

# Physical activity statistics 2012

British Heart Foundation Health Promotion Research Group  
Department of Public Health, University of Oxford



© British Heart Foundation, July 2012

ISBN 978-1-899088-07-2

All rights reserved. No part of this publication may be reproduced or transmitted, in any form or by any means, electronic, photocopying or otherwise without prior permission of the publishers. NHS workers and teachers may make photocopies for education purposes only, provided that no charge or profit is made for any course or event for which they are used.

Published by the British Heart Foundation,  
Greater London House, 180 Hampstead Road, London, NW1 7AW  
**bhf.org.uk**

Registered Charity No 225971

Edited by Peter Weissberg, British Heart Foundation

Compiled by Nick Townsend, Prachi Bhatnagar, Kremlin Wickramasinghe, Peter Scarborough, Charlie Foster and Mike Rayner, British Heart Foundation Health Promotion Research Group, Department of Public Health, University of Oxford, Old Rd Campus, Headington, Oxford OX3 7LF  
**<http://www.publichealth.ox.ac.uk/bhfhpgrg>**

Suggested citation:

Townsend N, Bhatnagar P, Wickramasinghe K, Scarborough P, Foster C, Rayner M (2012). *Physical activity statistics 2012*. British Heart Foundation: London.

# Physical activity statistics 2012

**Nick Townsend, Prachi Bhatnagar, Kremlin Wickramasinghe,  
Peter Scarborough, Charlie Foster and Mike Rayner**  
British Heart Foundation Health Promotion Research Group  
Department of Public Health, University of Oxford

# Contents

<b>Foreword</b>			5
<b>Introduction</b>			6
<b>Summary</b>			7
<b>Glossary</b>			8
<b>Chapter 1 – Meeting physical activity guidelines</b>			<b>9–32</b>
<b>Overall levels in adults</b>			
Physical activity levels, adults	Table 1.1	Figures 1.1a,b	14, 15
Meeting the recommendations, adults, England 1997 to 2008	Table 1.2		16
Meeting the recommendations, adults, Scotland 2008 to 2010	Table 1.3		17
Meeting the recommendations, adults, N.I. 2001 to 2011	Table 1.4	Figure 1.4	18, 19
<b>Children and young people</b>			
Physical activity levels	Table 1.5	Figures 1.5a,b	20, 21
<b>Regional, ethnic and socioeconomic differences</b>			
Physical activity levels by region, adults	Table 1.6		22
Physical activity levels by income, adults	Table 1.7	Figure 1.7	23
Physical activity levels by ethnic group, adults	Table 1.8,	Figure 1.8	24, 25
<b>Self-reported and objective activity levels</b>			
Self-reported versus objectively measured, adults	Table 1.9	Figures 1.9a,b	26, 27
Objectively measured activity by income, adults	Table 1.10	Figure 1.10	28
Objectively measured activity, children	Table 1.11	Figures 1.11a,b	29, 30
<b>Cardiac rehabilitation</b>			
Physical activity levels before and after cardiac rehabilitation, adults	Table 1.12	Figures 1.12a, b	31, 32
<b>Chapter 2 – Daily minutes of physical activity</b>			<b>33–42</b>
<b>Adults</b>			
Moderate to vigorous activity	Table 2.1	Figure 2.1	35
Physical activity levels, weekend and weekday	Table 2.2	Figures 2.2a,b	36, 37
<b>Children</b>			
Physical activity levels	Table 2.3	Figure 2.3	38, 39
Physical activity levels by income	Table 2.4		40
Physical activity levels, weekend and weekday	Table 2.5	Figures 2.5a,b	41, 42
<b>Chapter 3 – International differences</b>			<b>43–48</b>
<b>Guidelines</b>			
WHO recommended guidelines for physical activity	Table 3.1		45
<b>Europe</b>			
Regular exercise or sport participation, adults	Table 3.2	Figure 3.2	46, 47
Physical activity outside of sport, adults	Table 3.3		48

<b>Chapter 4 – Types of physical activity</b>			<b>49–60</b>
<b>Non-occupational physical activity</b>			
Time spent on different activities, adults	Table 4.1	Figure 4.1	51
Average time spent on activities, men	Table 4.2a	Figure 4.2a	52, 53
Average time spent on activities, women	Table 4.2b	Figure 4.2b	54, 55
Participation in different activities, adults	Table 4.3	Figure 4.3	56, 57
<b>Occupational physical activity</b>			
Time spent in occupational activities, men	Table 4.4a	Figure 4.4	58, 60
Time spent in occupational activities, women	Table 4.4b	Figure 4.4	59, 60
<b>Chapter 5 – Active travel</b>			<b>61–68</b>
<b>Distance and mode of travel</b>			
Distance travelled by mode of travel	Table 5.1	Figure 5.1	63
Trips per person per year by mode of travel	Table 5.2	Figure 5.2	64, 65
Households with car or van ownership	Table 5.3	Figure 5.3	66
<b>Active travel to school</b>			
Walking or cycling to school	Table 5.4	Figure 5.4	67
Travel to school by type of school	Table 5.5		68
<b>Chapter 6 – Factors influencing physical activity</b>			<b>69–98</b>
<b>Knowledge</b>			
Awareness of recommendations, adults	Table 6.1	Figure 6.1	72
Knowledge of recommendations, adults	Table 6.2	Figure 6.2	73
Knowledge of recommendations, children	Table 6.3	Figure 6.3	74
<b>Motivation</b>			
Like to do more physical activity, adults	Table 6.4	Figure 6.4	75
Like to do more physical activity, children	Table 6.5	Figure 6.5	76
Like to do more physical activity by income, adults	Table 6.6	Figure 6.6	77
Like to do more physical activity by income, children	Table 6.7	Figure 6.7	78, 79
<b>Barriers</b>			
Barriers to doing more, men	Table 6.8a	Figure 6.8a	80
Barriers to doing more, women	Table 6.8b	Figure 6.8b	81
Barriers to doing more by income, men	Table 6.9a	Figure 6.9a	82, 83
Barriers to doing more by income, women	Table 6.9b	Figure 6.9b	84, 85
Factors putting off sport, adults, N.I.	Table 6.10	Figure 6.10	86
Encourage physical activity, adults	Table 6.11	Figure 6.11	87
<b>Local environment</b>			
Physical activity environment most important factors, by region, adults	Table 6.12	Figure 6.12	88
Satisfied with physical activity environment, by region, adults	Table 6.13	Figure 6.13	89
Physical activity environment needs improving, by region, adults	Table 6.14	Figure 6.14	90
Views on parks and play areas in local area, children	Table 6.15	Figure 6.15	91
<b>Physical education and school sport</b>			
Two hours PE and school sport by school year group, children	Table 6.16	Figure 6.16	92
Two hours PE and school sport by school type, children	Table 6.17	Figure 6.17	93
Three hours PE and school sport by school year group, children	Table 6.18	Figure 6.18	94, 95
Three hours PE and school sport by school type, children	Table 6.19	Figure 6.19	96
Three hours PE and school sport by sex, children	Table 6.20	Figure 6.20	97, 98

# Contents (Continued)

---

<b>Chapter 7 – Sedentary behaviour</b>			99–127
<b>Self-reported</b>			
Prevalence per day, adults	Table 7.1	Figures 7.1a,b	102, 103
Average hours per day, adults	Table 7.2	Figures 7.2a,b	104, 105
Prevalence per day, children	Table 7.3	Figures 7.3a,b	106, 107
Average hours per day, children	Table 7.4	Figures 7.4a,b	108, 109
<b>Objectively measured</b>			
Minutes per day, adults	Table 7.5	Figures 7.5a,b	110, 111
Minutes per day, children	Table 7.6	Figures 7.6a,b	112, 113
<b>Socio-economic differences</b>			
Minutes per day by income, adults	Table 7.7		114
Minutes per day by income, children	Table 7.8		115
Hours per week by income, children	Table 7.9	Figures 7.9a,b	116, 117
<b>Regional differences</b>			
Hours per week by region, children	Table 7.10	Figures 7.10a,b	118, 119
<b>Sedentary behaviours</b>			
Hours television viewing per week 1999 to 2010, adults	Table 7.11	Figures 7.11a,b	120, 121
Hours television viewing per week, by country, adults	Table 7.12		122
Percentage sedentary time that is television viewing, adults	Table 7.13	Figures 7.13a,b	124, 125
Percentage sedentary time that is television viewing, children	Table 7.14	Figures 7.14a,b	126, 127

---

<b>Acknowledgements</b>			128
-------------------------	--	--	-----

## Foreword

This supplement published by the British Heart Foundation (BHF) is the first to focus solely on *Physical activity statistics* and comes at a pertinent time. It is less than a year since the Chief Medical Officers for each UK country released updated recommendations on the amount of physical activity individuals should take, acknowledging the importance of regular physical activity in reducing risk for a number of chronic conditions, including cardiovascular disease. Additionally, this report is published in the same year that the Olympics are to be held in the UK for the first time in more than 60 years. Although there is a lot more to physical activity than competitive sport, generating interest in sport and exercise is a positive means through which to encourage individuals to be more active.

There has been evidence of some success in increasing physical activity levels in the UK population over the past decade. However, statistics presented in this report suggest that less than half of adults in the UK meet UK Government recommendations, with this proportion declining with age. It is also apparent that the amount of physical activity children take decreases as they get older, and it is important that we encourage children to maintain recommended levels as they move into adolescence and then early adulthood. It is particularly worrying that objective measures in England suggest that few girls aged 11 to 15 years meet recommended physical activity levels.

If we are to increase physical activity levels of the population further, it is imperative that guidance is widely disseminated and understood. Less than one third of adults in England had heard of the UK Government's physical activity guidelines, whilst less than one tenth were able to report them accurately, and over two thirds believed them to be lower than they were. Knowledge of guidelines is not the only issue, however, with over 70% of adults saying they would like to do more physical activity, citing work commitments and a lack of leisure time as the most common barriers to this.

Increases in physical activity are associated with protection against chronic diseases, an improved quality of life through improving physical and mental health, as well as cost savings for health and social care services. Although new guidelines have been produced these must be both disseminated and supported through the creation of environments that encourage physical activity. The numerous benefits that physical activity bring to both the individuals and the population as a whole makes it a key focus in public health within the UK.

**Professor Peter Weissberg**  
**Medical Director, British Heart Foundation**

# Introduction

This is the first time a supplement of the *Coronary Heart Disease Statistics* has focused solely on *Physical activity statistics*, updating and building on a previous publication *Diet, physical activity and obesity statistics*, published in 2006. *Physical activity statistics* is designed for health professionals, medical researchers and anyone with an interest in physical activity or cardiovascular disease.

*Physical activity statistics* is divided into seven chapters. Chapter one describes the proportion of people within the UK achieving the Chief Medical Officer's (CMO) recommendations for weekly physical activity levels. Chapter two describes daily minutes of physical activity for both adults and children. Chapter three compares physical activity levels in countries of the European Union (EU). Chapter four describes the types of physical activity individuals are engaging in, comparing physical activity inside and outside the workplace. Chapter five details the means by which people travel, with a particular focus on active travel: walking and cycling. Chapter six describes the factors that influence physical activity including knowledge, attitude and motivation along with the activity environment, physical education (PE) and sport in schools. Chapter 7 presents statistics on levels and types of sedentary behaviour.

Each chapter contains a set of tables and figures to illustrate key points and a brief review of the data presented. Wherever possible statistics are included for all UK countries, however, obtaining comparable data for England, Scotland, Wales and Northern Ireland is rare therefore many of the tables and figures correspond to one country. Physical activity levels can be measured either through asking people to report how much exercise they do (self-report), or by objectively measuring the amount of exercise a person is doing using tools such as accelerometers. Self-report is the most widely used measurement method in UK surveys and so most of the statistics displayed correspond to self-reported physical activity, where possible objectively measured statistics are also included.

All of the tables and figures presented in *Physical activity statistics* can also be found on the British Heart Foundation's Heart statistics website [bhf.org.uk/research/statistics](http://bhf.org.uk/research/statistics). This website aims to be the most comprehensive and up-to-date source of statistics on cardiovascular disease in the UK. The website is updated on an ongoing basis and contains a wider range of tables and figures than is available in the *Coronary Heart Disease Statistics* series of publications. Further copies of this publication can be downloaded from the website, as well as copies of recent publications from the *Coronary Heart Disease Statistics* series, including:

- *Trends in coronary heart disease 1961-2011 (2011)*
- *Coronary Heart Disease Compendium (2010)*
- *Ethnic Differences in Cardiovascular Disease (2010)*
- *Stroke Statistics (2009)*
- *European Cardiovascular Disease Statistics (2008)*

## Summary

- 45% of men in Scotland reported meeting recommended levels of physical activity, compared to 39% in England, 37% in Wales and 33 % in Northern Ireland.
- Women were less active than men in all UK countries with 33% reporting meeting recommended levels in Scotland, 29% in England, 24% in Wales and 28% in Northern Ireland.
- The proportion of adults achieving the recommended levels of physical activity increased for England between 1997 and 2008 and in Northern Ireland between 2001 and 2011.
- Large differences were found in the prevalence of individuals reaching recommended levels of physical activity in England when comparing self-report and accelerometry data.
- The number of minutes per day adults and children in England spend being moderately to vigorously active declines with age.
- In England both adults and children spent more minutes being moderately to vigorously active on weekdays than on weekend days.
- 14% of adults in the UK exercise or play sport regularly, higher than the EU average of 9% but lower than Ireland which has the highest prevalence with 23%.
- Latvia has the highest prevalence of adults engaging in physical activity outside of sport at 44% compared to 37% in the UK and 27% the EU average.
- In England in 2008, the most common form of occupational and non-occupational physical activity was walking.
- 56% of women in England did not spend any time in sports and exercise in 2008.
- In England 24% of men report moderate to vigorous occupational activity for at least 30 minutes per day compared to 10% of women
- In Great Britain the average distance travelled on foot or by bike by each person per year has decreased from 306 miles in 1975/76 to 221 miles in 2010.
- In England more than two thirds of boys and girls walked or cycled to or from school at least once a week in 2008.
- Only 6% of men and 9% of women in England can correctly define the UK Government recommended physical activity targets.
- The most common barriers to doing more physical activity identified by adults in England were work commitments and a lack of leisure time. In Northern Ireland not enough time was the most common barrier.
- 90% of pupils in English schools participate in at least two hours of physical education and out of hours school sport each week. The lowest figures are for single-sex girls school.
- In adults in England sedentary time decreases into middle age and then increases into older age.
- Both adults and children in England were found to be more sedentary on weekdays than weekend days.

# Glossary

This section provides a definition for some of the terms used throughout *Physical activity statistics 2012*.

**Accelerometer** – hip mounted motion sensor that measures acceleration in 1, 2 or 3 dimensions. Accelerometers are used as an objective measure of physical activity or exertion.

**Active travel** – refers to an approach to travel and transport that focuses on physical activity. Cycling and walking are the most common types of active travel. Active travel is beneficial for health and accessibility, and when replacing journeys by car can also reduce congestion and emissions.

**Age standardised rate** – a measure of the rate that a population would experience if it had a standard age structure. It is useful to present rates as age standardised as it allows for comparisons between populations with very different age structures.

**Cardiac rehabilitation** – is a programme of exercise and information sessions provided for patients with certain conditions.

**Cardiovascular disease (CVD)** – the collective term for all diseases affecting the circulatory system (heart, arteries, blood vessels).

**Equivalent Household Income** – is when the total income for a household is adjusted to take the number of people living in that household into account.

**Moderate to vigorous physical activity (MVPA)**

– defined in the Health Survey for England 2008 as all activity occurring at 3 or more METs. A definition for METs is provided in this glossary.

**MET (metabolic equivalent or metabolic equivalent of task)**

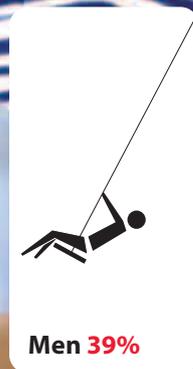
– the ratio of work metabolic rate to a standard resting metabolic rate. Metabolic rate is the rate at which a person uses energy, or burns calories, 1 MET is considered a resting metabolic rate.

**Quintile** – a statistical value that divides a range of data into five equal parts.

**Sedentary behaviour** – a cluster of individual behaviours in which sitting or lying is the dominant mode of posture and energy expenditure is very low.

**Tertile** – a statistical value that divides a range of data into three equal parts.

# 1.



1997

2008

Percentage of individuals reaching Government recommendations

## Meeting physical activity guidelines

The percentage of men meeting physical activity recommendations increased from 32% to 39% over ten years. The percentage of women meeting them increased from 21% to 29% over the same period of time.

# 1. Meeting physical activity guidelines

People who are physically active are at lower risk of coronary heart disease (CHD). To produce the maximum benefit, exercise needs to be regular and aerobic. This should involve the use of the major large muscle groups steadily and rhythmically, so that heart rate and breathing increase significantly.

Recent research from the World Health Organization (WHO) highlighted the importance of physical inactivity as a major risk factor for CHD. As the fourth leading risk factor for global mortality, the WHO estimated that around 6% of global deaths were caused by physical inactivity<sup>1</sup>. Between 20% – 35% of cardiovascular diseases could be prevented if more people become more active throughout the life course<sup>2</sup>. In the UK the direct financial cost of physical inactivity to the NHS is estimated as £900 million<sup>3</sup>.

Physical activity levels can be measured either through asking people to report how much exercise they do, or by objectively measuring the amount of exercise a person is doing. The former method, known as self-report, is the most widely used measurement method in UK surveys. Results using the self-report method are detailed here for England, Scotland, Wales and Northern Ireland, where possible. Although physical activity and sedentary levels are normally self-reported, a sub-sample of the 2008 Health Survey for England (HSE) was selected to wear accelerometers in order to obtain objective measures of physical activity and sedentary behaviour. The advantage of accelerometry over self-report is that it provides objective information on the frequency, intensity, and duration of both physical activity and sedentary behaviour. This chapter goes on to compare objectively measured data to self-reported and concludes by describing the proportion of patients achieving recommendations before and after cardiac rehabilitation.

### Physical activity guidelines

Guidelines issued by the four Chief Medical Officers (CMOs) of England, Scotland, Wales and Northern Ireland in 2011, emphasise for the first time the importance of physical activity for people of all ages. The guidelines bring different aspects of physical activity together including a life course approach, the flexibility to combine moderate and vigorous intensity activities and reduce sedentary behaviour<sup>2</sup>. The guidelines also highlight the importance of minimising the amount of time spent being sedentary.

The Government's Strategy Unit published a target for physical activity improvements in England in 2002. In 2003 the Scottish Health Executive also set a target for physical activity. However, the 2011 physical activity report from the four home countries' CMOs did not refer to any targets. Scottish targets were included in the 2011 Physical Activity National Indicator.

### Overall levels in adults

The new CMOs' guidelines on physical activity were published in July 2011. Currently available data were collected in reference to the previous guidelines published in 2004. These guidelines recommended 30 minutes of physical activity on at least five days a week for adults<sup>4</sup> and at least one hour of moderate intensity activity a day for children aged 5 to 18 years<sup>5</sup>. Data presented in this publication, therefore, correspond to the 2004 guidelines rather than those from 2011.

Self-reported physical activity levels in UK adults are fairly low. Men in Scotland exercise the most, with 45% meeting recommended physical activity levels in 2010, however in Northern Ireland only a third of men reported meeting the recommendations. Fewer women than men achieved these levels of physical activity with 33% of Scottish women meeting the recommendations and 24% of Welsh women doing so. In men, physical activity levels decline with age, with a greater proportion of men meeting the recommendations in the 16 to 24 age group and the fewest in the 75 and above age group. For England and Wales, the pattern appears to be similar, however in Scotland activity is reported to be highest in the 25 to 54 age group (Table 1.1, Figures 1.1a and 1.1b).

Between 1997 and 2008, the Health Survey for England reported that the overall proportion of adults meeting the recommended level of physical activity increased from 32% to 39% in men and from 21% to 29% in women. The 2010 Scottish Health Survey suggested that the progress towards improving physical activity levels in Scotland has slowed; with 45% of men and 33% of women meeting these recommendations in 2010, the same prevalence as in 2008 for both sexes. Increases have been found for both sexes in Northern Ireland, rising from 30% of men in 2001 to 44% in 2010/11 and 26% to 35% in women over the same period of time (Tables 1.2, 1.3 and 1.4, Figure 1.4).

### Children and young people

Self-reported levels of physical activity in children vary by country of the UK. In Scotland for children aged 2 to 15, 75% of boys and 72% of girls reported meeting the recommended levels of activity. For the same age group in England however, only 32% of boys and 24% of girls did. While the percentage of boys meeting the recommendations shows a varying pattern by age in both England and Scotland, for girls in these countries there was a notable decrease after age 10. In Wales 53% of boys and 35% of girls aged 11 to 16 were physically active for 60 minutes or more, five days or more per week<sup>6</sup> (Table 1.5, Figures 1.5a and 1.5b).

### Regional, ethnic and socioeconomic differences

Regional variation in adult self-report physical activity levels is not marked, although there are differences. After accounting for differences in the age-structure of the population in each region of England, 44% of men in the South West reported meeting physical activity recommendations, compared to 33% of men in the North East. For women, the highest proportion was reported in South Central at 34%, while the lowest was 25% for women in the East of England (Table 1.6).

The Health Survey for England 2008 shows a substantial difference in physical activity levels in adults by equivalised household income quintile. There were higher percentages of men and women meeting the recommended levels in the highest income quintile compared to the lowest. Differences between highest and lowest quintiles was greater for men (42% compared to 31%) than for women (34% compared to 26%) (Table 1.7, Figure 1.7). Compared with the general population in 2004, Indian, Pakistani, Bangladeshi and Chinese men and women living in England were less likely to meet physical activity recommendations. Of the men, Bangladeshi and Pakistani men had the lowest prevalence of meeting physical activity recommendations (26% and 28%). This pattern was also true of women from these groups, at 11% and 14% respectively. Irish men and Black Caribbean women had the highest prevalence of meeting the recommendations compared to any other ethnic groups living in England (Table 1.8, Figure 1.8).

### Comparing self-report and objective activity levels

While self-report is the most commonly used method to measure physical activity, this has the potential to inaccurately measure physical activity prevalence<sup>7</sup>. Its advantages are that it is easy to collect data from a large number of people at low cost; however social desirability may lead to over-reporting of physical activity. Certain sections of the population such as the elderly and children may have difficulty accurately recalling their activities, and it is also possible that the respondent may have a different understanding of what 'moderate intensity' or 'exercise' actually means.

In 2008, the Health Survey for England measured physical activity using self-report methods, as well as accelerometers, which are an objective measure of a person's activity. Accelerometers measure frequency, intensity and duration of physical activity, but are not waterproof and may not accurately record activities such as cycling or rowing. People were asked to wear the accelerometers while awake for seven consecutive days, but to take them off when swimming or showering. Due to issues of consent, eligibility, compliance and faults with the devices only 49% of men and 46% of women from the 4,507 adults selected to wear accelerometers provided sufficient data to be included in the analyses of daily average wear. Of the 1,707 children aged 4 to 15 selected 43% of boys and 47% of girls provided sufficient data<sup>8</sup>. For children, whereas self-reported data covered sedentary behaviour in leisure time excluding time at school, those participants sampled to wear accelerometers were encouraged to wear them at all times including at school. This may account for some differences between self-reported and objective data for these age groups.<sup>8</sup> When the prevalence of men and women meeting the recommended levels of physical activity are compared using self-report and accelerometry data, large differences are apparent. Thirty nine percent of men and 29% of women in England reported meeting the recommendations, however, when measured using an accelerometer it was found that only 6% of men and 4% of women met these. Both self-report and objective measures found that the levels of physical activity declined with age in both men and women (Table 1.9, Figures 1.9a and 1.9b).

Accelerometry data by tertile of equivalised household income does not show a clear trend, as was seen with the self-report data. For men, more people in the highest tertile were meeting recommendations, however for women it was those who were in the lowest tertile (Table 1.10, Figure 1.10).

The Health Survey for England in 2008 also gave a subsample of children aged 4 to 15 years accelerometers to wear. In boys aged 4 to 10, 51% were meeting the recommended levels of activity for children, however for boys aged 11 to 15 this was only 7% whilst 75% were classified as having low levels of activity. The prevalence of physical activity in girls was even lower, with 34% of girls aged 4 to 10 meeting the recommended levels, but no girls aged 11 to 15 exercising to this level. Ninety six percent of girls in this age group were measured as having low activity levels (Table 1.11, Figures 1.11a and 1.11b).

### Cardiac rehabilitation

In 2009-10, 42% of patients who had a heart attack (MI), bypass surgery (CABG), or an angioplasty (PCI) took part in cardiac rehabilitation (CR) across England, Wales and Northern Ireland, with the aim of reducing cardiac mortality, promoting self-management and improving quality of life<sup>9</sup>. In 2000 the National Service Framework (NSF) for Coronary Heart Disease recommended that at 12 months at least 50% of individuals who had taken part in cardiac rehabilitation should be taking regular physical activity of at least 30 minutes duration on average for five times each week<sup>10</sup>. The 2011 National Audit of Cardiac Rehabilitation found that a greater proportion of patients reached these NSF recommended levels after they had undergone cardiac rehabilitation, with 53% achieving these levels 12 weeks after rehabilitation and 49% 12 months after. Although a smaller number of patients were sampled 12 months after rehabilitation than 12 weeks (Table 1.12, Figures 1.12a and 1.12b).

1. World Health Organization (2010). Global Recommendations on Physical Activity for Health. WHO: Geneva.
2. Department of Health, Physical Activity, Health Improvement and Protection (2011). Start active, stay active: a report on physical activity from the four home countries. Chief Medical Officers: London.
3. Scarborough P, Bhatnagar P, Wickramasinghe K, Allender S, Foster C, Rayner M. (2011). The economic burden of ill health due to diet, physical inactivity, smoking, alcohol and obesity in the UK: an update to 2006–07 NHS costs. *J Public Health*. doi: 10.1093/pubmed/fdr033
4. Department of Health (2004). At least five a week: evidence on the impact of physical activity and its relationship to health. Department of Health: London.
5. Department of Health (2005) Choosing Activity: a physical activity action plan. Department of Health: London.
6. Welsh Assembly Government (2011). Health Behaviour in School – aged Children: initial findings from the 2009/10 survey in Wales. Social Research Division: Cardiff.
7. Sallis F, Saelens B (2000). Assessment of Physical Activity by Self-Report: Status, Limitations, and Future Directions. *Research Quarterly for Exercise and Sport*. American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD).
8. Department of Health (2010). Health Survey for England 2008: Physical activity and fitness. The Stationery Office: London.
9. British Heart Foundation (2011). The National Audit of Cardiac Rehabilitation: Annual Statistical Report 2011. British Heart Foundation: London.
10. Department of Health (2000). National Service Framework for Coronary Heart Disease: Modern Standards and Service Models. The Stationery Office: London.

**Table 1.1**  
**Self-reported physical activity levels in adults, by sex and age, England 2008, Scotland 2010, Wales 2010 and Northern Ireland 2005/06**

Summary physical activity level	All adults	16–24	25–34	35–44	45–54	55–64	65–74	75+
	%	%	%	%	%	%	%	%
<b>England</b>								
<b>Men</b>								
Meeting recommendations	39	53	49	44	41	32	20	9
Some activity	31	30	32	33	34	31	33	23
Low activity	30	16	19	23	25	37	47	68
Base	7,305	1,133	1,210	1,411	1,204	1,084	724	538
<b>Women</b>								
Meeting recommendations	29	35	36	34	32	28	17	6
Some activity	34	33	39	39	35	34	30	16
Low activity	38	32	25	28	33	37	53	78
Base	7,660	1,088	1,212	1,428	1,230	1,119	798	785
<b>Scotland</b>								
<b>Men</b>								
Meeting recommendations	45	66	61	51	48	34	22	10
Some activity	26	22	24	29	25	29	29	20
Low activity	29	12	15	20	27	36	50	70
Base	3,112	274	420	478	566	555	488	331
<b>Women</b>								
Meeting recommendations	33	37	42	45	40	30	17	7
Some activity	33	39	36	35	36	33	31	17
Low activity	33	25	22	19	24	36	52	76
Base	4,122	373	564	682	761	699	573	470
<b>Wales</b>								
<b>Men</b>								
Meeting recommendations	37	48	43	42	41	31	26	14
Some activity	26	26	29	29	24	26	24	17
Low activity	31	17	19	24	28	37	45	65
Base	7,420	882	831	1,082	1,333	1,361	1,109	822
<b>Women</b>								
Meeting recommendations	24	28	27	28	28	25	19	7
Some activity	33	40	41	38	34	34	27	15
Low activity	36	23	24	25	32	35	48	76
Base	8,579	919	1,073	1,330	1,472	1,520	1,247	1,018
<b>Northern Ireland</b>								
<b>Men</b>								
Meeting recommendations	33	33	40	39	29	28	26	17
Below recommendations	67	67	60	61	71	72	74	83
Base	1,747	153	287	346	305	276	237	152
<b>Women</b>								
Meeting recommendations	28	26	35	35	33	26	20	11
Below recommendations	72	74	65	65	67	74	80	89
Base	2,498	254	428	501	417	335	312	251

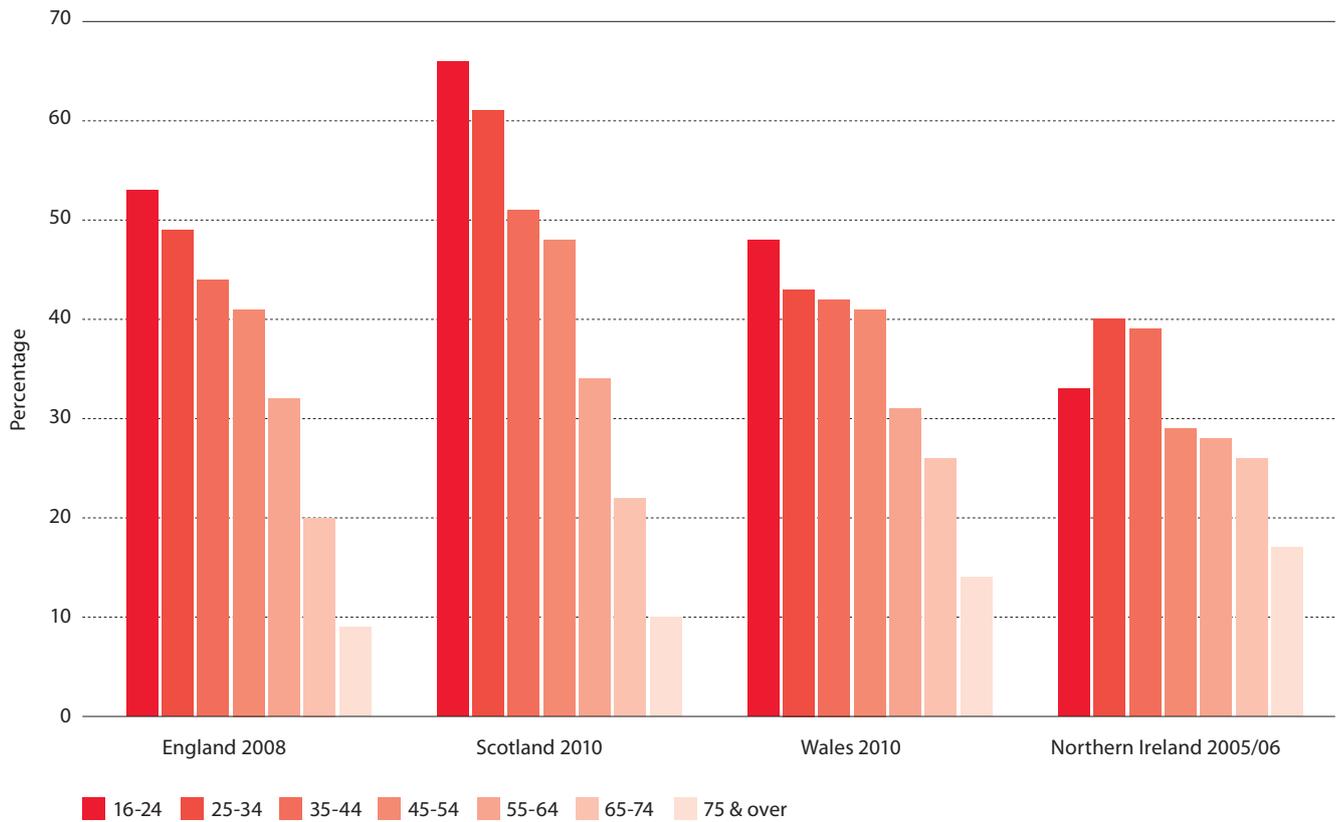
**Notes:**

Meets recommendations: 30 minutes or more of moderate or vigorous activity on at least 5 days a week; Some activity: 30 minutes or more of moderate or vigorous activity on 1 to 4 days a week; Low activity: lower levels of activity. All data are self-reported.

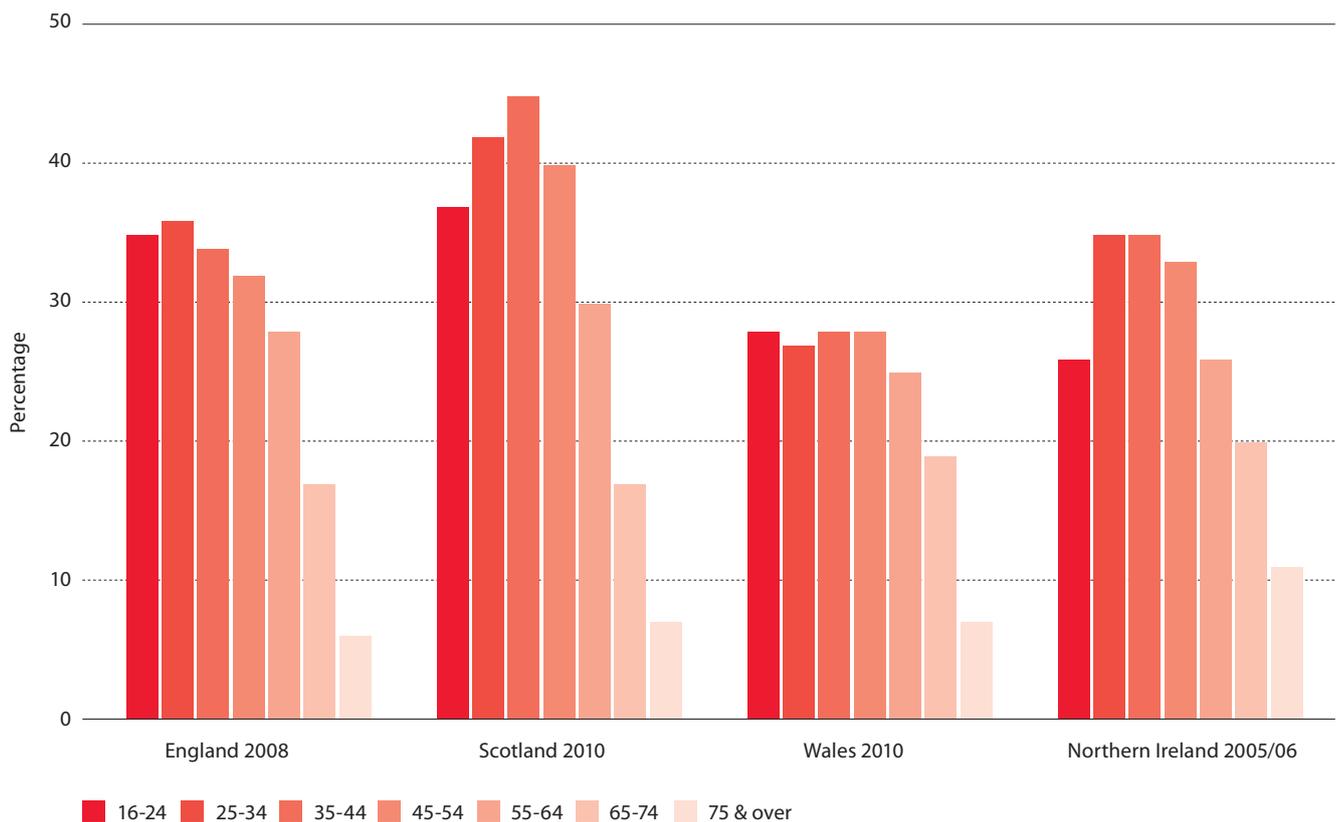
**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. © Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved. Scottish Health Executive (2011). The Scottish Health Survey 2010: Results. The Scottish Executive: Edinburgh. Welsh Government (2011). Welsh Health Survey 2010. Welsh Assembly: Cardiff. Northern Ireland Statistics and Research Agency (2007). Northern Ireland health Social Wellbeing Survey 2005/06: Topline results. NISRA: Belfast.

**Figure 1.1a**  
**Self-reported percentage of men meeting physical activity recommendations, by age and country, latest available year**



**Figure 1.1b**  
**Self-reported percentage of women meeting physical activity recommendations, by age and country, latest available year**



**Table 1.2****Self-reported percentage of adults meeting the physical activity recommendations, by sex and age, England 1997 to 2008**

	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75 +
	%	%	%	%	%	%	%	%
<b>Men</b>								
1997	32	49	41	37	32	23	12	7
1998	34	53	45	41	34	30	14	6
2003	36	52	44	41	38	32	17	8
2004	37	56	46	41	37	32	18	8
2006	40	53	52	46	38	35	21	9
2008	39	53	49	44	41	32	20	9
<b>Base</b>								
1997	3,898	492	739	740	694	535	455	243
1998	7,193	875	1,338	1,305	1,289	987	837	562
2003	6,581	744	1,024	1,260	1,098	1,097	807	551
2004	2,873	291	446	535	439	508	378	276
2006	5,561	649	860	1,181	1,049	1,123	415	284
2008	6,737	771	952	1,218	1,095	1,181	873	647
<b>Women</b>								
1997	21	26	26	29	24	19	8	5
1998	21	28	28	28	25	18	9	3
2003	24	30	29	30	31	23	13	3
2004	25	32	30	32	30	20	14	4
2006	28	33	36	35	34	27	16	4
2008	29	35	36	34	32	28	17	6
<b>Base</b>								
1997	4,684	560	916	833	806	585	545	439
1998	8,715	1,006	1,630	1,573	1,484	1,148	967	907
2003	8,210	886	1,279	1,615	1,278	1,304	948	900
2004	3,818	364	550	746	626	621	482	429
2006	6,869	792	1,146	1,490	1,279	1,269	463	430
2008	8,337	919	1,220	1,513	1,371	1,367	1,000	947

**Notes:**

Adults aged 16 and over. Recommendation: at least moderate intensity, of 30 minutes or more duration on five or more days per week. Activity sessions lasting for less than 30 minutes have been excluded so that data were comparable.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. © Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Table 1.3**  
**Self-reported percentage of adults meeting the physical activity recommendations, by sex and age, Scotland 2008 to 2010**

	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%	%
<b>Men</b>								
2008	45	58	63	53	43	37	21	13
2009	43	61	54	50	43	37	21	11
2010	45	66	61	51	48	34	22	10
<b>Base</b>								
2008	2,837	245	317	459	534	525	453	304
2009	3,278	272	406	550	600	574	517	359
2010	3,112	274	420	478	566	555	488	331
<b>Women</b>								
2008	33	42	42	43	37	29	20	4
2009	32	38	41	39	38	30	17	6
2010	33	37	42	45	40	30	17	7
<b>Base</b>								
2008	3,615	334	451	647	631	631	515	406
2009	4,238	383	579	779	733	735	550	479
2010	4,122	373	564	682	761	699	573	470

**Notes:**

Adults aged 16 and over. Recommendation: 30 minutes or more physical activity in at least 5 days a week. Activity sessions lasting for less than 10 minutes have been excluded.

**Source:**

Scottish Health Executive (2011). The Scottish Health Survey 2010. Scottish Executive: Edinburgh.

**Table 1.4**  
**Self-reported percentage of adults meeting the physical activity recommendations, by sex and age,**  
**Northern Ireland 2001, 2005/06 and 2010/11**

	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%	%
<b>Men</b>								
2001	30	38	34	36	34	23	20	15
2005/06	33	33	40	39	29	28	26	17
2010/11	44							
<b>Base</b>								
2001	1,968	250	337	347	351	277	266	140
2005/06	1,747	153	278	346	305	276	237	152
<b>Women</b>								
2001	26	27	32	35	31	24	17	7
2005/06	28	26	35	35	33	26	20	11
2010/11	35							
<b>Base</b>								
2001	2,722	345	476	501	466	357	319	258
2005/06	2,498	254	428	501	417	335	312	251

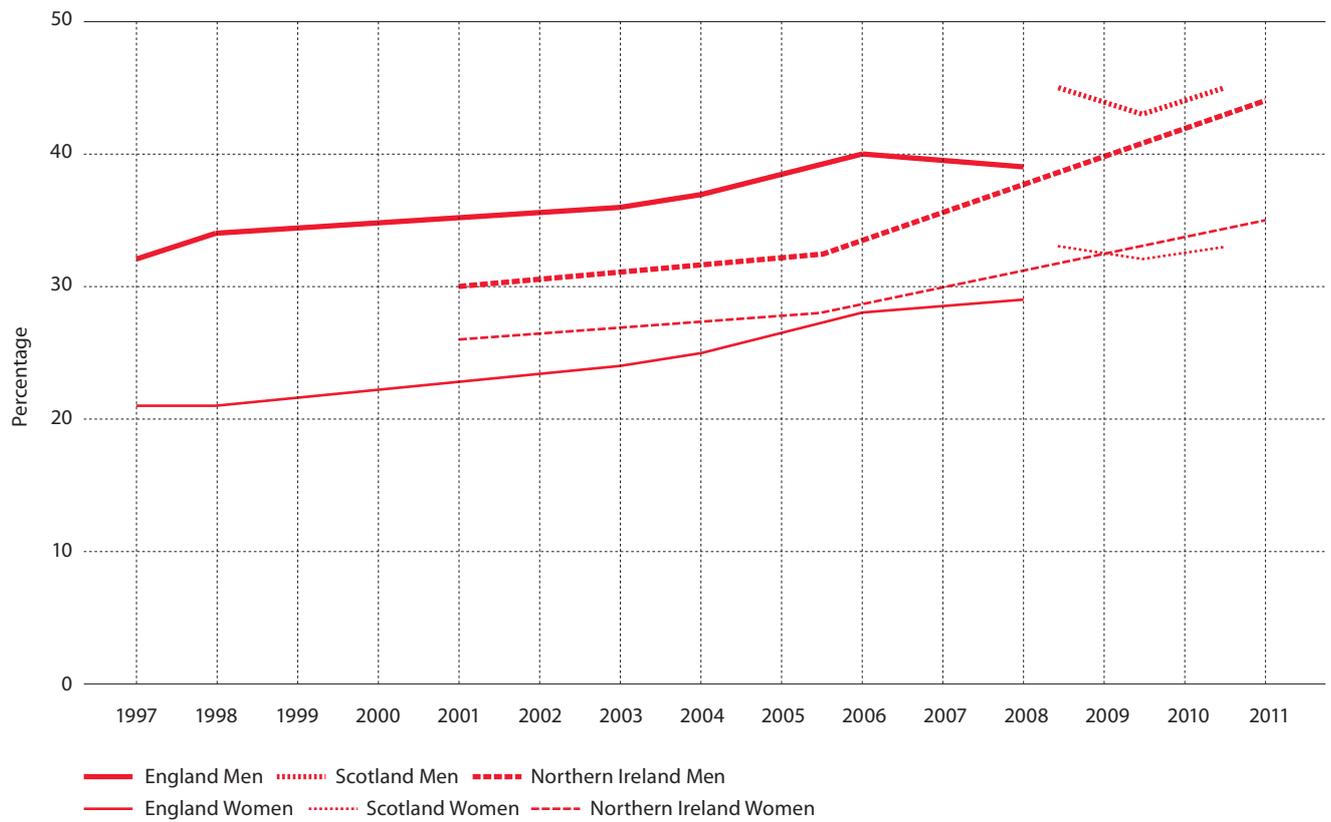
**Notes:**

Adults aged 16 and over. Recommendation: at least 30 minutes of moderate or vigorous physical activity in blocks lasting more than 30 minutes in five or more days in a week. Included only 30 minutes of vigorous activity, moderate activity or brisk walking per day but not a cumulative combination of these activities. Data from 2010/11 not available by age group, bases from this year also not provided.

**Source:**

Northern Ireland Statistics and Research Agency (2007). Northern Ireland Health and Social Wellbeing Survey 2005/06. Includes data from previous years. ¶ The Department of Health, Social Services and Public Safety (2011). First results from the 2010/11 Health Survey Northern Ireland. ¶ Public Health Information & Research Branch: Belfast.

**Figure 1.4**  
**Self-reported percentage of adults meeting the physical activity recommendations, by sex,**  
**UK countries 1997 to 2011**



**Table 1.5**  
**Self-reported physical activity levels in children, by sex and age, England 2008, Scotland 2010**

	All	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>England</b>															
<b>Boys</b>															
Meeting recommendations	32	43	32	28	32	34	36	32	33	31	29	29	27	32	32
Some activity	44	30	39	41	43	41	47	45	46	49	50	46	52	43	42
Low activity	24	27	25	30	25	25	18	23	22	20	21	25	21	24	26
Base	3,493	253	240	247	239	249	235	236	243	255	254	260	286	267	229
<b>Girls</b>															
Meeting recommendations	24	35	33	28	31	28	28	23	25	27	16	19	20	12	15
Some activity	47	38	42	49	43	44	50	55	49	44	55	50	46	47	40
Low activity	29	27	24	23	26	27	22	23	26	29	29	31	34	41	45
Base	3,545	246	268	229	225	236	254	231	248	296	291	240	259	278	244
<b>Scotland</b>															
	All	2-4	5-7	8-10	11-12	13-15									
	%	%	%	%	%	%									
<b>Boys</b>															
Meeting recommendations	75	70	75	85	69	75									
Base	811	188	190	170	104	159									
<b>Girls</b>															
Meeting recommendations	72	70	73	84	74	62									
Base	694	174	143	132	100	145									

**Notes:**

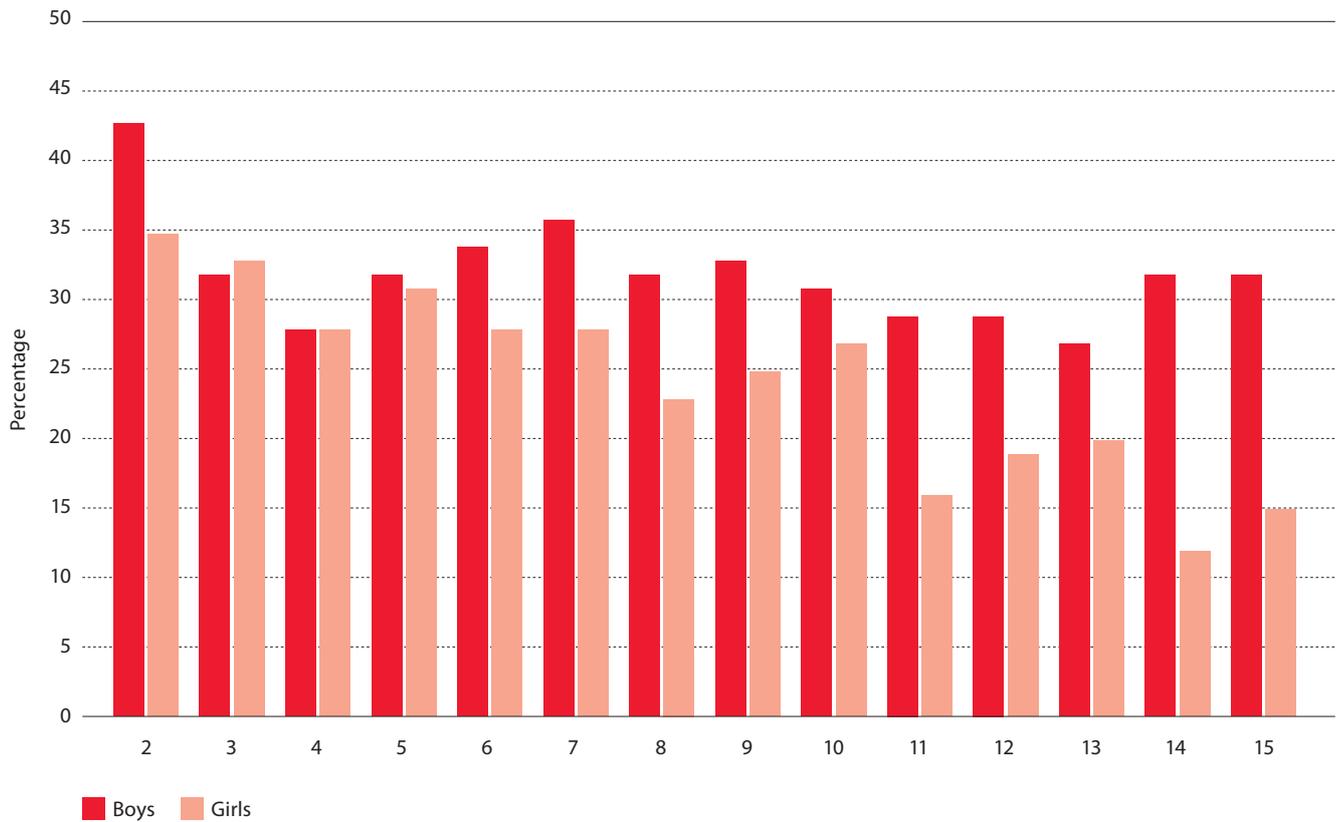
Meets recommendations: 60 minutes or more on all 7 days of the week; Some activity: 30 to 59 minutes on all 7 days of the week; Low activity: lower levels of activity. All data are self-reported.

