Health Survey for England 2016

Summary of key findings

Information and technology
for better health and care

Published 13 December 2017

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This summary report may be of interest to people working in public health, policy officials, commissioners of health and care services and to the general public to see the prevalence of obesity, some health conditions and health related behaviours like smoking and drinking alcohol.

Contents

About the Health Survey for England

The Health Survey for England (HSE) monitors trends in the nation's health and health-related behaviours.

HSE provides information about adults aged 16 and over, and children aged 0 to 15, living in private households in England. The survey consists of an interview, followed by a visit from a nurse who takes a number of measurements and samples. Adults and children aged 13 to 15 were interviewed in person, and parents of children aged 0 to 12 answered on behalf of their children for many topics. Children aged 8 to 15 filled in a self-completion booklet about their drinking and smoking behaviour.

The survey series covers some core topics every year, including general health, longstanding illness, key lifestyle behaviours that influence health, and social care. In 2016, there were additional questions for adults on the following topics:

- Physical activity
- Weight management
- Kidney and liver disease
- Problem gambling.

In total 8,011 adults (aged 16 and over) and 2,056 children (aged 0 to 15) were interviewed. 5,049 adults and 1,117 children had a nurse visit.

The 2016 Health Survey for England publication

This report summarises key findings from the Health Survey for England (HSE) 2016.

The full publication is online at https://digital.nhs.uk/pubs/hse2016.

In addition to this Summary, there are:

- Six topic reports with supporting tables
  - Adult overweight and obesity
  - Kidney and liver disease
  - Physical activity in adults
  - Prescribed medicines
  - Social care for older adults
  - Well-being and mental health
- A report and tables focusing on trends in children's health
- A report and tables focusing on trends in key statistics about adults' health
- Quick guide – introducing the survey
- A methods report, giving a full account of the technical aspects of the survey
- Excel tables showing true standard errors, confidence intervals and design effects for key survey measures
- A user guide explaining how estimates of the numbers of people with health related behaviours and in BMI categories were calculated
- Documentation, including questionnaires, field materials and protocols for conducting survey measures

Overweight and obesity

Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health. Obesity is associated with an increased risk of a number of common causes of disease and death including diabetes, cardiovascular disease and some cancers. For individuals classified as obese, the risk of poor health increases sharply with increasing body mass index (BMI).

Successive governments have introduced a number of initiatives to tackle obesity in England.

The prevalence of overweight and obesity is indicated by body mass index (BMI) as a measure of general obesity, and/or waist circumference as a measure of abdominal obesity.

BMI, defined as weight in kilograms divided by the square of the height in metres (kg/m^2) was calculated in order to group people into the following categories:

BMI (kg/m^2)	Description
Less than 18.5	Underweight
18.5 to less than 25	Normal
25 to less than 30	Overweight, not obese
30 or more	Obese, including morbidly obese
40 or more	Morbidly obese

Overweight and obesity

Overweight and obesity in adults

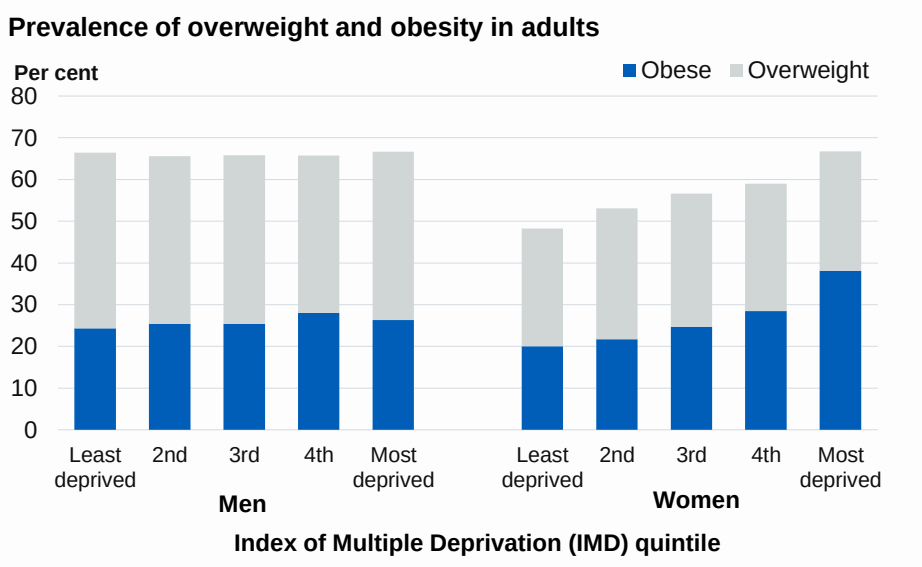
In 2016, 26% of men and 27% of women aged 16 and over in England were obese, and a further 40% of men and 30% of women were overweight.

26%

of adults were obese

The proportion of adults who were obese has been similar since 2010.

Obesity prevalence varied with area deprivation in women but not in men. 38% of women in the most deprived areas were obese, compared with 20% of women in the least deprived areas.



Overweight and obesity

Overweight and obesity in children

In 2016, 16% of children aged 2 to 15 were obese. This was the same for boys and girls.

A further 12% of children aged 2 to 15 were overweight (but not obese).

The prevalence of childhood obesity increased between 1995 and 2005. Since 2005 the rate of childhood obesity has levelled out.

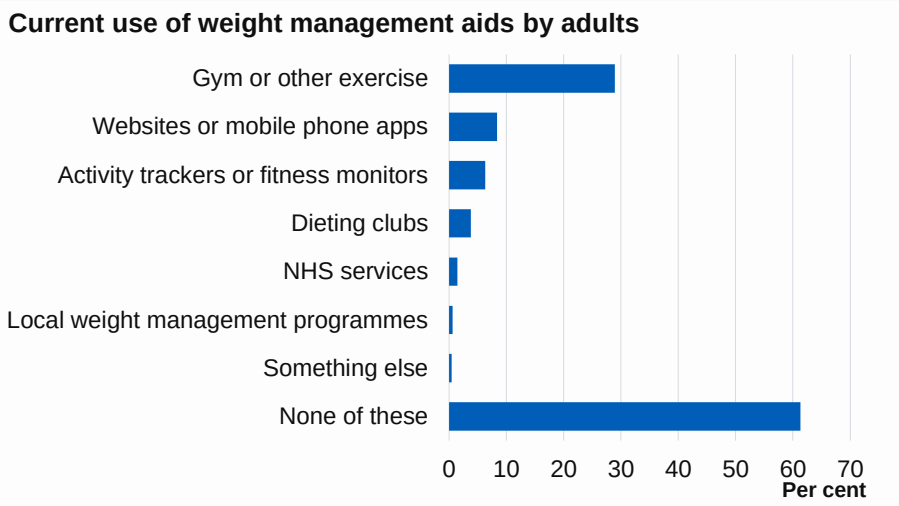
Of children aged 2 to 15:

16% were obese

12% were overweight (but not obese)

Weight management

All adult participants were asked about their use of aids or services to help manage or change their weight. 39% of all participants were using one of the aids or services asked about, most commonly going to the gym or doing exercise (29%).



