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Welsh Health Survey 2012

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Foreword

This is the latest in the series of annual reports providing key findings from the Welsh Health Survey. The report provides an authoritative insight into the health of the Welsh population. The role of information in developing an evidence-based approach to our work is crucial and the Welsh Health Survey makes a major contribution.

The survey is a vital source of information about the health and wellbeing of people living in Wales and how it changes over time. It meets a range of important needs, including the provision of data for monitoring health and health-related lifestyles. For example the survey is used to monitor a number of *Programme for Government* commitments (such as rates of smoking, alcohol consumption, physical activity, and obesity). It also provides evidence for informing policies and underpinning strategies for promoting better health, for example *Our Healthy Future*, the strategic framework for public health in Wales.

I welcome this report – the first during my time as Chief Medical Officer for Wales. I would particularly like to thank all of the people who have given up their time to participate in this important study.

Dr Ruth Hussey

Chief Medical Officer for Wales

Editors' acknowledgements

We would like to thank everyone who contributed to the survey and the production of this report.

Our thanks go to:

- NatCen Social Research (NatCen), in particular Melanie Doyle, Katharine Sadler, Roger Stafford, John Hurn, David Hussey, Kevin Pickering and their colleagues, and Pauline Burge and her team.
- all the interviewers who worked on the survey.
- NHS Direct Wales, who provided a helpline on the survey.
- all those who reviewed chapters of this report, or who contributed to the development of the survey.

Finally, we would like to thank all those members of the public who gave their time and co-operation in responding to the survey.

Bethan Varney, Cath Roberts (Responsible Statistician)

September 2013

Chapter 1
Key Facts

1 Key facts

This report presents the latest information available from the Welsh Health Survey (WHS). The WHS is a source of information about the health and health-related lifestyle of people in Wales.

The findings are based on data from the 2012 Welsh Health Survey, which is based on a sample of the general population living in private households in Wales. Initial results were published earlier in the year, and this report provides more detailed information.

The main chapters of the report focus on:
- health status, illnesses, and other conditions
- health-related lifestyle
- health service use
- health of children.

This summary presents key findings from the main chapters of the report. For further information, chapters 3 to 6 each begin with a summary of the main findings presented in the body of the text.

Health status, illnesses, and other conditions

- Half of adults reported that their health in general was excellent or very good, while around a fifth of adults reported fair or poor general health.

- Around a half of adults reported being treated for an illness such as high blood pressure, heart condition, arthritis, respiratory illness, mental illness or diabetes.

- Around a third of adults reported a limitation in their daily activities due to a health problem/disability, and around half of these reported being limited a lot.

- Levels of ill-health increased with levels of area deprivation. In general, those in the most deprived areas reported the worst health.

Health-related lifestyle

- Just under a quarter of adults reported that they currently smoke, and a fifth of adult non-smokers reported being regularly exposed to other people's tobacco smoke indoors.

- Around 2 in 5 adults reported drinking above the recommended guidelines on at least one day in the past week, including around a quarter who reported binge drinking – however people do not necessarily drink at these levels regularly.

- A third of adults reported eating five or more portions of fruit and vegetables the previous day, and around 3 in 10 adults reported being physically active on five or more days in the previous week.

- Around 3 in 5 adults were classified as overweight or obese, including around 1 in 4 adults classified as obese.

- Adults in less deprived areas reported healthier lifestyles in terms of smoking, obesity and fruit and vegetable consumption, but not for alcohol consumption or physical activity. Smoking rates showed the most variation.

Health service use

- Around 1 in 6 adults reported that they had talked to a GP about their own health in the past two weeks.

- Around 1 in 11 adults reported being in hospital as an inpatient in the past 12 months, while around a third of adults reported attending hospital as an outpatient. Around 1 in 6 adults reported attending a hospital casualty department in the past 12 months.

- 7 in 10 adults reported using a dentist in the past 12 months, and similarly around 7 in 10 reported using a pharmacist. Around half of adults reported using an optician.

- Around half of adults reported being on regular prescribed medication.

- Adults in the most deprived areas were more likely to report talking to a GP than those in the least deprived areas, and least likely to report using a dentist.

Health of children

- Over 9 in 10 children were reported to have very good or good general health.

- A fifth of children were reported as having a long-standing illness, including around 1 in 18 children with a limiting long-standing illness.

- 3 in 5 children were reported as eating fruit every day, and half of children were reported as eating vegetables every day.

- Around a third of children were reported as undertaking physical activity for at least an hour on every day of the previous week.

- Around a third of children were classified as overweight or obese, including around a fifth of children classified as obese.

- For around 1 in 8 children it was reported that a GP had been consulted about their health in the past two weeks.

Chapter 2
Introduction

2 Introduction

2.1 Background

The Welsh Health Survey provides unique information about the health and health-related lifestyles of people living in Wales. It covers a range of health-related issues, including health status, lifestyle and health behaviours, and health service use. It presents a picture of the health of the Welsh population, variations between sub-groups and areas, and changes over time, and makes an important contribution to informing and monitoring public health strategy in Wales. The survey was established in October 2003 and runs all year round. This report presents results from the 2012 survey, relating to data collected between January and December 2012.

2.2 Overview of survey design

The survey was based on a representative sample of people living in private households in Wales. A random sample of addresses from the Postcode Address File (PAF) was selected and the sample was stratified by local authority. The smaller local authorities were oversampled to allow the production of survey estimates at this level following the collection of two years' data. At each household, all adults and a maximum of two children were eligible for inclusion in the survey. The small proportion of people not covered by the PAF, including those living in institutions, was not covered by the survey. It should be noted that people in institutions are likely to be, on average, in poorer health than those in private households – this should be kept in mind when considering the results from this survey.

Information was collected at two levels: household (through a short interview, offered in English or Welsh) and individual (through English or Welsh self-completion questionnaire). First, a short interview with a responsible adult in the household was conducted to enumerate the household, and to record brief demographic information for each household member and the socio-economic classification of the household reference person. Self-completion questionnaires were then left for completion by each adult aged 16 years and over in the household, for later collection by the interviewer. In households with children, a maximum of two children were randomly selected for inclusion in the survey. For selected children, questionnaires were left for completion (with older children completing their own questionnaires) and height and weight measurements were taken by the interviewer. The survey relies on a self-completion questionnaire. The results, therefore, reflect people's own understanding of their health rather than a clinical assessment of their medical condition, and their own interpretation of the health services they have used.

The survey results were weighted to take account of unequal selection probabilities, and for differential non-response, i.e. to ensure that the age and sex distribution of the responding sample matched that of the population of Wales.

During the period covered by this report, a household interview was obtained with 78% of eligible households in the sample. Self-completion questionnaires were obtained for 81% of adults and 77% of selected children in participating households, and height and weight

measurements were obtained for 58% of eligible children in those households. During this period, around 16,000 adults and 3,000 children participated fully in the survey.

Further details of the survey methodology and response are given later in this report (chapter 7). Information about the survey and its outputs is also available on the WHS theme page[1].

2.3 The content of this report

This report is based on data from the 2012 Welsh Health Survey. Initial results were published earlier in the year, and this report now provides more detailed information.

The report is divided into eight chapters. Following the two introductory chapters, chapters 3-5 present the survey findings for adults in more detail, including breakdowns by age and sex. For a selection of key measures, socio-demographic breakdowns are also shown, along with comparisons with earlier years. Chapter 6 presents the survey findings for children. Methods and definitions are shown at the end of each chapter; tables are included at the end of each chapter. Tables showing further breakdowns by age and sex are available online[1] as are trend data for a selection of key variables. Chapter 7 covers technical aspects of the survey, and chapter 8 provides references to further information relating to the Welsh Health Survey. Local authority / health board breakdowns for 2011 + 2012 combined are provided in a separate report.

The chapters are:

Chapter 1 Key facts
This chapter presents a summary of the key findings.

Chapter 2 Introduction
This chapter provides an introduction to the survey, with notes to results.

Chapter 3 Health status, illnesses, and other conditions
This chapter presents the survey findings for general health status (including the SF-36 set of questions), a range of reported illnesses, and other conditions (such as eyesight or hearing difficulty).

Chapter 4 Health-related lifestyle
This chapter presents the survey findings on reported lifestyle behaviours, including smoking, drinking, fruit and vegetable consumption, physical activity, and body mass index.

Chapter 5 Health service use
This chapter presents the survey findings on reported use of a range of health services. It also includes information about medicines.

Chapter 6 Health of children
This chapter presents the survey findings on the general health, health-related lifestyle and service use of children.

[1] Welsh Health Survey theme page
http://wales.gov.uk/topics/statistics/theme/health/health-survey/?lang=en

Chapter 7 Technical summary
This chapter includes technical information about the survey, including information on the sample design, response, and weighting. A more detailed technical report is published by NatCen Social Research, who carried out the survey on behalf of the Welsh Government.

Chapter 8 Further information
This chapter provides references to further information relating to the Welsh Health Survey, such as how to access unpublished data, and information on other UK health surveys.

Appendices
Appendix A is the glossary. Appendix B contains a copy of the adult survey questionnaire. Child survey questionnaires are available online.

2.4 Users and uses of the statistics

The survey is used by a wide range of users, including those working in national and local government, NHS organisations, research and academic settings. It is also useful to a wider general audience, particularly those in Wales.

The survey meets a range of needs and is used in many ways, including to:
- provide national estimates of health and health-related lifestyle.
- examine differences between population sub-groups (e.g. age, sex, social class) and local areas (heath boards and local authorities).
- provide evidence to inform and monitor targets, indicators and policies for promoting better health, such as the Programme for Government, Our Healthy Future and Together for Health.
- provide local authority level information for development of joint local health, social care and wellbeing strategies.

More detailed information on how the WHS statistics are used can be found in the introductory background sections of the results chapters**.** These background sections provide an overview of how the statistics in the chapters are used in various health policies and strategies, for example the in Welsh Government's public health framework *Our Healthy Future*[2], and in the *Programme for Government*[3].

2.5 Availability of unpublished data

Enquiries about the information in this report may be addressed to: Health Statistics and Analysis Unit, Knowledge and Analytical Services, Welsh Government, Cathays Park, Cardiff CF10 3NQ; tel 029 2082 6710 (029 2082 3332 in Welsh); e-mail stats.healthinfo@wales.gsi.gov.uk. Some statistical bulletins on specific topics in the survey may also be produced at a later date and will be available through the Statistics for Wales

[2] Our Healthy Future
http://wales.gov.uk/topics/health/cmo/healthy/?lang=en
[3] Programme for Government (Welsh Government)
http://wales.gov.uk/about/programmeforgov/?lang=en

website[4]. Some additional summaries may be produced on request, subject to the availability of resources, data quality and robustness, and provided the confidentiality of respondents is preserved.

An anonymised version of the main dataset, together with supporting documentation, is deposited with the UK Data Archive each year (some information is removed to ensure confidentiality is preserved). These datasets may be accessed by registered users for specific research projects. Some examples of uses made of the data by researchers are shown on the website. The UK Data Archive can be accessed via the UK Data Service[5] website.

2.6 Key quality information

a. The small proportion of people not covered by the PAF, including those living in institutions, was not covered by the survey. It should be noted that people in institutions are likely to be, on average, in poorer health than those in private households – this should be kept in mind when considering the results from the survey.

b. Interpretation of the results should take account of the questionnaire design, as the mode of collection (self-reporting on paper) and the questions themselves affect the information collected. The survey relies on a self-completion questionnaire. The results, therefore, reflect people's own understanding of their health rather than a clinical assessment of their medical condition and their own interpretation of the health services they have used. Questionnaires are available on the WHS web pages, and the adult questionnaire can be found in Appendix B.

c. Survey results are weighted to take account of unequal selection probabilities, and for differential non-response, i.e. to ensure that the age and sex distribution of the responding sample matches that of the Welsh population.

d. Details of response rates are given earlier in this chapter, and in chapter 7. Base numbers (sample sizes) of respondents replying to individual questions may vary slightly. The last column of each table provides unweighted overall base numbers of respondents taking part in the Welsh Health Survey, although a small number may not have answered particular questions. The sample sizes shown therefore serve as an upper limit for the base numbers of the table.

e. It should be noted that the design of the survey means that the effective sample sizes will be somewhat smaller than actual sample sizes (base numbers), so these should be interpreted as a guide to precision only. More information on approximate confidence intervals is provided in chapter 7 and in the initial headline results.

f. All percentages less than 0.5 per cent are expressed as zero in tables.

[4] Statistics for Wales
www.wales.gov.uk/statistics
[5] UK Data Service
http://ukdataservice.ac.uk/get-data/key-data.aspx#/tab-uk-surveys

g. Missing answers occur for several reasons, including refusal or inability to answer a particular question, and cases where the question is not applicable to the informant. Missing answers have been omitted from all tables and analyses.

h. Initial Headline Results for the 2012 Welsh Health Survey were published in May 2013. No revisions have been made to any of the statistics published in the Initial Headline Results. There are no planned revisions to the statistics in this report, but if revisions were made, they would be in accordance with the *Revisions, Errors and Postponements Policy* for Statistics for Wales.

i. The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

   Designation can be broadly interpreted to mean that the statistics:
   - meet identified user needs;
   - are well explained and readily accessible;
   - are produced according to sound methods; and
   - are managed impartially and objectively in the public interest.

   Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

Chapter 3
Health Status, Illnesses and Other Conditions

3 Health status, illnesses, and other conditions

3.1 Introduction

This chapter focuses on general health status, illnesses and other conditions among adults (such as eyesight or hearing difficulty).

Broad figures for Wales are provided along with age and gender breakdowns. For a selection of key measures, information is provided by socio-economic group and area deprivation. Some comparisons with earlier years are also shown. Online tables showing further breakdowns are available[1] as are trend data for a selection of key variables[2]. Local authority/health board breakdowns for 2011 and 2012 combined are provided in a separate report[3].

The Welsh Health Survey relies on a self-completion questionnaire. The results, therefore, reflect people's own understanding of their health rather than a clinical assessment of their medical condition.

This chapter includes information on:

- health status (3.4)
- illnesses (3.5)
- other conditions (3.6)
- untreated problems or symptoms (3.7)
- key measures by socio-demographic factors (3.8)
- trends for key measures (3.9)
- methods and definitions (3.10)

[1] Online tables showing more detailed breakdowns are available at:
www.wales.gov.uk/statistics
[2] Trend data for a selection of key variables are available at:
www.wales.gov.uk/statistics
[3] Welsh Health Survey: 2011 and 2012 Local Authority / Health Board Results
www.wales.gov.uk/statistics

3.2 Background

This chapter provides information on adults' general health status, rates of illnesses and other conditions, and untreated symptoms.

Self-assessed general health is an important indicator of the health of the population, and poor self-rated health is associated with increased risk of mortality[4,5]. This and previous WHS reports demonstrate that there are clear differences in the levels of health and well-being between more and less deprived areas.

In September 2011, the United Nations held a summit[6] to address the growing problem of non-communicable diseases (namely, cancers, cardiovascular diseases, chronic respiratory diseases and diabetes). It was suggested that non-communicable diseases now kill more people globally than infectious diseases.

The Welsh Government's *Our Healthy Future*[7] is a framework which sets the future strategic direction for public health in Wales, to tackle the causes of ill health and promote the factors which contribute to better health and wellbeing. The framework focuses on key priority areas such as health and wellbeing through the life course, improving mental wellbeing and reducing health inequalities.

In 2012, the Welsh Government launched *Together for Health*[8], a five year strategy for the NHS in Wales, which includes commitments to reduce health inequalities and to address challenges such as the increasing number of people with long term health problems.

[4] Idler et al (1997), Self-rated health and mortality: a review of twenty-seven community studies. *Journal of Health and Social Behaviour*; 38(1):21-37.
[5] Burstrom et al (2001), Self rated health: Is it as good a predictor of subsequent mortality among adults in lower as well as in higher social classes? *Journal of Epidemiology and Community health*; 55(11):836-40.
[6] United Nations Summit on non communicable disease
http://www.cdc.gov/Features/UNSummit/
http://www.un.org/en/ga/president/65/issues/ncdiseases.shtml
[7] Our Healthy Future
http://wales.gov.uk/topics/health/cmo/healthy/?lang=en
[8] Together for Health
http://wales.gov.uk/topics/health/publications/health/reports/together/?lang=en

3.3 Summary

- Half of adults reported that their health in general was excellent or very good, while around a fifth of adults reported fair or poor general health.

- Overall, physical and mental health status scores (using SF-36) were lower for women than for men, indicating poorer health and well-being among women.

- As shown in figure 3a, 20% of adults reported currently being treated for high blood pressure, 14% for a respiratory illness, 12% for arthritis, 11% for a mental illness, 9% for a heart condition (other than high blood pressure) and 7% for diabetes.

- The percentage who reported being treated for specified illnesses generally increased with age, but not for mental illness. Women were more likely than men to report being treated for multiple illnesses.

- Around a third of adults reported a limitation in their daily activities due to a health problem/disability, and around half of these reported being limited a lot.

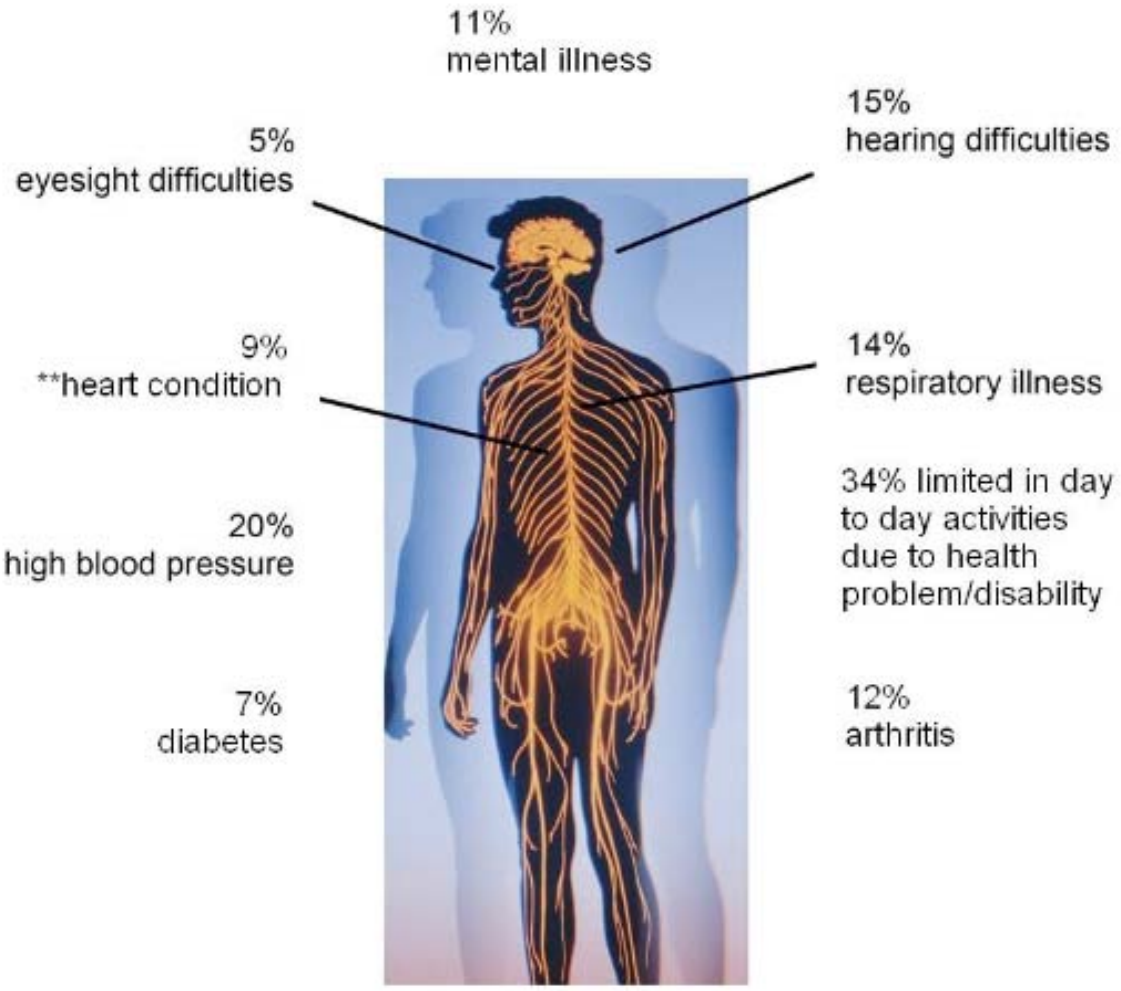
- A quarter of adults reported having fewer than 21 of their own teeth, or having mainly false teeth or dentures. Around 1 in 7 adults reported having difficulty with their hearing, and around 1 in 20 adults reported having difficulty with their eyesight.

- Around half of adults reported having one or more untreated problems or symptoms that they had not been to see a doctor or nurse about, reporting that the most common reasons for not seeking treatment was that they didn't think their symptoms seemed serious enough, or that they had learnt to live with them.

- Levels of ill-health increased with levels of area deprivation. In general, those in the most deprived areas reported the worst health.

- Since 2003/04 when the survey started, there has been a slight increase in adults reporting being treated for high blood pressure, mental illness and diabetes, and a slight decrease for heart conditions and arthritis.

Figure 3a: Percentage of adults who reported being treated for selected illnesses, or having certain conditions*



* With the exception of eyesight, hearing difficulties and limitation in daily activities, the figures show the percentage of adults who reported currently being treated.

** Excludes high blood pressure

3.4 Health status

Health status questions (SF-36)

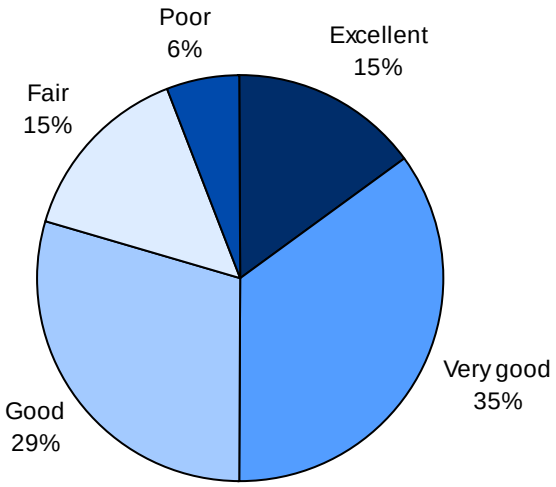
The Welsh Health Survey adult questionnaire included a standard set of 36 health status questions known as SF-36[9] (version 2). SF-36 questions asked respondents about their own perception of their physical and mental health and the impact it has on their daily lives, including a question asking respondents to rate their own general health on a five-point scale ranging from excellent to poor.

Responses to the SF-36 questions are combined to produce two summary measures of physical and mental health - the Physical Component Summary (PCS) and Mental Component Summary (MCS) scores. Higher scores indicate better health. More information on the SF-36 definitions is given at the end of the chapter (3.10).

SF-36 General health question

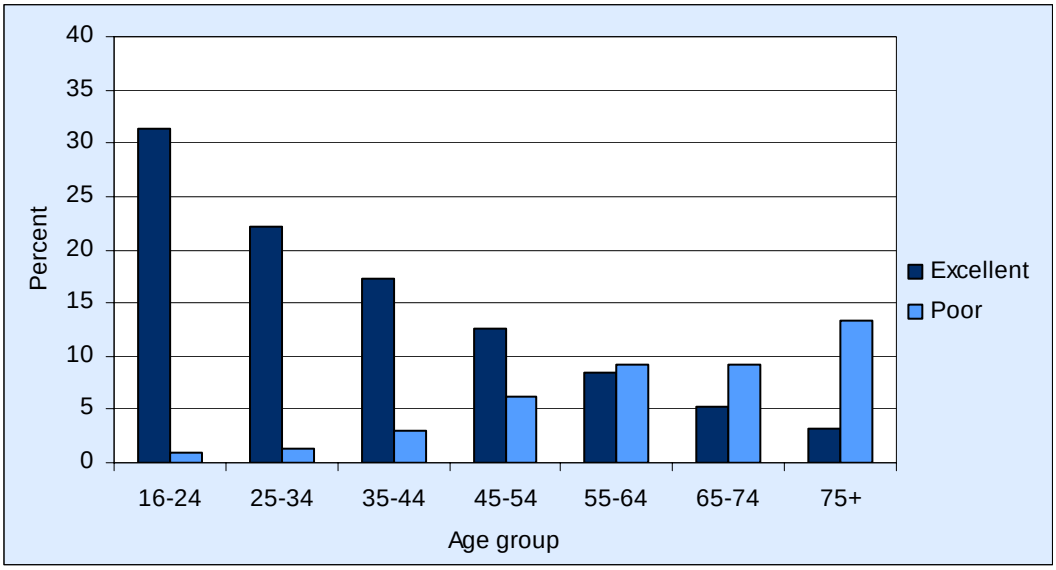
Half of adults reported that their health in general was excellent or very good, while around a fifth of adults reported fair or poor general health. Poor general health increased with age.

Figure 3b: Self-reported general health status of adults



[9] SF-36
http://www.sf-36.org/

Figure 3c: Percentage who reported excellent and poor health, by age



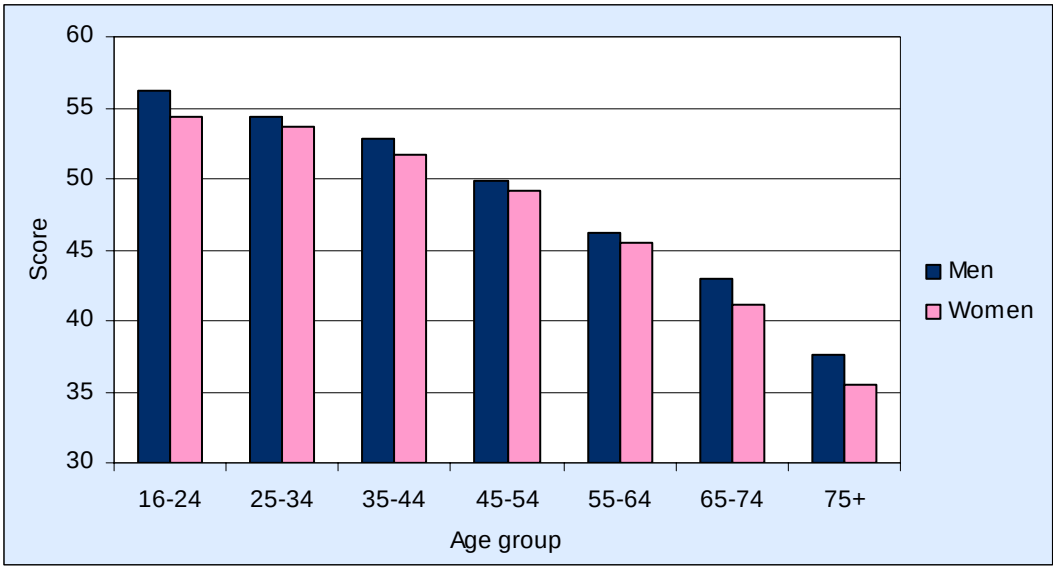
- 15% of adults reported that their health in general was excellent, 35% very good, and 29% good.
- 15% of adults reported that their health in general was fair, and 6% poor.
- The percentage who reported excellent health decreased with age, while the percentage who reported poor health increased with age.
- A higher percentage of men than women reported being in excellent health in the younger age-groups.

Tables 3.1, 3.5+, figures 3b, 3c
+online table

SF-36 Mental and physical wellbeing

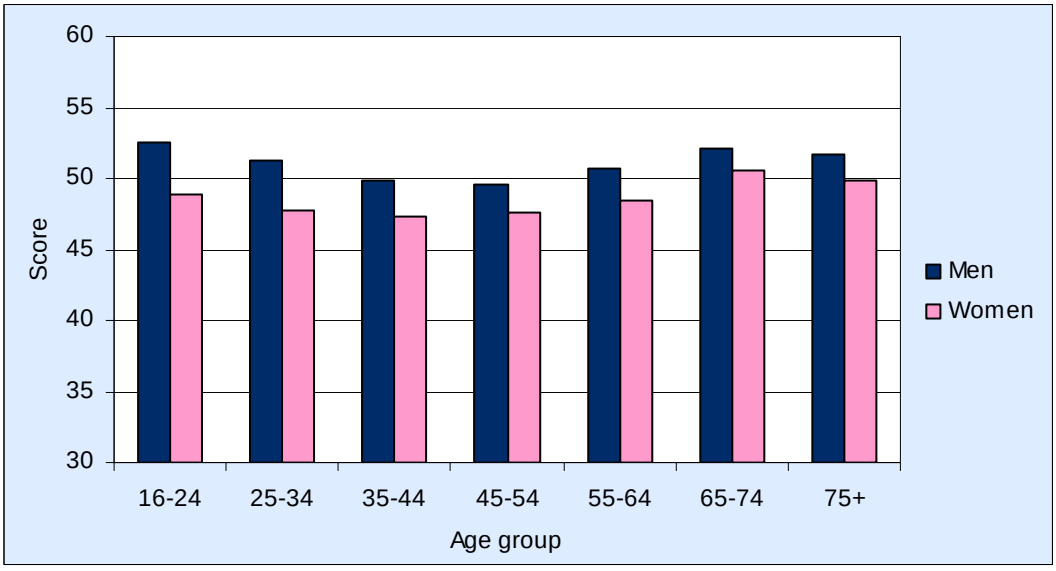
Overall, women had lower (poorer) physical and mental health and wellbeing scores than men. Physical health scores decreased with age.

Figure 3d: Mean SF-36 physical component summary score (PCS)*, by age and sex



* Higher scores indicate better health.

Figure 3e: Mean SF-36 mental component summary score (MCS)*, by age and sex



* Higher scores indicate better health.

- The overall mean physical and mental component scores for women were generally lower than those for men, indicating poorer health and wellbeing for women.
- The physical component score decreased with age, that is physical health worsened with age. For the mental component score there was no clear pattern with age, although there was some tendency for scores to be higher (better) among younger and older adults.

Tables 3.2, 3.6+, figures 3d, 3e
+online table

3.5 Illnesses

The following section provides information for a range of illnesses. Methods and definitions of each illness are provided at the end of the chapter (section 3.10).

Heart conditions and high blood pressure

Around 1 in 12 adults reported being treated for a heart condition, excluding high blood pressure, and a fifth of adults reported being treated for high blood pressure. Heart conditions and high blood pressure increased with age. Heart conditions were more common amongst men for the older age groups.