**Source:**

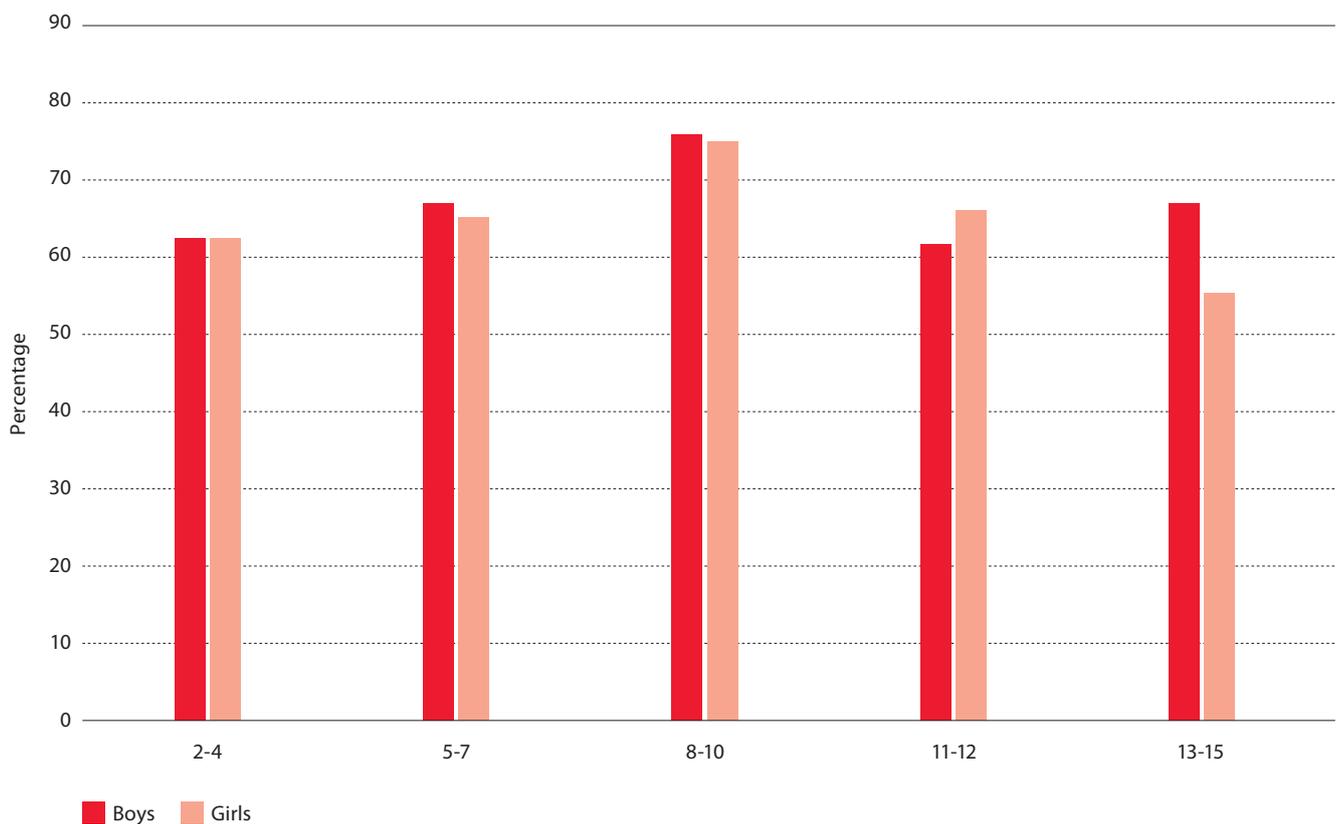
Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. ¶ Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved. ¶ Scottish Health Executive (2011). The Scottish Health Survey 2010: Results. The Scottish Executive: Edinburgh.

**Figure 1.5a**

**Self-reported percentage of children meeting physical activity recommendations, by sex and age in years, England 2008**

**Figure 1.5b**

**Self-reported percentage of children meeting physical activity recommendations, by sex and age in years, Scotland 2010**



**Table 1.6**  
**Self-reported age-standardised physical activity levels among adults, by sex and strategic health authority, England 2008**

	North East	North West	Yorkshire & the Humber	East Midlands	West Midlands	East of England	London	South East Coast	South Central	South West
	%	%	%	%	%	%	%	%	%	%
<b>Men</b>										
Meets recommendations	33	39	40	38	38	38	38	38	41	44
Some activity	33	30	29	35	33	31	29	35	33	30
Low activity	34	31	31	27	29	30	33	27	26	26
<b>Women</b>										
Meets recommendations	26	29	26	27	25	27	29	34	30	32
Some activity	32	34	34	33	32	37	31	35	32	33
Low activity	41	37	40	39	43	35	40	31	38	35
<b>Base</b>										
<i>Men</i>	429	965	714	637	676	820	755	532	527	682
<i>Women</i>	523	1,193	906	795	877	939	927	674	620	863

**Notes:**

Meets recommendations: 30 minutes or more of moderate or vigorous activity on at least 5 days a week; Some activity: 30 minutes or more of moderate or vigorous activity on 1 to 4 days a week; Low activity: lower levels of activity. Episodes of activity less than 30 minutes have been excluded. Data are age-standardised to the mid-year 2007 population estimates for England; see source for details of method. All data are self-reported.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Table 1.7****Self-reported age-standardised physical activity levels in adults, by sex and quintile of equivalised household income, England 2008**

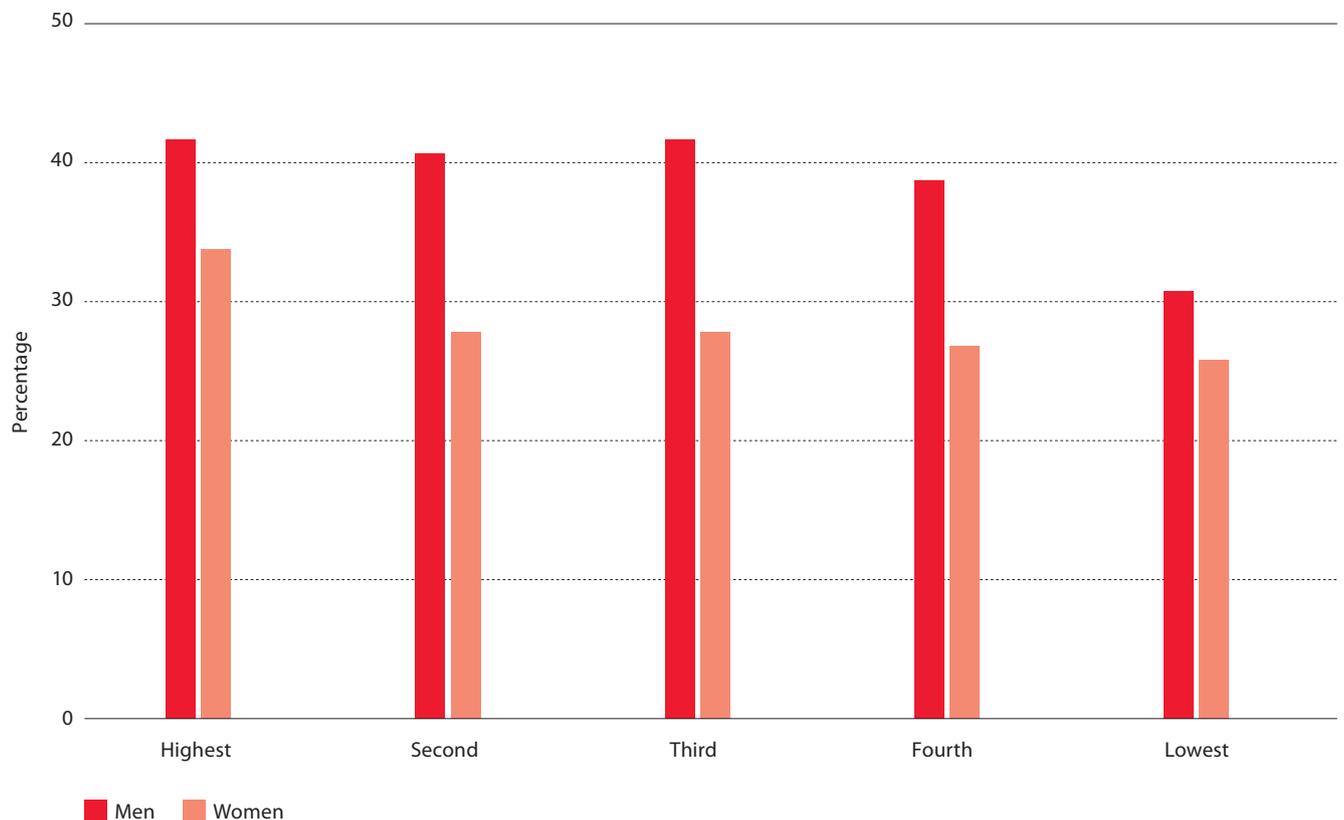
	Highest	Second	Third	Fourth	Lowest
	%	%	%	%	%
<b>Men</b>					
Meets recommendations	42	41	42	39	31
Some activity	35	37	29	28	23
Low activity	23	23	29	33	46
<b>Women</b>					
Meets recommendations	34	28	28	27	26
Some activity	37	38	34	32	29
Low activity	28	35	38	41	45
<b>Base</b>					
Men	1,329	1,180	1,041	1,046	854
Women	1,313	1,285	1,310	1,397	1,274

**Notes:**

Meets recommendations: 30 minutes or more of moderate or vigorous activity on at least 5 days a week; Some activity: 30 minutes or more of moderate or vigorous activity on 1 to 4 days a week; Low activity: lower levels of activity. Episodes of activity less than 30 minutes have been excluded. All data are self-reported.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 1.7****Self-reported age-standardised percentage of adults meeting physical activity recommendations, by sex and quintile of equivalised household income, England 2008**

**Table 1.8**  
**Self-reported physical activity prevalence, by sex and ethnic group, England 2004**

	General population	Black Caribbean	Black African	Indian	Pakistani	Bangladeshi	Chinese	Irish
	%	%	%	%	%	%	%	%
<b>Men</b>								
Meeting recommendations	37	37	35	30	28	26	30	39
Some activity	31	29	30	26	21	23	32	28
Low activity	32	34	35	44	51	51	38	33
Base	2,873	409	386	549	429	408	348	497
<b>Women</b>								
Meeting recommendations	25	31	29	23	14	11	17	29
Some activity	36	30	28	32	34	21	36	38
Low activity	39	39	43	45	52	68	47	33
Base	3,818	648	467	634	508	477	375	656

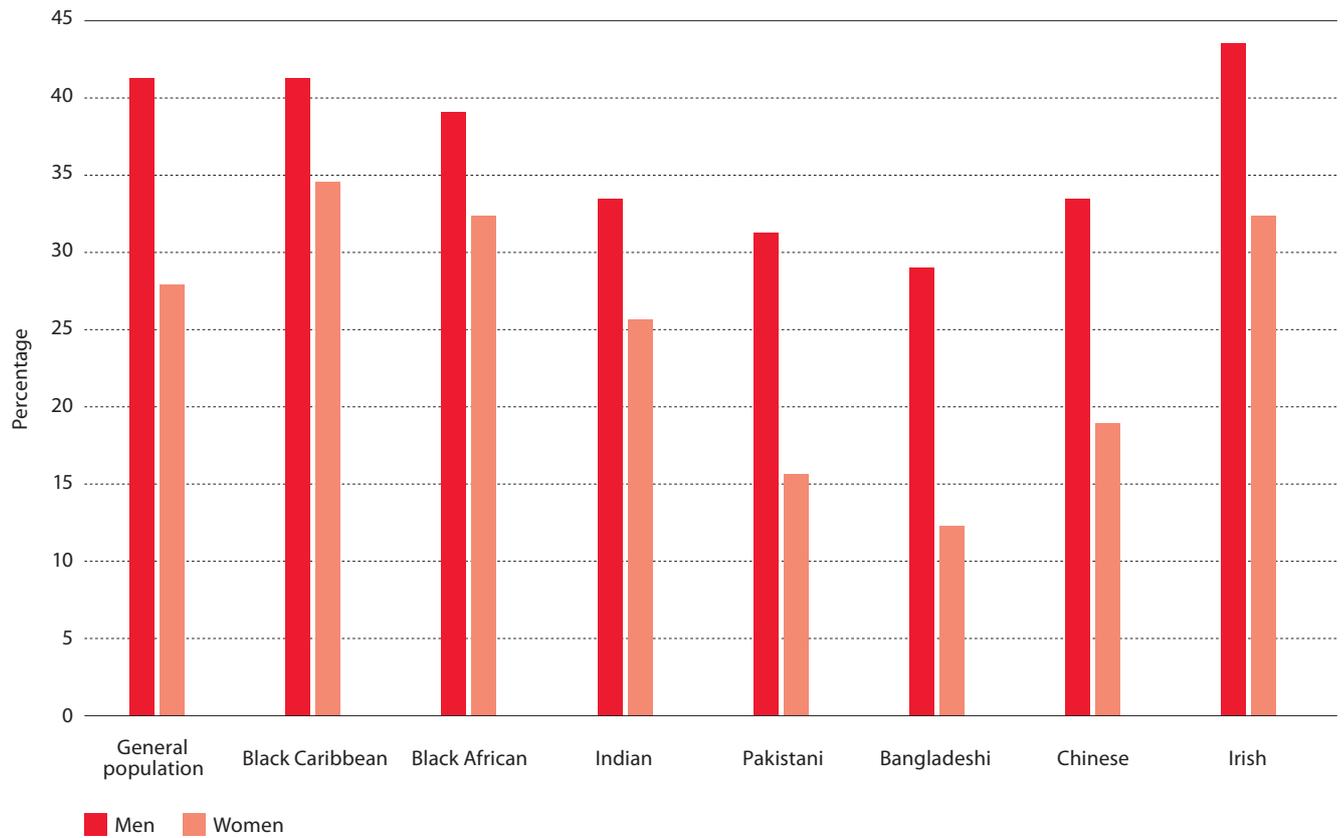
**Notes:**

Meets recommendations: 30 minutes or more of moderate or vigorous activity on at least 5 days a week; Some activity: 30 minutes or more of moderate or vigorous activity on 1 to 4 days a week; Low activity: lower levels of activity. Episodes of activity less than 30 minutes have been excluded. All data are self-reported. Adults aged 16 and over. Data are weighted for non-response.

**Source:**

Joint Health Surveys Unit (2006). Health Survey for England 2004: Health of Ethnic Minorities. The Information Centre: Leeds. © Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 1.8**  
**Self-reported percentage of adults meeting physical activity recommendations, by sex and ethnic group, England 2004**



**Table 1.9**  
**Self-reported versus objectively measured physical activity, by sex and age, England 2008**

	All adults	16-34	35-64	65+
	%	%	%	%
<b>Men</b>				
<b>Accelerometry</b>				
Meeting recommendations	6	11	5	5
Some activity	43	62	46	20
Low activity	50	27	49	75
<b>Self-reported</b>				
Meeting recommendations	39	51	40	16
Some activity	31	31	32	28
Low activity	30	18	28	56
<b>Women</b>				
<b>Accelerometry</b>				
Meeting recommendations	4	8	4	0
Some activity	38	51	40	23
Low activity	58	41	56	76
<b>Self-reported</b>				
Meeting recommendations	29	36	32	12
Some activity	34	36	36	23
Low activity	38	28	32	65
<b>Bases</b>				
<b>Accelerometry</b>				
<i>Men</i>	623	78	353	192
<i>Women</i>	682	89	384	209
<b>Self-reported</b>				
<i>Men</i>	6,737	1,723	3,494	1,520
<i>Women</i>	8,317	2,132	4,240	1,945

**Notes:**

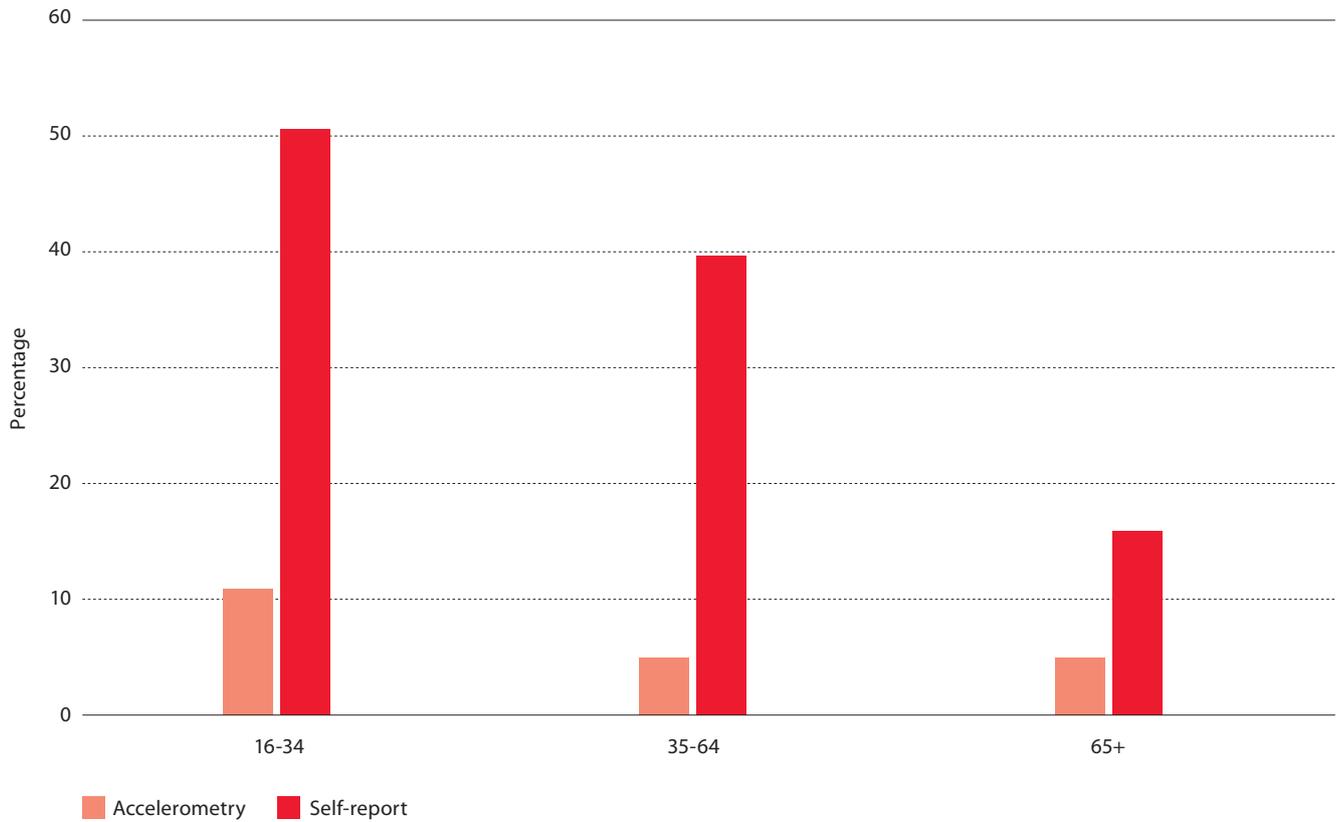
Accelerometry: Meets recommendations: 30 minutes or more of moderate or vigorous activity on at least 5 days the week of accelerometer wear; Some activity: 30 minutes or more of moderate or vigorous activity on 1 to 4 days; Low activity: lower levels of activity. No days with 30 minutes or more of moderate or vigorous activity. Self-reported: Meets recommendations: 30 minutes or more of moderate or vigorous activity on at least 20 occasions in the last 4 weeks (equivalent to at least 5 days per week); Some activity: 30 minutes or more of moderate or vigorous activity on four to 19 occasions (1 to 4 days per week); Low activity: 30 minutes or more of moderate or vigorous activity on fewer than four occasions in the last 4 weeks (less than once per week on average). Episodes of less than 30 minutes have been excluded. Data are weighted for non-response. Adults aged 16 and over.

**Source:**

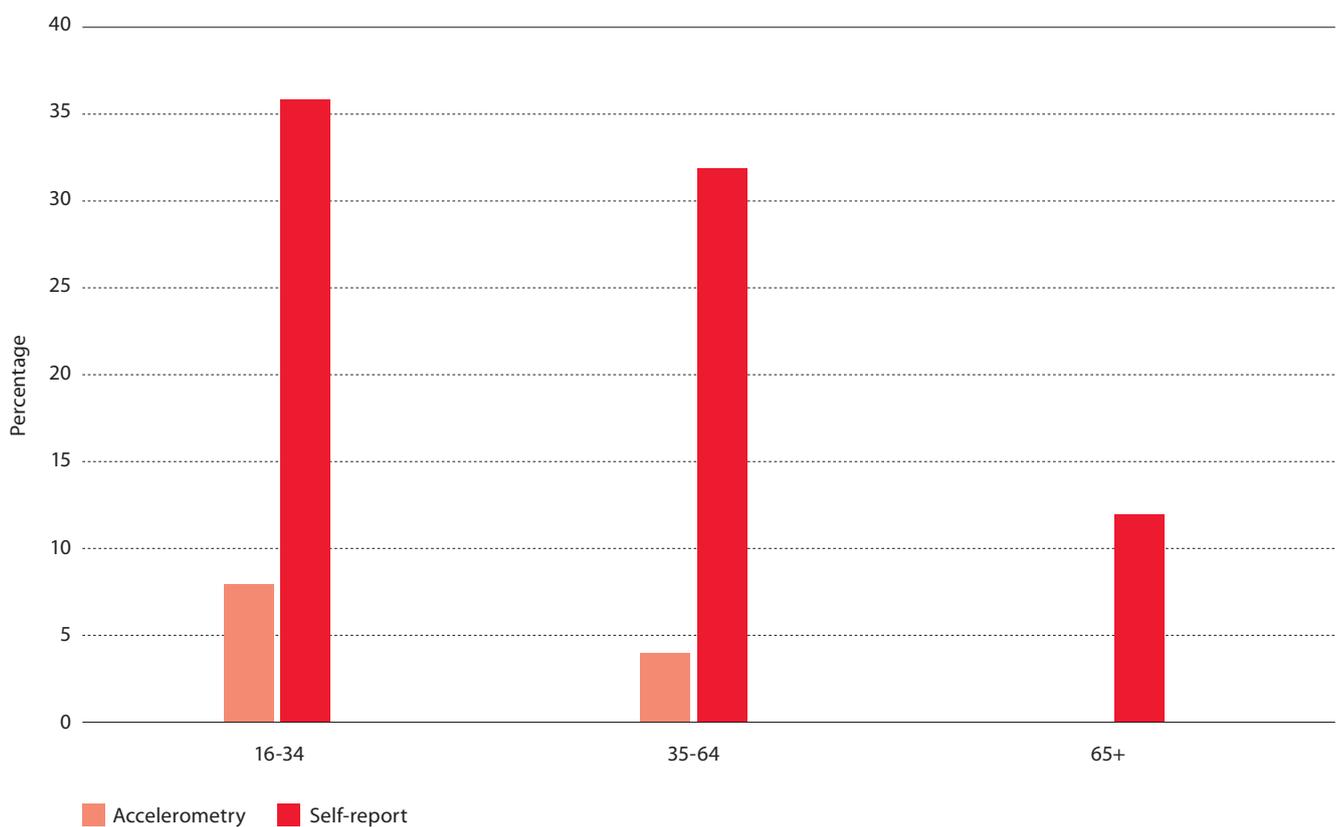
Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. © Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 1.9a**

**Self-reported versus objectively measured percentage meeting physical activity recommendations in men, by age, England 2008**

**Figure 1.9b**

**Self-reported versus objectively measured percentage meeting physical activity recommendations in women, by age, England 2008**



**Table 1.10**  
**Objectively measured physical activity levels, by sex and tertile of equivalised household income, England 2008**

	Highest	Middle	Lowest
	%	%	%
<b>Men</b>			
Meets recommendations	12	4	9
Some activity	46	49	49
Low activity	43	46	42
<i>Base</i>	224	187	120
<b>Women</b>			
Meets recommendations	4	3	6
Some activity	48	36	38
Low activity	48	60	57
<i>Base</i>	193	200	172

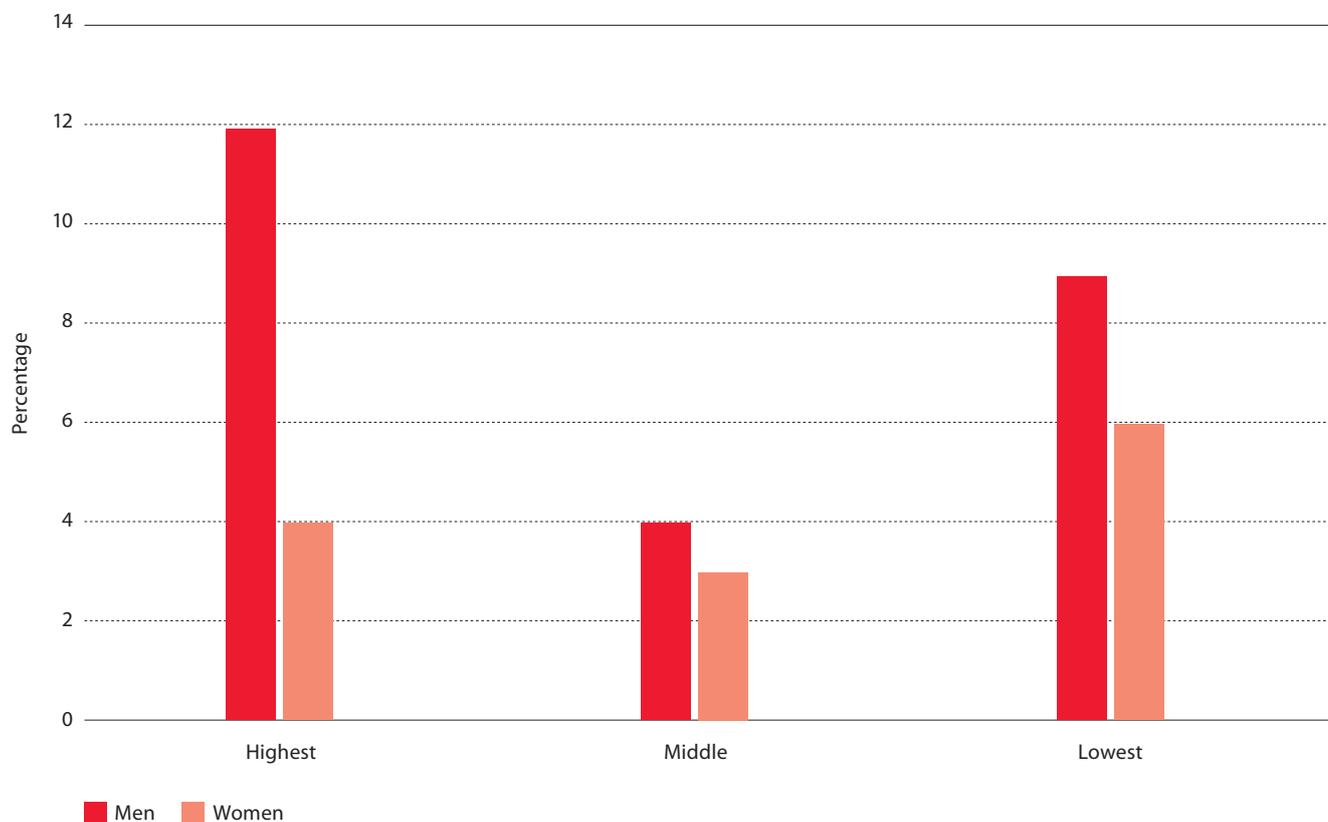
**Notes:**

Accelerometry: Meets recommendations: 30 minutes or more of moderate or vigorous activity on at least 5 days the week of accelerometer wear; Some activity: 30 minutes or more of moderate or vigorous activity on 1 to 4 days; Low activity: lower levels of activity. No days with 30 minutes or more of moderate or vigorous activity. Adults aged 16 and over with 7 days valid accelerometry data.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 1.10**  
**Objectively measured percentage meeting physical activity recommendations, by sex and tertile of equivalised household income, England 2008**



**Table 1.11**  
**Objectively measured physical activity levels in children, by sex and age, England 2008**

	All children	4-10	11-15
	%	%	%
<b>Boys</b>			
Meeting recommendations	33	51	7
Some activity	20	22	18
Low activity	47	28	75
<i>Base</i>	132	74	58
<b>Girls</b>			
Meeting recommendations	21	34	0
Some activity	18	28	4
Low activity	61	39	96
<i>Base</i>	151	90	61

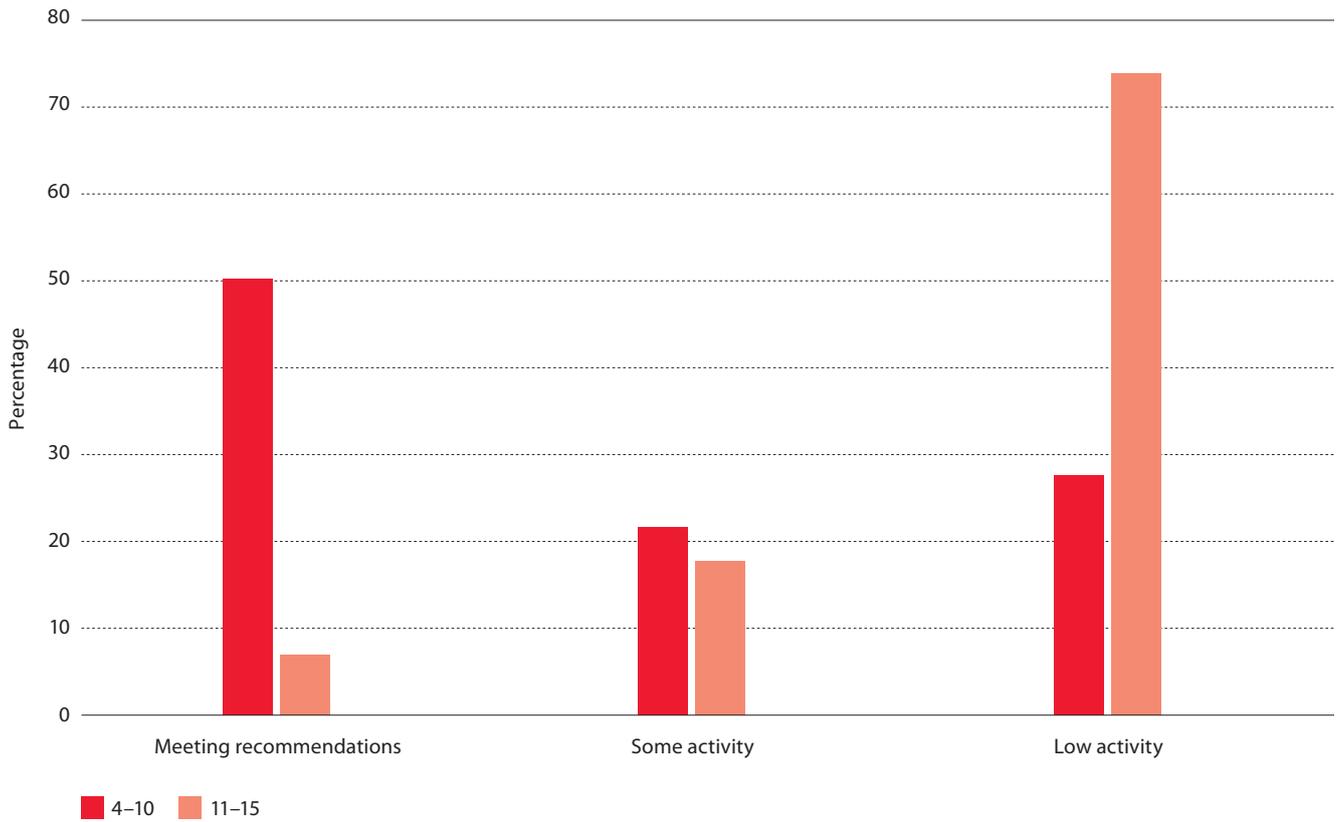
**Notes:**

Accelerometry: Meets recommendations: 60 minutes or more of at least moderate activity on all 7 days; Some activity: 30-59 minutes on all 7 days; Low activity: lower levels of activity. Children aged 4 to 15 with 7 days valid accelerometry data.

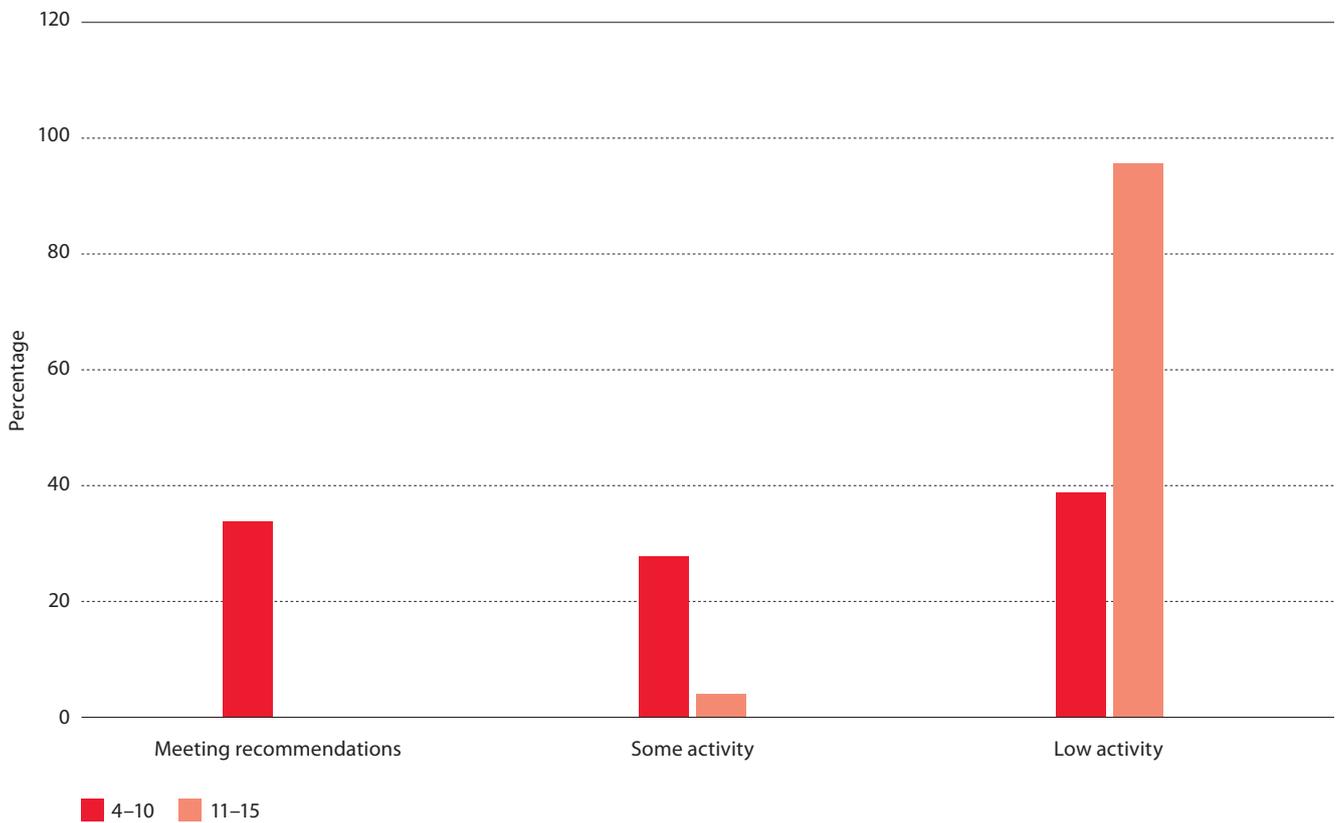
**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 1.11a**  
**Objectively measured physical activity levels in boys, by age, England 2008**



**Figure 1.11b**  
**Objectively measured physical activity levels in girls, by age, England 2008**



**Table 1.12****Self-reported patient physical activity outcomes before and after completing cardiac rehabilitation, England, Northern Ireland and Wales 2009/10**

	12 weeks		12 months	
	Before	After	Before	After
	%	%	%	%
Exercise 5 x 30 minutes/week	32	53	34	49
<b>Exercise</b>				
Often	18	29	19	25
Sometimes	32	49	32	46
Never	50	23	49	29
<i>Base</i>	<i>16,901</i>		<i>5,325</i>	

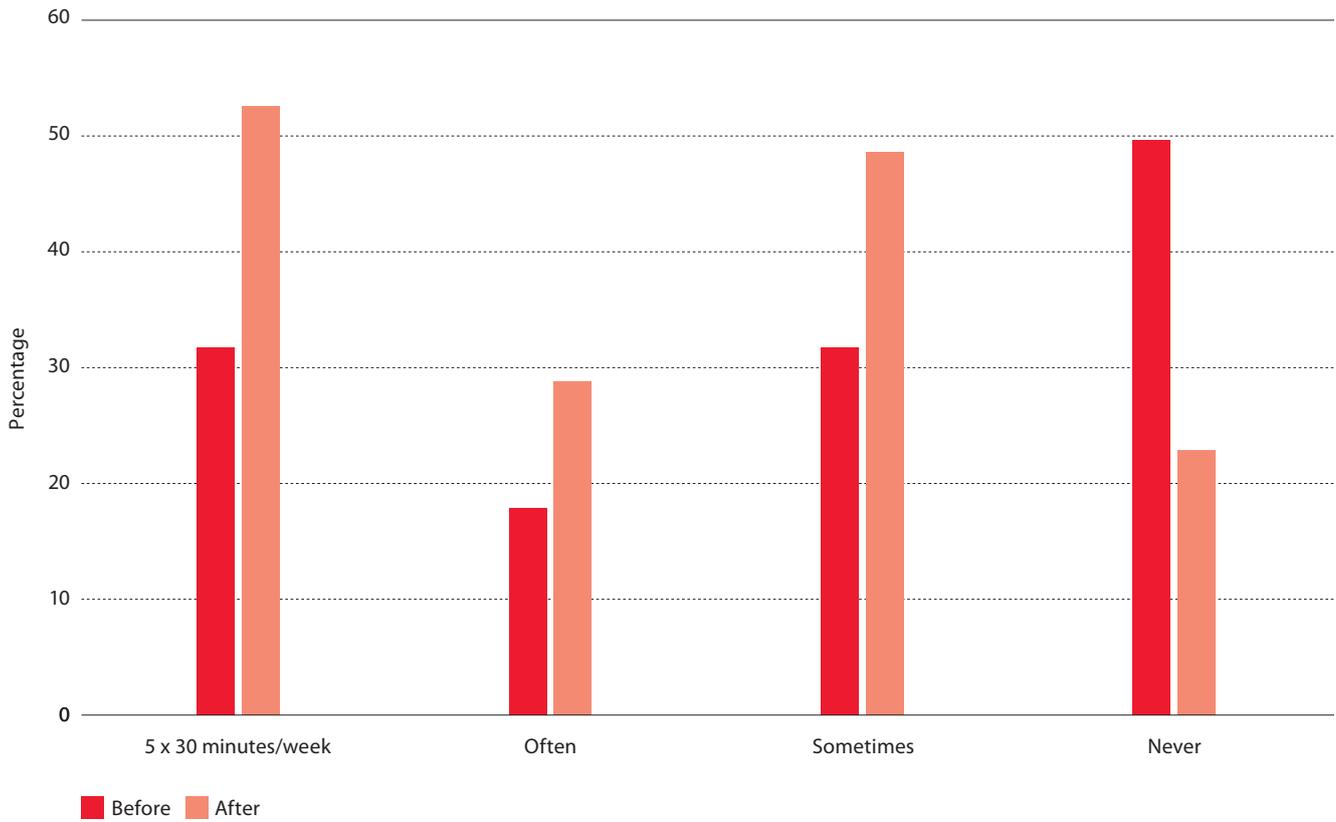
**Note:**

In England, the National Service Framework for CHD (2000) recommended that at 12 months at least 50% of people who took part in Cardiac Rehabilitation should be taking regular physical activity of at least 30 minutes duration on average for five times each week.

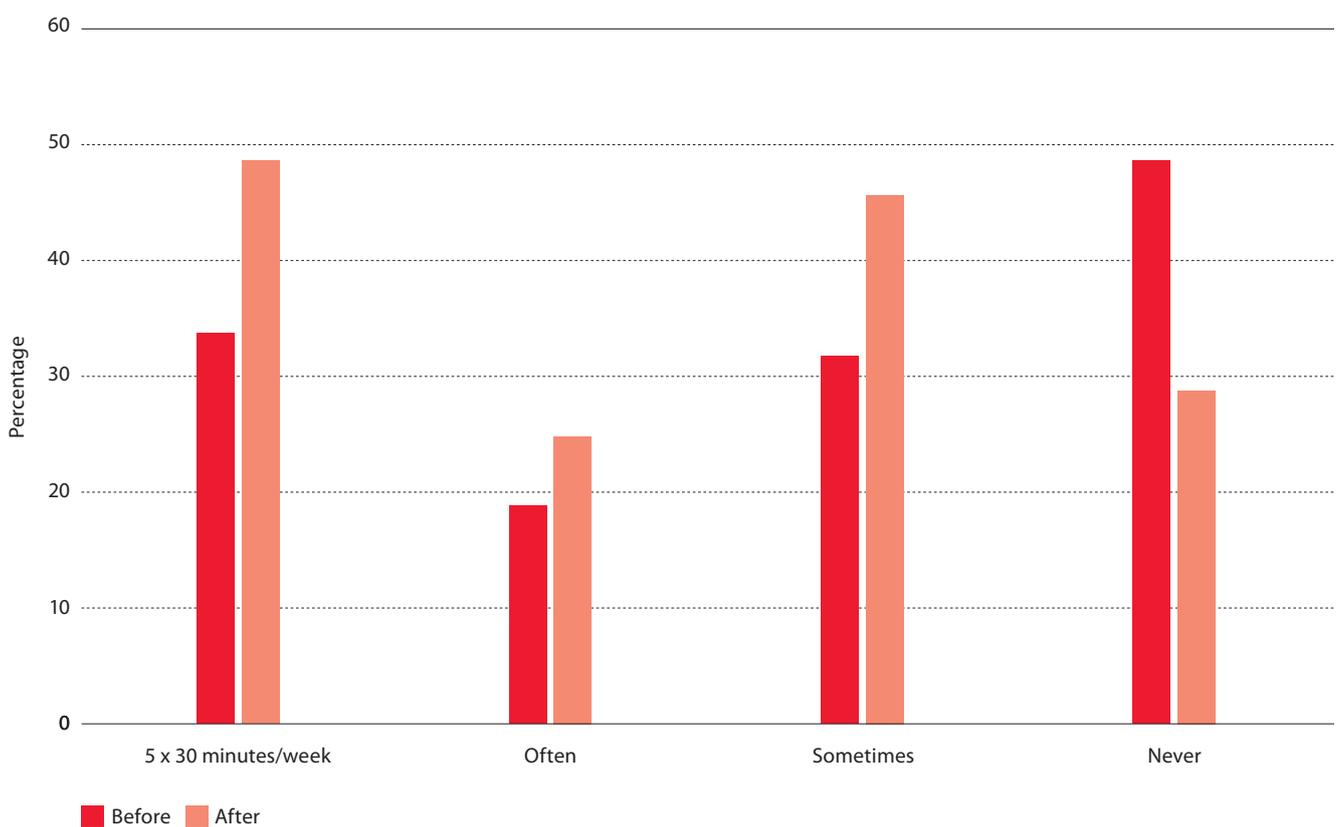
**Source:**

British Heart Foundation (2011). The National Audit of Cardiac Rehabilitation: Annual Statistical Report 2011. British Heart Foundation: London.

**Figure 1.12a**  
**Patient physical activity outcomes before and 12 weeks after completing cardiac rehabilitation, England, Northern Ireland and Wales 2009/10**



**Figure 1.12b**  
**Patient physical activity outcomes before and 12 months after completing cardiac rehabilitation, England, Northern Ireland and Wales 2009/10**



# 2.

Men  
**33 minutes**  
Women  
**24 minutes**



Men  
**28 minutes**  
Women  
**21 minutes**



**Weekdays**

Minutes of MVPA per day

**Weekend days**

## **Daily minutes of physical activity**

**Both men and women spend more time being physically active during weekdays than on weekend days.**

## 2. Daily minutes of physical activity

This chapter presents findings from the sub-sample of the 2008 Health Survey for England that was selected to wear accelerometers, in order to obtain objective measures of physical activity and sedentary behaviour. Advantages of accelerometry over self-report are that as well as providing objective information on physical activity levels, they also provide greater precision, however, they can be subject to measurement error<sup>1</sup>.

In Chapter 1 we presented statistics describing the proportion of individuals that reach certain targets of physical activity over defined periods of time. In this chapter we use accelerometry data to describe the average number of minutes individuals spend in physical activity levels defined by METs (metabolic equivalent or metabolic equivalent of task) for both adults and children. Metabolic rate is the rate at which a person uses energy, or burns calories. MET is defined as the ratio of metabolic rate for a specific physical activity to a reference metabolic rate, with 1 MET considered as a resting metabolic rate. Patterns in these measures of physical activity are explored by age, sex and socioeconomic status, as well as comparing between weekdays and weekend days.

### Adults

In England, 2008, men spent more time doing moderate to vigorous physical activity (MVPA) than women, 31 minutes a day compared to 24. MVPA is defined in the 2008 Health Survey for England as all activity occurring at 3 or more METs. The amount of time spent in this category did decline with age for both sexes, with men aged 16 to 24 years spending 45 minutes in MVPA a day, compared to 12 minutes for men aged 75 and above. Both men and women spent marginally more time doing physical activity on the weekdays, however they were also more sedentary during the week (Tables 2.1 and 2.2, Figures 2.1, 2.2a and 2.2b).

### Children

The Health Survey for England in 2008 also gave accelerometers to a subsample of children aged 4 to 15 years. Physical activity levels were assessed using the average daily minutes being sedentary or active as defined by METs. Children in the oldest age group (12 to 15 years) spent the most time being sedentary and the least time being moderate to vigorously active during the day, the children in the youngest age group spent the most time being moderate to vigorously active (Table 2.3 and Figure 2.3). These findings agree with the objectively measured data presented in Chapter 1 (Table 1.11, Figures 1.11a and 1.11b).

Objectively measured physical activity in children showed little difference by tertile of equivalised household income. Levels of sedentary behaviour, light and moderate to vigorous physical activity differed little between the tertiles (Table 2.4). The amount of time children spent being sedentary or active varied according to whether it was a weekday or a weekend. Both boys and girls aged 4 to 15 were more active during the week than at the weekend (Table 2.5, Figures 2.5a and 2.5b).

1. Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds.

**Table 2.1**  
**Objectively measured average daily minutes of moderate to vigorous physical activity, by sex and age, England 2008**

	All adults	16-34	35-44	45-54	55-64	65-74	75+
Men	31	45	37	39	31	23	12
Women	24	34	34	25	24	16	9
<b>Base</b>							
Men	970	179	145	170	202	160	114
Women	1,145	221	176	195	249	176	128

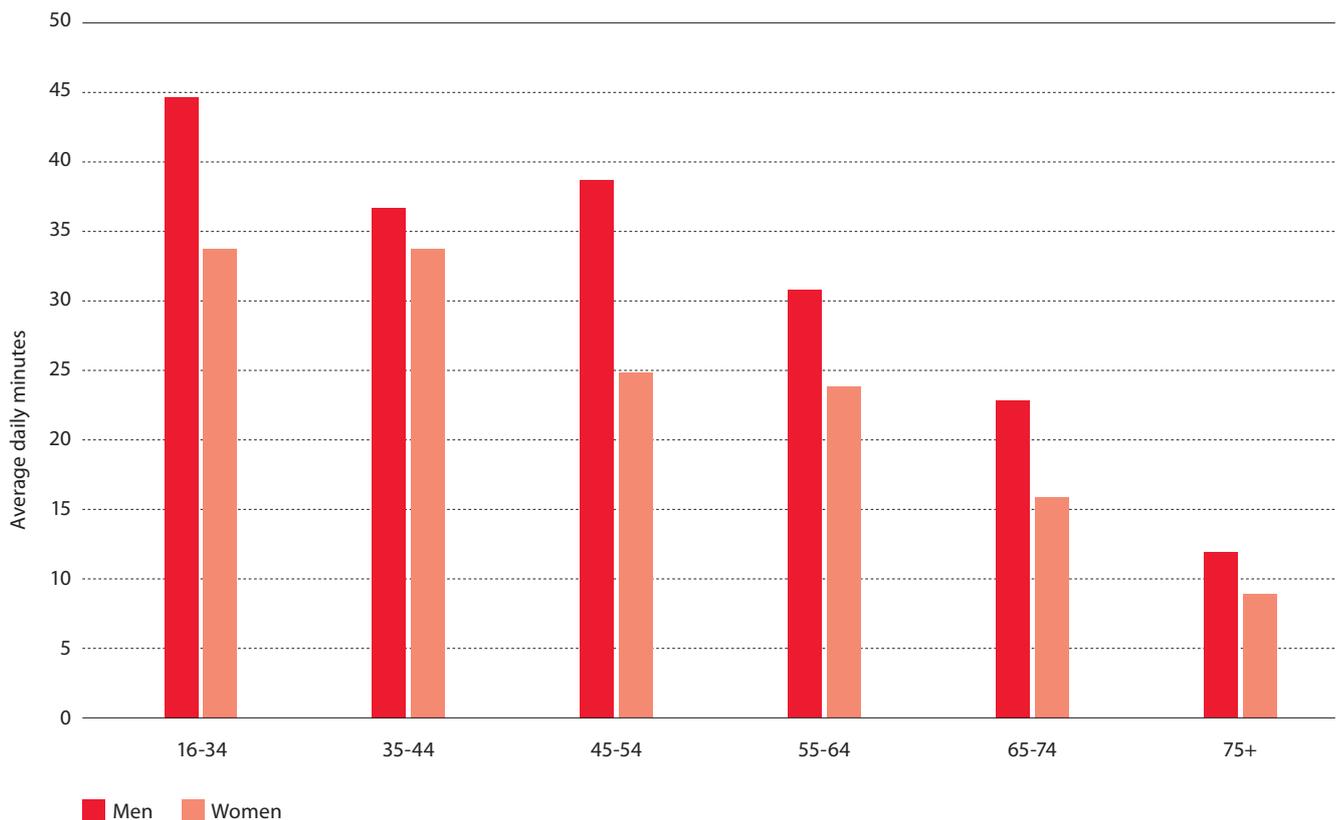
**Notes:**

Moderate to vigorous physical activity is all activity at 3 or more METs. Metabolic Equivalent (MET) is defined as the ratio of work metabolic rate to a standard resting metabolic rate, 1 MET is considered a resting metabolic rate obtained during quiet sitting. Sedentary: Below 1.5 METs; Light physical activity: 1.5 to below 3 METs; Moderate to vigorous physical activity: All activity at 3 or more METs. The data in this table have been adjusted for average accelerometer wear time using regression techniques, to allow comparisons between groups with different average wear time.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 2.1**  
**Objectively measured average daily minutes of moderate to vigorous physical activity, by sex and age, England 2008**



**Table 2.2**  
**Objectively measured average daily physical activity level for weekdays and weekend, by sex and age, England 2008**

	All adults	16-34	35-44	45-54	55-64	65-74	75+
<b>Men</b>							
<b>Weekday</b>							
Sedentary	600	587	566	569	591	615	670
Light physical activity	218	218	245	244	227	211	164
Moderate to vigorous physical activity	33	46	37	42	33	24	13
<i>Base</i>	970	179	145	170	202	160	114
<b>Weekend</b>							
Sedentary	579	541	543	561	582	599	646
Light physical activity	194	218	221	208	191	181	147
Moderate to vigorous physical activity	28	42	37	32	27	20	8
<i>Base</i>	968	180	145	164	200	163	116
<b>Women</b>							
<b>Weekday</b>							
Sedentary	592	580	558	561	583	607	663
Light physical activity	235	235	261	260	244	227	180
Moderate to vigorous physical activity	24	35	35	25	24	17	10
<i>Base</i>	1,145	221	176	195	249	176	128
<b>Weekend</b>							
Sedentary	563	546	512	544	551	587	640
Light physical activity	216	224	257	232	227	200	154
Moderate to vigorous physical activity	21	30	31	24	22	13	7
<i>Base</i>	1,138	218	174	188	243	179	136

**Notes:**

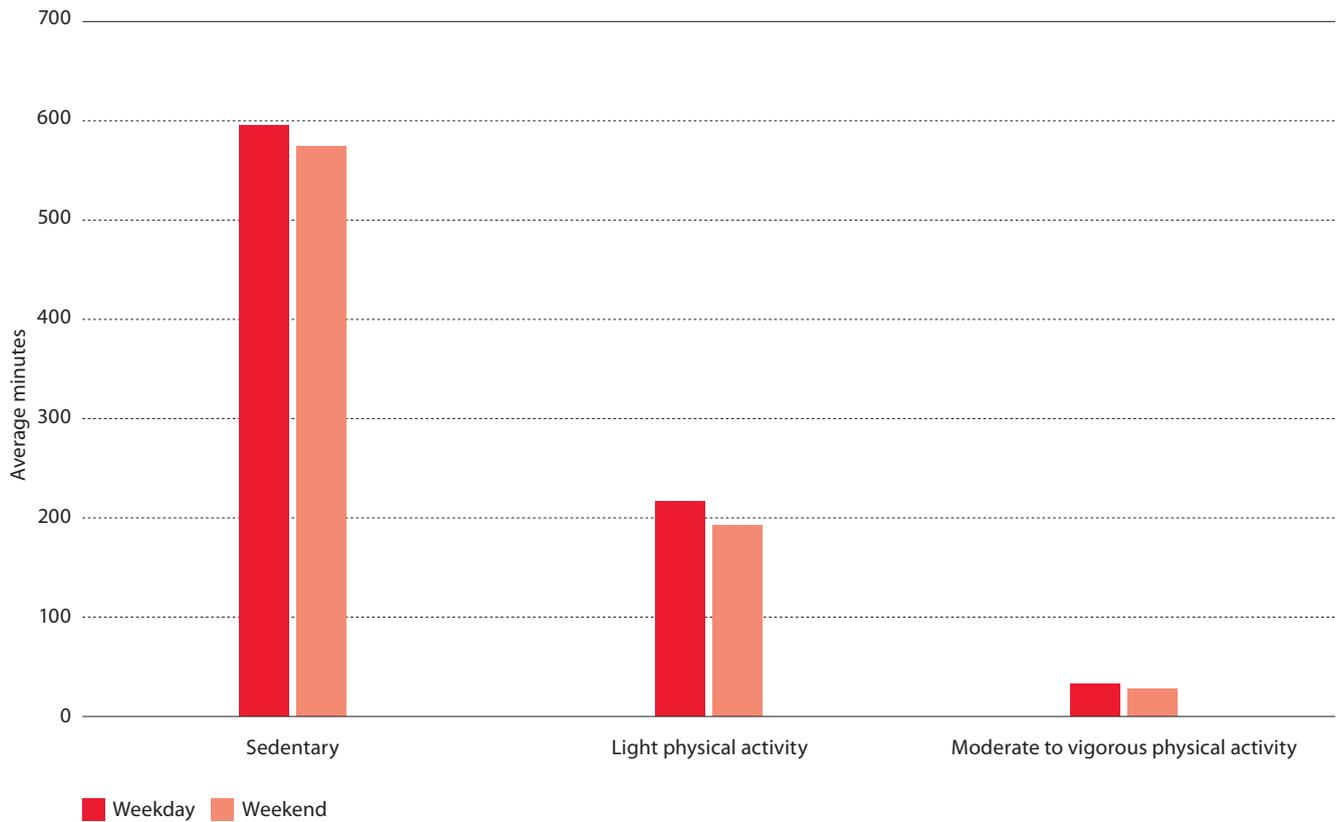
Metabolic Equivalent (MET) is defined as the ratio of work metabolic rate to a standard resting metabolic rate, 1 MET is considered a resting metabolic rate obtained during quiet sitting. Sedentary: below 1.5 METs; Light physical activity: 1.5 to below 3 METs; Moderate to vigorous physical activity: all activity at 3 or more METs. The data in this table have been adjusted for average accelerometer wear time using regression techniques, to allow comparisons between groups with different average wear time.