Websites or mobile phone apps were used by 8% and activity trackers or fitness monitors by 6%.

Overall 47% of adults said they were trying to lose weight. Women were more likely than men to be trying to lose weight (54% and 39% respectively).

80% of obese women and 68% of obese men were trying to lose weight.

Half of the people who reported they were trying to lose weight were not using any of the aids or support asked about.

Physical activity

Physical activity is important for cardiovascular health. The UK analysis of the Global Burden of Diseases, Injuries and Risk Factors Study found low physical activity to be the fourth leading risk factor contributing to deaths and the burden of disease globally, ranking ahead of overweight or obesity. Physical inactivity was estimated to contribute to almost one in ten premature deaths from coronary heart disease (CHD) and one in six deaths from any cause.[1]

The UK guidelines for physical activity recommend that adults aged 19 and over should undertake a minimum of 150 minutes of moderate intensity activity per week in bouts of 10 minutes or more.[2] Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week, or combinations of moderate and vigorous intensity activity.

Compared with 2012, the proportion of adults aged 19 and over meeting these aerobic activity guidelines was similar for both men (66% in 2012 and 2016) and women (56% in 2012 and 58% in 2016).

Proportion aged 19 and over meeting aerobic physical activity guidelines in 2016

66% men

58% women

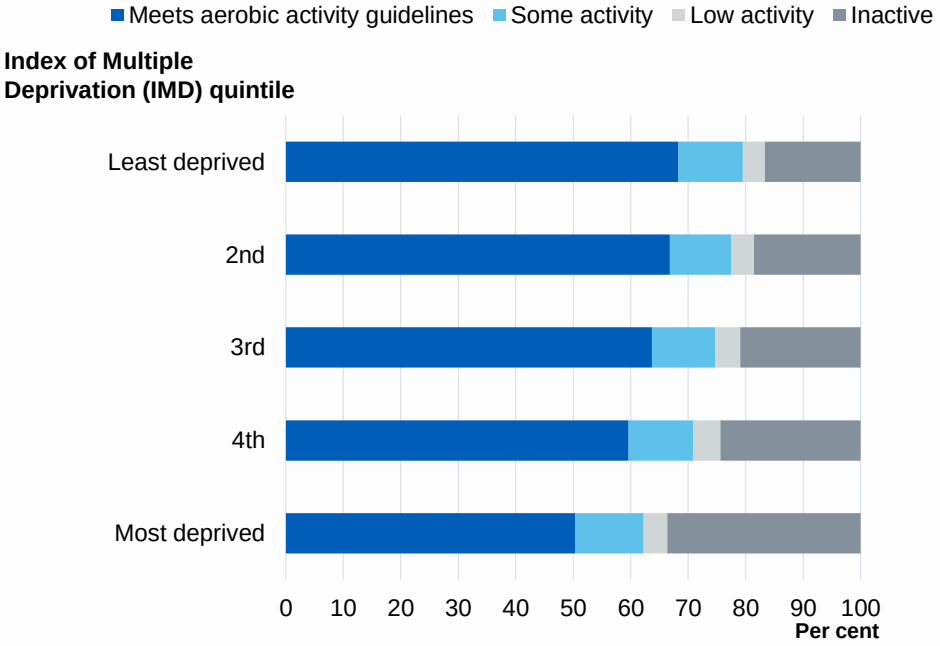
1 Lee IM, Shiroma EJ, Lobelo F, et al. Effect of physical inactivity on major non-communicable diseases worldwide. Lancet 2012;380:219-229.
2 Department of Health. Start Active, Stay Active, 2011 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216370/dh_128210.pdf

Physical activity

The survey collected data about the activities of people aged 16 and over. Some of these findings are reported here and more details are in the physical activity topic report.

The proportion of adults aged 16 and over who met the guidelines for aerobic activity varied by quintiles of the Index of Multiple Deprivation (IMD), ranging from 50% in the most deprived quintile to 68% in the least deprived quintile.

Summary activity levels among adults, by Index of Multiple Deprivation (IMD)



Physical activity

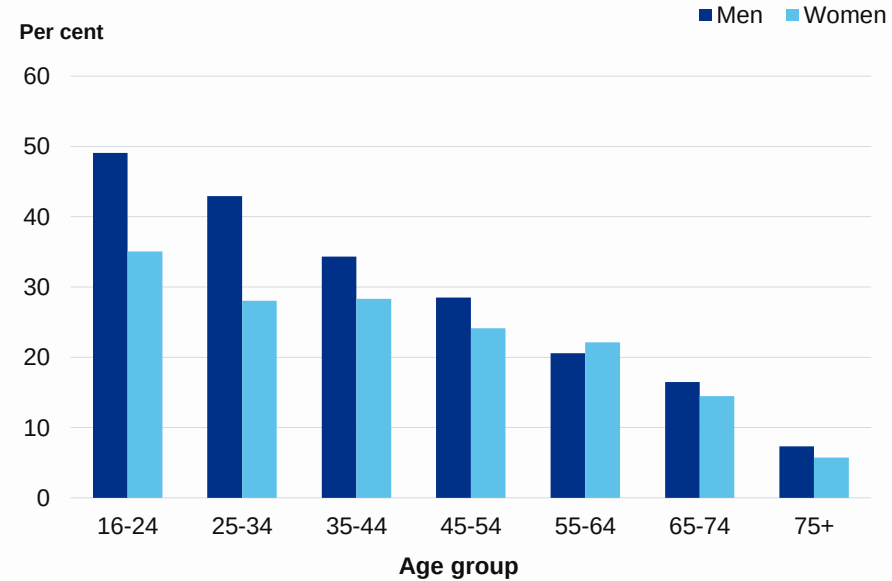
Adults are also recommended to undertake muscle-strengthening activities on at least two days per week to increase bone strength and muscular fitness.