Figure 3f: Percentage who reported being treated for any heart condition, excluding high blood pressure, by age and sex

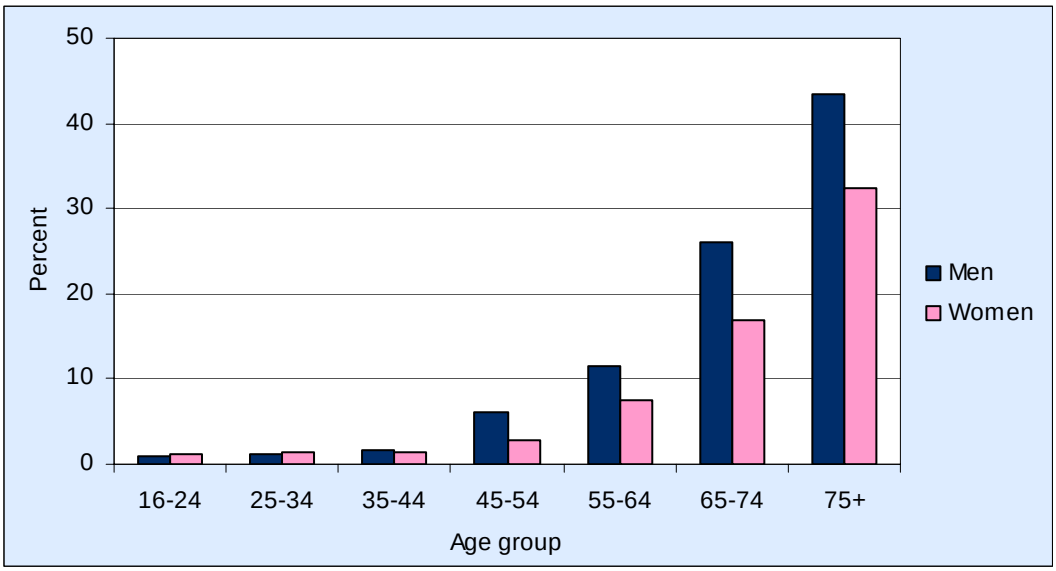
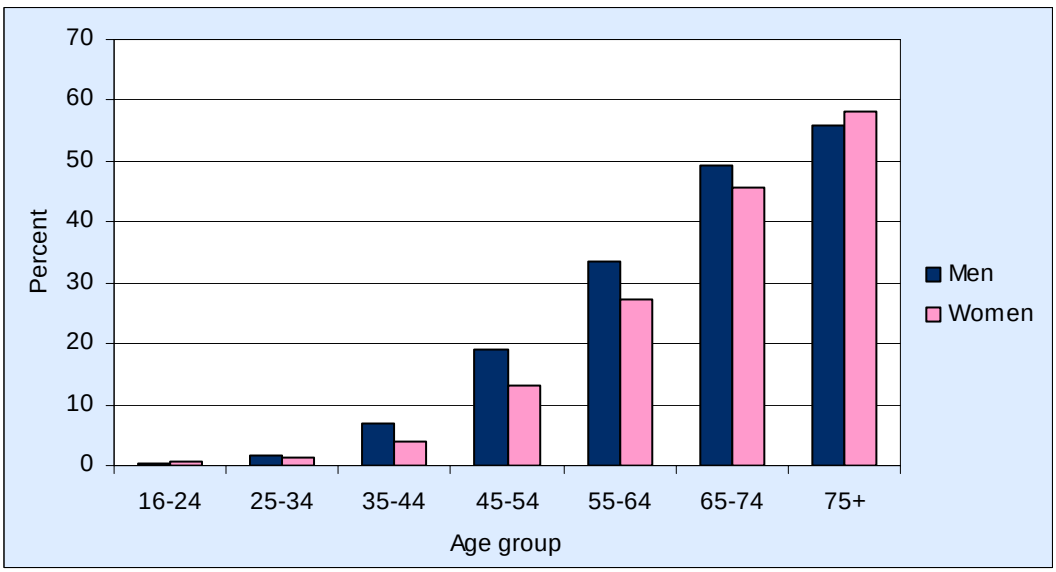


Figure 3g: Percentage who reported being treated for high blood pressure, by age and sex



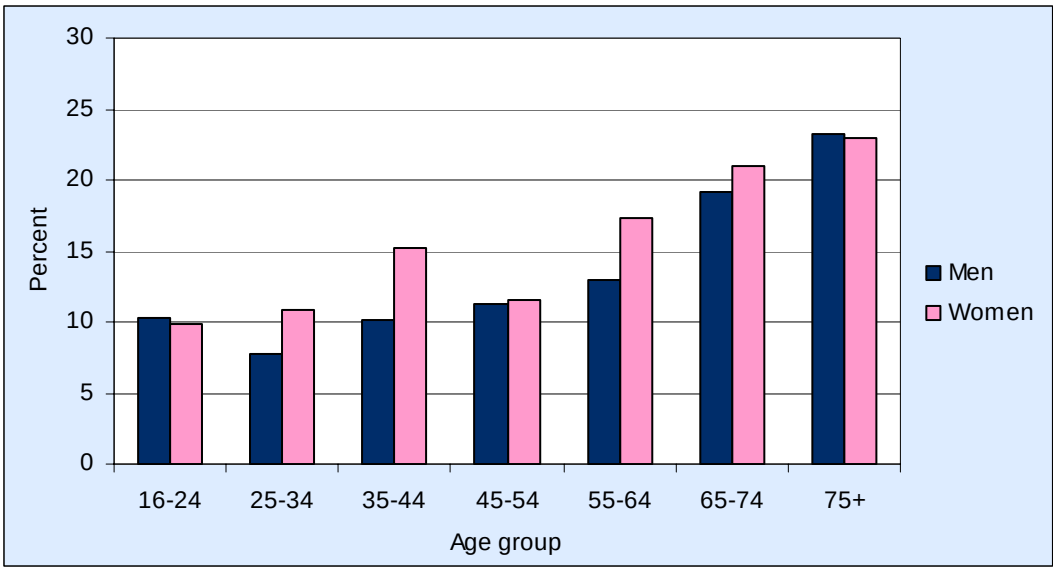
- 20% of adults reported currently being treated for high blood pressure.
- 9% of adults reported being treated for any heart condition, excluding high blood pressure.
- 4% of adults reported ever having been treated for a heart attack.
- 4% of adults reported currently being treated for angina, 1% for heart failure, and 4% for another heart condition.
- The proportion of adults who reported being treated for a heart condition and for high blood pressure rose with age, as shown in figures 3f and 3g. Around half of those aged 65 and over reported being treated for high blood pressure.
- Overall a slightly higher percentage of men (10%) than women (8%) reported being treated for a heart condition (but not for high blood pressure).

Tables 3.1, 3.2, 3.7+, figures 3f, 3g
+online table

Respiratory illnesses

Around 1 in 7 adults reported currently being treated for a respiratory illness, most commonly asthma (around 1 in 10 adults). Respiratory illnesses increased with age.

Figure 3h: Percentage who reported being treated for any respiratory illness, by age and sex



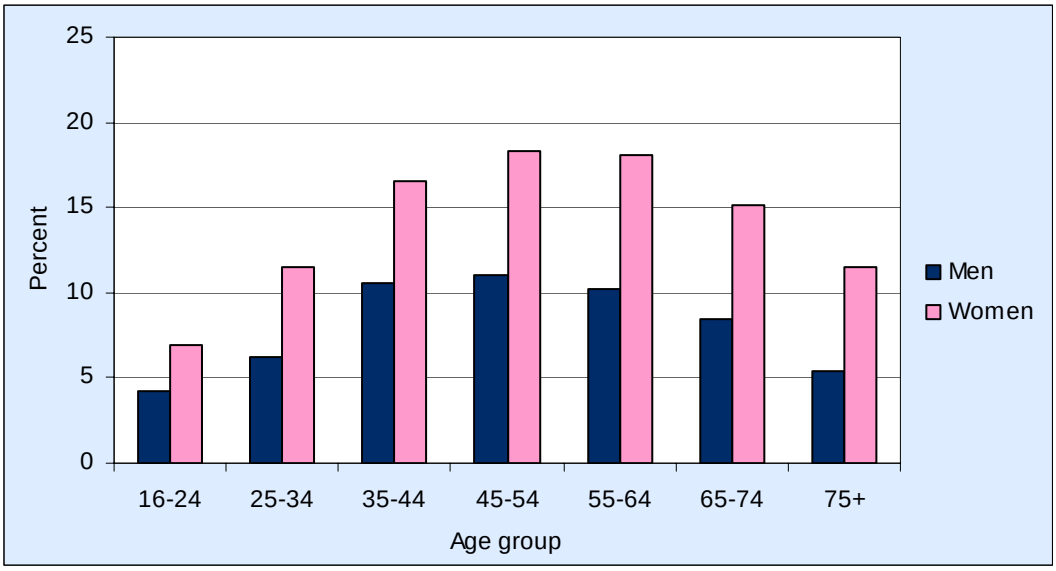
- 14% of adults reported being treated for any respiratory illness.
- 10% of adults reported currently being treated for asthma.
- 2% of adults reported currently being treated for bronchitis, 1% for emphysema and 3% for another respiratory illness.
- Figure 3h shows that the percentage of adults who reported being treated for a respiratory illness increased with age, with around a fifth of people aged 65 and over reporting being treated for a respiratory condition.
- Overall more women (15%) than men (12%) reported being treated for a respiratory illness.

Tables 3.1, 3.2, 3.8+, figure 3h
+online table

Mental illnesses

Around 1 in 9 adults reported being treated for a mental illness. Mental illness was more common amongst middle aged people, and was more common amongst women than men.

Figure 3i: Percentage who reported being treated for any mental illness, by age and sex



- 11% of adults reported currently being treated for any mental illness.
- 9% of adults reported currently being treated for depression, 7% for anxiety, and 2% for another mental illness.
- The percentage of adults who reported being treated for any mental illness increased towards middle age before decreasing in retirement age, as shown in figure 3i.
- A higher percentage of women (14%) than men (8%) reported being treated for a mental illness.

Tables 3.1, 3.2, 3.9+, figure 3i
+online table

Other illnesses (including arthritis, back pain, diabetes and stroke)

Around 1 in 8 adults reported being treated for arthritis, and around 1 in 14 for diabetes. The proportion increased with age, particularly for arthritis.

Figure 3j: Percentage who reported being treated for arthritis, by age and sex

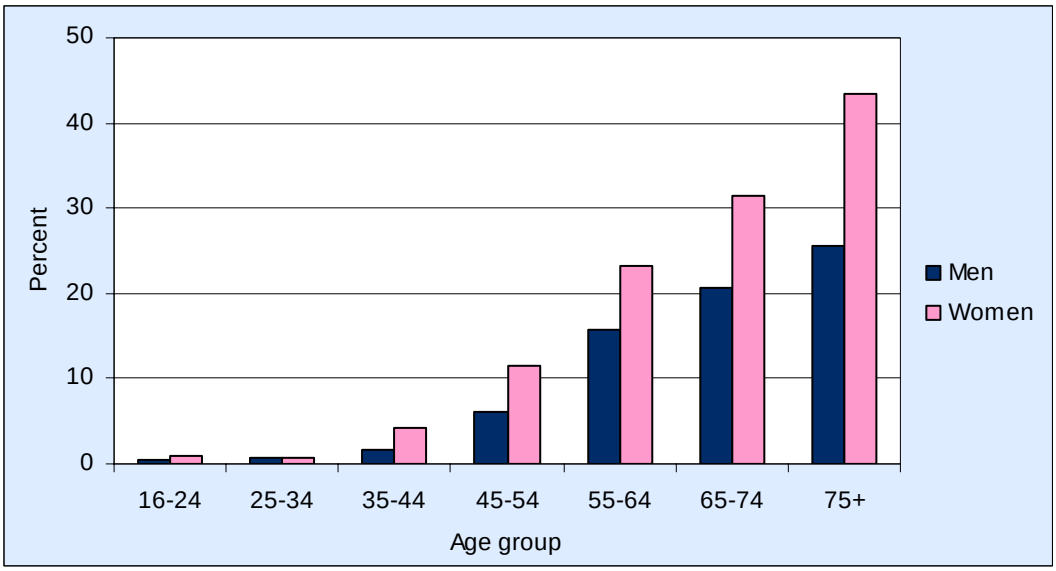
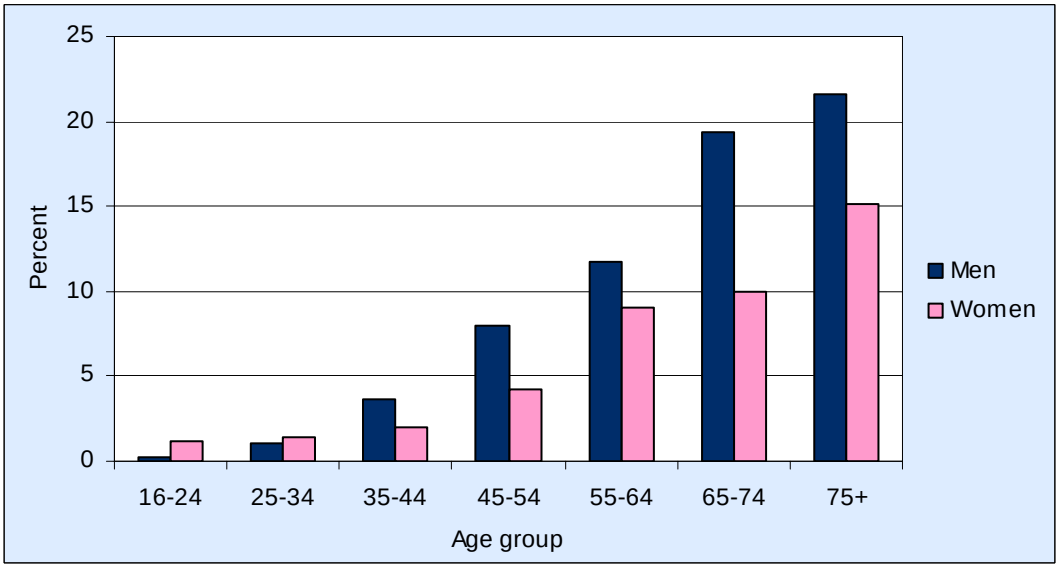


Figure 3k: Percentage who reported being treated for diabetes, by age and sex



- 12% of adults reported currently being treated for arthritis.
- 12% of adults reported currently being treated for back pain.
- Overall more women than men reported being treated for arthritis and back pain.
- 7% of adults reported currently being treated for diabetes. This percentage increased with age and in the older age group a higher proportion of men than women reported being treated for diabetes.

- Those who reported being treated for diabetes were asked how their diabetes was controlled, and given a list of options to 'tick all that apply'. Of those who reported being treated for diabetes, 24% reported that they control the disease by injection, 69% by tablets, and 46% by diet (not shown in table).
- 2% of adults reported ever having been treated for a stroke. This percentage increased with age (note that this measure represents an individual's accumulated experience of illness over their lifetime).
- The percentage of adults who reported being treated for the illnesses specified above increased with age. Arthritis in particular showed a steep increase with age and a considerable difference between men and women in the older age groups.

Tables 3.1, 3.2, 3.10+, figures 3j, 3k
+online table

Any Illness

Around half of adults reported being treated for one of the illnesses covered by the survey or another chronic illness. Around a quarter of adults reported having two or more illnesses, becoming more common with age. Overall, women were more likely than men to report being treated for an illness.

Figure 3l: Percentage who reported being treated for an illness, by age and sex

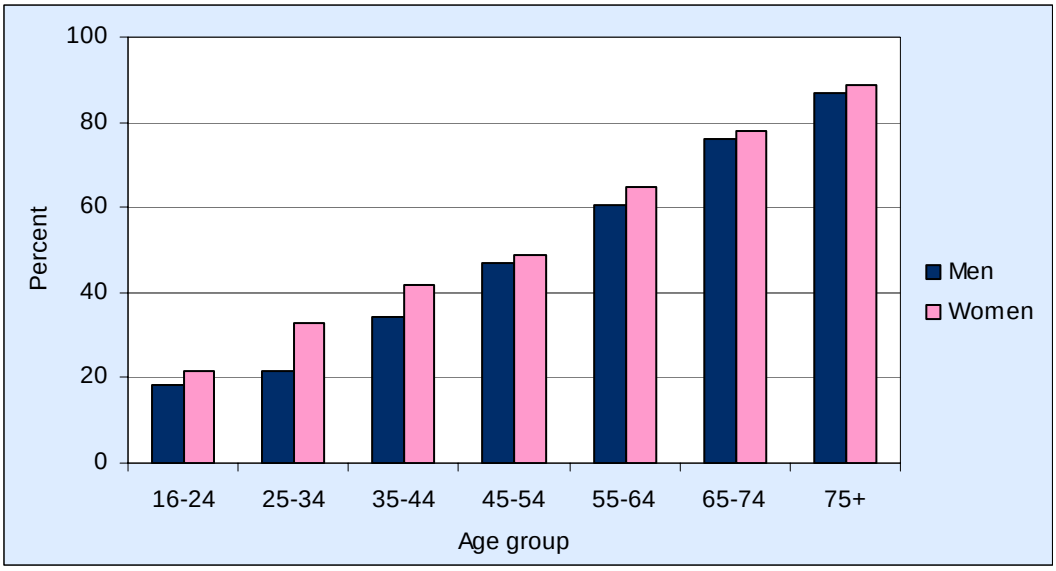
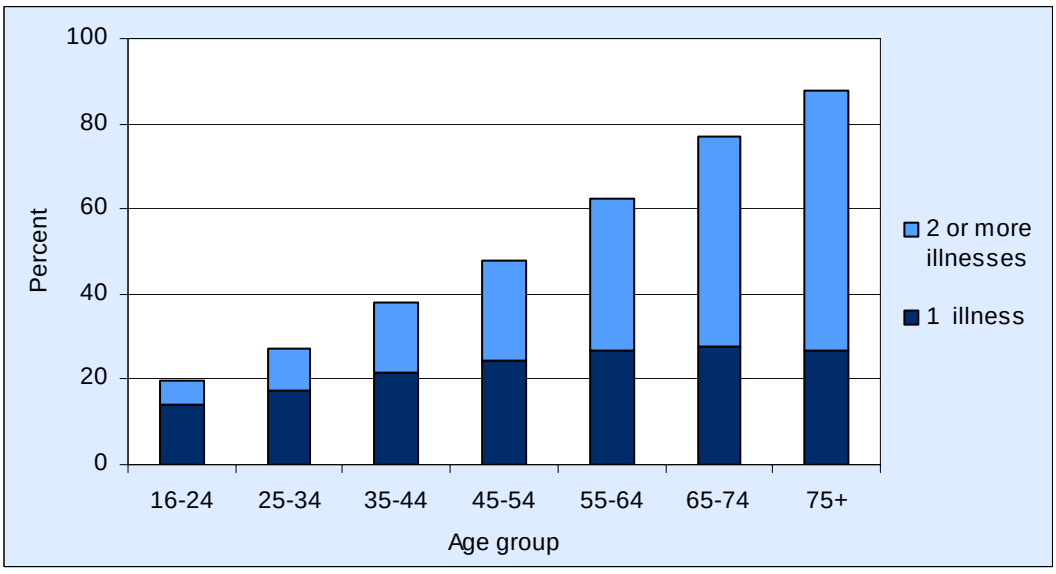


Figure 3m: Percentage who reported being treated for one illness, or two or more illnesses, by age



- 49% of adults reported currently being treated for an illness (as defined in section 3.10).
- Figure 3l shows an increase with age in the percentage who reported being treated for an illness.
- Overall, women (52%) were more likely than men (46%) to report being treated for an illness, in particular for those aged 25-44.
- In terms of the number of illnesses reported, 22% of adults reported being treated for one illness only, and 27% reported being treated for two or more illnesses.

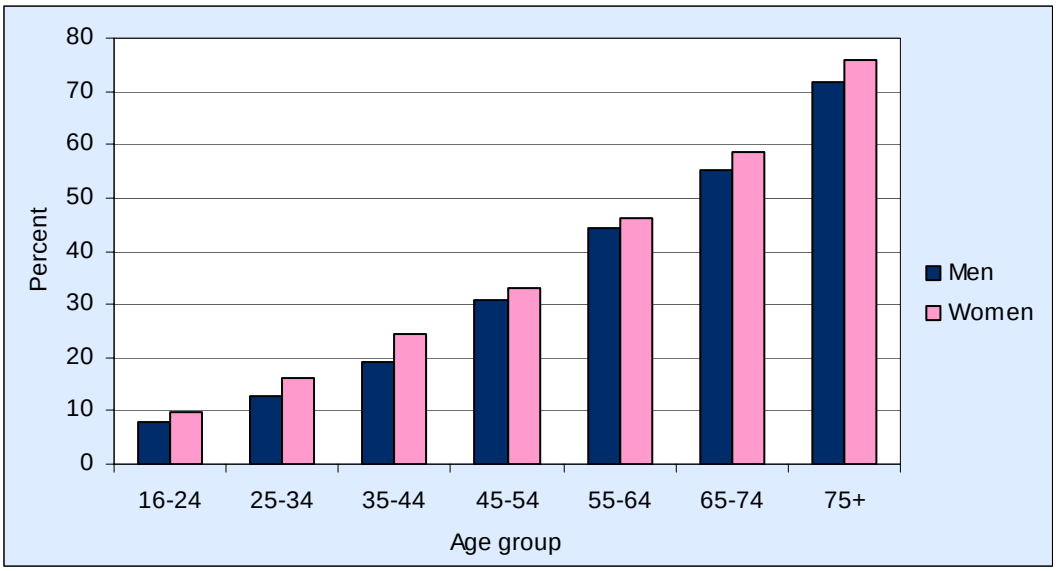
- Figure 3m shows that the percentage who reported two or more illnesses increased with age.
- Women (29%) were more likely than men (24%) to report being treated for multiple illnesses.

Tables 3.1, 3.2, 3.11+, figures 3l, 3m
+online table

Limited by a health problem/disability

Around a third of adults reported a limitation in their daily activities due to a health problem/disability, and around half of these reported being limited a lot. Around half of adults with a limitation in their daily activities reported that a musculoskeletal problem was the main cause of their limitation.

Figure 3n: Percentage who reported that their day to day activities were limited because of a health problem/disability, by age and sex



- 34% of adults reported that their day-to-day activities were limited because of a health problem/disability lasting (or expected to last) at least 12 months, including 16% who were limited a lot.
- Figure 3n shows an increase with age in the percentage reporting that their day to day activities were limited due to a health problem/disability.
- Overall, more women (36%) than men (31%) reported a limitation in their daily activities due to a health problem/disability.
- The percentage of adults who reported being limited a lot also increased with age, and was overall slightly more common for women (17%) than men (15%).
- Adults who reported a limitation in their daily activities were asked to specify the illness which was the main cause of their limitation. By far the most common group of illnesses mentioned here was musculoskeletal problems (52% of those with a limitation), followed by mental disorders (8%) and respiratory system (8%) (not shown in tables).

Tables 3.1, 3.2, 3.11+, figure 3n
+online table

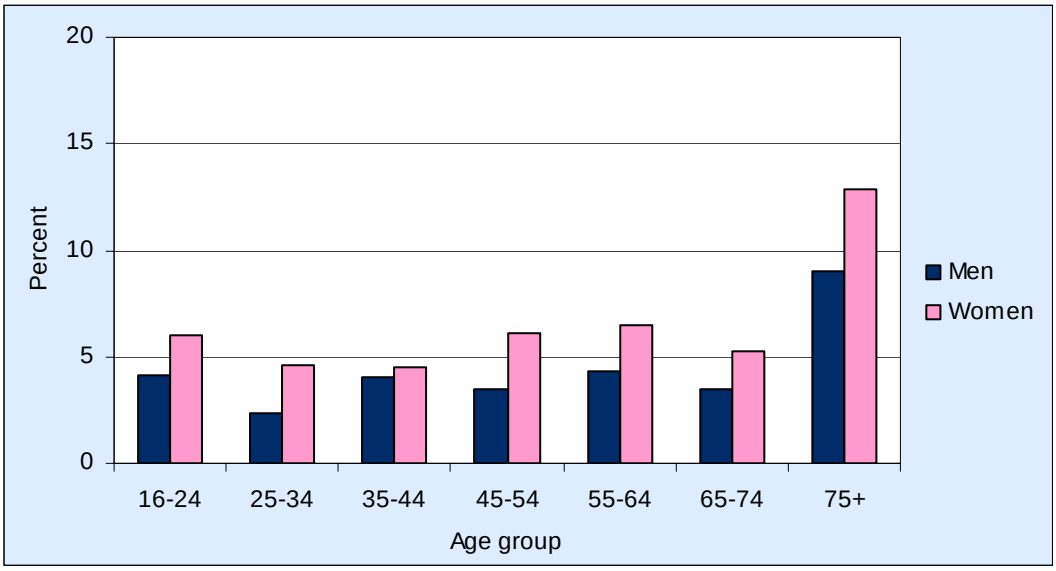
3.6 Other conditions

The survey also asked adults about eyesight, hearing, and teeth. Methods and definitions are provided at the end of the chapter (3.10).

Eyesight

Around 1 in 20 adults reported having eyesight difficulty. Eyesight problems increased steeply for those aged 75 and over, and were most common amongst older women.

Figure 3o: Percentage who reported having difficulty with their eyesight, by age and sex



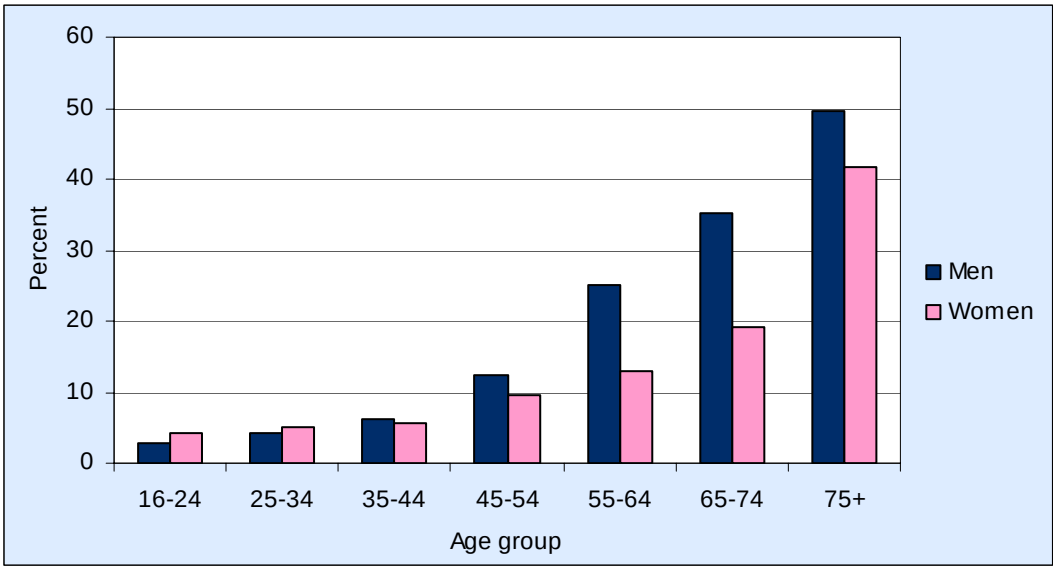
- 5% of adults reported having difficulty with their eyesight.
- Figure 3o shows that there was a steep increase in the percentage who reported having difficulty with their eyesight for those aged 75 and over, particularly for women.
- Older women were more likely to report difficulty with their eyesight than men.
- Overall, 3% of adults reported difficulty in being able to see the face of someone across a room, and 2% reported not being able to see the face of someone across a room (not shown in table).

Tables 3.1, 3.12+, figure 3o
+online table

Hearing

Around 1 in 7 adults reported having difficulty with their hearing. Hearing difficulty increased with age, affecting around a third of people aged 65 and over, and was more common amongst men than women for the older age groups.

Figure 3p: Percentage who reported having difficulty with their hearing, by age and sex



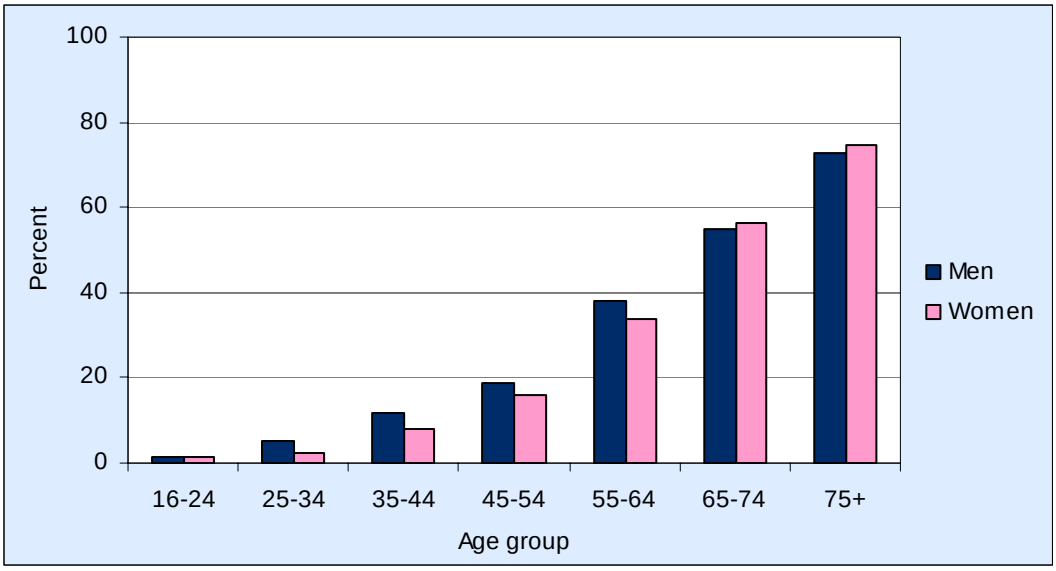
- 15% of adults reported having difficulty with their hearing.
- The rate increased with age, and over a third of those aged 65 and over reported a hearing difficulty. Figure 3p indicates that men were more likely than women to report having difficulty with their hearing for the older age groups.
- Of those adults who reported having difficulty with their hearing, 54% reported that they did not wear a hearing aid and never had, 9% reported that they did not wear a hearing aid but had tried one, 14% reported wearing a hearing aid some of the time, and 23% reported wearing a hearing aid most of the time (not shown in table).
- Of those adults who reported wearing a hearing aid some or most of the time, 44% reported having difficulty with their hearing while wearing the aid (not shown in table).

Tables 3.1, 3.12+, figure 3p
+online table

Teeth

A quarter of adults reported having fewer than 21 of their own teeth, or having mainly false teeth or dentures, becoming more common with age.

Figure 3q: Percentage who reported having fewer than 21 teeth, by age and sex



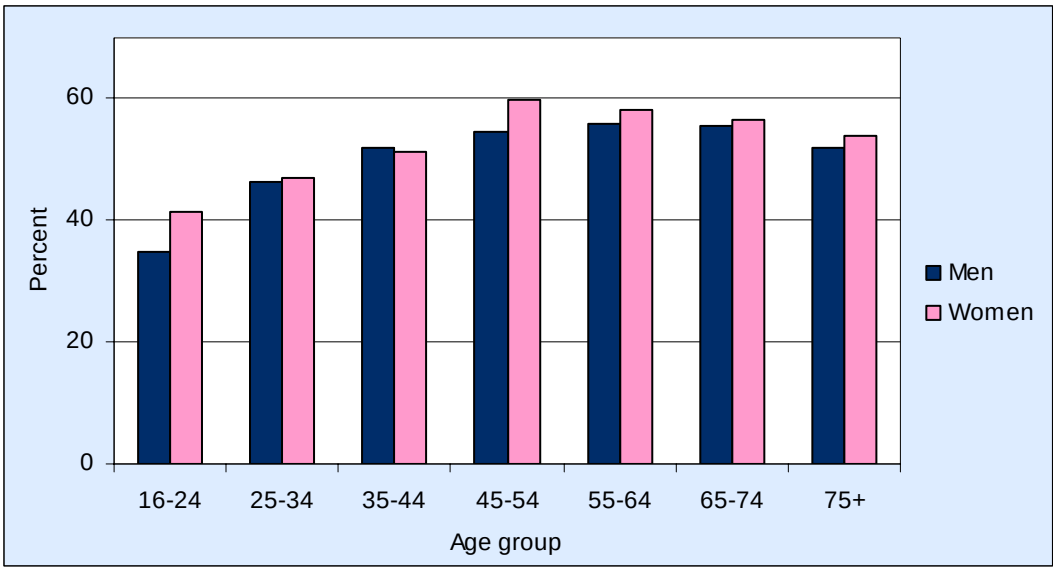
- 25% of adults reported having fewer than 21 of their own teeth, or having mainly false teeth or dentures.
- The percentage who reported having fewer than 21 teeth increased with age, shown in figure 3q.
- There was generally little difference between men and women.

