Health Survey for England 2011

Volume 1

Health, social care and lifestyles

A survey carried out on behalf of the Health and Social Care Information Centre

Joint Health Surveys Unit

NatCen
Social Research that works for society

Department of Epidemiology and Public Health, University College London
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Volume 1

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Edited by
Rachel Craig and Jennifer Mindell

Principal authors
Sadie Boniface, Sally Bridges, Rachel Craig, Robin Darton, Elizabeth Fuller, Ruth Hancock, Catherine Henderson, Craig Knott, Dhriti Mandalia, Jennifer Mindell, Alison Moody, Marcello Morciano, Linda Ng Fat, Oyinlola Oyebode, Chloe Robinson, Katharine Sadler, Rosie Sutton, Raphael Wittenberg.

Joint Health Surveys Unit
NatCen Social Research
Department of Epidemiology and Public Health, UCL (University College London)

THE HEALTH AND SOCIAL CARE INFORMATION CENTRE
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I am delighted to introduce the findings of the 21st annual Health Survey for England, which provides an important insight into the health and behaviour of people in England.

The survey is conducted annually on behalf of the Health and Social Care Information Centre, and collects information from a representative sample of the general population. Combining information gathered through interviewing the sampled respondents (including a wealth of socio-demographic variables) with objective measures of health such as height, weight and blood pressure measurements, its findings play a vital role in aiding better understanding of health issues and helping decision-makers manage policies to improve services.

The 2011 survey has a special focus on cardiovascular disease and the associated conditions hypertension and diabetes. Cardiovascular disease is a major cause of death. Hypertension is a major preventable risk factor for premature death. Diabetes is a long term condition which also increases the risk of cardiovascular disease and is a leading cause of avoidable mortality. These are all important conditions for our health service. The report examines the prevalence of and trends in cardiovascular disease, hypertension and diabetes, and factors associated with them.

Social care provides help with personal care and domestic tasks to enable people to live as independently as possible. It affects the daily lives of several million people in England. The 2011 survey includes a new module of questions for older people about their need for care, receipt of care and payment for care. The survey also asks all adults if they provide unpaid care for other adults. The findings provide a valuable insight about social care.

This report also has chapters covering chronic pain, adult and child obesity, and drinking of alcohol. There is much more to the survey than can be covered in this volume and the trend tables published at the same time focus upon key changes in core topics and measurements. The trend tables include estimates of the number, as well as the proportion, of people with a range of health related problems and lifestyle behaviours. In addition, the full dataset will be placed in the UK Data Archive at the University of Essex in 2013 to allow secondary analysis.

A large and complex survey like this requires dedication and much effort by a skilled team, and the co-operation of the public in answering its questions. I would like to show my appreciation to all those who worked on this survey in the Joint Health Surveys Unit of NatCen Social Research and the Research Department of Epidemiology and Public Health at UCL (University College London) and to my colleagues within my own organisation. I would particularly like to thank the team of skilled interviewers and nurses whose commitment and hard work were crucial in collecting the data within this survey. I also wish to express my gratitude to all those across England who gave up their time to take part and have helped improve our understanding of our nation’s health.

I believe that people reading the results of the 2011 Health Survey for England will find much to interest and inform them about the health and well-being of people in this country.

Tim Straughan

Chief Executive
Health and Social Care Information Centre
Editors’ acknowledgements

We wish to thank, first of all, all those who gave up their time to be interviewed and who welcomed interviewers and nurses into their homes. We should also like to acknowledge the debt the survey’s success owes to the commitment and professionalism of the interviewers and nurses who worked on the survey throughout the year.

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

• The authors of all the chapters: Sadie Boniface, Sally Bridges, Robin Darton, Elizabeth Fuller, Ruth Hancock, Catherine Henderson, Craig Knott, Dhriti Mandalia, Alison Moody, Marcello Morciano, Linda Ng Fat, Oyinlola Oyebode, Chloe Robinson, Katharine Sadler, Rosie Sutton, Raphael Wittenberg.
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We should also like to express our thanks to Linda Wilson, Julie Day and the staff at the Department of Clinical Biochemistry at the Royal Victoria Infirmary in Newcastle upon Tyne, and to Colin Feyerabend, Mira Doig and the staff at ABS Laboratories, Welwyn Garden City, for their helpfulness and efficiency.