26% of adults aged 19 and over met both the aerobic and muscle-strengthening guidelines; this was higher for men (30%) than for women (23%).

31% of men and 23% of women aged 16 and over met both the aerobic and muscle-strengthening guidelines.

The proportion meeting both the aerobic and muscle-strengthening guidelines decreased with age, more sharply for men than for women.

Proportion of adults meeting both the aerobic and muscle-strengthening guidelines



Sedentary time

The current UK physical activity guidelines recommend that all adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Among people aged 16 and over, men were more likely than women to spend six or more hours of total sedentary time (time spent watching TV and other sedentary time such as reading and computer use) per weekend day (40% and 35% respectively). This excludes sedentary time at their paid work.

The equivalent proportion per weekday was the same for men and women (29%).

The average number of hours spent sedentary, when not at their paid work, was higher for men than for women on both weekdays and weekend days.

Adults'[3] average number of hours spent sedentary when not at paid work

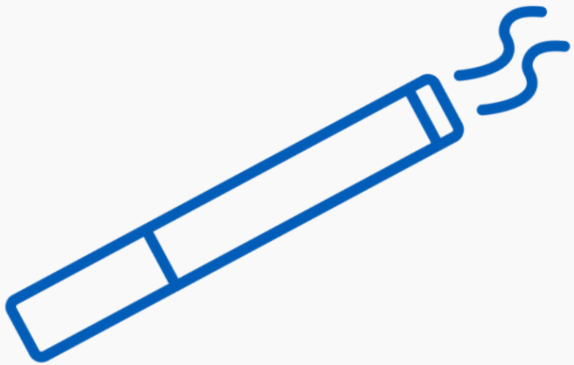
3 Aged 16 and over

Smoking prevalence

The World Health Organisation Report on the Global Tobacco Epidemic 2017 stated that tobacco use remains the leading cause of preventable illness and premature death in England and worldwide.[4]

Tobacco use contributed to around 21% of deaths in men and 13% of deaths in women aged over 35 in England in 2014.[5]

In 2017, the government published *Towards a smoke-free generation: a tobacco control plan*. This set out a five-year plan to reduce the harms of smoking, including a target to reduce the proportion of adults smoking to 12% or less by the end of 2022.[6]

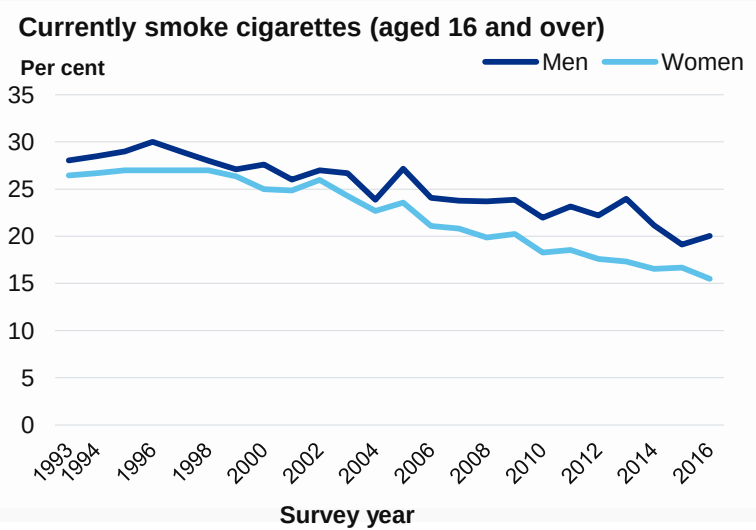


4 World Health Organisation, Switzerland, 2017. http://www.who.int/tobacco/global_report/2017/en/
5 Health and Social Care Information Centre. Statistics on Smoking, 2016. http://content.digital.nhs.uk/catalogue/PUB20781/stat-smok-eng-2016-rep.pdf
6 Department of Health, 2017. http://www.gov.uk/government/publications/towards-a-smoke-free-generation-tobacco-control-plan-for-england

Smoking prevalence

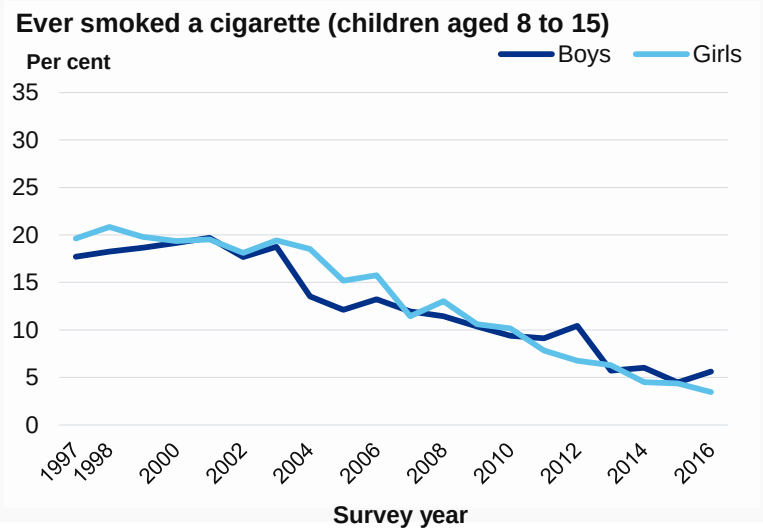
Smoking among adults

Since 1993 there has been a steady decline in the proportion of men and women who were current smokers, from 28% to 20% in 2016 among men, and from 26% to 16% among women.



Smoking among children

The proportion of children aged 8 to 15 who reported that they had ever smoked a cigarette decreased from 18% of boys and 20% of girls in 1997, to 6% of boys and 3% of girls in 2016.



Alcohol consumption

Most adults in Britain drink alcohol, at least occasionally, and alcohol is part of British social life. Alcohol has been identified as a causal factor in many medical conditions, including cancers, cirrhosis of the liver, high blood pressure and depression. Additionally, alcohol increases the risk of accidents, violence and injuries. There is interest and concern about the impact of alcohol consumption among policy makers, health professionals and the general public.

In 2015/2016 there were 1.1 million hospital admissions where an alcohol-related disease, injury or condition was the primary reason for admission or a secondary diagnosis, with men more likely than women to be admitted for these reasons.[7]

The current guidelines are that men and women should not regularly drink more than 14 units a week.[8] Drinking at this level is considered to be ‘low risk’.

Above this level is considered to be ‘increased risk’, for men this is now above 14 units and up to 50 units, and for women over 14 units and up to 35 units per week.