Tables 3.1, 3.12+, figure 3q
+online table

3.7 Untreated problems or symptoms

Around half of adults reported having one or more untreated problems or symptoms that they had not been to see a doctor or nurse about, reporting that the main reasons for not seeking treatment was that they didn't think their symptoms seemed serious enough, or because they had learnt to live with/put up with them.

Figure 3r: Percentage who reported having one or more untreated problems or symptoms by age and sex



- 51% of adults reported having one or more untreated problems or symptoms in the previous 12 months (i.e. symptoms that they had not been to see a doctor or nurse about).
- There was generally little difference between men and women, however rates were higher for younger women aged 16-24 compared to men and for some middle aged women.
- Adults were asked about their untreated problems or symptoms and their reasons for not seeing a doctor or nurse (they could provide more than one answer). The most commonly reported problems were joint pain, muscle pain or stiffness (33% of adults with untreated problems) and backache (30%).
- The most common reasons reported by adults for not seeing a doctor or nurse about their symptoms was because they did not think their symptoms seemed serious enough (45%), or because they had learnt to live with/put up with them (39%) (not shown in table).

Tables 3.1, 3.13+, figure 3r
+online table

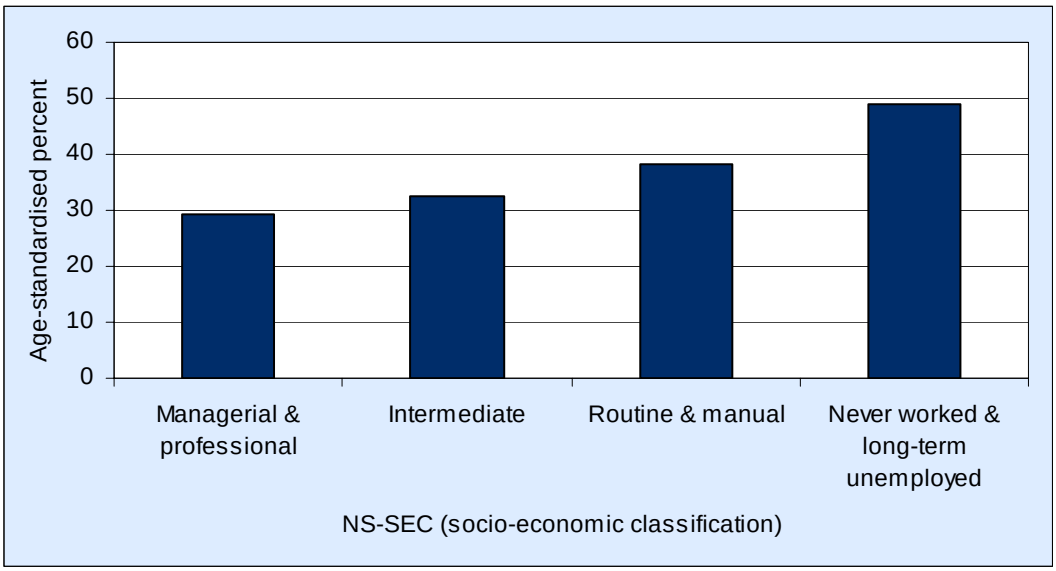
3.8 Key measures by socio-demographic factors

For some key variables, information is shown by socio-economic group and area deprivation. Age-standardised rates or means are shown. Age-standardisation removes the effect of age from comparisons between groups, in this case between different categories of socio-economic group and area deprivation. See the glossary (Appendix A) for further details. Definitions for the socio-demographic factors are provided at the end of the chapter (3.10).

Socio-economic group (NS-SEC)

Overall, levels of ill-health increased from managerial and professional households through to manual households. Those who had never worked and the long term unemployed reported the worst health.

Figure 3s: Percentage who reported that their day to day activities were limited because of a health problem/disability, by household NS-SEC



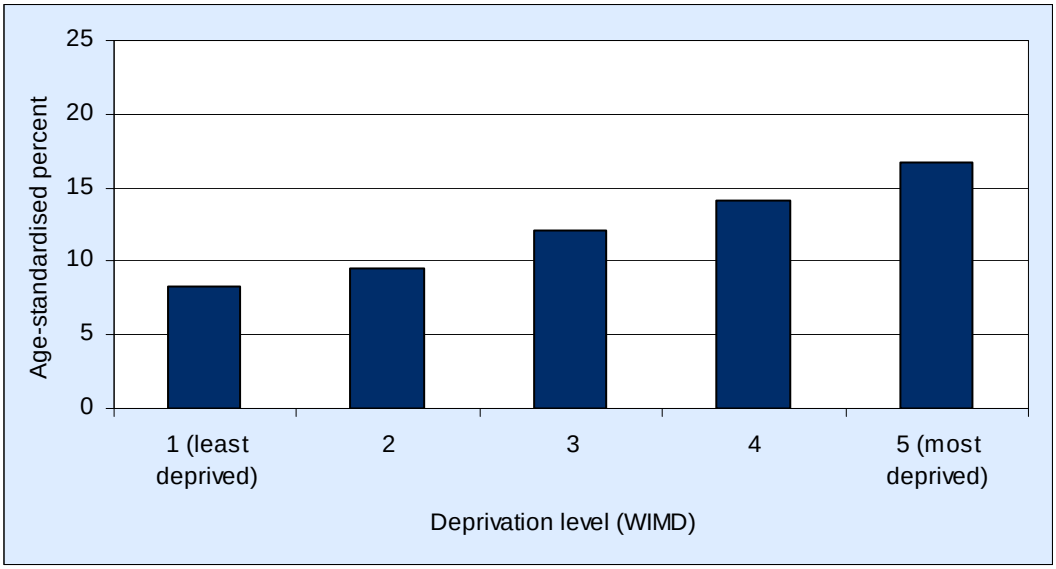
- Overall, levels of ill-health increased from managerial and professional households through to households headed by someone who had never worked or was long-term unemployed (it should be noted that this group includes people unable to work because of long-term sickness or disability). This general pattern is shown for adults reporting a limitation in their daily activities due to a health problem/disability by NS-SEC in figure 3s.
- In households headed by someone who had never worked or was long-term unemployed, 40% of adults reported that their health in general was fair or poor, compared with 26% in routine and manual households and 14% in managerial and professional households. Also in households headed by someone who had never worked or was long-term unemployed, 28% of adults reported currently being treated for a mental illness, compared with 15% in routine and manual households and 8% in managerial and professional households.

Table 3.3, figure 3s

Area deprivation (WIMD)

Levels of ill health increased with area deprivation. In general, those in the most deprived areas reported the worst health.

Figure 3t: Percentage who reported being treated for arthritis, by area deprivation



- In general, levels of ill-health increased with levels of area deprivation.
- In general, those in the most deprived areas showed the highest rates for each of the key illnesses. This general pattern is shown for arthritis in figure 3t. The proportion of adults reporting being treated for arthritis in the most deprived areas was 17%, compared with 8% in the least deprived areas, while the proportion of adults reporting fair or poor general health in the most deprived areas was 30%, compared with 13% in the least deprived areas.

Table 3.3, figure 3t

3.9 Trends for key measures

For some key variables, trends are shown for the first nine years of the survey.

Since 2003/04 when the survey started, there has been a slight increase in adults reporting being treated for high blood pressure, mental illness and diabetes, and a slight decrease for heart conditions and arthritis.

Figure 3u: Adults currently being treated for selected illnesses, 2003/04-2012

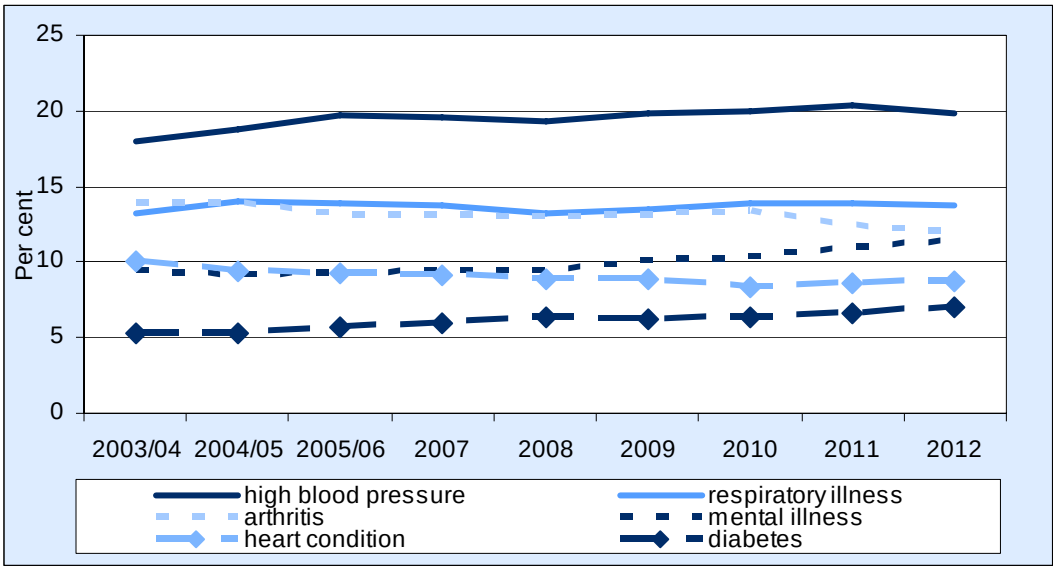


Table 3.4

3.10 Methods and definitions

SF-36 Questions

The Welsh Health Survey adult questionnaire included a standard set of 36 health status questions known as SF-36 (version 2). SF-36 questions asked respondents about their own perception of their physical and mental health and the impact it has on their daily lives.

SF-36 general health question

The SF-36 questions include a question asking respondents to rate their own general health on a five-point scale ranging from excellent to poor.

SF-36 component scores

Responses to the SF-36 questions can be combined to produce eight scores for the following aspects of health and well-being:

- physical functioning
- role-physical
- bodily pain
- general health
- vitality
- social functioning
- role-emotional
- mental health.

All scores above or below 50 can be interpreted as above or below the general US 1998 population norm. See the glossary at Appendix A for further information.

SF-36 summary scores

The eight components can be combined to produce two summary measures of physical and mental health - the Physical Component Summary (PCS) and Mental Component Summary (MCS) scores. Higher scores indicate better health.

Illnesses

The survey asked adults aged 16 years and over whether they were currently being treated for a range of illnesses. For heart attack, stroke and cancer they were asked whether they had ever been treated for the condition. Information was also collected on adults reporting limitations in day to day activities due to a health problem or disability.

Any heart condition

Adult respondents were classified as having any heart condition if they reported ever having been treated for a heart attack, or currently being treated for angina, heart failure or 'another heart condition'. Results for high blood pressure (hypertension) are also shown, but are

usually shown separately from heart conditions because high blood pressure is a risk factor for heart disease rather than an actual heart condition.

Any respiratory illness

Adult respondents were classified as having any respiratory illness if they reported currently being treated for asthma, pleurisy, bronchitis, or 'another respiratory illness'.

Any mental illness

Adult respondents were classified as having any mental illness if they reported currently being treated for depression, anxiety, or 'another mental illness'.

Diabetes

Adult respondents were asked whether they were currently being treated for diabetes, making no distinction between type 1 and type 2 diabetes. If they responded positively, they were asked how their diabetes was controlled (by injection, tablets or diet).

Another chronic illness

Following questions on specific illnesses in the adult questionnaire, the survey asked if the adult was currently being treated for 'any other chronic or long-term illness', and asked to specify the main illness. Answers were subsequently coded according to a coding frame similar to that used by the General Household Survey and Health Survey for England. The categories into which respondents' answers were coded were collapsed into broad groups approximate to the chapter headings of the International Classification of Diseases (ICD10). See the glossary at Appendix A for more details.

Any illness

Adult respondents were classified as having 'any illness' if they reported currently being treated for any of the illnesses specified in the questionnaire (see Appendix A), or another chronic illness (see above).

Limited by health problem/disability

The questionnaire asked adults whether their day-to-day activities were limited because of a health problem or disability lasting (or expected to last) at least 12 months. They were able to answer 'yes, limited a lot', 'yes, limited a little' or 'no'. Adults were asked to include problems due to old age. If responding positively, they were asked for the main cause of this limitation. Answers were coded according to the ICD 10 codes (see above). This is the same question as that used in the 2011 Census.

Eyesight

The survey asked adults whether their eyesight was good enough to see the face of someone across a room, with glasses or contact lenses if they usually wore them. They were able to answer 'yes', 'yes, with difficulty' or 'no'. In this report, those answering 'yes, with difficulty' or 'no' are classified as having an eyesight difficulty.

Hearing

Respondents were asked whether they had any difficulty with their hearing, without a hearing aid if they usually wore one. If they answered yes, they were asked about the use and effectiveness of hearing aids.

Teeth

The survey asked adults how many of their own natural teeth they had, with filled and capped teeth counting as their own, but not false teeth nor dentures. Answers were restricted to '21 or more' of their own teeth, or 'less than 21 or mainly false teeth or dentures'.

Untreated problems or symptoms

The survey asked adults if they had any untreated problems or symptoms in the previous 12 months that they had not been to see a doctor or nurse about them (they could provide more than one answer). They were also asked to include problems they'd had for longer if they had troubled them in the past year. Respondents were then asked about the main reasons for not being to see a doctor or nurse about their symptoms (again they could provide more than one answer).

Socio-demographic factors

Socio-economic group

The socio-economic classification in use in this report is the 3-class version of the National Statistics Socio-Economic Classification (NS-SEC) of the Household Reference Person (HRP). See the glossary (Appendix A) for further details.

Area deprivation

Area deprivation is based on the Welsh Index of Multiple Deprivation[10] 2011 (WIMD). WIMD gives deprivation scores for small areas in Wales. These small areas were split into five groups ("fifths") of deprivation according to overall WIMD scores and each respondent to the Welsh Health Survey was allocated to the relevant fifth. See the glossary (Appendix A) for further details.

[10] Welsh Index of Multiple Deprivation 2011
http://wales.gov.uk/topics/statistics/theme/wimd/wimd2011/?lang=en

Tables

Table 3.1 Adults who reported a range of illnesses and conditions, by broad age, sex (a) (b)

Per cent

	by sex:		by age:			
	Men 16+	Women 16+	16-44	45-64	65+	All 16+
General health status:						
Excellent	17	13	23	11	4	15
Very good	35	35	42	33	24	35
Good	29	30	26	32	33	29
Fair	13	16	7	16	28	15
Poor	6	6	2	8	11	6
Fair or poor	19	22	9	24	39	20
Heart disease:						
Heart attack (ever treated)	5	3	0	3	12	4
Angina	4	3	0	3	12	4
Heart Failure	1	1	0	1	5	1
High blood pressure	20	19	3	23	52	20
Another heart condition	5	4	1	4	14	4
Any heart condition excl high blood pressure	10	8	1	7	29	9
Any heart condition inc high blood pressure	25	23	4	26	62	24
Respiratory illnesses:						
Asthma	9	12	10	10	13	10
Emphysema	1	1	0	1	3	1
Pleurisy	0	0	0	0	0	0
Bronchitis	2	2	0	2	5	2
Another respiratory illness	4	3	1	4	9	3
Any respiratory illness	12	15	11	13	21	14
Mental illnesses:						
Depression	6	11	8	12	7	9
Anxiety	5	9	6	9	6	7
Another mental illness	2	2	2	2	1	2
Any mental illness	8	14	9	14	11	11
Other illnesses:						
Stroke (ever treated)	3	2	0	2	7	2
Arthritis	8	15	1	14	31	12
Back Pain	10	14	5	14	22	12
Diabetes	8	6	2	8	16	7
Number of illnesses:						
Any illness	46	52	29	55	82	49
1 illness	22	23	18	26	27	22
2 or more illnesses	24	29	11	30	55	27
Limited by health problem / disability (c)						
Limited a lot	15	17	5	17	36	16
Limited at all	31	36	15	38	65	34
Other conditions						
Eyesight difficulty	4	6	4	5	8	5
Hearing difficulty	17	13	5	15	35	15
Has fewer than 21 teeth	25	25	5	26	64	25
One or more untreated problems or symptoms	50	53	46	57	55	51
Unweighted bases (d)	*7,309*	*8,378*	*5,939*	*5,540*	*4,208*	*15,687*

(a) Tables showing more detailed breakdowns are available at www.wales.gov.uk/statistics.
(b) See definitions at 3.10.
(c) Day-to-day activities limited because of health problem or disability lasting (or expected to last) at least 12 months.
(d) Bases vary: those shown are for the whole sample.

Table 3.2 Adults who reported key illnesses or health status, by age and sex (a) (b)

	Currently being treated for:					
	High blood pressure	Any heart condition excluding high blood pressure	Any respiratory illness	Any mental illness	Arthritis	Diabetes
	%	%	%	%	%	%
Men aged:						
16-24	0	1	10	4	0	0
25-34	2	1	8	6	1	1
35-44	7	2	10	11	2	4
45-54	19	6	11	11	6	8
55-64	33	12	13	10	16	12
65-74	49	26	19	8	21	19
75+	56	43	23	5	26	22
16-44	3	1	9	7	1	2
45-64	26	9	12	11	11	10
65+	52	33	21	7	23	20
Men aged 16+	20	10	12	8	8	8
Women aged:						
16-24	1	1	10	7	1	1
25-34	1	1	11	11	1	1
35-44	4	1	15	17	4	2
45-54	13	3	12	18	12	4
55-64	27	8	17	18	23	9
65-74	46	17	21	15	31	10
75+	58	32	23	12	43	15
16-44	2	1	12	12	2	2
45-64	20	5	14	18	17	7
65+	52	25	22	13	37	13
Women aged 16+	19	8	15	14	15	6
All aged:						
16-24	1	1	10	6	1	1
25-34	1	1	9	9	1	1
35-44	5	1	13	14	3	3
45-54	16	4	11	15	9	6
55-64	30	10	15	14	19	10
65-74	47	21	20	12	26	15
75+	57	37	23	9	36	18
16-44	3	1	11	9	1	2
45-64	23	7	13	14	14	8
65+	52	29	21	11	31	16
All aged 16+	20	9	14	11	12	7

(a) Tables showing more detailed illnesses are available at www.wales.gov.uk/statistics.
(b) See definitions at 3.10.
(c) Day-to-day activities limited because of health problem or disability lasting (or expected to last) at least 12 months.
(d) Higher scores indicate better health or well-being.
(e) Bases vary: those shown are for the whole sample.

Table 3.2 Adults who reported key illnesses or health status, by age and sex (a) (b) (continued)

		Limited by health problem / disability (c)					
	Currently being treated for any illness	Limited a lot	Limited at all	General health status: fair or poor	SF-36 Physical component summary score (d)	SF-36 Mental component summary score (d)	
	%	%	%	%	*Mean*	*Mean*	*Unweighted base (e)*
Men aged:							
16-24	18	3	8	4	56.3	52.5	*927*
25-34	22	4	13	7	54.3	51.2	*812*
35-44	34	8	19	12	52.8	49.8	*1,016*
45-54	47	13	31	19	49.9	49.6	*1,294*
55-64	60	20	44	28	46.3	50.7	*1,338*
65-74	76	27	55	32	43.0	52.1	*1,122*
75+	87	42	72	42	37.6	51.7	*800*
16-44	25	5	13	8	54.5	51.2	*2,755*
45-64	54	17	37	23	48.2	50.1	*2,632*
65+	81	33	62	36	40.8	52.0	*1,922*
Men aged 16+	46	15	31	19	49.8	51.0	*7,309*
Women aged:							
16-24	21	3	10	8	54.3	48.8	*940*
25-34	33	4	16	9	53.7	47.7	*1,008*
35-44	42	9	25	13	51.7	47.3	*1,236*
45-54	49	13	33	22	49.2	47.5	*1,437*
55-64	65	21	46	27	45.5	48.4	*1,471*
65-74	78	28	59	35	41.2	50.5	*1,243*
75+	89	47	76	46	35.6	49.9	*1,043*
16-44	32	5	17	10	53.2	47.9	*3,184*
45-64	57	16	39	24	47.4	48.0	*2,908*
65+	83	38	67	41	38.5	50.2	*2,286*
Women aged 16+	52	17	36	22	48.2	48.4	*8,378*
All aged:							
16-24	20	3	9	6	55.3	50.7	*1,867*
25-34	27	4	15	8	54.0	49.5	*1,820*
35-44	38	8	22	13	52.2	48.6	*2,252*
45-54	48	13	32	20	49.5	48.6	*2,731*
55-64	63	20	45	28	45.9	49.5	*2,809*
65-74	77	28	57	34	42.0	51.3	*2,365*
75+	88	45	74	45	36.5	50.7	*1,843*
16-44	29	5	15	9	53.8	49.6	*5,939*
45-64	55	17	38	24	47.8	49.0	*5,540*
65+	82	36	65	39	39.6	51.0	*4,208*
All aged 16+	49	16	34	20	49.0	49.7	*15,687*

(a) Tables showing more detailed illnesses are available at www.wales.gov.uk/statistics.
(b) See definitions at 3.10.
(c) Day-to-day activities limited because of health problem or disability lasting (or expected to last) at least 12
(d) Higher scores indicate better health or well-being.
(e) Bases vary: those shown are for the whole sample.

Table 3.3 Adults who reported key illnesses or health status (age-standardised), by socio-demographic factors (a)

	Currently being treated for:					
	High blood pressure	Any heart condition excluding high blood pressure	Any respiratory illness	Any mental illness	Arthritis	Diabetes
	%	%	%	%	%	%
Socio-economic classification of household reference person (NS-SEC)						
Managerial and professional	18	7	12	8	9	6
Intermediate	19	8	12	10	10	7
Routine and manual	22	10	16	15	15	8
Never worked and long-term unemployed	23	11	20	28	21	8
2011 Welsh Index of Multiple Deprivation quintile						
1 (least deprived)	18	8	11	8	8	6
2	19	8	13	10	10	6
3	19	8	12	10	12	7
4	21	9	15	13	14	7
5 (most deprived)	24	12	19	17	17	9

(a) See definitions at 3.10 and glossary at Appendix A for explanations of age-standardisation and socio-demographic factors.
(b) Day-to-day activities limited because of health problem or disability lasting (or expected to last) at least 12 months.
(c) Higher scores indicate better health or well-being.
(d) Bases vary: those shown are for the whole sample.

Table 3.3 Adults who reported key illnesses or health status (age-standardised), by socio-demographic factors (continued) (a)

	Currently being treated for any illness	Limited by health problem / disability (b)		General health status: fair or poor	SF-36 Physical component summary score (c)	SF-36 Mental component summary score (c)	
		Limited a lot	Limited at all				
	%	%	%	%	*Mean*	*Mean*	*Unweighted base (d)*
Socio-economic classification of household reference person (NS-SEC)							
Managerial and professional	46	11	29	14	50.5	51.4	*5,729*
Intermediate	46	14	32	19	49.3	50.5	*3,009*
Routine and manual	54	20	38	26	47.3	48.2	*6,165*
Never worked and long-term unemployed	63	31	49	40	45.2	43.5	*344*
2011 Welsh Index of Multiple Deprivation quintile							
1 (least deprived)	44	11	28	13	50.9	51.3	*3,046*
2	48	12	31	16	50.0	50.6	*3,274*
3	48	16	34	20	48.7	49.8	*3,469*
4	51	18	36	25	48.3	49.2	*3,068*
5 (most deprived)	56	24	41	30	46.2	46.9	*2,830*

(a) See definitions at 3.10 and glossary at Appendix A for explanations of age-standardisation and socio-demographic factors.
(b) Day-to-day activities limited because of health problem or disability lasting (or expected to last) at least 12 months.
(c) Higher scores indicate better health or well-being.
(d) Bases vary: those shown are for the whole sample.

Table 3.4 Adults who reported key illnesses or health status, 2003/04-2012 (a)

	Currently being treated for:					
	High blood pressure	Any heart condition excluding high blood pressure	Any respiratory illness	Any mental illness	Arthritis	Diabetes
	%	%	%	%	%	%
Men aged 16+:						
2003/04	17	11	12	7	11	5
2004/05	17	10	13	7	10	6
2005/06	18	10	13	7	10	7
2007 (b)	19	11	13	7	9	6
2008	18	10	12	7	10	7
2009	20	10	13	7	10	7
2010	20	9	13	8	10	7
2011	20	10	13	8	9	8
2012	20	10	12	8	8	8
Women aged 16+:						
2003/04	19	9	14	11	17	5
2004/05	20	9	14	12	17	4
2005/06	21	8	15	11	16	5
2007 (b)	20	8	15	12	16	6
2008	20	8	14	12	16	6
2009	20	8	14	13	16	6
2010	20	7	15	13	16	6
2011	21	8	15	14	16	6
2012	19	8	15	14	15	6
All aged 16+:						
2003/04	18	10	13	9	14	5
2004/05	19	9	14	9	14	5
2005/06	20	9	14	9	13	6
2007 (b)	20	9	14	9	13	6
2008	19	9	13	9	13	6
2009	20	9	13	10	13	6
2010	20	8	14	10	13	6
2011	20	9	14	11	12	7
2012	20	9	14	11	12	7

(a) See definitions at 3.10.
(b) From 2007 the fieldwork runs on a calendar year basis.
(c) Day-to-day activities limited because of health problem or disability lasting (or expected to last) at least 12 months.
(d) Higher scores indicate better health or well-being.
(e) Bases vary: those shown are for the whole sample.

Table 3.4 Adults who reported key illnesses or health status, 2003/04-2012 (continued) (a)

		Limited by health problem / disability (c)					
	Currently being treated for any illness	Limited a lot	Limited at all	General health status: fair or poor	SF-36 Physical component summary score (d)	SF-36 Mental component summary score (d)	
	%	%	%	%	*Mean*	*Mean*	*Unweighted base (e)*
Men aged 16+:							
2003/04	44	-	-	20	49.3	51.0	*7,486*
2004/05	44	-	-	21	49.4	50.8	*7,437*
2005/06	43	-	-	20	49.6	51.1	*6,691*
2007 (b)	44	-	-	19	49.5	51.1	*6,418*
2008	44	-	-	19	49.8	51.1	*6,119*
2009	45	-	-	20	49.5	50.9	*7,412*
2010	45	-	-	19	49.4	51.0	*7,420*
2011	45	15	32	19	49.7	51.1	*7,458*
2012	46	15	31	19	49.8	51.0	*7,309*
Women aged 16+:							
2003/04	50	-	-	23	48.3	48.6	*8,812*
2004/05	51	-	-	23	47.9	48.5	*8,598*
2005/06	52	-	-	23	48.3	48.5	*7,614*
2007 (b)	52	-	-	22	48.1	48.9	*7,499*
2008	52	-	-	22	48.2	48.6	*7,194*
2009	52	-	-	22	48.1	49.0	*8,606*
2010	52	-	-	21	48.0	48.8	*8,579*
2011	53	17	36	22	48.1	48.6	*8,600*
2012	52	17	36	22	48.2	48.4	*8,378*
All aged 16+:							
2003/04	47	-	-	22	48.8	49.8	*16,298*
2004/05	48	-	-	22	48.6	49.6	*16,035*
2005/06	48	-	-	21	48.9	49.8	*14,305*
2007 (b)	48	-	-	21	48.8	50.0	*13,917*
2008	48	-	-	20	48.9	49.8	*13,313*
2009	48	-	-	21	48.8	49.9	*16,018*
2010	49	-	-	20	48.7	49.9	*15,999*
2011	49	16	34	21	48.9	49.8	*16,058*
2012	49	16	34	20	49.0	49.7	*15,687*

(a) See definitions at 3.10.
(b) From 2007 the fieldwork runs on a calendar year basis.
(c) Day-to-day activities limited because of health problem or disability lasting (or expected to last) at least 12 months.
(d) Higher scores indicate better health or well-being.
(e) Bases vary: those shown are for the whole sample.

Chapter 4
Health-Related Lifestyle

4 Health-related lifestyle

4.1 Introduction

This chapter focuses on the reported health-related lifestyles of adults.

Broad figures for Wales are provided along with age and sex breakdowns. For a selection of key measures, information is provided by socio-economic group and area deprivation. Some comparisons with earlier years are also shown. Online tables showing further breakdowns are available[1] as are trend data for a selection of key variables[2]. Local authority / health board breakdowns for 2011 and 2012 combined are provided in a separate report[3].

The survey asked adults (aged 16 and over) about their lifestyle, including questions about their exposure to other people's tobacco smoke. In addition, respondents were asked to provide their height and weight.

The survey relies on a self-completion questionnaire, so care should be taken when making comparisons with results from other surveys, for example, when making comparisons of levels of obesity with those from surveys where height and weight is measured by an interviewer or nurse.

Methods and definitions are provided at the end of the chapter (4.11).

This chapter includes information on:

- smoking (4.4)
- alcohol (4.5)
- fruit and vegetable consumption (4.6)
- physical activity (4.7)
- body mass index (4.8)
- key measures by socio-demographic factors (4.9)
- trends for key measures (4.10)
- methods and definitions (4.11)

[1] Online tables showing more detailed breakdowns are available at:
www.wales.gov.uk/statistics
[2] Trend data for a selection of key variables are available at:
www.wales.gov.uk/statistics
[3] Welsh Health Survey: 2011 and 2012 Local Authority / Health Board Results
www.wales.gov.uk/statistics

4.2 Background

This chapter focuses on the reported health-related lifestyles of adults.

There is considerable evidence to suggest that people's health-related lifestyle can impact on their general health and wellbeing. In September 2011, the United Nations held a summit[4] to address the growing problem of non-communicable diseases (namely, cancers, cardiovascular diseases, chronic respiratory diseases and diabetes). It was suggested that non-communicable diseases now kill more people globally than infectious diseases, and the summit highlighted the need to tackle the common risk behaviours for these diseases, including tobacco use, unhealthy diets, physical inactivity, and harmful use of alcohol. A report was published by Cancer Research UK[5] in December 2011 which suggested that around a third of cancers diagnosed in the UK each year are caused by lifestyle behaviours of smoking, alcohol consumption, unhealthy diet and excess weight.

Following the growing interest in the lifestyle behaviours of adults, the Welsh Government published a statistical bulletin[6] in May 2012 which analyses the combined health lifestyle behaviours of adults. The bulletin focuses on smoking habits, alcohol consumption, fruit and vegetable consumption and physical activity levels, and rather than analyse these behaviours individually, the bulletin analyses adults' overall behaviour for these four lifestyles combined, including the extent to which adults follow a completely healthy lifestyle, and the extent to which they have multiple health risk behaviours.