Last, but certainly not least, we wish to express our appreciation of the work of the staff at the Health and Social Care Information Centre at all stages of the project, and in particular the contributions made by Vicky Cooper, Paul Eastwood, Paul Glossop, Victoria Jones, Alison Neave, Jesmond Smith, Bethan Thomas and Steve Webster.

Rachel Craig, Jennifer Mindell
1. The data used in the report have been weighted. The weighting is described in Chapter 7, Volume 2 of this report, *Methods and documentation*. Both unweighted and weighted sample sizes are shown at the foot of each table. The weighted numbers reflect the relative size of each group in the population, not numbers of interviews made, which are shown by the unweighted bases.

2. Children’s data each year have been weighted to adjust for the probability of selection, since a maximum of two children are selected in each household. This ensures that children from larger households are not under-represented. Since 2003, as for adults, non-response weighting has also been applied.

3. Five different non-response weights have been used: for the interview stage, for the nurse visit, for the blood and cotinine samples, and for the drinking diary.

4. Apart from tables showing age breakdowns, data for adults have been age-standardised for men and for women separately. This allows comparisons between groups (such as different strategic health authorities or household income categories), after adjusting for the effects of any differences in their age distributions. When comparing data for the two sexes, it should be remembered that no age standardisation has been introduced to remove the effects of the sexes’ different age distributions. See Chapter 8.3.3, Volume 2 of this report.

5. The following conventions have been used in tables:
   - no observations (zero value)
   - non-zero values of less than 0.5% and thus rounded to zero
   - [] used to warn of small sample bases, if the unweighted base is less than 50. If a group’s unweighted base is less than 30, data are normally not shown for that group.

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

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

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

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

10. The group on which the figures in each table are based is stated at the upper left corner of the table.

11. The term ‘significant’ refers to statistical significance (at the 95% level) and is not intended to imply substantive importance.
1.1 The Health Survey for England series

The Health Survey for England (HSE) comprises a series of annual surveys, of which the 2011 survey is the twenty first. All surveys have covered the adult population aged 16 and over living in private households in England. Since 1995, the surveys have also covered children aged 2-15 living in households selected for the survey. Since 2001, infants aged under 2 have been included as well as older children.

The HSE is part of a programme of surveys currently commissioned by the Health and Social Care Information Centre (HSCIC), and before April 2005 commissioned by the Department of Health. The surveys provide regular information that cannot be obtained from other sources on a range of aspects concerning the public’s health, and many of the factors that affect health. The series of Health Surveys for England was designed to:

1. provide annual data from nationally representative samples to monitor trends in the nation’s health;
2. estimate the proportion of people in England who have specified health conditions;
3. estimate the prevalence of certain risk factors associated with these conditions;
4. examine differences between subgroups of the population (e.g. by age, sex or income) in their likelihood of having specified conditions or risk factors;
5. assess the frequency with which particular combinations of risk factors are found, and in which groups these combinations most commonly occur;
6. monitor progress towards selected health targets;
7. (since 1995) measure the height of children at different ages, replacing the National Study of Health and Growth; and
8. (since 1995) monitor the prevalence of overweight and obesity in children.

Each survey in the series includes core questions and measurements such as blood pressure, anthropometric measurements and analysis of blood and saliva samples, as well as modules of questions on specific issues that vary from year to year. In some years, the core sample has also been augmented by an additional boosted sample from a specific population subgroup, such as minority ethnic groups, older people or children; there was no boost in 2011.

The Health Survey for England has been designed and carried out since 1994 by the Joint Health Surveys Unit of NatCen Social Research and the Research Department of Epidemiology and Public Health at UCL (University College London).

1.2 The 2011 survey

1.2.1 Topics

A major new core topic of social care was introduced in the HSE in 2011. There was also a focus on cardiovascular disease (CVD), with questions on associated conditions, hypertension and diabetes. Additional modules of questions were also included, covering chronic pain, attitudes to personal health and lifestyle, well-being, and dental health. Core topics on general health and lifestyles were continued from previous years, with usual
questions on drinking supplemented by further questions on regular drinking, and a drinking diary.

**Social care**

The HSE 2011 included a new module of questions for older people about their need for care, receipt of care and payment for care, and questions to all adults about their provision of informal care.

Social care affects the daily lives of several million people in England. Around 5 million people provide unpaid care to family and friends.¹ Some 1.6 million work in the social care sector, providing formal care.² Some 1.1 million receive care arranged by their local authority³ and at least a further 250,000 buy care privately.

