



## Adult physical activity data factsheet

### Key points

- The Health Survey for England 2012 showed that 67% of men and 55% of women meet new government recommendations for levels of physical activity (minimum of 150 minutes of moderate intensity per week in bouts of at least ten minutes), however there is some variation in levels of physical activity between regions across England
- Physical activity levels are related to household income. Men and women from the lowest income group are least likely to meet the government recommendations (Figure 4)
- The percentage of adults achieving previous recommended levels of physical activity (30 minutes of moderate physical activity, five times per week) increased steadily between 1997 and 2012, from 26% to 37% for all adults (Figure 7)
- According to the 2013 Active People Survey 7, the percentage of people doing one session (at least 30 minutes) of sport per week has increased slightly since 2005 for both men and women (Figure 9)
- The government recommends that adults spend minimal time being sedentary for long periods. The Health Survey for England 2012 showed that on weekdays 31% of men and 29% of women spend six hours or more being sedentary, increasing to 40% of men and 35% of women on weekend days (Figure 10)
- The National Travel Survey showed that average number of trips made walking has reduced in both men and women between 1995–97 and 2013 (Figure 12)

Most of the data in this factsheet is self-reported data that is known to be influenced by the respondent's ability to accurately recall and assess their physical activity. Accelerometer data provides standardised measures of physical activity. Although accelerometer data has advantages over self-reported data, it does have limitations, for example, accelerometers are less good at recording activities such as cycling and swimming.

## Current figures

New government recommendations now allow physical activity to be measured in bouts of ten minutes, where previously only bouts of 30 minutes or more were measured.

This section explores the proportion of adults meeting the government recommendations introduced in 2011 of at least 150 minutes of moderate intensity physical activity per week, according to self-reported data. Definitions of the activity level categories vary between surveys.

### Health Survey for England (HSE)

The HSE collected self-reported data on home activity, walks, sports and exercise and occupational physical activity undertaken in the four weeks prior to being surveyed, and an average was taken to obtain weekly levels of activity.

People were then classified into four groups as follows:

Category	Definition
<b>Meets recommendations</b>	A minimum of 150 minutes of moderate intensity physical activity (MPA) per week, or 75 minutes of vigorous intensity physical activity (VPA) per week or an equivalent combination of the two.
<b>Some activity</b>	60-149 minutes per week of MPA, 30-70 minutes per week of VPA, or an equivalent combination of these.
<b>Low activity</b>	30-59 minutes per week of MPA, 15-29 minutes per week of VPA, or an equivalent combination of these.
<b>Inactive</b>	Less than 30 minutes per week of MPA, less than 15 minutes per week of VPA, or a combination of these.

Data collected by the HSE in 2012 showed that overall, 67% of men and 55% of women reported levels of activity that met the recommendations.

## The Active People Survey (APS)

The APS data published by Sport England provides information on adult participation in sport and active recreation. The published data uses various indicators, notably the proportion taking part in sport at least once a week<sup>1</sup>.

In 2012 a number of refinements were made to questions in the APS on additional activities alongside sport and active recreation, in order to create a measure of participation in physical activity that is closer to the government recommendations. Analysis of this data is published by Public Health England, and is used to inform the Public Health Outcomes Framework. The activities included in this PHE analysis are: sport, recreational cycling, recreational walking, walking for active travel purposes, cycling for active travel purposes, dance and gardening. Occupational activity or work in the home is not included.

Four levels of participation are reported, taken as an average based on levels of activity over a 28-day period:

Category	Definition
<b>Meets recommendations</b>	A minimum of 150 minutes of moderate intensity physical activity (MPA) per week, or 75 minutes of vigorous intensity physical activity (VPA) per week or an equivalent combination of the two.
<b>Some activity</b>	90-149 minutes per week of MPA, 45-74 minutes per week of VPA, or an equivalent combination of these.
<b>Low activity</b>	30-89 minutes per week of MPA, 15-44 minutes per week of VPA, or an equivalent combination of these.
<b>Inactive</b>	Less than 30 minutes per week of MPA, less than 15 minutes per week of VPA, or a combination of these.

Local authority level data from the APS can also be found on the Public Health Outcomes Framework website<sup>1</sup>. The two indicators published look at (i) the proportion of adults meeting the recommendation of 150 minutes per week; and (ii) the proportion of inactive adults doing less than 30 minutes per week.

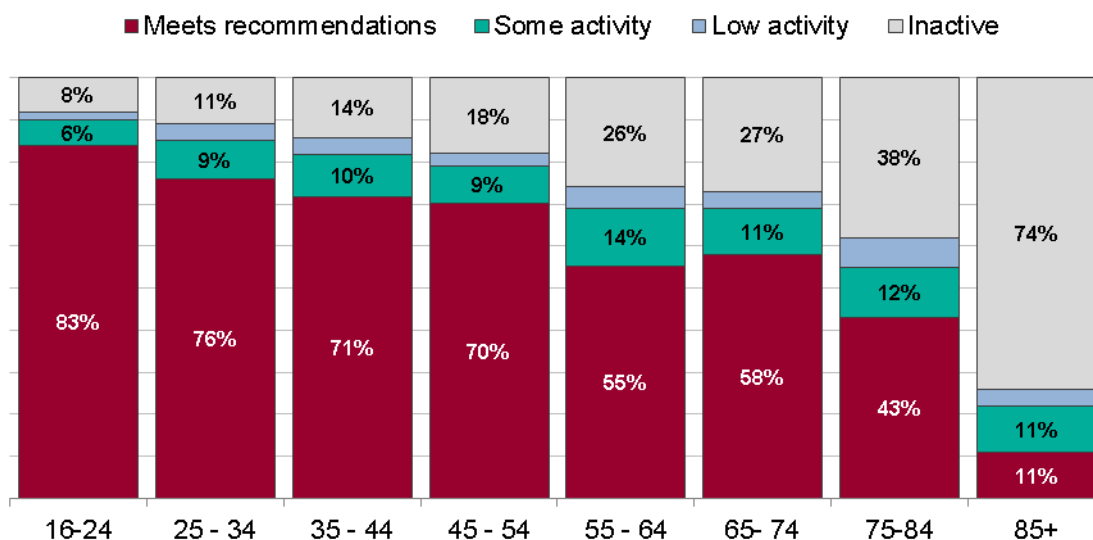
<sup>1</sup> See 'Data Sources' for further details