The Welsh Government's public health strategic framework *Our Healthy Future*[7] comments that "if we don't smoke, don't drink too much, eat a balanced diet and keep active we are likely to live longer and healthier lives." It sets out a number of priority areas which focus on improving people's health-related lifestyles, including reducing smoking rates, increasing participation rates in physical activity, reducing unhealthy eating and reducing harmful alcohol consumption rates. It also identifies reducing health inequalities as a priority, and it is clear from this and previous WHS reports that there are variations in healthy lifestyle behaviour between more and less deprived areas.

Smoking is the greatest single cause of avoidable mortality in Wales[8]. One of the key themes identified in *Our Healthy Future* is the need to further reduce smoking and exposure to second-hand smoke, which has lead to the development of a *Tobacco Control Action Plan for Wales*[9], which aims to address these issues. A report on *Tobacco and Health in Wales* was published jointly by the Welsh Government and the Public Health Wales Observatory in June 2012. This detailed report provides a wide range of data on smoking in Wales to

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[4] United Nations Summit on non communicable disease
http://www.cdc.gov/Features/UNSummit/
http://www.un.org/en/ga/president/65/issues/ncdiseases.shtml
[5] Cancer Research UK review of cancer and lifestyle in the UK
http://info.cancerresearchuk.org/news/archive/pressrelease/2011-11-07-cigarettes-diet-alcohol-and-obesity-behind-more-than-100000-cancers
[6] Welsh Health Survey, 2009 and 2010: Combined Health Lifestyle Behaviours of Adults
http://wales.gov.uk/topics/statistics/headlines/health2012/1205221/?lang=en
[7] Our Healthy Future (Welsh Government)
http://wales.gov.uk/topics/health/cmo/healthy/?lang=en
[8] Tobacco and Health in Wales
http://www.wales.nhs.uk/sitesplus/922/page/59800
[9] Tobacco Control Action Plan
http://wales.gov.uk/topics/health/improvement/index/tobaccoplan/?lang=en

support the implementation of the Welsh Government's Tobacco Control Action Plan for Wales.

The Welsh Government's *Programme for Government*[10] builds on the priorities in *Our Healthy Future*, and uses Welsh Health Survey data on smoking, alcohol consumption, physical activity and obesity to monitor progress towards reducing health risk lifestyles among adults. *Together for Health*[11], a five year strategy for the NHS in Wales, also aims for obesity, smoking, and alcohol abuse to level off or fall.

The Change4Life Wales[12] social marketing campaign has been developed to help people to achieve and maintain a healthy body weight, to eat well, be physically active and drink within sensible limits. It seeks to set the right conditions for behaviour change, accurately target information at at-risk groups of the population, and develop an on-going relationship with them.

[10] Programme for Government (Welsh Government)
http://wales.gov.uk/about/programmeforgov/?lang=en
[11] Together for Health
http://wales.gov.uk/topics/health/publications/health/reports/together/?lang=en
[12] Change4Life Wales
http://change4lifewales.org.uk/?skip=1&lang=en

4.3 Summary

- Just under a quarter of adults reported that they currently smoke.
- A fifth of adult non-smokers reported being regularly exposed to other people's tobacco smoke indoors.
- Around 2 in 5 adults reported drinking above the recommended guidelines on at least one day in the past week, including around a quarter who reported binge drinking – however people do not necessarily drink at these levels regularly.
- A third of adults reported eating five or more portions of fruit and vegetables the previous day.
- Around 3 in 10 adults reported being physically active on five or more days in the previous week.
- Around 3 in 5 adults were classified as overweight or obese, including around 1 in 4 adults classified as obese.
- In general, men were more likely to drink alcohol above the guidelines and be overweight (but not obese) than women, but men were also more likely to be physically active. Fruit and vegetable consumption was similar for both men and women, and a slightly higher percentage of men were smokers.
- Overall, the percentage of smokers and of those drinking alcohol above guidelines was lower amongst older people, as was the percentage that were physically active.
- Adults in less deprived areas reported healthier lifestyles in terms of smoking, obesity and fruit and vegetable consumption, but not for alcohol consumption or physical activity. Smoking rates showed the most variation.
- There has been a slight decrease in smoking rates and a slight increase in levels of obesity over the first nine years of the survey. There has been little change in physical activity during this time. Compared with guidelines, there has been a small decline in levels of drinking and in fruit and vegetable consumption since 2008 (when the current questions were introduced).

4.4 Smoking

Smoking status

Just under a quarter of adults reported that they currently smoke. Overall, smoking is slightly more common amongst men, and is less common amongst the older age groups.

Figure 4a: Self-reported smoking status of adults

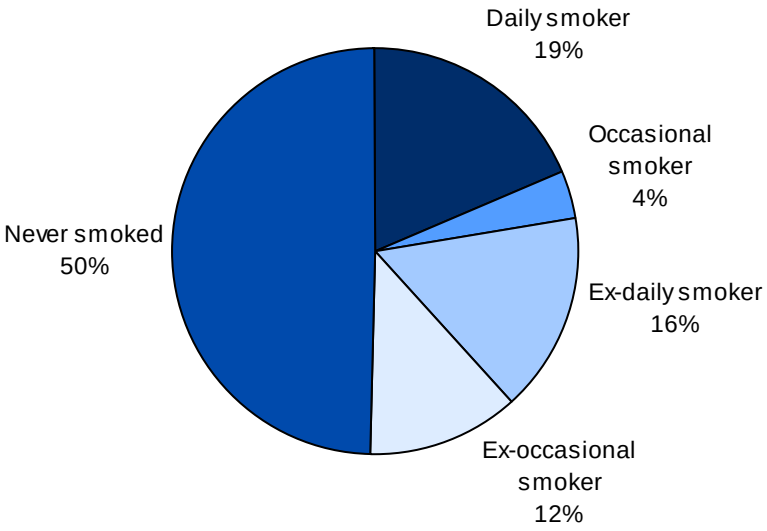
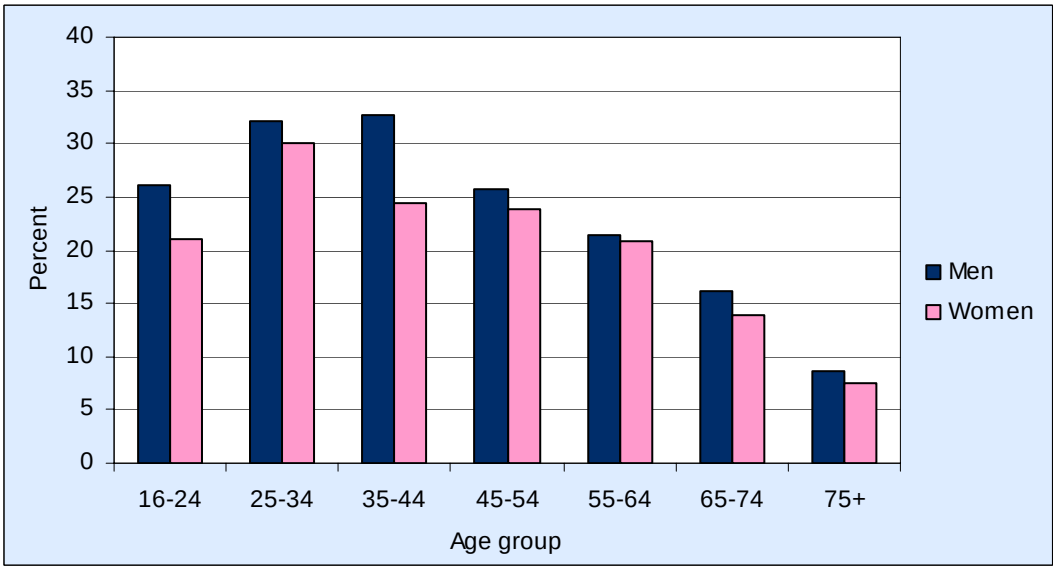


Figure 4b: Percentage who reported being a current smoker, by age and sex



- 23% of adults reported that they currently smoked.
- 28% of adults reported that they had given up smoking.
- 50% of adults reported that they had never smoked.

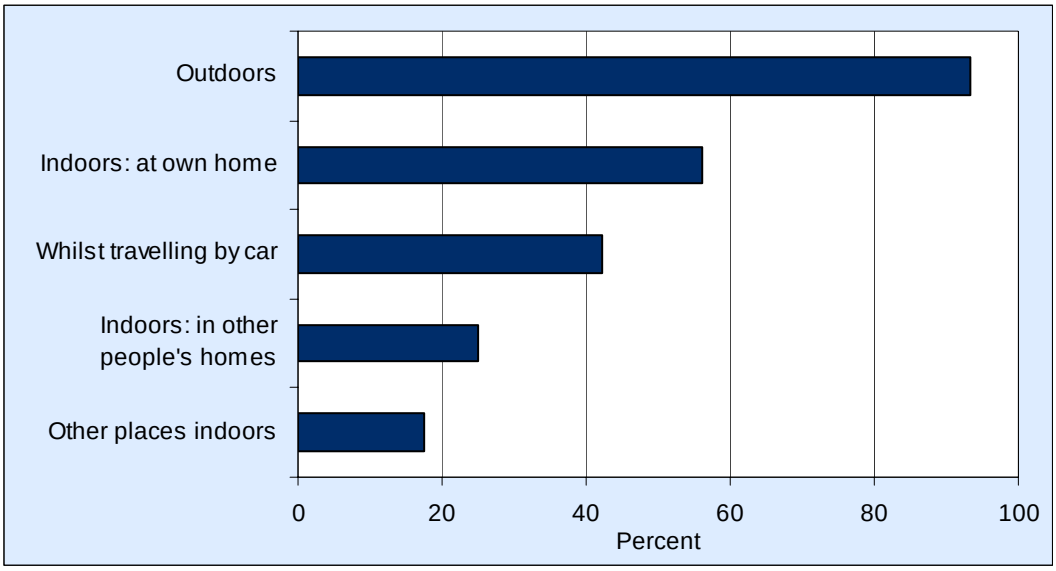
- Overall, a slightly higher proportion of men were smokers (25%) compared with women (21%), and the prevalence of smoking peaked at around 25-34 for women and 25-44 for men and then decreased with age for both men and women.

Tables 4.1, 4.2, 4.5+ figures 4a, 4b
+online table

Where people smoked

Around 3 in 5 smokers reported smoking in their own home, and around a quarter of smokers reported smoking in other people's homes. Around 2 in 5 smokers reported smoking whilst travelling by car.

Figure 4c: Percentage of smokers who reported smoking in various locations*



*Those reporting smoking in more than one location are counted in each relevant category

- 56% of smokers reported smoking in their own home in the last 7 days, 25% in other people's homes, 42% whilst travelling by car and 17% in other places indoors (respondents were allowed to record more than one smoking location).
- Overall, 71% of smokers reported smoking indoors, 93% outdoors.

Tables 4.1, 4.6+ figure 4c
+online table

Giving up smoking

Around 7 in 10 smokers reported that they would like to give up, and around 4 in 10 smokers had tried to give up in the last year.

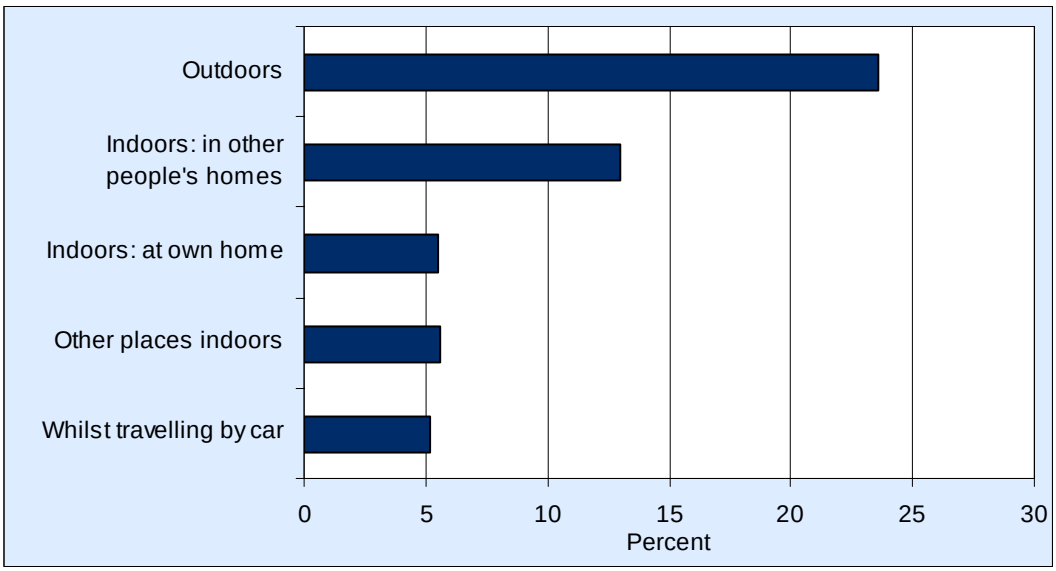
- 71%of smokers reported that they would like to give up smoking.
- 39%of smokers had tried to give up in the last year.
- The main reason for wanting to give up was for better health.

Table 4.1

Exposure to other people's smoke

A fifth of adult non-smokers reported being regularly exposed to other people's tobacco smoke indoors.

Figure 4d: Percentage of non-smoking adults who reported being regularly exposed to other people's tobacco smoke*



*Those reporting exposure to smoke in more than one location are counted in each relevant category.

- Overall, 19% of adult non-smokers reported being regularly exposed to other people's tobacco smoke indoors, and 24% indoors or outdoors.
- Of all adult non-smokers, 13% reported being exposed to other people's smoke in other people's homes, 5% in their own homes, 6% in other places indoors, and 5% whilst travelling by car.
- Adults' reported exposure to other people's smoke decreased with age, and this applied for all the places specified.

Tables 4.1, 4.2, 4.7+ figure 4d
+online table

Children living in households where adults smoke

Around 1 in 8 children lived in households where at least one adult had smoked in their home in the past seven days.

As well as questions about smoking, the Welsh Health Survey asks about the composition of the household. It is therefore possible to identify households containing children and look at the smoking behaviour of adults in these households.

- 38% of children lived in households where at least one adult smoked daily or occasionally.
- 12% of children lived in households where at least one adult had smoked in their home in the past seven days (not shown in table).

4.5 Alcohol

Around 2 in 5 adults reported drinking above the recommended guidelines on at least one day in the past week, including around a quarter who reported binge drinking – however people do not necessarily drink at these levels regularly. Drinking above guidelines was more common amongst men, and was less common amongst older people. Around half of adults reported either not drinking, or drinking less than once a week.

Figure 4e: Adults' reported average frequency of drinking alcohol

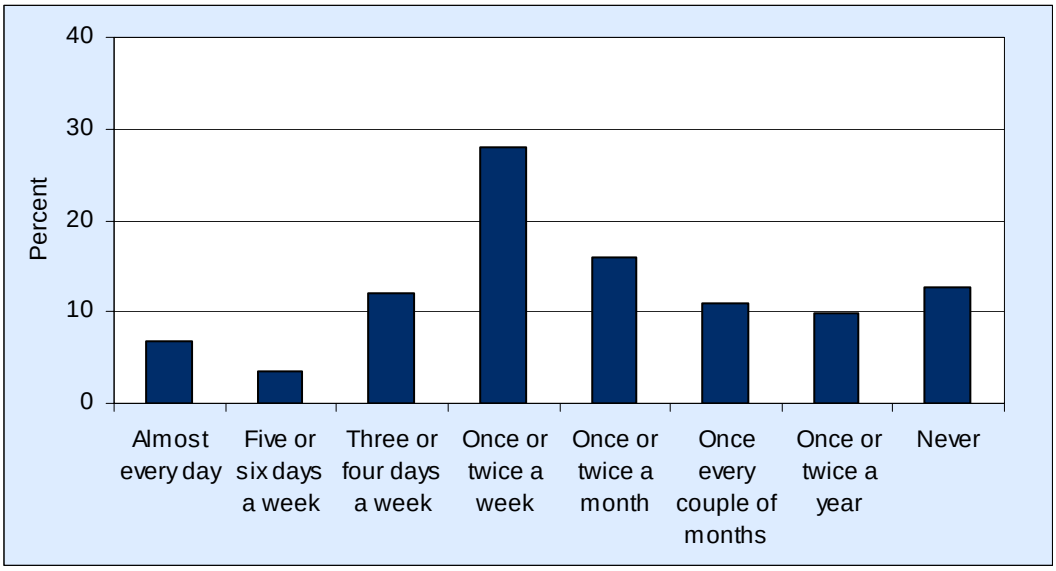
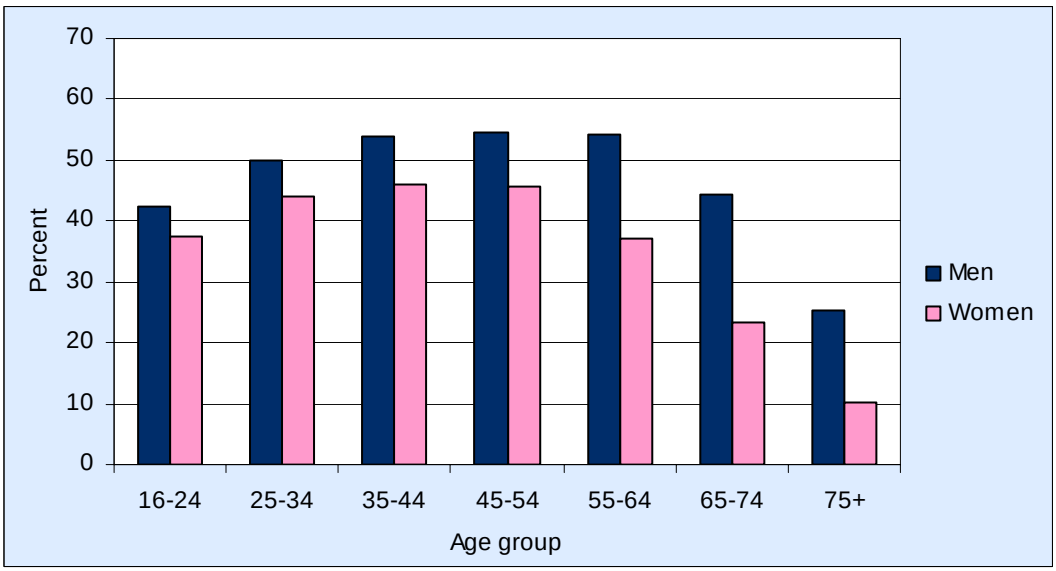


Figure 4f: Percentage who reported drinking above guidelines on at least one day in the past week, by age and sex



- 13% of adults reported that they were non-drinkers, and a further 37% reported that they drank less than once a week.

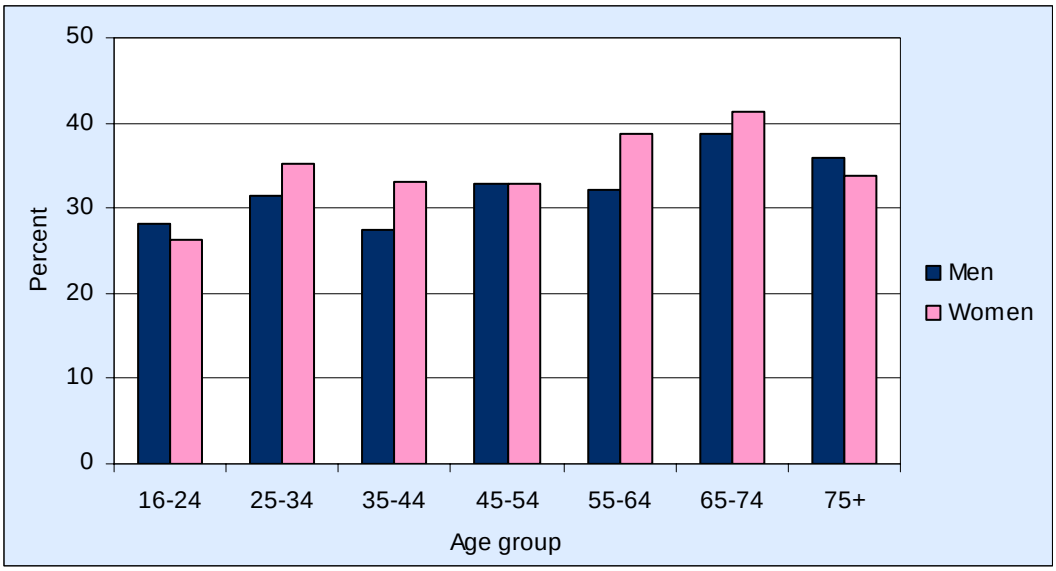
- Figure 4e shows that 28% of adults reported drinking alcohol on average once or twice a week, while 7% of adults reported drinking something almost every day, less common in the younger age groups.
- 42% of all adults (i.e. including non-drinkers) reported drinking above the recommended guidelines on at least one day in the past week, including 26% who reported binge drinking (drinking more than twice the daily guidelines). However, they do not necessarily drink at these levels regularly (advice on sensible drinking refers to 'regular' drinking above this level).
- Overall, men were more likely than women to report drinking above the recommended guidelines on at least one day in the past week (48% of men compared with 36% of women), and to report binge drinking (31% of men, 21% of women).
- Drinking above guidelines or binge drinking was less common in older people.
- Recommendations on sensible drinking relate to regularly drinking above the daily guidelines of 4 units (men) or 3 units (women). The survey provides some information on volume of alcohol consumption (on a day the previous week) and on drinking regularity, but not on the combination of the two (so it does not identify those who regularly consume large volumes of alcohol).

Tables 4.1, 4.2, 4.8+, 4.9+ figures 4e, 4f
+online tables

4.6 Fruit and vegetable consumption

A third of adults reported eating five or more portions of fruit and vegetables the previous day.

Figure 4g: Percentage who reported eating five or more portions of fruit and vegetables the previous day, by age and sex



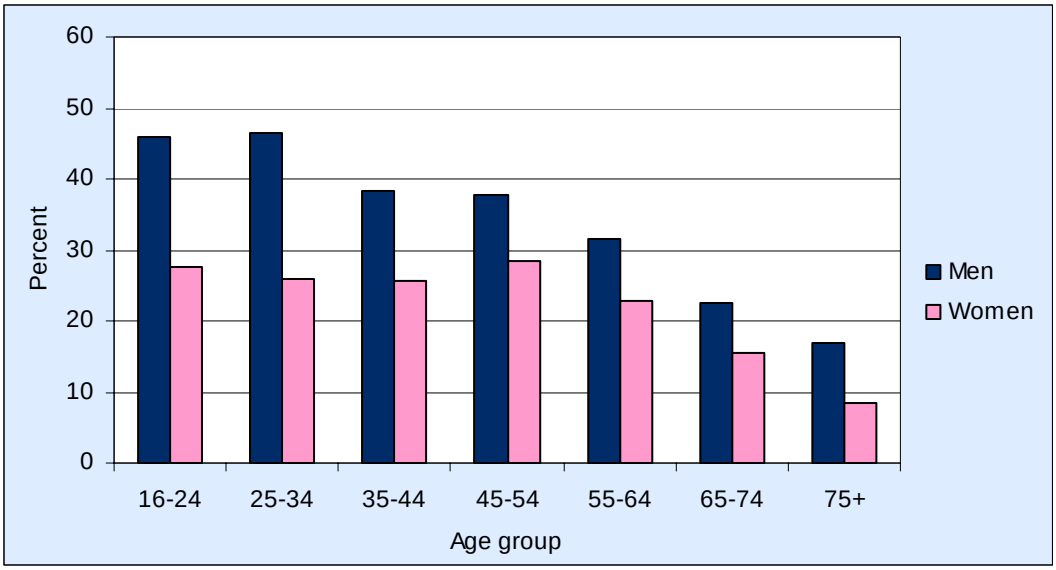
- 33% of adults reported eating five or more portions of fruit and vegetables the previous day.
- 9% of adults reported that they ate no fruit and vegetables at all the previous day, more common amongst young men.
- As shown in figure 4g, the proportions of both men and women who reported eating the recommended five or more portions a day fluctuated with age.

Tables 4.1, 4.2, 4.10+ figure 4g
+online table

4.7 Physical activity

Around 3 in 10 adults reported being physically active on five or more days in the previous week. Men were more likely to be physically active than women. The proportion who were physically active decreased with age, particularly for men. Around a third of adults reported either not doing any exercise, or doing no more than light exercise, in the previous week.

Figure 4h: Percentage who reported being physically active on 5 or more days in the past week, by age and sex*



*Did at least 30 minutes of at least moderate intensity physical activity on 5 or more days in the previous week.

- 29% of adults reported doing at least 30 minutes of at least moderate intensity physical activity, on five or more days a week.
- Overall, a higher proportion of men (36%) than women (23%) were physically active on 5 or more days a week. Figure 4h illustrates that this pattern was seen within each age group.
- Figure 4h also shows that the proportion of people who were physically active on 5 or more days a week decreased with age, particularly for men.
- Some adults (13%) reported that they had done no exercise or physical activity in the past week, and a further 21% had done no more than light activity.

Tables 4.1, 4.2, 4.11⁺ figure 4h
⁺online table

4.8 Body Mass Index

Around 3 in 5 adults were classified as overweight or obese, including around 1 in 4 adults classified as obese. Men were more likely to be overweight than women, but there was little difference between the sexes for obesity. Obesity was more prevalent in middle age for both men and women.

Figure 4i: Body Mass Index category of adults

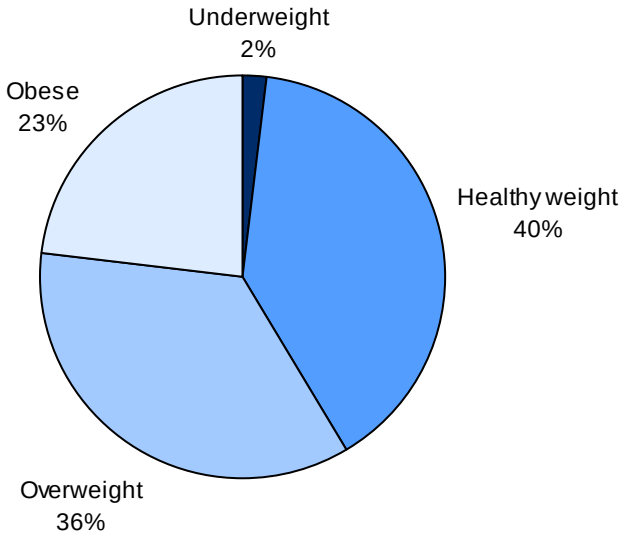


Figure 4j: Percentage who were overweight or obese, by age and sex

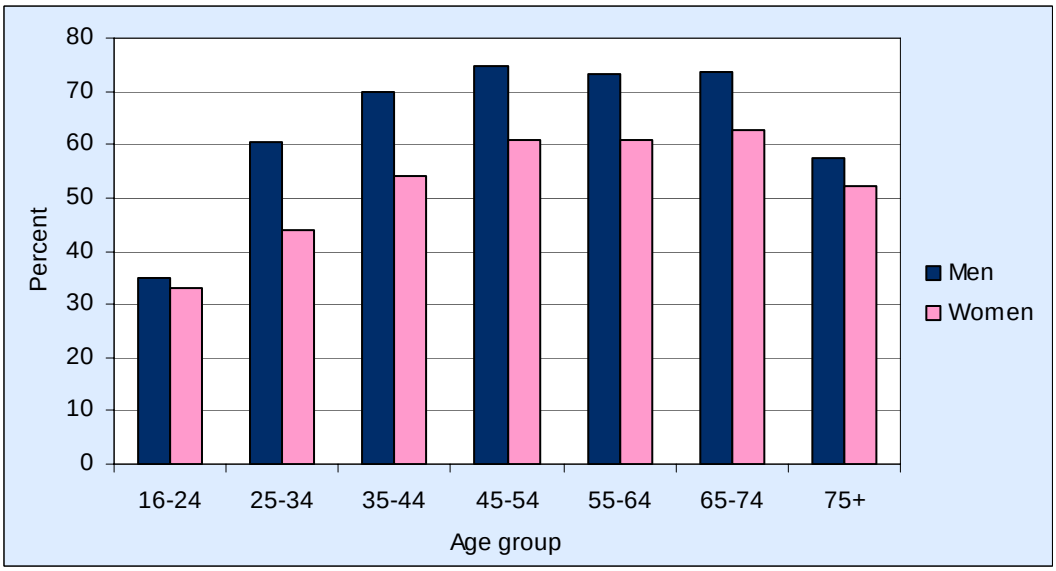
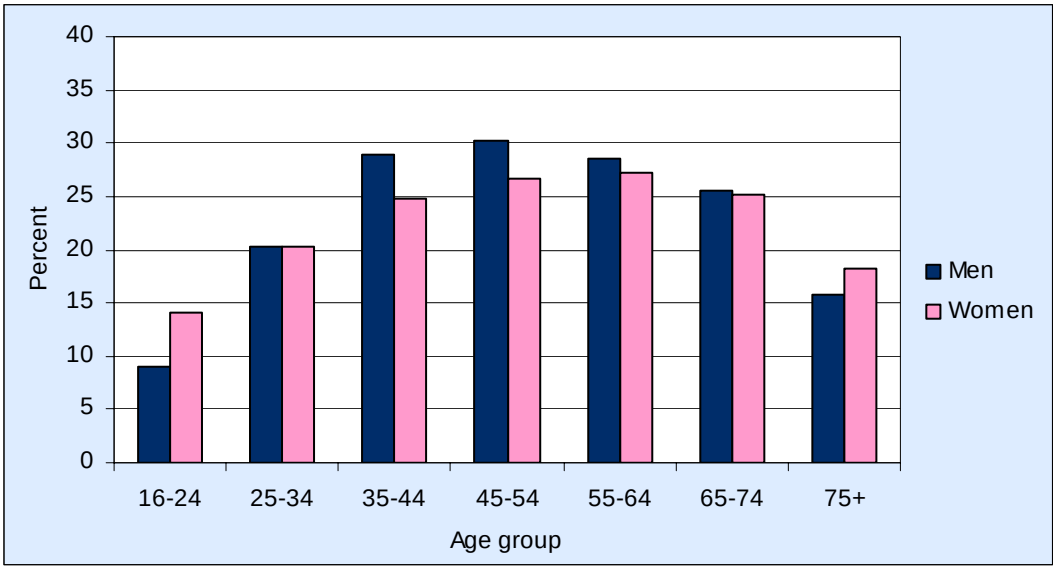


Figure 4k: Percentage who were obese, by age and sex



- In total, 59% of adults were classified as overweight or obese, including 23% of adults classified as obese.
- Figure 4j indicates that men were more likely to be overweight than women. For obesity there was little difference between men and women.
- Figure 4k illustrates that levels of obesity for men and women increased towards middle age before decreasing for the older age groups.
- On average, men were 5ft 10in (177cm) tall and weighed 13st 5lb (85kg). For women the equivalent figures were 5ft 4in (163cm) and 11st 1lb (70kg) (not shown in table).

Tables 4.1, 4.2, 4.12+ figures 4i, 4j, 4k
+online table

4.9 Key measures by socio-demographic factors

For some key variables, information is shown by socio-economic group and area deprivation. Age-standardised rates are shown. Age-standardisation removes the effect of age from comparisons between groups, in this case between different categories of socio-economic group and area deprivation. See the glossary (Appendix A) for further details. Definitions for the socio-demographic factors are provided at the end of the chapter (4.11).