Men who regularly drink more than 50 units a week and women more than 35 units, are described as ‘higher risk drinkers’ and are considered to be at particular risk of alcohol-related health problems.

7 NHS Digital. Statistics on alcohol, England 2017. https://www.gov.uk/government/statistics/statistics-on-alcohol-england-2017
8 UK Chief Medical Officers’ Low Risk Drinking Guidelines, 2016 https://www.gov.uk/government/publications/alcohol-consumption-advice-on-low-risk-drinking

Alcohol consumption

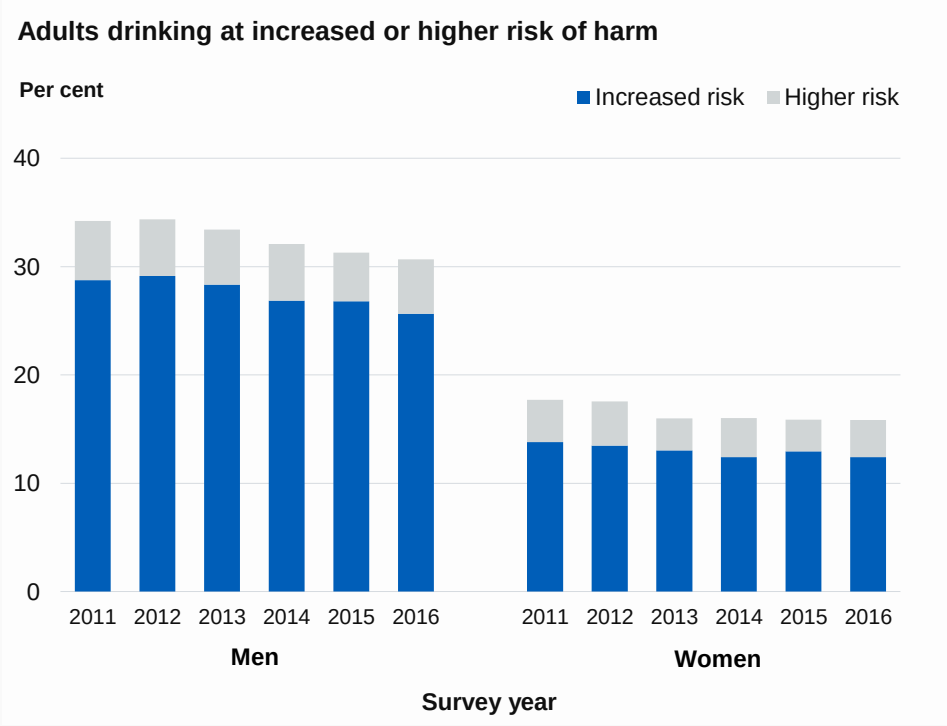
The adult figures in this summary are for people aged 16 and over, and are based on their usual weekly consumption of alcohol.

Adults drinking at increased or higher risk of harm in 2016:

31% men

16% women

The proportion of both men and women drinking at increased or higher risk of harm decreased between 2011 and 2016 (from 34% to 31% of men, and from 18% to 16% of women).



Alcohol consumption

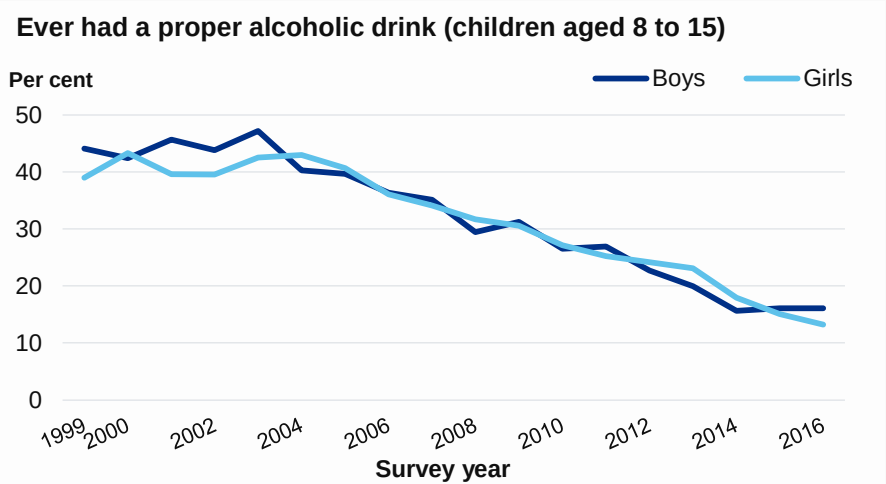
Alcohol consumption among children

The Chief Medical Officer's guidance on consumption of alcohol by children and young people is that alcohol consumption during any stage of childhood can have a detrimental effect on development, and young people may have a greater vulnerability than adults to the harmful effects of alcohol use. Therefore an alcohol-free childhood is the healthiest and best option, and children under 15 should not drink alcohol at all.[9]

15% of children aged 8 to 15 had ever had a proper alcoholic drink

HSE data show that drinking alcohol by under 16s has been falling.

The proportion of children aged 8 to 15 who reported ever having had a proper alcoholic drink (not just a sip) fell from 45% in 2003 to 15% in 2016.



9 Department of Health. Guidance on the consumption of alcohol by children and young people. A report by the Chief Medical Officer, 2009. http://webarchive.nationalarchives.gov.uk/20130107105354/http:/www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_110256.pdf

Fruit and vegetable consumption

The ‘5 a day’ guidelines state that everyone should eat at least five portions of a variety of fruit and vegetables every day.[10]

Adults

The proportions of men and women consuming five or more portions of fruit and vegetables a day have been similar since 2008 at around 24-25% of men and 27-29% of women.

Adults in 2016:

24% ate ‘5 a day’

3.4 average portions a day

28% ate ‘5 a day’

3.7 average portions a day

Children

In 2016, 16% of children aged between 5 and 15 ate five or more portions of fruit and vegetables a day.

The average number of portions of fruit and vegetables consumed by children aged 5 to 15 was 3.1 per day.

Children aged 5 to 15:

16% ate ‘5 a day’

3.1 average portions a day

10 See www.nhs.uk/livewell/5aday/pages/5adayhome.aspx/

Hypertension (high blood pressure)

Hypertension (high blood pressure) is an important public health challenge worldwide because of its high prevalence and the associated increase in risk of other diseases. It is one of the most important modifiable risk factors for cardiovascular, cerebrovascular and renal disease, and one of the most preventable and treatable causes of premature deaths worldwide.[11]

High blood pressure is defined as a systolic blood pressure (SBP) at or above 140mmHg or diastolic blood pressure (DBP) at or above 90mmHg or on medication prescribed for high blood pressure.