## By age and sex

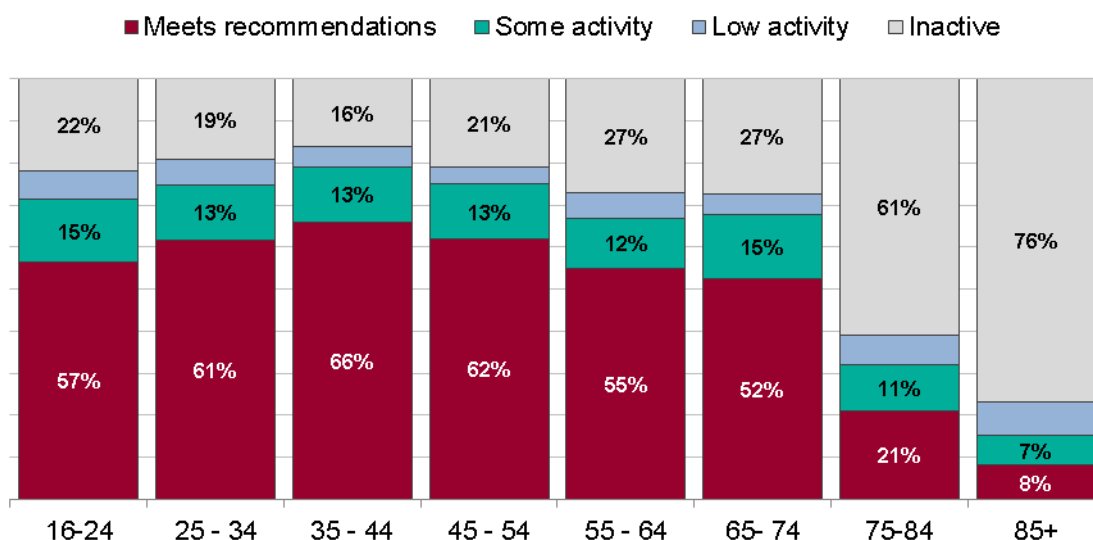
The proportion of men meeting the recommendations declines steeply with age from 16–24 through to 85 years and over, while the proportion in the ‘some activity’ group varies between age groups (Figure 1). Among women, the highest proportion meeting recommendations are age 35–44 (66%). The proportion of women in the ‘some activity’ group is stable until 75 years and over. Overall, 19% of men and 26% of women were recorded as inactive, with the highest proportions in the 85+ age group (74% and 76%, respectively).

**Figure 1: Summary activity levels, by age and sex, 2012 (base: aged 16 and over)**

### Men



### Women



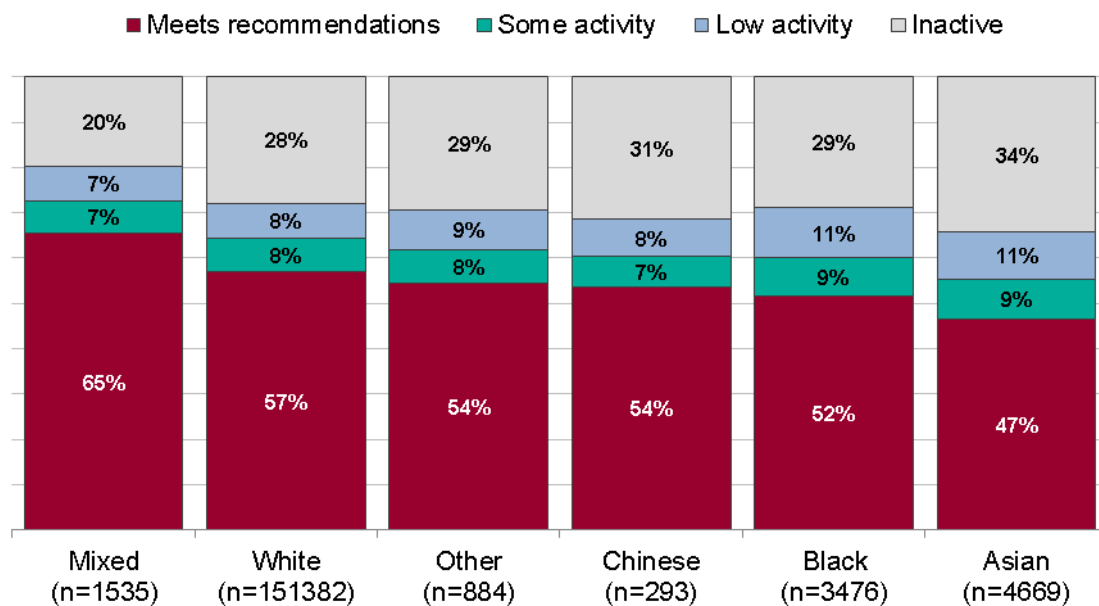
Source: Health Survey for England 2012 Report\*

## By ethnicity

The APS collects data on respondent's ethnicity, with a completion rate of 97% in 2013. This has allowed us to explore the variation in participation in recommended levels of physical activity between ethnic groups (Figure 2).

Respondents of mixed ethnicity had the highest proportion meeting the recommended levels of physical activity (65%) and the lowest proportion of inactivity recorded (20%). Asian respondents had the lowest proportion meeting the recommended levels (47%) and the highest proportion of inactivity where a valid ethnicity was recorded (34%). There is little variation in levels of some activity and low activity between ethnic groups (7–11%). These figures are not age standardised, so some of the differences between ethnic groups may be due to differences in the age structure.

**Figure 2: Summary activity levels, by ethnicity, 2013 (base: aged 16 and over)**



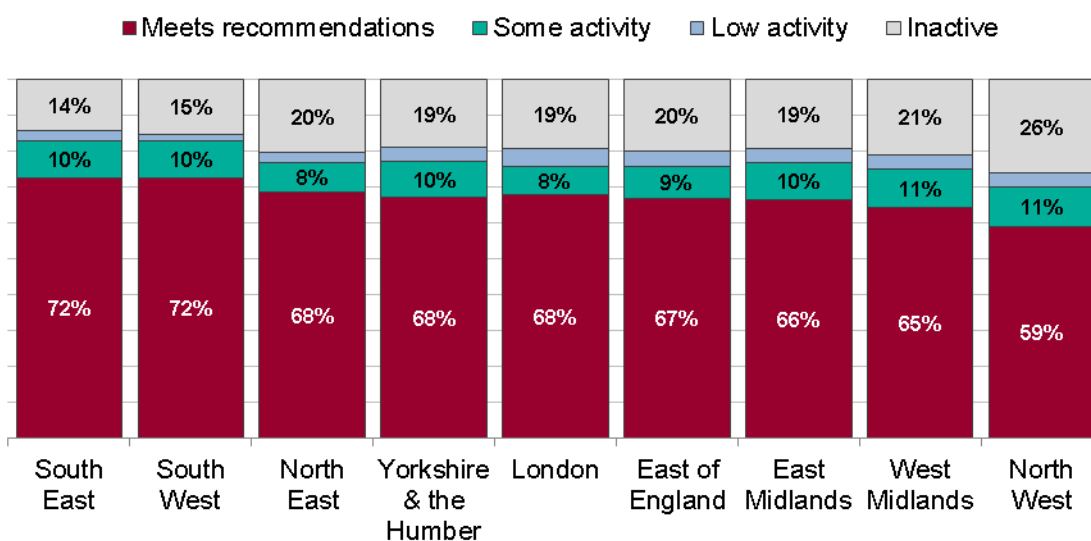
Source: Active People Survey 7/8 (2013), Sport England