Under successive governments there have been substantial developments in policy on adult social care and how it is funded. The current Coalition Government published *A Vision for Social Care*⁴ in 2010 and a White Paper *Caring for our future*⁵ in July 2012. The Coalition Government also established a Commission on Funding of Care and Support, which reported in July 2011.⁶

Despite the importance of adult social care, data on social care is considerably more limited than data on other welfare state services such as health or social security. The most recent national survey to cover these topics was the 2009/10 Survey of Carers in Households,¹ updating the 2001 General Household Survey coverage of informal carers.⁷ There have been substantial changes in policy and practice in the last decade. The new module of questions in the HSE in 2011 provides an important update on social care; the intention is to include the module in subsequent years to provide further data in this rapidly developing policy area.

**Cardiovascular disease**

CVD is one of the leading contributors to the global disease burden. The single most common cardiovascular disease is ischaemic heart disease (IHD, or coronary heart disease (CHD)). IHD includes myocardial infarction (MI, heart attacks) and angina (chest pain on exertion due to inadequate blood flow to the heart muscle). Most CVD in England is caused by atherosclerosis (‘furring’ of the arteries). This is not only the case for IHD and for stroke, the two main diseases, but also for most aortic aneurysms and peripheral vascular disease (impaired blood flow to the limbs).

Over the second half of the 20th century, there was a fairly steady decrease in mortality due to CVD in England and Wales.⁸ In 1999, CHD was made a government priority,⁹ with the introduction of the National Service Framework for CHD following in 2000.¹⁰ The goal was to reduce death from CHD and related illnesses in the under 75s by 40% by the year 2010. This target was reached ahead of schedule.¹¹

Despite a reduction in deaths from CVD, these diseases remain the most common cause of death and still cause a large proportion of morbidity in this country. In England and Wales in 2011, CVD accounted for 29% of all deaths.¹²

The main reasons for a decrease in mortality from CVD are reductions in the prevalence of some risk factors for CVD in the population and improvements in treatment of CVD. Decreased cigarette smoking, lower systolic blood pressure and lower total cholesterol in the general population all contribute to a better cardiovascular profile, although increases in obesity and diabetes counteract some of the benefits.

In 2006, prevalence of any CVD in adults over 16 was found by the Health Survey for England to be 14% in men and 13% in women - around one in seven adults.¹³ In 2010/11 there were 281,754 hospital admissions (405,095 hospital episodes) for IHD and 106,829 admissions for stroke (198,335 episodes);¹⁴ these resulted in more than 3.3 million bed days in hospital in England. It is estimated that in 2008/09, the direct care cost of stroke was at least £3billion annually, within a wider economic cost of about £8billion in England.¹⁵
1.2.2 Sample size

Data collection involved an interview, followed by a visit from a specially trained nurse for all those who agreed. The nurse visit included measurements and collection of blood and saliva samples, as well as additional questions.

A total of 8,610 adults and 2,007 children were interviewed. A household response rate of 66% was achieved. 5,715 adults and 1,257 children had a nurse visit. It should be noted that, for the first time for several years, there was no child boost sample in 2011. Thus the scope for analyses of some data for children may be limited by relatively small sample sizes.

1.3 Ethical approval

Ethical approval for the 2011 survey was obtained from the Oxford A Research Ethics Committee (reference number 10/H0604/56).

1.4 2011 survey design

1.4.1 The sample

The survey was designed to yield a representative sample of the general population living in private households in England. More detailed information about survey design is presented in Volume 2 of this report, Chapters 2-7.

Those living in institutions were outside the scope of the survey. This should be borne in mind when considering survey findings since the institutional population is likely to be older and, on average, less healthy than those living in private households.

A random sample of 8,992 addresses was selected from the Postcode Address File (PAF), using a multi-stage sample design with appropriate stratification. Addresses in smaller strategic health authorities (North East, East Midlands, South East Coast and South Central) were over-sampled to provide a minimum sample size (of approximately 700 adults) in each strategic health authority for regional analyses. 562 postcode sectors were selected, and 16 addresses were issued in each.

Where an address was found to have multiple dwelling units, one was selected at random. Where there were multiple households at a dwelling unit, a single household was selected at random.

Each individual within a selected household was eligible for inclusion. Where there were more than two children in a household, two were randomly selected for inclusion, to limit the burden on any household.

1.4.2 Fieldwork

Interview

A letter stating the purpose of the survey was sent to each sampled address before the interviewer visited. The interviewer sought the permission of each eligible selected adult in the household to be interviewed, and both parents’ and children’s consent to interview selected children aged up to 15.