**Source:**

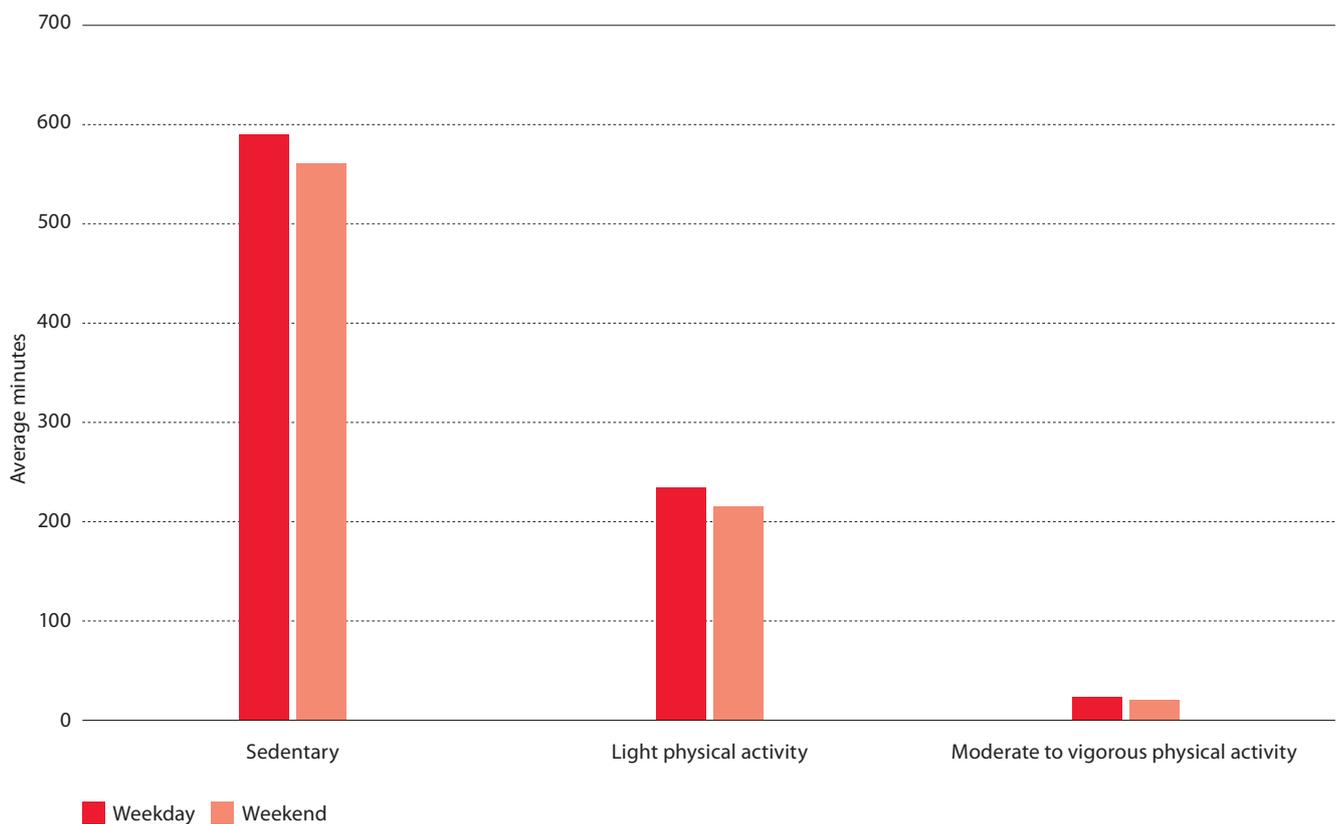
Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds.  
 Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 2.2a**

**Objectively measured average daily minutes spent in physical activity level in men, by weekdays and weekend days, England 2008**

**Figure 2.2b**

**Objectively measured average daily minutes spent in physical activity level in women, by weekdays and weekend days, England 2008**



**Table 2.3**  
**Objectively measured average daily physical activity levels in children, by sex and age, England 2008**

Average daily minutes spent in each category	All children	4-7	8-11	12-15
<b>Boys</b>				
Sedentary	427	374	424	484
Light physical activity	260	273	270	237
Moderate to vigorous physical activity	85	124	79	52
<i>Base</i>	365	89	144	132
<b>Girls</b>				
Sedentary	460	398	449	534
Light physical activity	250	274	267	209
Moderate to vigorous physical activity	61	101	55	28
<i>Base</i>	405	112	145	148

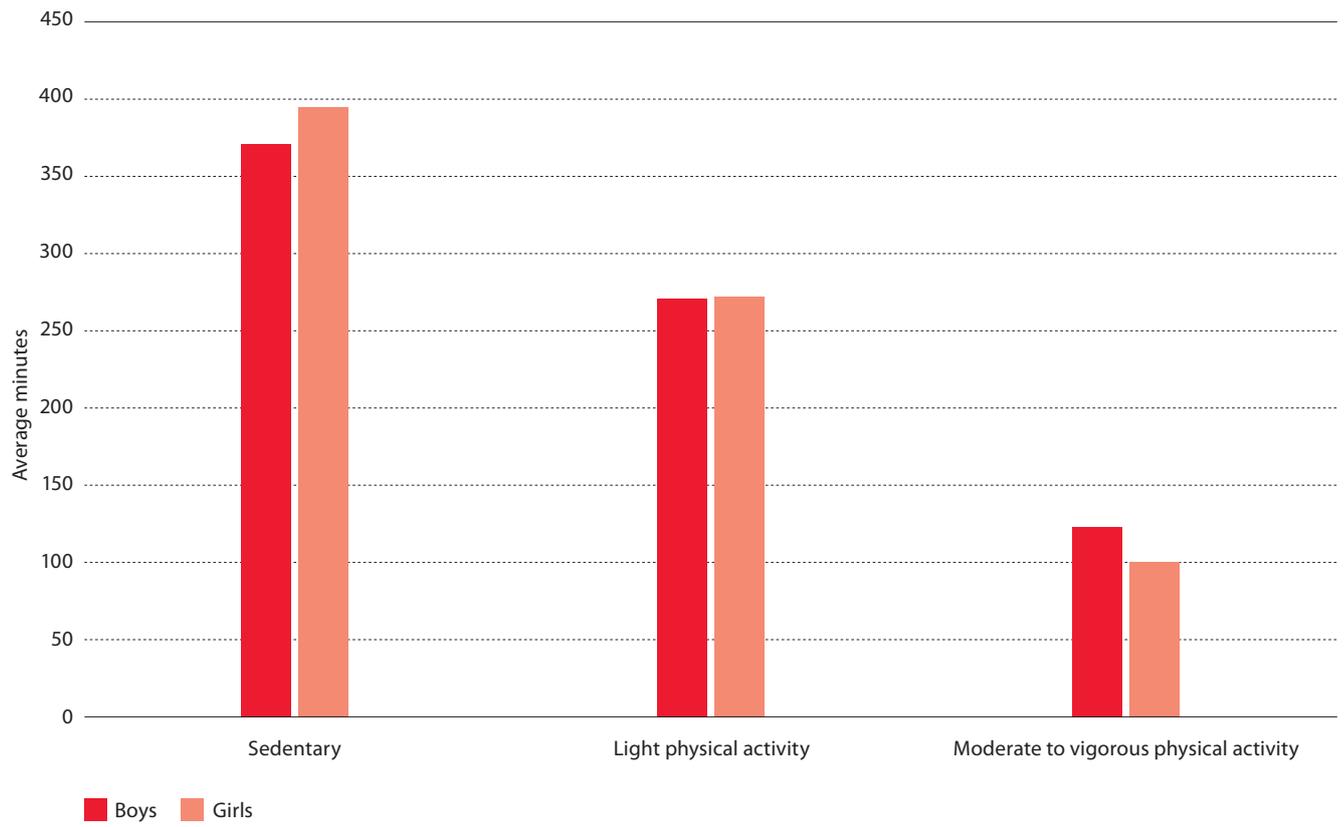
**Notes:**

Metabolic Equivalent (MET) is defined as the ratio of work metabolic rate to a standard resting metabolic rate, 1 MET is considered a resting metabolic rate obtained during quiet sitting. Sedentary: below 1.5 METs; Light physical activity: 1.5 to below 4 METs; Moderate to vigorous physical activity: all activity at 4 or more METs. The data in this table have been adjusted for average accelerometer wear time using regression techniques, to allow comparisons between groups with different average wear time.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds.  
 Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 2.3**  
**Objectively measured daily minutes spent in physical activity level in children, by sex, England 2008**



**Table 2.4**  
**Objectively measured average daily physical activity levels in children, by sex and tertile of equivalised household income, England 2008**

Average daily minutes spent in each category	Highest	Middle	Lowest
<b>Boys</b>			
Sedentary	426	424	413
Light physical activity	256	261	267
Moderate to vigorous physical activity	81	85	93
<i>Base</i>	<i>76</i>	<i>146</i>	<i>80</i>
<b>Girls</b>			
Sedentary	464	463	452
Light physical activity	243	248	255
Moderate to vigorous physical activity	67	58	59
<i>Base</i>	<i>106</i>	<i>126</i>	<i>117</i>

**Notes:**

Moderate to vigorous physical activity is all activity at 3 or more METs. Metabolic Equivalent (MET) is defined as the ratio of work metabolic rate to a standard resting metabolic rate, 1 MET is considered a resting metabolic rate obtained during quiet sitting. Sedentary: Below 1.5 METs; Light physical activity: 1.5 to below 4 METs; Moderate to vigorous physical activity: All activity at 4 or more METs. The data in this table have been adjusted for average accelerometer wear time using regression techniques, to allow comparisons between groups with different average wear time.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds.  
 Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Table 2.5**  
**Average daily physical activity level in children for weekdays and weekend days, by sex and age, England 2008**

Average daily minutes spent in each category	All children	4-7	8-11	12-15
<b>Boys</b>				
<b>Weekday</b>				
Sedentary	433	382	430	487
Light physical activity	262	275	271	239
Moderate to vigorous physical activity	86	123	81	55
<i>Base</i>	365	89	144	132
<b>Weekend day</b>				
Sedentary	407	347	400	473
Light physical activity	254	267	270	225
Moderate to vigorous physical activity	79	126	70	43
<i>Base</i>	348	90	130	128
<b>Girls</b>				
<b>Weekday</b>				
Sedentary	467	405	454	542
Light physical activity	251	277	268	209
Moderate to vigorous physical activity	63	99	58	31
<i>Base</i>	405	112	145	148
<b>Weekend day</b>				
Sedentary	435	375	429	502
Light physical activity	248	261	264	219
Moderate to vigorous physical activity	57	103	47	20
<i>Base</i>	378	106	140	132

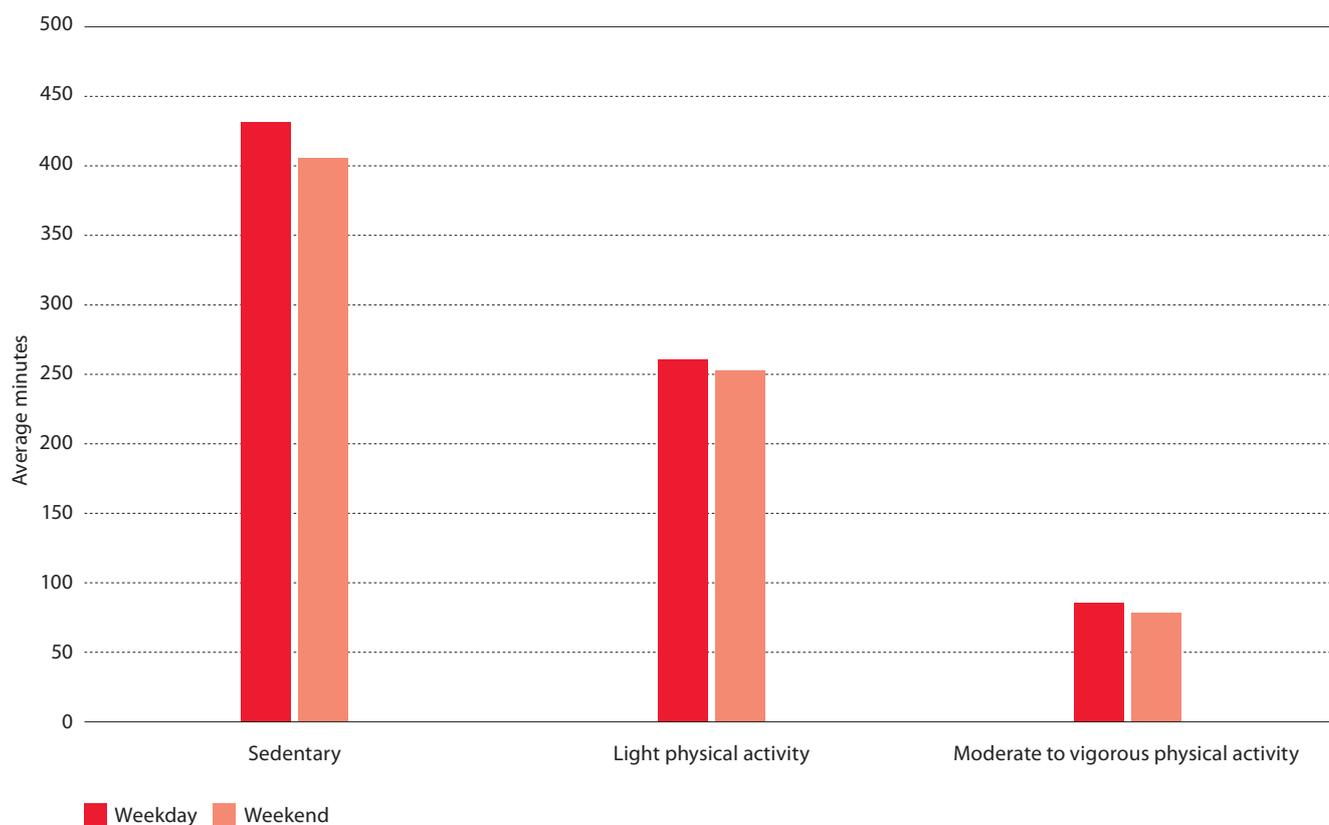
**Notes:**

Metabolic Equivalent (MET) is defined as the ratio of work metabolic rate to a standard resting metabolic rate, 1 MET is considered a resting metabolic rate obtained during quiet sitting. Sedentary: below 1.5 METs; Light physical activity: 1.5 to below 43 METs; Moderate to vigorous physical activity: all activity at 4 or more METs. The data in this table have been adjusted for average accelerometer wear time using regression techniques, to allow comparisons between groups with different average wear time.

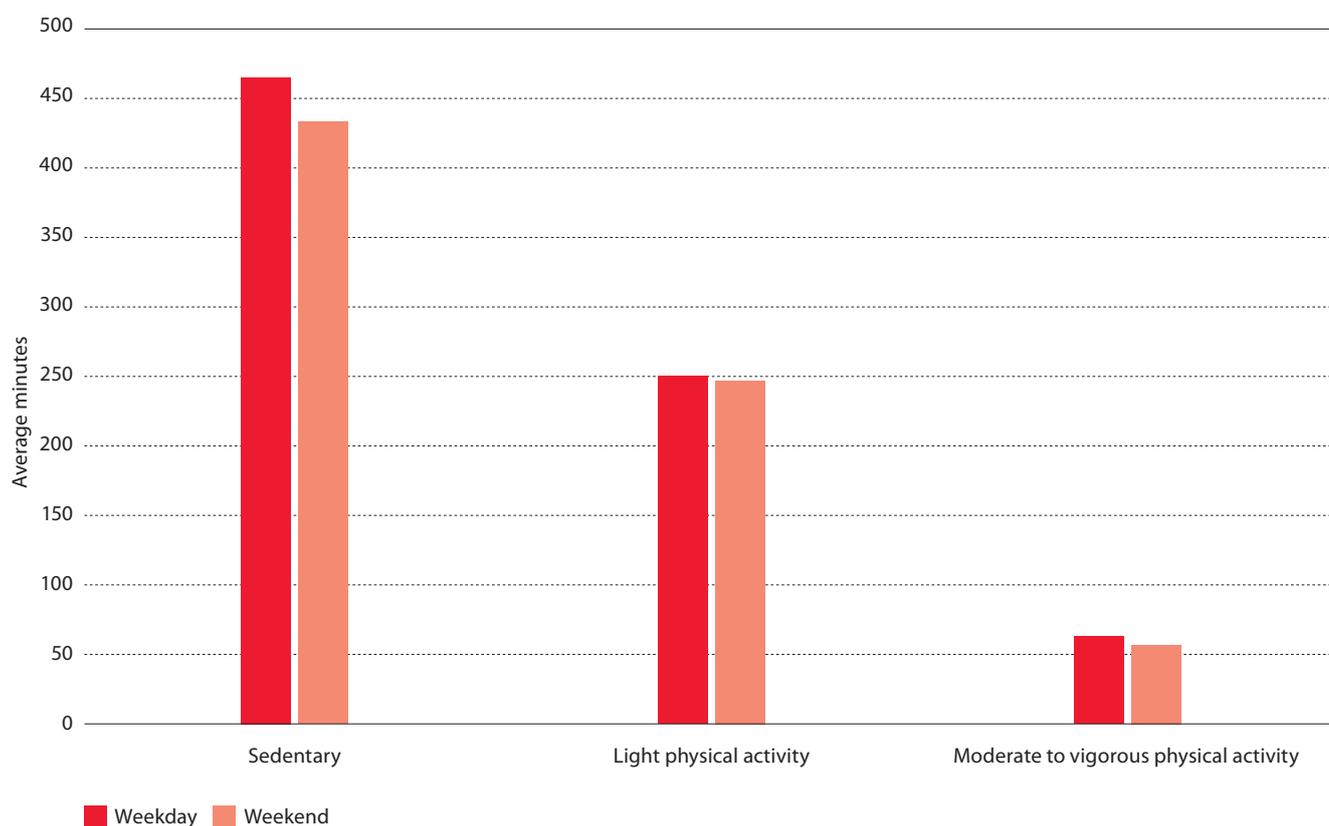
**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds.  
 Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 2.5a**  
Objectively measured average daily minutes spent in physical activity level in boys, by weekdays and weekend days, England 2008



**Figure 2.5b**  
Objectively measured average daily minutes spent in physical activity level in girls, by weekdays and weekend days, England 2008



# 3.

Ireland 23%



UK 14%



Bulgaria 3%

Greece 3%

Italy 3%

Percentage of adults regularly playing sport

## International differences

Ireland has the highest level of participation in sport in the EU with 23% of adults saying that they exercise or play sport regularly, compared to 14% in the UK and only 3% in Bulgaria, Greece and Italy.

## 3. International differences

This chapter reports on international guidelines for physical activity and the levels of physical activity in Europe. A European Commission report on physical activity levels was published in 2010. This presented findings from interviews conducted in 27 European Union (EU) states examining the physical activity levels of individuals.

### WHO guidelines

The WHO guidelines for physical activity recommend a minimum of 30 minutes of moderate-intensity physical activity five days a week, or at least 20 minutes of vigorous-intensity physical activity three days a week. Additional recommendations are made for people over 65, whilst school-aged children have separate recommendations (Table 3.1).

### European physical activity

Self-reported rates of regularly exercising or participating in sport varied dramatically by country of the EU. Bulgaria, Greece and Italy had the lowest prevalence, with only 3% of adults in these countries reporting that they exercised regularly. At 23%, Ireland had the highest reported prevalence of regular exercising or playing sport (Table 3.2, Figure 3.2).

This survey also asked respondents about their physical activity outside of sport. Marked variation by country was also found for this question, with 7% of Italians answering that they regularly engage in physical activity outside of sport compared to 44% of Latvians (Table 3.3).

**Table 3.1**  
**WHO recommended guidelines for physical activity**

Adults aged 18 to 65	A minimum of 30 minutes of moderate-intensity physical activity 5 days a week or at least 20 minutes of vigorous-intensity physical activity 3 days a week.
	The necessary dose of physical activity can be accumulated in bouts of at least 10 minutes and can also consist of a combination of moderate- and vigorous-intensity periods. Activities to increase muscular strength and endurance should be added 2 to 3 days per week.
Adults aged over 65	As for 18-65 year olds, but with additional strength training and balance exercises.
School-aged youth	60 minutes or more of moderate to vigorous physical activity daily, in forms that are developmentally appropriate, enjoyable, and involve a variety of activities.
	The full dose can be accumulated in bouts of at least 10 minutes.

**Source:**

EU Working Group on Sport & Health (2008). EU physical activity guidelines. [http://ec.europa.eu/sport/news/eu-physical-activity-guidelines\\_en.htm](http://ec.europa.eu/sport/news/eu-physical-activity-guidelines_en.htm) (Accessed December 2011).

**Table 3.2**  
**Self-reported frequency of exercising or playing sport, EU countries 2009**

	Don't know	Never	Seldom	With some regularity	Regularly
	%	%	%	%	%
Austria	0	59	33	33	5
Belgium	0	28	22	34	16
Bulgaria	1	58	28	10	3
Cyprus	0	46	13	25	16
Czech Republic	0	37	35	23	5
Denmark	0	18	18	49	15
Estonia	0	41	25	27	7
Finland	0	7	21	55	17
France	0	34	18	35	13
Germany	0	31	20	40	9
Greece	0	67	15	15	3
Hungary	0	53	24	18	5
Ireland	1	26	15	35	23
Italy	0	55	16	26	3
Latvia	0	44	29	19	8
Lithuania	0	44	20	22	14
Luxembourg	0	32	17	39	12
Malta	0	38	14	31	17
Netherlands	0	28	16	51	5
Poland	2	49	24	19	6
Portugal	1	55	11	24	9
Romania	2	49	28	13	8
Slovakia	0	35	35	25	5
Slovenia	0	22	26	39	13
Spain	0	42	19	27	12
Sweden	0	6	22	50	22
United Kingdom	0	32	22	32	14
EU	0	39	21	31	9

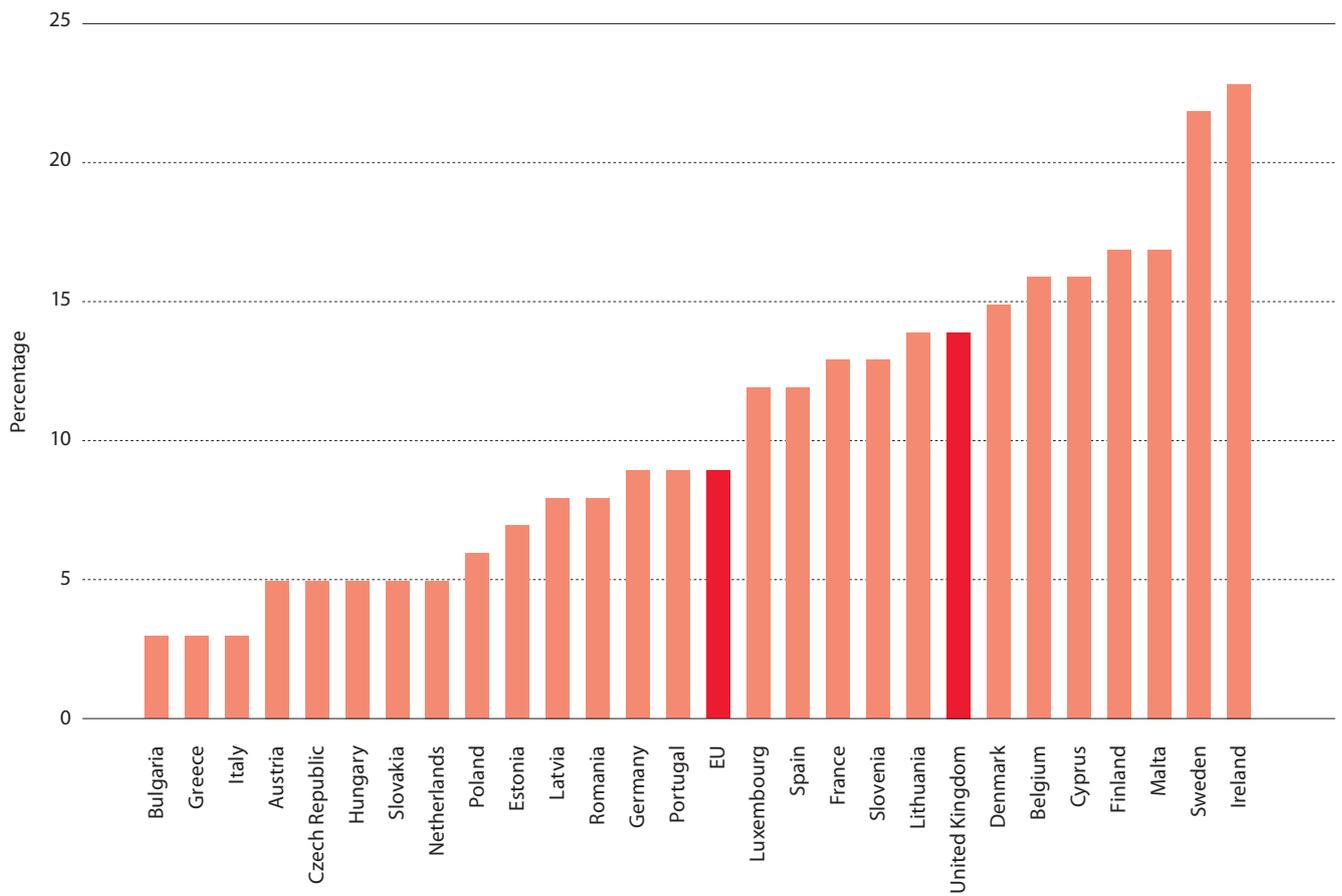
**Notes:**

All adults aged 15 and above.

**Source:**

European Commission (2010). Sport and Physical Activity: Special Eurobarometer 334 / Wave 72.3 – TNS Opinion & Social.  
[http://ec.europa.eu/sport/news/eu-physical-activity-guidelines\\_en.htm](http://ec.europa.eu/sport/news/eu-physical-activity-guidelines_en.htm) (Accessed December 2011).

**Figure 3.2**  
Self-reported frequency of regularly exercising or playing sport, EU countries 2009



**Table 3.3**  
**Self-reported frequency of engaging in physical activity outside sport, EU countries 2009**

	Don't know	Never	Seldom	With some regularity	Regularly
	%	%	%	%	%
Austria	0	5	26	54	15
Belgium	0	19	24	36	21
Bulgaria	5	3	27	40	25
Cyprus	0	32	17	31	20
Czech Republic	0	13	35	35	17
Denmark	0	4	11	42	43
Estonia	0	8	15	37	40
Finland	0	4	18	49	29
France	0	10	15	42	33
Germany	0	6	16	50	28
Greece	0	27	25	33	15
Hungary	0	10	18	31	41
Ireland	1	12	13	41	33
Italy	0	33	30	30	7
Latvia	1	9	14	32	44
Lithuania	0	14	19	26	39
Luxembourg	0	7	16	40	37
Malta	1	24	13	30	32
Netherlands	0	5	11	41	43
Poland	4	17	19	34	26
Portugal	1	36	15	31	17
Romania	4	27	26	24	19
Slovakia	0	8	25	40	27
Slovenia	0	5	15	41	39
Spain	0	10	19	38	33
Sweden	0	2	14	44	40
United Kingdom	0	12	15	36	37
EU	1	14	20	38	27

**Notes:**

All adults aged 15 and above.

**Source:**

European Commission (2010). Sport and Physical Activity: Special Eurobarometer 334 / Wave 72.3 – TNS Opinion & Social.  
[http://ec.europa.eu/sport/news/eu-physical-activity-guidelines\\_en.htm](http://ec.europa.eu/sport/news/eu-physical-activity-guidelines_en.htm) (Accessed December 2011).

# 4.

Men  
2.2 hours per week



Women  
1.9 hours per week



Average hours of walking per week

## Types of physical activity

Men and women spent more time walking than any other activity outside of work.

## 4. Types of physical activity

The World Health Organization warns that physical activity should not be mistaken for sport. Physical activity is any bodily movement produced by the skeletal muscles that uses energy. This includes sports, exercise and other activities such as playing, walking, doing household chores or gardening<sup>1</sup>. Recent research has estimated the energy expenditure of domestic activities, allowing us to highlight the potential contribution of these activities to promote health<sup>2</sup>. This chapter shows different types of physical activity levels in England categorised by non-occupational and occupational settings. Occupational activity refers to those performed whilst working, non-occupational to all those activities performed outside of paid work.

### Non-occupational physical activity levels

The Health Survey for England 2008 examined the number of hours spent on different activities<sup>3</sup>. Both men (2.2 hours/week) and women (1.9 hours/week) spent more hours per week walking than other non-occupational activities. Time spent in heavy house work remained relatively stable across age groups for both men and women. Overall, men reported more hours spent in non-occupational physical activity (6 hours/week) than women (5 hours/week) (Table 4.1, Figure 4.1).

Around 23% of men reported that they participate in heavy house work for more than an hour per week, with this declining after the age of 55 years. A similar trend was found with heavy manual gardening and DIY. More than two thirds of men walked less than one hour per week and the proportion who walked more than one hour per week started to decline after 44 years of age. More than 50% of men spent less than one hour per week participating in sports and exercises, with this proportion declining with age. Almost 30% of men spent less than one hour in any type of non-occupational physical activity (Table 4.2a, Figure 4.2a).

Women aged 25 to 64 spent more time in heavy house work than the younger and older age groups. The majority of women (88%) reported that they did not spend any time in heavy manual/gardening or DIY work and more than half of women (56%) did not spend any time in sports and exercise, with a similar pattern of decreasing participation with increasing age as found with men. Around two thirds (66%) of women reported some sort of non-occupational physical activity for more than one hour per week which started to decline after 35 years of age (Table 4.2b, Figure 4.2b).

Both men and women reported walking and sports and exercise as the non-occupational activities with the highest number of days participation in the last four weeks. On average men participated in non-occupational physical activity on 14 days during the last four weeks compared to 12.2 days for women. The average number of days of physical activity participation declined with age for both men and women (Table 4.3, Figure 4.3)

### Occupational physical activity levels

Around one in four men (24%) reported moderate to vigorous occupational activity for at least 30 minutes per day compared to one in ten women. The highest levels of occupational physical activity were reported for the youngest age group for men (16 to 24 years) and above 55 years of age for women. A greater proportion of time at work was spent sitting or standing than anything else, whilst the most common form of physical activity at work for both men and women was walking (Tables 4.4a and 4.4b, Figure 4.4).

1. World Health Organization (2011). Global recommendations on physical activity for health. WHO: Geneva.
2. Weller I, Corey P (1998). The impact of excluding non-leisure energy expenditure on the relation between physical activity and mortality in women. *Epidemiology*, 9:632–5.
3. Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds.

**Table 4.1**  
**Time spent on different activities, by sex and age group, England 2008**

Average number of hours per week	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
<b>Men</b>								
Heavy housework	0.9	0.6	1.0	0.9	1.1	0.9	1.0	0.6
Heavy manual/ gardening/ DIY	1.1	0.5	0.8	1.3	1.6	1.5	1.4	0.8
Walking	2.2	2.7	2.6	2.6	2.2	1.8	2.1	0.6
Sports and exercise	1.9	3.8	2.7	1.8	1.3	1.0	0.7	0.4
Any physical activity	6.0	7.3	6.9	6.5	6.1	5.1	5.2	2.4
<i>Base</i>	6,746	773	951	1,219	1,098	1,183	874	648
<b>Women</b>								
Heavy housework	1.7	1.1	2.1	2.1	1.9	2.2	1.5	0.5
Heavy manual/ gardening/ DIY	0.4	0.1	0.3	0.4	0.5	0.5	0.5	0.2
Walking	1.9	1.9	1.9	2.4	2.3	2.3	1.2	0.4
Sports and exercise	1.1	2.1	1.4	1.2	1.0	0.9	0.6	0.2
Any physical activity	5.0	5.1	5.7	5.8	5.7	5.7	3.8	1.3
<i>Base</i>	8,335	920	1,220	1,513	1,369	1,367	999	947

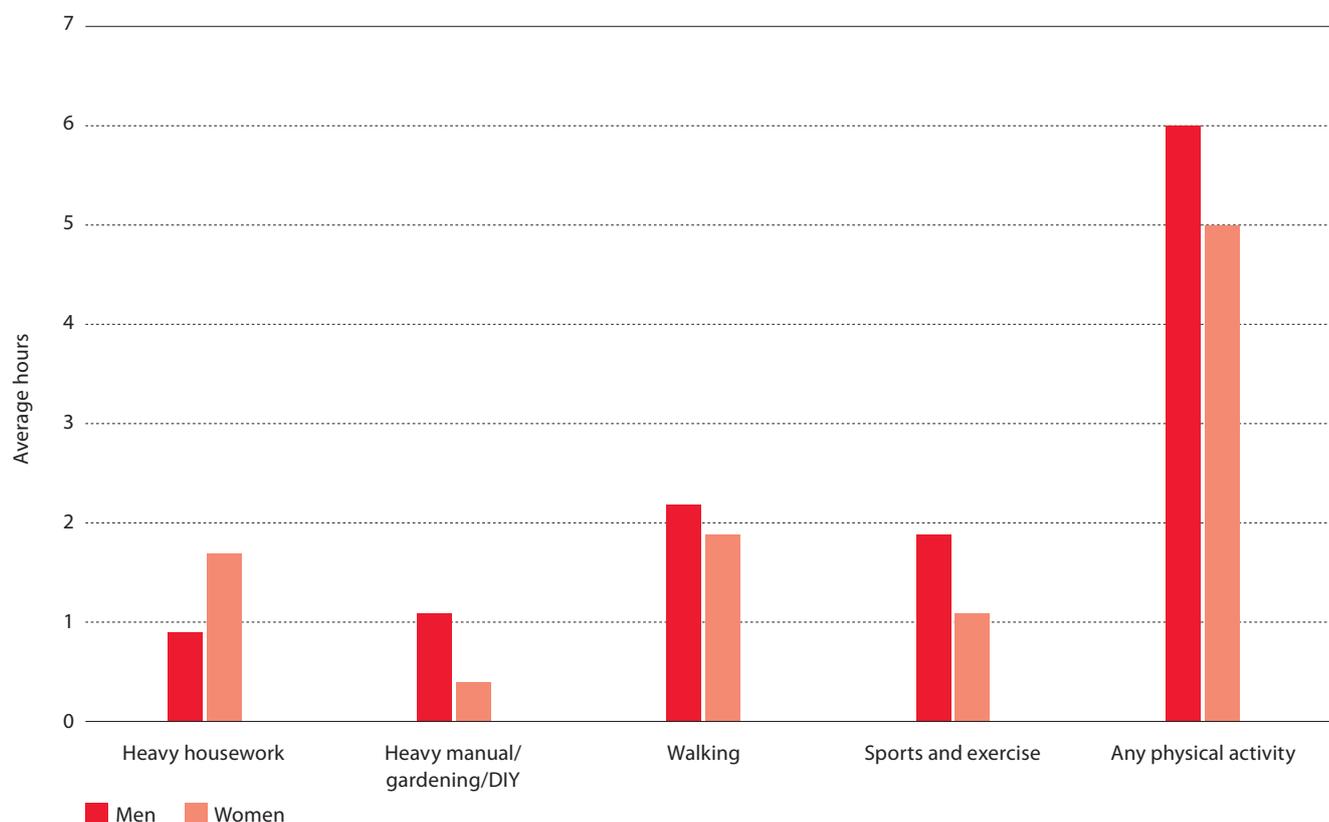
**Notes:**

Occupational activities not included. Average time based on all participants including those who reported no participation.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 4.1**  
**Average number of hours spent per week on different activities, by sex, England 2008**



**Table 4.2a**  
**Average time spent on different activities in men, by age, England 2008**

Average time spent per week	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%	%
<b>Heavy housework</b>								
No time	54	66	48	49	49	54	54	66
Less than 1 hour	22	18	25	23	23	21	23	19
1 to less than 5 hours	19	13	23	24	23	21	18	12
5 hours or more	4	3	4	4	5	5	5	3
<b>Heavy manual/ gardening/ DIY</b>								
No time	72	86	76	66	66	67	67	80
Less than 1 hour	7	6	6	9	7	6	7	5
1 to less than 5 hours	15	6	13	16	18	17	17	11
5 hours or more	7	2	4	8	10	10	9	4
<b>Walking</b>								
No time	59	46	47	54	60	66	77	90
Less than 1 hour	8	8	11	11	8	7	3	1
1 to less than 5 hours	20	32	27	22	19	16	8	5
5 hours or more	12	15	15	13	13	11	11	3
<b>Sports and exercise</b>								
No time	49	22	32	43	53	67	73	86
Less than 1 hour	13	13	16	17	13	10	10	4
1 to less than 5 hours	25	36	35	25	27	16	13	8
5 hours or more	13	30	18	12	7	7	5	2
<b>Any physical activity</b>								
No time	18	9	10	14	16	24	28	48
Less than 1 hour	11	8	9	12	11	13	16	15
1 to less than 5 hours	30	31	34	33	34	28	27	23
5 hours or more	40	52	47	42	39	34	28	14
<i>Base</i>	<i>6,746</i>	<i>773</i>	<i>951</i>	<i>1,219</i>	<i>1,098</i>	<i>1,183</i>	<i>874</i>	<i>648</i>

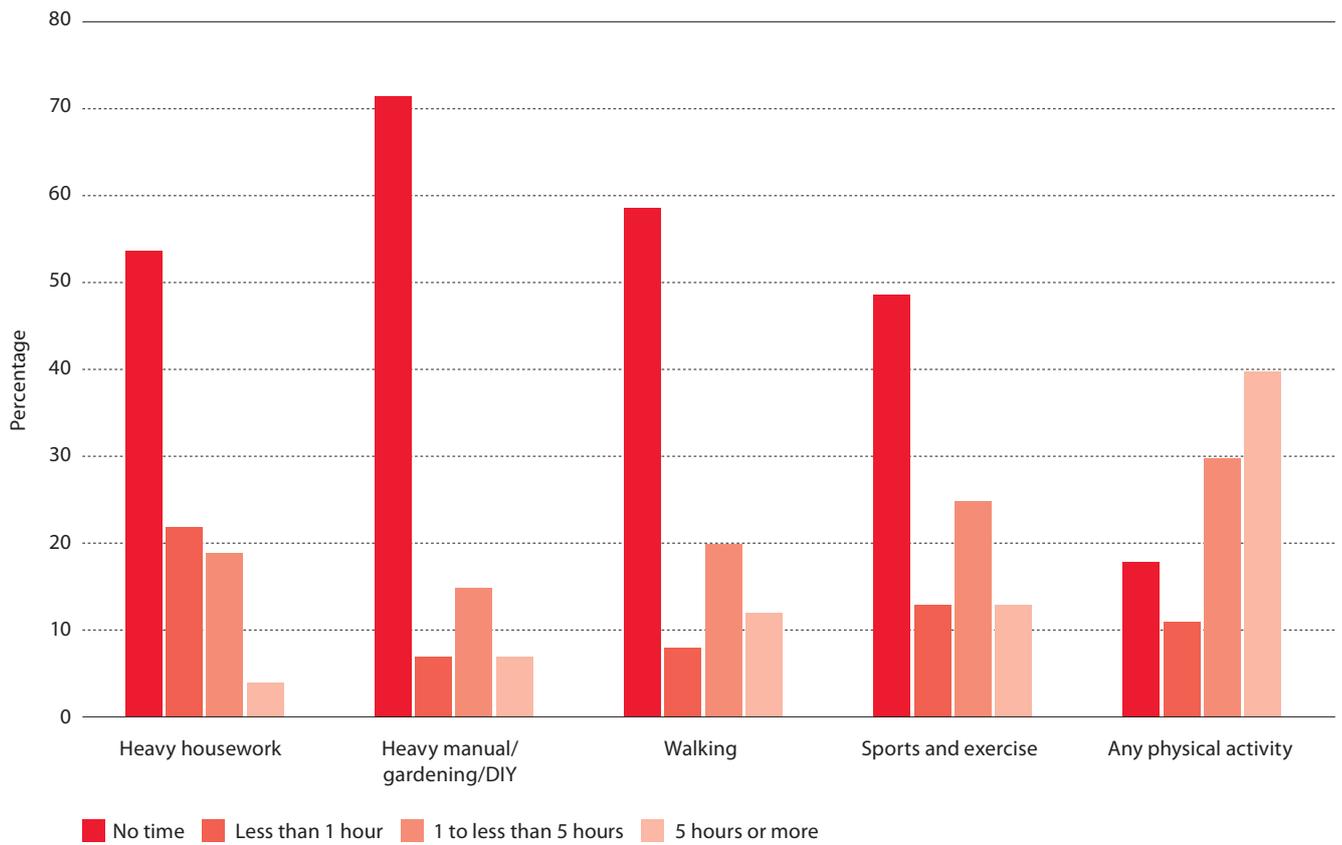
**Notes:**

Occupational activities not included. Average time spent per week (at least 10 minutes a day).

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 4.2a**  
**Percentage of men spending time on different activities, England 2008**



**Table 4.2b**  
**Average time spent on different activities in women, by age, England 2008**

Average time spent per week	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%	%
<b>Heavy housework</b>								
No time	41	51	33	30	35	37	46	70
Less than 1 hour	21	22	21	24	22	20	24	16
1 to less than 5 hours	28	21	34	35	31	30	22	12
5 hours or more	9	6	12	12	11	12	8	2
<b>Heavy manual/ gardening/ DIY</b>								
No time	88	96	89	84	84	83	87	95
Less than 1 hour	4	2	4	6	4	6	5	2
1 to less than 5 hours	6	1	5	7	9	8	6	3
5 hours or more	2	0	1	2	3	4	2	1
<b>Walking</b>								
No time	67	59	61	59	63	70	80	93
Less than 1 hour	5	7	6	7	6	4	3	1
1 to less than 5 hours	16	22	20	19	18	13	9	3
5 hours or more	11	12	12	14	13	13	9	3
<b>Sports and exercise</b>								
No time	56	38	45	50	57	62	72	87
Less than 1 hour	15	19	18	17	15	13	10	6
1 to less than 5 hours	23	31	30	27	24	21	14	6
5 hours or more	6	13	8	6	5	4	3	1
<b>Any physical activity</b>								
No time	21	15	12	12	15	21	32	59
Less than 1 hour	13	13	11	13	13	14	16	16
1 to less than 5 hours	33	37	39	35	35	32	28	17
5 hours or more	33	36	38	40	36	34	24	8
<i>Base</i>	8,335	920	1,220	1,513	1,369	1,367	999	947

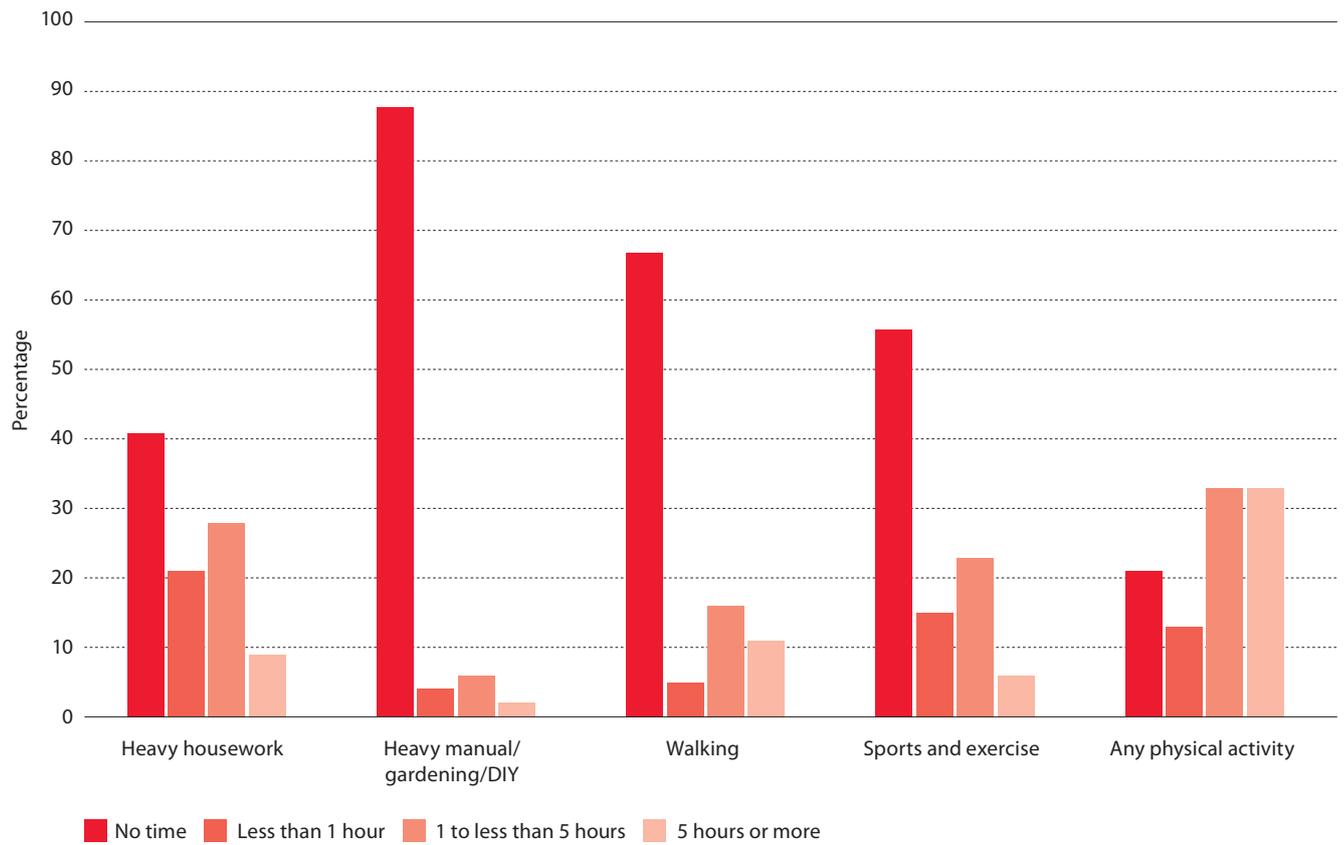
**Notes:**

Occupational activities not included. Average time spent per week (at least 10 minutes a day).