Participants were classified into one of four groups as follows:

- Normotensive untreated: SBP below 140mmHg and DBP below 90mmHg, not currently taking medication for blood pressure.
- Hypertensive controlled: SBP below 140mmHg and DBP below 90mmHg, currently taking medication for blood pressure.
- Hypertensive uncontrolled: SBP at or greater than 140mmHg and DBP at or greater than 90mmHg, currently taking medication for blood pressure.
- Hypertensive untreated: SBP at or greater than 140mmHg and DBP at or greater than 90mmHg, not currently taking medication for blood pressure.

11 World Health Organization. Global Health Observatory (GHO) Data, Raised blood pressure: Situation and Trends. 2016; http://www.who.int/gho/ncd/risk_factors/blood_pressure_prevalence_text/en/

Hypertension (high blood pressure)

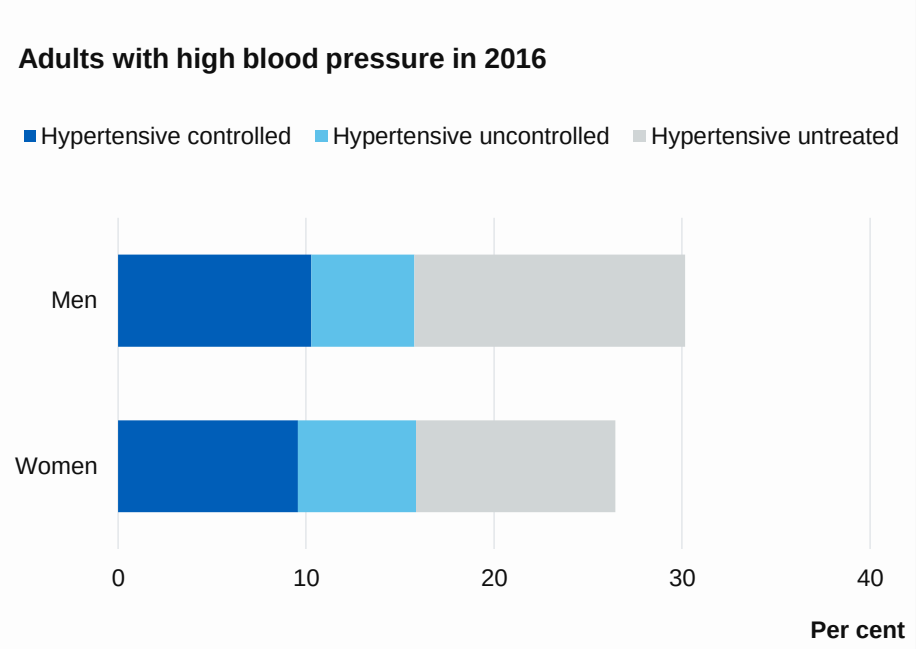
In 2016, 28% of adults in total had hypertension (high blood pressure). There has been little change in the last few years.

10% of adults had controlled hypertension.

12% of adults had untreated hypertension. This proportion has fallen since 2003 when it was 15%.

Over a quarter

of adults had high blood pressure



Well-being and mental health

Mental well-being is not just the absence of mental ill health; it includes the way that people feel about themselves and their lives.

Well-being is generally thought to be made up of things like the experience of positive emotions, people's perceptions that the things they do in their lives are meaningful and worthwhile, and life satisfaction. Mental well-being is a measure of the population's overall health status.[12]

Data on adults' well-being was collected using the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS).

WEMWBS is scored on a range from 14 to 70. In 2016, the average well-being scores for men and women aged 16 and over were 50.1 and 49.6 respectively.

Well-being declined slightly from 2015 when the scores were 51.7 for men and 51.5 for women.

Men and women living in more deprived areas had lower well-being scores, on average, than those living in less deprived areas.

Adults' mean well-being scores:

Least deprived areas[13]	Most deprived areas[13]
51.2	**48.0**

12 HM Government, No Health Without Mental Health, 2011 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213761/dh_124058.pdf
13 In the least/most deprived Index of Multiple Deprivation (IMD) quintile

Well-being and mental health

Data on self-reported mental health was collected from participants aged 16 and over using the General Health Questionnaire (GHQ-12). This is a short, 12 item screening tool asking about general levels of happiness, depression, anxiety, sleep disturbance and self-confidence. It is scored on a range from 0 to 12, with a score of 4 or more indicative of probable mental ill health.

The proportion of adults with probable mental ill health has increased since 2012, from 15% to 19%.

This increase is particularly apparent among young men aged between 16 and 34, and young women aged between 16 and 24.

GHQ-12 - probable mental ill health in adults:

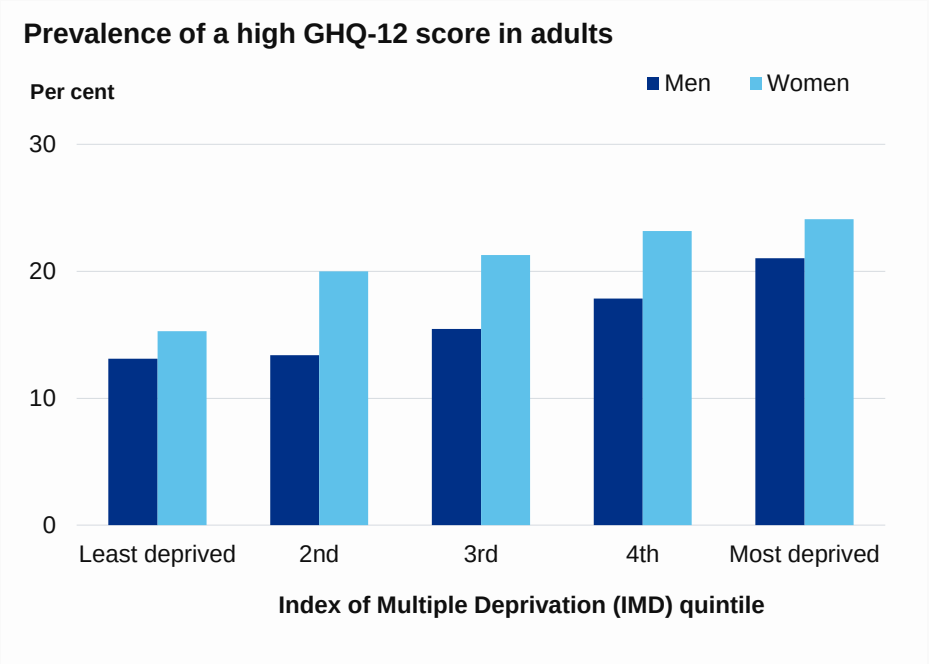
2012 **15%**

2016 **19%**

Well-being and mental health

Women were more likely than men to report a GHQ-12 score of 4 or more (21% of women and 16% of men).