Computer assisted interviews were conducted. The content of the interview is detailed in Volume 2, Chapter 3; full documentation is provided in the Appendices to Volume 2.

Adults were asked core modules of questions on general health, alcohol consumption, smoking and fruit and vegetable consumption. A new core module on social care was introduced, with adults aged 65 and over being asked about receipt of social care, and all adults aged 16 and over being asked about provision of social care. Participants were also asked about cardiovascular disease, chronic pain and dental health. Additional questions
on regular drinking were included to supplement core questions about the heaviest drinking day in the last week and frequency of alcohol consumption. Self-reported height and weight was established early in the interview, to provide a comparison with the height and weight measurements which were taken later.

Children aged 13-15 were interviewed themselves, and parents of children aged 0-12 were asked about their children, with the interview including questions on general health and fruit and vegetable consumption.

Adults and children aged 8-15 were asked to fill in a self-completion booklet during the interview; this covered attitudes to personal health and lifestyle (to define Healthy Foundations segments\(^1\)), the Warwick Edinburgh mental well-being scale (WEMWBS) and EQ-5D for adults aged 16 and over. For children and some young adults details of drinking and smoking were also collected by self-completion.

In addition, parents of children aged 4-15 selected for the survey were asked to fill in the strengths and difficulties questionnaire about their child or children. This included a question about the parent’s perception of their child’s weight.

Height and weight measurements were taken at the end of the interview.

At the end of the interview, interviewers placed a drinking diary with all eligible adults aged 18 and over (those who had drunk alcohol in the last 12 months). The drinking diary asked them to record the types and amounts of alcohol they consumed in the seven days following the interview.

**Nurse visit**

Nurse visits were offered to all participants. At the nurse visit, questions were asked about prescribed medication, vitamin supplements and use of nicotine replacement treatments. For infants, additional information was collected on immunisations and measurements at birth. Nurses took waist and hip measurements for those aged 11 and over and measured the blood pressure of those aged 5 and over.

Non-fasting blood samples (for the analysis of total and HDL cholesterol and glycated haemoglobin) were taken from adults aged 16 and over. Samples of saliva (for the analysis of cotinine, a derivative of nicotine) were taken from participants aged 4 and over. Written consent was obtained for these samples.

**Interview length**

Interviews could be conducted with between one and four persons per session; the most common session types were with one or two individuals. Interview length for a single adult averaged around 50 minutes, and for two people (including at least one adult) interview length averaged around 60 minutes. Nurse visits were conducted with a single individual at a time, and the nurse visit for adults who took part in all the measurements averaged 30 minutes.

Interviews with children were shorter than with adults, and the interview length varied with age as some modules were only asked of older children. When children were interviewed without adults, the average interview length was around 10-15 minutes for a single child aged 8-15, and around 20 minutes for two children of this age.

### 1.5 Survey response

Interviews were held in 5,338 households with 8,610 adults aged 16 and over, and 2,007 children aged 0-15. Among the general population sample, 5,715 adults and 1,257 children had a nurse visit. More detailed information on survey response can be found in Volume 2, Chapter 6.

Response to the survey can be calculated in two ways: at a household level and at an individual level. Interviews were carried out at 66% of sampled eligible households (after
removing vacant addresses etc). Interviews were obtained with 87% of adults and 93% of (sampled) children in ‘co-operating’ households (where at least one person was interviewed).

The assumption is made that households where the number of adults and children was not known contained, on average, the same number of adults and children as households where it was known. On this basis, the individual response rate, based on all eligible households, was estimated to be 59% among adults and 65% among (sampled) children.

Table 1A shows individual response rates to the different stages of the survey for adults. The first column gives the individual response rates based on all adults in all eligible households, and the second column gives individual response rates for adults in co-operating households.

Table 1B shows the equivalent response rates to the different stages of the survey for children, with response rates based on all children in all eligible households in the first column, and response rates in co-operating households in the second column. Note that it is not possible to estimate response rates based on all eligible children for saliva samples, waist and hip and blood pressure measurements, as only certain age groups are eligible for these.17 The response rates for these measures in co-operating households are based on the appropriate age groups.

### 1.6 Data analysis

#### 1.6.1 Introduction

The HSE is a cross-sectional survey of the population. It examines associations between health states, personal characteristics and behaviour. However, such associations do not necessarily imply causality. In particular, associations between current health states and current behaviour need careful interpretation, as current health may reflect past, rather than present, behaviour. Similarly, current behaviour may be influenced by advice or treatment for particular health conditions.

