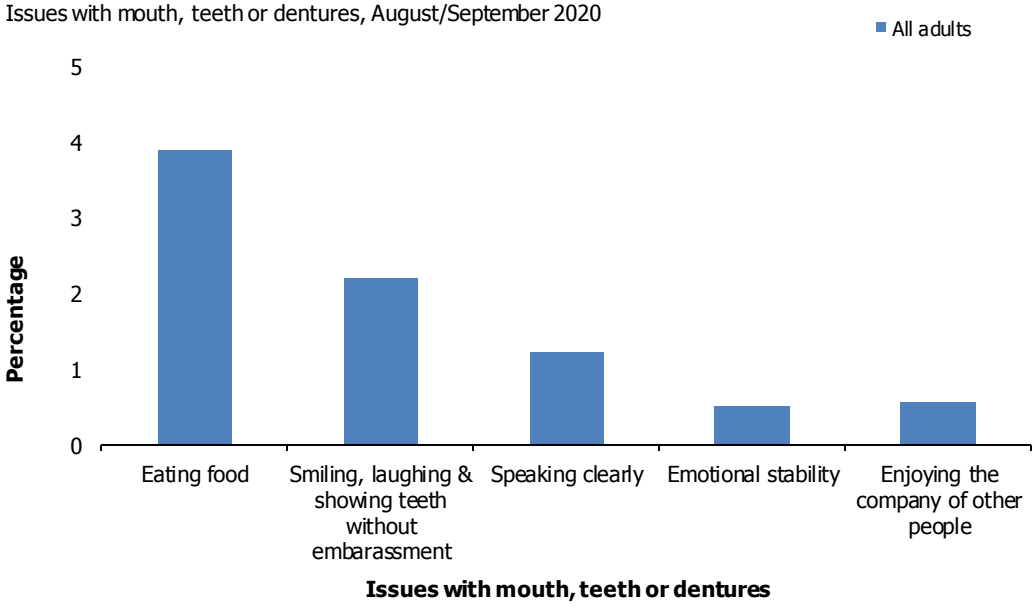
8.2.3 Issues with mouth, teeth or dentures, August/September 2020, by age and sex

During the fieldwork period, most adults (94%) had no issues with their mouth, teeth or dentures.

The most common issue reported with mouth, teeth or dentures was eating food (4%), followed by smiling, laughing and showing teeth without embarrassment (2%). Other mouth, teeth or denture issues reported by small proportions included not being able to speak clearly (1%), an impact on emotional stability, such as becoming more easily upset than usual (1%) and that these issues affected their enjoyment of the company of other people (1%).

Figure 8B

Issues with mouth, teeth or dentures, August/September 2020



Sex was not a significant determinant of issues with mouth, teeth or dentures. The only issue where prevalence was associated with age was eating food; prevalence increased from 2% among those aged 16-44 to 6% among those aged 75 and over. A similar pattern was evident in women, but there was no pattern by age for men.

Figure 8B, Table 8.3

Table List

The tables can be found in the main report page under supporting documents.

References and notes

[1] World Health Organisation (2012). *What is the burden of oral disease?* [Online]. Available at: https://www.who.int/oral_health/disease_burden/global/en/

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☒ may be made available on request, subject to consideration of legal and ethical factors. Please contact Scottish_Health_Survey@gov.scot for further information.

Further breakdowns of the data:

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https://www.gov.scot/collections/scottish-health-survey

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