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 4.2b**  
**Percentage of women spending time on different activities, England 2008**



**Table 4.3**  
**Participation in different activities, by sex and age, England 2008**

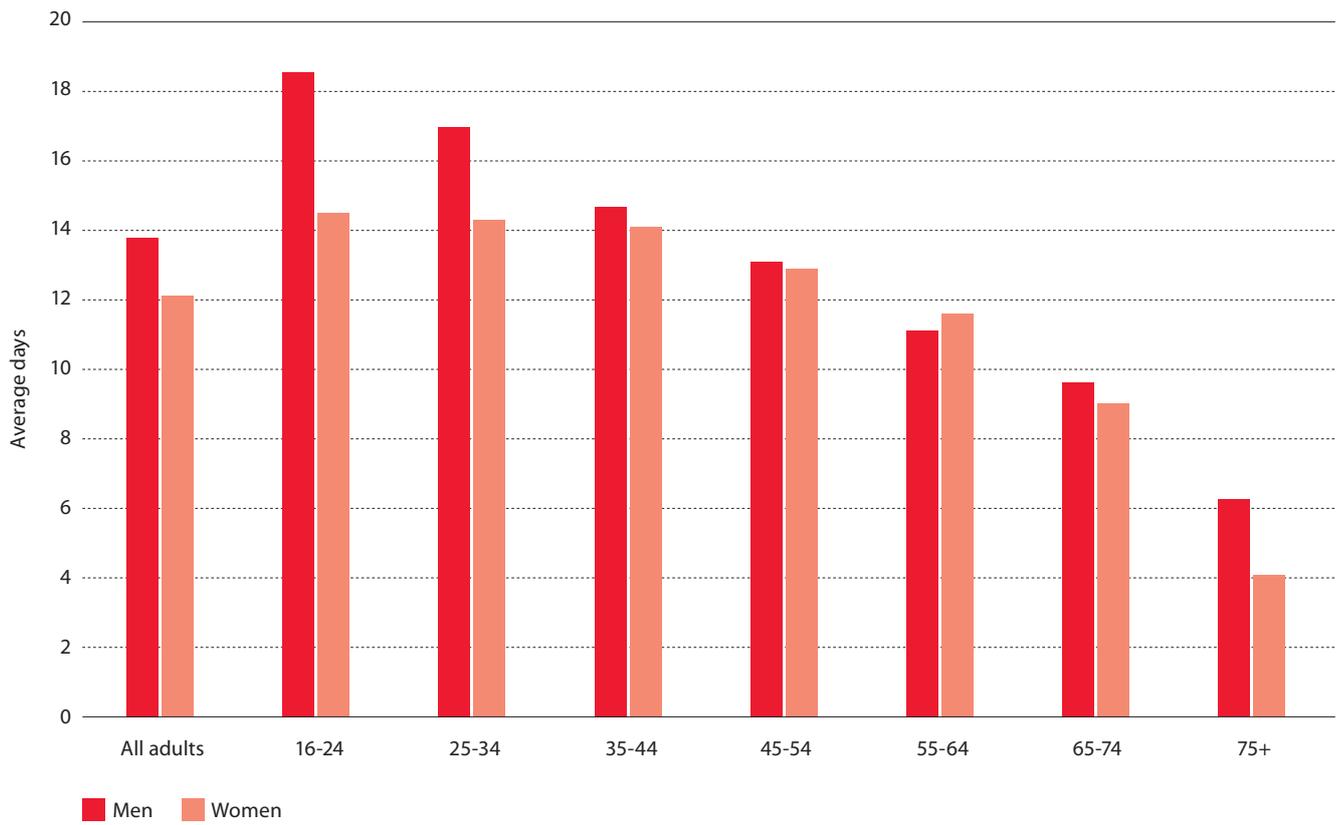
Average number of days participation in the last 4 weeks	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
<b>Men</b>								
Heavy housework	2.2	1.5	2.1	2.3	2.4	2.3	2.4	1.9
Heavy manual/ gardening/ DIY	1.3	0.5	0.9	1.4	1.6	1.6	1.7	1.0
Walking	6.8	9.9	8.7	7.3	6.3	5.6	4.2	1.9
Sports and exercise	6.8	12.5	9.5	7.2	5.5	3.8	3.0	2.1
Any physical activity	13.9	18.7	17.1	14.8	13.2	11.2	9.7	6.3
<i>Base</i>	6,748	772	953	1,220	1,098	1,183	874	648
<b>Women</b>								
Heavy housework	3.6	2.7	4.4	4.4	3.9	4.2	3.2	1.7
Heavy manual/ gardening/ DIY	0.5	0.2	0.4	0.5	0.7	0.8	0.7	0.2
Walking	5.8	7.4	7.0	7.1	6.4	5.4	3.7	1.2
Sports and exercise	4.9	7.6	6.3	5.5	4.8	3.9	2.9	1.5
Any physical activity	12.2	14.6	14.4	14.2	13.0	11.7	9.1	4.1
<i>Base</i>	8,334	918	1,220	1,512	1,371	1,367	999	947

**Notes:**

Occupational activities not included. Average is based on all participants including those who reported no participation.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 4.3****Average number of days participating in physical activity in last four weeks, by sex and age, England 2008**

**Table 4.4a**  
**Average time spent in occupational activities in men, by age, England 2008**

Average time spent per week	All adults	16-24	25-34	35-44	45-54	55-64	65-74
	%	%	%	%	%	%	%
<b>Sitting or standing</b>							
No time	14	24	12	13	12	12	19
Less than 1 hour	3	3	2	2	4	2	5
1 to less than 5 hours	28	30	25	27	27	30	42
5 hours or more	56	43	61	58	58	56	33
<b>Walking around at work</b>							
No time	41	36	47	41	40	42	45
Less than 1 hour	7	8	7	6	6	7	8
1 to less than 5 hours	36	36	32	37	38	37	32
5 hours or more	16	20	14	15	17	15	14
<b>Climbing stairs or ladders</b>							
No time	59	64	59	56	58	59	65
Less than 1 hour	22	16	23	23	22	24	20
1 to less than 5 hours	19	19	17	20	19	17	15
5 hours or more	1	2	2	1	1	0	1
<b>Lifting, carrying or moving heavy loads</b>							
No time	57	47	59	55	56	62	69
Less than 1 hour	11	10	11	12	12	12	8
1 to less than 5 hours	25	32	23	27	26	22	19
5 hours or more	6	11	7	6	6	3	4
<b>Moderate or vigorous occupational activity</b>							
at least 30 minutes per day	24	30	21	25	26	22	24
<i>Base</i>	4,247	456	844	1,070	937	767	173

**Notes:**

Based on all participants who reported working in the last four weeks. Average time spent per week (at least 10 minutes a day).

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds.  
 Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Table 4.4b**  
**Average time spent in occupational activities in women, by age, England 2008**

Average time spent per week	All adults	16-24	25-34	35-44	45-54	55-64	65-74
	%	%	%	%	%	%	%
<b>Sitting or standing</b>							
No time	13	19	10	11	11	15	18
Less than 1 hour	3	5	1	3	3	3	3
1 to less than 5 hours	34	33	27	35	36	35	54
5 hours or more	50	43	62	50	49	46	25
<b>Walking around at work</b>							
No time	40	35	43	42	39	40	50
Less than 1 hour	7	7	9	7	7	8	8
1 to less than 5 hours	37	35	32	37	40	38	38
5 hours or more	16	22	17	13	14	14	6
<b>Climbing stairs or ladders</b>							
No time	66	66	67	68	62	65	83
Less than 1 hour	23	20	23	20	26	25	13
1 to less than 5 hours	11	13	10	12	13	10	4
5 hours or more	0	0	0	0	0	0	0
<b>Lifting, carrying or moving heavy loads</b>							
No time	72	61	75	74	71	77	79
Less than 1 hour	12	16	11	12	12	10	11
1 to less than 5 hours	14	20	13	13	15	11	10
5 hours or more	2	3	2	1	2	2	1
<b>Moderate or vigorous occupational activity</b>							
at least 30 minutes per day	11	11	9	12	12	13	13
<i>Base</i>	<i>4,327</i>	<i>550</i>	<i>823</i>	<i>1,081</i>	<i>1,023</i>	<i>699</i>	<i>151</i>

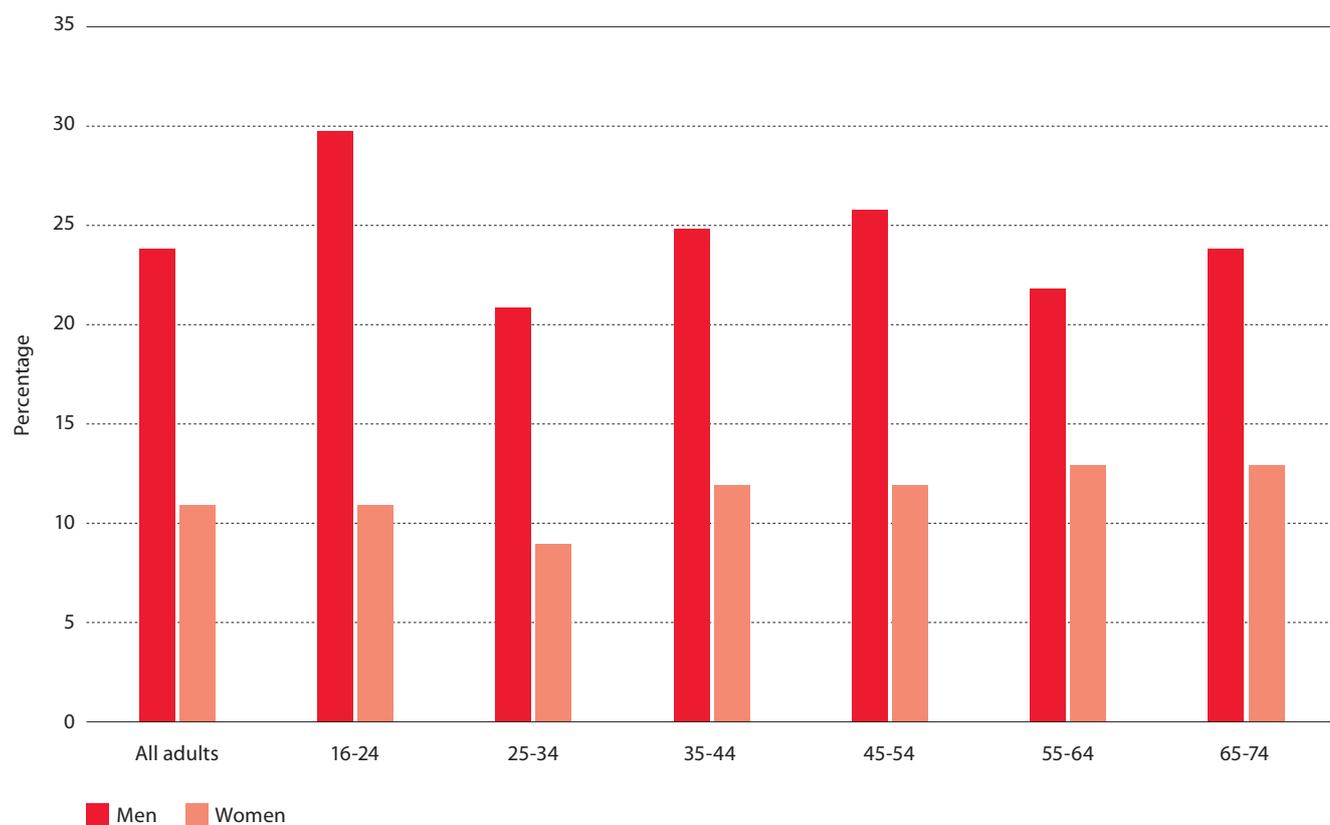
**Notes:**

Based on all participants who reported working in the last four weeks. Average time spent per week (at least 10 minutes a day).

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 4.4**  
Percentage of adults engaging in moderate or vigorous occupational activity for at least 30 minutes per day, by sex and age, England 2008



## Active travel

Since 1975/76, the average distance we travel by foot or bike in a year has fallen from 306 miles to 221 miles.

# 5.



306 miles



1975/76

221 miles



2010

Average distance travelled by foot or bike

## 5. Active travel

In recent decades, substantial changes in lifestyles, rapid urbanisation and transportation systems have led to changes in physical activity patterns among children and adults. Active transport, which refers to any form of human-powered transportation, has declined dramatically in developed countries. Walking and cycling for transport can lead to various health benefits<sup>1</sup>. Reversing these low rates of walking and cycling for transportation provides a major opportunity for improving physical activity levels. The London 2012 Active Travel programme aims to capture the opportunities offered by the London 2012 Olympic Games to encourage more walking and cycling before, during and after the event, across the UK. The programme expects an additional one million journeys a day to be made by foot and bike in summer 2012<sup>2</sup>.

### Distance and mode of travel

The average number of miles travelled per person per year started to decline after 2007. In 2010, on average a person travelled 6,726 miles by all modes, less than in 1995. Most of these miles (5,256) were travelled by car either as a driver or passenger compared to 179 miles on foot and 42 miles by bike (Table 5.1, Figure 5.1).

In 2010 on average there were 960 trips per person per year in all modes. This was the lowest number of trips recorded for the last three decades. Almost two thirds of these trips were made by car compared to 21% walking and less than 2% by bicycle (Table 5.2, Figure 5.2).

Increasing car use is one of the main reasons for low levels of physical activity and associated health problems in the UK<sup>3</sup>. In 1961, around 70% of households in Great Britain did not have a car or van. The Department for Transport showed that between 1961 and 2009 the number of households with no cars dropped from 69% to 25%. The number of households with two or more cars has increased consistently since the early 1960s. This is likely to have contributed to levels of active travel falling dramatically over this time period among children and adults (Table 5.3 and Figure 5.3).

### Active travel to school

The Health Survey for England 2008 reported that more than two thirds of boys and girls walked or cycled to or from school at least once a week. Participation in active travel to school increased with age for both sexes. A Department for Education survey showed that more than half of school children have participated in some form of active travel each week<sup>4</sup>. Walking and cycling were the most popular modes of transport to and from school in state funded primary schools. Travelling to school by buses, car or van were more popular than active travel among state funded secondary schools and special schools (Tables 5.4 and 5.5, Figure 5.5).

1. Garrard J (2009) Active transport: Adults, An overview of recent evidence. VicHealth: Melbourne.
2. London 2012 Olympic and Paralympic Games (2011). The London 2012 Active Travel programme. <http://www.london2012.com/making-it-happen/sustainability/active-travel-programme/> (Accessed Jan 2012).
3. Sustainable Development Commission (2007) Sustainable transport and active travel. Sustainable Development Commission: London.
4. Department for Education (2011). Schools, pupils and their characteristics 2011. Department for Education: London

**Table 5.1**  
**Average distance travelled in miles by mode of travel, Great Britain 1975/76 to 2010**

	1975/1976	1985/1986	1992/1994	1995/1997	1998/2000	2002	2003	2004	2005	2006	2007	2008	2009	2010
Walk	255	244	199	200	198	198	201	203	197	201	190	193	196	179
Bicycle	51	44	38	43	40	36	37	39	36	39	40	42	46	42
Car/van driver	1,971	2,425	3,205	3,623	3,725	3,661	3,660	3,674	3,682	3,660	3,641	3,494	3,339	3,416
Car/van passenger	1,401	1,600	2,030	2,082	2,086	2,115	2,098	2,032	2,063	2,033	1,989	1,974	1,984	1,840
Motorcycle/moped	47	51	32	35	33	35	41	38	35	34	35	38	38	30
Other private vehicles	16	33	43	134	143	145	163	156	156	118	111	110	148	138
Bus in London	57	39	42	43	44	56	60	59	67	63	67	69	71	81
Other local bus	372	258	217	225	218	224	230	219	212	233	239	243	237	226
Non-local bus	54	109	96	94	100	59	87	70	75	63	71	56	56	63
LT Underground	36	44	50	60	65	81	68	68	67	75	71	75	78	73
Surface rail	289	292	298	321	401	413	384	433	461	466	509	495	471	506
Taxi/minicab	13	27	38	46	63	59	55	51	60	52	56	54	56	54
Other public including air, ferries, light rail, etc.	18	22	41	75	46	55	108	61	97	96	83	80	56	77
All modes	4,740	5,317	6,439	6,981	7,164	7,135	7,192	7,103	7,208	7,133	7,103	6,923	6,775	6,726
Base		25,785	24,671	22,861	21,868	16,886	19,467	19,199	19,904	19,490	19,735	18,983	19,914	19,072

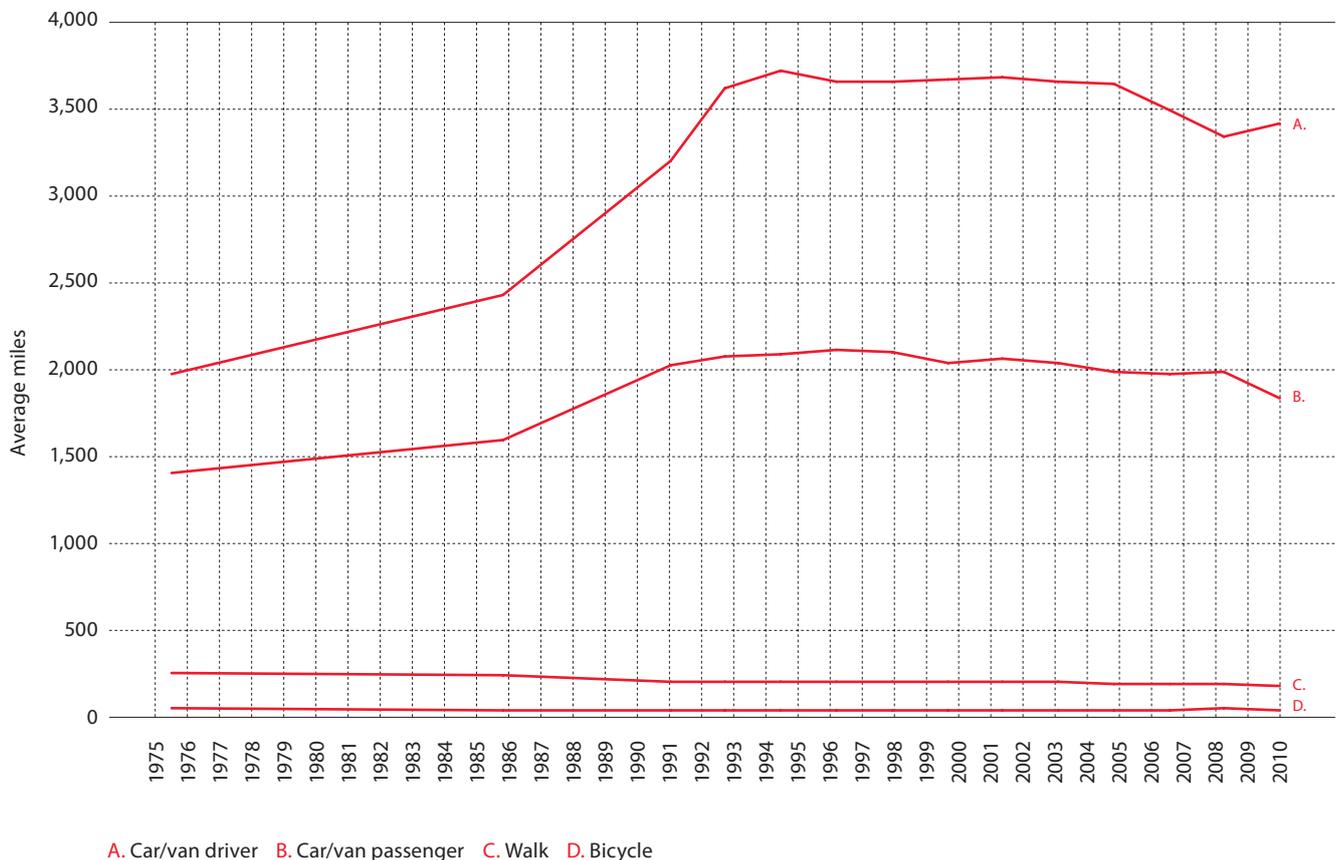
**Notes:**

Short walks believed to be under-recorded in 2002 and 2003 compared with other years. Base not provided for 1975/1976. Subject to Crown Copyright.

**Sources:**

Department for Transport (2011). National Travel Survey 2010. Department for Transport: London. ¶ Department for Transport (2001). National Travel Survey 1991/2001:update. Department for Transport: London

**Figure 5.1**  
**Average distance travelled by mode of travel per year, Great Britain 1975/76 to 2010**



**Table 5.2**  
**Trips per person per year by mode of travel, Great Britain 1975/76 to 2010**

	1975/1976	1985/1986	1992/1994	1995/1997	1998/2000	2002	2003	2004	2005	2006	2007	2008	2009	2010
Walk	325	350	306	292	271	244	246	246	245	249	216	221	228	210
Bicycle	30	25	18	18	17	16	15	16	14	16	14	16	15	15
Car/van driver	262	317	389	425	434	435	425	422	435	430	408	410	395	405
Car/ van passenger	167	200	229	239	238	239	232	229	236	228	218	227	217	213
Motorcycle	9	9	5	4	4	4	4	3	4	3	3	4	3	3
Other private	15	14	11	9	8	9	8	8	9	8	8	9	9	8
Bus in London	14	11	12	13	13	15	15	16	16	16	17	18	19	21
Other local bus	93	72	54	53	50	49	51	48	46	49	48	47	49	46
Non-local bus	1	2	2	2	2	1	1	1	1	1	1	1	1	1
London Underground	4	6	6	7	8	9	8	7	7	8	8	9	9	8
Surface rail	11	12	11	12	13	13	14	16	16	16	17	18	16	19
Taxi/minicab	3	7	9	11	13	12	12	11	12	10	11	11	11	10
Other public	N/A	1	1	1	2	2	3	2	3	3	2	2	2	2
All modes	935	1,024	1,053	1,086	1,071	1,047	1,034	1,026	1,044	1,037	972	992	973	960
Base		25,785	24,671	22,861	21,868	16,886	19,467	19,199	19,904	19,490	19,735	18,983	19,914	19,072

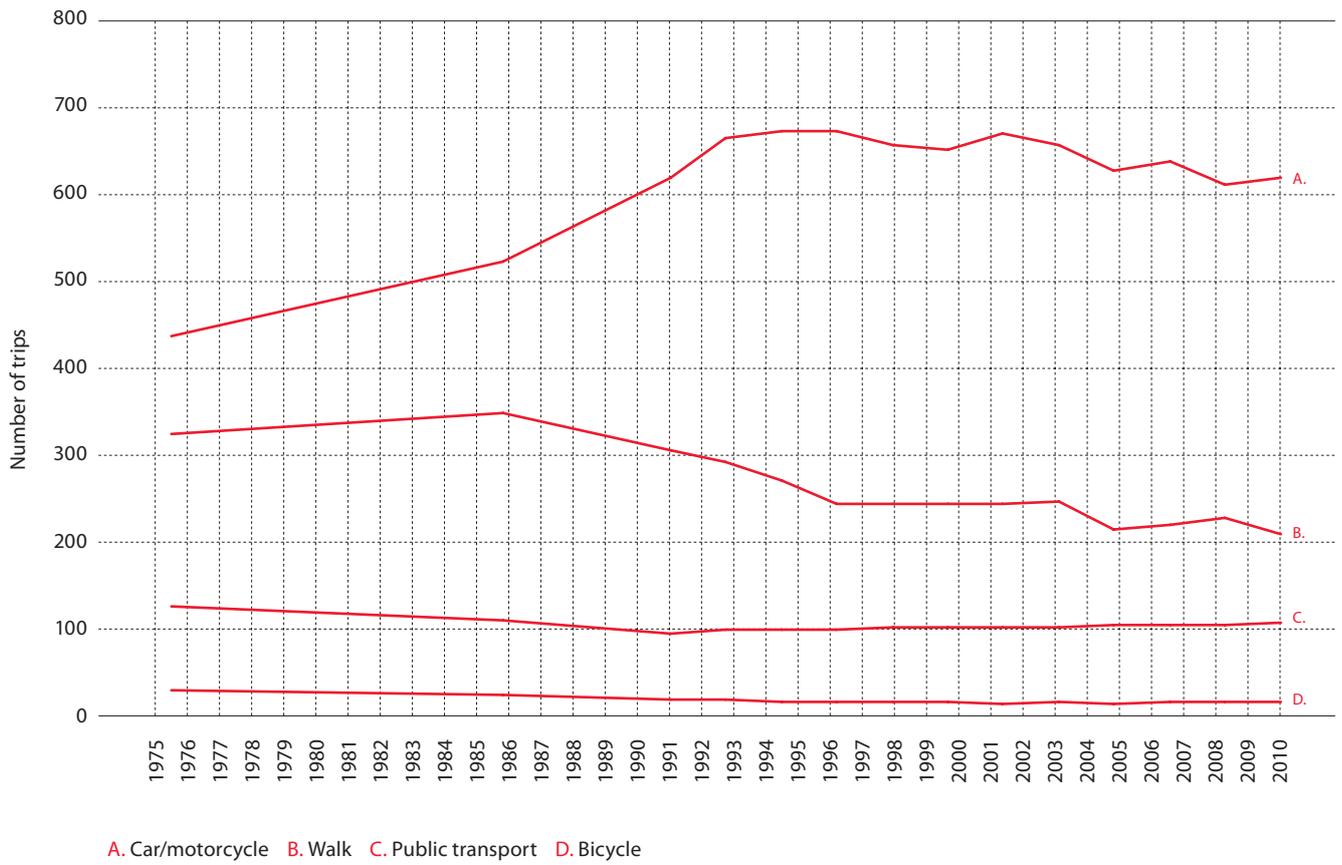
**Notes:**

Short walks believed to be under-recorded in 2002 and 2003 compared with other years. Subject to Crown Copyright. Other private includes mostly private hire buses and school buses. Base not provided for 1975/1976.

**Sources:**

Department for Transport (2011). National Travel Survey 2010. Department for Transport: London. ¶ Department for Transport (2001). National Travel Survey 1991/2001: update. Department for Transport: London.

**Figure 5.2**  
**Trips per person per year by mode of travel, Great Britain 1975/76 to 2010**



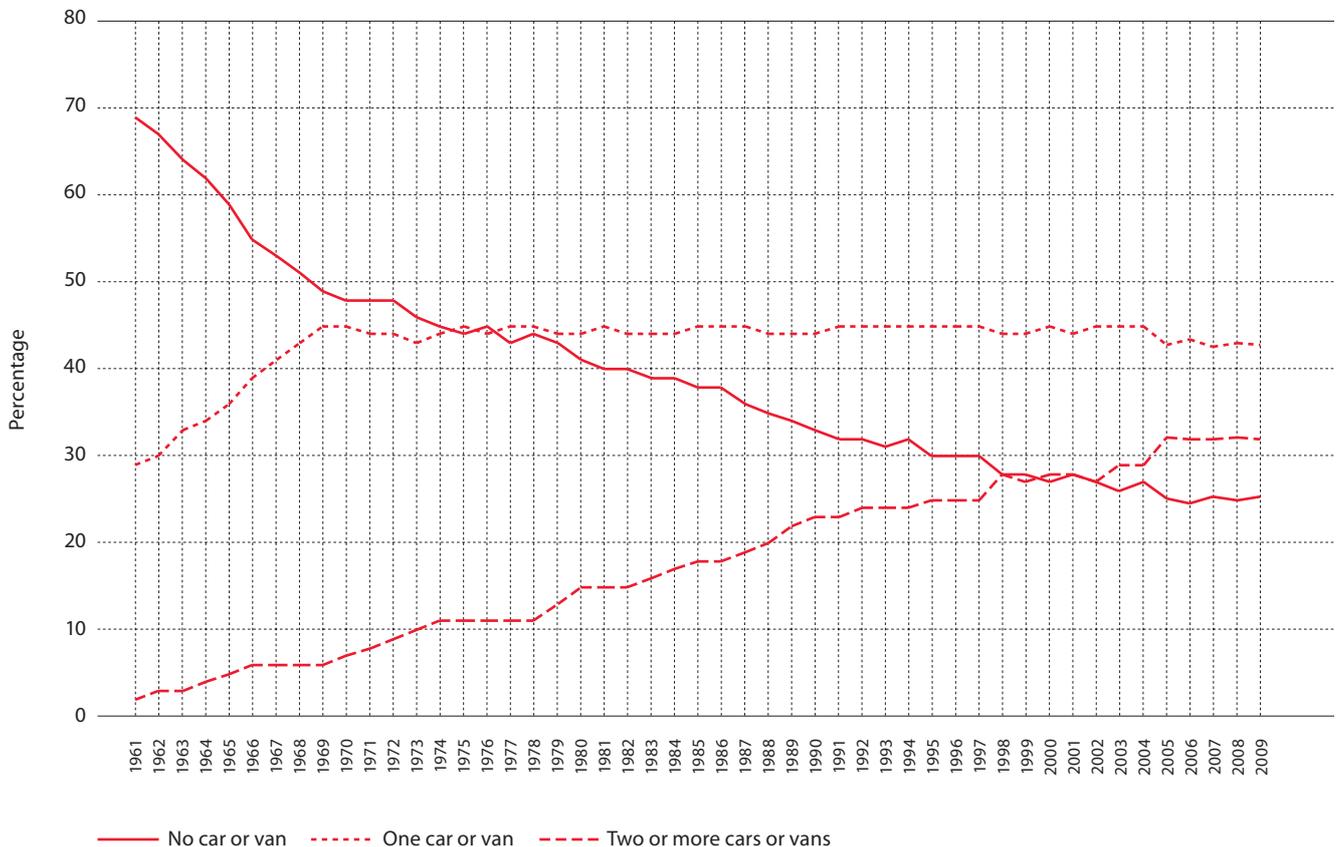
**Table 5.3**  
**Percentage of households with car or van ownership, Great Britain 1961 to 2009**

	No car or van	One car or van	Two or more cars or vans	Base
	%	%	%	
1961	69	29		
1965	59	36		
1972	48	43	9	11,624
1975	44	45	11	11,929
1981	41	44	14	11,989
1985	38	45	17	9,963
1991	32	44	23	9,910
1995	29	45	26	9,758
1996	30	46	25	9,158
1998	28	44	29	8,636
2000	27	45	28	8,221
2002	27	45	27	8,620
2004	27	45	29	8,700
2005	25	43	32	9,453
2006	25	44	32	9,261
2007	25	43	32	9,278
2008	25	43	32	8,924
2009	25	43	32	9,128

**Notes:**  
 Bases for 1961 and 1965 are not available.

**Source:**  
 Department for Transport, Scottish Executive and Welsh Assembly (2005). Transport statistics 2005. Office for National Statistics: London. ¶ Department for Transport (2010). National Travel Survey 2009. Department for Transport: London.

**Figure 5.3**  
**Percentage of households with car or van ownership, Great Britain 1961 to 2009**



**Table 5.4**  
**Percentage of children walking or cycling to school, by sex and age, England 2008**

	All children	2 - 4	5 - 10	11 - 15
	%	%	%	%
<b>Boys</b>				
Walking	63	52	66	65
Cycling	5	3	4	8
Base	2,847	536	1,243	1,068
<b>Girls</b>				
Walking	65	56	65	70
Cycling	2	1	2	2
Base	2,849	526	1,245	1,078

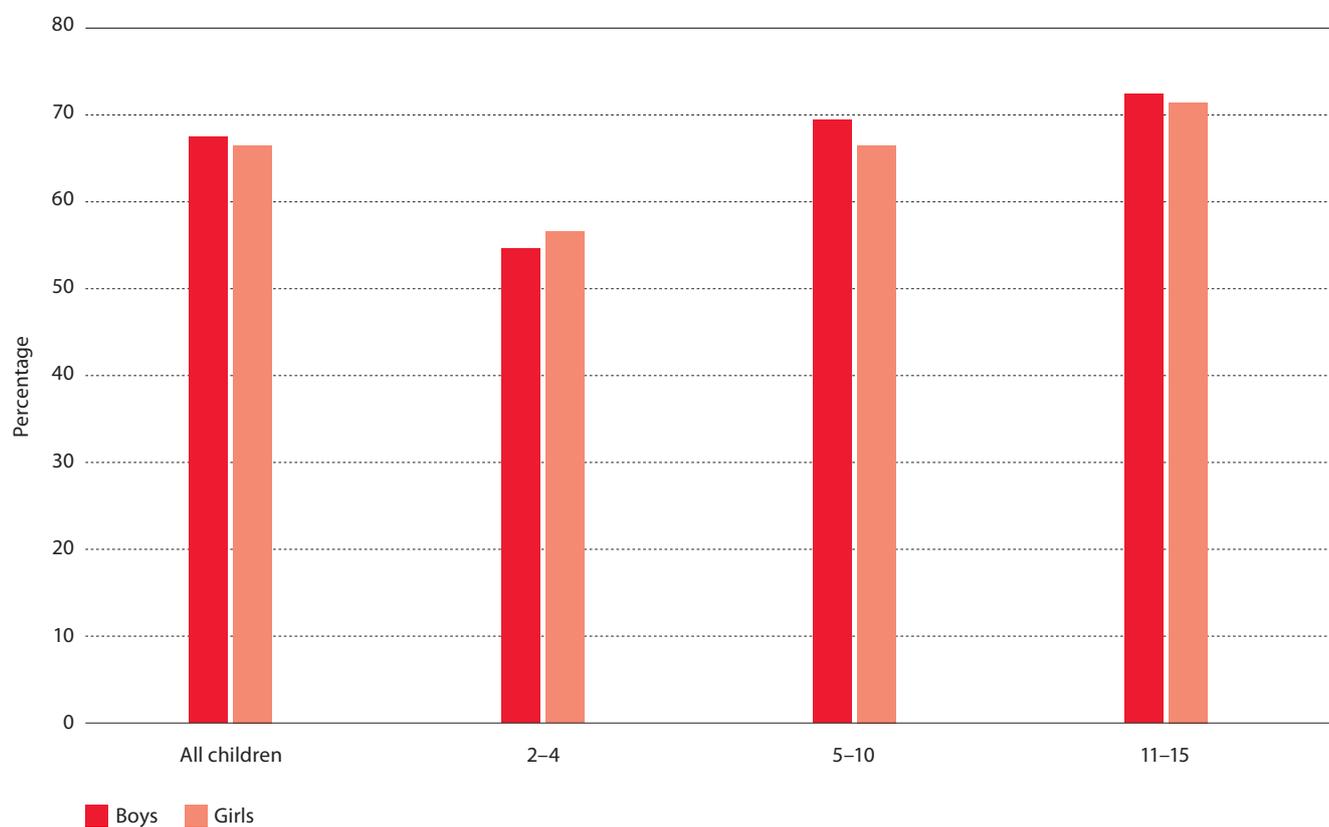
**Notes:**

Participation in active travel on at least one day in the last week.

**Source:**

Department of Health (2010). Health Survey for England 2008: Physical activity and fitness. The Stationery Office: London.

**Figure 5.4**  
**Percentage of children walking or cycling to school, by sex and age, England 2008**



**Table 5.5**  
**Mode of travel to school, by type of school, England 2011**

	All schools	State-funded primary schools	State-funded secondary schools	Special schools
	%	%	%	%
Walk	51.2	59.5	42.0	3.2
Cycle	1.8	1.0	2.9	0.3
Car/Van	28.3	35.7	18.8	37.1
Bus	16.2	3.1	31.7	57.2
Train	0.7	0.1	1.5	0.1
Other	0.6	0.2	1.2	1.0
<i>Base</i>	<i>7,487,915</i>	<i>4,137,755</i>	<i>3,258,920</i>	<i>91,240</i>

**Notes:**

Participation in active travel on at least one day in the last week. Special schools includes maintained and non maintained special schools.

**Source:**

Department for Education (2011). Schools, pupils and their characteristics 2011. Department for Education: London.

6.

## Factors influencing physical activity

Over 70% of adults would like to do more physical activity; the most common barriers to this are work commitments and a lack of leisure time.

**Men** 45% say that work commitments get in the way



**Women** 37% say they don't have enough leisure time



71% of men and 74% of women said they would like to do more physical activity

## 6. Factors influencing physical activity

This chapter reports on the factors that are associated with physical activity. These include sections on knowledge and awareness of government recommendations, motivation in being physically active, barriers and facilitators to physical activity and physical education and sport in schools. Where possible patterns in these factors are explored by age, sex, socio-economic status and geographic region.

### Knowledge of government recommendations

In 2007 the Health Survey for England focused on knowledge and attitudes about key aspects of lifestyle, including physical activity<sup>1</sup>. As these data were collected in 2007 they correspond to the Chief Medical Officer's report<sup>2</sup> published in 2004 and not the more recent guidelines that superseded these in July 2011<sup>3</sup>. According to the 2004 report adults should be active on at least five days a week, at moderate or greater intensity, for at least 30 minutes a day. This could be either in one session or in a number of shorter bouts of activity of 10 minutes or longer<sup>2</sup>.

Less than one third of adults in England (27% of men and 29% of women) thought they knew of these recommendations for physical activity when asked, a similar percentage (34% of men and 29% of women) said they had not heard of them at all. When asked to describe the recommendations for people of their age, only 6% of men and 9% of women could correctly define the minimum recommended targets. Around a quarter (25% men and 23% women) described minimum standards greater than those that were in place, whilst the majority (69% men and 68% women) thought the recommendations were lower than published. This was worse for young people, aged 11 to 15, amongst whom 81% of boys and 87% of girls thought the recommendations for minimum physical activity for children (at least 60 minutes of at least moderate intensity activity on all 7 days) were lower than they were (Tables 6.1 and 6.2, Figures 6.1 and 6.2).

### Motivation to be physically active

A slightly greater percentage of women than men surveyed by the 2007 Health Survey for England wanted to do more physical activity than they did at present, 74% to 70% respectively. This was lowest amongst the oldest age group, 60% in men and 55% in women aged 55 to 64 years. Motivational differences were also found between the sexes amongst children, with more girls (74%) than boys (61%) wanting to do more physical activity, with this percentage decreasing with age for boys but not girls (Tables 6.4 and 6.5, Figures 6.4 and 6.5).

Differences were also found by socioeconomic status with more men and women in the highest quintile of equivalised household income (80% and 83% respectively) saying they would like to do more

physical activity, compared to 60% of men and 63% of women in the lowest. The opposite was true for children, with more boys (64%) and girls (77%) in the lowest quintile saying they wanted to do more physical activity than in the highest quintile (59% of boys and 69% of girls) (Tables 6.6 and 6.7, Figures 6.6 and 6.7).

### Barriers to doing physical activity

Respondents to the 2007 Health Survey for England were asked to select the main barriers they faced to participating in physical activity, from suggestions provided in the questionnaire. These included practical and psychological barriers that might prevent people from doing more physical activity, exercise or sport<sup>1</sup>.

The most common barriers identified by adults, included work commitments (45% men and 34% women) and a lack of leisure time (38% men and 37% women), with a lack of motivation also cited by 21% of men and 25% of women. Women (25%) were more likely to choose caring for children or older people as a reason for not doing more physical activity than men (13%), with this most common amongst those aged 25 to 44 (Tables 6.8a and 6.8b).

A lack of money was most likely to be cited as a barrier by the youngest age group (16 to 24 years), with this seen as a greater barrier for those with less money; 21% of men and 25% of women in the lowest quintile of equivalised household income compared to 7% of men and 6% of women in the highest quintile. Poor health and physical limitations were also more likely to be seen as barriers amongst adults in poorer households whilst the opposite was true of work commitments and a lack of leisure time (Tables 6.8a, 6.8b and 6.9a, Figure 6.9).

The most commonly cited factor putting adults off sport in Northern Ireland<sup>4</sup> was a lack of time, with 26% of respondents choosing this from a list of barriers. Older adults were less likely to recognise this as a barrier, with 60% of those aged 65 years and above citing being too old as a factor discouraging them from sport. Accordingly having more leisure time was the most frequently reported factor that would encourage adults in England to do more physical activity (42% for both men and women), with this more prominent for adults aged under 54 years. Self-motivation was also recognised as important with 32% of men and 38% of women saying this would enable them to be more active. Other factors

seen as having an impact included ill health and advice to take more physical activity from a doctor or a nurse, whilst having more money and someone to be physically active with were both recognised as important factors for the youngest age group of adults (Tables 6.10 and 6.11).

### Local environment

The Marmot Review 'Fair Society, Healthy Lives' published in 2010 identified the importance of the local environment in improving health and encouraging physical activity, recommending improvements in the availability of good quality open and green spaces, along with access to sports facilities, across the social gradient<sup>5</sup>.

The 2008 Place Survey asked adults in England for their opinions on the parks and open spaces, and sports and leisure facilities, in their local area<sup>6</sup>. Over one quarter of adults (28%) said that parks and open spaces were the most important factor in making somewhere a good place to live. Regional differences were found in adult satisfaction with the facilities in their local area. The greatest percentage of those satisfied with the parks and open spaces lived in London (72.3%) and the South East (72.6%) and the lowest percentage lived in the North East (63.3%). Adults in the West Midlands (43.2%) and Yorkshire and Humber (43.3%) were the least likely to say that they were satisfied with the sports and leisure facilities, although differences across England were small with the highest percentage (49.4%) found in the South East. Some regional differences were also found in adults reporting that facilities needed improving, although differences were small, with 16.3% of adults in England reporting that sports and leisure facilities needed improving and 10.6% saying that parks and open spaces did. The views of children and young people on parks and play areas in their local area, collected by the Tellus4 survey in 2009<sup>7</sup>, differed by age, with older children more likely to think these facilities were poor (Tables 6.12 to 6.15, Figures 6.12 to 6.15).

### Physical education and school sport

The important role that physical education (PE) and school sport play in school life has been recognised with the setting up of the national PE, School Sport and Club Links strategy, which included the School Sport Partnership Programme that aimed to increase both the quality and quantity of sporting opportunities for young people<sup>7</sup>. These partnerships were set up in a number of phases and were rolled out from 2000 to 2006. By the end of 2007 all maintained schools (21,727) in England were arranged into 450 different School Sport Partnerships. Investment was also provided from 2003 and a Public Service Agreement Target was set in 2004 to enhance the take-up of sporting opportunities by 5 to 16 year olds through PE and school sport<sup>8</sup>.

In 2007/08 the School Sports Survey<sup>9</sup> surveyed partnership schools and found that overall 90% of pupils in these participated in at least two hours of high quality PE and out of hours school sport in a typical week. Participation has risen for all age groups since 2004/05, although older children were less likely to achieve this. Participation was lowest in single-sex girls schools, in which 69% of pupils participated in the recommended levels of two hours or more, compared to 90% of pupils in boys schools and 91% in mixed schools (Tables 6.16 and 6.17, Figures 6.16 and 6.17).

By 2007/08, 90% of pupils across Years 1 to 11 in schools achieved this two hour level of participation. In subsequent Schools Sports Surveys, therefore, schools were asked to provide information about participation in at least three hours of high quality PE and out of hours school sport<sup>9</sup> with increases in the percentage of pupils achieving this new threshold between 2008/09 and 2009/10 for all year groups. As before single-sex girls schools achieved the lowest proportion of pupils reaching the new target (Tables 6.18 to 6.20, Figures 6.18 to 6.20).

1. Joint Health Surveys Unit (2008). Health Survey for England 2007: Healthy lifestyles: knowledge, attitudes and behaviour. The Stationery Office: London.
2. The Chief Medical Officer (2004). At least five a week: evidence on the impact of physical activity and its relationship to health. Department of Health: London.
3. The Chief Medical Officers (2011). Start Active, Stay Active: A report on physical activity from the four home countries' Chief Medical Officers. Department of Health: London.
4. Department of Culture Arts and Leisure (2010). Experience of Sport and Physical Activity in Northern Ireland: Findings from the Continuous Household Survey 2008/09. Research and Statistics Branch: Belfast.
5. Marmot M (2010). Fair Society, Healthy Lives: Strategic review of health inequalities in England post-2010. Marmot Review: London.
6. Communities and Local Government (2009). Place Survey England – Headline Table Results 2008 (Revised).
7. National Foundation for Educational Research (2010). Tellus4 National Report. Department for Children, Schools and Families: London.
8. Department for Education and Skills (2003) Learning through PE and Sport – A guide to the PE, School Sport and Club Links Strategy. DfES Publications: Annesley.
9. TNS UK Limited (2008). Schools sports survey 2007/08. Department for Children, Schools and Families: London

**Table 6.1**  
**Awareness of recommendations for physical activity in adults, by sex, England 2007**

	Men	Women
	%	%
Said they knew recommendations	27	29
Heard of recommendations but didn't know them	39	42
Had not heard of recommendations	34	29
<i>Base</i>	<i>2,349</i>	<i>2,911</i>

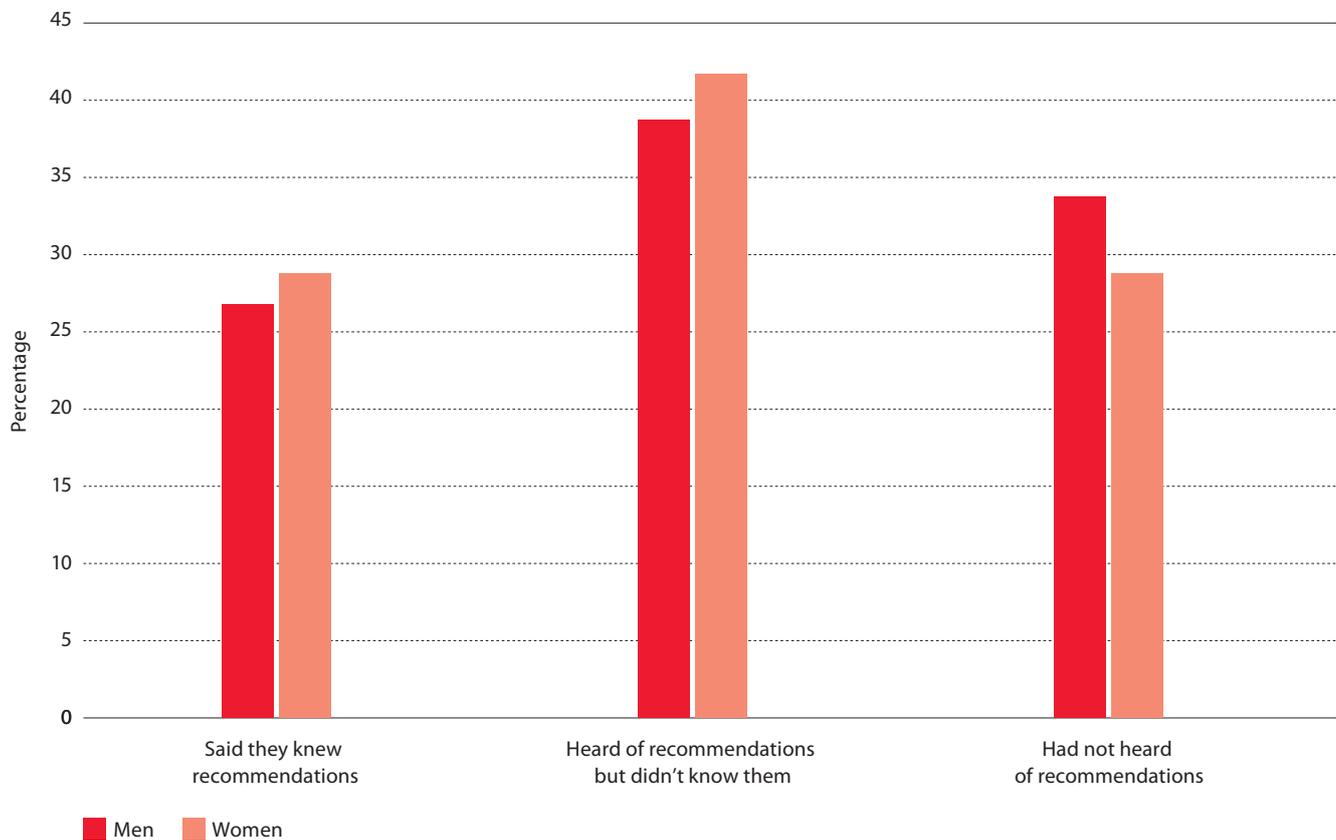
**Notes:**

Adults aged 16 to 64 years. Individuals were asked if they were aware of the government's guidelines for physical activity.

**Source:**

Joint Health Surveys Unit (2008). Health Survey for England 2007: Healthy lifestyles: knowledge, attitudes and behaviour. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 6.1**  
**Awareness of recommendations for physical activity in adults, by sex, England 2007**



**Table 6.2**  
**Knowledge of amount of physical activity in recommendations in adults, by sex and age, England 2007**

	All adults	16 – 24	25 – 34	35 – 44	45 – 54	55 – 64
	%	%	%	%	%	%
<b>Men</b>						
Same as recommendations	6	5	9	7	6	3
More than recommendations	25	32	22	23	24	25
Less than recommendations	69	63	69	70	71	71
<b>Women</b>						
Same as recommendations	9	9	13	9	7	7
More than recommendations	23	22	21	24	25	22
Less than recommendations	68	69	66	67	68	71
<b>Base</b>						
Men	2,144	310	390	519	468	457
Women	2,689	339	533	655	602	560

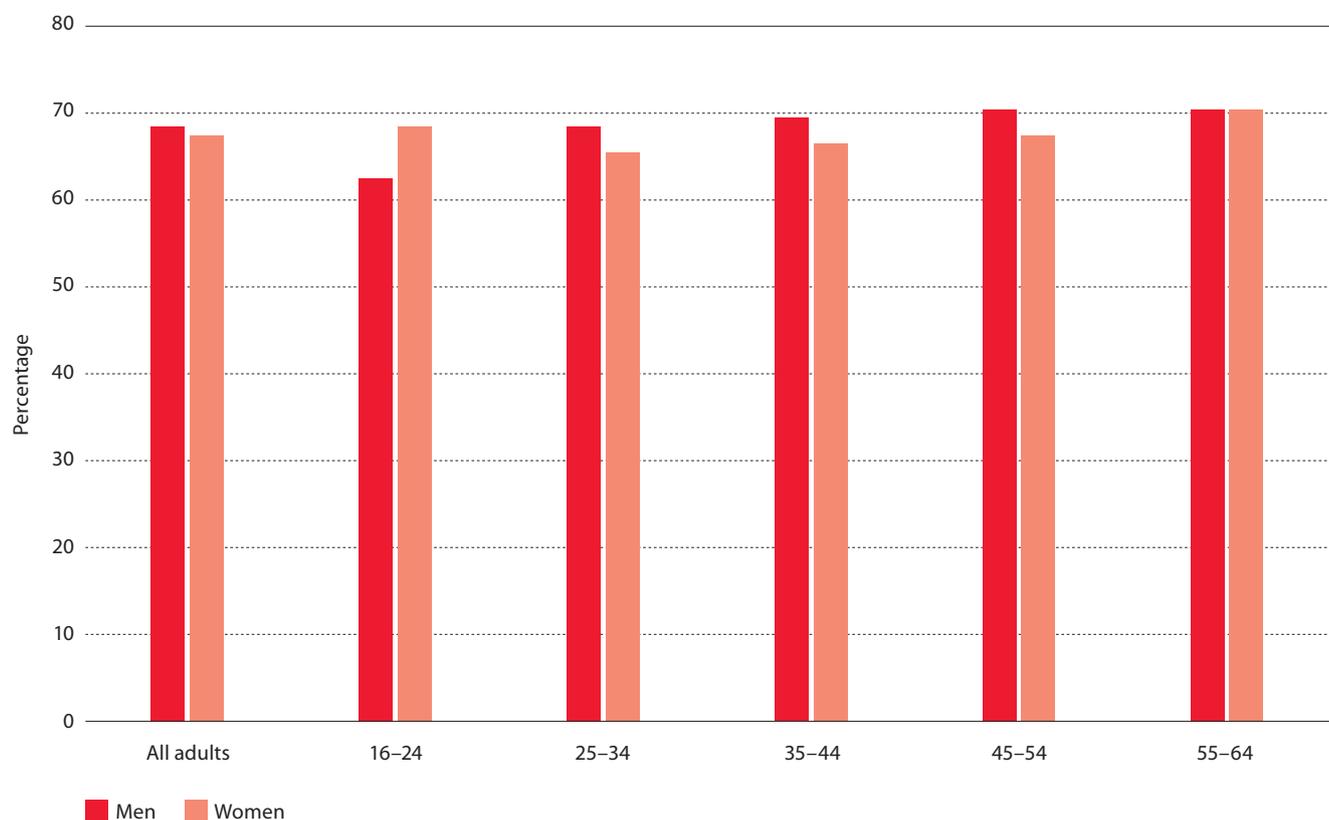
**Notes:**

Adults aged 16 to 64 years. Adults were asked what amount of physical activity people of your age should do. Those adults reported as 'Less than recommendations' thought the recommended levels of physical activity were lower than they were. Table shows responses to two separate questions for which the bases vary but are of a similar size; those shown are for knowledge of days per week. Recommendations for adults in 2007 were that they should be active on at least five days a week, at moderate or greater intensity, for at least 30 minutes a day.