#### 1.6.2 Weighting the samples

**The overall sample**

Weights were calculated at the household level and at the individual participant level. The household weight corrected for the probability of selection where additional dwelling units or households were identified at a selected address. Calibration weighting was also used for
adults to reduce non-response bias resulting from differential non-response at the household level, based on the age and sex profile of the residents and the region in which the household was situated. 87% of adults in participating households were interviewed, and weights were therefore also calculated at an individual level to correct for non-response within participating households.

**The child sample**

Weights for the child sample adjust for the probability of selection for children in larger households, and ensure that the profile of children selected for the survey matches the profile of all children. As the level of response for obtaining a child interview in participating households in the core sample was relatively high (93%), no additional non-response weighting was undertaken for the sample of children.

**Non-response weighting for the nurse visit and samples**

Further weights were calculated, as well as weights to allow for non-response at the interview stage. These were to adjust for non-response to the nurse visit, obtaining a blood or saliva sample, and completing a drinking diary.

Further details on the weighting procedures are given in Volume 2, Chapter 7.

### 1.6.3 Weighted and unweighted data and bases in report tables

All 2011 data in this report are weighted (apart from response tables). Both weighted and unweighted bases are given in each table in the report. The unweighted bases show the number of participants involved. The weighted bases show the relative sizes of the various sample elements after weighting, reflecting their proportions in the population in England, so that data from different columns can be combined in their correct proportions.

Non-response weighting was introduced to the HSE in 2003, and has been used in all subsequent years. In this report, chapters focus on 2011 results, but in a small number of chapters trend tables are presented. In tables for adults, results from 2003 onwards are weighted. For tables showing trends in children’s data, results for years up to 2002 have selection weighting only, and results for 2003 onwards have both selection and non-response weighting.

### 1.6.4 Age as an analysis variable

Age is a continuous variable but results are presented in this report by age groups. Age in HSE reports always refers to age at last birthday.

### 1.6.5 Age standardisation

Adult data have been age-standardised throughout the 2011 report to allow comparisons between groups 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.

It should be noted that all analyses in the report are presented separately for men and women. All age standardisation has been undertaken separately within each sex, expressing male data to the overall male population and female data to the overall female population. When comparing data for the two sexes, it should be remembered that no age standardisation has been introduced to remove the effects of the sexes’ different age distributions.

Details of the direct standardisation method used are given in Volume 2, Chapter 8.

### 1.6.6 Standard analysis breakdowns

For most tables in this report, three standard analysis breakdowns have been used as well as age. These are strategic health authority (SHA), equivalised household income and Index of Multiple Deprivation.
**Strategic health authority**

From July 2006 a new configuration of strategic health authorities (SHAs) was introduced in England, reducing the number from 28 to 10 SHAs. The boundaries were the same as those of Government Office Regions with the exception of South East Coast SHA and South Central SHA, which were combined into the South East Government Office Region.

Both observed and age-standardised data are provided by SHA in the tables. Observed data can be used to examine actual prevalence or mean values within a region, needed, for example, for planning services; age-standardised data are required for comparisons between areas to exclude age-related effects, and are discussed in the report text.

It should be noted that base sizes for SHAs are often relatively small, and caution should be exercised in examining regional differences. In 2011, the smaller strategic health authorities (the North East, East Midlands, South East Coast and South Central) were over-sampled to provide a minimum unweighted sample size of approximately 700 adults; the weighting process adjusted for this.

**Equivalised household income**

The second standard breakdown is equivalised household income. Household income was established by means of a show-card (see field documents in Volume 2, Appendix A) on which banded incomes were presented. This can be used as an analysis variable, but there has been increasing interest recently in using measures of equivalised income that adjust income to take account of the number of persons in the household. To derive this, each household member is given a score based, for adults, on the number of adults apart from the household reference person, and for dependent children, on their age. The total household income is divided by the sum of the scores to provide the measure of equivalised household income. All individuals in each household were allocated to the equivalised household income quintile to which their household had been allocated.

It should be noted that around 19% of adults live in households where no information is provided on income, and are therefore excluded from the breakdown by equivalised household income.

Further details about equivalised household income are given in the Glossary in Volume 2, Appendix C.