## By region

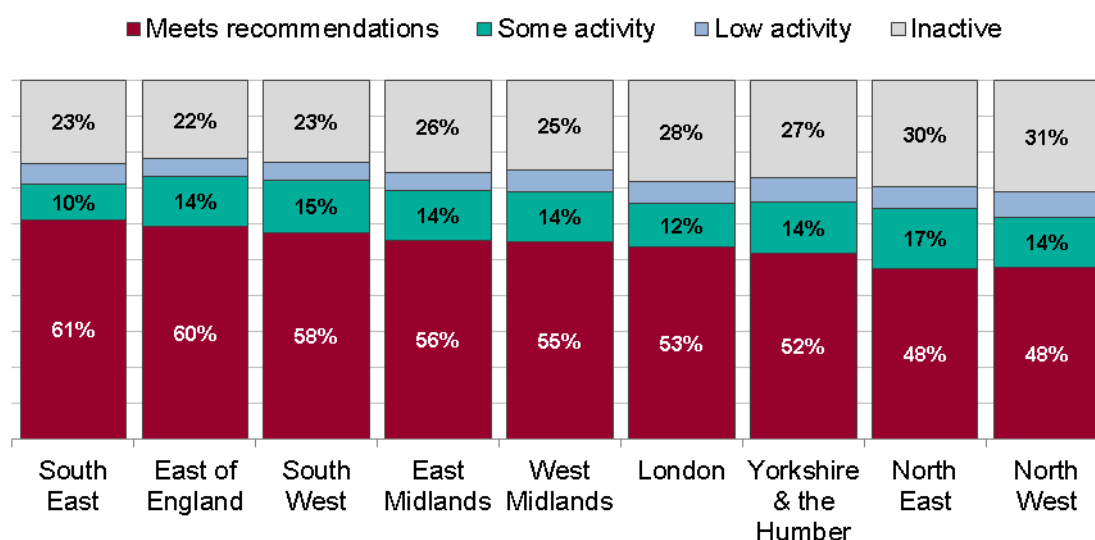
There is variation in physical activity levels across the country (Figure 3). South East England has the highest percentage of both men and women meeting recommended levels of physical activity (72% and 61%, respectively), while North West England had the lowest percentages (59% for men and 48% for women). In all regions levels of inactivity are higher among women than men.

**Figure 3: Age-standardised summary activity levels, by region and sex, 2012 (base: aged 16 and over)**

### Men



### Women



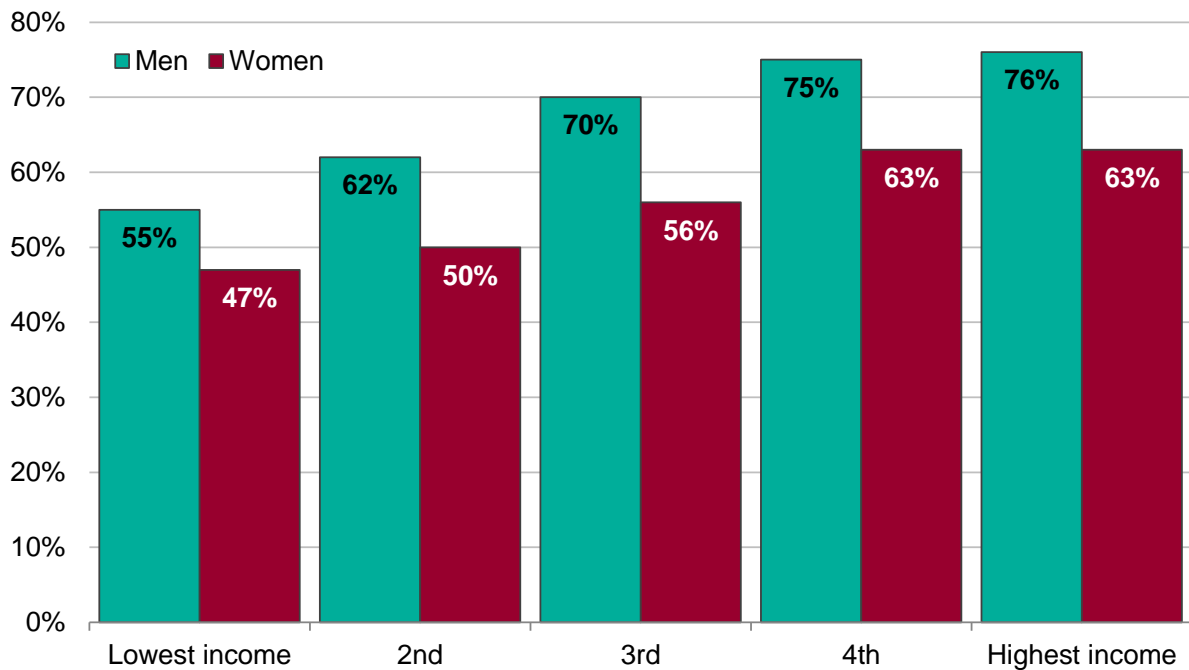
Source: Health Survey for England 2012 Report\*

**Standardisation** allows like to be compared with like, by making sure that differences in the number of events (for example individuals being physically active) observed in two or more populations are not due to differences in the age and sex profile between the different populations.

## By household income

Physical activity is related to household income. Figure 4 shows that those from the highest income households are more likely than those from the lowest income households to have met the government's recommendations. Both men and women in the lowest income quintile are least likely to have met the recommendations.

**Figure 4: Proportion of adults meeting physical activity recommendations, by equivalised<sup>a</sup> household income and sex, 2012 (base: aged 16 and over)**



Source: Health Survey for England 2012 Report \*

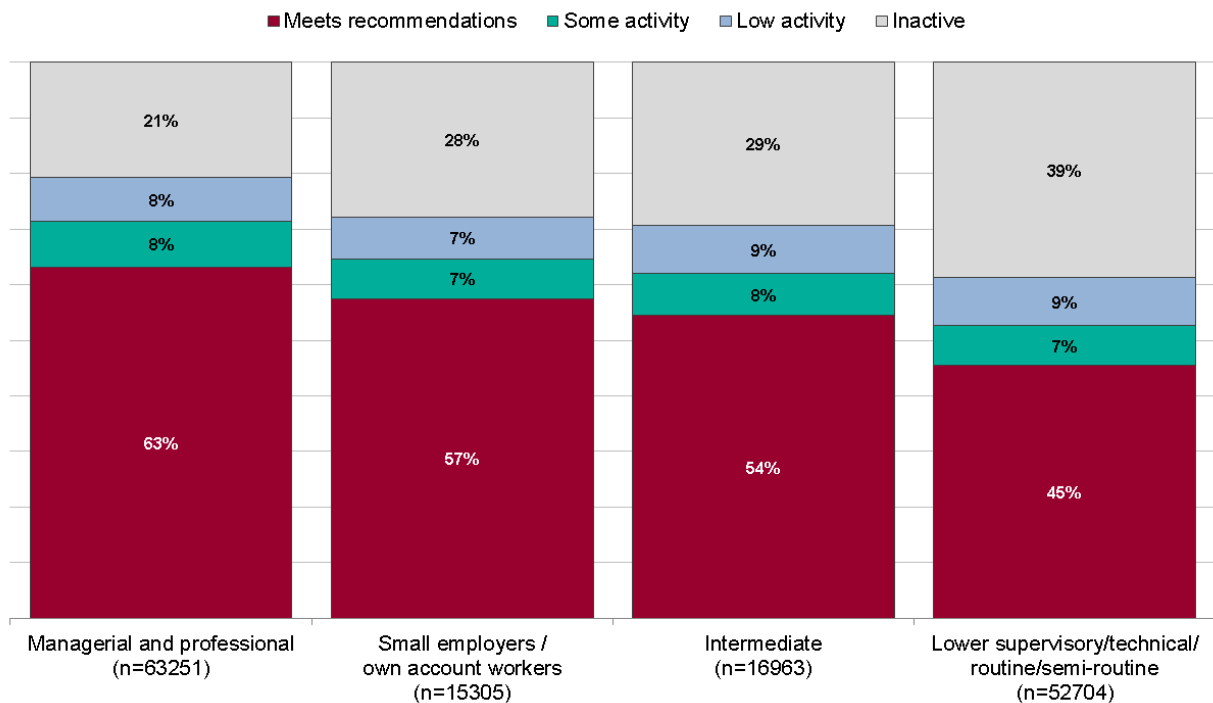
<sup>a</sup>Equivalised household income is a measure that takes account of the number of people in the household. For this analysis, households were split into five equal-sized groups banded by income level (income quintiles). Physical activity levels were compared between these groups.