**Source:**

Joint Health Surveys Unit (2008). Health Survey for England 2007: Healthy lifestyles: knowledge, attitudes and behaviour. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 6.2**  
**Percentage of adults who think the recommended levels of physical activity are lower than described in the guidelines, by sex and age, England 2007**



**Table 6.3**  
**Knowledge of amount of physical activity in recommendations in children, by sex and age, England 2007**

	All children	Age (years)				
		11	12	13	14	15
<b>Boys</b>						
Same as recommendations	10	11	13	11	7	10
More than recommendations	8	7	5	8	9	10
Less than recommendations	81	82	83	80	83	79
<b>Girls</b>						
Same as recommendations	10	12	12	12	9	7
More than recommendations	3	2	3	4	3	1
Less than recommendations	87	85	85	84	88	91
<b>Base</b>						
Boys	1,288	255	252	285	261	235
Girls	1,222	221	260	283	236	222

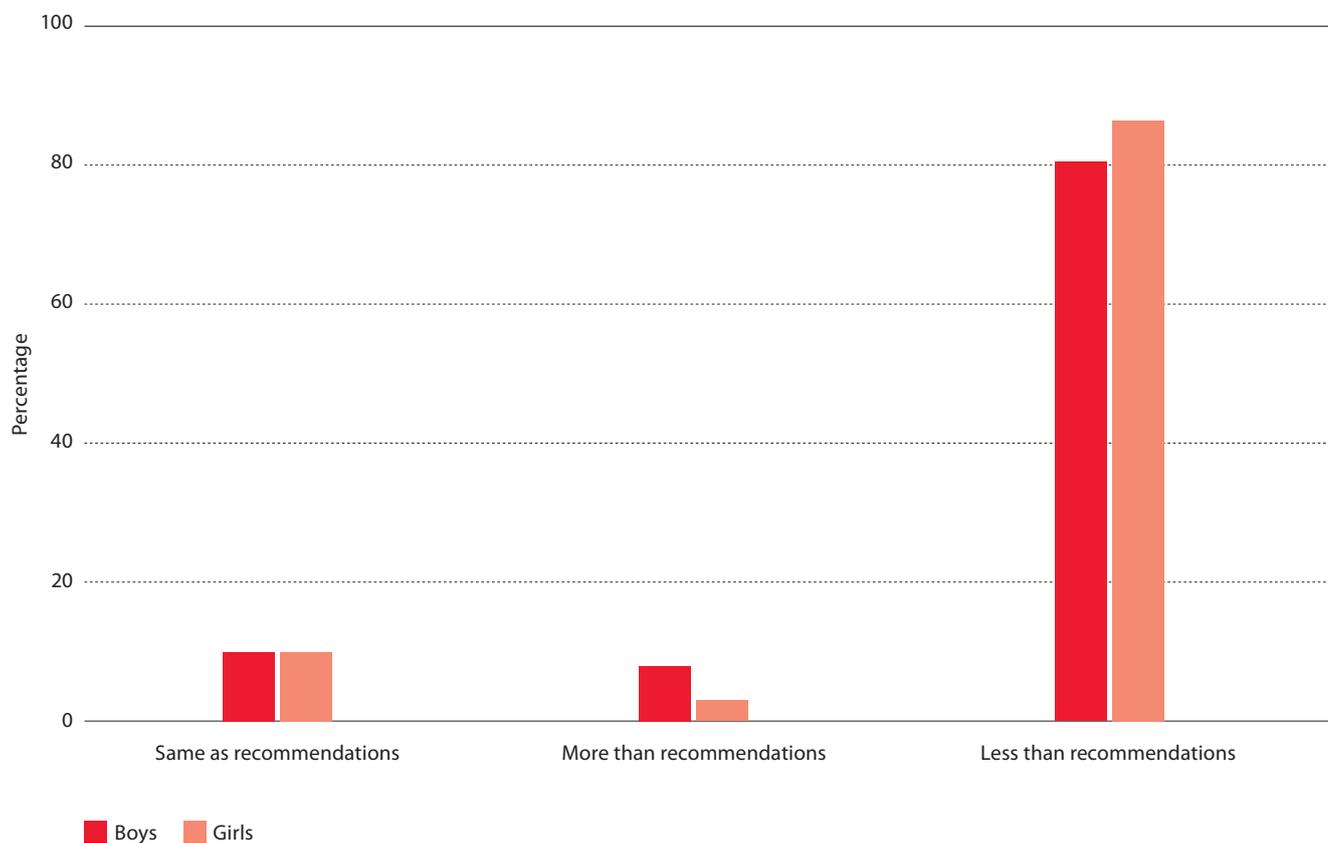
**Notes:**

Children aged 11 to 15 years. Bases weighted on knowledge of number of days and non-response. Children aged 11-12 were asked about the amount of physical activity 'children your age' should take, and children aged 13-15 were asked about 'young people'. Those children reported as 'Less than recommendations' thought the recommended levels of physical activity were lower than they were. Recommendations for children in 2007 were at least 60 minutes of at least moderate intensity activity on all 7 days. Bases vary but are of similar sizes; those shown are for knowledge of number of days.

**Source:**

Joint Health Surveys Unit (2008). Health Survey for England 2007: Healthy lifestyles: knowledge, attitudes and behaviour. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 6.3**  
**Knowledge of physical activity recommendations in children, by sex and age, England 2007**



**Table 6.4**  
**Percentage of adults who would like to do more physical activity, by sex and age, England 2007**

	All adults	16 – 24	25 – 34	35 – 44	45 – 54	55 – 64
	%	%	%	%	%	%
<b>Men</b>	71	70	78	76	69	60
<b>Women</b>	74	81	81	81	74	55
<b>Base</b>						
<i>Men</i>	2,125	295	389	518	468	455
<i>Women</i>	2,678	326	534	656	602	560

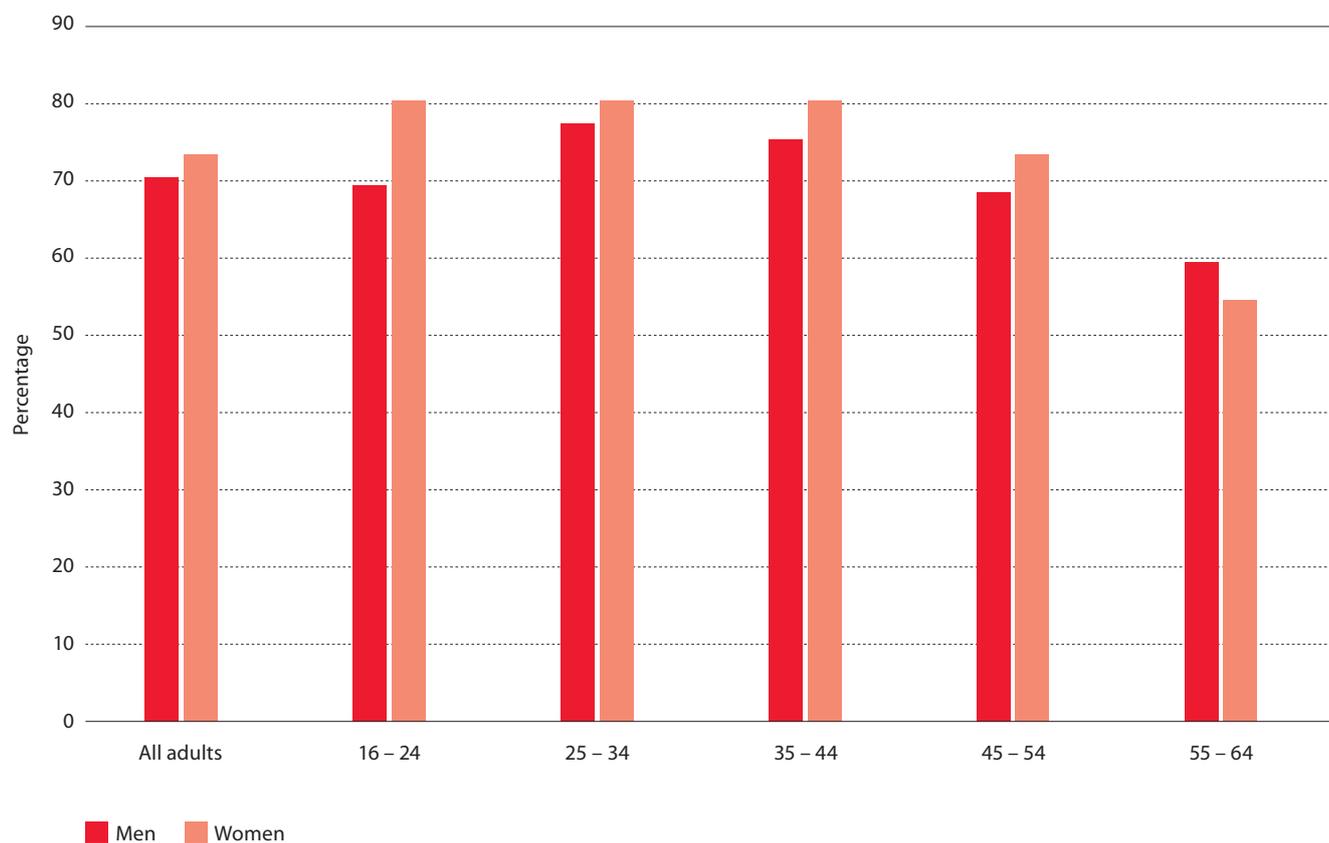
**Notes:**

Adults aged 16 to 64 years. Data are displayed as a percentage of individuals who were able to do more physical activity. Less than 10% of total sample were unable to more physical activity, although this was higher for those 55 to 64 years.

**Source:**

Joint Health Surveys Unit (2008). Health Survey for England 2007: Healthy lifestyles: knowledge, attitudes and behaviour. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 6.4**  
**Percentage of adults who would like to do more physical activity, by sex and age, England 2007**



**Table 6.5**  
**Percentage of children who would like to do more physical activity, by sex and age, England 2007**

	All children	Age (years)				
		11	12	13	14	15
	%	%	%	%	%	%
<b>Boys</b>	61	65	65	62	60	54
<b>Girls</b>	74	75	77	70	72	76
<b>Base</b>						
<i>Boys</i>	1,285	255	248	285	261	236
<i>Girls</i>	1,226	221	261	283	239	222

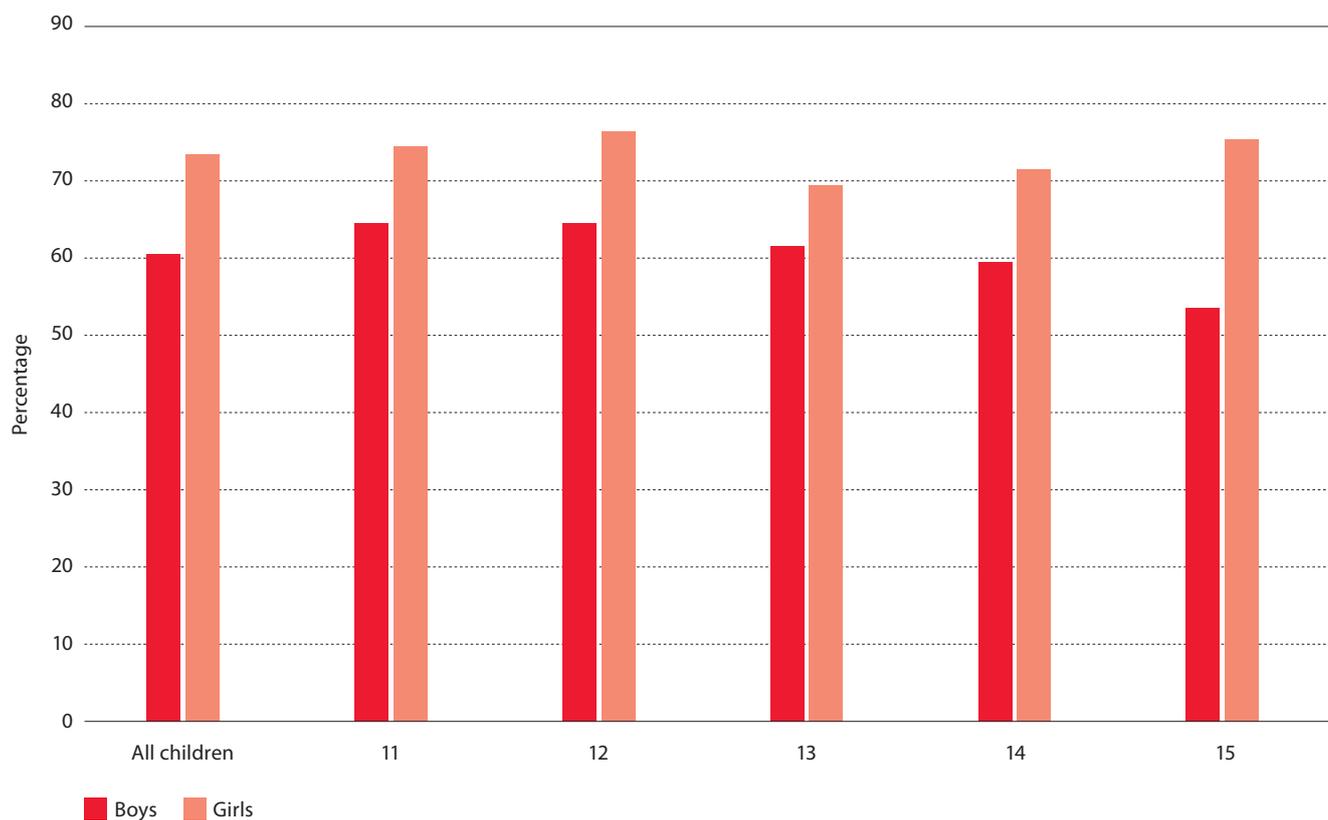
**Notes:**

Children aged 11 to 15 years.

**Source:**

Joint Health Surveys Unit (2008). Health Survey for England 2007: Healthy lifestyles: knowledge, attitudes and behaviour. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 6.5**  
**Percentage of children who would like to do more physical activity, by sex and age, England 2007**



**Table 6.6****Percentage of adults who would like to do more physical activity, by sex and quintile of equivalised household income, England 2007**

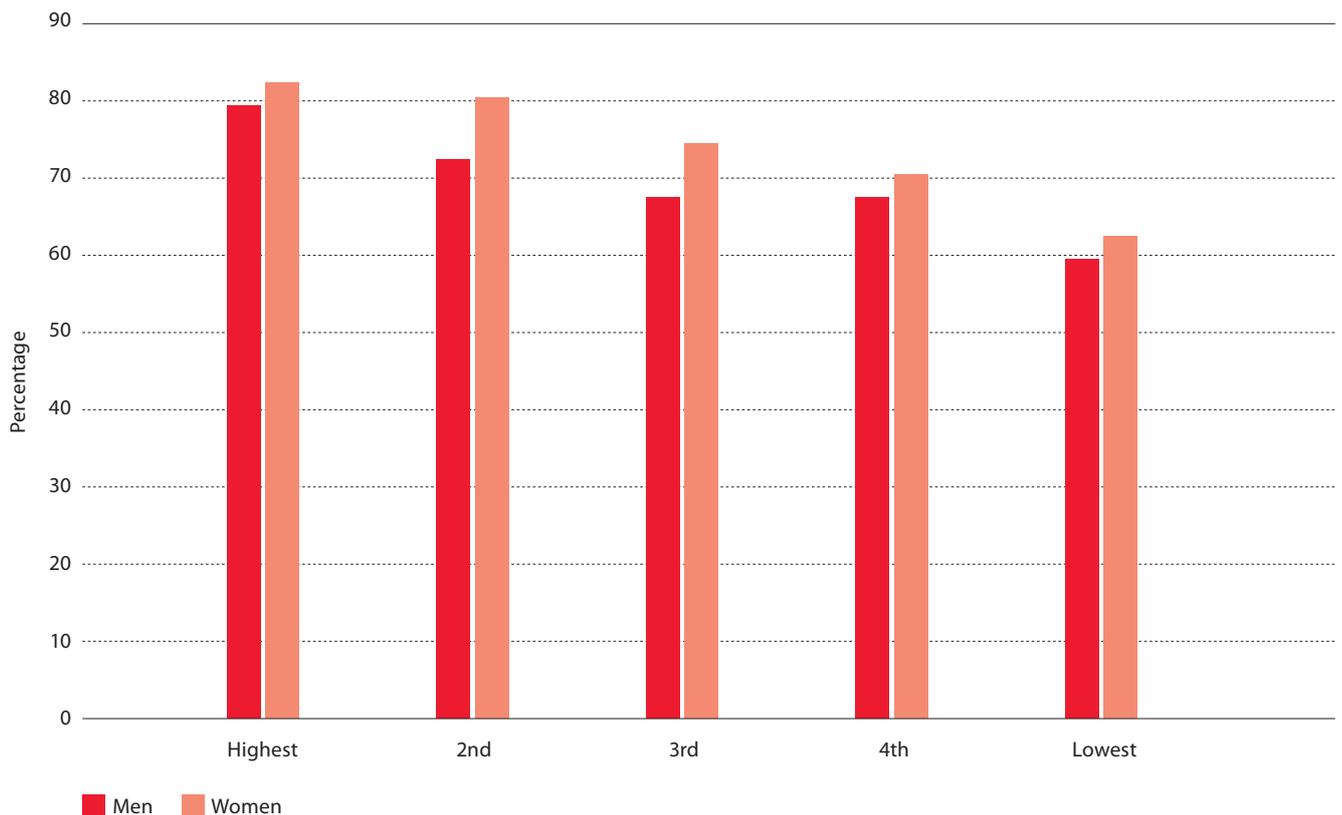
	Highest	2nd	3rd	4th	Lowest
	%	%	%	%	%
<b>Men</b>	80	73	68	68	60
<b>Women</b>	83	81	75	71	63
<b>Base</b>					
<i>Men</i>	542	435	331	233	221
<i>Women</i>	546	483	396	355	385

**Notes:**

Adults aged 16 to 64 years. Data are displayed as a percentage of individuals who were able to do more physical activity. Less than 10% of total sample were unable to do more physical activity, although this was higher for lower income quintile.

**Source:**

Joint Health Surveys Unit (2008). Health Survey for England 2007: Healthy lifestyles: knowledge, attitudes and behaviour. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 6.6****Percentage of adults who would like to do more physical activity, by sex and quintile of equivalised household income, England 2007**

**Table 6.7**  
**Percentage of children who would like to do more physical activity, by sex and quintile of equivalised household income, England 2007**

	Highest	2nd	3rd	4th	Lowest
	%	%	%	%	%
<b>Boys</b>	59	58	66	60	64
<b>Girls</b>	69	72	77	73	77
<b>Base</b>					
<i>Boys</i>	190	208	230	229	222
<i>Girls</i>	166	183	185	210	266

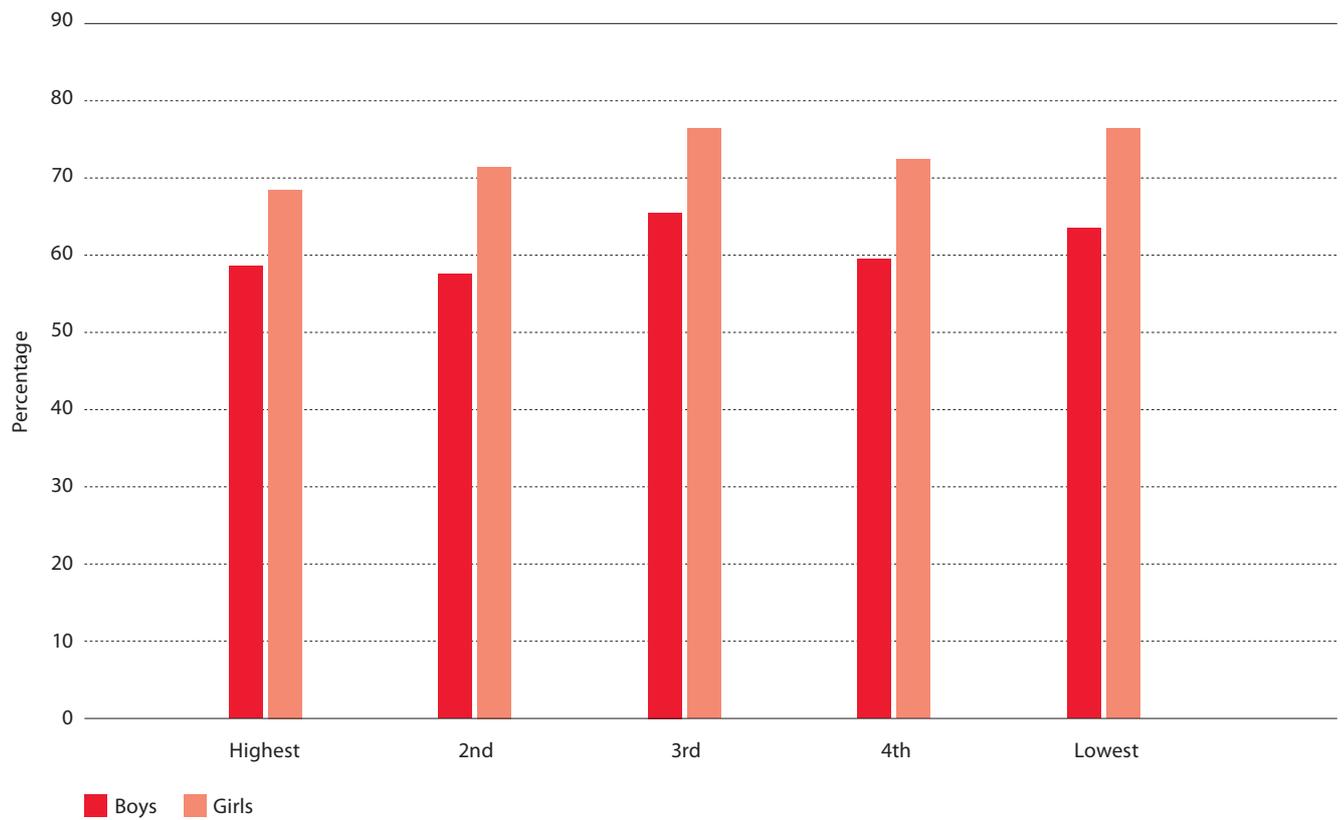
**Notes:**

Children aged 11 to 15 years. Bases weighted for non-response.

**Source:**

Joint Health Surveys Unit (2008). Health Survey for England 2007: Healthy lifestyles: knowledge, attitudes and behaviour. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 6.7**  
**Percentage of children who would like to do more physical activity, by sex and quintile of equivalised household income, England 2007**



**Table 6.8a**  
**Barriers to doing more physical activity, exercise or sport in men, by age, England 2007**

	All adults	16 – 24	25 – 34	35 – 44	45 – 54	55 – 64
	%	%	%	%	%	%
<b>What stops you from doing more than you do now</b>						
My work commitments	45	36	49	57	47	29
Don't have enough leisure time	38	35	43	45	39	24
Caring for children or older people	13	3	18	25	9	4
Don't have enough money	13	23	17	10	10	5
Poor health or physical limitations	10	4	4	7	14	21
Have no one to exercise with	8	16	10	5	8	5
Injuries which prevent me	8	5	6	8	12	11
No suitable places to do it in my area	5	10	7	4	3	2
Haven't got the right clothes or equipment	2	5	4	2	1	1
Don't need to do any more	17	19	15	16	16	21
<b>Other factors that apply</b>						
Not motivated to do more	21	21	23	23	22	17
Prefer to do other things	15	20	17	13	15	11
Not the sporty type	14	14	13	11	17	15
Worried about injury	5	4	4	6	7	5
Don't enjoy physical activity	5	5	7	4	7	2
Too shy or embarrassed	4	7	5	4	3	2
Too old	3	0	1	3	4	9
Too overweight	4	4	2	5	5	4
Think exercise is a waste of time	0	0	0	1	1	0
<i>Base</i>	2,128	297	390	517	467	457

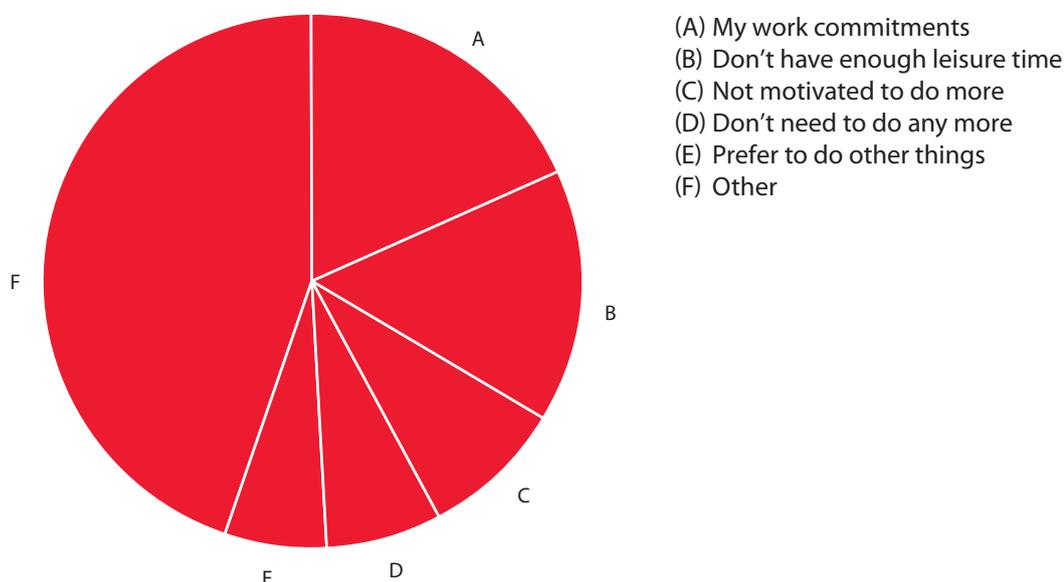
**Notes:**

Adults aged 16 to 64. Weighted for non-response. Two questions were asked to determine the main barriers adults faced to participating in physical activity: The first question presented a list of primarily practical barriers, the second question listed other factors including psychological barriers.

**Source:**

Joint Health Surveys Unit (2008). Health Survey for England 2007: Healthy lifestyles: knowledge, attitudes and behaviour. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 6.8a**  
**Barriers to doing more physical activity, exercise or sport in men, England 2007**



**Table 6.8b**  
**Barriers to doing more physical activity, exercise or sport in women, by age, England 2007**

	All adults	16 – 24	25 – 34	35 – 44	45 – 54	55 – 64
	%	%	%	%	%	%
<b>What stops you from doing more than you do now</b>						
My work commitments	34	35	39	37	39	20
Don't have enough leisure time	37	44	42	42	35	19
Caring for children or older people	25	16	34	39	18	12
Don't have enough money	16	34	19	15	9	6
Poor health or physical limitations	13	4	11	10	15	23
Have no one to exercise with	10	22	9	9	8	5
Injuries which prevent me	6	4	5	5	8	8
No suitable places to do it in my area	5	13	4	4	2	2
Haven't got the right clothes or equipment	3	11	3	2	1	1
Don't need to do any more	12	5	8	11	14	20
<b>Other factors that apply</b>						
Not motivated to do more	25	36	27	26	22	16
Prefer to do other things	14	25	13	10	12	13
Not the sporty type	21	27	19	18	24	21
Worried about injury	5	4	4	6	7	5
Don't enjoy physical activity	8	9	7	8	9	8
Too shy or embarrassed	10	21	10	8	7	3
Too old	2	0	1	1	3	5
Too overweight	7	6	6	9	8	7
Think exercise is a waste of time	0	0	0	0	0	
<i>Base</i>	<i>2,674</i>	<i>327</i>	<i>535</i>	<i>656</i>	<i>601</i>	<i>555</i>

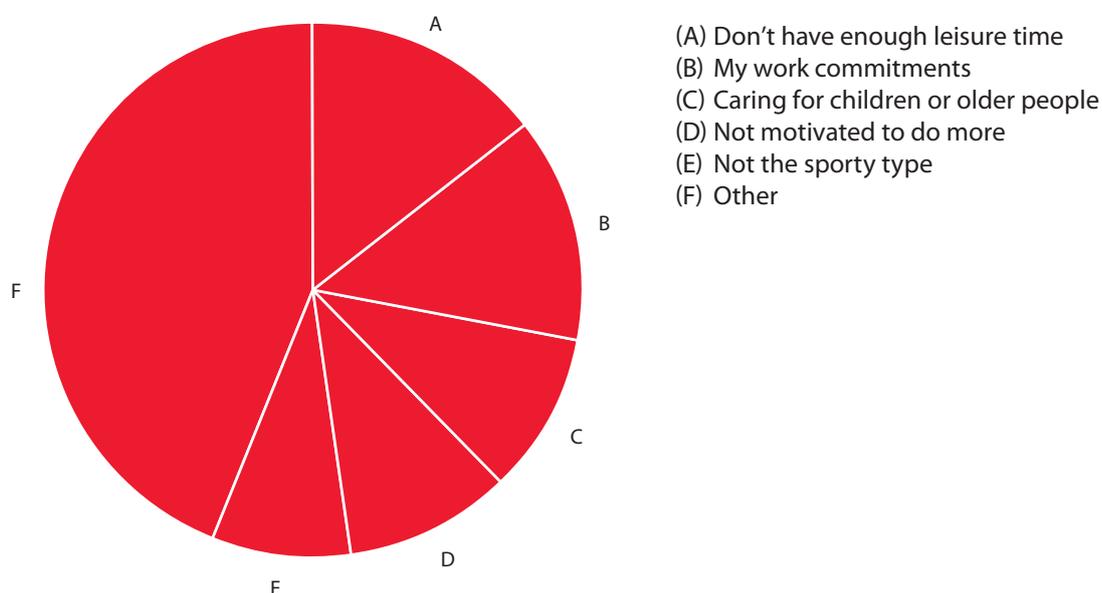
**Notes:**

Adults aged 16 to 64. Weighted for non-response. Two questions were asked to determine the main barriers adults faced to participating in physical activity: The first question presented a list of primarily practical barriers, the second question listed other factors including psychological barriers.

**Source:**

Joint Health Surveys Unit (2008). Health Survey for England 2007: Healthy lifestyles: knowledge, attitudes and behaviour. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 6.8b**  
**Barriers to doing more physical activity, exercise or sport in women, England 2007**



**Table 6.9a**  
**Barriers to doing more physical activity, exercise or sport, age-standardised percentages in men, by quintile of equivalised household income, England 2007**

	Highest	2nd	3rd	4th	Lowest
	%	%	%	%	%
<b>What stops you from doing more than you do now</b>					
My work commitments	58	49	42	34	20
Don't have enough leisure time	44	41	37	30	25
Caring for children or older people	14	11	15	13	8
Don't have enough money	7	11	18	17	21
Poor health or physical limitations	5	8	9	16	24
Have no one to exercise with	7	9	8	9	5
Injuries which prevent me	6	7	9	13	15
No suitable places to do it in my area	5	5	5	7	4
Haven't got the right clothes or equipment	1	2	3	5	2
Don't need to do any more	14	17	20	16	18
<b>Other factors that apply</b>					
Not motivated to do more	22	21	21	25	18
Prefer to do other things	16	17	16	16	12
Not the sporty type	15	13	13	15	15
Worried about injury	4	6	5	7	8
Don't enjoy physical activity	6	4	4	7	4
Too shy or embarrassed	4	5	4	6	4
Too old	2	2	5	5	4
Too overweight	3	4	3	7	4
Think exercise is a waste of time	0	0	0	1	0
<i>Base</i>	545	435	331	236	220

**Notes:**

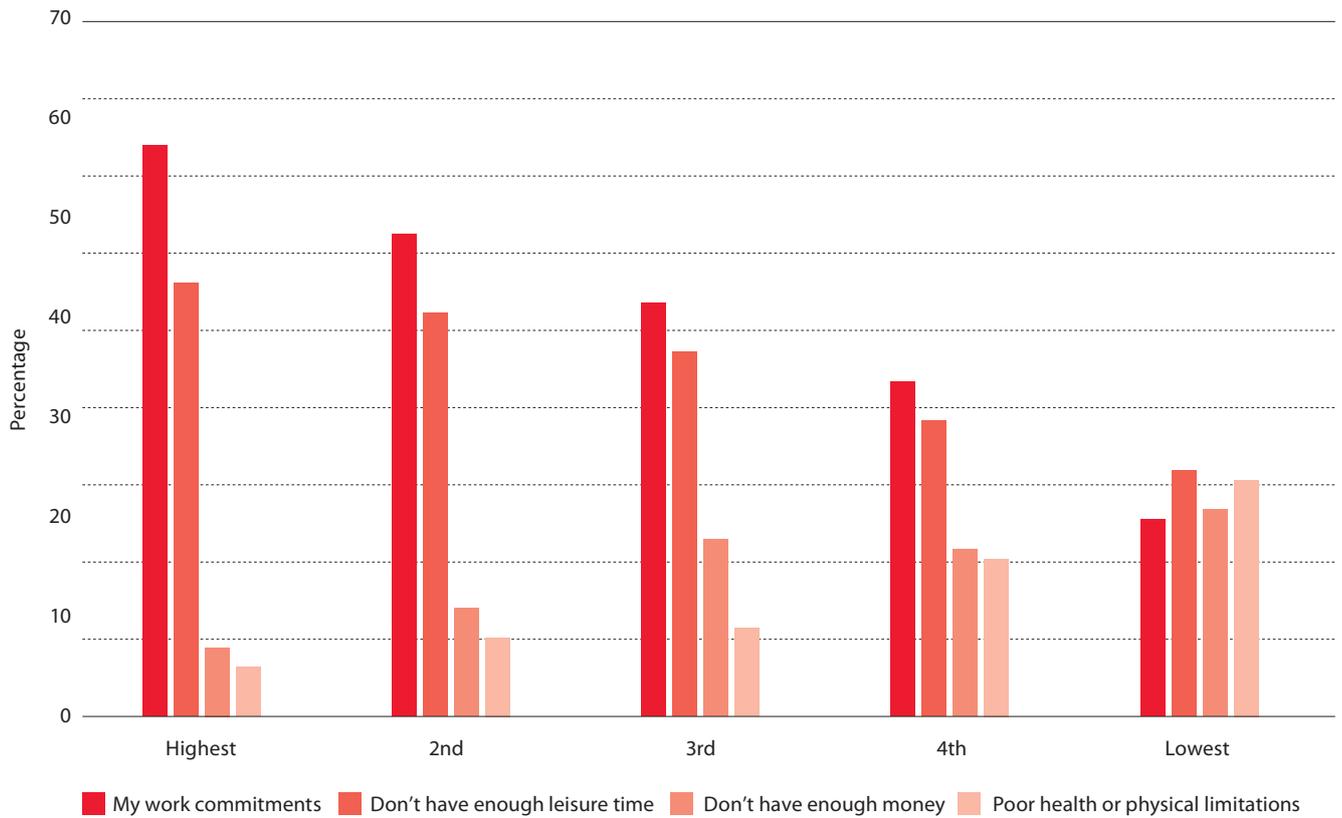
Adults aged 16 to 64 years. Weighted for non-response. The standard population to which the age distribution of sub-groups was adjusted was the mid-year 2006 population estimates for England.

**Source:**

Joint Health Surveys Unit (2008). Health Survey for England 2007: Healthy lifestyles: knowledge, attitudes and behaviour. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 6.9a**

**Barriers to doing more physical activity, exercise or sport, age-standardised percentages in men, by quintile of equivalised household income, England 2007**



**Table 6.9b**  
**Barriers to doing more physical activity, exercise or sport, age-standardised percentages in women, by quintile of equivalised household income, England 2007**

	Highest	2nd	3rd	4th	Lowest
	%	%	%	%	%
<b>What stops you from doing more than you do now</b>					
My work commitments	49	41	35	24	17
Don't have enough leisure time	45	46	40	33	19
Caring for children or older people	21	22	32	29	29
Don't have enough money	6	13	22	23	25
Poor health or physical limitations	9	12	10	17	19
Have no one to exercise with	6	7	13	14	13
Injuries which prevent me	6	4	3	7	6
No suitable places to do it in my area	2	5	6	5	6
Haven't got the right clothes or equipment	0	3	3	4	6
Don't need to do any more	9	10	11	11	16
<b>Other factors that apply</b>					
Not motivated to do more	24	24	27	27	18
Prefer to do other things	17	16	17	14	11
Not the sporty type	18	23	22	28	23
Worried about injury	4	3	4	4	5
Don't enjoy physical activity	7	9	9	8	8
Too shy or embarrassed	7	8	13	14	13
Too old	1	1	3	2	3
Too overweight	4	6	9	8	11
Think exercise is a waste of time	0	0	1	0	0
<b>Base</b>					
<i>Men</i>	545	435	331	236	220
<i>Women</i>	545	485	394	354	383

**Notes:**

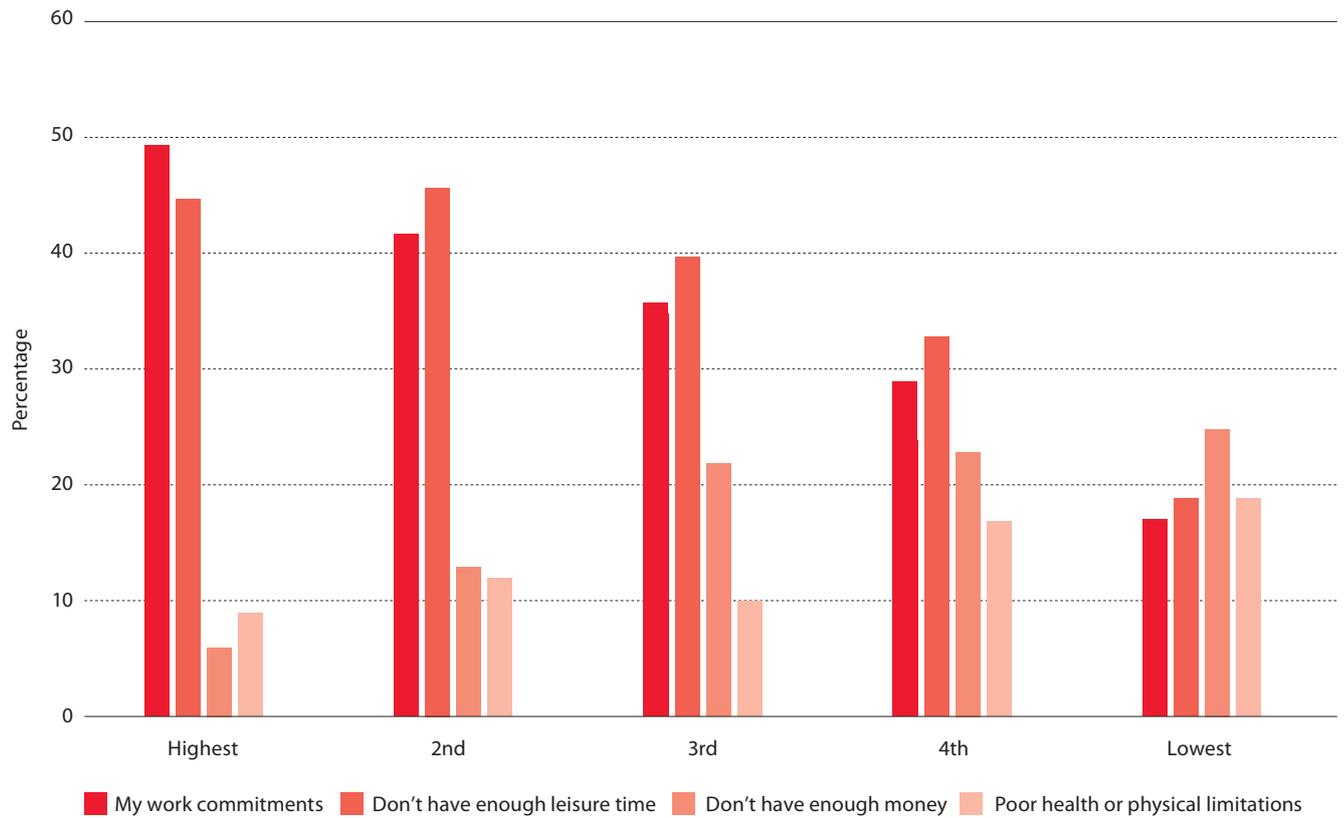
Adults aged 16 to 64 years. Weighted for non-response. The standard population to which the age distribution of sub-groups was adjusted was the mid-year 2006 population estimates for England.

**Source:**

Joint Health Surveys Unit (2008). Health Survey for England 2007: Healthy lifestyles: knowledge, attitudes and behaviour. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 6.9b**

**Barriers to doing more physical activity, exercise or sport, age-standardised percentages in women, by quintile of equivalised household income, England 2007**



**Table 6.10**  
**Factors putting adults off sport, by age, Northern Ireland 2008/09**

	All adults	16 – 24	25 – 34	35 – 44	45 – 54	55 – 64	65+
	%	%	%	%	%	%	%
Don't have enough time	26	30	44	44	29	13	5
Not fit	21	16	17	18	22	24	27
Not interested in sport/physical activity	20	24	18	16	23	24	17
Too old	19	0	0	2	6	17	60
Restricting medical condition	16	5	6	11	16	27	22
Family commitments	13	9	22	25	15	6	3
Other not specified	12	21	15	13	13	12	7
Too busy at work	12	11	17	21	17	7	1
Get short of breath	10	5	4	5	10	12	17
Get tired easily	8	6	4	5	7	10	13
Not good at sport/physical activity	8	11	9	7	10	8	6
Find sport/physical activity boring	5	10	6	6	7	4	2
Overweight	5	3	6	7	7	5	3
Disability	5	1	2	2	5	9	7
Lack of facilities in area	3	7	5	5	2	2	1
Embarrassed to exercise in front of others	3	3	4	4	3	2	1
Too far or difficult to travel to facilities	2	4	2	2	2	1	1
Embarrassed to change in front of others	1	0	1	1	1	0	0
Language issues	1	1	1	1	1	0	0
<i>Base</i>	<i>3,083</i>	<i>266</i>	<i>470</i>	<i>605</i>	<i>523</i>	<i>493</i>	<i>726</i>

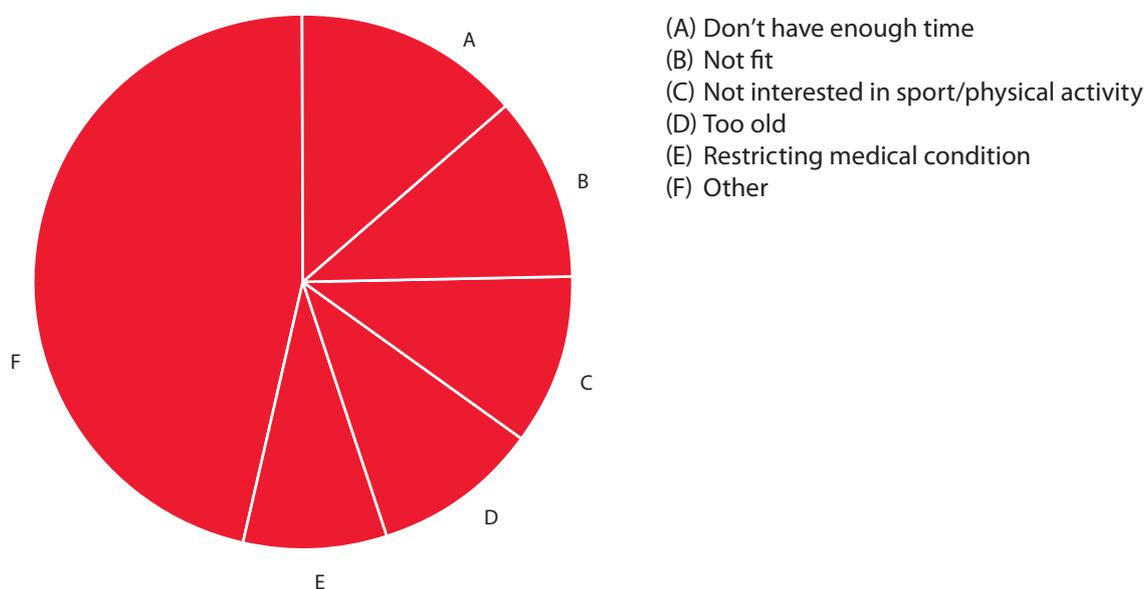
**Notes:**

Percentages may add up to more than 100 due to multiple responses. Respondents were presented with a list of barriers and asked to select factors.

**Source:**

Department of Culture Arts and Leisure (2010). Experience of Sport and Physical Activity in Northern Ireland: Findings from the Continuous Household Survey. Research and Statistics Branch: Belfast.

**Figure 6.10**  
**Factors putting adults off sport, Northern Ireland 2008/09**



**Table 6.11**  
**What would encourage adults to do more physical activity, by sex and age, England 2007**

	All adults	16 – 24	25 – 34	35 – 44	45 – 54	55 – 64
	%	%	%	%	%	%
<b>Men</b>						
More leisure time	42	40	51	51	41	26
Self-motivation	32	35	39	33	30	23
Own ill health	31	28	31	34	33	29
Advice from a doctor or a nurse	28	19	25	30	31	33
Having someone to do it with	20	31	23	18	16	12
Increased income	14	24	21	13	9	6
Advice from a family member	10	11	12	10	10	8
Family member's ill health	9	11	9	9	9	5
Having physical activity I am capable of	9	10	6	7	13	12
Clearer advice from the government	4	4	4	3	5	4
Don't need to do more	22	25	20	20	20	25
<b>Women</b>						
More leisure time	42	51	48	49	42	21
Self-motivation	38	51	43	38	35	23
Own ill health	29	33	25	28	34	27
Advice from a doctor or a nurse	23	20	18	22	29	24
Having someone to do it with	26	47	29	22	22	15
Increased income	15	28	20	14	11	7
Advice from a family member	8	15	6	7	6	4
Family member's ill health	9	13	9	9	10	4
Having physical activity I am capable of	14	18	11	12	17	13
Clearer advice from the government	2	3	3	2	3	1
Don't need to do more	15	8	12	14	16	26
<b>Base</b>						
<i>Men</i>	2,114	296	384	516	464	454
<i>Women</i>	2,648	324	529	652	595	548

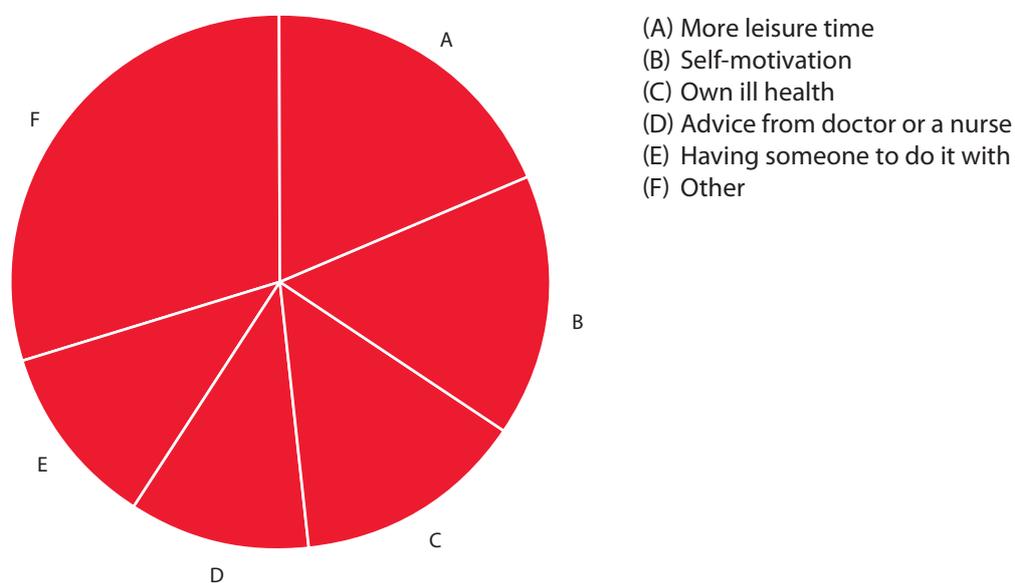
**Notes:**

Adults aged 16 to 64. Bases weighted for non-response. Respondents chose from a list of factors presented in the questionnaire.