Prevalence of high GHQ-12 scores, indicating probable mental ill health, increased with area deprivation among both men and women. In the least deprived areas, 13% of men and 15% of women had a GHQ-12 score of 4 or more, compared with 21% of men and 24% of women in the most deprived areas.



Kidney disease

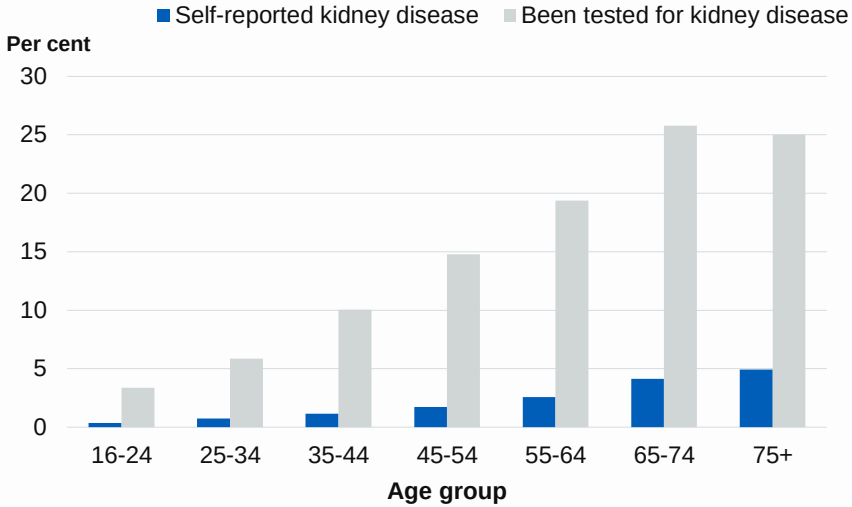
Chronic kidney disease is recognised as a global public health problem. Chronic kidney disease is a strong risk factor for all-cause and cardiovascular disease mortality.

In HSE 2016, 2% of adults reported having a chronic kidney disease as diagnosed by a doctor.

Older people were more likely to report a doctor-diagnosed chronic kidney disease, increasing from less than 0.5% among those aged 16 to 24 years to 5% in those aged 75 and over.

14% of adults reported having been tested for kidney disease. Among adults aged 75 and over, this was 25%.

Self-reported doctor-diagnosed, and having been tested for, chronic kidney disease among adults aged 16 and over



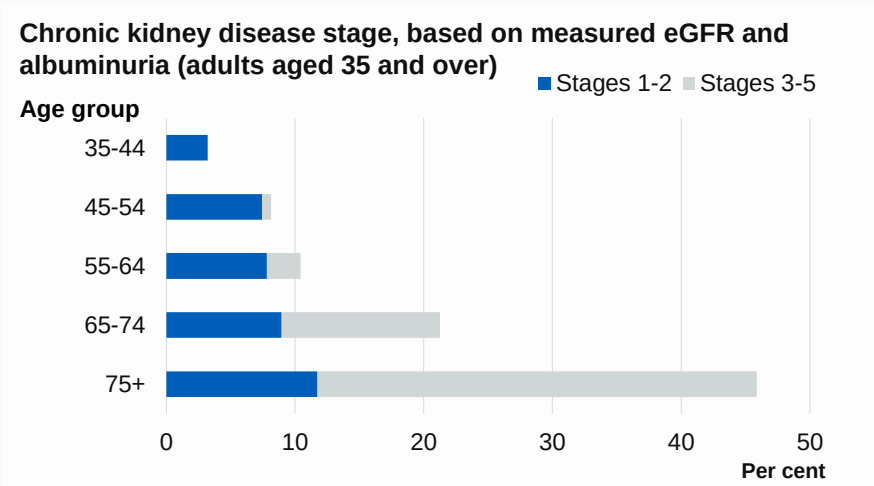
Kidney disease

Kidney function was assessed in two ways. Serum (blood) creatinine levels were used to estimate glomerular filtration rate (eGFR); and albuminuria, the presence of albumin in the urine, was measured using the albumin:creatinine ratio. A combination of the eGFR levels and urinary albumin excretion status was used to calculate chronic kidney disease stage in accordance with NICE definitions.[14]

Using these measurements, the survey found that 15% of adults aged 35 and over had any chronic kidney disease stage (stage 1 to 5), and 7% had the most severe stages (stage 3 to 5). No symptoms are found with the disease in its early stages (1,2,3a). Symptoms are more likely as severity increases and stage 5 may require dialysis or transplantation.

15% of adults aged 35 and over whose survey measurements indicated they had chronic kidney disease stages 3-5 reported being diagnosed.

The prevalence and severity of kidney disease increased among older adults; 34% of adults aged 75 and over had chronic kidney disease (stage 3 to 5).



14 NICE Clinical Guidance [CG182] . Chronic kidney disease in adults: assessment and management. NICE, 2015
https://www.nice.org.uk/guidance/cg182/chapter/1-recommendations

Liver disease

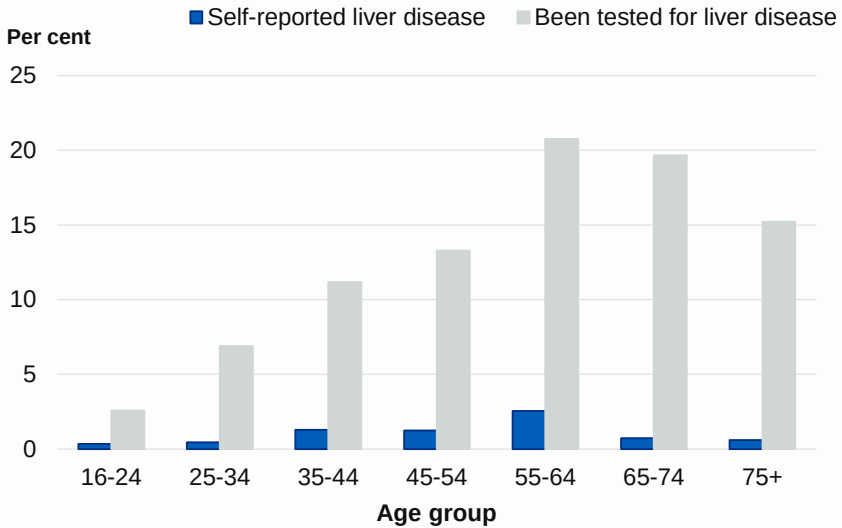
Chronic liver disease causes 2% of deaths in the UK but is the fifth commonest cause of death in the UK in people aged under 65.[15]

Liver disease mortality rates have increased fourfold in the past few decades, largely due to alcoholic liver disease.[16]

Among all adults in HSE 2016, 1% reported having doctor-diagnosed chronic liver disease. The prevalence was highest among those aged 55 to 64 (3%).