## By social class

Social class is a classification of occupational groups based on skill levels, ranging from 'professional' to 'lower supervisory/technical/ routine /semi-routine/never-worked /long-term unemployed'.

The percentage of adults that achieve 150 minutes of physical activity per week differs according to social class. Figure 5 shows a general trend of decreasing percentage of people doing physical activity with decreasing occupational skill level, from professional occupations to unskilled manual occupations. The managerial and professional group participate in more physical activity than people from other occupational groups.

**Figure 5: Summary activity levels, by social class, 2013 (base: aged 16 and over)**



Source: Active People Survey 7/8 (2013), Sport England



## Objective measurement of physical activity - accelerometer data

The HSE included an objective measurement of physical activity for the first time in 2008. Accelerometer data is more objective and provides standardised measures of physical activity compared to self-report data. Although accelerometer data has advantages over self-reported data, it does have limitations; for example, accelerometers are less good at recording activities such as cycling and swimming.

The summary activity level classification for accelerometer data, for participants with seven valid days of data, is as follows:

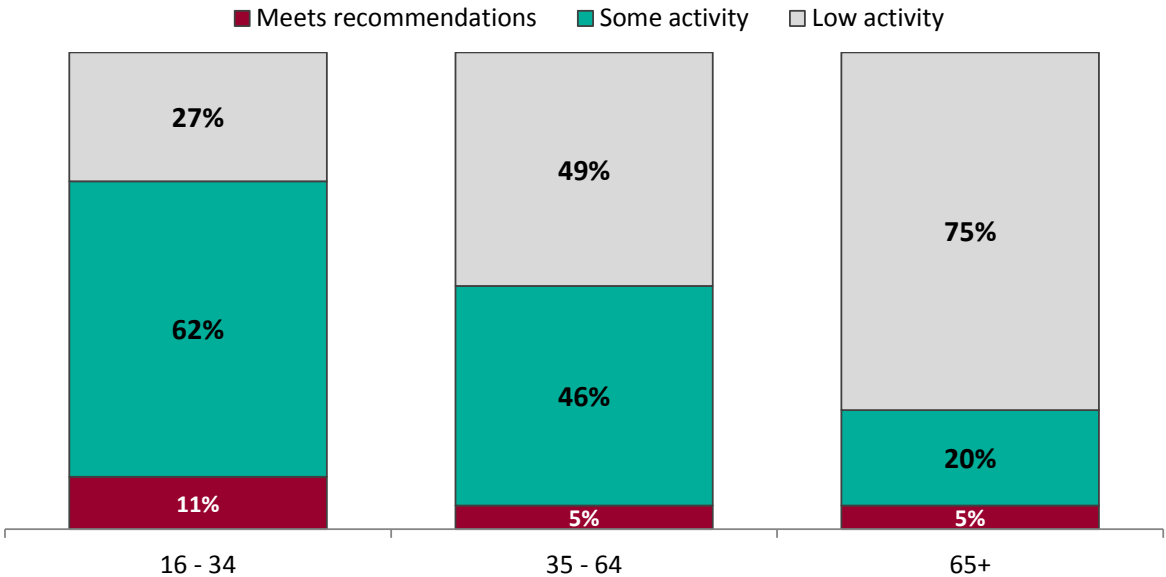
Category	Definition
<b>Meets recommendations</b>	30 minutes or more of moderate activity, on at least five of the seven days
<b>Some activity</b>	30 minutes or more of moderate or vigorous activity on one to four days
<b>Low activity</b>	Lower levels of activity

When accelerometers were used to assess physical activity, only 6% of men and 4% of women met the government’s recommendations, compared to 39% and 29% respectively from self-reported data in the same period. This suggests that both men and women tended to over-estimate their levels of activity when self-reporting, although the HSE also reported that where both self-reported and accelerometer data was collected for individuals there were also some cases of under-reporting (see data sources).

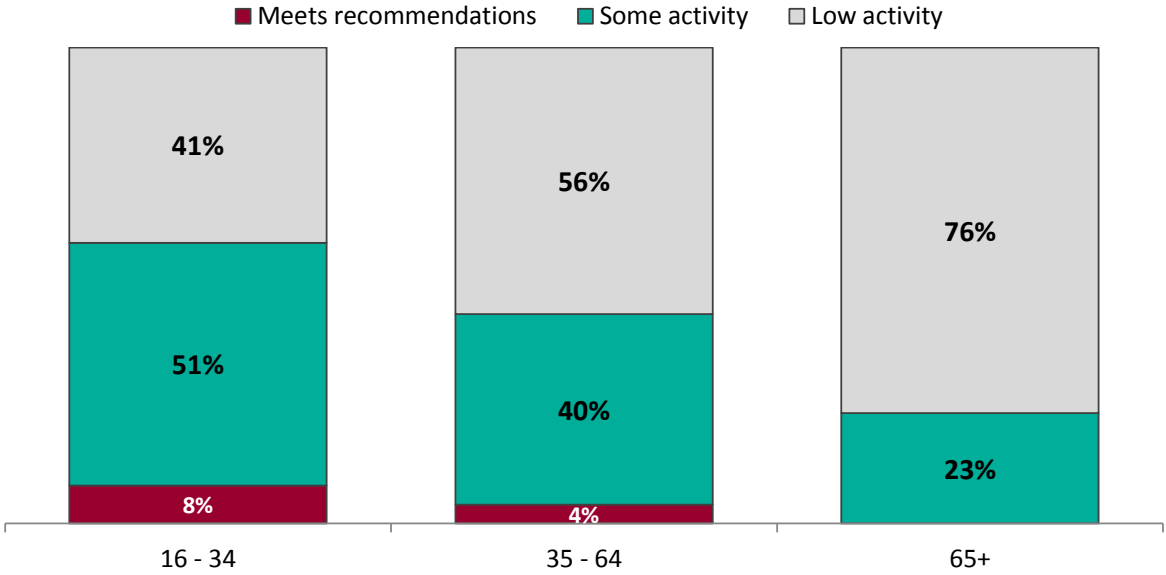
Figure 6 shows the percentage of men and women of different ages in the ‘some activity’ and ‘low activity’ groups as well as the percentage achieving recommended levels. As before, physical activity decreases with age. While the majority of men and women aged 16–34 years are in the ‘some activity’ category, almost 50% of men aged 35–64 years, and 75% of men aged over 65 years, are in the low activity group. For women, around 56% of those aged 35–64 years and 76% of those aged over 65 years are in the low activity group.