**Source:**

Joint Health Surveys Unit (2008). Health Survey for England 2007: Healthy lifestyles: knowledge, attitudes and behaviour. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 6.11**  
**What would encourage adults to do more physical activity, England 2007**



**Table 6.12**

**Percentage of adults saying that sports and leisure facilities or parks and open spaces are the most important factor in making somewhere a good place to live, by Government Office Region, England 2008**

	Sport/leisure facilities	Parks and open spaces
	%	%
<b>Government Office Region</b>		
North East	11.1	22.9
North West	11.3	26.4
Yorkshire and the Humber	10.8	24.9
East Midlands	12.1	26.1
West Midlands	10.6	25.7
East of England	11.9	28.6
London	12.8	35.6
South East	12.6	29.0
South West	12.0	26.8
England	11.8	28.0
<i>Base</i>	543,713	543,713

**Notes:**

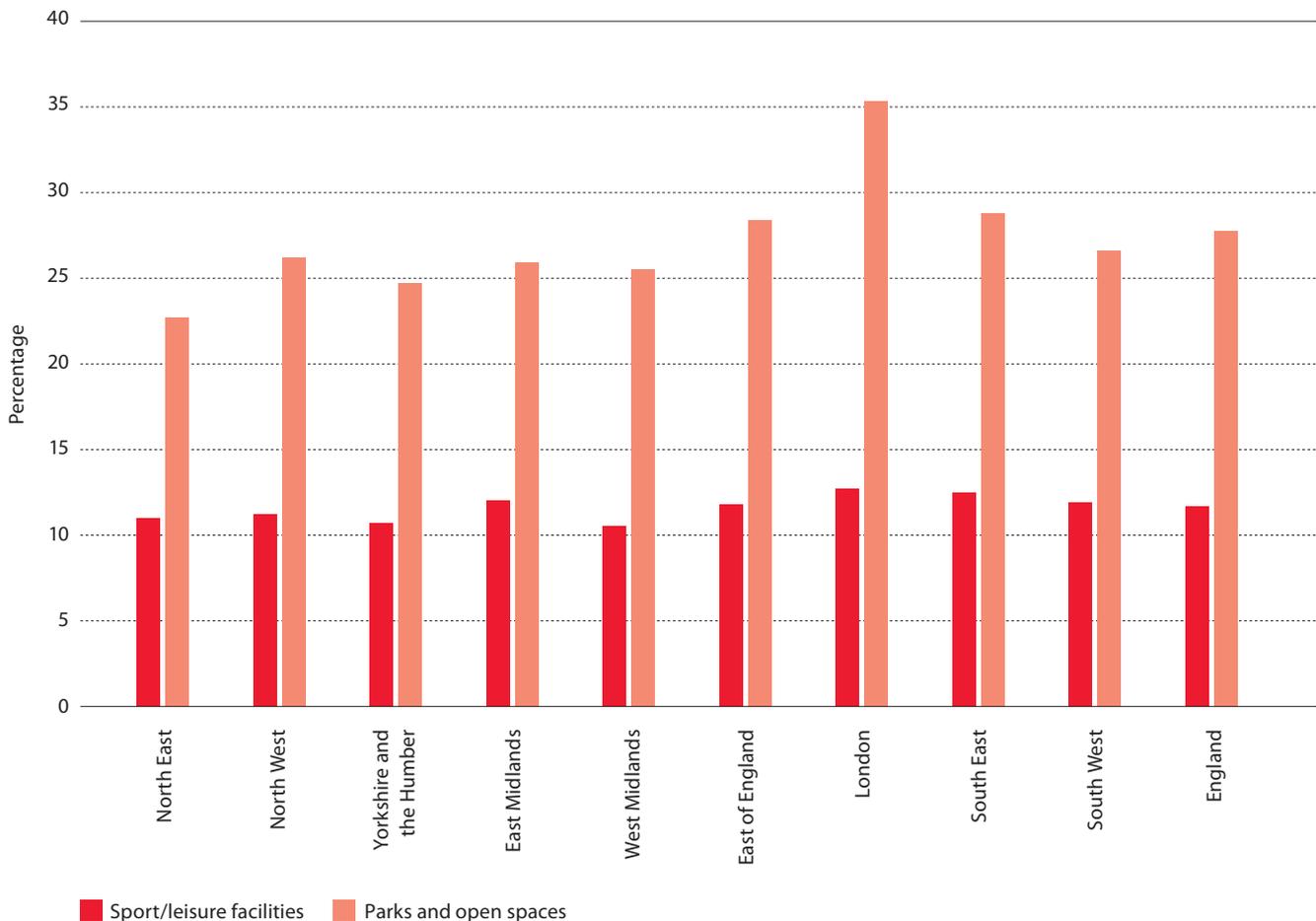
When completing the questionnaire, respondents were asked to consider "local area" as the area within 15-20 minutes walking distance from their home. The Place Survey was run between September and December 2008 but designed to reflect the structure of local government from 1st April 2009.

**Source:**

Communities and Local Government (2009). Place Survey England – Headline Table Results 2008 (Revised).  
<http://www.communities.gov.uk/publications/corporate/statistics/placesurvey2008> (Accessed December 2011).

**Figure 6.12**

**Percentage of adults saying that sports and leisure facilities, or parks and open spaces are the most important factor in making somewhere a good place to live, by Government Office Region, England 2008**



**Table 6.13**

**Percentage of adults very or fairly satisfied with sports and leisure facilities, or parks and open spaces in local area, by Government Office Region, England 2008**

	Sport/leisure facilities	Parks and open spaces
	%	%
<b>Government Office Region</b>		
North East	47.0	63.3
North West	46.4	65.2
Yorkshire and the Humber	43.3	64.2
East Midlands	44.6	65.8
West Midlands	43.2	65.1
East of England	45.5	71.0
London	46.5	72.3
South East	49.4	72.6
South West	47.4	69.9
England	46.2	68.5
<i>Bases</i>	543,713	543,713

**Notes:**

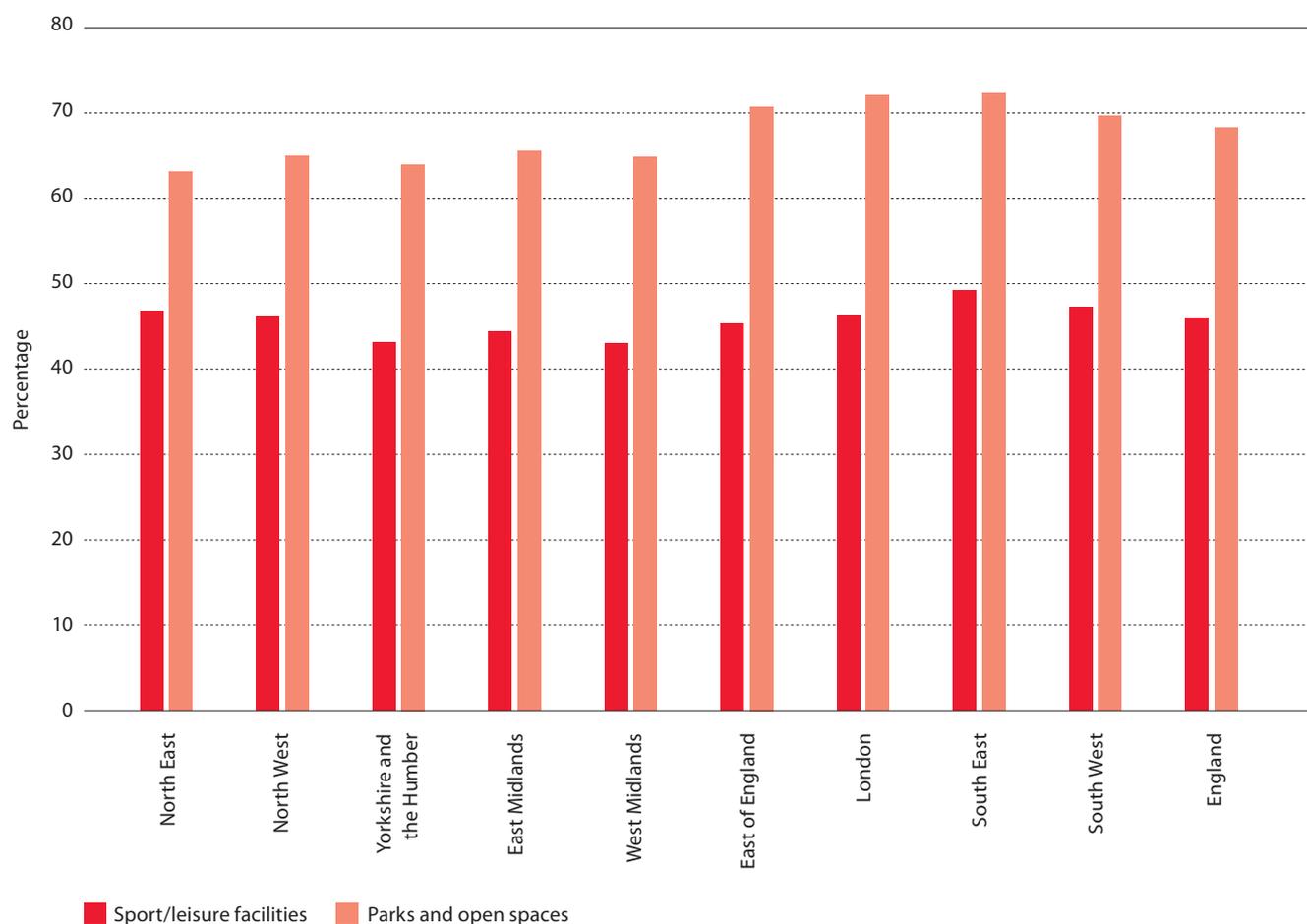
When completing the questionnaire, respondents were asked to consider "local area" as the area within 15-20 minutes walking distance from their home. The Place Survey was run between September and December 2008 but designed to reflect the structure of local government from 1st April 2009.

**Source:**

Communities and Local Government (2009). Place Survey England – Headline Table Results 2008 (Revised).  
<http://www.communities.gov.uk/publications/corporate/statistics/placesurvey2008> (Accessed December 2011).

**Figure 6.13**

**Percentage of adults very or fairly satisfied with sports and leisure facilities and parks and open spaces in local area, by Government Office Region, England 2008**



**Table 6.14**  
**Percentage of adults saying that sports and leisure facilities or parks and open spaces need improving in local area, by Government Office Region, England 2008**

	Sport/leisure facilities	Parks and open spaces
	%	%
<b>Government Office Region</b>		
North East	16.6	13.3
North West	15.4	11.8
Yorkshire and the Humber	16.8	12.2
East Midlands	18.2	11.3
West Midlands	16.9	12.1
East of England	15.9	9.1
London	19.0	10.5
South East	14.3	8.5
South West	15.2	9.6
England	16.3	10.6
<i>Base</i>	543,713	543,713

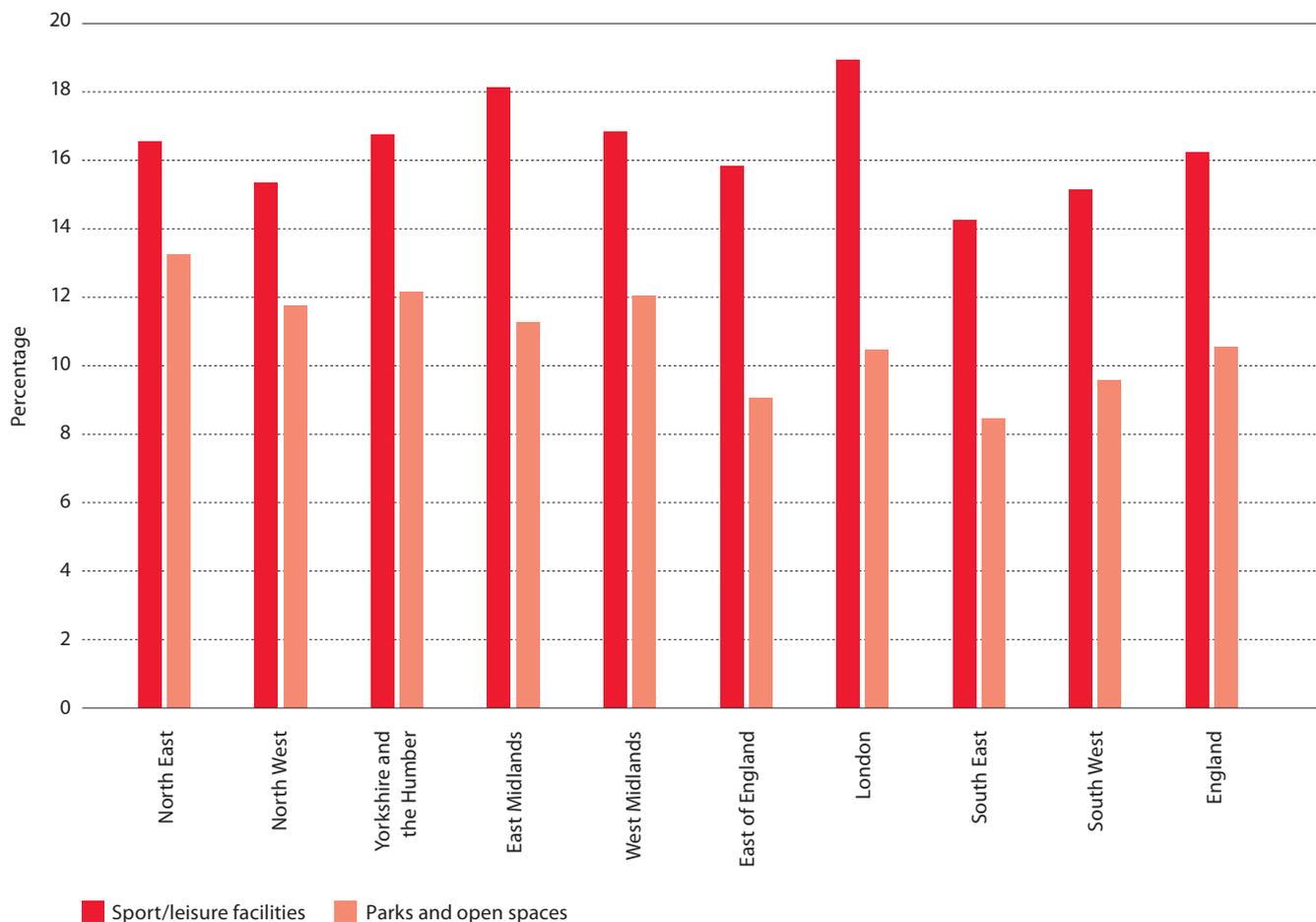
**Notes:**

When completing the questionnaire, respondents were asked to consider "local area" as the area within 15-20 minutes walking distance from their home. The Place Survey was run between September and December 2008 but designed to reflect the structure of local government from 1st April 2009.

**Source:**

Communities and Local Government (2009). Place Survey England – Headline Table Results 2008 (Revised).  
<http://www.communities.gov.uk/publications/corporate/statistics/placesurvey2008> (Accessed December 2011).

**Figure 6.14**  
**Percentage of adults saying that sports and leisure facilities or parks and open spaces need improving in local area, by Government Office Region, England 2008**



**Table 6.15****Children's views on the parks and play areas in their local area, by school year group, England 2009**

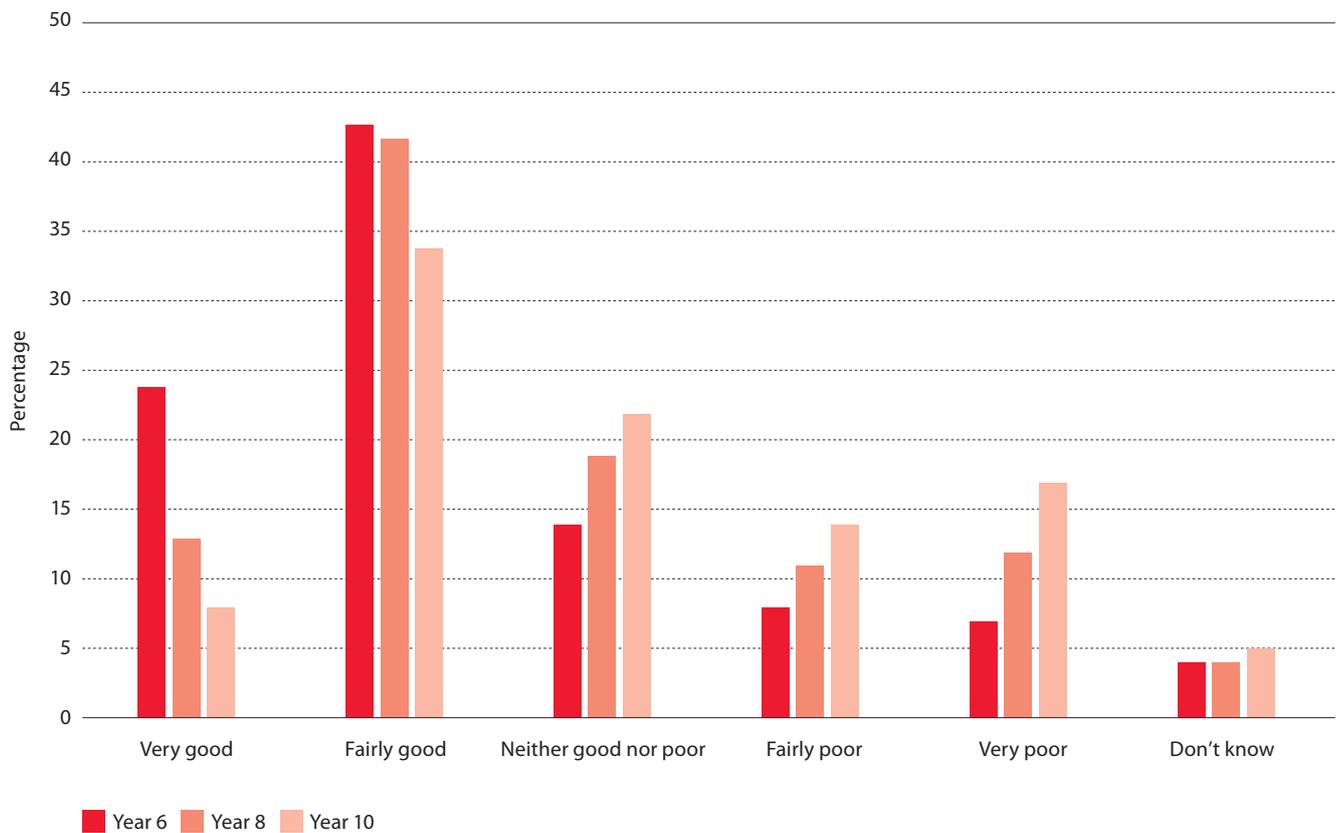
	Very good	Fairly good	Neither good nor poor	Fairly poor	Very poor	Don't know	Base
Year 6	24	43	14	8	7	4	95,751
Year 8	13	42	19	11	12	4	87,001
Year 10	8	34	22	14	17	5	70,427

**Notes:**

Data come from a single response item. Due to rounding, percentages may not sum to 100. Ages of pupils by year groups: Year 6 = 10 to 11 years, Year 8 = 12 to 13 years, Year 10 = 14 to 15 years.

**Source:**

National Foundation for Educational Research (2010). Tellus4 National Report. Department for Children, Schools and Families: London.

**Figure 6.15****Children and young people's views on the parks and play areas in their local area, by school year group, England 2009**

**Table 6.16**

**Percentage of pupils who participated in at least two hours of high quality physical education and out of hours school sport in a typical week, by school year group, England 2004/05 to 2007/08**

	2004/05	2005/06	2006/07	2007/08
	%	%	%	%
Year 1	51	74	87	95
Year 2	54	77	89	96
Year 3	64	83	91	97
Year 4	68	84	92	97
Year 5	72	87	93	97
Year 6	74	88	94	97
Year 7	87	90	92	95
Year 8	86	89	91	93
Year 9	81	84	86	89
Year 10	63	65	67	71
Year 11	58	60	63	66
<b>All years</b>	<b>69</b>	<b>80</b>	<b>86</b>	<b>90</b>
<i>Base</i>	<i>3,555,533</i>	<i>5,056,155</i>	<i>6,300,142</i>	<i>6,231,747</i>

**Notes:**

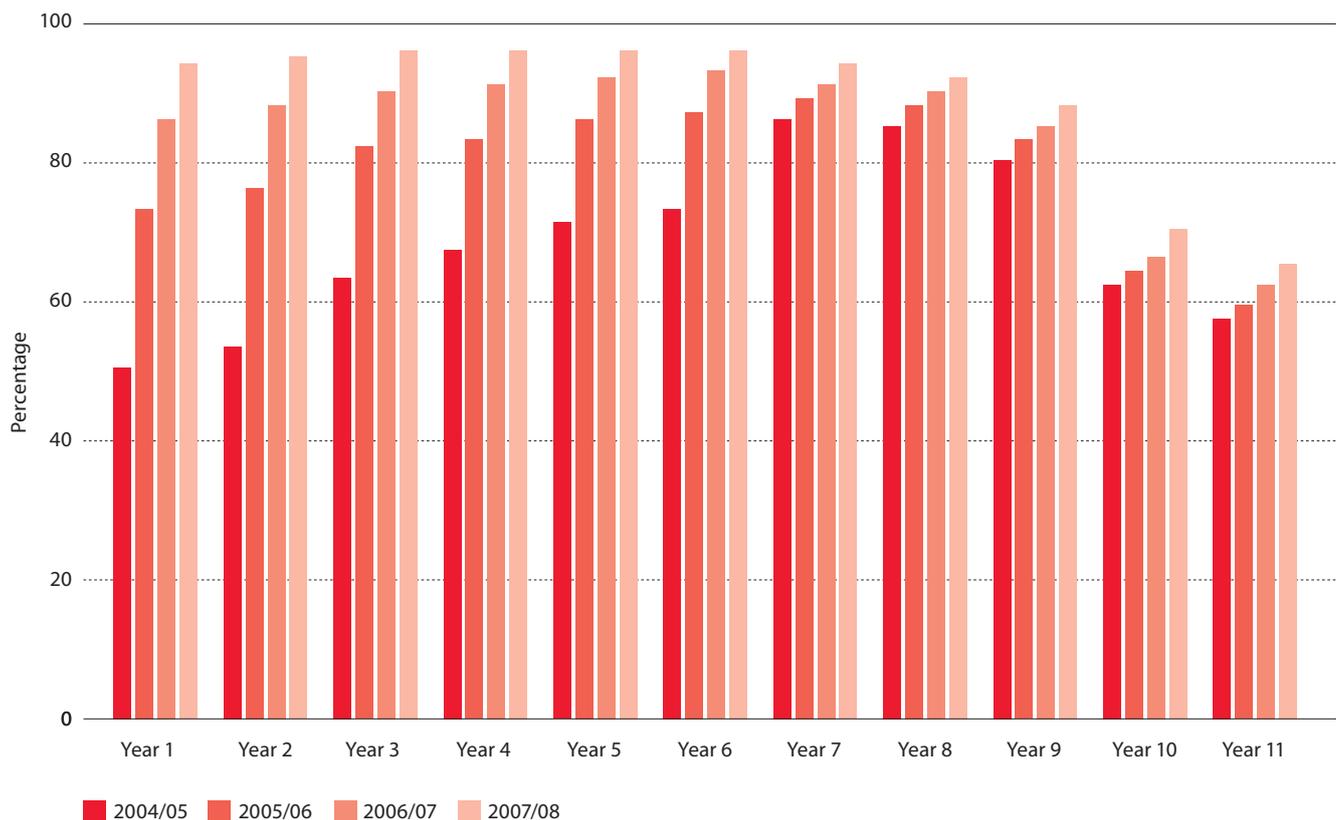
Physical education is the planned teaching and learning programme in curriculum time that meets the requirements of the national curriculum. High quality is defined as 'producing young people with the skills, understanding, desire and commitment to continue to improve and achieve in a range of PE, sport and health-enhancing physical activities, in line with their abilities'. School sport includes any activity that requires physical skilfulness and is part of the school's planned formal, semi-formal, supervised or led provision. School sport typically takes place out of school hours. Data collected from school sport partnerships.

**Source:**

TNS UK Limited (2008). Schools sports survey 2007/08. Department for Children, Schools and Families: London

**Figure 6.16**

**Percentage of pupils who participated in at least two hours of high quality physical education and out of hours school sport in a typical week, by school year group, England 2004/05 to 2007/08**



**Table 6.17**

**Percentage of pupils who participated in at least two hours of high quality physical education and out of hours school sport in a typical week, by school type, England 2004/05 to 2007/08**

	2004/05	2005/06	2006/07	2007/08
	%	%	%	%
Boys only	80	83	86	90
Girls only	57	62	65	69
Mixed	70	81	86	91
All Schools	69	80	86	90
<i>Base</i>	3,555,533	5,056,155	6,300,142	6,231,747

**Notes:**

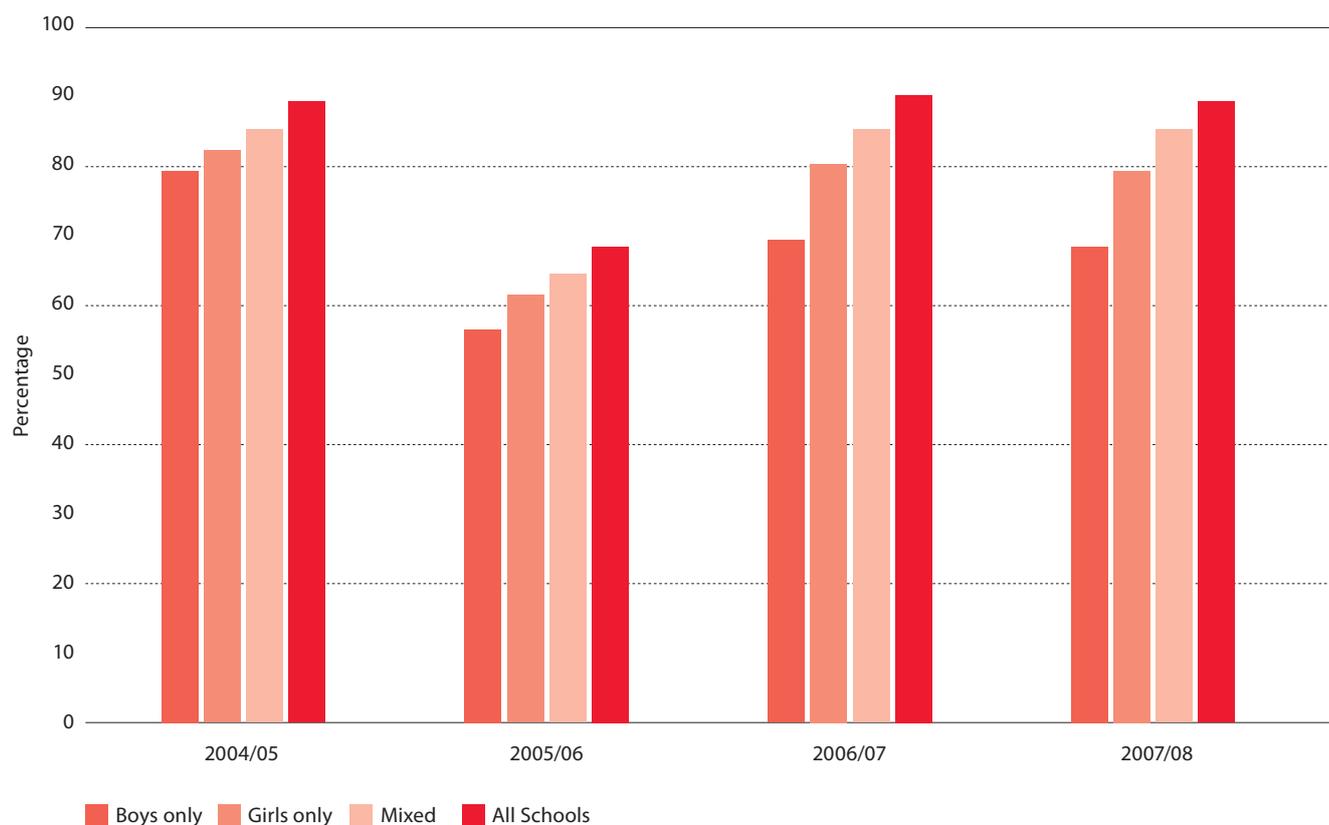
Physical Education is the planned teaching and learning programme in curriculum time that meets the requirements of the national curriculum. High quality is defined as 'producing young people with the skills, understanding, desire and commitment to continue to improve and achieve in a range of PE, sport and health-enhancing physical activities, in line with their abilities'. School sport includes any activity that requires physical skilfulness and is part of the school's planned formal, semi-formal, supervised or led provision. School sport typically takes place out of school hours. Data collected from school sport partnerships.

**Source:**

TNS UK Limited (2008). Schools sports survey 2007/08. Department for Children, Schools and Families: London.

**Figure 6.17**

**Percentage of pupils who participated in at least two hours of high quality physical education and out of hours school sport in a typical week, by school type, England 2004/05 to 2007/08**



**Table 6.18**  
**Percentage of pupils who participated in at least three hours of high quality physical education and out of hours school sport in a typical week, by school year group, England 2008/09 to 2009/10**

	2008/09	2009/10
	%	%
Year 1	47	57
Year 2	52	61
Year 3	55	63
Year 4	59	66
Year 5	63	69
Year 6	65	70
Year 7	53	59
Year 8	50	54
Year 9	44	49
Year 10	42	45
Year 11	37	40
Year 12	21	23
Year 13	19	21
All years	50	55
<i>Base</i>	6,557,890	6,565,106

**Notes:**

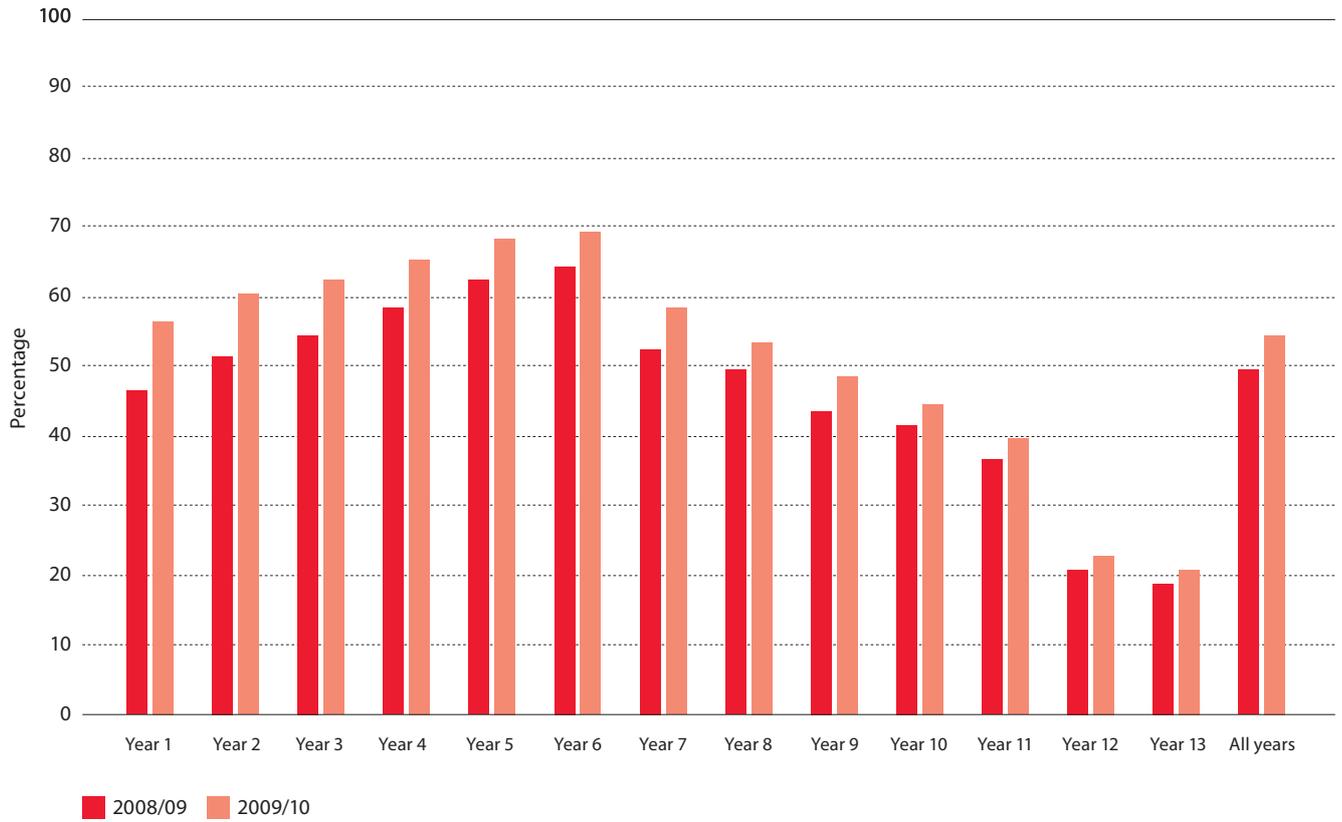
Physical Education is the planned teaching and learning programme in curriculum time that meets the requirements of the national curriculum for physical education. High quality is defined as 'producing young people with the skills, understanding, desire and commitment to continue to improve and achieve in a range of PE, sport and health-enhancing physical activities, in line with their abilities'. School sport includes any activity that requires physical skilfulness and is part of the school's planned formal, semi-formal, supervised or led provision. School sport typically takes place out of school hours. Data collected from school sport partnerships.

**Source:**

TNS BMRB (2010). Schools sports survey 2009/10. Department for Education: London.

**Figure 6.18**

**Percentage of pupils who participated in at least three hours of high quality physical education and out of hours school sport in a typical week, by school year group, England 2008/09 to 2009/10**



**Table 6.19**

**Percentage of pupils who participated in at least three hours of high quality physical education and out of hours school sport in a typical week, by school type, England 2008/09 to 2009/10**

	2008/09	2009/10
	%	%
Boys only	49	53
Girls only	33	37
Mixed	50	56
All Schools	50	55
<i>Base</i>	6,557,890	6,565,106

**Notes:**

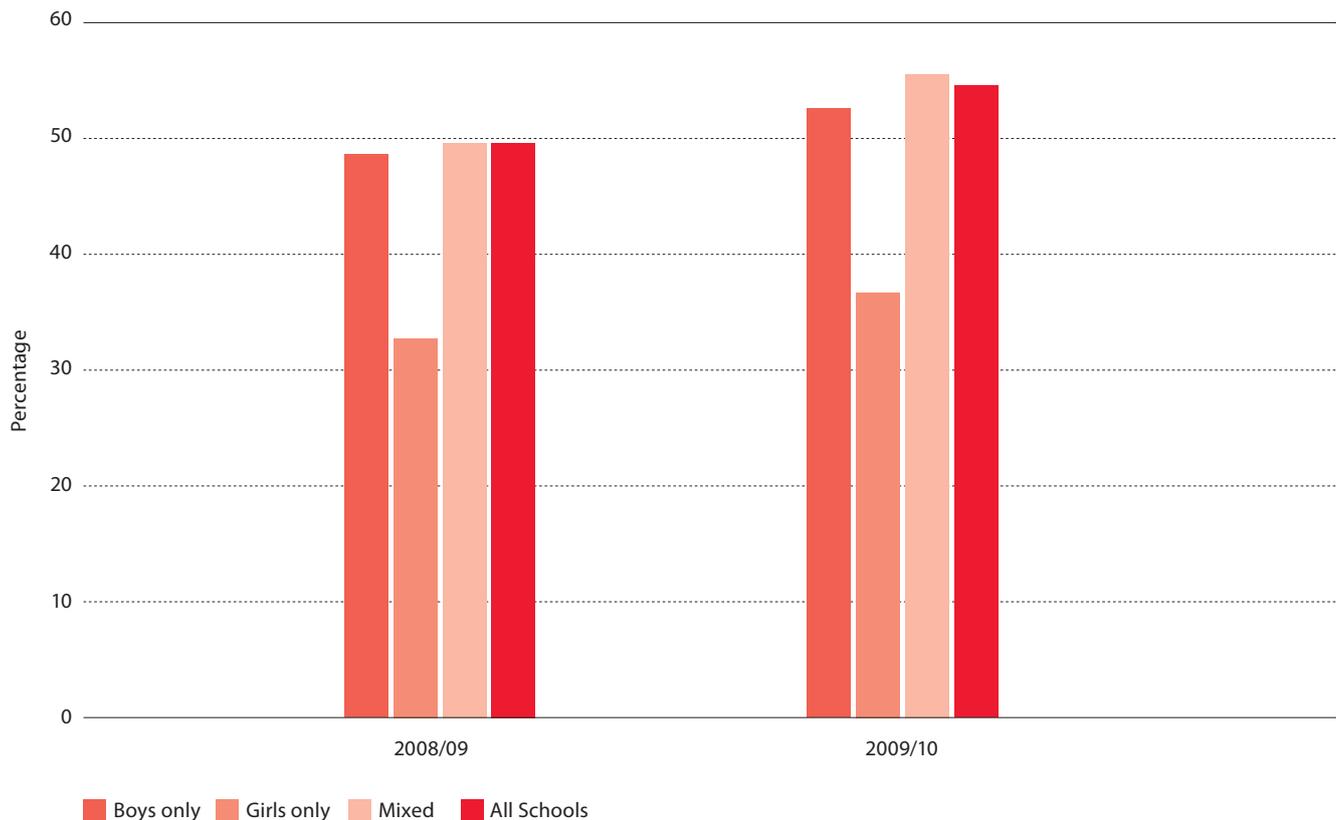
Physical Education is the planned teaching and learning programme in curriculum time that meets the requirements of the national curriculum. High quality is defined as 'producing young people with the skills, understanding, desire and commitment to continue to improve and achieve in a range of PE, sport and health-enhancing physical activities, in line with their abilities'. School sport includes any activity that requires physical skilfulness and is part of the school's planned formal, semi-formal, supervised or led provision. School sport typically takes place out of school hours. Data collected from school sport partnerships.

**Source:**

TNS BMRB (2010). Schools sports survey 2009/10. Department for Education: London.

**Figure 6.19**

**Percentage of pupils who participated in at least three hours of high quality physical education and out of hours school sport in a typical week, by school type, England 2008/09 to 2009/10**



**Table 6.20**  
**Percentage of pupils who participated in at least three hours of high quality physical education and out of hours school sport in a typical week, by sex and school year group, England 2009/10**

	Boys	Girls
	%	%
Year 1	58	55
Year 2	63	60
Year 3	65	61
Year 4	67	64
Year 5	71	67
Year 6	73	68
Year 7	61	56
Year 8	57	50
Year 9	53	44
Year 10	51	39
Year 11	46	33
Year 12	29	17
Year 13	28	15
All years	58	52
Base	6,565,106	

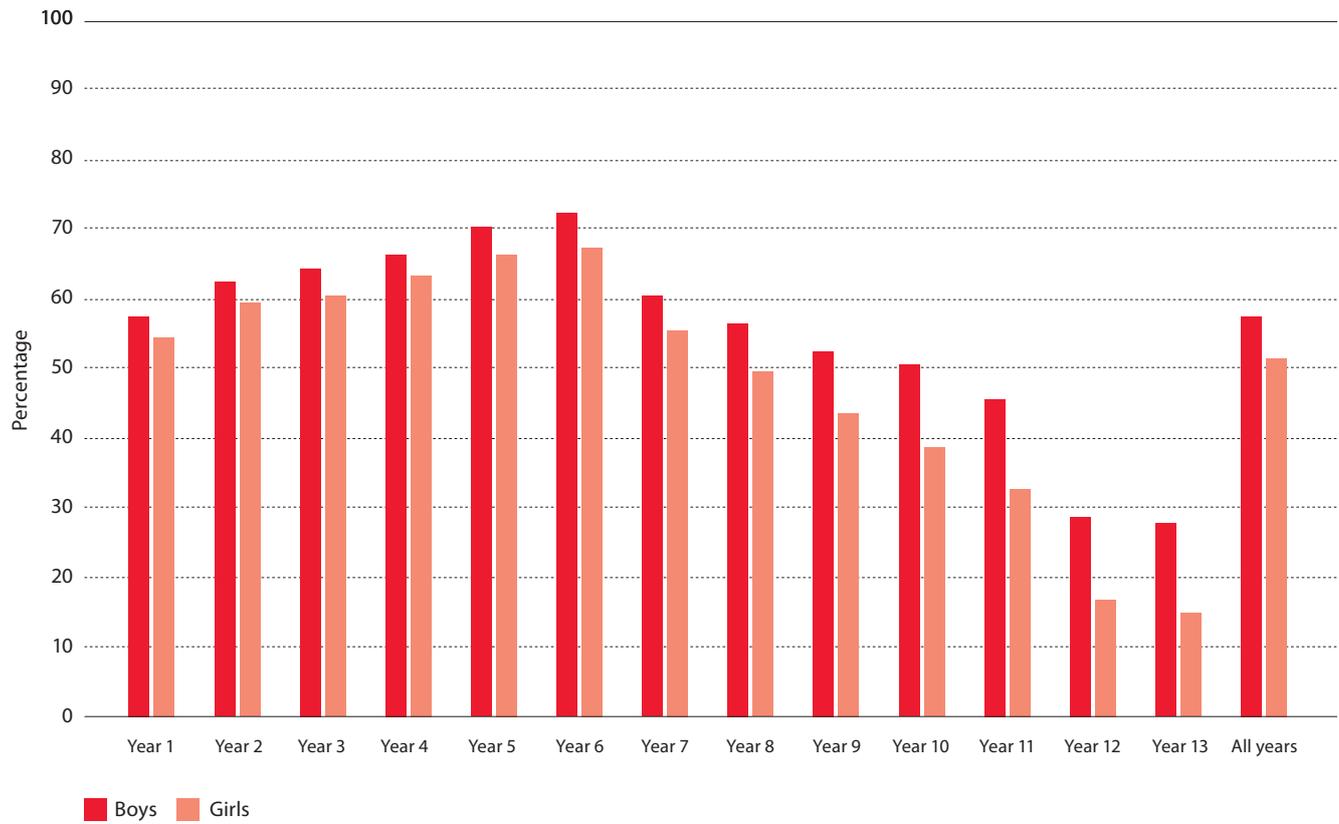
**Notes:**

Physical Education is the planned teaching and learning programme in curriculum time that meets the requirements of the national curriculum for physical education. High quality is defined as 'producing young people with the skills, understanding, desire and commitment to continue to improve and achieve in a range of PE, sport and health-enhancing physical activities, in line with their abilities'. School sport includes any activity that requires physical skilfulness and is part of the school's planned formal, semi-formal, supervised or led provision. School sport typically takes place out of school hours. Data collected from school sport partnerships.

**Source:**

TNS BMRB (2010). Schools sports survey 2009/10. Department for Education: London.

**Figure 6.20**  
**Percentage of pupils who participated in at least three hours of high quality physical education and out of hours school sport in a typical week, by sex and school year group, England 2009/10**

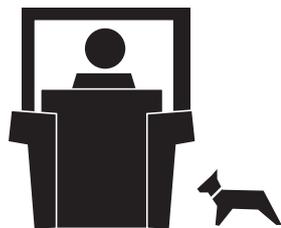


## Sedentary behaviour

Over half of all sedentary time outside of work is spent watching television.

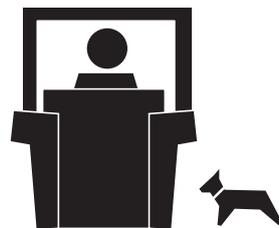
7.

Men **56%**  
Women **56%**



**Weekdays**

Men **57.1%**  
Women **56.6%**



**Weekend days**

Percentage of sedentary time spent watching television

## 7. Sedentary behaviour

Sedentary behaviour is not simply a lack of physical activity but is a cluster of individual behaviours in which sitting or lying is the dominant mode of posture and energy expenditure is very low<sup>1</sup>. Research suggests that sedentary behaviour is associated with poor health in all ages independent of the level of overall physical activity<sup>2,3,4,5,6,7</sup>. Spending large amounts of time being sedentary may increase the risk of some adverse health outcomes, even among people who are active at the recommended levels<sup>1</sup>.

The Chief Medical Officers' report 'Start Active, Stay Active: a report on physical activity for health from the four home countries', launched in July 2011, provided recommendations on sedentary behaviour for the first time. Suggesting a limit to the amount of time people spend being sedentary for extended periods. The report states that the available data are not sufficient to suggest a specific quantitative recommendation on daily sedentary time for health. Based on the current evidence, the report instead recommended reducing total sedentary time and breaking up extended periods of sitting<sup>1</sup>.

This chapter reports on the prevalence of sedentary behaviour in the population and examines patterns in sedentary behaviour by age, sex and socio-economic status; presenting self-reported and objectively measured data. Types of sedentary behaviour are investigated through temporal trends in the amount of television viewed, along with data on how much sedentary behaviour is made up with watching television.

### Self-reported sedentary behaviour

The 2008 Health Survey for England had a primary focus on physical activity and fitness. The survey also included a short set of questions asking about time spent sitting down in leisure activities on weekdays and on weekend days. From this total sedentary time was estimated<sup>8</sup>.

On weekdays total average sedentary time was similar between men and women. Whereas on weekend days men were more likely than women to average six or more hours a day (44% of men and 39% of women). Overall a lower percentage of adults reported long bouts of sedentary time on a weekday than on a weekend day. The greatest differences were found amongst the middle aged, who also reported the lowest overall amounts of sedentary behaviour. Amongst children, average sedentary time (excluding time at

school) was similar for boys and girls on both weekdays (3.4 hours for both) and weekend days (4.1 hours for boys and 4.2 hours for girls). Older children were also more likely to report long periods of sedentary behaviour (Tables 7.1 to 7.4, Figures 7.1 to 7.4b).

### Objectively measured sedentary behaviour

Although physical activity and sedentary levels are normally self-reported, a sub-sample of the 2008 Health Survey for England was selected to wear accelerometers. This enabled the collection of objective measures of physical activity and sedentary behaviour. Less than half of adults and children selected to wear accelerometers provided sufficient data to be included in the analysis. Thus providing a smaller sample size than self-reported levels<sup>8</sup> (See Chapter 1 for details).

Objectively measured activity levels found that men had longer periods of sedentary time on both weekdays (600 minutes) and weekend days (579 minutes) than women (592 and 563 minutes respectively). As with self-reported levels sedentary time decreased into middle age and increased into older age. In contrast to self-reported levels however, sedentary time was greater for both men and women on weekdays than on weekend days. Children were also more sedentary on weekdays than weekend days. Time spent being sedentary increased with age, whilst girls were found to be more sedentary than boys at all ages. For children, whereas self-reported data covered sedentary behaviour in leisure time excluding time at school, those participants sampled to wear accelerometers were encouraged to wear them at all times including at school. This may account for some differences between self-reported and objective data for these age groups<sup>8</sup> (Tables 7.5 and 7.6, Figures 7.5 and 7.6).

### Socio-economic differences

Objectively measured average sedentary time was higher in the highest income tertile (591 minutes for men and 585 minutes for women) than in the middle (573 minutes for men and 567 minutes for women) and lowest (575 minutes for men and 569 minutes for women) tertiles. The same was true for children. Conversely, self-reported levels were lowest amongst children in the highest income quintile, although this does not include school based sedentary behaviour (Tables 7.7 to 7.9, Figure 7.9).

### Regional differences

Within England there was some variation in the self-reported levels of sedentary behaviour amongst children by region. Boys in the South West Strategic Health Authority (SHA) and girls in the South Central SHA reported the lowest amounts of sedentary time. Those in Yorkshire and Humber reported the highest (Table 7.10, Figure 7.10).

### Sedentary behaviours

Sedentary behaviours are multi-faceted and might include behaviours at work or school, at home, in transit and in leisure time. Typically, sedentary behaviours include watching TV; using a computer; travelling; and sitting to read, talk, work or listen to music<sup>1</sup>. The number of hours of television viewed by individuals in the UK increases with age. Temporal trends also show an increase in the average hours of television viewing since 2008 for most ages and both sexes, after decreases were found between 1999 and 2007. Of all the UK countries Wales demonstrates the highest average television viewing, although this varies by age and sex. Data from the 2008 Health Survey for England suggests that watching television accounts for more than half of all sedentary time for adults of all ages, except those in the age group 16 to 24 years. Amongst children the proportion of sedentary time that is made up by television viewing declines with age, with this also lower amongst boys than girls (Tables 7.11 to 7.14, Figures 7.13a to 7.14b).

1. The Chief Medical Officers (2011). Start Active, Stay Active: A report on physical activity from the four home countries' Chief Medical Officers. Department of Health: London.
2. Tremblay MS, Colley RC, Saunders TJ et al (2010). Physiological and health implications of a sedentary lifestyle. *Applied Physiology, Nutrition, and Metabolism* 35(6): 725–740.
3. Okely AD and Jones RA (2011). Sedentary behaviour recommendations for early childhood. In Tremblay RE, Barr RG, Peters R De V and Boivin M (eds) *Encyclopedia on Early Childhood Development*. Centre of Excellence for Early Childhood Development : Montreal, Quebec.
4. Sedentary Behaviour and Obesity Expert Working Group (2010) *Sedentary Behaviour and Obesity: Review of the Current Scientific Evidence*. London: Department of Health.
5. Stamatakis E, Hirani V, Rennie K. (2009). Moderate-to-vigorous physical activity and sedentary behaviours in relation to body mass index-defined and waist circumference-defined obesity. *British Journal of Nutrition* 101:765-773.
6. Howard RA, Freedman D, Park Y, et al. (2008). Physical activity, sedentary behaviour, and the risk of colon and rectal cancer in the NIH-AARP Diet and Health Study. *Cancer Causes Control*. 2008;19:939-953.
7. Hu F, Li T, Colditz G, et al. (2003). Television Watching and Other Sedentary Behaviors in Relation to Risk of Obesity and Type 2 Diabetes Mellitus in Women. *Journal of the American Medical Association*, 289:1785-1791.
8. Joint Health Surveys Unit (2010). *Health Survey for England 2008: Physical activity and fitness*. The Information Centre: Leeds.