Socio-economic group (NS-SEC)

Adults in managerial and professional households reported healthier lifestyles in terms of smoking, obesity and fruit and vegetable consumption, but not for alcohol consumption or physical activity. The largest variation by NS-SEC was for reported smoking behaviour, with smoking rates more than twice as high in routine and manual households compared with managerial and professional households.

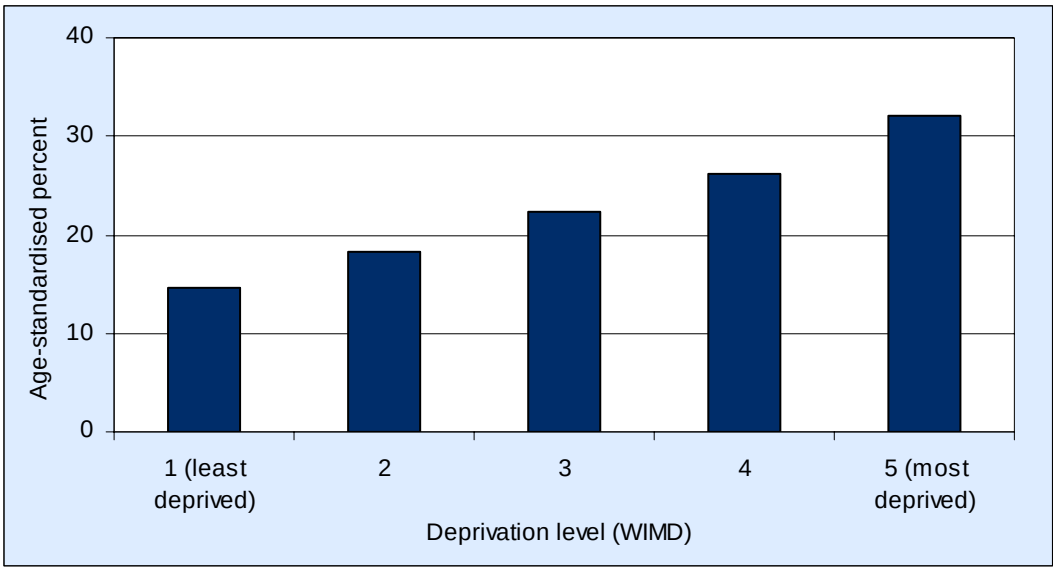
- The largest variation by NS-SEC was for reported smoking behaviour. 14% of adults in managerial and professional households reported that they currently smoked, compared with 30% in routine and manual households. The smoking rate was 45% in households headed by someone who had never worked or was long-term unemployed.
- Adults in managerial and professional households were less likely to smoke, more likely to meet guidelines for fruit and vegetable consumption and less likely to be overweight or obese than those in routine and manual households – however, they were also more likely to drink above guidelines. There was little difference for physical activity.

Table 4.3

Area deprivation (WIMD)

Adults in less deprived areas reported healthier lifestyles in terms of smoking, obesity and fruit and vegetable consumption, but not for alcohol consumption or physical activity. The largest variation was for reported smoking behaviour, with smoking rates in the most deprived areas more than twice as high as those in the least deprived areas.

Figure 4l: Percentage of adults who reported being a current smoker, by area deprivation



- In general, adults in the least deprived areas were less likely to smoke, more likely to meet guidelines for fruit and vegetable consumption and less likely to be overweight or obese than those in the most deprived areas – however, they were also more likely to drink above guidelines. Physical activity rates in the least and most deprived areas were fairly similar.
- Smoking rates showed the most variation, with rates in the most deprived fifth of population more than twice as high as those in the least deprived fifth (32% compared with 15%). This is illustrated in figure 4l. Non-smoking adults in the most deprived areas were more than twice as likely to report being exposed to passive smoke indoors (29%) than those in the least deprived areas (12%).

Table 4.3, figure 4l

4.10 Trends for key measures

For some key variables, information is shown for the nine years of the survey since it started in 2003/04. Questions on exposure to passive smoke, alcohol consumption, and fruit and vegetable consumption were changed from 2008.

There has been a slight decrease in smoking rates and a slight increase in levels of obesity over the first nine years of the survey. There has been little change in physical activity during this time. Compared with guidelines, there has been a small decline in levels of drinking and in fruit and vegetable consumption since 2008 when current questions were introduced.

Figure 4m: Reported lifestyle behaviours in adults, 2003/04-2012

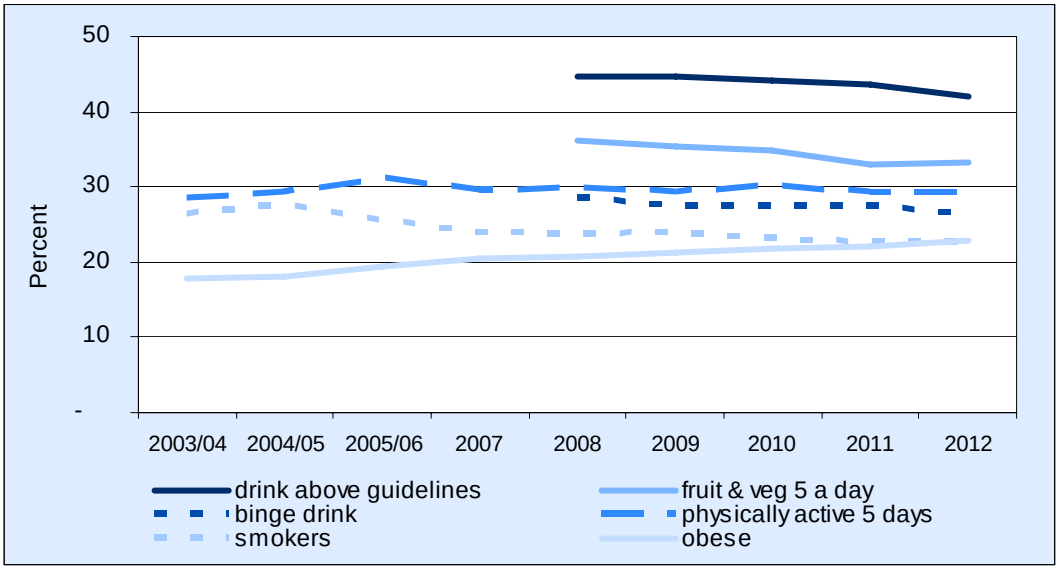


Table 4.4, figure 4m

4.11 Methods and definitions

Smoking

The survey asked adults whether they smoked (daily or occasionally), used to smoke (daily or occasionally), or had never smoked. Those who reported smoking were asked where they had smoked in the last 7 days, if they had tried to or wanted to give up, and their reasons for wanting to give up.

It also asked whether respondents were regularly exposed to other people's tobacco smoke in a range of places.

Alcohol Consumption

The survey asked adults a set of questions about their alcohol consumption.

Respondents were asked how often they drank alcohol in the past 12 months and, if never, whether they had always been a non-drinker.

Respondents were also asked to indicate how many measures of each type of alcohol they had consumed on their heaviest drinking day the previous week. The following table was used to calculate the units drunk on that day:

Type of drink	Measure	Alcohol units
Normal strength beer, lager, stout, cider or shandy	Pints	2
	Large cans or bottles	2
	Small cans or bottles	1.5
Strong beer, lager, stout or cider	Pints	4
	Large cans or bottles	3
	Small cans or bottles	2
Wine	Large glass (250ml)	3
	Standard glass (175ml)	2
	Small glass (125ml)	1.5
	Bottles (750ml)	9
Spirits or liqueurs	Measures or shots (single measure)	1
Fortified wines	Small glass	1
Alcopops	Small can or bottle	1.5

The Department of Health guidelines about sensible drinking[13] are that men should not regularly drink more than 3 – 4 units of alcohol per day, and women not more than 2 – 3 units.

For the purpose of this report, the following definitions of drinking are used, based on the heaviest drinking day in the past week:

Description	Maximum daily alcohol consumption in the past week
None	Did not drink in the last seven days
Within guidelines	Drank something; men drinking no more than 4 units, women no more than 3 units
Above guidelines, less than binge	Men drinking more than 4 and up to and including 8 units, women more than 3 and up to and including 6 units
Binge	Drinking more than twice the daily guidelines, that is, men drinking more than 8 units, women more than 6 units
Above guidelines	Men drinking more than 4 units, women more than 3 units

However, it should be noted that advice on sensible drinking refers to *regularly* drinking above the daily guidelines, reflecting both the amount drunk and the frequency of drinking at that level. The Welsh Health Survey provides some information on both frequency of drinking and a snapshot of the amount drunk on a day the previous week but, in common with other similar surveys, they can't be combined to reliably identify adults who regularly exceed the recommendations.

Health-related behaviours can be a complex area to measure and there may be some differences between what people report and what they do (for instance, they may tend to underestimate their alcohol consumption). However, survey data still provides a reliable means of comparing patterns for these behaviours between different groups and over time.

Fruit and Vegetable Consumption

The survey asked adults questions about a range of food items to determine the overall amounts of fruit, vegetables and pulses consumed the previous day. The questionnaire could be completed on any day of the week.

For each food item, respondents were asked how much they had consumed, and to write "0" if none eaten. Everyday measures were given for each food item, for example: tablespoons of vegetables, small bowls of salad, or medium sized fruit (such as apples). Each question provided a definition of which foods were to be included. Guidelines[14] recommend eating at least five portions of a variety of fruit and vegetables each day. To conform with these

[13] Department of Health: Alcohol Guidelines
http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publichealth/Alcoholmisuse/DH_125368

[14] NHS choices: Fruit and vegetables
http://www.nhs.uk/livewell/5aday/pages/5adayhome.aspx/

guidelines, the questions and analysis were based on the concept of portions of 80g each and the information collected was converted into standard portions at the analysis stage.

The table that follows shows portion sizes for the different food items included in the questionnaire.

Food item	Portion size
Vegetables (fresh, frozen or tinned)	3 tablespoons
Pulses	3 tablespoons
Salad	1 small bowl
Dishes made mainly from vegetables or pulses	3 tablespoons
Very large fruit, such as melon	1 average slice
Large fruit, such as grapefruit	Half a fruit
Medium fruit, such as apples, bananas, oranges	1 fruit
Small fruit, such as plums, satsumas	2 fruits
Very small fruit, such as grapes, berries	2 average handfuls
Dried fruit, such as raisins, apricots	1 average handful
Frozen/tinned fruit	3 tablespoons
Dishes made mainly from fruit such as fruit salad or fruit pies	3 tablespoons
Fruit juice	1 small glass

At the analysis stage, rules for certain foods were applied: respondents could obtain no more than one portion of their daily intake from fruit juice, one portion from pulses, and one portion from dried fruit. These restrictions are in line with guidelines, which emphasise that a variety of fruit and vegetables should be consumed.

Health-related behaviours can be a complex area to measure and there may be some differences between what people report and what they do. However, survey data still provides a reliable means of comparing patterns for these behaviours between different groups and over time.

Physical Activity

The survey asked adults on which days in the past week they did at least 30 minutes of light, moderate, and vigorous exercise or physical activity. Blocks of activity lasting more than 10 minutes, which were done on the same day, count towards the full 30 minutes. (Prior to 2011 the Department of Health recommended that adults do at least 30 minutes of moderate intensity physical activity on at least 5 days a week, however guidelines were revised during 2011 to allow more flexibility in how target activity levels are met[15]). The new guidelines recommend that adults should aim to do at least 150 minutes of moderate activity during the week – alternatively, comparable benefits can be achieved by 75 minutes of vigorous activity.

[15] Department of Health: New physical activity guidelines (2011)
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_127931

Respondents were asked to include physical activity which is part of their job. Examples of each type of activity are:

- light activity – housework or golf
- moderate activity – heavy gardening or fast walking
- vigorous activity – running or aerobics.

Health-related behaviours can be a complex area to measure and there may be some differences between what people report and what they do (for instance, they may tend to overestimate their levels of physical activity). However, survey data still provides a reliable means of comparing patterns for these behaviours between different groups and over time.

Body Mass Index

The survey asked adults to report their height and their weight. In order to define overweight or obesity, a measurement is required which allows for differences in weight due to height. The Body Mass Index (BMI) is calculated as weight (kg) divided by squared height (m^2). However, BMI does not distinguish between mass due to body fat and mass due to muscular physique, nor does it take account of the distribution of fat.

BMI was calculated for all respondents, excluding pregnant women, with valid height and weight measurements and classified into the following BMI groups[16]:

BMI (kg/m^2)	Description
Less than 18.5	Underweight
18.5 to under 25	Healthy weight
25 to under 30	Overweight
30 and over	Obese
40 and over	Morbidly obese

Height and weight of respondents are self-reported, and there is evidence to show that some people tend to under-report weight and/or over-report height, resulting in an under-estimation of the prevalence of overweight and obesity[17,18].

Socio-Demographic Factors

Socio-economic group

The socio-economic classification in use in this report is the 3-class version of the National Statistics Socio-Economic Classification (NS-SEC) of the Household Reference Person (HRP). See the glossary (Appendix A) for further details.

[16] WHO Technical Report Series 894. Obesity: Preventing and Managing the Global Epidemic T[17] World Health Organization, Geneva, 2000
http://whqlibdoc.who.int/trs/WHO_TRS_894.pdf
[18] Roberts, RJ. (1995) Can self-reported data accurately describe the prevalence of overweight? *Public Health*; 109 (4): 275-84 [Used Welsh data]

Area deprivation

Area deprivation is based on the Welsh Index of Multiple Deprivation[19] 2011 (WIMD). WIMD gives deprivation scores for small areas in Wales. These small areas were split into five groups ("fifths") of deprivation according to overall WIMD scores and each respondent to the Welsh Health Survey was allocated to the relevant fifth. See the glossary (Appendix A) for further details.

[19] Welsh Index of Multiple Deprivation 2011
http://wales.gov.uk/topics/statistics/theme/wimd/wimd2011/?lang=en

Tables

Table 4.1 Adults' reported lifestyle behaviours, by broad age, sex (a) (b)

Per cent

	by sex:		by age:			
	Men 16+	Women 16+	16-44	45-64	65+	All 16+
Smoking behaviour:						
Daily smoker	20	17	22	20	10	19
Occasional smoker	5	3	6	3	2	4
Smoker (c)	25	21	28	23	12	23
Ex-daily smoker	18	13	8	19	26	16
Ex-occasional smoker	12	13	10	11	18	12
Ex-smoker (d)	30	26	18	30	44	28
Never smoked	46	53	55	47	44	50
Non-smoker (e)	75	79	72	77	88	77
Location of smoking (smokers):						
Outdoors	94	92	95	93	84	93
Indoors:	71	70	66	76	82	71
At own home	54	59	46	65	78	56
In other people's homes	25	25	31	17	10	25
Whilst travelling by car	46	38	43	44	31	42
Other places indoors	20	14	21	13	10	17
Passive smoking (non-smokers):						
Indoors or outdoors	31	33	40	29	19	32
Outdoors	23	25	31	22	12	24
Indoors	18	20	26	16	11	19
At own home	6	5	7	5	4	5
In other people's homes	12	14	19	11	5	13
Whilst travelling by car	5	5	7	4	2	5
Other places indoors	6	5	7	5	4	6
Give up smoking:						
Would like to give up smoking	69	73	72	73	58	71
Tried giving up smoking in past 12 months	36	41	39	38	37	39
Average frequency of drinking alcohol:						
Never	10	15	10	11	21	13
Once or twice a year	7	13	9	10	13	10
Once every couple of months	9	13	13	9	9	11
Once or twice a month	15	17	21	13	10	16
Once or twice a week	32	25	31	28	22	28
Three or four days a week	14	10	10	16	10	12
Five or six days a week	4	3	2	5	4	4
Almost every day	9	5	3	9	11	7
Maximum daily alcohol consumption in past week:						
None	35	49	43	37	51	42
Within guidelines	16	15	12	15	24	15
Above guidelines, less than binge	17	15	13	19	15	16
Binge	31	21	32	28	10	26
Above guidelines	48	36	46	48	26	42

(a) Tables showing more detailed age breakdowns are available at www.wales.gov.uk/statistics.
(b) See definitions at 4.11.
(c) Includes those who smoke either daily or occasionally.
(d) Includes those who used to smoke either daily or occasionally.
(e) Includes those who used to smoke either daily or occasionally, and those who have never smoked.
(f) Includes those classified as morbidly obese.
(g) Bases vary, those shown are for the whole sample.

Table 4.1 Adults' reported lifestyle behaviours, by broad age, sex (a) (b) (continued)

Per cent

	by sex:		by age:			
	Men 16+	Women 16+	16-44	45-64	65+	All 16+
Fruit & vegetables: number of portions consumed previous day:						
None	10	7	11	8	5	9
Some, but less than five	58	58	59	58	57	58
Five or more	32	34	30	34	38	33
Physical activity: number of days of at least moderate activity in past week:						
None	31	37	23	34	56	34
1	8	10	10	8	7	9
2	10	13	12	11	10	11
3	9	10	10	10	7	10
4	7	7	9	6	4	7
5 or more	36	23	35	30	16	29
Physical activity: most strenuous activity in past week:						
None	14	12	9	13	23	13
Light	17	24	15	21	33	21
Moderate	34	42	35	43	36	38
Vigorous	36	21	42	23	9	28
Body Mass Index:						
Underweight	1	3	3	1	2	2
Healthy weight	35	44	47	32	36	40
Overweight	41	30	30	39	40	36
Obese (f)	23	23	20	28	22	23
Morbidly obese	1	3	2	3	2	2
Overweight or obese	64	53	50	67	62	59
Unweighted base (g)	*7,309*	*8,378*	*5,939*	*5,540*	*4,208*	*15,687*

(a) Tables showing more detailed age breakdowns are available at www.wales.gov.uk/statistics.
(b) See definitions at 4.11.
(c) Includes those who smoke either daily or occasionally.
(d) Includes those who used to smoke either daily or occasionally.
(e) Includes those who used to smoke either daily or occasionally, and those who have never smoked.
(f) Includes those classified as morbidly obese.
(g) Bases vary, those shown are for the whole sample.

Table 4.2 Adults who reported key health-related lifestyles by age and sex (a) (b)

Per cent

	Smoker	Non-smoker exposed to passive smoke indoors	Maximum daily alcohol consumption		Consumption of fruit and vegetables	Exercise or physical activity done	Body Mass Index		*Un-weighted base (d)*
			Above guidelines	Binge	Meets guidelines	Active on 5 or more days a week (c)	Overweight or obese	Obese	
Men aged:									
16-24	26	28	43	32	28	46	35	9	*927*
25-34	32	27	50	36	31	47	60	20	*812*
35-44	33	15	54	38	28	38	70	29	*1,016*
45-54	26	18	54	38	33	38	75	30	*1,294*
55-64	21	14	54	31	32	32	73	29	*1,338*
65-74	16	13	44	23	39	23	74	26	*1,122*
75+	9	12	25	7	36	17	57	16	*800*
16-44	30	23	49	36	29	44	55	20	*2,755*
45-64	24	16	54	35	33	35	74	29	*2,632*
65+	13	12	36	16	38	20	67	21	*1,922*
Men aged 16+	25	18	48	31	32	36	64	23	*7,309*
Women aged:									
16-24	21	37	37	28	26	28	33	14	*940*
25-34	30	27	44	30	35	26	44	20	*1,008*
35-44	24	21	46	29	33	26	54	25	*1,236*
45-54	24	19	46	26	33	28	61	27	*1,437*
55-64	21	15	37	18	39	23	61	27	*1,471*
65-74	14	12	23	9	41	15	63	25	*1,243*
75+	8	9	10	2	34	9	52	18	*1,043*
16-44	25	28	43	29	32	26	44	20	*3,184*
45-64	22	17	42	22	36	26	61	27	*2,908*
65+	11	11	17	6	38	12	57	22	*2,286*
Women aged 16+	21	20	36	21	34	23	53	23	*8,378*
All aged:									
16-24	24	33	40	30	27	37	34	11	*1,867*
25-34	31	27	47	33	33	36	53	20	*1,820*
35-44	28	18	50	34	30	32	62	27	*2,252*
45-54	25	18	50	32	33	33	68	28	*2,731*
55-64	21	15	46	25	36	27	67	28	*2,809*
65-74	15	12	34	16	40	19	68	25	*2,365*
75+	8	10	16	4	35	12	54	17	*1,843*
16-44	28	26	46	32	30	35	50	20	*5,939*
45-64	23	16	48	28	34	30	67	28	*5,540*
65+	12	11	26	10	38	16	62	22	*4,208*
All aged 16+	23	19	42	26	33	29	59	23	*15,687*

(a) Tables showing more detailed health-related lifestyles are available online at www.wales.gov.uk/statistics.
(b) See definitions at 4.11.
(c) Did at least 30 minutes of at least moderate intensity physical activity on 5 or more days the previous week. (Prior to 2011 this was the target activity level for meeting physical activity guidelines, but guidelines were revised during 2011 to allow more flexibility in how target activity levels are met).
(d) Bases vary, those shown are for the whole sample.

Table 4.3 Adults who reported key health-related lifestyles (age-standardised), by socio-demographic factors (a)

Per cent

	Smoker	Non-smoker exposed to passive smoke indoors	Maximum daily alcohol consumption: Above guidelines	Maximum daily alcohol consumption: Binge	Consumption of fruit and vegetables: Meets guidelines	Exercise or physical activity done: Active on 5 or more days a week (b)	Body Mass Index: Overweight or obese	Body Mass Index: Obese	*Unweighted base (c)*
Socio-economic classification of household reference person (NS-SEC)									
Managerial and professional	14	14	47	28	38	28	55	19	*5,729*
Intermediate	21	19	41	25	34	33	57	22	*3,009*
Routine and manual	30	26	39	25	29	30	63	27	*6,165*
Never worked and long-term unemployed	41	26	29	17	21	25	55	26	*344*
2011 Welsh Index of Multiple Deprivation quintile									
1 (least deprived)	15	12	49	30	37	27	53	18	*3,046*
2	18	16	42	24	36	30	57	21	*3,274*
3	22	19	41	26	34	30	59	22	*3,469*
4	26	22	40	26	31	30	61	26	*3,068*
5 (most deprived)	32	29	39	25	27	28	63	28	*2,830*

(a) See definitions at 4.11 and glossary at Appendix A for explanations of age-standardisation and socio-demographic factors.

(b) Did at least 30 minutes of at least moderate intensity physical activity on 5 or more days the previous week. (Prior to 2011 this was the target activity level for meeting physical activity guidelines, but guidelines were revised during 2011 to allow more flexibility in how target activity levels are met).

(c) Bases vary: those shown are for the whole sample.

Table 4.4 Adults who reported key health-related lifestyles, 2003/04-2012 (a)

Per cent

	Smoker	Non-smoker exposed to passive smoke indoors	Maximum daily alcohol consumption		Consumption of fruit and vegetables	Exercise or physical activity done	Body Mass Index		
			Above guidelines	Binge	Meets guidelines	Active on 5 or more days a week (c)	Overweight or obese	Obese	*Un-weighted base (d)*
Men aged 16+:									
2003/04	27	-	-	-	-	36	59	17	*7,486*
2004/05	29	-	-	-	-	36	60	18	*7,437*
2005/06	27	-	-	-	-	38	61	19	*6,691*
2007 (b)	25	-	-	-	-	36	62	20	*6,418*
2008	25	23	52	35	35	38	62	21	*6,119*
2009	26	21	52	34	34	36	62	21	*7,412*
2010	25	20	51	34	33	37	63	22	*7,420*
2011	24	20	50	33	32	36	62	22	*7,458*
2012	25	18	48	31	32	36	64	23	*7,309*
Women aged 16+:									
2003/04	26	-	-	-	-	22	49	18	*8,812*
2004/05	26	-	-	-	-	23	50	18	*8,598*
2005/06	24	-	-	-	-	25	51	20	*7,614*
2007 (b)	23	-	-	-	-	23	51	21	*7,499*
2008	22	24	38	22	37	22	53	21	*7,194*
2009	22	22	38	21	37	23	52	21	*8,606*
2010	22	23	37	21	36	24	52	21	*8,579*
2011	21	21	38	22	34	23	53	22	*8,600*
2012	21	20	36	21	34	23	53	23	*8,378*
All aged 16+:									
2003/04	26	-	-	-	-	29	54	18	*16,298*
2004/05	28	-	-	-	-	29	55	18	*16,035*
2005/06	25	-	-	-	-	31	56	19	*14,305*
2007 (b)	24	-	-	-	-	29	57	21	*13,917*
2008	24	23	45	28	36	30	57	21	*13,313*
2009	24	22	45	27	35	29	57	21	*16,018*
2010	23	21	44	27	35	30	57	22	*15,999*
2011	23	20	43	27	33	29	57	22	*16,058*
2012	23	19	42	26	33	29	59	23	*15,687*

(a) See definitions at 4.11.

(b) From 2007 the fieldwork runs on a calendar year basis.

(c) Did at least 30 minutes of at least moderate intensity physical activity on 5 or more days the previous week. (Prior to 2011 this was the target activity level for meeting physical activity guidelines, but guidelines were revised during 2011 to allow more flexibility in how target activity levels are met).

(d) Bases vary: those shown are for the whole sample.

Chapter 5
Health Service Use

5 Health service use

5.1 Introduction

This chapter focuses on reported use of health services by adults, with some information on medicines.

Broad figures for Wales are provided along with age and sex breakdowns. For a selection of key measures, information is provided by socio-economic group and area deprivation. Some comparisons with earlier years are also shown. Online tables showing further breakdowns are available[1]. Local authority/health board breakdowns for 2011 and 2012 combined are provided in a separate report[2].

The survey asked adults (aged 16 and over) whether they had used a range of health services recently. It complements other administrative sources of data about use of health services as it includes some information about the characteristics of people using them, includes those making little or no use of services, and covers some services for which information from other data sources is not available. The survey relies on a self-completion questionnaire - the results, therefore, reflect people's own interpretation of the health services they have used.

Methods and definitions are provided at the end of the chapter (5.9).

This chapter includes information on:

- use of GP services (5.3)
- use of hospital services (5.4)
- use of other selected health services (5.5)
- medicines (5.6)
- key measures by socio-demographic factors (5.7)
- trends for key measures (5.8)
- methods and definitions (5.9)

[1] Online tables showing more detailed breakdowns are available at:
www.wales.gov.uk/statistics
[2] Welsh Health Survey: 2011 and 2012 Local Authority / Health Board Results.
www.wales.gov.uk/statistics

5.2 Summary

- Around 1 in 6 adults reported that they had talked to a GP about their own health in the past two weeks.

- Around 1 in 11 adults reported being in hospital as an inpatient in the past 12 months, while around a third of adults reported attending hospital as an outpatient. Around 1 in 6 adults reported attending a hospital casualty department in the past 12 months.

- 7 in 10 adults reported using a dentist in the past 12 months, and similarly around 7 in 10 reported using a pharmacist. Around half of adults reported using an optician.

- Use of many health services increased with age (but not casualty, where use fluctuated, or dentists, where use decreased with age). For some services, use by younger women was also relatively high, possibly linked to family planning and child bearing.

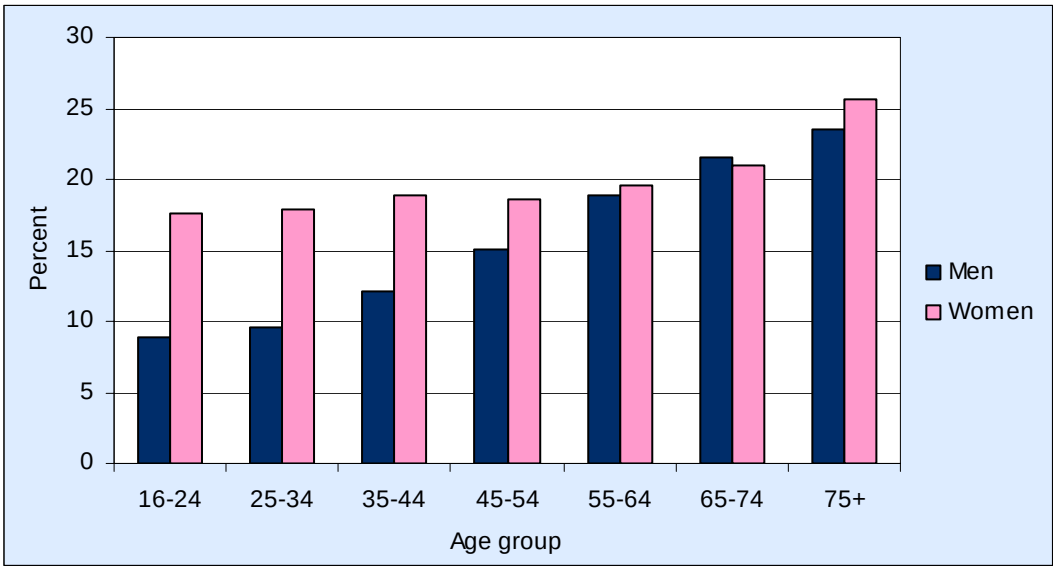
- Around half of adults reported being on regular prescribed medication, and the percentage increased with age.

- Adults in the most deprived areas were more likely to report talking to a GP than those in the least deprived areas, and least likely to report using a dentist.

5.3 Use of GP services

Around 1 in 6 adults reported that they had talked to a GP about their own health in the past two weeks, becoming more common with age. For younger adults, women were more likely than men to have talked to a GP or seen a practice nurse.

Figure 5a: Percentage who reported talking to a GP about their own health in the past two weeks, by age and sex



In the past two weeks:

- 17% of adults reported that they had talked to a GP about their own health.
- 9% of adults reported that they had seen a practice nurse at the GP surgery about their own health.
- The percentage talking to a GP and the percentage seeing a practice nurse increased with age, particularly for men (figure 5a shows the pattern for GPs).
- For younger adults, women were more likely than men to have talked to a GP or seen a practice nurse. Many consultations by women of this age may be associated with family planning or pregnancy, which could account for some of the difference.
- Of those talking to a GP about their health, 72% had received a prescription (not shown in table).

Tables 5.1, 5.2, 5.6+, figure 5a
+online table

5.4 Use of hospital services

Around 1 in 11 adults reported being in hospital as an inpatient in the past 12 months, around a third reported attending hospital as an outpatient, and around 1 in 6 reported attending a hospital casualty department. The proportion of adults using hospital services generally increased with age, but not for casualty, where rates fluctuated with age.