**Figure 6: Objective summary activity levels by age and sex, 2008 (base: aged 16 and over with seven days valid accelerometry)**

**Men**



**Women**



Source: Health Survey for England 2008 Report\*

## Trends

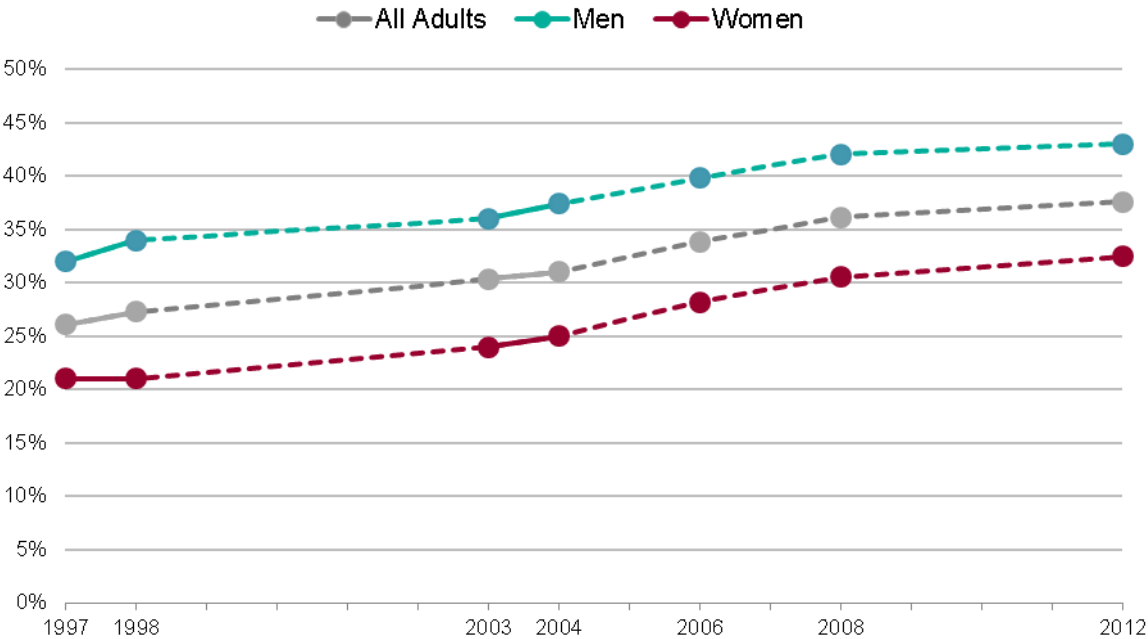
Previous recommendations for levels of physical activity were 30 minutes of moderate activity, five times per week. In order to allow us to look at trends of physical activity, the latest data from the HSE has also been analysed using the previous recommended levels.

The percentage of adults achieving these recommended levels of physical activity increased steadily between 1997 and 2012, rising from 32% to 43% among men, and from 21% to 32% among women (Figure 7). Low levels of activity were classified as less than 30 minutes of moderate or vigorous activity on one to four days a week.

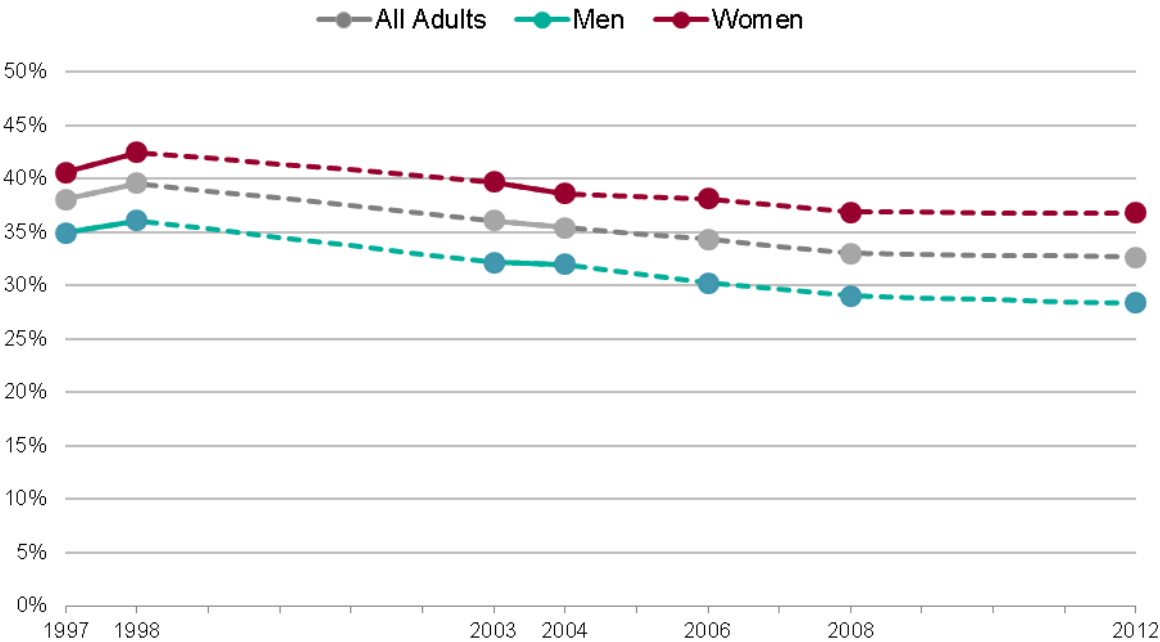
As you might expect, there has been a steady decrease in levels of low activity from 1998 to 2012 corresponding with the increase in those becoming more active (Figure 8). Women continue to have higher rates of low activity than men, with the gap widening slightly in more recent years (41% vs. 35% respectively in 1998, and 37% vs. 28% in 2012).

Note that these figures are again based on self-reported data.

**Figure 7: Percentage of adults meeting physical activity recommendations (base: aged 16 and over)**



**Figure 8: Percentage of adults with low levels of activity recorded (base: aged 16 and over)**

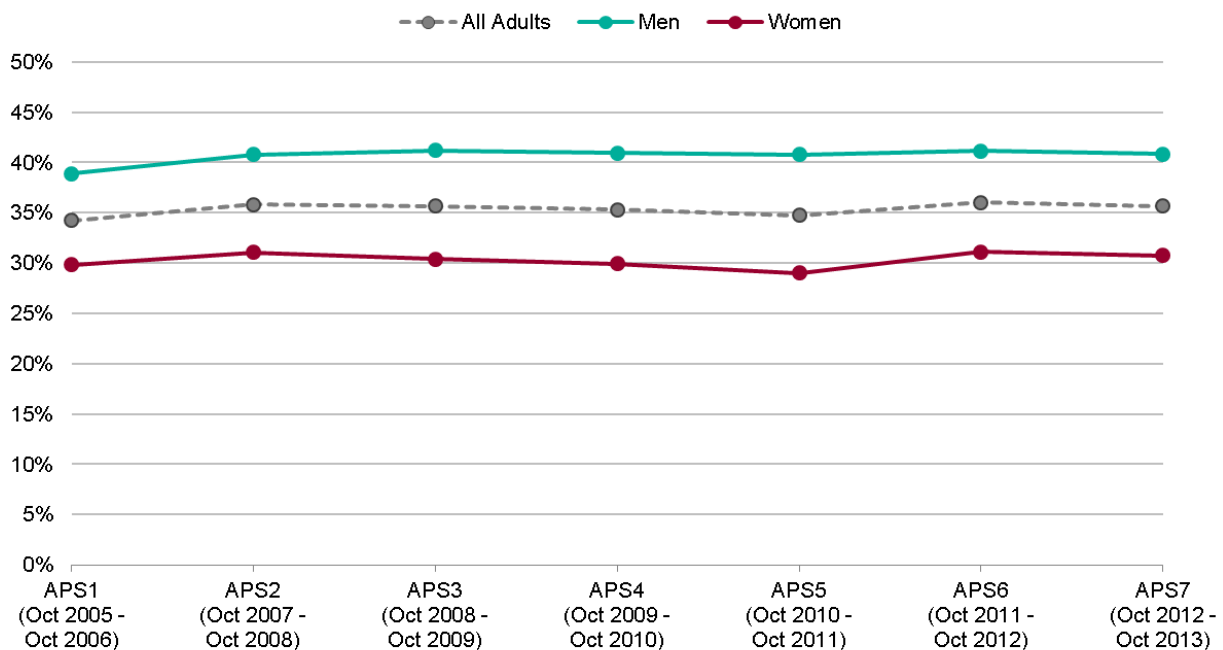


Source: Health Survey for England  
 Data were collected only for the years presented above.