12% of adults reported that they had been tested for liver disease; among those aged 55 to 64 this was 21%.

Self-reported doctor-diagnosed, and having been tested for, chronic liver disease among adults aged 16 and over



15 National End of Life Care Intelligence Network. Deaths from liver disease, 2012. http://www.endoflifecare-intelligence.org.uk/view?rid=276
16 ONS. Alcohol-related deaths in the UK, 2016.
https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/alcoholrelateddeathsintheunitedkingdom/registeredin2016

Prescribed medicines

Prescribing is the most common clinical intervention in the NHS.[17] The total cost at list price of prescriptions dispensed in the community in 2016 was £9.2 billion. The number of prescribed medicines supplied in primary care in England has increased steadily year on year, and the total number of items dispensed in 2016 was over 1,104 million. The average number of prescription items per head of the population in 2016 was 20.0, compared with 19.8 items in the previous year.[18]

The HSE 2016 report includes analysis of the use of prescribed medicines in the last week by HSE 2015 and HSE 2016 participants.

In 2015/16, nearly half, 48%, of adults had taken at least one prescribed medicine in the last week, and almost a quarter, 24%, had taken three or more.

Prescribed medicine use increased with age, from 19% of young adults aged 16 to 24 to more than 90% of those aged 75 and over.

Prescribed medicine use (all adults):

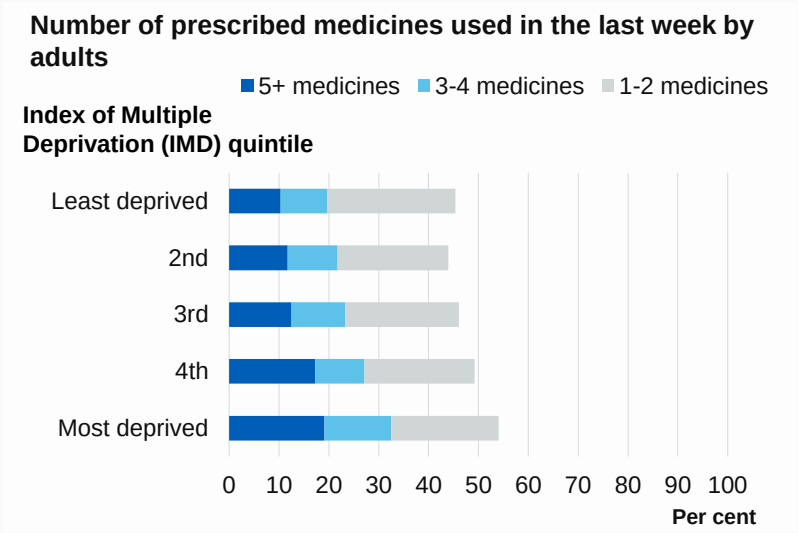
48% at least one

24% three or more

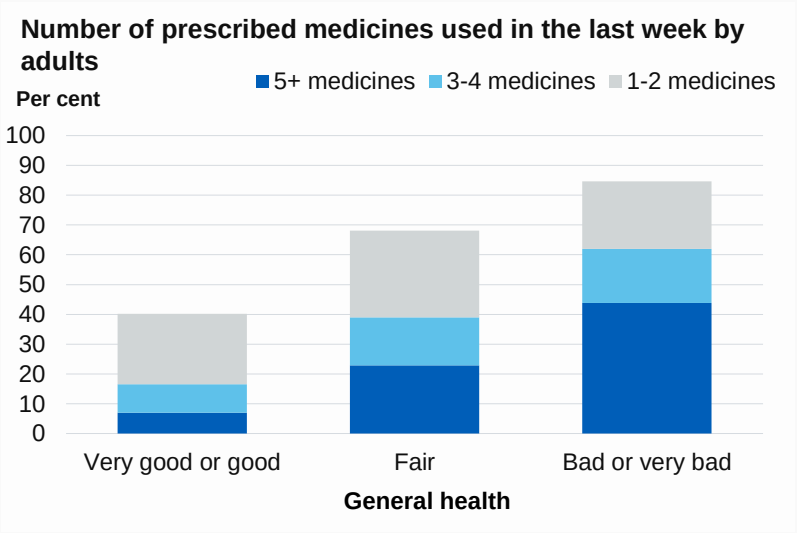
17 NICE Medicines optimisation (NG5), 2015. https://www.nice.org.uk/guidance/ng5
18 NHS Digital. Prescription Cost Analysis, 2016.http://www.gov.uk/government/statistics/prescription-cost-analysis-england-2016

Prescribed medicines

The prevalence of prescribed medicine use was higher in more deprived areas: 54% of adults in the most deprived fifth of areas took at least one medicine, compared with 45% in the least deprived areas.



Prescribed medicine use was higher among those with self-reported bad or very bad general health. 40% of those reporting very good or good general health had used at least one prescribed medicine, compared with 85% of those in bad or very bad general health.



Social care for older adults

Social care involves providing help with personal care and domestic tasks to enable people live as independently as possible. It lets people do the everyday things that most take for granted: things like getting out of bed, getting dressed and going to work; cooking meals; seeing friends; caring for their families; and being part of the community. Many who need care are older people, needing help because of problems associated with long-term physical or mental ill health, disability or problems relating to old age.

Questions on social care have been asked in the HSE since 2011. Participants aged 65 and over were asked whether they needed help with a list of Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs) listed below.