Figure 5b: Percentage who reported attending the outpatient department of a hospital in the past twelve months, by age and sex

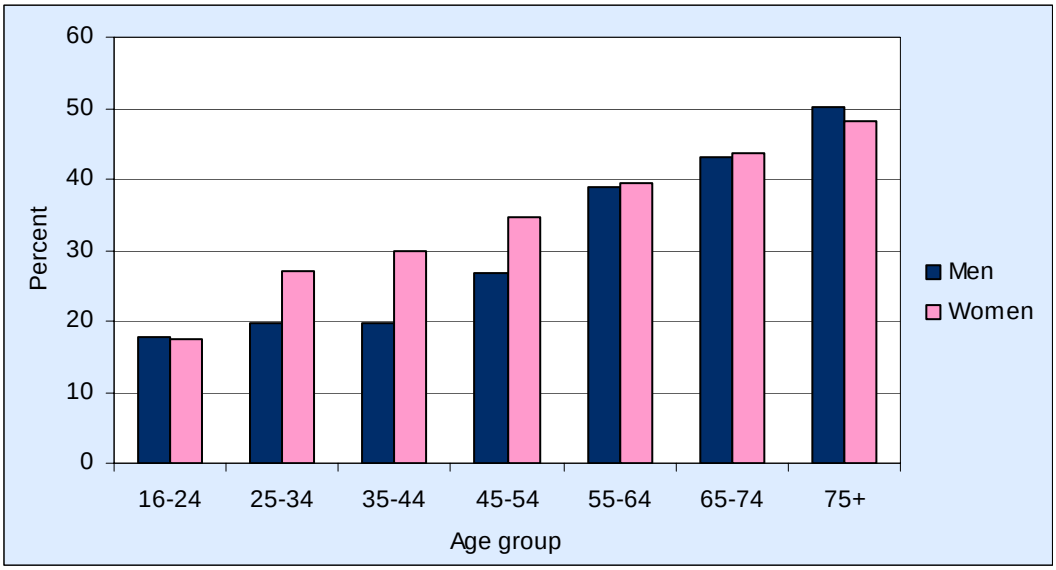
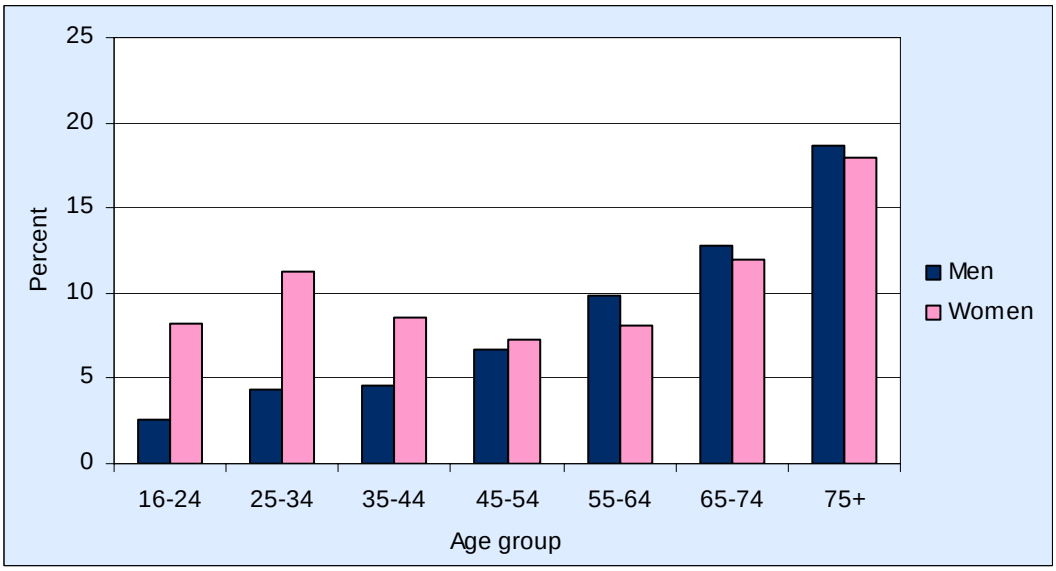


Figure 5c: Percentage who reported being in hospital as an inpatient in the past twelve months, by age and sex



In the past three months:

- 4% of adults reported an accident, injury or poisoning needing a visit to hospital.

In the past twelve months:

- 31% of adults reported attending the outpatient department of a hospital.
- 17% of adults reported attending the casualty department of a hospital.
- 9% of adults reported being in hospital as an inpatient (overnight or longer).
- 9% of adults reported being in hospital for treatment as a day patient.
- The percentage of adults using hospital services generally increased with age, with the exception of casualty and needing a visit to hospital following an accident, injury or poisoning (where rates fluctuated).
- For inpatients, rates were relatively high for women aged 25-34 (possibly linked to maternity stays). Figures 5b and 5c show the use by age and sex for outpatients and inpatients.

Tables 5.1, 5.2, 5.6+, figures 5b, 5c
+online table

5.5 Use of other selected health services

7 in 10 adults reported using a dentist in the past 12 months, and around half reported using an optician. The proportion of adults visiting a pharmacist, chiropodist or optician increased with age, while older people were less likely to have used a dentist.

In the past twelve months:

- 71% of adults reported using a dentist.
- 69% of adults reported using a pharmacist.
- 48% of adults reported using an optician.
- 13% of adults reported using a health visitor, district or other community nurse.
- 11% of adults reported using a chiropodist.
- For pharmacists, chiropodists and opticians, the percentage of adults using them increased with age, while for dentists, older people were less likely to have used them.
- The percentage of men using health visitors, district or other community nurses increased with age, while for women, rates were higher in younger women aged 16-34 (possibly linked with child and maternal health), and in older women.
- Overall, women were more likely than men to use many of the services.
- The survey also covered a range of other services, including physiotherapist (12%), the NHS Direct helpline (8%), GP out of hours services (8%) and osteopath (5%).

Tables 5.1, 5.2, 5.7+
+online table

5.6 Medicines

Over a third of adults reported buying medicines in the past four weeks, overall more common amongst women than men. Around half of adults reported being on regular prescribed medication, becoming more likely with age.

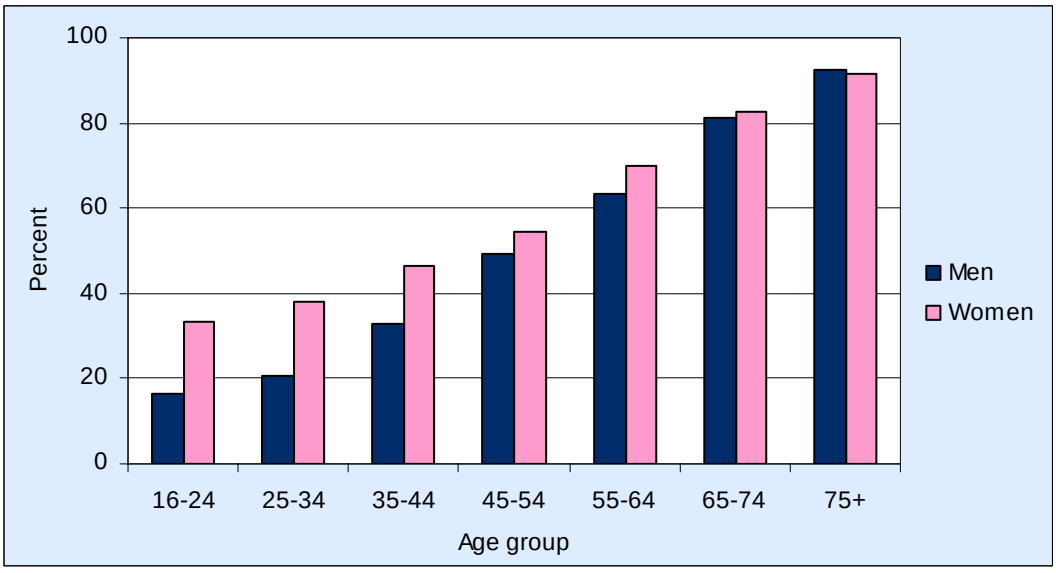
Buying medicine

- 37% of adults reported buying medicine in the past four weeks.
- Overall, women were more likely than men to have bought medicines.
- Adults in the youngest and older age groups were less likely to report purchasing medicines.
- Of those buying medicine, 91% had bought conventional medicines (e.g. aspirin, eye-drops, antacids, cough medicine), 30% mineral or vitamin supplements, 8% herbal medicines and 2% homeopathic medicines (some people bought more than one type of medicine) (not shown in table).

Tables 5.3, 5.8+
+online table

On regular prescribed medication

Figure 5d: Percentage who reported being on regular prescribed medication (for a year or more), by age and sex



- 53% of adults reported being on regular prescribed medication.
- The percentage of adults on regular prescribed medication increased with age, and was higher for women than men in the younger age groups (figure 5d).

Tables 5.3, 5.8+, figure 5d
+online table

5.7 Key measures by socio-demographic factors

For some key variables, information is shown by socio-economic group and area deprivation. Age-standardised rates are shown. Age-standardisation removes the effect of age from comparisons between groups, in this case between different categories of socio-economic group and area deprivation. See the glossary (Appendix A) for further details. Definitions for the socio-demographic factors are provided at the end of the chapter (5.9).

Socio-economic group (NS-SEC)

Adults in managerial and professional households were most likely to report using a dentist or an optician in the past year. They were slightly less likely to report talking to a GP or attending the casualty department of a hospital than those in routine and manual households.

Table 5.4

Area deprivation (WIMD)

Adults in the most deprived areas were more likely than those in the least deprived areas to report talking to a GP or attending the casualty department of a hospital, and less likely to report using a dentist or optician.

Table 5.4

5.8 Trends for key measures

Trend data for selected health services is shown in table 5.5. The trend data shows that there has been little change in the reported use of health services by adults.

Table 5.5

5.9 Methods and definitions

Use of GP services

The survey asked adults whether they had talked to a GP (family doctor) about their own health in the past two weeks (either in person or by telephone). Those who had were asked how many times they had done so, and whether they received a prescription. The survey also asked whether adults had seen a practice nurse at the GP surgery about their own health in the past 2 weeks.

Use of hospital services

The survey asked adults whether they had attended the outpatient or casualty department of a hospital as a patient in the past twelve months (apart from straightforward ante- or post-natal visits), and whether they had been in hospital for treatment as a day patient (admitted to a hospital bed or day ward but not remaining overnight) or inpatient (overnight or longer) in the past twelve months. They were also asked if any of their visits were paid for privately.

The survey also asked adults whether they had had any accident, injury or poisoning needing hospital treatment or a visit to casualty in the past three months. If so, they were asked what the accident was and where the most recent accident took place.

Use of other selected health services

The survey asked adults if they had used a range of other services in the past twelve months and for some services asked whether they had any private treatment.

Medicines

The survey asked adults whether they had bought any medicine (conventional and others) during the past four weeks. Medicine was defined as anything taken or put on the skin, such as tablets, powders, creams, sprays and drops, to treat a medical condition. Those who had bought medicine were asked what kinds they bought.

Adults were also asked whether they were on regular medication (for a year or more) prescribed by a doctor.

Socio-Demographic Factors

Socio-economic group

The socio-economic classification in use in this report is the 3-class version of the National Statistics Socio-Economic Classification (NS-SEC) of the Household Reference Person (HRP). See the glossary (Appendix A) for further details.

Area deprivation

Area deprivation is based on the Welsh Index of Multiple Deprivation[3] 2011 (WIMD). WIMD gives deprivation scores for small areas in Wales. These small areas were split into five groups ("fifths") of deprivation according to overall WIMD scores and each respondent to the Welsh Health Survey was allocated to the relevant fifth. See the glossary (Appendix A) for further details.

[3] Welsh Index of Multiple Deprivation 2011
http://wales.gov.uk/topics/statistics/theme/wimd/wimd2011/?lang=en

Tables

Table 5.1 Adults' reported use of health services, by broad age, sex (a) (b)

Per cent

	by sex:		by age:			
	Men 16+	Women 16+	16-44	45-64	65+	All 16+
Service use (c):						
Talked to family doctor (GP) (in past 2 weeks)	15	20	14	18	23	17
Saw practice nurse (in past 2 weeks)	8	11	6	10	16	9
Attended hospital due to accident (past 3 months)	5	4	6	3	4	4
Attended casualty department	18	16	18	14	18	17
Attended outpatient department	29	34	22	35	46	31
In hospital as a day patient	9	10	7	10	14	9
In hospital as an inpatient	8	10	7	8	15	9
Pharmacist	63	76	61	73	82	69
Dentist	66	74	70	76	64	71
Optician	42	55	36	53	68	48
District nurse (d)	9	16	11	10	21	13
Chiropodist	8	14	2	9	34	11
GP out of hours services	6	10	9	6	9	8
NHS Direct helpline	6	10	10	6	7	8
Physiotherapist	11	13	10	14	15	12
Osteopath	5	5	4	7	5	5
Unweighted base (e)	*7,309*	*8,378*	*5,939*	*5,540*	*4,208*	*15,687*

(a) Tables showing more detailed age breakdowns are available at www.wales.gov.uk/statistics.
(b) See definitions at 5.9.
(c) Service use refers to the past 12 months, except where stated otherwise.
(d) Health visitor, district or community nurse.
(e) Bases vary: those shown are for the whole sample.

Table 5.2 Adults who reported using selected health services, by age and sex (a) (b)

Per cent

	In the past two weeks	In the past twelve months						
	Talked to family doctor (GP)	Attended casualty department	Outpatient department	In hospital as an inpatient	Pharmacist	Dentist	Optician	*Unweighted base (c)*
Men aged:								
16-24	9	22	18	3	43	67	28	*927*
25-34	10	20	20	4	50	58	25	*812*
35-44	12	16	20	5	59	67	31	*1,016*
45-54	15	16	27	7	64	69	46	*1,294*
55-64	19	16	39	10	72	72	50	*1,338*
65-74	22	17	43	13	82	71	59	*1,122*
75+	24	22	50	19	82	59	70	*800*
16-44	10	19	19	4	51	64	28	*2,755*
45-64	17	16	33	8	68	70	48	*2,632*
65+	22	19	46	15	82	66	63	*1,922*
Men aged 16+	15	18	29	8	63	66	42	*7,309*
Women aged:								
16-24	18	20	18	8	68	73	46	*940*
25-34	18	16	27	11	75	75	39	*1,008*
35-44	19	16	30	9	73	79	46	*1,236*
45-54	19	13	35	7	74	80	56	*1,437*
55-64	20	13	39	8	80	81	61	*1,471*
65-74	21	15	44	12	83	71	69	*1,243*
75+	26	21	48	18	82	55	72	*1,043*
16-44	18	18	25	9	72	76	44	*3,184*
45-64	19	13	37	8	77	81	58	*2,908*
65+	23	18	46	15	83	63	71	*2,286*
Women aged 16+	20	16	34	10	76	74	55	*8,378*
All aged:								
16-24	13	21	18	5	55	70	37	*1,867*
25-34	14	18	23	8	62	66	32	*1,820*
35-44	16	16	25	7	66	73	38	*2,252*
45-54	17	15	31	7	69	75	51	*2,731*
55-64	19	14	39	9	76	76	56	*2,809*
65-74	21	16	43	12	82	71	64	*2,365*
75+	25	21	49	18	82	56	71	*1,843*
16-44	14	18	22	7	61	70	36	*5,939*
45-64	18	14	35	8	73	76	53	*5,540*
65+	23	18	46	15	82	64	68	*4,208*
All aged 16+	17	17	31	9	69	71	48	*15,687*

(a) Tables showing more detailed service use are available at www.wales.gov.uk/statistics.
(b) See definitions at 5.9.
(c) Bases vary: those shown are for the whole sample.

Table 5.3 Adults' reported purchase and use of medicine, by broad age, sex (a) (b)

Per cent

	by sex:		by age:			
	Men 16+	Women 16+	16-44	45-64	65+	All 16+
Purchase and use of medicine:						
Purchased medicine	29	44	38	40	31	37
On regular precribed medication	47	58	31	59	87	53
Unweighted base (c)	*7,309*	*8,378*	*5,939*	*5,540*	*4,208*	*15,687*

(a) Tables showing more detailed age breakdowns are available at www.wales.gov.uk/statistics.
(b) See definitions at 5.9.
(c) Bases vary: those shown are for the whole sample.

Table 5.4 Adults who reported using selected health services, (age-standardised), by socio-demographic factors (a)

Per cent

	In the past two weeks	In the past twelve months						
	Family doctor (GP)	Attended casualty department	Outpatient department	In hospital as an inpatient	Pharm-acist	Dentist	Optician	*Unweighted base (b)*
Socio-economic classification of household reference person (NS-SEC)								
Managerial and professional	16	15	33	8	72	79	53	*5,729*
Intermediate	17	17	29	9	66	73	48	*3,009*
Routine and manual	19	18	31	10	69	64	45	*6,165*
Never worked and long-term unemployed	19	22	33	11	66	57	43	*344*
2011 Welsh Index of Multiple Deprivation quintile								
1 (least deprived)	16	16	31	8	73	78	54	*3,046*
2	16	16	32	9	69	74	49	*3,274*
3	17	16	32	9	69	72	48	*3,469*
4	18	19	31	9	69	66	46	*3,068*
5 (most deprived)	20	19	32	11	67	61	47	*2,830*

(a) See definitions at 5.9 and glossary at Appendix A for explanations of age-standardisation and socio-demographic factors.
(b) Bases vary: those shown are for the whole sample.

Table 5.5 Adults who reported using selected health services, 2003/04-2012 (a)

Per cent

	In the past two weeks	In the past twelve months						
	Family doctor (GP)	Attended casualty department	Outpatient department	In hospital as an inpatient	Pharmacist	Dentist	Optician	*Unweighted base (c)*
Men aged 16+:								
2003/04	14	-	-	9	-	-	-	*7,486*
2004/05	14	-	-	8	-	-	-	*7,437*
2005/06	13	-	-	9	-	-	-	*6,691*
2007 (b)	14	-	-	8	-	-	-	*6,418*
2008	15	18	29	9	62	66	43	*6,119*
2009	15	17	30	9	64	66	43	*7,412*
2010	15	18	30	8	62	65	42	*7,420*
2011	14	17	29	8	62	66	44	*7,458*
2012	15	18	29	8	63	66	42	*7,309*
Women aged 16+:								
2003/04	19	-	-	11	-	-	-	*8,812*
2004/05	19	-	-	11	-	-	-	*8,598*
2005/06	20	-	-	12	-	-	-	*7,614*
2007 (b)	19	-	-	11	-	-	-	*7,499*
2008	19	15	33	11	77	74	55	*7,194*
2009	20	16	35	11	75	74	56	*8,606*
2010	20	16	34	11	75	73	53	*8,579*
2011	20	16	35	11	75	73	55	*8,600*
2012	20	16	34	10	76	74	55	*8,378*
All aged 16+:								
2003/04	16	-	-	10	-	-	-	*16,298*
2004/05	17	-	-	10	-	-	-	*16,035*
2005/06	17	-	-	10	-	-	-	*14,305*
2007 (b)	17	-	-	9	-	-	-	*13,917*
2008	17	16	31	10	69	70	49	*13,313*
2009	18	17	33	10	70	70	50	*16,018*
2010	17	17	32	10	69	69	48	*15,999*
2011	17	16	32	9	69	70	49	*16,058*
2012	17	17	31	9	69	71	48	*15,687*

(a) See definitions at 5.9.
(b) From 2007 the fieldwork runs on a calendar year basis.
(c) Bases vary: those shown are for the whole sample.

Chapter 6
Health of Children

6 Health of children

6.1 Introduction

This chapter considers the general health, health-related lifestyle and service use of children.

Broad figures for Wales are provided along with breakdowns by sex. Due to the relatively small numbers of children in the sample, breakdowns by other measures such as age and socio-demographic factors are not shown.

For children aged 0-12 years, parents or legal guardians were asked to complete the questionnaire on behalf of their child (with slightly different questions for children aged 0-3 and those aged 4-12). Young people aged 13-15 years were asked to complete the questionnaire themselves. The interviewer also measured the height and weight of children aged 2 and over.

This chapter includes information on:

- general health and well-being (6.4)
- eating habits (6.5)
- physical activity (6.6)
- body mass index (6.7)
- health service use (6.8)
- trends for key measures (6.9)
- methods and definitions (6.10)

As the Welsh Health Survey relies on self-completion questionnaires the results reflect people's own understanding of their children's health rather than a clinical assessment of their medical condition.

The results from this survey are not comparable with those from school-based surveys because of differences in the approach used (whether conducted at school or at home), in the precise questions asked, and in the age of children included.

6.2 Background

This chapter provides information on children's general health, health-related lifestyle and service use. The Welsh Government's public health framework *Our Healthy Future*[1] aims to promote health and wellbeing throughout the life course, and supports the drive to improve health for children and young people.

The Welsh Government's *Change4Life*[2] campaign supports families to live healthier lives, aiming to encourage physical activity and healthy eating amongst children.

[1] Our Healthy Future
http://wales.gov.uk/topics/health/cmo/healthy/?lang=en
[2] Change4Life
http://wales.gov.uk/topics/health/improvement/change/?lang=en

6.3 Summary

- Over 9 in 10 children were reported to have very good or good general health.
- A fifth of children were reported as having a long-standing illness, including around 1 in 18 children with a limiting long-standing illness.
- 3 in 5 children were reported as eating fruit every day, and half of children were reported as eating vegetables every day.
- Around a third of children were reported as undertaking physical activity for at least an hour on every day of the previous week, more common amongst boys than girls.
- Around a third of children were classified as overweight or obese, including around a fifth of children classified as obese.
- For around 1 in 8 children it was reported that a GP had been consulted about their health in the past two weeks.

6.4 General health and well-being

Over 9 in 10 children were reported to have very good or good general health. Around a fifth of children were reported as having a long-standing illness. 1 in 18 children were reported as having a limiting long-standing illness.

General Health

- 68% of children were reported to have very good general health, 27% good, and 5% fair.
- Fewer than 1% of children were reported as having either bad or very bad health.

Illnesses

- 19% of children were reported as having a long-standing illness. The most commonly reported long-standing illnesses were asthma (6%), a skin complaint (3%) and mental illness (3%).
- 6% of children were reported as having a limiting long-standing illness.
- Among children who were reported as currently being treated for an illness or condition, the most common were a skin complaint (11%), asthma (9%), and eye complaints (9% - includes wearing glasses).
- Note that different estimates are obtained depending on whether the question asks about long-standing illness (which may or may not be being treated) or about illnesses currently being treated (which may or may not be long-standing). More information is provided in section 6.10 (methods and definitions).
- There was little difference between boys and girls.

Table 6.1

6.5 Eating habits

3 in 5 children were reported as eating fruit every day, and half of children were reported as eating vegetables every day.

- 59% of children were reported as eating fruit every day, and 50% vegetables.
- 28% of children were reported as eating sweets every day, and 18% crisps.
- 10% of children were reported as drinking soft drinks containing sugar every day, 17% low sugar soft drinks, and 67% water.

Table 6.2

6.6 Physical activity

Around a third of children were reported as undertaking physical activity for at least an hour on every day of the previous week, more common amongst boys than girls.

- 51% of children were reported as undertaking physical activity for at least an hour on five or more days of the previous week, including 34% who did so every day.
- A higher proportion of boys than girls were reported to undertake these levels of physical activity.

Table 6.3

6.7 Body Mass Index

Around a third of children were classified as overweight or obese, including around a fifth of children classified as obese.

- 34% of children were classified as overweight or obese, including 19% obese. The estimates are based on the 1990 UK BMI curves.
- There was little difference between the levels of those classified as overweight or obese in boys and girls.
- Estimates of overweight and obesity in children will vary depending on the definition used (more information is given at the end of the chapter in section 6.10, and in the Glossary at Appendix A). Estimates using international cut-off points instead of the 1990 UK BMI reference curves suggest that around 28% of children would be classified as overweight or obese, including 9% obese (not shown in table).

This is the last year when child BMI will be available from the Welsh Health Survey. The Child Measurement Programme for Wales[3] was established in 2011 to collect information on the heights and weights of all reception year children (aged 4-5) in Wales, and will provide future detailed information on child obesity.

Table 6.4

6.8 Health service use

For around 1 in 8 children it was reported that a GP had been consulted about their health in the past two weeks. Over three quarters of children were reported to have used a dentist in the past twelve months, and around a third were reported to have used an optician in the past twelve months.

- For 13% of children, it was reported that a GP had been consulted about their health in the past two weeks.
- 7% of children were reported as having an accident, injury or poisoning needing a visit to hospital in the past three months.

[3] Child Measurement Programme for Wales
http://www.wales.nhs.uk/sitesplus/888/page/56237

- 22% of children were reported to have attended an Accident and Emergency (casualty) department of a hospital in the past twelve months, and similarly 21% were reported to have attended an outpatient department.
- 77% of children were reported to have used a dentist in the past twelve months, and 33% an optician.

Table 6.5

6.9 Trends for key measures

Six years of data is available for children, and estimates are shown for some key variables. During this time, there has been little change in children's reported health and levels of overweight and obesity.

Table 6.6

6.10 Methods and definitions

General health and wellbeing

The Welsh Health Survey children's questionnaires ask about self-assessed general health and illnesses.

Self- assessed health

General health was classified using the following scale: very good, good, fair, bad or very bad.

Illnesses and other health problems

The survey asked details of any illness, disability or health problem children had had for some time and whether any of these limited their daily activities. Those with a long-standing illness were asked to record the nature of the problem (up to six different health problems could be recorded). Those reporting a limiting long-standing illness were also asked to record details of the problem (up to three health problems). Long-standing illnesses and limiting long-standing illnesses were coded into categories according to the International Classification of Diseases (ICD10) (see the glossary, Appendix A).

The survey also asked whether children were currently being treated for various illnesses and conditions. These included asthma, other breathing problems, skin complaints, ear complaints, eye complaints (including wearing glasses or contact lenses to correct vision), problems with bones, joints, muscles and anxiety, depression or mental illness.

Eating habits

Eating habits were assessed through a question asking about a range of foods. The survey asked how many times a week children aged 4-15 usually ate certain foods.

Physical activity

The survey asked how much exercise children aged 4-15 had undertaken on each day in the last week. In the question, "exercise" referred to physical activity that left the child feeling warm or slightly out of breath. Respondents were asked to include exercise done at school and outside of school. The new physical activity guidelines published by the Department for Health in 2011 recommend that children do at least 60 minutes of moderate-intensity physical activity every day[4].

Body Mass Index

The heights and weights of children aged 2-15 were measured by the interviewer.

[4] Department of Health: New physical activity guidelines (2011)
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_127931

In order to define being overweight or obese a measure is required which allows for differences in weight due to height. The Body Mass Index (BMI) is calculated as weight (kg) divided by squared height (m^2).

BMI was calculated for all children with valid height and weight measurements. Defining overweight and obesity in children is problematic. Constant changes in body composition during growth mean that the relationship between weight-for-height is age dependent. The child overweight and obesity prevalence estimates in this report have been produced using the 85th percentile (overweight) and 95th percentile (obese) of the 1990 UK BMI reference curves[5]. They are not comparable with estimates produced on a different basis (for instance, those using international cut-offs) or with adult estimates. See the glossary (Appendix A) and technical summary (chapter 7) for further details.

This is the last year when child BMI will be available from the Welsh Health Survey. The Child Measurement Programme for Wales was established in 2011 to collect information on the heights and weights of all reception year children (aged 4-5) in Wales, and will provide future detailed information on child obesity.

Health service use

The survey asked about children's use of a range of health services; these included GP services, hospital services and other selected community and family health services. Respondents were asked whether someone had talked to a GP (family doctor) about the child's health in the past two weeks (either in person or by telephone), and whether they had received a prescription.

Respondents were asked whether children had used a range of hospital and other selected community and family health services in the past twelve months. They were also asked whether children had had any accident, injury or poisoning in the past three months needing hospital treatment or a visit to casualty.

[5] Cole T, Freeman JV, Preece MA, Body Mass Index reference curves for the UK, 1990 **http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1511150**

Tables

Table 6.1 Reported health status and illnesses of children, by sex

Per cent

	Boys	Girls	Children
General health status			
Very Good	69	67	68
Good	26	28	27
Fair	4	5	5
Bad	1	1	1
Very bad	0	0	0
Illnesses			
Long-standing illness	20	17	19
Limiting long-standing illness	7	4	6
Selected long-standing illnesses			
Asthma	7	5	6
Skin complaint	3	3	3
Mental illness	4	1	3
Illnesses or conditions currently being treated			
Asthma	10	8	9
Another respiratory condition	3	2	3
Skin complaint	10	12	11
Ear complaint	3	4	4
Eye complaint	9	9	9
Musculoskeletal problems	3	2	3
Any mental illness	1	1	1
Unweighted base (a)	*1,537*	*1,406*	*2,943*

(a) Bases vary: those shown are for the whole sample of children aged under 16.

Table 6.2 Reported eating habits of children, by sex (a)

Per cent

	Boys	Girls	Children
Eat daily			
Fruit	55	63	59
Vegetables	48	53	50
Sweets	28	27	28
Chips	5	5	5
Potato crisps	18	18	18
Skimmed or semi-skimmed milk	64	62	63
Full fat milk	29	24	27
Low sugar soft drinks	16	17	17
Soft drinks	10	10	10
Water	66	68	67
Eat less than once a week			
Fruit	10	7	9
Vegetables	8	6	7
Sweets	7	6	6
Chips	19	20	20
Potato crisps	18	16	17
Skimmed or semi-skimmed milk	25	23	24
Full fat milk	62	66	64
Low sugar soft drinks	48	49	48
Soft drinks	60	64	62
Water	9	7	8
Unweighted base (b)	*1,134*	*1,056*	*2,190*

(a) Children aged 4-15.
(b) Bases vary: those shown are for the whole sample of children aged 4-15.

Table 6.3 Reported physical activity of children, by sex (a)

Per cent

	Boys	Girls	Children
Number of days with at least one hour of exercise in past week			
None	11	15	13
One	5	8	6
Two	8	13	11
Three	9	12	10
Four	9	10	9
Five	10	8	9
Six	8	6	7
Seven	41	28	34
Five or more	59	42	51
Unweighted base (b)	*1,134*	*1,056*	*2,190*

(a) Children aged 4-15.
(b) Bases vary: those shown are for the whole sample of children aged 4-15.

Table 6.4 Body Mass Index of children, by sex (a)

Per cent

	Boys	Girls	Children
Overweight (b)	16	15	15
Obese (b)	20	19	19
Overweight or obese (b)	35	33	34
Unweighted base (c)	*922*	*806*	*1,728*

(a) Children aged 2-15 with valid height and weight measurements.
(b) Based on 85th (overweight) and 95th (obese) percentiles of the 1990 UK BMI reference curves. See definitions at 6.10.
(c) Bases vary: those shown are for children aged 2-15 with valid height and weight measurements.

Table 6.5 Reported health service use of children, by sex

Per cent

	Boys	Girls	Children
Family doctor (GP) in the past two weeks	12	14	13
Accident needing hospital treatment in the past three months (a)	9	6	7
In the past twelve months:			
Accident & Emergency (casualty)	24	19	22
Outpatient	23	18	21
Day patient	6	5	6
Inpatient	6	5	6
Dentist (b)	77	77	77
Health visitor, district nurse or other community nurse	25	26	26
Practice nurse	23	26	25
Optician	31	35	33
Speech therapist	6	4	5
GP out of hours	15	15	15
NHS Direct helpline	12	12	12
Pharmacist	47	49	48
Unweighted base (c)	*1,537*	*1,406*	*2,943*

(a) Accident, injury or poisoning needing hospital treatment or a visit to casualty.
(b) Family, local, community, school or other dentist.
(c) Bases vary: those shown are for the whole sample of children aged under 16.

Table 6.6 Children's key health measures, 2007-2012

Per cent

	Aged under 16:			Aged 2-15:			
	Good/Very good general health	Long-standing illness	Limiting long-standing illness	Overweight or obese (a)	Obese (b)	*Unweighted base (c)*	*Unweighted base (d)*
2007	94	20	7	36	20	*2,668*	*1,765*
2008	94	19	6	33	16	*2,653*	*1,542*
2009	94	20	6	34	19	*3,223*	*2,019*
2010	95	20	6	36	19	*3,077*	*1,971*
2011	95	18	5	35	19	*3,167*	*2,045*
2012	95	19	6	34	19	*2,943*	*1,728*

(a) Based on 85th (overweight) percentiles of the 1990 UK BMI reference curves. See definitions at 6.10.
(b) Based on 95th (obese) percentiles of the 1990 UK BMI reference curves. See definitions at 6.10.
(c) Bases vary: those shown are for all children aged under 16.
(d) Bases vary: those shown are for children aged 2-15 with valid height and weight measurements.