Figure 9 shows the percentage of people that do one session of sport and active recreation (at least 30 minutes) per week from each of the APS surveys conducted between 2005 and 2013. This measure is used for trend data (rather than participation in physical activity at recommended levels) as the physical activity measures are only available from 2012.

In all years, a higher proportion of men were reported to be participating in at least 30 minutes of moderate intensity activity than women. For men, participation in sport and active recreation ranged from 38.9% in APS 1 to 40.9% in APS 7. For women, 29.8% participated in APS 1, which increased slightly to 30.8% in APS 7.

**Figure 9: Percentage of adults (aged 16 and over) participating in sport and active recreation at moderate intensity (at least 30 minutes) per week, by sex, 2005 - 2013**



Source: Active People Survey 1-7 (2005-13), Sport England (see data sources)

## Sedentary time

Government recommendations in July 2011 advise that all adults should minimise the amount of time they spend being sedentary for extended periods.

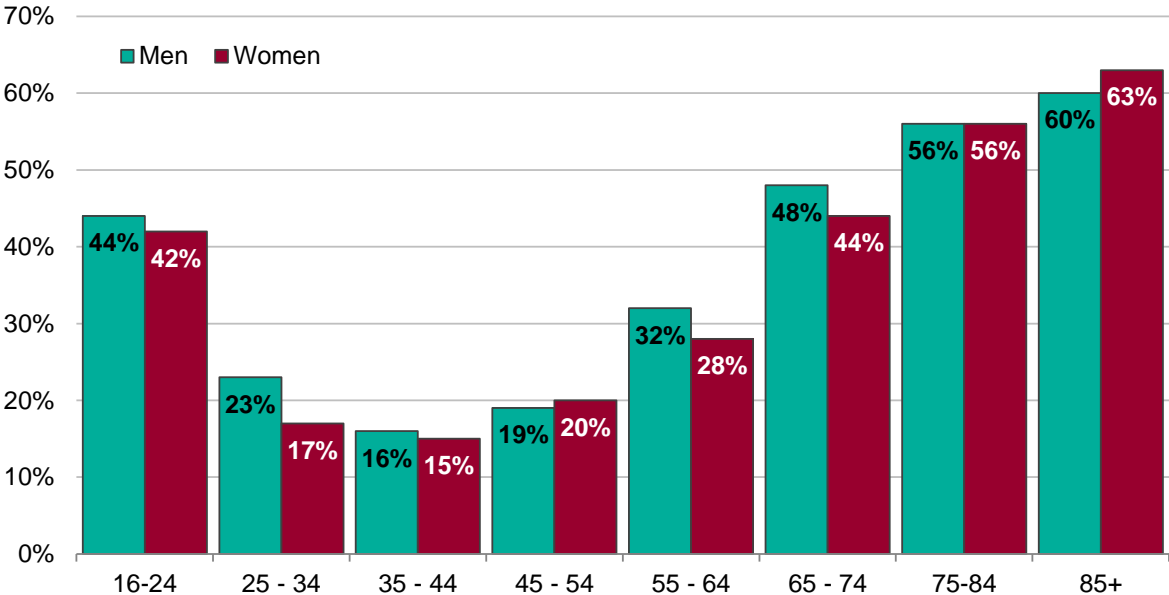
The HSE in 2008 and 2012 included questions on sedentary time. These aimed to find out how much leisure time, on average, people spend watching television and on other sedentary activities such as reading, eating, studying, drawing, using a computer or playing video games.

Figure 10 shows the proportion of men and women of different ages that spent six or more hours per day in sedentary activities in 2012. The pattern is very similar for men and women during the week, but men of most ages are slightly more likely to be sedentary at the weekend. Overall, 40% of men and 35% of women spent six hours or more in sedentary activities on weekend days. This is a reduction from the proportions recorded in the 2008 HSE (44% and 39%, respectively). People aged between 25 and 64 years are less likely than those under 25 or over 64 years to be sedentary for six hours or more, especially on weekdays.

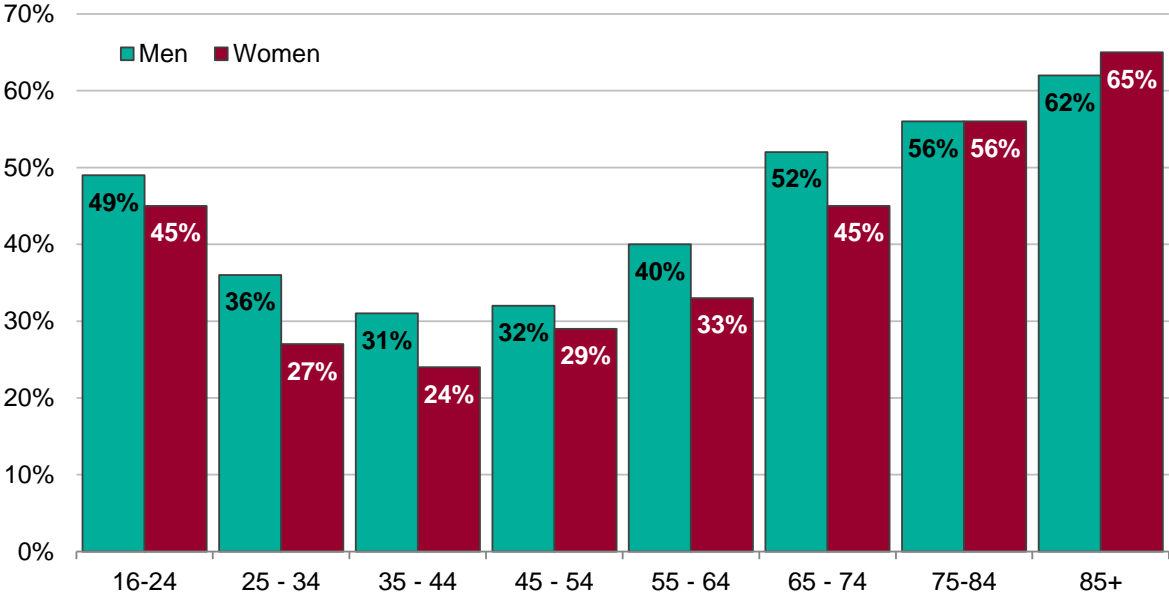
Note that this is again self-reported data, which is subjective and influenced by the respondent's ability to accurately recall and assess their physical activity.