ADLs

Having a bath or shower
Using the toilet
Getting up and down stairs
Getting around indoors
Dressing or undressing
Getting in and out of bed
Washing face and hands
Eating, including cutting up food
Taking medicine

IADLs

Doing routine housework or laundry
Shopping for food
Getting out of the house
Doing paperwork or paying bills

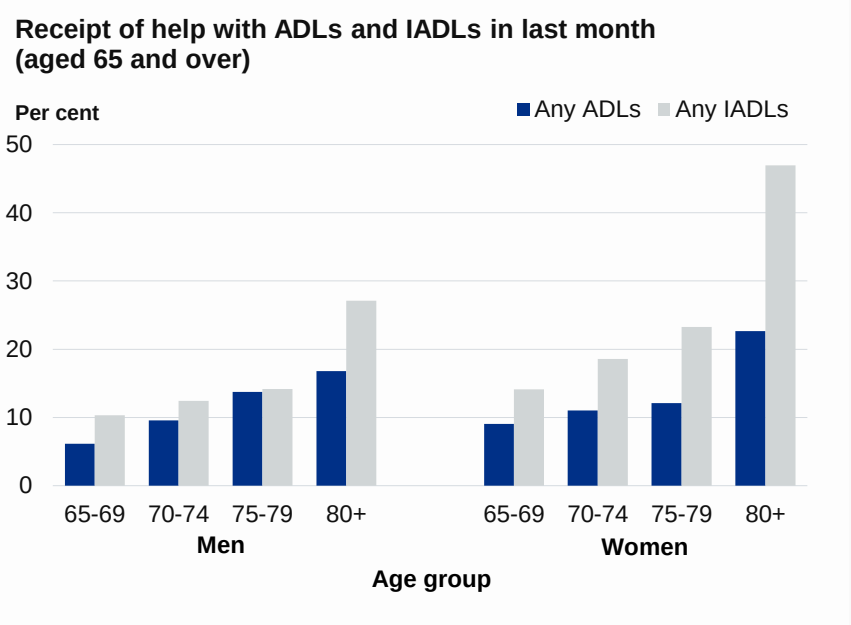
Social care for older adults

Need for and receipt of help

24% of men and 31% of women aged 65 and over needed help with at least one Activity of Daily Living (ADL), and 22% and 32% respectively needed help with at least one Instrumental Activity of Daily Living (IADL).

Overall, 11% of men and 14% of women aged 65 and over had received help with at least one ADL in the last month, and 15% and 26% respectively had received help with at least one IADL.

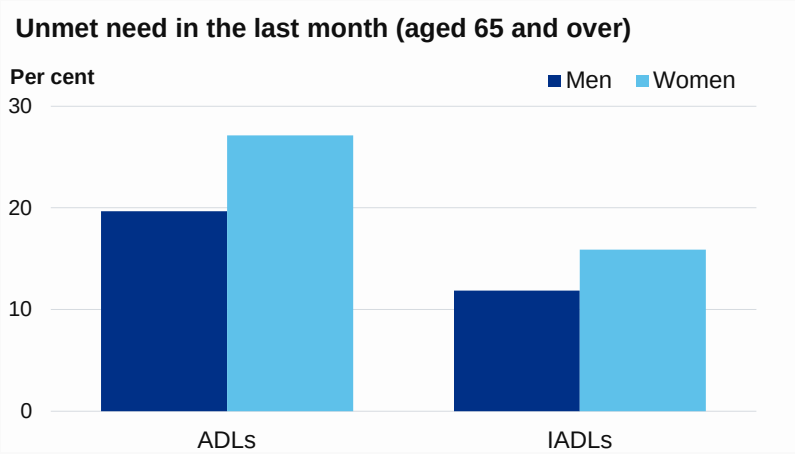
The proportions of men and women who needed help, and who received help, with ADLs and IADLs increased with age.



Social care for older adults

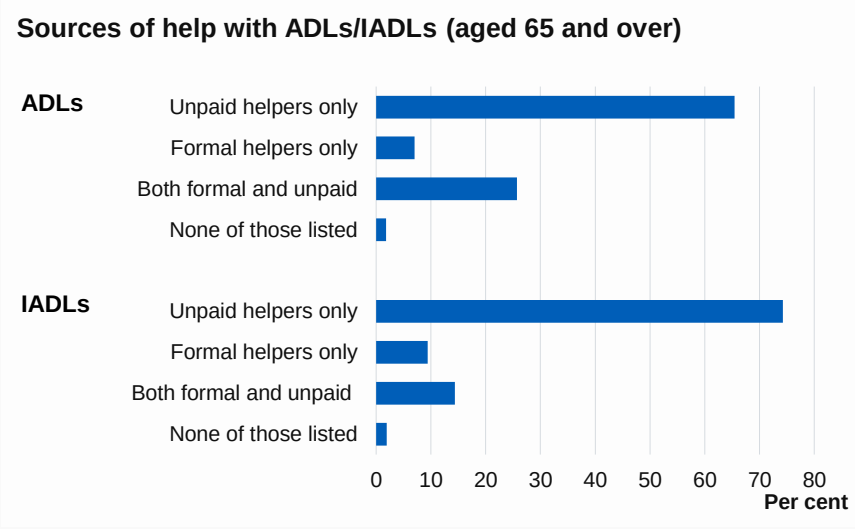
Unmet need for help

Not all those who needed help received any, and there was more unmet need with ADLs than IADLs. 20% of men and 27% of women aged 65 and over had some unmet need with at least one ADL, and 12% and 16% respectively had some unmet need with at least one IADL.



Sources of help

Most adults aged 65 and over who had received help for ADLs or IADLs in the past month, had received this from unpaid helpers only (65% for ADLs, 74% for IADLs).



Further information

Reports on HSE from 2004 onwards are available at https://digital.nhs.uk/pubsearch?q=HSE&s=s.

Copies of the anonymised datasets for each survey since 1993 are available through the UK Data Service at https://discover.ukdataservice.ac.uk/series/?sn=2000021. These cover answers to more questions than those included in the reports, and full documentation including a list of all the variables and derived variables.

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NatCen Social Research
35 Northampton Square
London EC1V 0AX

Telephone: 020 7250 1866
Email: info@natcen.ac.uk
Website: www.natcen.ac.uk

NatCen
Social Research that works for society

Research Department of Epidemiology and Public Health
UCL
1-19 Torrington Place, London WC1E 6BT

Telephone: 020 7679 5646
Website: www.ucl.ac.uk/hssrg

UCL

Authors: NatCen Social Research and UCL
Responsible Statistician: Alison Neave, Population Health

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enquiries@nhsdigital.nhs.uk

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