**Table 7.1**  
**Self-reported sedentary time per day in adults, by age and sex, England 2008**

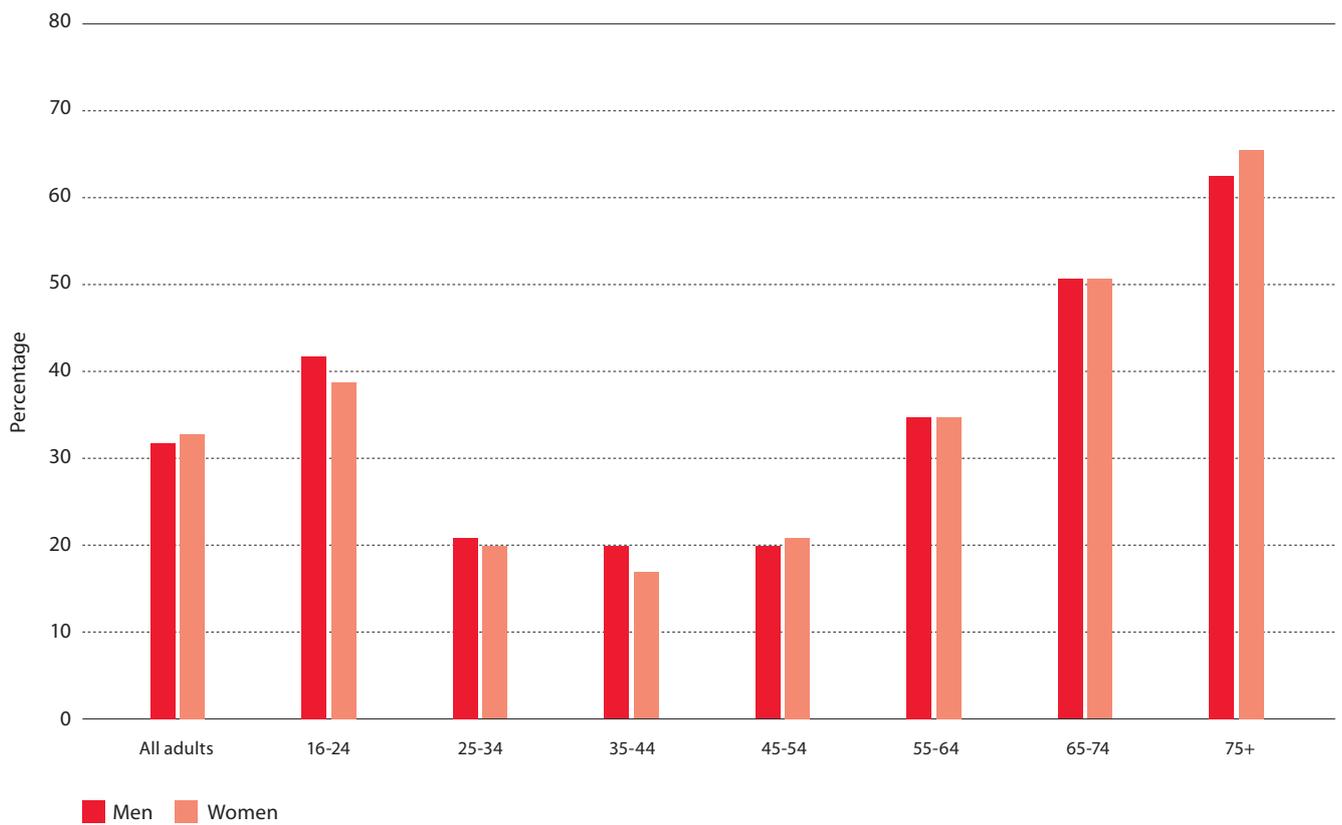
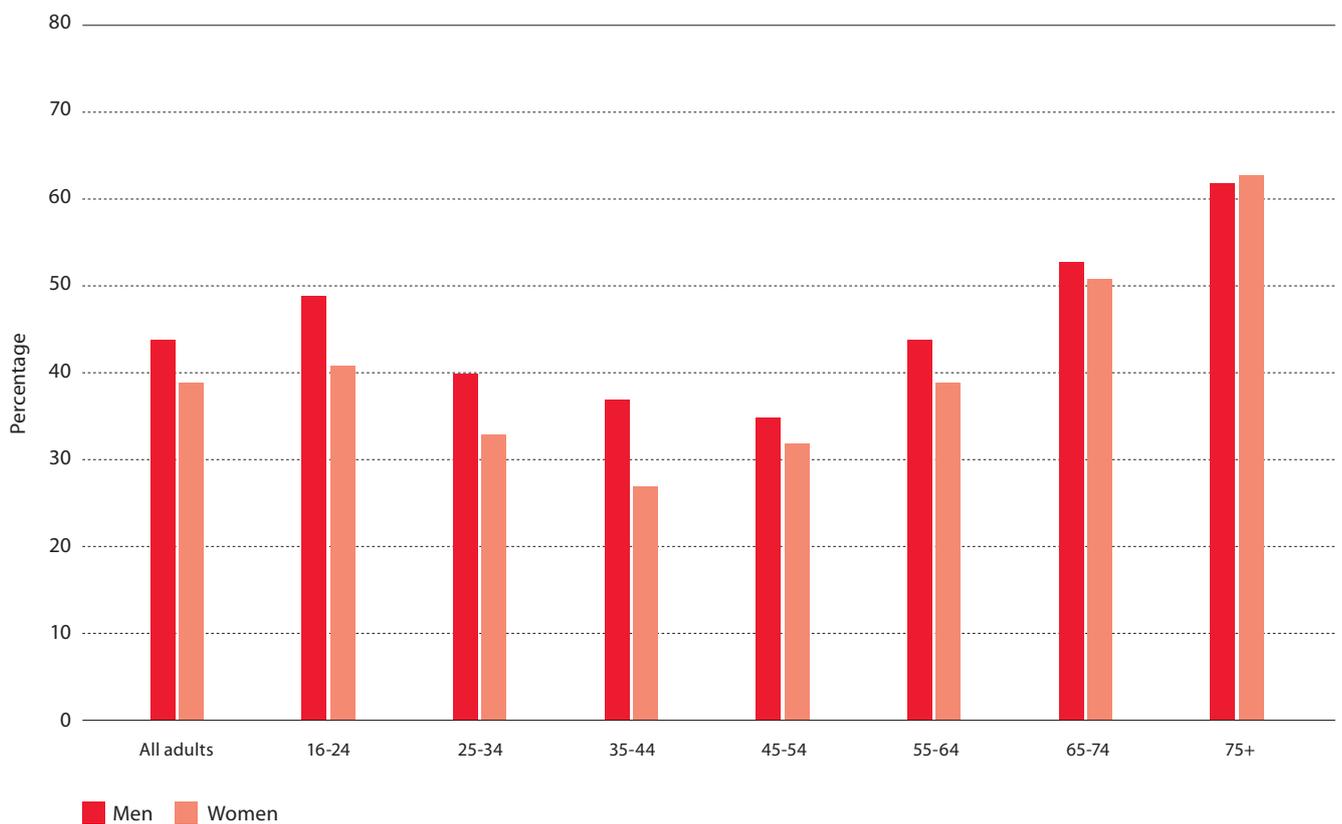
	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%	%
<b>Men</b>								
<b>Weekday</b>								
Less than 2 hours	5	4	6	7	5	4	2	1
2 to 4 hours	29	23	39	39	38	25	11	9
4 to 6 hours	34	31	34	34	37	36	35	27
6 hours or more	32	42	21	20	20	35	51	63
<b>Weekend day</b>								
Less than 2 hours	5	7	5	6	5	4	3	2
2 to 4 hours	20	20	22	25	24	21	12	8
4 to 6 hours	31	24	33	33	36	31	33	28
6 hours or more	44	49	40	37	35	44	53	62
<i>Base</i>	6,746	771	954	1,218	1,098	1,183	875	647
<b>Women</b>								
<b>Weekday</b>								
Less than 2 hours	5	4	7	9	7	3	1	2
2 to 4 hours	29	22	38	42	36	25	13	9
4 to 6 hours	33	35	34	31	35	38	35	23
6 hours or more	33	39	20	17	21	35	51	66
<b>Weekend day</b>								
Less than 2 hours	5	6	7	7	5	3	2	2
2 to 4 hours	23	23	24	30	27	20	15	10
4 to 6 hours	34	29	36	35	37	37	32	25
6 hours or more	39	41	33	27	32	39	51	63
<i>Base</i>	8,336	919	1,219	1,512	1,374	1,367	1,000	945

**Notes:**

Data come from a short set of questions asking about time spent sitting down in a number of leisure time activities. Bases vary but are of similar sizes; those shown are for watching TV, weekday.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 7.1a****Percentage of adults reporting 6 hours or more of sedentary time on weekdays, by sex and age, England 2008****Figure 7.1b****Percentage of adults reporting 6 hours or more sedentary time on weekend days, by sex and age, England 2008**

**Table 7.2**  
**Self-reported average number of hours of sedentary time per day in adults, by sex and age, England 2008**

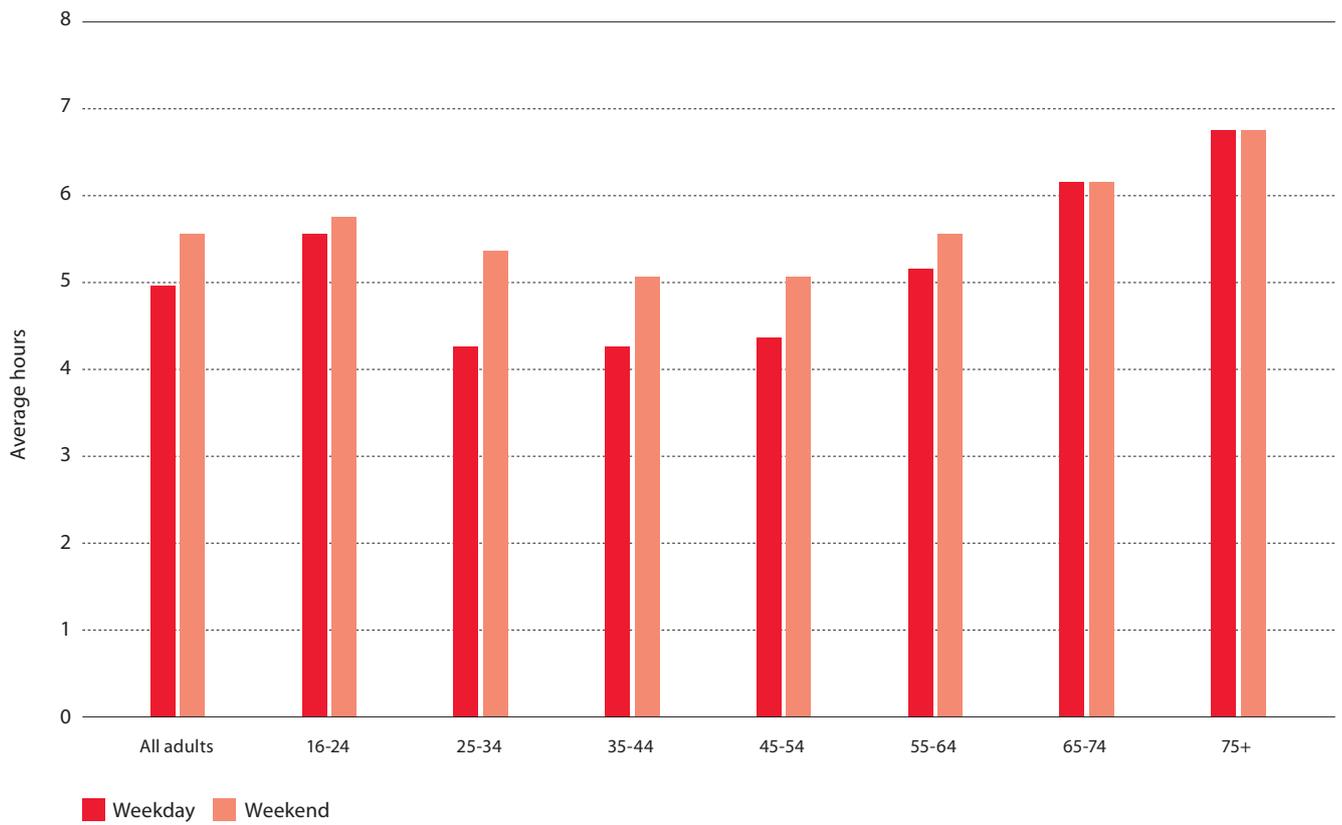
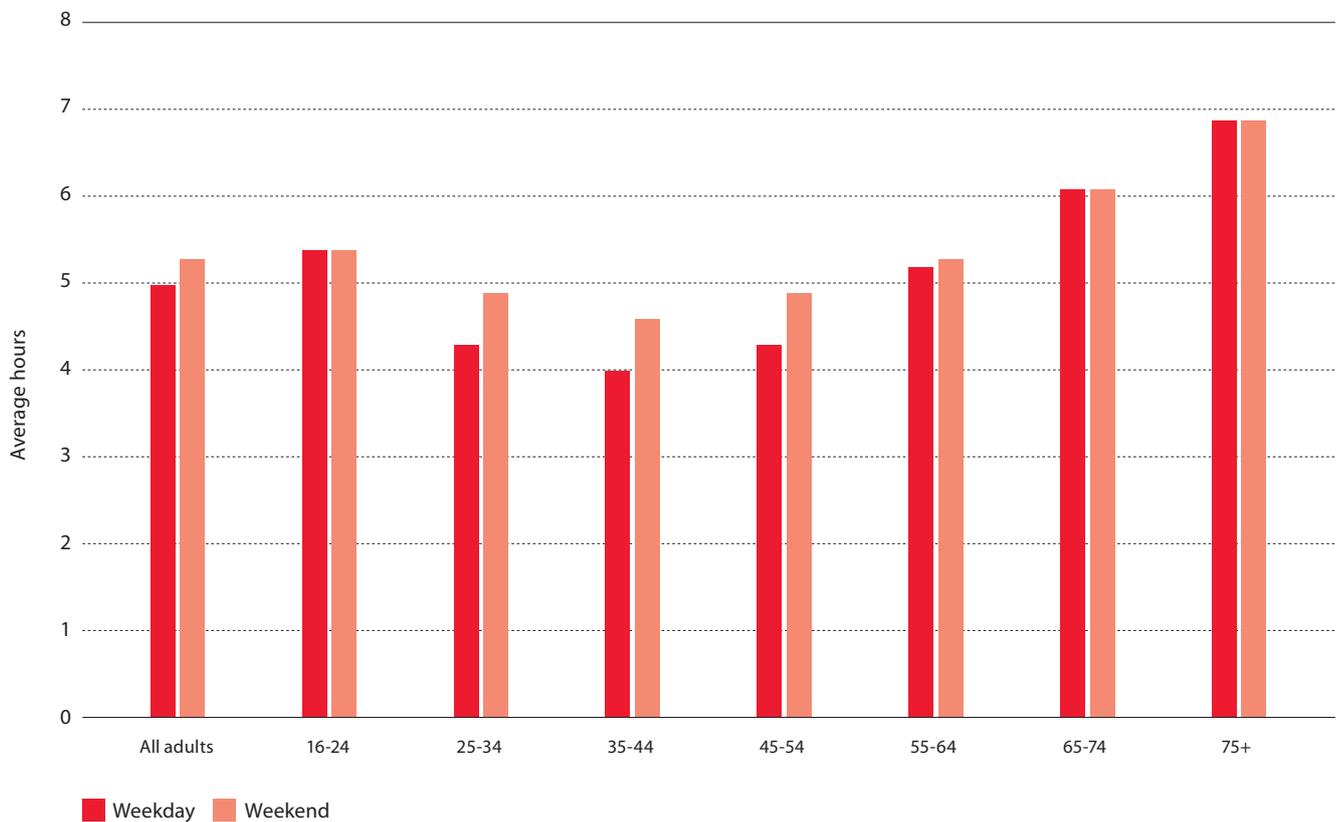
	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
<b>Men</b>								
Weekday	5.0	5.6	4.3	4.3	4.4	5.2	6.2	6.8
Weekend day	5.6	5.8	5.4	5.1	5.1	5.6	6.2	6.8
<i>Base</i>	6,746	771	954	1,218	1,098	1,183	875	647
<b>Women</b>								
Weekday	5.0	5.4	4.3	4.0	4.3	5.2	6.1	6.9
Weekend day	5.3	5.4	4.9	4.6	4.9	5.3	6.1	6.9
<i>Base</i>	8,336	919	1,219	1,512	1,374	1,367	1,000	945

**Notes:**

Data come from a short set of questions asking about time spent sitting down in a number of leisure time activities. Bases vary but are of similar sizes; those shown are for watching TV, weekday. Averages are based on all participants interviewed including those who reported no participation.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds.  
 Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 7.2a****Self-reported average number of hours of sedentary time per day in men, by age, England 2008****Figure 7.2b****Self-reported average number of hours of sedentary time per day in women, by age, England 2008**

**Table 7.3**  
**Self-reported total sedentary time per day in children, by sex and age, England 2008**

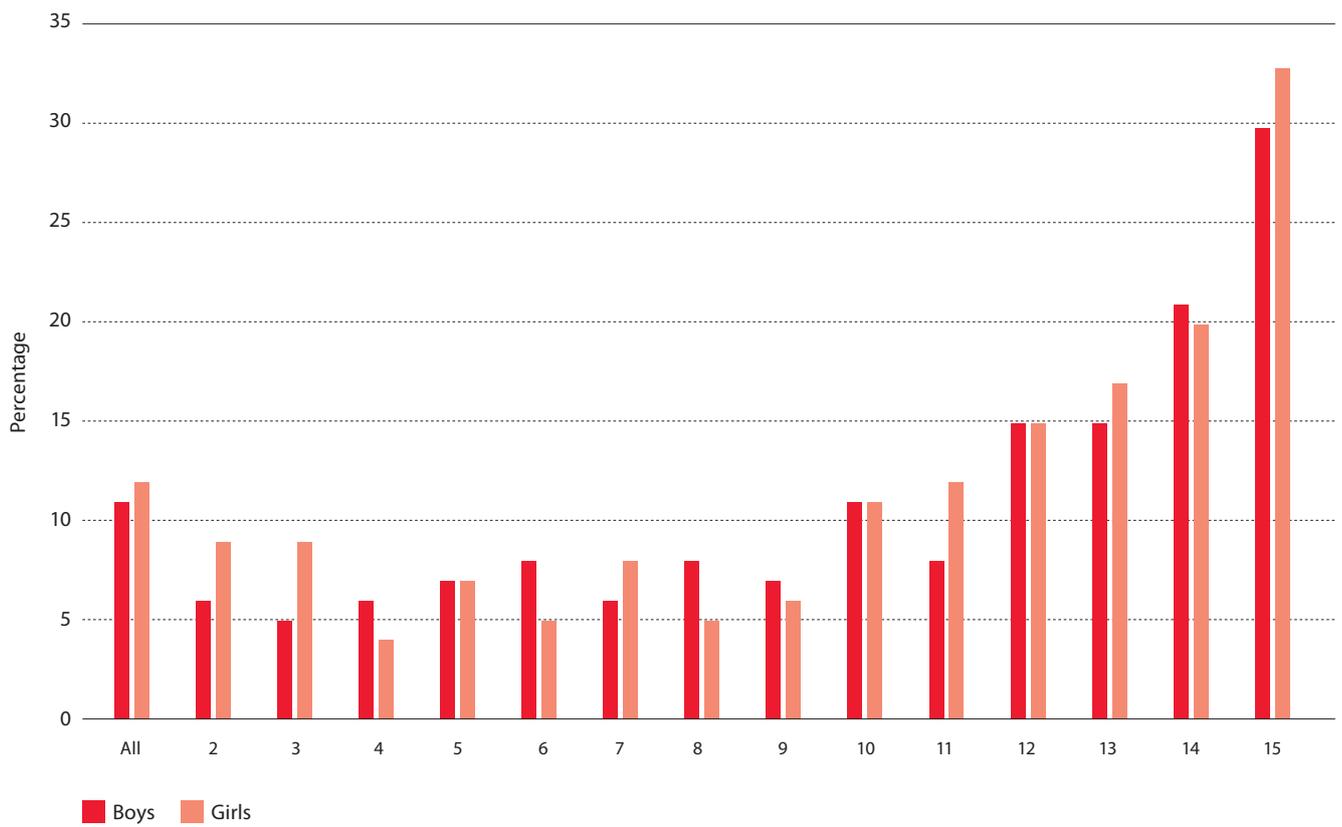
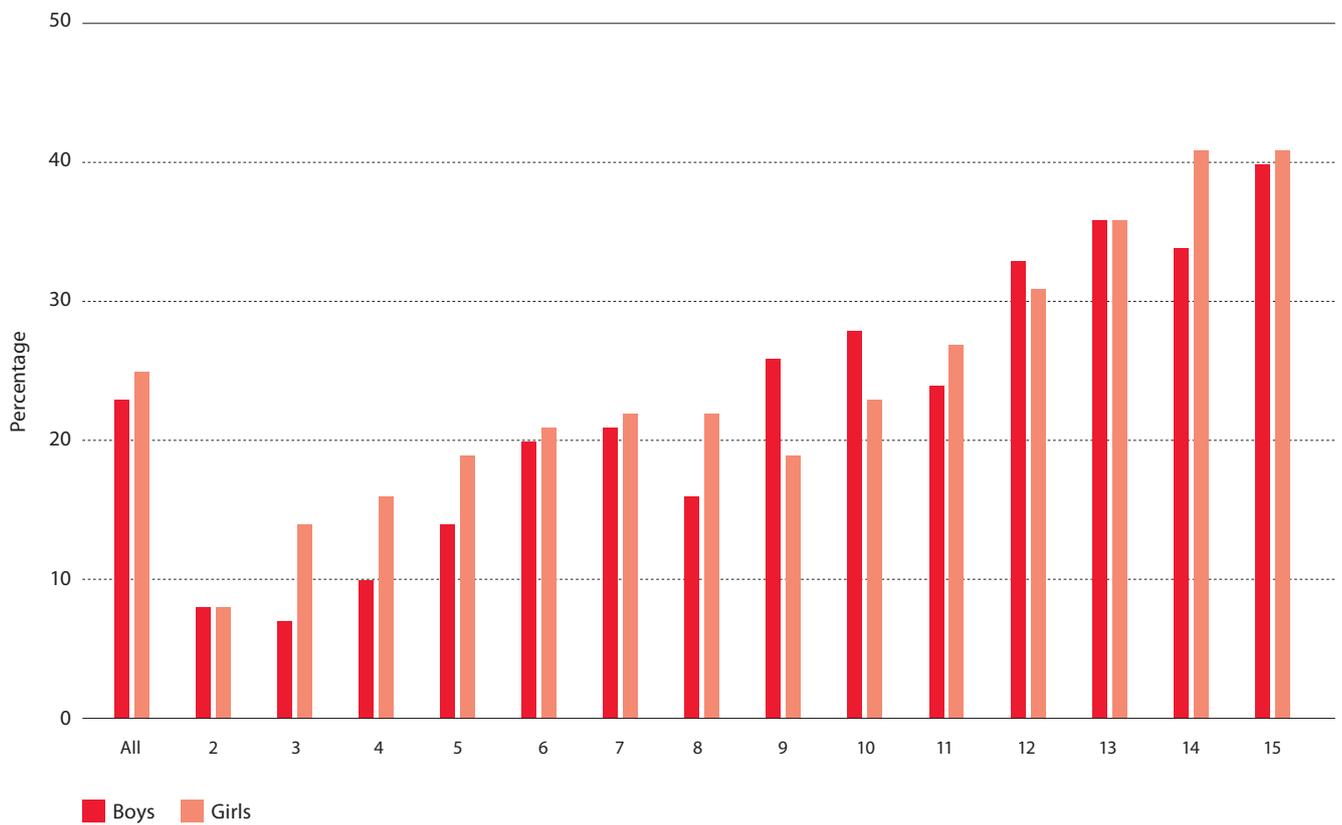
	All	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
<b>Boys</b>																
<b>Weekday</b>																
Less than 2 hours	18	40	26	24	32	24	17	17	15	14	10	8	6	7	7	
2 to 4 hours	44	37	50	53	42	46	57	53	50	44	46	38	40	37	31	
4 to 6 hours	27	16	19	17	19	22	20	22	28	30	35	38	39	35	33	
6 hours or more	11	6	5	6	7	8	6	8	7	11	8	15	15	21	30	
<b>Weekend day</b>																
Less than 2 hours	14	39	24	18	13	14	9	10	9	8	10	11	9	11	8	
2 to 4 hours	34	38	46	42	44	33	33	42	35	34	30	25	24	26	24	
4 to 6 hours	29	15	23	29	29	33	37	31	30	29	36	30	31	29	28	
6 hours or more	23	8	7	10	14	20	21	16	26	28	24	33	36	34	40	
Base	3,503	255	239	249	240	252	235	236	244	255	255	260	286	266	231	
<b>Girls</b>																
<b>Weekday</b>																
Less than 2 hours	17	37	22	24	26	23	25	22	15	15	9	10	7	6	5	
2 to 4 hours	43	41	42	48	49	58	49	55	53	49	44	37	38	27	24	
4 to 6 hours	27	13	26	24	19	15	18	18	26	25	35	38	38	46	39	
6 hours or more	12	9	9	4	7	5	8	5	6	11	12	15	17	20	33	
<b>Weekend day</b>																
Less than 2 hours	13	34	19	13	12	13	13	17	10	10	11	8	10	10	7	
2 to 4 hours	31	36	40	34	36	37	35	26	37	33	29	27	26	18	26	
4 to 6 hours	31	21	27	37	34	29	31	36	35	34	33	34	29	31	26	
6 hours or more	25	8	14	16	19	21	22	22	19	23	27	31	36	41	41	
Base	3,562	248	268	230	226	237	255	233	252	297	291	241	257	281	246	

**Notes:**

Data come from a short set of questions asking about time spent sitting down in a number of leisure time activities. Bases vary but are of similar sizes; those shown are for watching TV, weekday. Personal reports of physical activity among children aged 13-15 and parental proxy reports for children aged 2-12. Participants were asked about sedentary time after school, and therefore any sedentary time during the school day is not included.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 7.3a****Percentage of children reporting 6 hours or more sedentary time on weekdays, by sex and age, England 2008****Figure 7.3b****Percentage of children reporting 6 hours or more sedentary time on weekend days, by sex and age, England 2008**

**Table 7.4**  
**Self-reported average number of hours of sedentary time per day in children, by sex and age, England 2008**

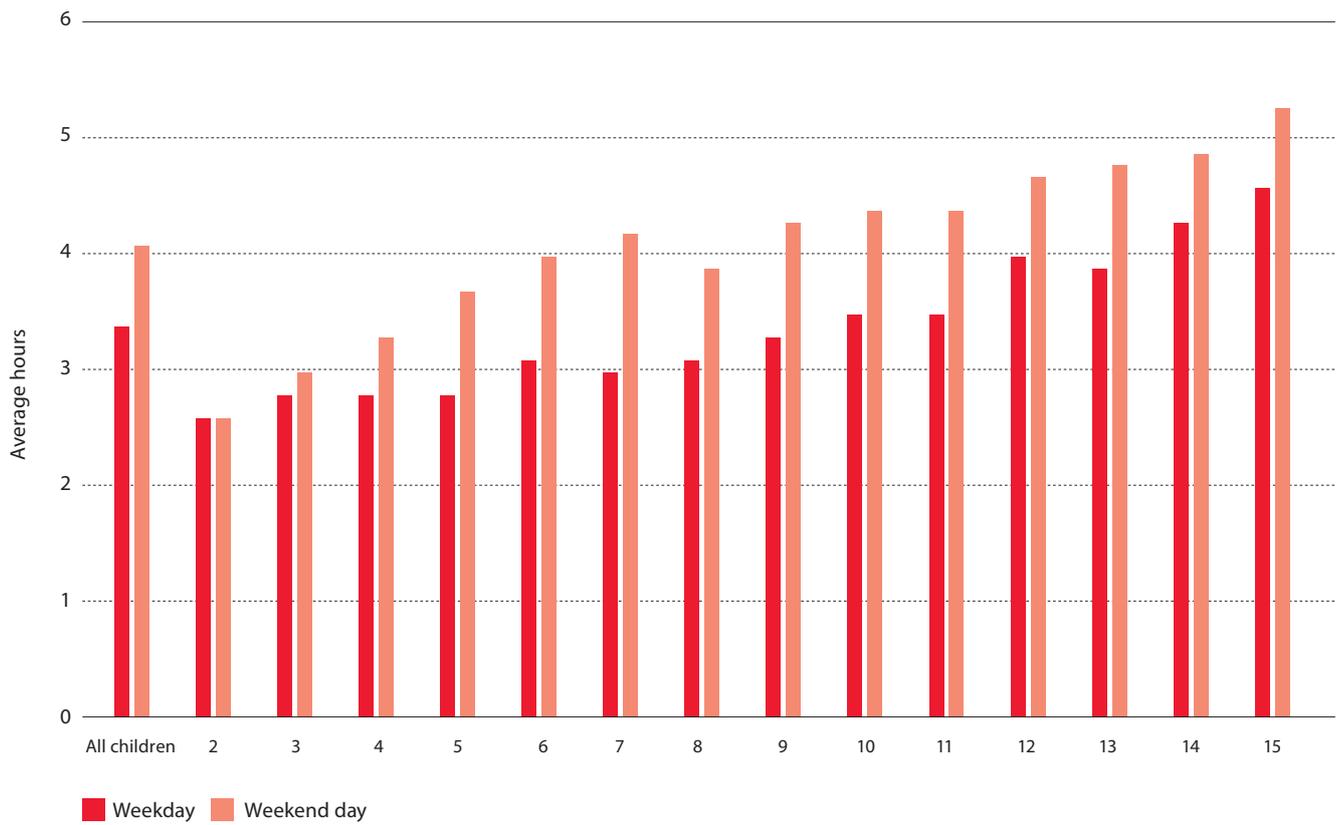
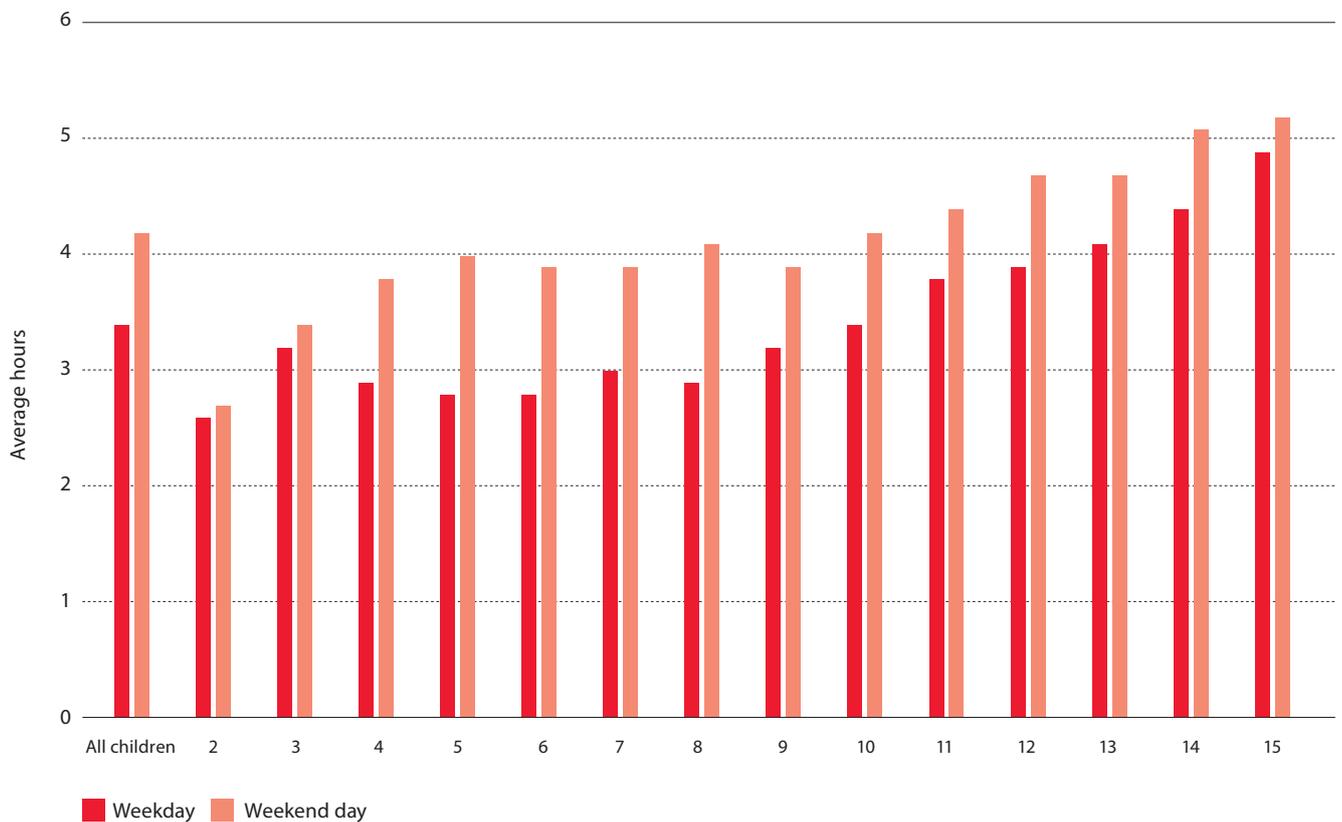
	All	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>Boys</b>															
Weekday	3.4	2.6	2.8	2.8	2.8	3.1	3.0	3.1	3.3	3.5	3.5	4.0	3.9	4.3	4.6
Weekend day	4.1	2.6	3.0	3.3	3.7	4.0	4.2	3.9	4.3	4.4	4.4	4.7	4.8	4.9	5.3
Base	3,503	255	239	249	240	252	235	236	244	255	255	260	286	266	231
<b>Girls</b>															
Weekday	3.4	2.6	3.2	2.9	2.8	2.8	3.0	2.9	3.2	3.4	3.8	3.9	4.1	4.4	4.9
Weekend day	4.2	2.7	3.4	3.8	4.0	3.9	3.9	4.1	3.9	4.2	4.4	4.7	4.7	5.1	5.2
Base	3,562	248	268	230	226	237	255	233	252	297	291	241	257	281	246

**Notes:**

Data come from a short set of questions asking about time spent sitting down in a number of leisure time activities. Bases vary but are of similar sizes; those shown are for watching TV, weekday. Personal reports of physical activity among children aged 13-15 and parental proxy reports for children aged 2-12. Averages are based on all participants interviewed including those who reported no participation. Participants were asked about sedentary time after school, and therefore any sedentary time during the school day is not included.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 7.4a****Self-reported average number of hours of sedentary time per day in boys, by age, England 2008****Figure 7.4b****Self-reported average number of hours of sedentary time per day in girls, by age, England 2008**

**Table 7.5**  
**Objectively measured average number of minutes of sedentary time per day in adults, by sex and age, England 2008**

	All adults	16-34	35-44	45-54	55-64	65-74	75+
<b>Men</b>							
Weekday	600	587	566	569	591	615	670
Weekend day	579	541	543	561	582	599	646
<b>Base</b>							
Weekdays	970	179	145	170	202	160	114
Weekend days	968	180	145	164	200	163	116
<b>Women</b>							
Weekday	592	580	558	561	583	607	663
Weekend day	563	546	512	544	551	587	640
<b>Base</b>							
Weekdays	1,145	221	176	195	249	176	128
Weekend days	1,138	218	174	188	243	179	136

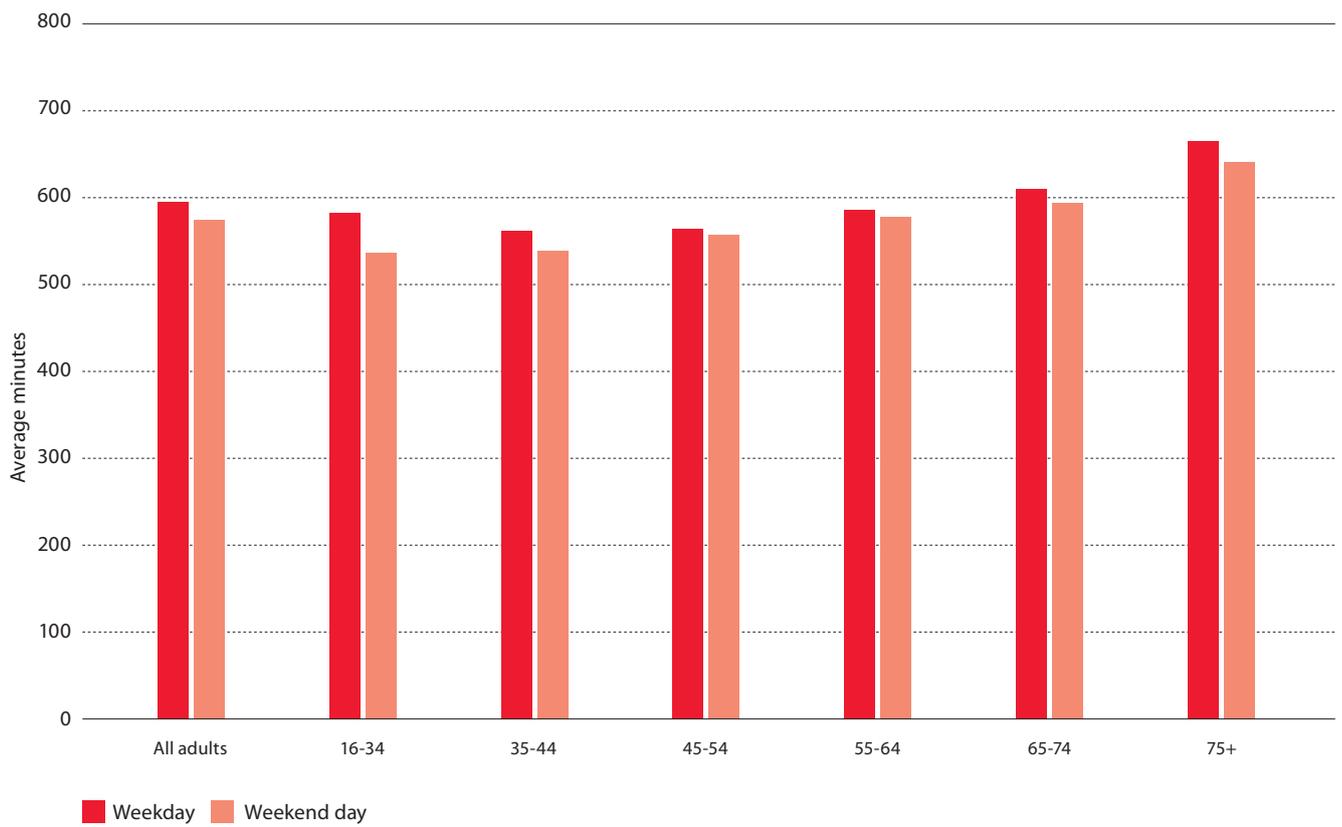
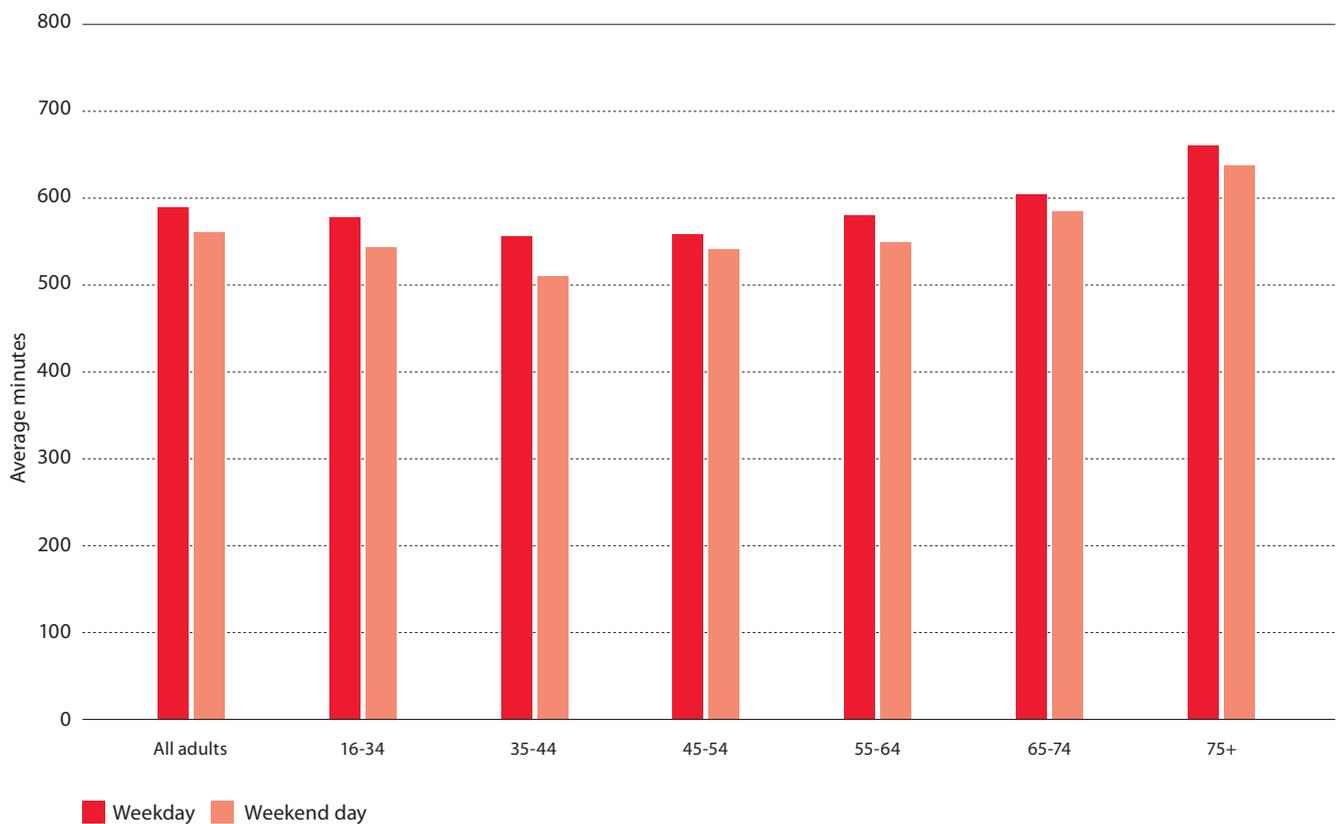
**Notes:**

Adults aged 16 and over. Cases with 4 or more days valid accelerometry data included. The data in this table have been adjusted for average wear time using regression techniques, to allow comparisons between groups with different average wear time. Metabolic Equivalent (MET) is defined as the ratio of work metabolic rate to a standard resting metabolic rate, 1 MET is considered a resting metabolic rate obtained during quiet sitting. Sedentary activity is defined as below 1.5 METs.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds.

Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 7.5a****Objectively measured average number of minutes of sedentary time per day in men, by age, England 2008****Figure 7.5b****Objectively measured average number of minutes of sedentary time per day in women, by age, England 2008**

**Table 7.6**  
**Objectively measured average number of minutes of sedentary time per day in children, by sex and age, England 2008**

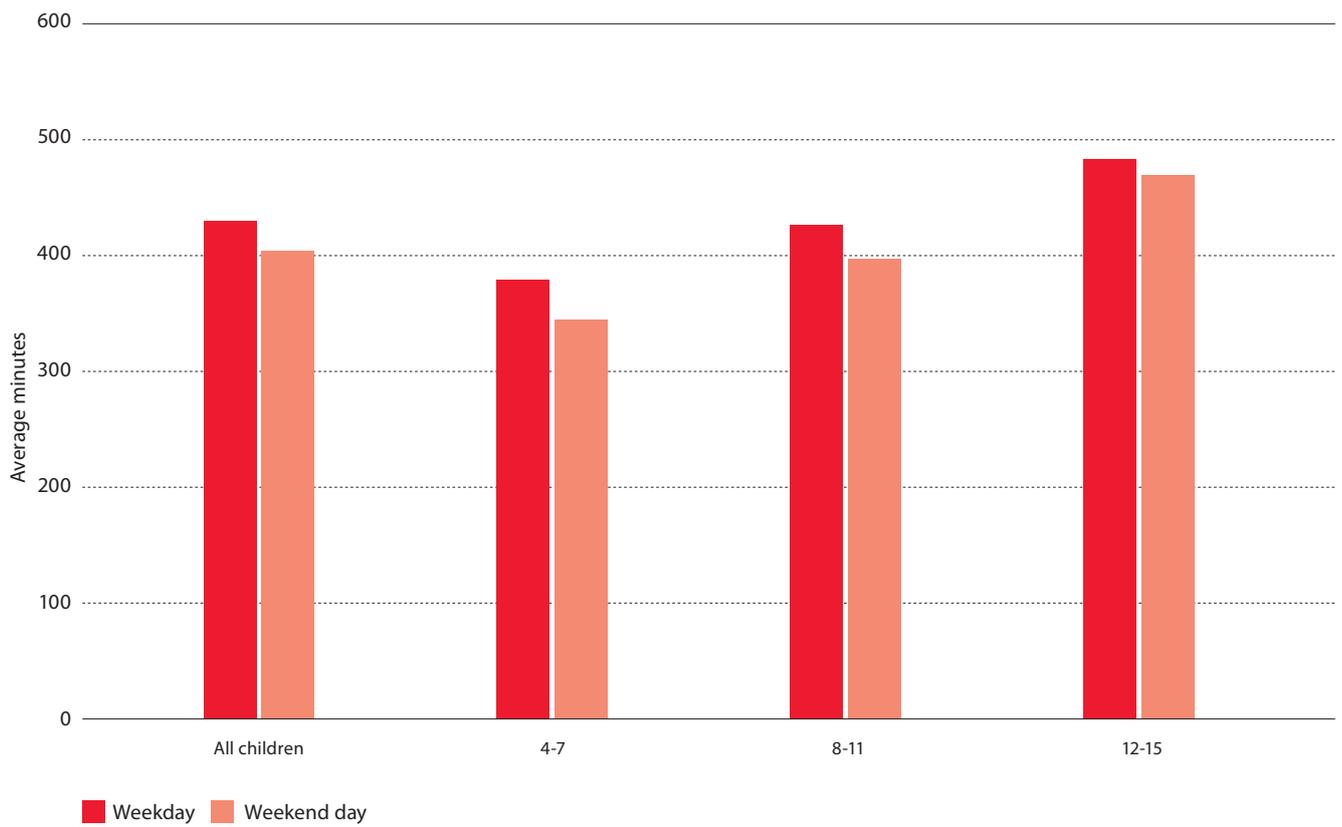
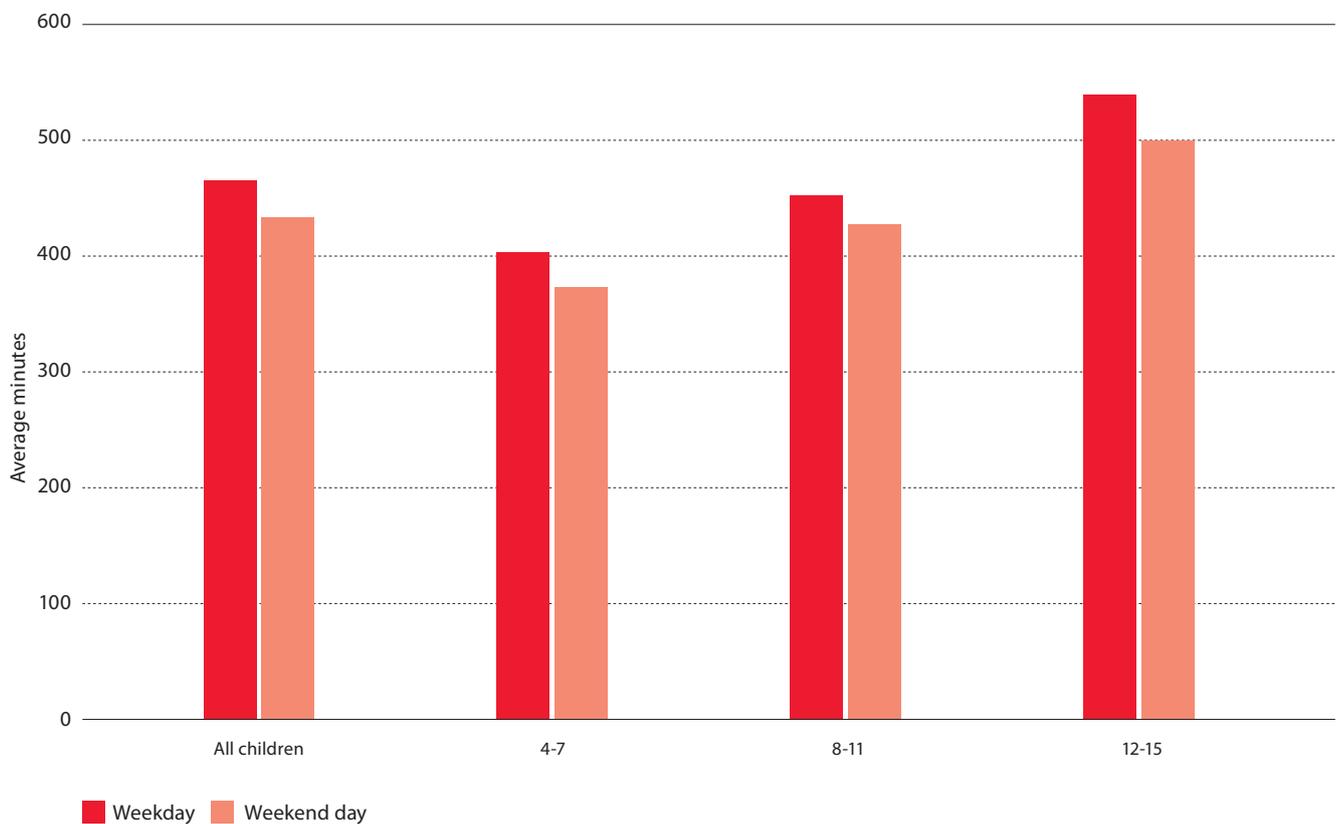
	All children	4-7	8-11	12-15
<b>Boys</b>				
Weekday	433	382	430	487
Weekend day	407	347	400	473
<b>Base</b>				
Weekdays	365	89	144	132
Weekend days	348	90	130	128
<b>Girls</b>				
Weekday	467	405	454	542
Weekend day	435	375	429	502
<b>Base</b>				
Weekdays	405	112	145	148
Weekend days	378	106	140	132

**Notes:**

Cases with 4 or more days valid accelerometry data included. The data in this table have been adjusted for average wear time using regression techniques, to allow comparisons between groups with different average wear time. Metabolic Equivalent (MET) is defined as the ratio of work metabolic rate to a standard resting metabolic rate, 1 MET is considered a resting metabolic rate obtained during quiet sitting. Sedentary activity is defined as below 1.5 METs.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds.  
 Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 7.6a****Objectively measured average number of minutes of sedentary time per day in boys, by age, England 2008****Figure 7.6b****Objectively measured average number of minutes of sedentary time per day in girls, by age, England 2008**

**Table 7.7****Objectively measured number of minutes of sedentary time per day in adults, by sex, age and tertile of equivalised household income, England 2008**

	Highest	Middle	Lowest
<b>Men</b>	591	573	575
<b>Women</b>	585	567	569
<b>Base</b>			
<i>Men</i>	350	278	200
<i>Women</i>	330	324	307

**Notes:**

Adults aged 16 and over. Cases with 4 or more days valid accelerometry data included. The data in this table have been adjusted for average wear time using regression techniques, to allow comparisons between groups with different average wear time. Metabolic Equivalent (MET) is defined as the ratio of work metabolic rate to a standard resting metabolic rate, 1 MET is considered a resting metabolic rate obtained during quiet sitting. Sedentary activity is defined as below 1.5 METs.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds.  
Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Table 7.8****Objectively measured average number of minutes of sedentary time per day in children, by sex and tertile of equivalised household income, England 2008**

	Highest	Middle	Lowest
<b>Boys</b>	426	424	413
<b>Girls</b>	464	463	452
<b>Base</b>			
<i>Boys</i>	76	146	80
<i>Girls</i>	106	126	117

**Notes:**

Children aged 4 to 15 years. Cases with 4 or more days valid accelerometry data included. The data in this table have been adjusted for average wear time using regression techniques, to allow comparisons between groups with different average wear time. Metabolic Equivalent (MET) is defined as the ratio of work metabolic rate to a standard resting metabolic rate, 1 MET is considered a resting metabolic rate obtained during quiet sitting. Sedentary activity is defined as below 1.5 METs.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Table 7.9**  
**Self-reported average number of hours of sedentary time in the last week in children, by quintile of equivalised household income, England 2008**

	Highest	2nd	3rd	4th	Lowest
<b>Boys</b>					
Weekday	3.1	3.1	3.5	3.5	3.7
Weekend day	3.9	4	4.1	4.3	4.2
<i>Base</i>	<i>419</i>	<i>562</i>	<i>693</i>	<i>640</i>	<i>644</i>
<b>Girls</b>					
Weekday	3.1	3.4	3.4	3.4	3.7
Weekend day	4.0	4.3	4.4	4.0	4.1
<i>Base</i>	<i>453</i>	<i>610</i>	<i>611</i>	<i>673</i>	<i>666</i>

**Notes:**

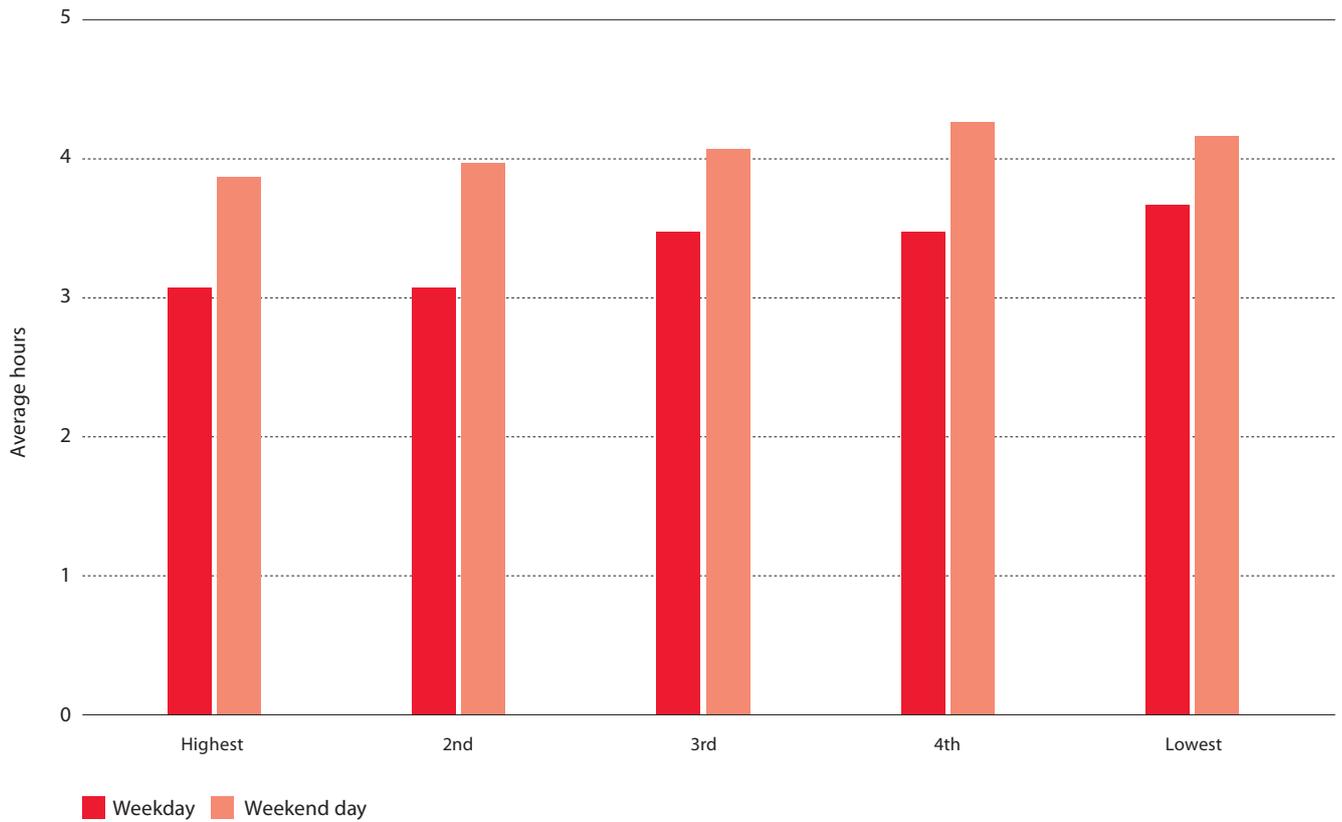
Children aged 2 to 15 years. Data come from a short set of questions asking about time spent sitting down in a number of leisure time activities. Bases given are for 'Watching TV'. All other bases vary but are of a similar size. Personal reports of physical activity among children aged 13-15 and parental proxy reports for children aged 2-12. Participants were asked about sedentary time outside of school, and therefore any sedentary time during the school day is not included.