Chapter 7
Technical Summary

7 Technical summary

7.1 Introduction

This chapter provides some technical information about the survey. A more detailed technical report[1] is published by NatCen Social Research, who carried out the survey on behalf of the Welsh Government.

This chapter includes information on:

- sampling (7.2)
- fieldwork (7.3)
- response (7.4)
- data preparation (7.5)
- weighting (7.6)
- sampling errors (7.7)

7.2 Sampling

Introduction

The Welsh Health Survey (WHS) aimed to achieve a total sample of 15,000 adults, with at least 600 adults in each local authority, during the period January – December 2012. The issued sample consisted of 14,775 addresses selected from the small user version of the Post Office's Postcode Address File (PAF). The sample was stratified by local authority to allow for analysis of survey data at this level. An unclustered sample was selected within each authority.

The PAF covers more than 99% of private households in Wales; the small proportion of people not covered by the PAF, including those living in institutions, were not covered by the WHS. It should be noted that people living in institutions are likely to be, on average, in poorer health than those in private households - this should be kept in mind when considering the results from this survey.

Selection of primary sampling units, addresses and households

An unclustered sample of addresses was selected from each of the 22 local authorities. Addresses were selected at random from across the whole local authority area and then grouped into interviewer assignments or 'points'. There were 591 points in total, each containing 25 addresses. Addresses were grouped together on the basis of proximity, taking account of natural barriers such as mountains and rivers.

A small proportion of addresses in the PAF contain more than one household. If the number of households at an address selected for the WHS was three or less, then all the households were included in the survey. However, if more than three households were found, then three

[1] NatCen (2012) *Welsh Health Survey - 2012 Technical Report.*
http://wales.gov.uk/topics/statistics/theme/health/health-survey/?lang=en

households were selected at random to be included. Weights were applied to correct for the selection of three households at multi-occupied addresses.

Sampling of children

Families with children aged under 16 were eligible for the child elements of the survey. In households with three or more children, two children were selected at random for participation to minimise respondent burden.

7.3 Fieldwork

Briefings and fieldwork period

Before fieldwork started, interviewers were briefed in person by the project researchers during briefings lasting a day each, covering all elements of the survey process.

Fieldwork started in January 2012. Each fieldwork point contained 25 addresses and fieldwork began on the first day of each month.

Fieldwork procedures

Prior to the interview, advance letters in English and Welsh were sent out by interviewers to all selected households. This included a set of questions and answers, and a phone number for NHS Direct for respondents to use if they had any queries about the survey. NHS Direct Wales operate a bilingual 24-hour service, and had been briefed on the survey.

Interviewers made contact with respondents by personal visit, with interviewers making a minimum of four calls at different times of the day and different days of the week to try and make contact. Having made contact, interviewers introduced the survey and presented a leaflet containing information about the survey and reinforcing confidentiality in data usage.

The survey consisted of a short household interview with a responsible adult (offered in English or Welsh). All adults aged 16 and over were left a self-completion questionnaire. There were three age-specific versions of the children's questionnaire (0-3 years, 4-12 years, and 13-15 years). Up to two children aged 0-15 were left a questionnaire for their age group, for completion by parent or guardian (0- 12 years) or by children (13-15 years). Interviewers collected self-completion questionnaires. They also took height and weight measurements for selected children aged 2-15, after obtaining consent and according to a standard written protocol. A copy of the individual self-completion questionnaire for adults is at Appendix A. All survey documents were available in English and Welsh.

7.4 Response

Introduction

Response may be broken down to two levels: household level response and individual level response (with individual response shown for adults and children separately).

Household response

In calculating household response, a recommended standard method for social surveys was used (details are in NatCen's report). It incorporates an estimate of the number of eligible and deadwood (ineligible) cases amongst those where eligibility is uncertain. Using this method, the final 'adjusted' household response rate was 78%. Table 7.1 shows the household response rates for Wales as a whole.

Individual response

Individual response to self-completion questionnaires within productive households was 81% for adults and 77% for selected children. Height and weight measurements were obtained for 58% of eligible selected children in productive households. Tables 7.2 - 7.4 show the individual response rates for Wales as a whole.

Combined household and individual response

Overall response rates can be calculated taking into account response both at the household and individual levels. The number of adults and children at non-responding households is not known, therefore the average number of adults and children in participating households is used to impute the denominator (i.e. the total number of adults and children in all eligible households). Using this approach, the combined response rate was estimated as 63% for adults and 60% for children.

7.5 Data preparation

Data keying and scanning

The household questionnaires were keyed in-house at NatCen. The self-completion questionnaires were sent directly to a scanning agency. Once these stages were complete, the scanned questionnaires, data and electronic images were sent to NatCen and the data linked to the household data through serial numbers (at both household and individual levels).

Data coding and editing

The self-completion questionnaires were edited using NatCen's in-house system. This ensured that routing was correctly followed, dealt with cases where respondents had coded more than one answer where only one was required, and reconciled incompatible answers. As a separate checking measure the handwritten digits on the questionnaire were verified visually as part of the quality control process.

The occupation and industry of the Household Reference Person (HRP) was coded and, together with employment status, used to derive the National Statistics Socio-Economic Classification (NS-SEC).

Where respondents identified an 'other' illness they were being treated for, the text was converted to International Classification of Diseases (ICD) groups and chapters. The answers were matched against the previous pre-coded individual illness questions and 'backcoded' into them if appropriate. Where text was provided by respondents to identify a main illness or disability that limited their day to day activities, this was also converted to ICD groups and chapters.

Child Body Mass Index (BMI) classification

The proportion of children who were overweight and obese was calculated according to the UK national BMI percentiles classification. Using 1990 reference data compiled from a number of sources as the baseline, and adjusted for age and sex, the threshold for overweight was defined as the 85th percentile and the threshold for obesity as the 95th percentile.

7.6 Weighting

Introduction

Respondents to the survey did not have equal chances of selection for a variety of reasons: the probability of selecting an address varied by local authority; at multiple occupancy addresses containing 4 or more households, 3 were selected at random for inclusion in the survey; and at households with 3 or more children, 2 were selected at random for inclusion. Hence it is necessary to weight the WHS sample.

Weights were also calculated to correct for non-response as some groups were under-represented, while others were over-represented. If the difference between the distribution of the survey sample and the true population was left uncorrected, it would lead to bias in the survey estimates.

Two sets of non-response weights were generated, household weights and individual weights. The household weights adjusted for non-contact and refusals of entire households, and the individual weights adjusted for non-response among individuals within responding households.

Selection weights

The first stage of weighting corrected for the imbalances created by the different probabilities of selection within each local authority. Addresses in smaller authorities were over-sampled to ensure a minimum issued sample in each authority. Without appropriate weighting, these smaller authorities would be over-represented in the sample. Therefore, selection weights were calculated.

For each selected address, a maximum of three households was selected for the issued sample. Weights were therefore required to correct for the cases where more than three households were found at a single address.

Household non-response weights

A household non-response model was used to adjust for non-contact and refusals of entire households. The probability of household response was estimated using a logistic regression model, including geographic and Census variables (see NatCen's report for details). Extreme weights below the 1st and above the 99th percentiles were trimmed to the values at these percentiles to avoid the situation where some individuals have a very large disproportionate influence on the survey estimates (either disproportionately large or disproportionately small).

Calibration weighting was used to further reduce household non-response bias. The initial weights were the product of the selection weights and the household non-response weight. Calibration weighting adjusted the weighted household sample so that the marginal distributions of age/sex and local authority for all individuals within responding households matched the 2011 mid-year population estimates for Wales. The final household weights used were the weights after calibration.

Child selection weights

In households with children aged under 16, no more than two children were selected for inclusion. Weights were therefore required to correct for households including three or more children. Three or more children were identified within 356 productive households[2].

Individual level non-response weights

Individual weights were calculated for individual respondents to the survey to adjust for non-response at the self-completion stage, in addition to household non-participation. As non-response at each stage was hierarchical, the individual weights were calculated for responding individuals within responding households. Logistic regression models for adults and children were used to estimate the probability of response, using variables from the household interview. Extreme weights below the 1st and above the 99th percentiles were trimmed to the values at these percentiles.

Calibration weighting was used to ensure that the final sample matched the age/sex distribution of the population. The initial weights were the product of the household weights and the individual level non-response weights. The calibration weighting adjusted the weighted individual sample so that the marginal distribution of age/sex for all individuals and those of children and adults (separately) within local authority matched the 2011 mid-year population estimates for Wales.

As a last step, each set of weights was scaled so that the weighted sample size was the same as the unweighted sample size (i.e. so that the mean of the weights was equal to 1).

[2] The number reported in the Welsh Health Survey 2011 technical summary and report should have been 390 households rather than 420 households.

7.7 Sampling errors

Introduction

As with any survey, results are subject to various sources of error. An important component of this is sampling error, which arises because the estimates are based on a sample rather than a full count of the population. The results obtained for any single sample are likely to vary slightly from the true population value, and the difference between the estimates derived from the sample and the population values is referred to as the sampling error. In general, the smaller the sample size the larger the potential error.

It is possible to estimate the size of sampling error by calculating the standard error of survey estimates. The standard error (*se*) of a percentage (*p*) based on a simple random sample of size *n* is calculated as:

$se(p) = \sqrt{(p(100-p)/n)}$

Design factors

The WHS was stratified at local authority level, with different probabilities of selection for different authorities. One of the effects of using this complex design is that standard errors for survey estimates are generally higher than the standard errors that would be derived from a simple random sample of the same size.

The ratio of the standard error of the complex sample to that of a simple random sample of the same size is known as the design factor. Put another way, the design factor (or 'deft') is the factor by which the standard error of an estimate from a simple random sample has to be multiplied to give the true standard error of the estimate, given the complex design.

True standard errors and defts for a selection of key WHS variables were calculated using a Taylor Series expansion method, and are shown in NatCen's report.

Confidence intervals

A confidence interval can be calculated around a survey estimate, which gives a range within which the true value for the population is likely to fall. The standard error (*se*) measures the precision with which the estimates from the sample approximate to the true population values and is used to construct the confidence interval for a survey estimate. The 95% confidence interval for a percentage (*p*) is calculated as:

$p \pm 1.96\ se(p)$

Table 7.5 shows approximate 95% confidence intervals for percentages based on a particular sample size, assuming a simple random sample. Note that the WHS was a survey of complex design and as such is likely to have higher standard errors, and thus wider confidence intervals than shown in the table. It should therefore be used as an approximate guide to precision only. NatCen's report [1] contains true standard errors and defts for a selection of key variables.

Tables

Table 7.1 Household level response rates

	Number of households	% of eligible sample	% of adjusted eligible sample
Households issued (a)	14,830		
Deadwood (ineligible)	1,693		
Eligible sample	13,137	100.0	
Total unknown eligibility	130	1.0	
Of which, estimate of deadwood	15		
Adjusted eligible sample	13,122		100.0
Estimate of eligible households among those of unknown eligibility	115		0.9
Refusals	1,932	14.7	14.7
Other unproductive	888	6.8	6.8
Productive	**10,187**	**77.5**	**77.6**

(a) From the 14,775 addresses issued, 14,830 separate households were identified.

Table 7.2 Individual level response rates – adults

	Number	% of issued sample
Total number of adults identified	19,282	100.0
Average number of adults in productive households	1.9	
Refusal	356	1.8
Questionnaire not returned	2,593	13.4
Other unproductive	646	3.4
Productive	**15,687**	**81.4**

Table 7.3 Individual level response rates – children

	Number	% of eligible sample
Number of productive households with children	2,513	
Total number of children identified in productive households	4,278	
Average number of children in productive households with children	1.7	
Number of selected children in productive households (a)	3,817	100.0
Average number of selected children in productive households with children	1.5	
Refusal (by child or parent)	74	1.9
Questionnaire not returned	636	16.7
Other unproductive	164	4.3
Productive	**2,943**	**77.1**

(a) A maximum of two children were selected per household.

Table 7.4 Response to child height and weight measurements (a)

	Height	Weight
Number of eligible selected children (aged 2-15) in productive households	3,346	3,346
Measurement unreliable	21	10
Child unavailable	532	522
Parent refusal	352	346
Child refusal	161	153
Unable to measure child	157	156
Don't know	194	221
Total non-response	1,417	1,408
Reliable measurement achieved	1,929	1,938
Response rate (%)	**57.7**	**57.9**

(a) For eligible selected children (aged 2-15) in productive households.

Table 7.5 95% confidence intervals (a) for a percentage estimate based on a simple random sample

	sample size (b)											
	100	200	300	400	500	1,000	2,000	3,000	4,000	5,000	10,000	15,000
Estimated %:												
5%	4.3	3.0	2.5	2.1	1.9	1.4	1.0	0.8	0.7	0.6	0.4	0.3
10%	5.9	4.2	3.4	2.9	2.6	1.9	1.3	1.1	0.9	0.8	0.6	0.5
15%	7.0	4.9	4.0	3.5	3.1	2.2	1.6	1.3	1.1	1.0	0.7	0.6
20%	7.8	5.5	4.5	3.9	3.5	2.5	1.8	1.4	1.2	1.1	0.8	0.6
25%	8.5	6.0	4.9	4.2	3.8	2.7	1.9	1.5	1.3	1.2	0.8	0.7
30%	9.0	6.4	5.2	4.5	4.0	2.8	2.0	1.6	1.4	1.3	0.9	0.7
35%	9.3	6.6	5.4	4.7	4.2	3.0	2.1	1.7	1.5	1.3	0.9	0.8
40%	9.6	6.8	5.5	4.8	4.3	3.0	2.1	1.8	1.5	1.4	1.0	0.8
45%	9.8	6.9	5.6	4.9	4.4	3.1	2.2	1.8	1.5	1.4	1.0	0.8
50%	9.8	6.9	5.7	4.9	4.4	3.1	2.2	1.8	1.5	1.4	1.0	0.8
55%	9.8	6.9	5.6	4.9	4.4	3.1	2.2	1.8	1.5	1.4	1.0	0.8
60%	9.6	6.8	5.5	4.8	4.3	3.0	2.1	1.8	1.5	1.4	1.0	0.8
65%	9.3	6.6	5.4	4.7	4.2	3.0	2.1	1.7	1.5	1.3	0.9	0.8
70%	9.0	6.4	5.2	4.5	4.0	2.8	2.0	1.6	1.4	1.3	0.9	0.7
75%	8.5	6.0	4.9	4.2	3.8	2.7	1.9	1.5	1.3	1.2	0.8	0.7
80%	7.8	5.5	4.5	3.9	3.5	2.5	1.8	1.4	1.2	1.1	0.8	0.6
85%	7.0	4.9	4.0	3.5	3.1	2.2	1.6	1.3	1.1	1.0	0.7	0.6
90%	5.9	4.2	3.4	2.9	2.6	1.9	1.3	1.1	0.9	0.8	0.6	0.5
95%	4.3	3.0	2.5	2.1	1.9	1.4	1.0	0.8	0.7	0.6	0.4	0.3

(a) The width of the interval depends on the value of the estimated percentage and the sample size on which it was based. 95% confidence intervals are formed as the estimated percentage ± the value shown in the table for that sample size. For example, an estimated percentage of 25% based on a sample of 1,000 has a 95% confidence interval of 25 ± 2.7% (ie, 22.3% - 27.7%).

(b) Note that this table assumes a simple random sample, while the WHS was a survey of complex design and is therefore likely to have higher standard errors, and wider confidence intervals than shown. It should therefore be used as an approximate guide to precision only. NatCen's report contains true standard errors and defts for a selection of key WHS variables.

Chapter 8
Further Information

8. Further information

This chapter points to further sources of information relating to the Welsh Health Survey.

Online tables

Tables showing more detailed age and sex breakdowns for the 2012 Welsh Health Survey can be found on the Welsh Health Survey theme page[1] which is on the Statistics for Wales[2] website. Tables showing trend data since 2003/04 for key variables by age, sex and socio-demographic group are also available online.

Tables showing Welsh Health Survey data for selected variables on health status, illnesses and health-related lifestyles can be found on StatsWales[3].

Local Authority and Local Health Board Results

A separate bulletin has been published showing key findings from the Welsh Health Survey at local authority and local health board level. This bulletin uses data from 2011 and 2012 combined to improve the precision of the estimates due to the larger sample size used.

Questionnaires

The Welsh Health Survey questionnaires for 2012 for adults and children can be found on the Welsh Health Survey theme page.

Technical Report

A technical report providing detailed information on the survey methodology is published by NatCen Social Research (NatCen), who carried out the survey on behalf of the Welsh Government.

Quality Report

A Quality Report for the Welsh Health Survey has been published, which details how the survey adheres to measures of quality. The report covers various topics including users and uses of the survey, survey design, quality assurance and dissemination.

General Information

More information on the development, content and results of the Welsh Health Survey, including a user guide, is available on the Welsh Health Survey theme page[1].

[1] Welsh Health Survey theme page
http://wales.gov.uk/topics/statistics/theme/health/health-survey/?lang=en
[2] Statistics for Wales
www.wales.gov.uk/statistics
[3] StatsWales
www.statswales.wales.gov.uk

Availability of unpublished data

Enquiries about the information in this report may be addressed to:

Health Statistics and Analysis Unit,
Knowledge and Analytical Services,
Welsh Government,
Cathays Park,
Cardiff.
CF10 3NQ.
Tel: 029 2082 6710 (029 2082 3332 in Welsh)
E-mail: stats.healthinfo@wales.gsi.gov.uk.

Some statistical bulletins on specific topics in the survey may also be produced at a later date and will be available through the Statistics for Wales website. Some additional summaries may be produced on request, subject to the availability of resources, data quality and robustness, and provided the confidentiality of respondents is preserved.

The UK Data Service

The UK Data Service[4] (UKDS) is a national data archiving and dissemination service. A wide range of information and support is available for data users at UKDS - this includes general guides on accessing and analysing data, as well as guidance on downloading and using WHS data from the UK Data Archive (see below). It also includes details of events and training. Registered users may also explore datasets, including WHS, online using Nesstar[5].

UK Data Archive

An anonymised version of the main dataset, together with supporting documentation, is deposited with the UK Data Archive each year (some information is removed to ensure confidentiality is preserved). These datasets may be accessed by registered users for specific research projects. Some examples of uses made of the data by researchers are shown on the website. The UK Data Archive can be accessed via the UK Data Service website (see above).

From time to time, researchers may wish to analyse more detailed data than is available from the Data Archive. Requests for such data will be considered on a case by case basis. For further details, contact stats.healthinfo@wales.gsi.gov.uk.

[4] UK Data Service
http://ukdataservice.ac.uk/get-data/key-data.aspx#/tab-uk-surveys
[5] Nesstar
http://nesstar.esds.ac.uk/webview/

Comparisons with other UK countries

This section provides further information on health surveys carried out by the other UK countries. **Differences in methodology and questions mean that in general, results from the WHS are not comparable with health surveys in the other UK countries.**

Health Survey for England

The Health Survey for England[6] (HSE) comprises a series of annual surveys beginning in 1991. This survey is now commissioned and published by The NHS Information Centre. It is designed to provide regular information on various aspects of the nation's health. All surveys have covered the adult population aged 16 and over living in private households in England. Children were included in every year since 1995.

Scottish Health Survey

The Scottish Health Survey[7] (SHeS) provides a detailed picture of the health of the Scottish population in private households and is designed to make a major contribution to the monitoring of health in Scotland. Previous Scottish Health Surveys were undertaken in 1995, 1998, 2003 and 2008. The continuous Scottish Health Survey began in January 2008 and is running from 2008 - 2015.

The Scottish Health Survey published a Topic Report[8] on UK comparisons comparing the results from the four health surveys conducted in the UK where appropriate. The Topic Report focuses on the 2008 SHeS, 2008 HSE, 2008 WHS and the 2005/06 NIHWS.

Health Survey Northern Ireland

The Health Survey Northern Ireland[9] covers a range of health topics that are important to the lives of people in Northern Ireland. It is commissioned by the Northern Ireland Department of Health, Social Services and Public Safety. The continuous survey started in 2010/11 and will run every year.

General Lifestyle Survey

The General Lifestyle Survey[10] (GLF) conducted by the Office for National Statistics collected data in Great Britain (England, Wales and Scotland) on a range of topics including health and health behaviours. The survey started in 1971. It provided comparable data across the three GB countries, although the sample sizes are relatively small. Following consultation with users, the Office for National Statistics decided that the General Lifestyle Survey (GLF) would not continue in its current format after January 2012. Some information may be collected through the new ONS Opinions and Lifestyle Survey.

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[6] Health Survey for England
https://www.gov.uk/government/publications/health-survey-for-england-2011
[7] Scottish Health Survey
http://www.scotland.gov.uk/Topics/Statistics/Browse/Health/scottish-health-survey
[8] Scottish Health Survey Topic Report on UK Comparisons
http://www.scotland.gov.uk/Publications/2010/08/31093025/0
[9] Health Survey Northern Ireland
http://www.northernireland.gov.uk/news-dhssps-221112-health-survey-northern
[10] The General Lifestyle Survey
www.ons.gov.uk

Appendices

Appendix A: Glossary

This glossary explains terms used in the report, other than those fully described in particular chapters.

Adults

Adults are defined as persons aged 16 years or over.

Age standardisation

Age standardisation has been used in selected chapters in order to enable groups to be compared after adjusting for the effects of any differences in their age distributions. When different sub-groups are compared in respect of a variable on which age has an important influence, any differences in age distributions between these sub-groups are likely to affect the observed differences in the proportions of interest.

Age standardisation was carried out using the direct standardisation method. The standard population to which the age distribution of sub-groups was adjusted was the mid-year 2011 population estimates for Wales. The age-standardised proportion p' was calculated as follows, where p_i is the age specific proportion in age group i and N_i is the standard population size in age group i:

$$p' = \frac{\sum_i N_i p_i}{\sum_i N_i}$$

Therefore p' can be viewed as a weighted mean of p_i using the weights N_i. Age standardisation was carried out using the age groups: 16-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75 and over.

Area deprivation

See WIMD.

Base numbers

Base numbers are shown in the last column of each table and in general are unweighted bases for the whole sample. Actual base numbers will vary due to varying response levels between different survey questions. When tables show the unweighted whole sample size (that is, the number of respondents to the survey) this serves as an upper limit for the base numbers of the table.

Body Mass Index (BMI) in children

See Child Body Mass Index (BMI) classification.

Child Body Mass Index (BMI) classification

The proportion of children who were overweight and obese was calculated according to the UK national BMI percentiles classification. Using 1990 reference data compiled from a number of sources as the baseline, and adjusted for age and sex, the threshold for overweight was defined as the 85th percentile and the threshold for obesity as the 95th percentile[1]. This definition is consistent with that used in the Health Surveys for England and Scotland.

Although BMI is widely used as an indicator of obesity in children, the establishment of a specific classification system for children and young people has proved difficult. Several methods can be used, including a variety of BMI curves and cut-off points. Some other studies may use different thresholds from those used in this report, and the estimates here should not be compared with those produced on a different basis (for instance, estimates derived using international cut-offs are likely to be lower as the cut-off points are higher) or with adult estimates.

Children

Children are defined as persons aged under 16 years.

Household

A household is defined as a person or group of people who have the accommodation as their only or main residence and who either share at least one meal a day or share the living accommodation.

Household Reference Person (HRP)

The Household Reference Person (HRP) is the householder (person in whose name the property is owned or rented) with the highest income. If there is more than one householder and they have the same income, the eldest is taken as the Household Reference Person.

International Classification of Diseases (ICD)

A classification system for coding diseases and health problems, used internationally and maintained by the World Health Organization (WHO). The survey makes limited use of groups approximating to ICD chapter headings. The groups used are shown below (along with selected examples of diseases for illustrative purposes). Further information is available at the WHO website[2].

[1] Cole T, Freeman JV, Preece MA. Body Mass Index reference curves for the UK, 1990. Archives of Disease in Childhood 1995; 73:25-29.
[2] World Health Organisation: International Classification of Diseases.
www.who.int/classifications/icd/en/

Condition group	Examples
Neoplasms and benign growths	Cancer, after effects of cancer
Endocrine and metabolic diseases	Diabetes, thyroid
Mental disorders	Depression, dyslexia
Nervous system	Epilepsy, multiple sclerosis
Eye complaints	Cataract, glaucoma
Ear complaints	Deafness, Meniere's disease
Heart and circulatory system	Angina, stroke, blood pressure
Respiratory system	Asthma, bronchitis, hayfever
Digestive system	Stomach ulcer, bowel complaints
Genito-urinary system	Kidney complaints, reproductive system disorders
Musculoskeletal system	Arthritis, back problems
Infectious diseases	Glandular fever, herpes
Blood and related organs	Anaemia, haemophilia
Skin complaints	Eczema, corns

NS-SEC (National Statistics Socio-Economic Classification)

The National Statistics Socio-Economic Classification (NS-SEC) is an occupationally based classification of social position that was introduced in 2001 for use in official statistics and surveys. There are fourteen operational categories representing different groups of occupations and a further three residual categories for full time students and occupations that cannot be classified due to lack of information or other reasons.

The operational categories may be collapsed to eight, five and three category analytic classes (the three-class version, but not the others, can be assumed to involve some kind of hierarchy). Full details of NS-SEC are on the Office for National Statistics' guidance and methodology pages[3]. In this report, the three-class version is presented, and is based on the current or former occupation of the household reference person (HRP).

SF-36

The SF-36 is a standard set of 36 health status questions asking respondents about their own perception of their physical and mental health and the impact it has on their daily lives. Responses can be combined to produce scores for eight domains of health and well-being, as well as summary scores for both physical and mental health.

[3] ONS guidance and methodology – standard classifications
http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/index.html

In this report, norm-based scoring has been used, to transform all scores to a mean of 50 and standard deviation of 10 using the general United States population in 1998 (for the purpose of comparability and simplicity[4]). Higher scores indicate better health.

Version 2 of SF-36 was used. SF-36 copyrights are held by the Medical Outcomes Trust, Health Assessment Lab, and QualityMetric Incorporated. Further information is available at the SF-36 website[5].

Socio-economic classification

See NS-SEC (National Statistics Socio-Economic Classification).

Unweighted base

See Base numbers.

Welsh Index of Multiple Deprivation (WIMD)

See WIMD.

WIMD

The WIMD is a measure of deprivation for small areas in Wales. WIMD 2011 was used in this report[6]. WIMD gives deprivation scores for small areas in Wales (Lower Layer Super Output areas, or LSOAs). These small areas were ranked from most deprived to least deprived according to overall WIMD scores and split into five groups ("fifths"). Each respondent to the Welsh Health Survey was allocated to the relevant fifth.

[4] Jenkinson, C. (1999) Comparison of UK and US methods for weighting and scoring the SF-36 summary measures, *Journal of Public Health Medicine* 21:372-376.
[5] **www.sf-36.org**
[6] Welsh Index of Multiple Deprivation.
www.wales.gov.uk/statistics

Appendix B: Adult questionnaire

Welsh Health Survey questionnaire (adults)

CONFIDENTIAL

WELSH HEALTH SURVEY 2012

QUESTIONNAIRE FOR ADULTS

About the survey
This important survey collects information about health and health-related factors. Some questions you may have about this survey are answered in the accompanying leaflet. By completing this questionnaire, you are agreeing to the use of your data as explained in the leaflet. If you have other questions, or would like to talk to someone about the study, please contact NHS Direct Wales on 0845 46 47. (A Minicom service is available on 0845 606 46 47.) When you phone, check firstly that you have reached NHS Direct **Wales**, and then ask to speak to someone about the Welsh Health Survey. Or you can visit: *http://www.natcen.ac.uk/study/welsh-health-survey/participants* for more information.

If you would like this questionnaire in Welsh
Please contact NHS Direct Wales on **0845 46 47**.

Os hoffech gael yr holiadur hwn yn Gymraeg
Cysylltwch â Galw Iechyd Cymru ar **0845 46 47**.

Questionnaire to be filled in by:

First Name 2026-037

Male 1 Female 2 2038

Serial Number 2001-006 2007 Hhold Number 2010 CKL 2008-009 Person Number

Date of placement 2013-018 Day Month Year

Interviewer I.D. Number 2019-024 1 2025 Version

Card 02
2011-012

To be collected on:

How to complete the questionnaire:

The questionnaire should be completed by the person named on the front page.

Most questions can be answered by simply ticking the box alongside the answer that applies to you.

You are sometimes told to skip over some questions in this survey. When this happens, you will see an arrow (➔) with a note that tells you what question to answer next, like this:

Example questions (please do not fill in)

E1 Do you live in a house or a flat?

Tick one only

A house ☑ ➔ *Go to E2*

A flat ☐ ➔ *Go to E3*

E2 How many bedrooms are there in your house?

Please write in

2 *bedrooms*

E3 Do you own any of the following forms of transport?

Tick one box on each row

	Yes	No
Car	☑	☐
Bicycle	☐	☑

Don't worry if you make a mistake; simply cross out the mistake and tick the correct box.

When you have completed it, please return the questionnaire to the interviewer (or in the envelope provided if sent to you in the post).

*This questionnaire is about **you.** Please answer about **yourself** and **your health** only.*

HEALTH SERVICE USE

1a During the **2 weeks ending yesterday**, did you talk to a family doctor (GP) about your own health either in **person** or by **telephone**?

Tick one only

Yes ☐ 1 → *Go to 1b* 2051

No ☐ 2 → *Go to 2a*

1b How many times did you talk to a family doctor (GP) about your own health in these **2 weeks**?

Please write in number

☐☐ 2052-053

1c As a result of speaking to a family doctor (GP) about your own health in these **2 weeks**, did they give (send) you a prescription?

Tick one only

Yes ☐ 1 2054

No ☐ 2

2a During the **2 weeks ending yesterday**, did you see a practice nurse or other nurse at the GP surgery about your own health?

Tick one only

Yes ☐ 1 → *Go to 2b* 2055

No ☐ 2 → *Go to 3a*

2b How many times did you see a practice nurse or other nurse at the GP surgery about your own health in these **2 weeks**?

Please write in number

☐☐ 2056-057

3a During the **last 12 months**, did you attend the **Casualty/A&E** department of a hospital as a patient?

Tick one only

Yes ☐ 1 → *Go to 3b* 2058

No ☐ 2 → *Go to 4a*

3b How many times did you go to **Casualty/A&E** altogether in the **last 12 months**?

Please write in number

☐☐ 2059-060

4a During the **last 12 months**, did you attend the **outpatient** department of a hospital as a patient (apart from straightforward ante- or post-natal visits)?

Tick one only

Yes ☐ 1 → *Go to 4b* 2061

No ☐ 2 → *Go to 5a*

4b Did you have any **outpatient** visits in the **last 12 months** that were paid for privately?

Tick one only

Yes, at least one paid for privately ☐ 1 2062

No, all visits under the NHS ☐ 2

5a During the **last 12 months**, have you been in hospital for treatment as a **day patient**, that is admitted to a hospital bed or day ward, but not required to remain overnight?