**Figure 10: Proportion of adults that spent 6 or more hours being sedentary per day by age group, 2012 (base: aged 16 and over)**

**Weekdays**



**Weekends**



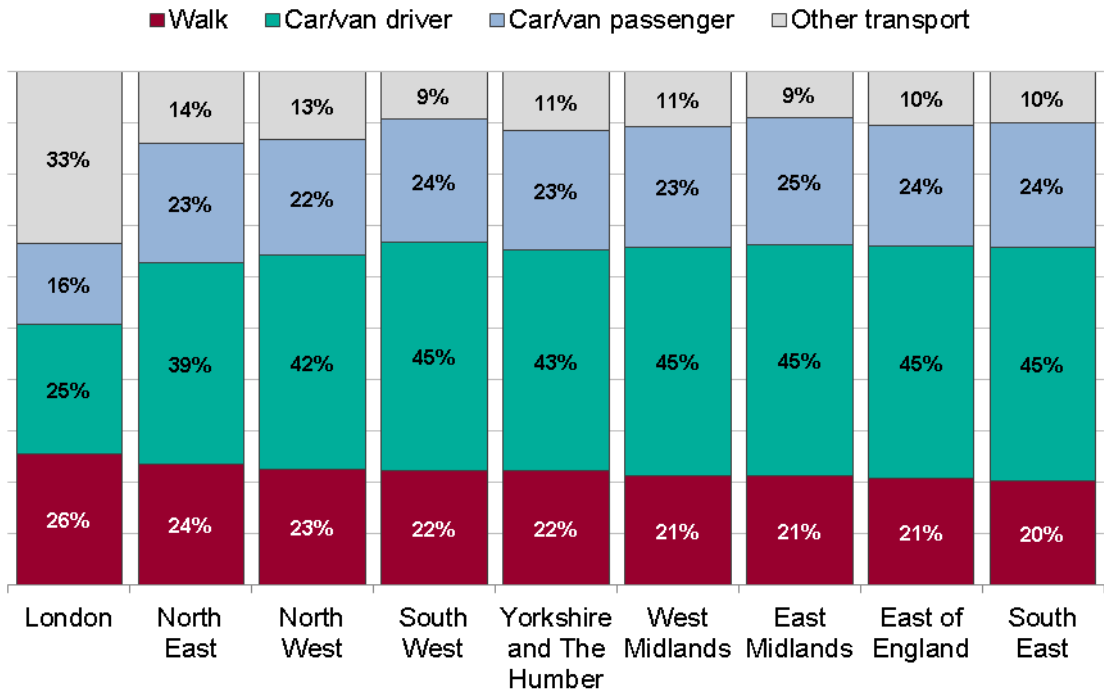
Source: Health Survey for England 2012 Report\*

# Travel

Regional results from the National Travel Survey (NTS) in 2012/13 showed that the majority of trips (39%-45%) were made by car or van drivers (Figure 11). The only exception was in London, where a third of people used other transport, including buses, bicycles, motorcycles, London Underground, surface rail and taxis or minicabs.

Trends since 1995 have shown a decrease in the average number of walking trips for both men and women (Figure 12). Men have also seen a decrease in the average number of trips by car or van as drivers and passengers and an increase in the use of other transport. Women, on the other hand, have seen an increase in the average number of trips made as car or van drivers, but a decrease in the average number of trips made as passengers and by other modes of transport (see data sources for definitions of trip categories).