**Index of Multiple Deprivation**

The Index of Multiple Deprivation 2010 combines a number of indicators, chosen to cover a range of economic, social and housing issues, into a single deprivation score for each small area in England. This allows each area to be ranked relative to others according to their level of deprivation. Seven distinct domains have been identified in the English Indices of Deprivation; Income Deprivation, Employment Deprivation, Health Deprivation and Disability, Education Skills and Training Deprivation, Barriers to Housing and Services, Living Environment Deprivation, and Crime. Individual domains can be used in isolation as measures of each specific form of deprivation, as well as using the single overall Index of Multiple Deprivation (IMD).

The Index is used widely to analyse patterns of deprivation, identify areas that would benefit from special initiatives or programmes and as a tool to determine eligibility for specific funding streams. In this report quintiles of IMD are used to give an area-level measure of socio-economic status, as opposed to the household-level measure of equivalised household income.

**1.6.7 Statistical information**

The HSE 2011 used a clustered, stratified multi-stage sample design. In addition, weights were applied when obtaining survey estimates. One of the effects of using the complex design and weighting is that standard errors for survey estimates are generally higher than the standard errors that would be derived from an unweighted simple random sample of the same size. The calculations of standard errors shown in tables, and comments on statistical
significance throughout the report, have taken the clustering, stratification and weighting into account. Full details of the sample design and weighting are given in Volume 2, Methods and documentation.

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 complex design. The true standard errors and defts for the HSE 2011 have been calculated for selected survey estimates presented in the topic chapters, and are shown in Volume 2, Tables 14-24.

1.6.8 Presentation of results

Commentary in the report highlights differences that are statistically significant at the 95% level. It should be noted that statistical significance is not intended to imply substantive importance.

A summary of findings is presented at the beginning of each chapter. Following the chapter introduction and details of methods and definitions, the results are outlined in detail; a discussion section at the end of most chapters makes comparisons with other data sources and trend data, and sets the results in a broader context. Tables at the end show the results discussed in the chapter, and as well as prevalence percentages, means and standard errors are presented when appropriate.

1.6.9 Availability of further data

As with surveys from previous years, a copy of the HSE 2011 data will be deposited at the UK Data Archive at the University of Essex. Copies of anonymised data files can be made available for specific research projects through the Archive.19

In addition, trend tables showing data for variables collected every year (‘core’ modules) for adults and children are available on the Health and Social Care Information Centre’s website.20

1.7 Content of this report

This volume contains chapters with substantive results from the HSE 2011, and is one of two volumes based on the survey, published as a set as ‘The Health Survey for England 2011’:

Volume 1: Health, social care and lifestyles21
Volume 2: Methods and documentation.22

Volume 2 gives full details of the survey methods and documentation. This includes a description of the survey design and response rates; sampling errors; analysis of non-response; description of weighting procedures; and information on laboratory techniques and quality control of analysis of blood and saliva samples. Appendices to Volume 2 are as follows:

Appendix A: Questions asked by interviewers and nurses and copies of other key fieldwork documents
Appendix B: Protocols for measurements
Appendix C: Glossary.

References and notes


www.skillsforcare.org.uk/research/research_reports/size_and_structure_2011.aspx


17 The base for all eligible children has to be estimated from information gathered as interviewers attempt to make contact with each selected household. There are some households where no information can be obtained, and assumptions have to be made to estimate the total number of eligible people living in them, to provide a denominator to calculate the overall response rate. While further assumptions can be made about the sex breakdown of adults and children in such households, no attempt has been made to estimate the age profiles. See Volume 2, Chapter 6, sections 6.3.1 and 6.4.1 for more details of how the overall response rate is calculated.


19 www.esds.ac.uk/government/hse/

20 www.ic.nhs.uk/pubs/hse11trends


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Research Department of Epidemiology and Public Health, UCL (University College London)
www.ucl.ac.uk/epidemiology

The Research Department of Epidemiology and Public Health, chaired by Professor Richard Watt, is a leading centre for research into the social determinants of health. The department has a strong interdisciplinary structure. The Department houses 180 staff in 12 main research groups, including the Joint Health Surveys Unit, part of the Health and Social Surveys Research Group. Collaborative research is conducted through the International Institute for Society and Health and across UCL. The Department’s research programme is concerned particularly with social factors in health and illness and inequalities in these, including national cross-sectional surveys of health and behaviour (such as diet), longitudinal studies of cardiovascular disease (Whitehall studies) and the English Longitudinal Study of Ageing (ELSA); international studies of cardiovascular disease and diabetes; socio-dental indicators of need; and the socio-economic and policy implications of an ageing population.