Tick one only

Yes ☐ 1 → *Go to 5b* 2063

No ☐ 2 → *Go to 6a*

5b Did you have any **day patient** treatments in the **last 12 months** that were paid for privately?

Tick one only

Yes, at least one paid for privately ☐ 1

No, all treatments under the NHS ☐ 2 2064

6a During the **last 12 months**, have you stayed in hospital as an **inpatient**, overnight or longer?

Tick one only

Yes ☐ 1 → *Go to 6b* 2065

No ☐ 2 → *Go to 7a*

6b Did you have any **inpatient** stays in the **last 12 months** that were paid for privately?

Tick one only

Yes, at least one paid for privately ☐ 1 2066

No, all stays under the NHS ☐ 2

Spare 2067-77

7a Which of the following services have **you** used for **yourself** in the **last 12 months**, either under the NHS or privately?
Please exclude waiting for an appointment

Tick one box on each row

	Did not use	NHS treatment only	Private treatment only	Both NHS and private treatment	
Dentist	☐ 1	☐ 2	☐ 3	☐ 4	2078
Chiropodist	☐ 1	☐ 2	☐ 3	☐ 4	2079
Physiotherapist	☐ 1	☐ 2	☐ 3	☐ 4	2080
Osteopath/chiropractor	☐ 1	☐ 2	☐ 3	☐ 4	2081

7b During the **last 12 months**, have **you** used any of these services for **yourself**?

Tick one box on each row

	Yes	No	
Optician	☐ 1	☐ 2	2082
Health Visitor, District Nurse or other community nurse	☐ 1	☐ 2	2083
GP out of hours services	☐ 1	☐ 2	2084
NHS Direct (National NHS telephone helpline)	☐ 1	☐ 2	2085
Pharmacist *including local pharmacists and those in large stores and supermarkets* (eg picked up prescribed medicine, asked for advice, bought medicines kept behind the counter)	☐ 1	☐ 2	2086

7c In general, which of the following do you go to the dentist for?

Tick one only

A regular check up (i.e. at least once a year) ☐ 1

An occasional check up or when I am having trouble with my teeth ☐ 2 — 2087

I don't ever go to the dentist ☐ 3

8 Have you had a flu jab in the **last 12 months**?

Tick one only

Yes ☐ 1

No ☐ 2 — 2088

Spare 2089-91

MEDICINES

By medicines we mean anything you take or that you put on your skin, such as tablets, powders, creams, sprays and drops, to treat a medical condition. Include conventional and other medicines.

9a During the **past 4 weeks** have you bought any medicine?
(Don't count anything that you got with a prescription)

Tick one only

Yes ☐ 1 → *Go to 9b* 2092

No ☐ 2 → *Go to 9c*

9b If you have bought medicines in the **past 4 weeks**, which of these kinds did you buy?

Tick all that apply

Conventional medicines, eg aspirin, eye-drops, antacids, cough medicine ☐ 1 2093-096

Herbal ☐ 2

Homeopathic ☐ 3

Mineral or vitamin supplements ☐ 4

9c Are you on any **regular** medication prescribed by a doctor?
(Regular means for a year or more)

Tick one only

Yes ☐ 1 2097

No ☐ 2

ILLNESSES AND OTHER HEALTH PROBLEMS

10a Have you **ever** been treated for any of these?

Tick one box on each row

	Yes	No	
Heart attack	☐ 1	☐ 2	2098
Stroke	☐ 1	☐ 2	2099
Cancer	☐ 1	☐ 2	2100

10b Are you **currently** being treated for any of these?

Tick one box on each row

	Yes	No	
Angina	☐ 1	☐ 2	2101
Heart failure	☐ 1	☐ 2	2102
High blood pressure (or hypertension)	☐ 1	☐ 2	2103
Another heart condition	☐ 1	☐ 2	2104
Asthma	☐ 1	☐ 2	2105
Emphysema	☐ 1	☐ 2	2106
Pleurisy	☐ 1	☐ 2	2107
Spells of bronchitis that have lasted over 3 years	☐ 1	☐ 2	2108
Another respiratory illness	☐ 1	☐ 2	2109

10c Are you **currently** being treated for any of these?

Tick one box on each row

	Yes	No	
Depression	☐ 1	☐ 2	2110
Anxiety	☐ 1	☐ 2	2111
Another mental illness	☐ 1	☐ 2	2112
Arthritis	☐ 1	☐ 2	2113
Back pain	☐ 1	☐ 2	2114
Epilepsy or fits	☐ 1	☐ 2	2115
Varicose veins	☐ 1	☐ 2	2116

10d Are you **currently** being treated for diabetes?

Tick one only

Yes ☐ 1 → *Go to 10e* 2117

No ☐ 2 → *Go to 11a*

Spare 2118-120

10e How is your diabetes controlled?

Tick all that apply

Injection ☐ 1 2121-123

Tablets ☐ 2

Diet ☐ 3

11a Are you **currently** being treated for any other chronic or long-term illness **not listed** in questions 10b – 10d?

Tick one only

Yes ☐ 1 → *Go to 11b* 2124

No ☐ 2 → *Go to 12a*

11b Please specify the **main** illness below. **Please write in only one illness.**

2125

2126-129

Spare 2130-134

12a Have you had any accident, injury or poisoning needing hospital treatment or a visit to Casualty/A&E in the **last 3 months**?

Tick one only

Yes ☐ 1 → *Go to 12b* 2135

No ☐ 2 → *Go to 13a*

12b What was the accident, injury or poisoning?

Tick all that apply

Break or fracture ☐ 1 2136-141

Poisoning ☐ 2

Head injury with concussion ☐ 3

Cut or puncture ☐ 4

Burn ☐ 5

Another kind of injury ☐ 6

12c Where did the **most recent** accident, injury or poisoning take place?

Tick one only

In the home ☐ 1 2142

In traffic ☐ 2

At work or in school ☐ 3

Somewhere else ☐ 4

13a Have you had a stomach upset with diarrhoea in the **last 3 months**, which you think was due to something you ate?

Tick all that apply

No ☐ 1 → *Go to 14* 2143-145

Yes, in this country ☐ 2 → *Go to 13b*

Yes, abroad ☐ 3 → *Go to 13b*

13b If yes, did you see a doctor about it?

Tick one only

Yes ☐ 1 2146

No ☐ 2

14 Is your eyesight good enough to see the face of someone across a room?
(With glasses or contact lenses if you usually wear them)

Tick one only

Yes ☐ 1 2147

Yes, with difficulty ☐ 2

No ☐ 3

15a Do you have any difficulty with your hearing?
(Without a hearing aid if you usually wear one)

Tick one only

Yes ☐ 1 → *Go to 15b* 2148

No ☐ 2 → *Go to 16*

15b Do you usually wear a hearing aid?

Tick one only

Yes, most of the time ☐ 1 → *Go to 15c* 2149

Yes, some of the time ☐ 2 → *Go to 15c*

No, but have tried one ☐ 3 → *Go to 16*

No, never ☐ 4 → *Go to 16*

15c If you usually wear a hearing aid, do you have any difficulty with your hearing while wearing the aid?

Tick one only

Yes ☐ 1 2150

No ☐ 2

16 How many of your own natural teeth do you have?
(Filled and capped teeth count as your own, false teeth and dentures don't)

Tick one only

I have 21 or more of my own teeth ☐ 1 2151

I have less than 21 of my own teeth OR mainly false teeth or dentures ☐ 2

UNTREATED PROBLEMS OR SYMPTOMS

We would now like to ask you about problems that may have troubled you which you have **not** been to see a doctor or nurse about.

17a In the **last 12 months** have you had any of the following and **not** been to see a doctor or nurse about them?
Please also include problems or symptoms you have had for longer if they troubled you in the last year.

Tick all that apply

2152-75

- Backache 01
- Joint pain, muscle pain or stiffness 02
- Troublesome varicose veins 03
- Shortness of breath, tight chest or wheezing 04
- Chest pain 05
- Dizziness, giddiness or fainting 06
- Loss of appetite or unexplained weight loss 07
- Lumps in breast, armpit or groin 08
- Sudden loss of hearing or vision 09
- An injury that limited your activities in some way 10
- Feeling depressed or anxious 11

Go to 17b

- None of these 12 → *Go to 18*

17b Why have you **not** been to see a doctor or nurse about your symptoms in the last 12 months?

Tick all that apply

2176-91

- I feel nervous or uncomfortable going to the doctor or hospital 01
- I did not think my symptoms seemed serious enough 02
- My symptoms went away by themselves 03
- It is difficult to see a doctor/ It would have taken too long 04
- I have learnt to live with my symptoms/ I put up with my symptoms 05
- I have seen someone else about my symptoms in the last 12 months 06
- I have seen a doctor about these symptoms more than 12 months ago 07
- Other reasons 08

YOUR HEALTH AND WELL-BEING

These questions ask for your views about your health. This information will help keep track of how you feel and how well you are able to do your usual activities. For each of the following questions, please tick the one box that best describes your answer.

18 In general, would you say your health is ... ?

Tick one only

Excellent	Very Good	Good	Fair	Poor	
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2192

19 **Compared to one year ago**, how would you rate your health in general now?

Tick one only

Much better now than one year ago	☐ 1	2193
Somewhat better now than one year ago	☐ 2	
About the same as one year ago	☐ 3	
Somewhat worse now than one year ago	☐ 4	
Much worse now than one year ago	☐ 5	

20 The following questions are about activities you might do during a typical day. **Does your health now limit** you in these activities? If so, how much?

Tick one box on each row

		Yes, limited a lot	Yes, limited a little	No, not limited at all	
a	**Vigorous activities**, such as running, lifting heavy objects, participating in strenuous sports	☐ 1	☐ 2	☐ 3	2194
b	**Moderate activities**, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	☐ 1	☐ 2	☐ 3	2195
c	Lifting or carrying groceries	☐ 1	☐ 2	☐ 3	2196
d	Climbing **several** flights of stairs	☐ 1	☐ 2	☐ 3	2197
e	Climbing **one** flight of stairs	☐ 1	☐ 2	☐ 3	2198
f	Bending, kneeling, or stooping	☐ 1	☐ 2	☐ 3	2199
g	Walking **more than a mile**	☐ 1	☐ 2	☐ 3	2200
h	Walking **several hundred yards**	☐ 1	☐ 2	☐ 3	2201
i	Walking **one hundred yards**	☐ 1	☐ 2	☐ 3	2202
j	Bathing or dressing yourself	☐ 1	☐ 2	☐ 3	2203

21 During the **past 4 weeks**, how much of the time have you had any of the following problems with your work or other regular daily activities **as a result of your physical health**?

Tick one box on each row

	All of the time	Most of the time	Some of the time	A little of the time	None of the time	
a Cut down on the **amount of time** you spent on work or other activities	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2204
b **Accomplished less** than you would like	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2205
c Were limited in the **kind** of work or other activities	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2206
d Had **difficulty** performing the work or other activities (for example, it took extra effort)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2207

22 During the **past 4 weeks**, how much of the time have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)?

Tick one box on each row

	All of the time	Most of the time	Some of the time	A little of the time	None of the time	
a Cut down on the **amount of time** you spent on work or other activities	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2208
b **Accomplished less** than you would like	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2209
c Did work or other activities **less carefully than usual**	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2210

23 During the **past 4 weeks**, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbours, or groups?

Tick one only

Not at all	Slightly	Moderately	Quite a bit	Extremely	
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2211

24 How much **bodily** pain have you had during the **past 4 weeks**?

Tick one only

None	Very Mild	Mild	Moderate	Severe	Very Severe	
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	2212

25 During the **past 4 weeks**, how much did **pain** interfere with your normal work (including both work outside the home and housework)?

Tick one only

Not at all	A little bit	Moderately	Quite a bit	Extremely	
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2213

26 These questions are about how you feel and how things have been with you during the **past 4 weeks**. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the **past 4 weeks** ...

Tick one box on each row

		All of the time	Most of the time	Some of the time	A little of the time	None of the time	
a	Did you feel full of life?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2214
b	Have you been very nervous?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2215
c	Have you felt so down in the dumps that nothing could cheer you up?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2216
d	Have you felt calm and peaceful?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2217
e	Did you have a lot of energy?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2218
f	Have you felt downhearted and low?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2219
g	Did you feel worn out?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2220
h	Have you been happy?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2221
i	Did you feel tired?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2222

27 During the **past 4 weeks**, how much of the time has your **physical health or emotional problems** interfered with your social activities (like visiting friends, relatives, etc)?

Tick one only

All of the time	Most of the time	Some of the time	A little of the time	None of the time	
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2223

28 How TRUE or FALSE is **each** of the following statements for you?

Tick one box on each row

		Definitely true	Mostly true	Don't know	Mostly false	Definitely false	
a	I seem to get ill more easily than other people	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2224
b	I am as healthy as anybody I know	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2225
c	I expect my health to get worse	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2226
d	My health is excellent	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	2227

29a Are your day-to-day activities limited because of a health problem or disability which has lasted, or is expected to last, at least 12 months? (Include problems related to old age.)

Tick one only

Yes, limited a lot	☐ 1	→ *Go to 29b*	2228
Yes, limited a little	☐ 2	→ *Go to 29b*	
No	☐ 3	→ *Go to 30*	

29b What is the **main** health problem or disability you have that limits your day-to-day activities? **Please write in one condition only, that is the one that limits your activities the most.**

2229

35

Spare 2236-99

SMOKING

30 Which one of these best describes you?

Tick one only

I smoke daily	☐ 1	→ *Go to 31*	2300
I smoke occasionally but not every day	☐ 2	→ *Go to 31*	
I used to smoke daily but do not smoke at all now	☐ 3	→ *Go to 36*	
I used to smoke occasionally but do not smoke at all now	☐ 4	→ *Go to 36*	
I have never smoked	☐ 5	→ *Go to 36*	

31 During the **7 days ending yesterday**, did you smoke in any of these places?

Tick one box on each row

		Yes	No/Does not apply	
Outdoors	Outside at home	☐ 1	☐ 2	2301
	Other places outdoors	☐ 1	☐ 2	2302
Indoors	In own home	☐ 1	☐ 2	2303
	In other people's homes	☐ 1	☐ 2	2304
	Whilst travelling by car	☐ 1	☐ 2	2305
	Other places indoors	☐ 1	☐ 2	2306

Spare 2307-09

32 Have you tried to give up smoking in the **last 12 months?**

Tick one only

Yes ☐ 1 — 2310

No ☐ 2

33 Compared with **this time last year**, do you…?

Tick one only

Smoke more now ☐ 1 — 2311

Smoke about the same now ☐ 2

Smoke less now ☐ 3

34 Would you like to give up smoking altogether?

Tick one only

Yes ☐ 1 → *Go to 35* — 2312

No ☐ 2 → *Go to 36*

35 What are your main reasons for wanting to give up?

Tick all that apply

Because of a health problem I have at present ☐ 01 — 2313-28

Better for my health in general ☐ 02

Less risk of getting smoking related illnesses ☐ 03

Family/friends want me to stop ☐ 04

Financial reasons ☐ 05

Worried about the effect on my children ☐ 06

Because of the smoking ban ☐ 07

Other reasons ☐ 08

36 Are you regularly exposed to other people's tobacco smoke in any of these places?

Tick one box on each row

		Yes	No/Does not apply	
Outdoors	Outside at home	☐ 1	☐ 2	2329
	Other places outdoors	☐ 1	☐ 2	2330
Indoors	In own home	☐ 1	☐ 2	2331
	In other people's homes	☐ 1	☐ 2	2332
	Whilst travelling by car	☐ 1	☐ 2	2333
	Other places indoors	☐ 1	☐ 2	2334

Spare 2335-49

ALCOHOL

37 How often have you had an alcoholic drink of any kind during the **last 12 months?**

Tick one only

Almost every day	☐ 01	→ *Go to 39*	2350-51
Five or six days a week	☐ 02	→ *Go to 39*	
Three or four days a week	☐ 03	→ *Go to 39*	
Once or twice a week	☐ 04	→ *Go to 39*	
Once or twice a month	☐ 05	→ *Go to 39*	
Once every couple of months	☐ 06	→ *Go to 39*	
Once or twice a year	☐ 07	→ *Go to 39*	
Not at all in the last twelve months	☐ 08	→ *Go to 38*	

38 Have you always been a non-drinker, or did you stop drinking for some reason?

Tick one only

Always a non-drinker	☐ 1	→ *Go to 41a*	2352
Used to drink but stopped	☐ 2	→ *Go to 41a*	

39 Did you have an alcoholic drink of any kind in the **last 7 days**?

Tick one only

Yes	☐ 1	→ *Go to 40a*	2353
No	☐ 2	→ *Go to 41a*	

40a Please think about **the day in the last week on which you drank the most alcohol**.

Please write in day

2354-55

40b Write in how much of each type of alcohol you drank **<u>on that day</u>**.

Write in how much you drank
(use any of the measures below)

<u>Normal</u> strength beer, lager, stout, cider or shandy
(less than 6% alcohol). *Exclude bottles/cans of shandy*
You can include half pints under pints, eg "1½"

Pints | Large cans or bottles | Small cans or bottles

2356-62

<u>Strong</u> beer, lager, stout or cider
(6% alcohol or more), such as Tennants Super, Special Brew, Diamond White
You can include half pints under pints, eg "1½"

Pints | Large cans or bottles | Small cans or bottles

2363-69

Wine, including champagne and Babycham
You can write in parts of a bottle, eg "½"

Large glasses (250ml) | Standard glasses (175ml) | Small glasses (125ml) | Bottles (750ml)

2370-78

Spirits or liqueurs, such as gin, whisky, rum, brandy, vodka, tequila, Baileys, Archers

Measures or shots (count doubles as 2 singles)

2379-80

Fortified wines, such as sherry, port, vermouth, Martini, Cinzano, Dubonnet

Small glasses (count doubles as 2 singles)

2381-82

Alcopops (alcoholic soft drink), such as WKD, Bacardi Breezer, Smirnoff Ice, Archers Aqua, Reef

Small cans or bottles

2383-84

Other kinds of alcoholic drink
Write in name of drink

	Glasses (count doubles as 2 singles)	Pints	Large cans or bottles	Small cans or bottles	
1					2385-94
2					2395-404

Spare 2405-20

FRUIT AND VEGETABLES

Note: A tablespoon is a size bigger than a spoon you would use to eat soup or breakfast cereal

41a Using the measures below, how much of the following did you eat **yesterday**?
Please read through the whole list before answering

	Write in number (or "0" if none eaten)		
Small bowlfuls of **salad**	☐☐	small bowlfuls	2421-22
Tablespoons of **potatoes** *Include potatoes in other dishes*	☐☐	tablespoons	2423-24
Tablespoons of **other vegetables** (raw, cooked, frozen or tinned)	☐☐	tablespoons	2425-26
Tablespoons of **pulses** such as baked beans, red kidney beans, lentils, chickpeas, daal	☐☐	tablespoons	2427-28
Tablespoons of vegetables or pulses **in other dishes** made **mainly** from vegetables or pulses *Do not include potatoes*	☐☐	tablespoons	2429-30
If no vegetables eaten **yesterday**, please tick	☐		2431

41b Using the measures below, how much of the following did you eat **yesterday**?
Please read through the whole list before answering

	Write in number (or "0" if none eaten)		
Average handfuls of **very small fresh fruit**, such as grapes, berries	☐☐	handfuls	2432-33
Small fruit, such as plums, satsumas	☐☐	whole fruit	2434-35
Medium fruit, such as apples, bananas, oranges	☐☐	whole fruit	2436-37
Half (½) large fruit, such as grapefruit	☐☐	half fruit	2438-39
Average slices of a **very large fruit**, such as melon	☐☐	slices	2440-41
Tablespoons of **frozen or tinned fruit**	☐☐	tablespoons	2442-43
Average handfuls of **dried fruit**, such as raisins, apricots	☐☐	handfuls	2444-45
Tablespoons of fruit **in other dishes** made **mainly** from fruit such as fruit salad or fruit pies	☐☐	tablespoons	2446-47
Small glasses of **fruit juice**	☐☐	small glasses	2448-49
If no fruit eaten **yesterday**, please tick	☐		2450

EXERCISE

42a During the **7 days ending yesterday**, on which days did you do **LIGHT** exercise or physical activity **for at least 30 minutes**?
Blocks of activity lasting at least 10 minutes, which were done on the same day, can be counted towards the full 30 minutes.
Include physical activity which is part of your job

Tick all days that apply

Light exercise / activity	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
For example Housework (eg hoovering, dusting), walking at an average pace, golf, light gardening (eg weeding)	☐ 01	☐ 02	☐ 03	☐ 04	☐ 05	☐ 06	☐ 07	2451-64
If no light exercise in the **last 7 days**, please tick	☐ 08							

42b During the **7 days ending yesterday**, on which days did you do **MODERATE** exercise or physical activity **for at least 30 minutes**?
Blocks of activity lasting at least 10 minutes, which were done on the same day, can be counted towards the full 30 minutes.
Include physical activity which is part of your job

Tick all days that apply

Moderate exercise / activity	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
For example Heavy housework (eg spring cleaning, walking with heavy shopping), fast walking, dancing, gentle swimming, heavy gardening (eg digging)	☐ 01	☐ 02	☐ 03	☐ 04	☐ 05	☐ 06	☐ 07	2465-78
If no moderate exercise in the **last 7 days**, please tick	☐ 08							

42c During the **7 days ending yesterday**, on which days did you do **VIGOROUS** exercise or physical activity **for at least 30 minutes**?
Blocks of activity lasting at least 10 minutes, which were done on the same day, can be counted towards the full 30 minutes.
Include physical activity which is part of your job

Tick all days that apply

Vigorous exercise / activity	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
For example Running, jogging, squash, swimming lengths, aerobics, fast cycling, football	☐ 01	☐ 02	☐ 03	☐ 04	☐ 05	☐ 06	☐ 07	2479-92
If no vigorous exercise in the **last 7 days**, please tick	☐ 08							

CARERS

43 Do you look after, or give any help or support to family members, friends, neighbours or others because of long-term physical or mental ill-health or disability, or problems related to old age? ***Do not count anything you do as part of your paid employment***

Tick time spent in a typical week

2493

No	☐ 1
Yes, 1-19 hours a week	☐ 2
Yes, 20-49 hours a week	☐ 3
Yes, 50+ hours a week	☐ 4

WELLBEING

The next 4 questions are about your feelings on aspects of your life.

44 Overall, how satisfied are you with your life nowadays? 2494-95

Please give your answer on a scale of 0 to 10, where 0 is 'not at all satisfied' and 10 is completely satisfied'.

Tick one only

Not at all satisfied										Completely satisfied
0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

45 Overall, to what extent do you feel that the things you do in your life are worthwhile? 2496-97

Please give your answer on a scale of 0 to 10, where 0 is 'not at all worthwhile' and 10 is 'completely worthwhile'.

Tick one only

Not at all worthwhile										Completely worthwhile
0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

46 Overall, how happy did you feel yesterday? 2498-99

Please give your answer on a scale of 0 to 10, where 0 is 'not at all happy' and 10 is 'completely happy'.

Tick one only

Not at all happy										Completely happy
0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

47 On a scale where 0 is 'not at all anxious' and 10 is 'completely anxious', overall, how anxious did you feel yesterday? 2500-501

Tick one only

Not at all anxious										Completely anxious
0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

ABOUT YOU

48 Are you….? Male ☐ 1 Female ☐ 2 2502

49 How old were you on your last birthday?

Please write in whole years

Age ☐☐ years 2503-05

50 **Women only:** Are you currently pregnant?

Tick one only

Yes ☐ 1 2506

No ☐ 2

51 How tall are you? 2507

☐ feet ☐☐ inches **OR** ☐☐☐ centimetres 2508-09 2510-12

52 How much do you weigh? 2513-14

☐☐ stone ☐☐ pounds **OR** ☐☐☐ kilograms 2515-16 2517-19

53a How would you describe your national identity?

Tick all that apply

Welsh ☐ 1 2520-25

English ☐ 2

Scottish ☐ 3

Northern Irish ☐ 4

British ☐ 5

Other ☐ 6

53b What is your ethnic group?

Choose **one** section from A to E, then tick **one** box to best describe your ethnic group or background.

Tick one only

A. White	Welsh/English/Scottish/Northern Irish/British	☐ 01	2526-27
	Irish	☐ 02	
	Gypsy or Irish Traveller	☐ 03	
	Any other White background	☐ 04	
B. Mixed/multiple ethnic groups	White and Black Caribbean	☐ 05	
	White and Black African	☐ 06	
	White and Asian	☐ 07	
	Any other Mixed/multiple ethnic background	☐ 08	
C. Asian/Asian British	Indian	☐ 09	
	Pakistani	☐ 10	
	Bangladeshi	☐ 11	
	Chinese	☐ 12	
	Any other Asian background	☐ 13	
D. Black/African/Caribbean/Black British	African	☐ 14	
	Caribbean	☐ 15	
	Any other Black/African/Caribbean background	☐ 16	
E. Other ethnic group	Arab	☐ 17	
	Any other ethnic group	☐ 18	

54 Which of these descriptions applies to what you were doing **last week**?

Tick first to apply

Going to school or college full-time (including on vacation)	☐ 01	2528-29
In paid employment or self-employment (or away temporarily)	☐ 02	
On a Government scheme for employment training	☐ 03	
Doing unpaid work for a business that you own, or that a relative owns	☐ 04	
Waiting to take up paid work already obtained	☐ 05	
Looking for paid work or a Government training scheme	☐ 06	
Intending to look for work but prevented by temporary sickness or injury (sick or injured for 28 days or less)	☐ 07	
Permanently unable to work because of long-term sickness or disability	☐ 08	
Retired from paid work	☐ 09	
Looking after the home or family	☐ 10	
Doing something else	☐ 11	

55 Which of these qualifications do you have?

Tick **every** box that applies if you have any of the qualifications listed.

If your UK qualification is not listed, tick the box that contains its nearest equivalent.

If you have qualifications gained outside the UK, tick the 'Foreign qualifications' box and the nearest UK equivalents (if known).

Tick all that apply

1-4 O levels/CSEs/GCSEs (any grades), Entry level	☐ 01	2530-55
NVQ Level 1, Foundation GNVQ, Basic skills	☐ 02	
5 + O levels (passes)/CSEs (grade 1)/GCSEs (grades A*-C), School Certificate, 1 A level/2-3 AS levels/VCEs, Welsh Baccalaureate Intermediate Diploma	☐ 03	
NVQ Level 2, Intermediate GNVQ, City and Guilds Craft, BTEC First/General Diploma, RSA Diploma	☐ 04	
Apprenticeship	☐ 05	
2+ A levels/VCEs, 4+ AS levels, Higher School Certificate, Welsh Baccalaureate Advanced Diploma	☐ 06	
NVQ Level 3, Advanced GNVQ, City and Guilds Advanced Craft, ONC, OND, BTEC National, RSA Advanced Diploma	☐ 07	
Degree (for example BA, BSc), Higher degree (for example MA, PhD, PGCE)	☐ 08	
NVQ Levels 4-5, HNC, HND, RSA Higher Diploma, BTEC Higher Level	☐ 09	
Professional qualifications (for example teaching, nursing, accountancy)	☐ 10	
Other vocational/work-related qualifications	☐ 11	
Foreign qualifications	☐ 12	
No qualifications	☐ 13	

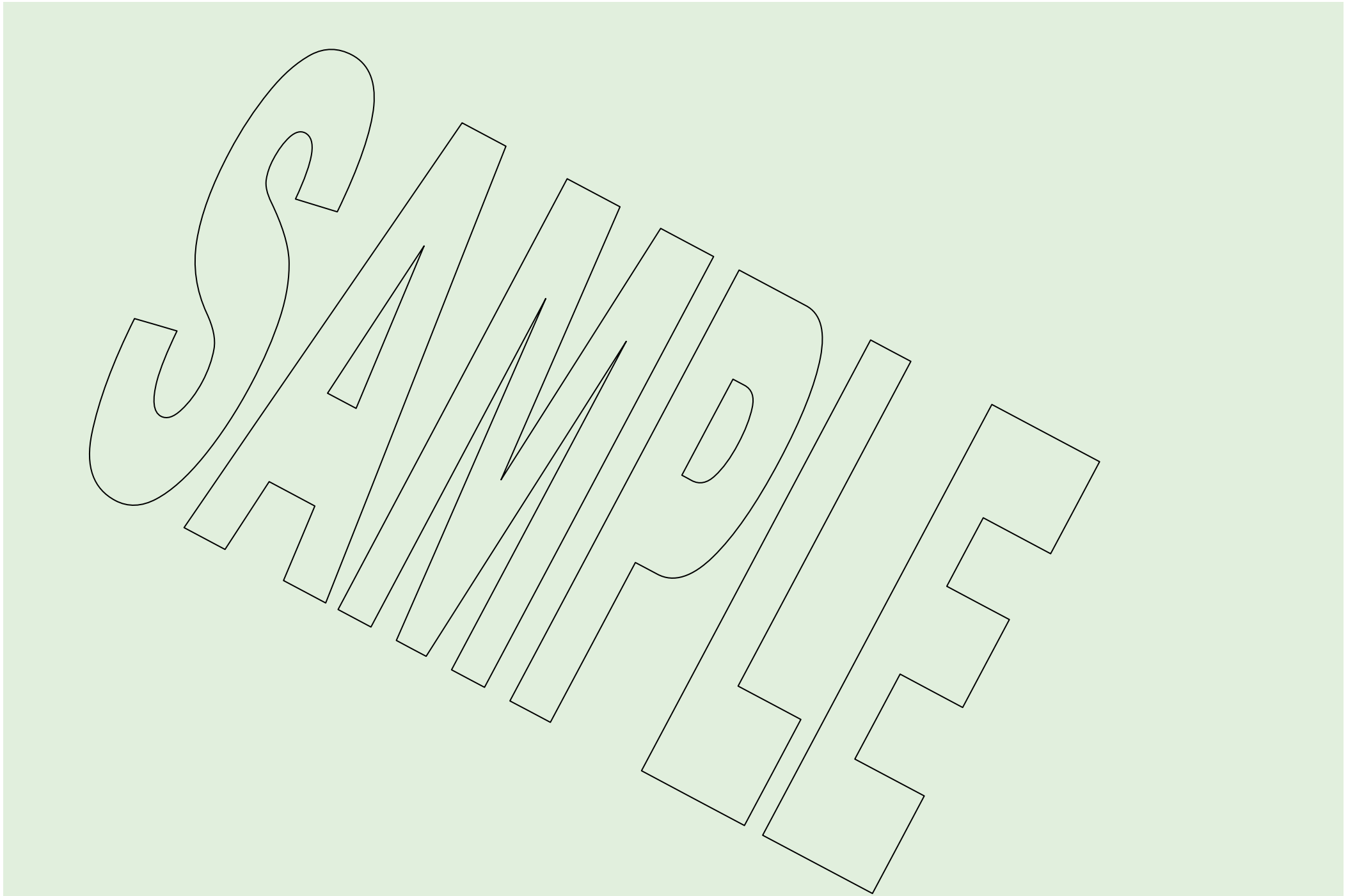
56 If at some future date we wanted to ask you to take part in a further health-related study, may we contact you to see if you are willing to help again?

Tick one only

Yes ☐ 1 2556

No ☐ 2

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE. Please return the questionnaire to the interviewer (or in the envelope provided if sent in the post)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