**Source:**

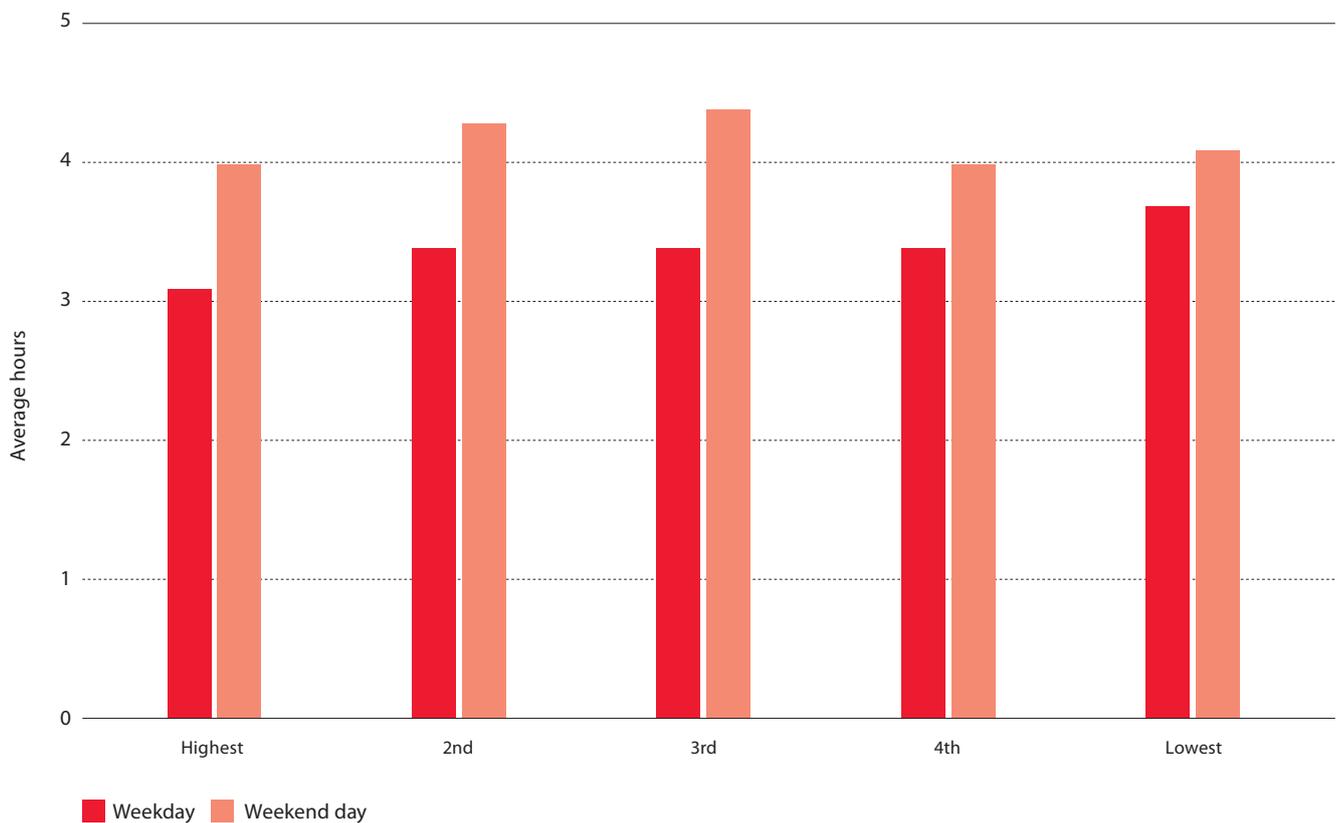
Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds.  
 Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 7.9a**

**Self-reported average number of hours of sedentary time in the last week in boys, by quintile of equivalised household income, England 2008**

**Figure 7.9b**

**Self-reported average number of hours of sedentary time in the last week in girls, by quintile of equivalised household income, England 2008**



**Table 7.10****Self-reported average number of hours of sedentary time in the last week in children, by Strategic Health Authority, England 2008**

	Strategic Health Authority									
	North East	North West	Yorkshire & the Humber	East Midlands	West Midlands	East of England	London	South East Coast	South Central	South West
<b>Boys</b>										
Weekday	3.4	3.4	3.6	3.3	3.4	3.3	3.5	3.4	3.4	3.2
Weekend day	4.2	4.2	4.2	4.0	4.2	4.2	4.2	4.1	4.2	3.8
Base	173	525	348	297	355	413	458	320	261	353
<b>Girls</b>										
Weekday	3.2	3.4	3.7	3.5	3.7	3.4	3.6	3.2	3.1	3.3
Weekend day	4.2	4.1	4.1	4.2	4.4	4.1	4.3	4.1	4.0	4.0
Base	180	535	396	294	341	412	465	291	312	336

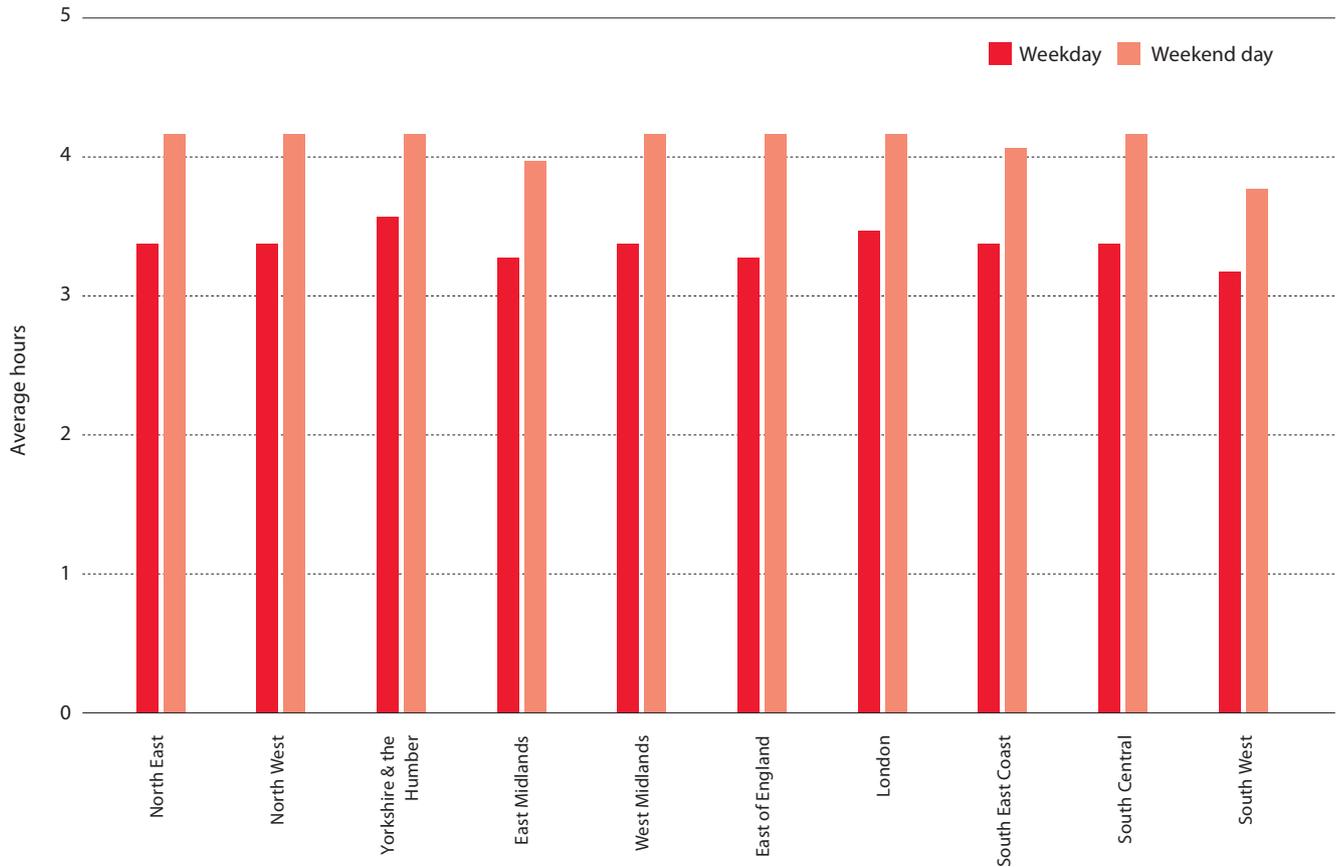
**Notes:**

Children aged 2 to 15 years. Data come from a short set of questions asking about time spent sitting down in a number of leisure time activities. Bases given are for 'Watching TV'. All other bases vary but are of a similar size. Personal reports of physical activity among children aged 13-15 and parental proxy reports for children aged 2-12. Participants were asked about sedentary time outside of school, and therefore any sedentary time during the school day is not included.

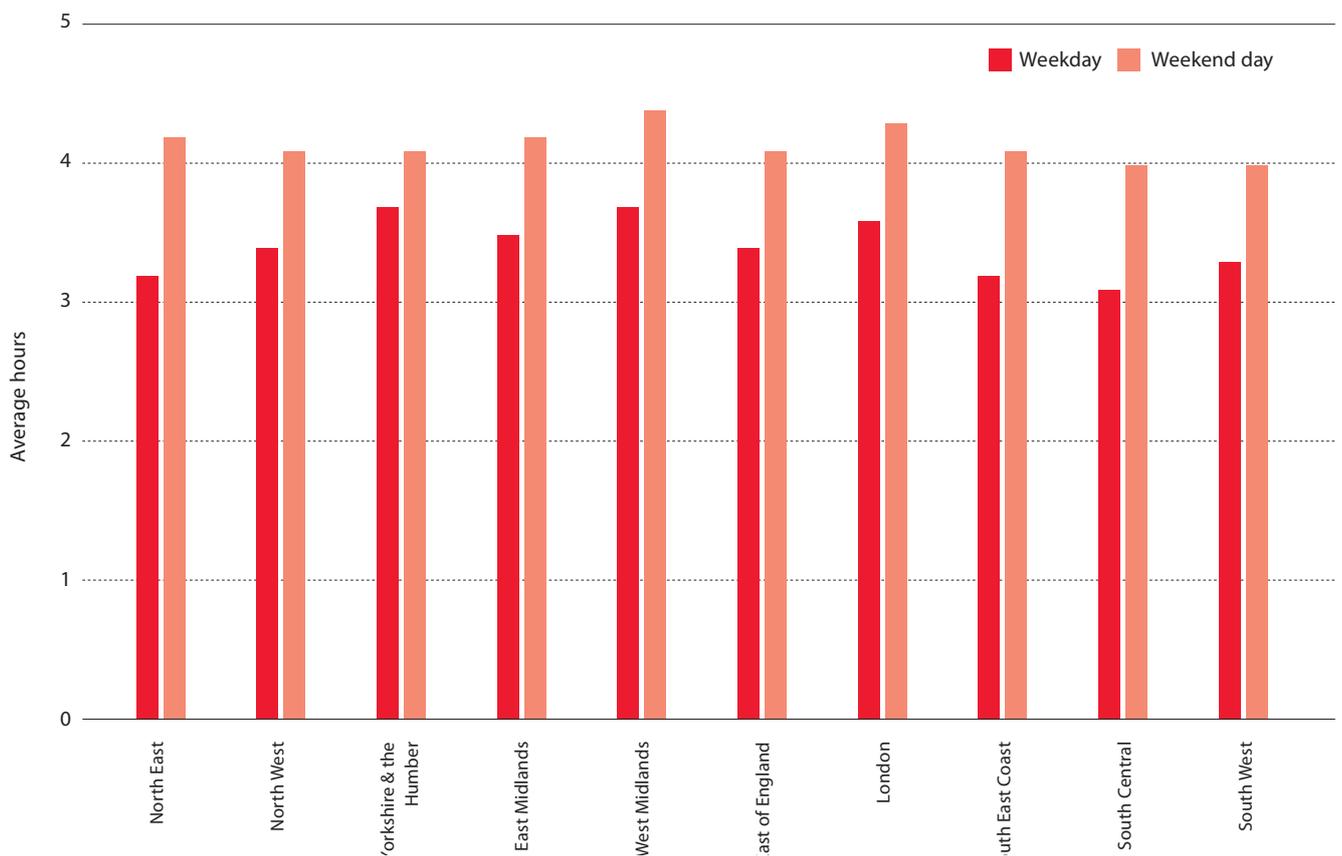
**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 7.10a**  
Self-reported average number of hours of sedentary time in the last week in boys, by Strategic Health Authority, England 2008



**Figure 7.10b**  
Self-reported average number of hours of sedentary time in the last week in girls, by Strategic Health Authority, England 2008



**Table 7.11**  
**Average hours of TV viewing per week, by sex and age, UK 1999 to 2010**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Males</b>												
4-15	19	19	18	16	17	17	16	15	16	16	15	17
16-24	18	17	17	16	17	16	16	15	15	14	15	17
25-34	22	21	21	21	22	22	22	21	20	21	22	21
35-44	23	24	23	23	25	25	24	24	24	24	24	26
45-54	25	27	26	26	27	27	27	27	26	28	28	30
55-64	29	30	29	29	30	30	29	29	29	30	31	34
65+	36	36	38	34	35	34	34	33	34	36	36	39
<b>Base</b>												
4-15	4,749	4,734	4,727	4,722	4,721	4,625	4,582	4,527	4,477	4,448	4,401	4,401
16-24	3,168	3,204	3,210	3,179	3,243	3,130	3,158	3,240	3,340	3,428	3,454	3,433
25-34	4,559	4,566	4,582	4,221	4,095	3,742	3,764	3,738	3,696	3,689	3,697	3,785
35-44	4,059	4,072	4,094	4,522	4,618	4,348	4,435	4,479	4,494	4,483	4,425	4,362
45-54	3,778	3,777	3,796	3,847	3,787	3,710	3,737	3,751	3,817	3,895	3,970	4,026
55-64	2,806	2,805	2,809	2,997	3,145	3,268	3,354	3,408	3,469	3,509	3,534	3,506
65+	3,656	3,660	3,674	3,715	3,755	3,886	3,926	4,009	4,048	4,112	4,183	4,266
<b>Females</b>												
4-15	18	18	17	17	17	17	16	16	16	16	17	18
16-24	23	23	23	21	22	20	21	21	21	21	22	23
25-34	27	26	26	26	28	27	27	25	26	26	26	25
35-44	25	25	25	26	27	27	27	27	27	27	27	29
45-54	27	28	27	28	30	30	30	30	30	31	31	33
55-64	32	32	31	32	33	33	33	32	34	34	34	38
65+	36	36	36	35	37	37	36	35	36	37	37	41
<b>Base</b>												
4-15	4,449	4,444	4,442	4,427	4,405	4,377	4,360	4,296	4,250	4,186	4,146	4,134
16-24	3,064	3,084	3,097	3,110	3,174	3,133	3,164	3,207	3,249	3,314	3,355	3,345
25-34	4,453	4,458	4,472	4,074	3,962	3,981	3,860	3,840	3,811	3,820	3,819	3,863
35-44	4,063	4,073	4,093	4,454	4,527	4,541	4,568	4,619	4,644	4,637	4,584	4,508
45-54	3,833	3,840	3,850	3,897	3,843	3,825	3,832	3,865	3,940	4,027	4,112	4,186
55-64	2,921	2,915	2,924	3,135	3,277	3,409	3,490	3,555	3,631	3,678	3,695	3,694
65+	5,103	5,126	5,144	4,951	4,943	5,121	5,133	5,158	5,170	5,196	5,258	5,310
<b>All</b>												
4-15	18	18	17	17	17	17	16	15	16	16	16	18
16-24	20	20	20	19	19	18	18	18	18	17	18	20
25-34	24	24	23	23	25	25	24	23	23	24	24	23
35-44	24	25	24	24	26	26	26	25	25	26	25	27
45-54	26	27	27	27	28	28	28	28	28	30	30	31
55-64	31	31	30	31	32	31	31	31	32	32	33	36
65+	36	36	37	35	36	36	35	34	35	37	37	40
<b>Base</b>												
4-15	9,199	9,177	9,169	9,149	9,126	9,002	8,942	8,823	8,727	8,634	8,547	8,535
16-24	6,232	6,288	6,307	6,289	6,417	6,263	6,322	6,447	6,589	6,742	6,809	6,778
25-34	9,012	9,024	9,054	8,295	8,057	7,723	7,624	7,578	7,507	7,509	7,516	7,648
35-44	8,123	8,145	8,187	8,976	9,145	8,889	9,003	9,098	9,138	9,120	9,009	8,870
45-54	7,611	7,617	7,646	7,744	7,630	7,535	7,569	7,616	7,757	7,922	8,082	8,212
55-64	5,727	5,720	5,733	6,132	6,422	6,677	6,844	6,963	7,100	7,187	7,229	7,200
65+	8,759	8,786	8,818	8,666	8,698	9,007	9,059	9,167	9,218	9,308	9,441	9,576

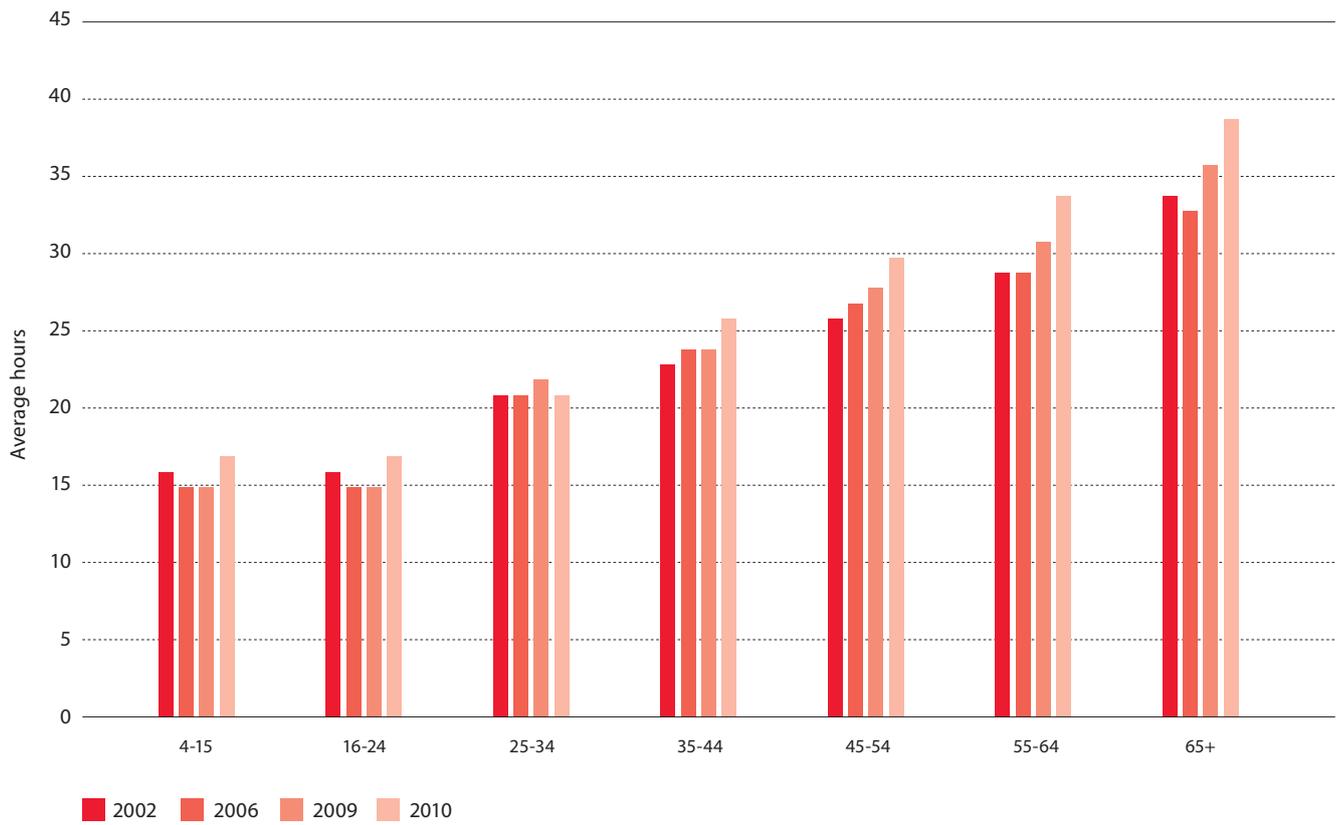
**Notes:**

Some changes to data collection occurred in 2010; this was felt to make it more accurate but may explain some differences to previous years.

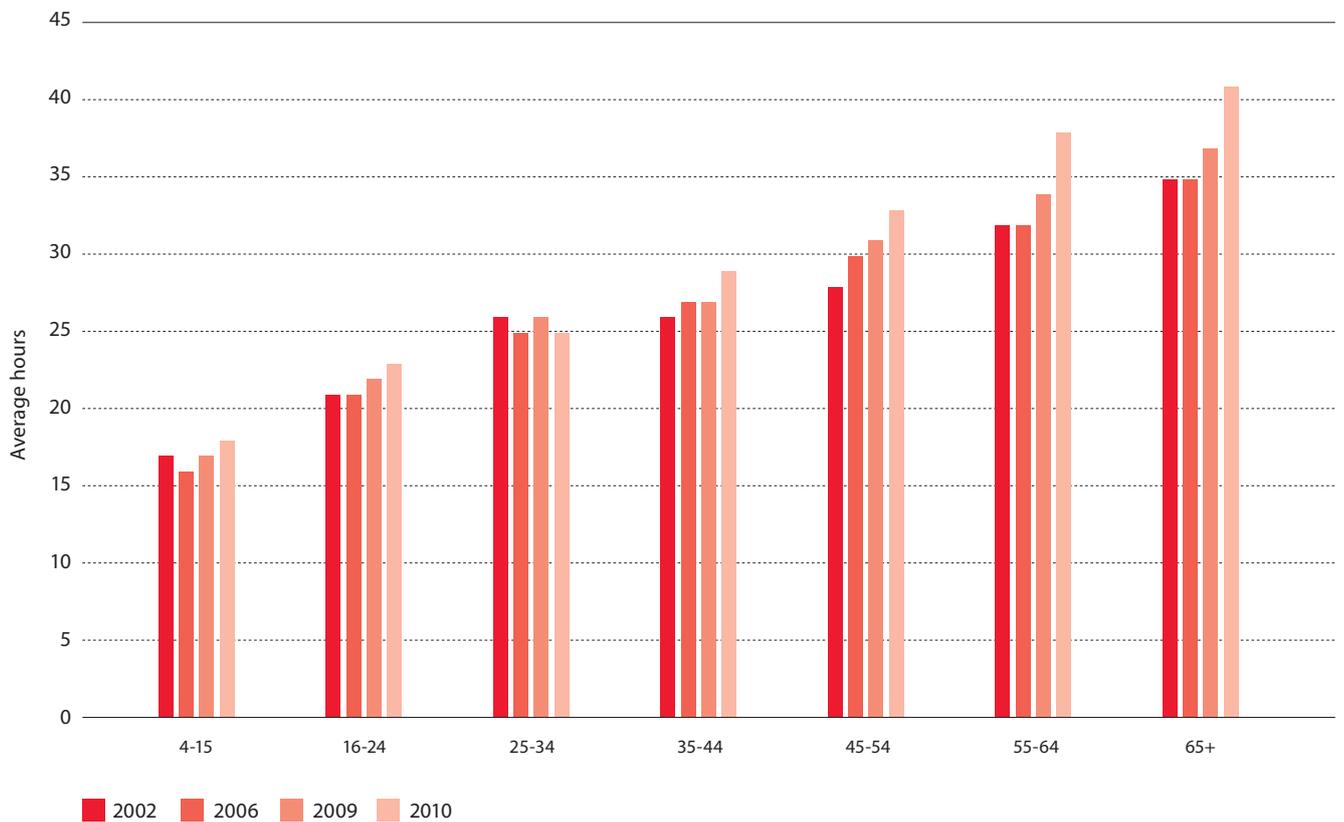
**Source:**

BARB; RSMB Television Research Ltd: London (2011). Personal communication

**Figure 7.11a**  
Average hours of TV viewing per week in males, by age, UK 2002 to 2010



**Figure 7.11b**  
Average hours of TV viewing per week in females, by age, UK 2002 to 2010



**Table 7.12**  
**Average hours of TV viewing per week, by sex and age, countries of the UK 2002 to 2010**

	2002					2006				
	UK	England	Northern Ireland	Scotland	Wales	UK	England	Northern Ireland	Scotland	Wales
<b>Males</b>										
4-15	16	17	16	15	18	15	15	15	14	17
16-24	16	16	18	18	18	15	16	12	15	14
25-34	21	21	20	25	20	21	21	18	24	25
35-44	23	23	26	27	23	24	23	23	29	26
45-54	26	25	25	30	27	27	26	27	29	27
55-64	29	28	27	31	34	29	28	25	34	30
65+	34	33	34	40	36	33	33	33	37	36
<b>Base</b>										
4-15	4,733	3,944	161	394	234	4,544	3,795	153	366	229
16-24	3,189	2,645	104	279	160	3,252	2,705	112	275	160
25-34	4,235	3,569	123	354	189	3,752	3,201	106	286	160
35-44	4,535	3,826	118	384	208	4,496	3,803	122	368	202
45-54	3,862	3,243	95	330	194	3,764	3,142	103	334	184
55-64	3,009	2,520	75	254	160	3,420	2,862	84	290	185
65+	3,724	3,141	80	299	204	4,024	3,385	94	330	215
<b>Females</b>										
4-15	17	17	17	19	15	16	16	14	15	15
16-24	21	21	18	21	23	21	21	15	22	20
25-34	26	25	27	32	25	25	25	24	27	28
35-44	26	25	28	33	24	27	27	24	30	25
45-54	28	28	30	33	31	30	29	29	36	33
55-64	32	32	39	37	36	32	31	28	39	41
65+	35	35	38	38	36	35	35	36	36	35
<b>Base</b>										
4-15	4,444	3,701	150	366	227	4,312	3,610	145	345	212
16-24	3,120	2,582	102	285	151	3,218	2,674	105	276	163
25-34	4,086	3,444	122	339	182	3,855	3,265	113	307	170
35-44	4,468	3,737	123	400	208	4,636	3,891	129	404	212
45-54	3,910	3,273	99	341	197	3,879	3,228	106	352	193
55-64	3,146	2,611	82	287	166	3,567	2,978	90	310	191
65+	4,969	4,167	105	422	274	5,176	4,321	124	456	276

	2009					2010				
	UK	England	Northern Ireland	Scotland	Wales	UK	England	Northern Ireland	Scotland	Wales
<b>Males</b>										
4-15	15	15	15	16	16	17	17	16	16	21
16-24	15	14	15	16	15	17	17	17	19	16
25-34	22	22	20	25	20	21	20	27	25	23
35-44	24	23	20	28	26	26	25	28	26	29
45-54	28	28	27	31	30	30	29	27	37	29
55-64	31	30	32	34	33	34	34	36	36	38
65+	36	35	35	40	41	39	38	41	43	48
<b>Base</b>										
4-15	4,422	3,696	147	359	220	4,422	3,695	151	355	220
16-24	3,470	2,895	112	290	174	3,452	2,881	113	284	174
25-34	3,713	3,150	110	297	156	3,802	3,233	113	294	162
35-44	4,446	3,770	123	358	194	4,383	3,716	123	350	193
45-54	3,989	3,331	111	355	192	4,048	3,379	114	359	195
55-64	3,550	2,967	89	304	190	3,523	2,938	92	304	190
65+	4,202	3,524	100	349	230	4,287	3,587	105	358	237
<b>Females</b>										
4-15	17	17	16	18	17	18	18	25	19	19
16-24	22	22	21	23	15	23	22	21	24	30
25-34	26	25	25	27	32	25	25	30	28	28
35-44	27	27	24	29	24	29	28	34	34	29
45-54	31	30	29	37	31	33	33	32	37	36
55-64	34	34	31	39	42	38	38	39	44	43
65+	37	37	39	41	37	41	41	42	43	42
<b>Base</b>										
4-15	4,165	3,492	137	332	205	4,154	3,483	136	331	203
16-24	3,371	2,807	112	284	168	3,357	2,800	110	278	169
25-34	3,837	3,250	114	309	164	3,889	3,295	119	309	167
35-44	4,606	3,869	131	396	210	4,531	3,808	130	385	208
45-54	4,131	3,432	116	382	201	4,207	3,497	120	384	206
55-64	3,712	3,095	95	325	198	3,713	3,092	95	327	199
65+	5,283	4,400	129	467	286	5,338	4,445	135	469	289

**Notes:**

Bases between countries vary, small bases may make data less reliable. Some changes to data collection occurred in 2010 this was felt to make it more accurate but may explain some differences to previous years.

**Source:**

BARB; RSMB Television Research Ltd: London (2011). Personal communication. <http://www.barb.co.uk/>

**Table 7.13**  
**Percentage of self-reported sedentary time that is spent watching television in adults, by sex and age, England 2008**

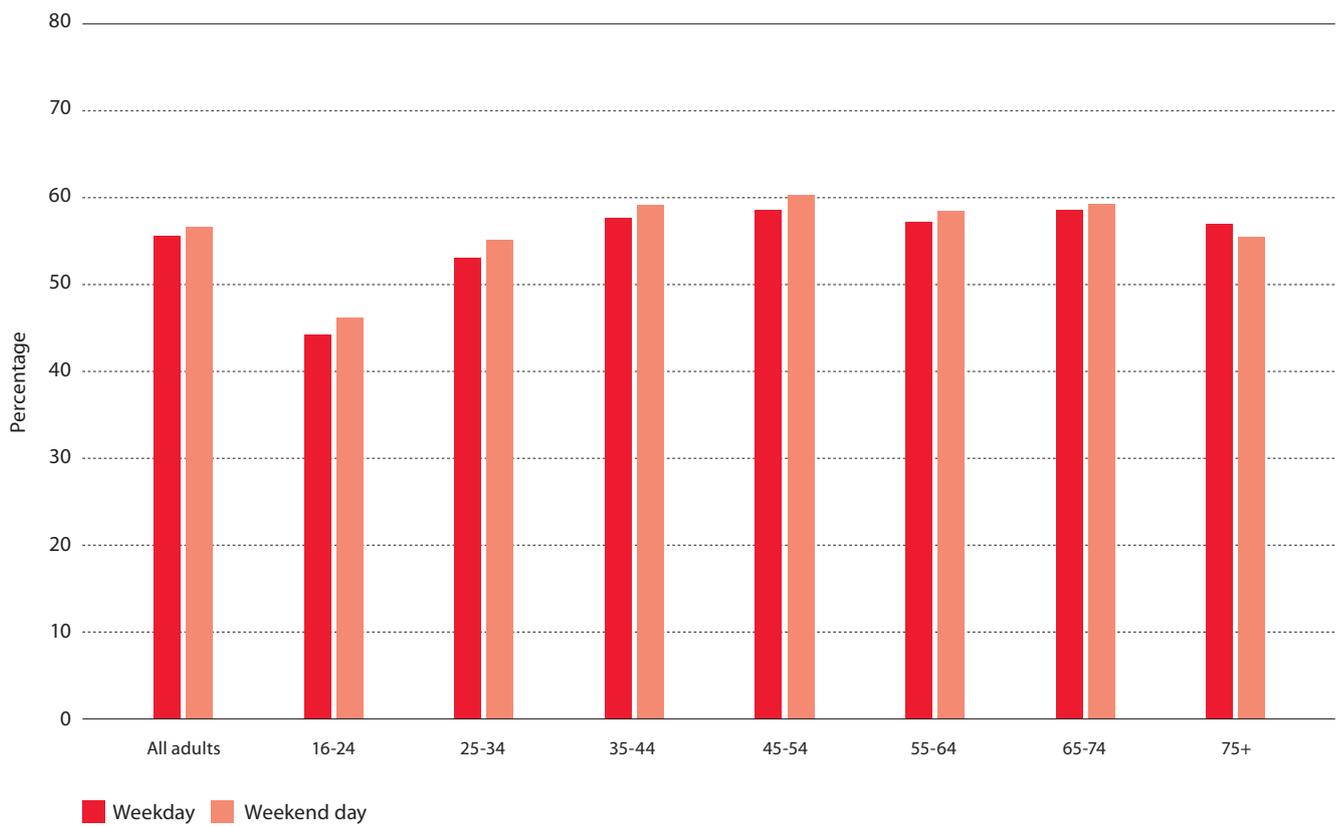
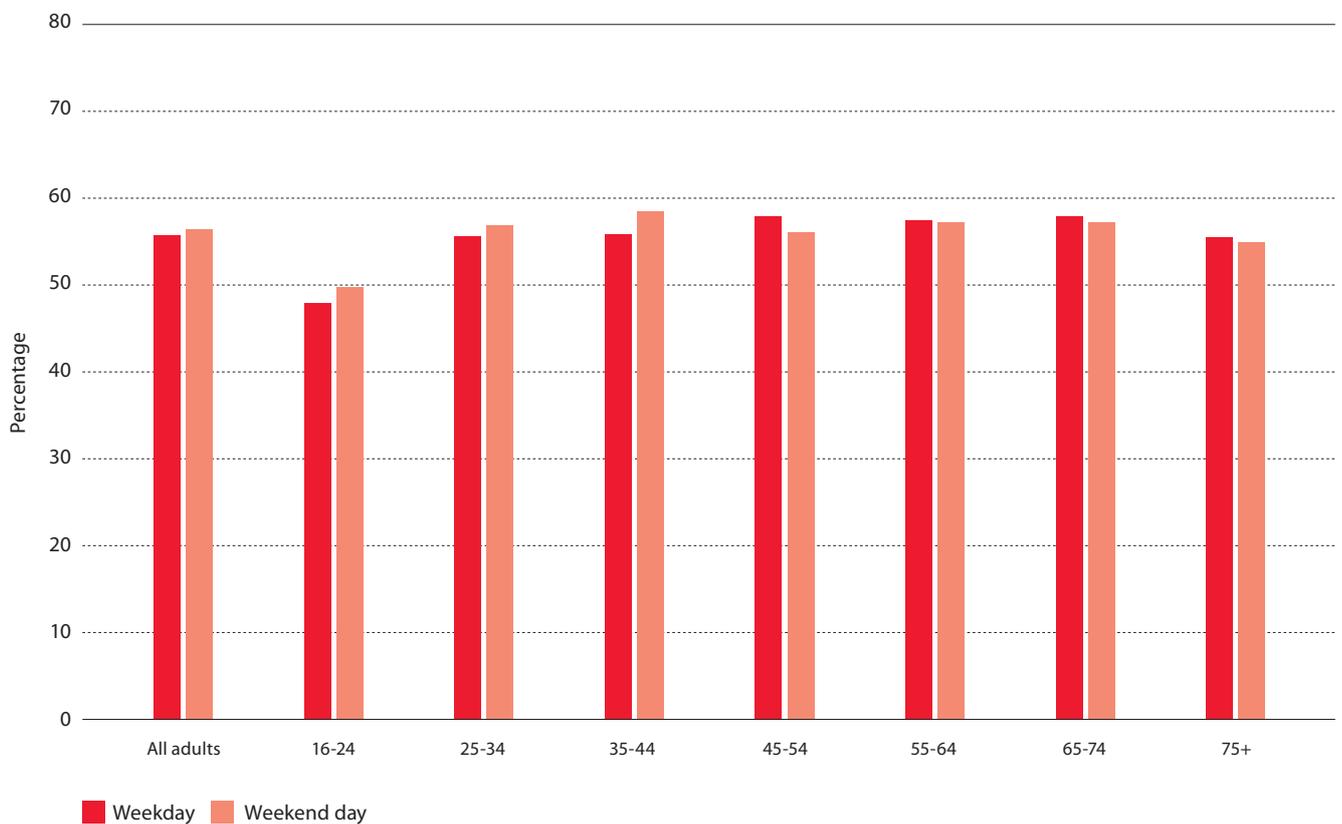
	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%	%
<b>Men</b>								
Weekday	56.0	44.6	53.5	58.1	59.1	57.7	59.0	57.4
Weekend day	57.1	46.6	55.6	59.6	60.8	58.9	59.7	55.9
Base	6,746	771	954	1,218	1,098	1,183	875	647
<b>Women</b>								
Weekday	56.0	48.1	55.8	56.1	58.1	57.7	58.1	55.7
Weekend day	56.6	50.0	57.1	58.7	56.3	57.4	57.4	55.1
Base	8,336	919	1,219	1,512	1,374	1,367	1,000	945

**Notes:**

Data come from a short set of questions asking about time spent sitting down in a number of leisure time activities. Watching TV including DVDs or videos expressed as a percentage of all sedentary time. Other sedentary time includes doing such things as reading, eating a meal/snack, working, drawing, using a computer or playing video games. Averages are based on all participants interviewed including those who reported no participation. Bases vary but are of similar sizes; those shown are for watching TV, weekday.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 7.13a****Percentage of self-reported sedentary time that is spent watching television in men, by age, England 2008****Figure 7.13b****Percentage of self-reported sedentary time that is spent watching television in women, by age, England 2008**

**Table 7.14**  
**Percentage of self-reported sedentary time that is spent watching television in children, by sex and age, England 2008**

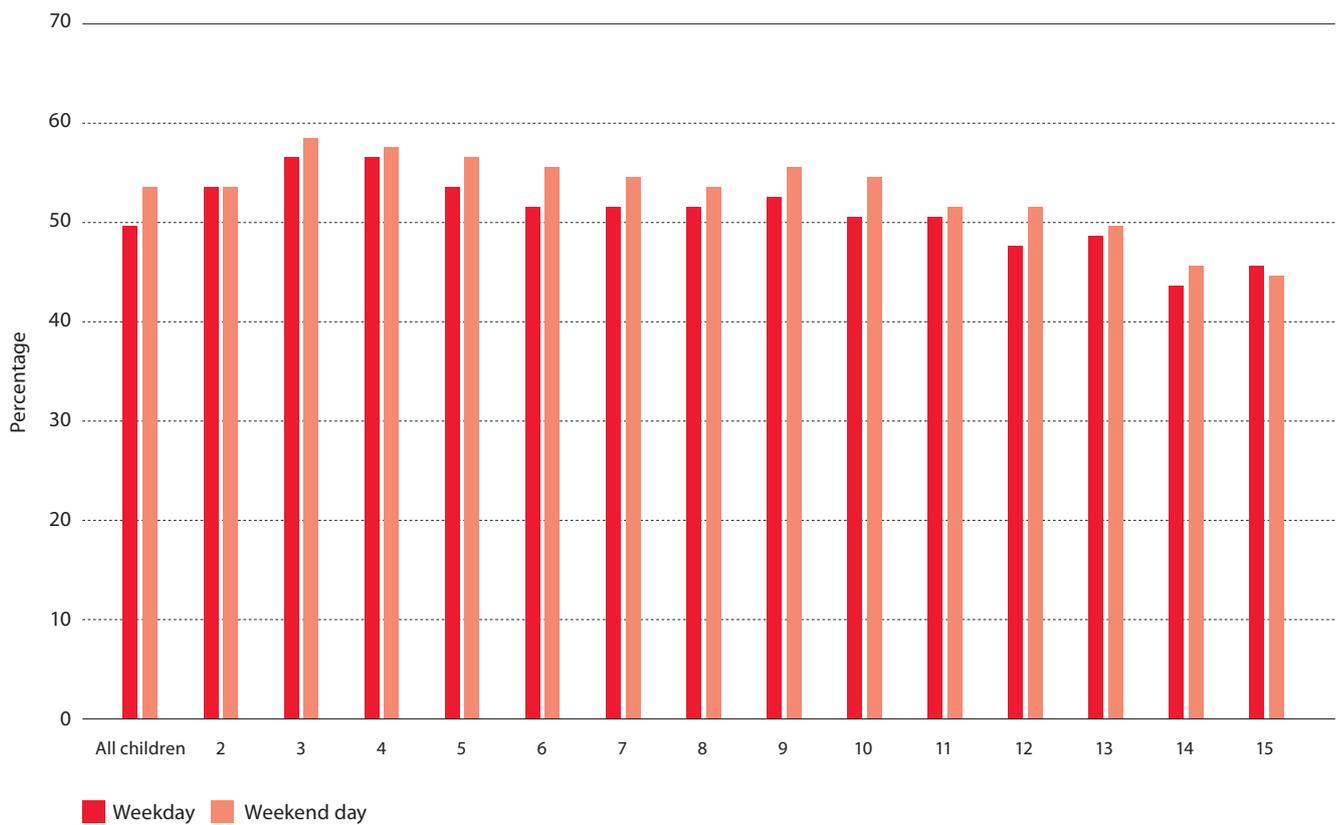
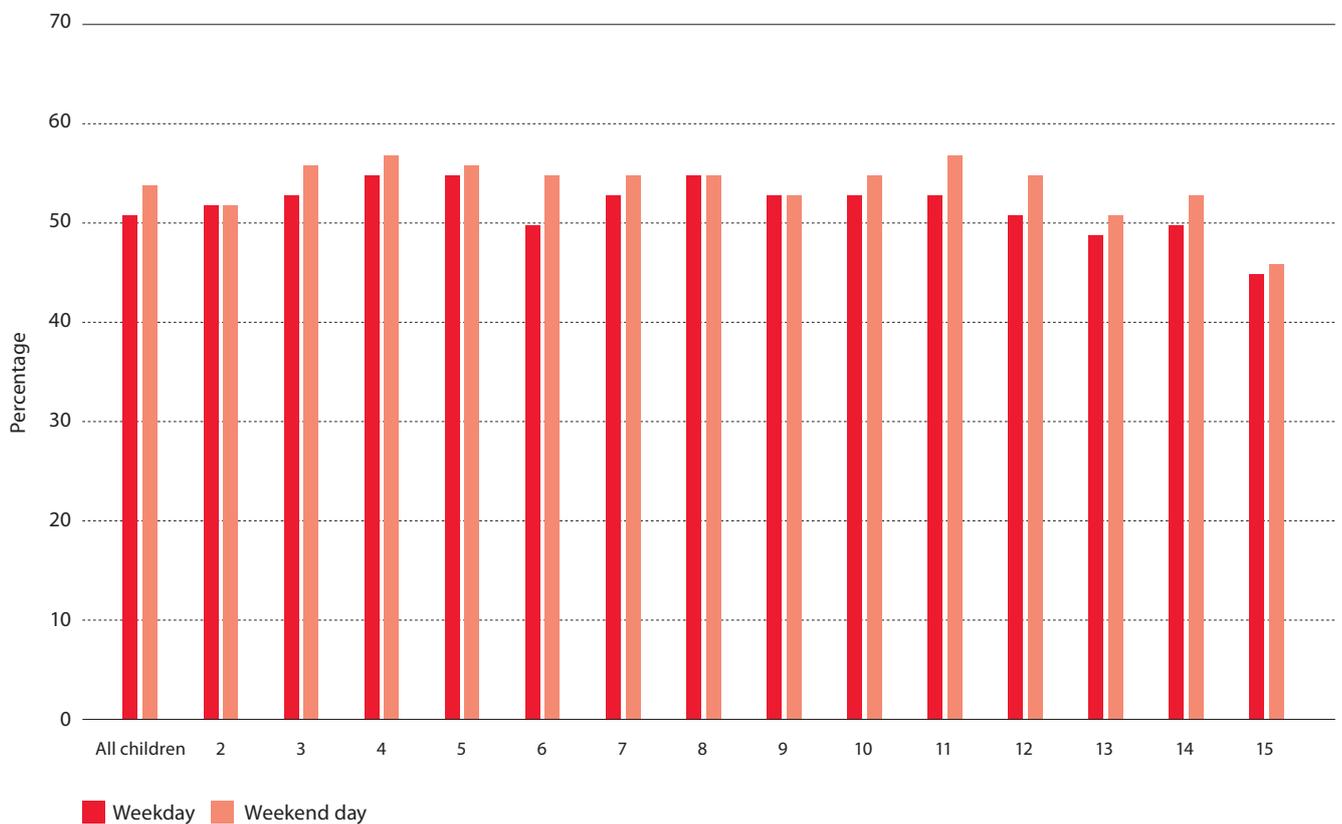
	Age (years)														
	All	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>Boys</b>															
Weekday	50	54	57	57	54	52	52	52	53	51	51	48	49	44	46
Weekend day	54	54	59	58	57	56	55	54	56	55	52	52	50	46	45
Base	3,503	255	239	249	240	252	235	236	244	255	255	260	286	266	231
<b>Girls</b>															
Weekday	51	52	53	55	55	50	53	55	53	53	53	51	49	50	45
Weekend day	54	52	56	57	56	55	55	55	53	55	57	55	51	53	46
Base	3,562	248	268	230	226	237	255	233	252	297	291	241	257	281	246

**Notes:**

Data come from a short set of questions asking about time spent sitting down in a number of leisure time activities. Watching TV including DVDs or videos expressed as a percentage of all sedentary time. Other sedentary activities include sitting down for any other activity, e.g. reading, doing homework, drawing, using a computer or playing video games. Bases vary but are of similar sizes; those shown are for watching TV, weekday. Averages are based on all participants interviewed including those who reported no participation.

**Source:**

Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds.  
 Copyright © 2010, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

**Figure 7.14a****Percentage of self-reported sedentary time that is spent watching television in boys, by age, England 2008****Figure 7.14b****Percentage of self-reported sedentary time that is spent watching television in girls, by age, England 2008**

## **Acknowledgements**

The compilers would like to thank Katie Larkins, Brian Steenson, Ed Dicks, Mark Wheatcroft, Catherine Kelly, Andy Carver, Natasha Stewart, Lisa Purcell, Jane Shepley and Peter Weissberg for their help in producing this publication.

We are the nation's heart charity, dedicated to saving lives through pioneering research, patient care, campaigning for change and by providing vital information. But we urgently need your help. We rely on your donations of time and money to continue our life-saving work. Because together we can beat heart disease.

**bhf.org.uk/  
statistics**

 **Heart Helpline**  
**0300 330 3311**  
**bhf.org.uk**

Information & support on anything heart-related  
Phone lines open 9am to 5pm Monday to Friday  
Similar cost to 01 or 02 numbers

British Heart Foundation  
Greater London House  
180 Hampstead Road  
London NW1 7AW  
T 020 7554 0000  
F 020 7554 0100