**Figure 11: Proportion of average number of trips, by mode of transport and region, 2012/13**

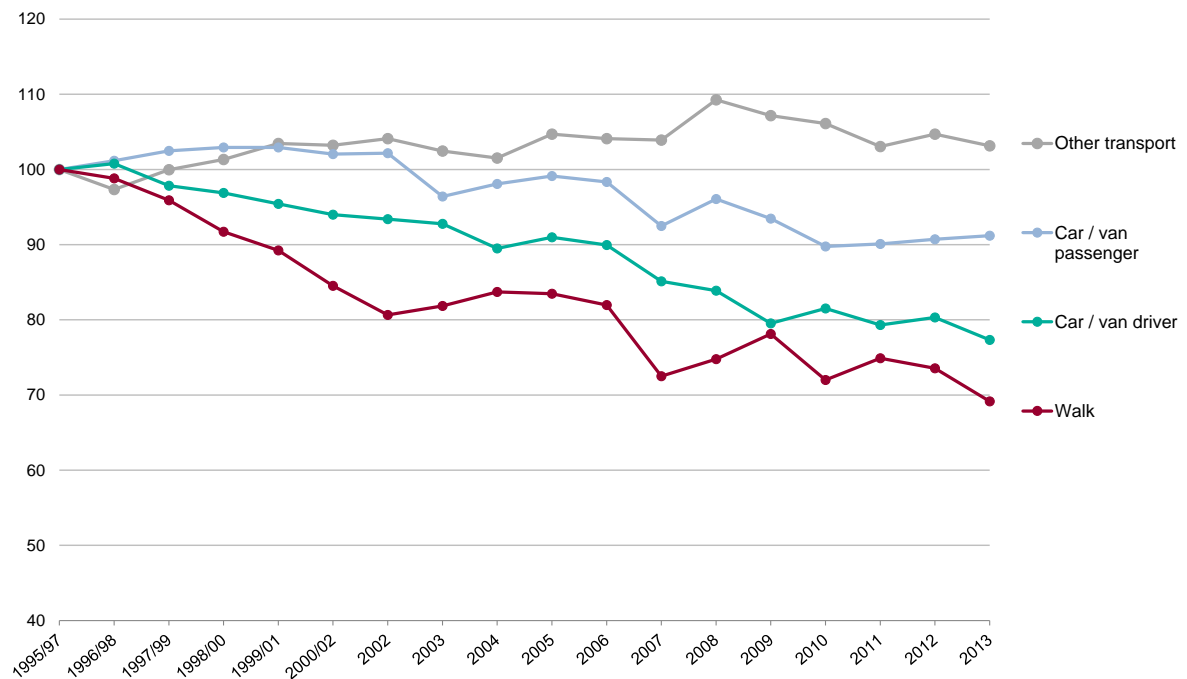


Source: National Travel Survey 2013

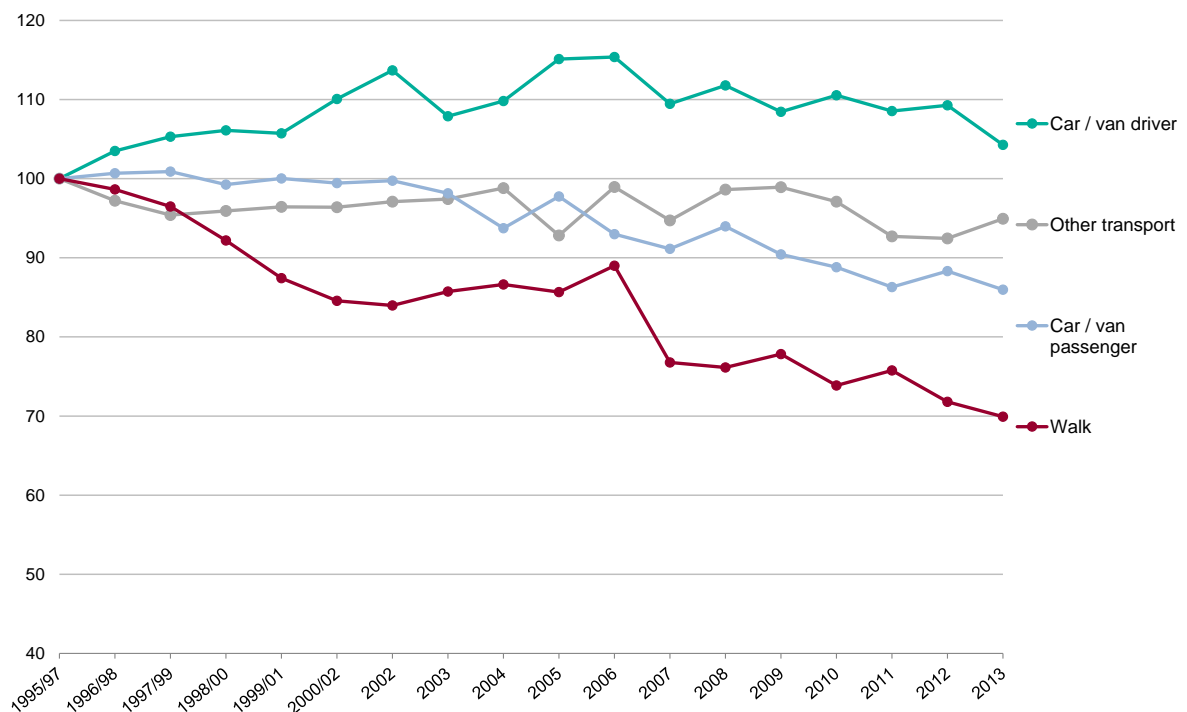


**Figure 12: Average number of trips, by mode of transport, year and sex (index: 1995/97=100)**

**Men**



**Women**



Source: National Travel Survey

# Data sources

## Health Survey for England

<http://www.hscic.gov.uk/article/3741/Health-Survey-for-England-Health-social-care-and-lifestyles>

All data presented here from the HSE is the most recent available at the time of writing. The HSE is a cross-sectional survey that samples a representative proportion of the population. No physical activity data was collected in the HSE 2009, 2010 or 2011.

For comparison of objective measurement and self-reported physical activity levels see: <http://www.hscic.gov.uk/catalogue/PUB00430/heal-surv-phys-acti-fitn-eng-2008-rep-v2.pdf> (page 70)

Data is also collected on religion and disability. It is not presented in this factsheet because the small numbers of respondents in these groups prevent us from being able to produce reliable results. We are currently looking at how we can examine and present data for these populations.

*Timing of data collection:* The survey is conducted annually. Data for some of the time series is available from 1993 onwards. Certain years include 'boost samples' that focus on specific population groups: for example the 2004 survey included a boost of individuals from minority ethnic groups.

*Date of next release:* The report on the HSE 2013 should be published online in December 2014. The data should be available from the UK Data Archive in the spring following publication of the report.

\* *Health Survey for England, 2008-2012.*  
*Joint Health Surveys Unit (Nat Cen Social Research & UCL) 2014. The Health and Social Care Information Centre: Leeds.*  
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## Active People Survey (APS)

[http://www.sportengland.org/research/active\\_people\\_survey.aspx](http://www.sportengland.org/research/active_people_survey.aspx)

The APS is a telephone survey conducted by TNS BMRB on behalf of Sport England. It measures the level of participation in physical activity by adults (defined as people aged 16 and over) living in England. The survey is conducted across every local authority in England and collects self-reported physical activity levels in the four weeks prior to interview. Random digit dialing generates a representative sample of telephone numbers and computer-assisted telephone interviewing is used.

The APS collects data on:

- Sport and active recreation. This includes a wide range of sports, including activities such as running, golf, swimming, team sports, racket sports, gymnastics, boxing, climbing and mountaineering, winter sports, archery, gym, and fitness activities or classes. It also includes activities such as yoga, pilates, bowls and croquet.
- Other physical activity. In 2009, additional questions were included in the survey on dance and gardening. In 2012 a number of refinements were made to questions in the APS on additional activities alongside sport and active recreation, in order to create a measure of participation in physical activity that is closer to the government recommendations. Additional activities are recreational cycling, recreational walking, walking for active travel purposes, cycling for active travel purposes, dance and gardening. Occupational activity or work in the home is not included. These are used for a number of analyses including the Public Health Outcomes Framework indicators published by Public Health England.

For an explanation of the different sport participation indicators see:

<http://www.sportengland.org/media/112857/summary-of-sport-participation-indicators.pdf>

Data is also collected on sexual orientation, religion and disability. It is not presented in this factsheet because the small numbers of respondents in these groups prevent us from being able to produce reliable results. We are currently looking at how we can examine and present data for these populations.

*Timing of data collection:* The survey began in 2005/06 and is repeated annually.

*Date of next release:* The 2013/14 data collection is expected to be completed in October 2014, and headlines figures available in December 2014.

## National Travel Survey

<https://www.gov.uk/government/publications/national-travel-survey-2013>

The National Travel Survey is a series of continuous household surveys on personal travel. It uses an interview and week-long travel diary to measure all aspects of personal travel, including walking and cycling. The survey is designed to pick up long-term trends and is not suitable for monitoring short-term trends.

For definitions of trip categories see:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/337241/nts2013-notes.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/337241/nts2013-notes.pdf)

Timing of data collection: The survey has been running on an ad hoc basis since 1965 and continuously since 1988. The data is collected annually and the most recent data available is for 2013, published in July 2014.

Date of next release: Data from the 2014 National Travel Survey and the published report should be available in July 2015.

# Definitions

For **adults** the minimum recommended levels of physical activity are:

150 minutes (two and half hours) each week of moderate intensity physical activity, such as brisk walking or cycling, in bouts of ten minutes or more (for example 30 minutes moderate activity on at least five days a week).

**For all adults up to age 65 and for those older adults who are already regularly active** at moderate intensity, comparable benefits can be achieved through 75 minutes of vigorous intensity activity (such as running or sports such as swimming or football) spread across the week or a combination of moderate and vigorous intensity activity.

**All adults** should aim to be active daily; muscle-strengthening activity (such as exercising with weights, dancing or carrying heavy groceries) should also be included on at least two days per week.

**Older adults at risk of falls** should incorporate physical activity to improve balance and co-ordination on at least two days per week. Such activities may include tai chi or yoga.

In addition, **all adults** are advised to minimise the time spent being sedentary for extended periods.

The previous recommended levels of physical activity for adults were 30 minutes or more of at least moderate intensity physical activity on at least five occasions per week.

## Useful resources

### **Statistics on Obesity, Physical Activity and Diet: England, February 2014**

<http://www.hscic.gov.uk/catalogue/PUB13648>

This statistical report presents a range of information on obesity, physical activity and diet, drawn together from a variety of sources.

Topics include overweight and obesity prevalence among adults and children, physical activity levels among adults and children, trends in purchases and consumption of food and drink and energy intake, and health outcomes of being overweight or obese.

### **Physical activity indicators in the Public Health Outcomes Framework**

<http://www.phoutcomes.info/>

The Public Health Outcomes Framework *Healthy lives, healthy people: Improving outcomes and supporting transparency* sets out a vision for public health, desired outcomes and the indicators that will help us understand how well public health is being improved and protected.

Indicator 2.13 presents (i) the proportion of adults meeting the recommendation of 150 minutes per week; and (ii) the proportion of inactive adults doing less than 30 minutes per week.

## Contact

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