

PHYSICAL ACTIVITY STATISTICS 2015

British Heart Foundation Centre on Population Approaches for Non-Communicable Disease Prevention. Nuffield Department of Population Health, University of Oxford

In Northern Ireland 19% of adults watch television for more than four hours a day at the weekend. Adults in Scotland spend on average more than five and a half hours a day sedentary.

> In England 83% of 16 to 24 year olds meet physical activity recommendations; only 30% of over 75s do.

In Wales 53% of primary schools and 15% of secondary schools have two hours of PE per week.

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Cover statistics

England: Adult physical activity levels, Table 1.1 Northern Ireland: Time spent on sedentary activities, Table 6.2 Scotland: Time spent on sedentary activities, Table 5.3 Wales: Time allocated to curricular PE in state schools, Table 2.13

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ISBN 978-1-899088-27-0

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Published by the British Heart Foundation, Greater London House, 180 Hampstead Road, London NW1 7AW

bhf.org.uk

Registered charity in England and Wales (225971) and in Scotland (SC039426)

Edited by Ed Dicks, British Heart Foundation

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Suggested citation:

Townsend N, Wickramasinghe K, Williams J, Bhatnagar P, Rayner M (2015). *Physical Activity Statistics 2015*. British Heart Foundation: London.

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BRITISH HEART FOUNDATION CENTRE ON POPULATION APPROACHES FOR NON-COMMUNICABLE DISEASE PREVENTION

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FOREWORD

This publication is an update to the supplement we published in 2012 on physical activity. The new report highlights the importance of physical activity in cardiovascular health, and takes advantage of the opportunity to align our statistics with the UK Chief Medical Officers' recommendations on physical activity published in 2011. Despite these recommendations providing more flexibility towards achieving physical activity goals, our data show that there has been little change in the proportion of individuals reaching the recommended activity levels and recent figures still highlight the differences found between sexes and across ages.

Currently, individuals are able to meet the physical activity recommendations but still spend most of their time sedentary. This is a concern as evidence is gathering that sedentary behaviour, that in which energy expenditure is very low, is strongly associated with poor health, independent of overall physical activity levels. Our data suggest that levels of sedentary behaviour remain stubbornly high in the UK. The BHF endorses Public Health England's (PHE) recent report *Get Everybody Active Every Day*. We must find ways to make physical activity an important part of everyone's daily routine. This is particularly important for children where the data show a rapid drop-off in activity levels in girls in their teenage years. It is a concern that there is less focus on physical education and sport in secondary schools than in primary, with considerable variation between schools and regions.

The BHF believes the UK Governments should ensure that all children in the UK have equal access to enjoyable sports and activities, by prioritising physical activity in and around the school day, raising awareness of the physical activity guidelines and promoting the benefits of regular activity among children, young people, and their parents. Only if we make regular physical activity a policy priority can we expect people to respond and decrease the burden of inactivity-related ill health, in particular heart disease, from which too many people currently suffer. In making physical activity easier for all we will undoubtedly improve the future cardiovascular health of our population.

Professor Peter Weissberg Medical Director, British Heart Foundation

INTRODUCTION

This supplement to *Cardiovascular disease statistics* provides an update to our 2012 publication on the same topic. *Physical Activity Statistics 2015* is designed for health professionals, medical researchers and anyone with an interest in physical activity or cardiovascular disease.

Physical Activity Statistics 2015 has six chapters describing physical activity levels and sedentary behaviour in both children and adults. Chapter one describes the proportion of people within the UK achieving the Chief Medical Officers' 2011 recommendations for weekly physical activity levels. Chapter two describes the types of physical activity that both adults and children do. Chapter three compares physical activity levels of adults in countries of the European Union (EU) and those for children internationally. Chapter four presents statistics on physical activity and exercise related to cardiac rehabilitation programmes. Chapter five describes overall levels of sedentary behaviour whilst chapter six presents statistics on the types of sedentary behaviour that people indulge in.

Each chapter contains tables and figures to illustrate the main topics. A brief narrative of the presented data accompanies these tables and figures. Wherever possible, statistics are included for all UK countries. However, comparable data for England, Scotland, Wales and Northern Ireland can be rare, therefore many of the tables and figures correspond to only one of the four nations. Self-report is the most widely used measurement method in UK surveys and involves asking people to report how much exercise they do or have done. All data included in this supplement come from self-report measurement.

All of the tables and figures presented in *Physical Activity Statistics 2015* are also available on the British Heart Foundation's website at **bhf.org.uk/statistics**. The website aims to be the most comprehensive and up-to-date source of statistics on cardiovascular disease in the UK. The website is regularly updated and contains exclusive statistics, rankings, tables and figures. Further copies of this publication can be downloaded from the website, as can copies of other statistical publications, including:

- Cardiovascular Disease Statistics (2014)
- Children and Young People Statistics (2013)
- European Cardiovascular Disease Statistics (2012)
- Physical Activity Statistics (2012)
- Trends in coronary heart disease 1961-2011 (2011)
- Ethnic Differences in Cardiovascular Disease (2010)

SUMMARY

Chapter I LEVELS OF PHYSICAL ACTIVITY

This chapter reports on the physical activity levels of the UK population. It presents separate data for UK countries and for adults and children.

- In 2012, in England and Scotland, 67% of men met the guidelines. More men met the guidelines than women and physical activity declined with age for both genders.
- The highest percentages of men and women achieving the recommended levels of physical activity in England are found in the South East (72% and 61% respectively).
- The highest levels of physical inactivity in England are in the North West for both men (26%) and women (31%).
- Physical activity levels also vary by household income. In England, in 2012, 76% of men in the highest income quintile reached recommended levels, compared to 55% of men in the lowest income quintile.

- In 2012, in Scotland 73% of boys and 68% of girls in the 2 to 15 years age group met the recommendations.
- In both boys and girls in England the proportion of children aged 5 to 15 years meeting recommendations fell between 2008 and 2012. A higher decline was observed amongst boys than girls. The largest declines were at age 13 to 15 years for both genders.
- Regional differences in children achieving physical activity recommendations are found in England. More than 25% of boys in the South East met recommendations, while only 13% did so in the South West.

Chapter 2 TYPES OF PHYSICAL ACTIVITY

This chapter reports on the levels of the various types of physical activity occurring inside and outside of the workplace, how it varies between weekdays and weekends, as well as between genders.

- In 2012, in England, men and women spent similar amounts of time walking, but women spent less time engaging in physical activity outside of the workplace.
- In 2012, in England, 59% of men and 54% of women reported spending five hours or more per work day sitting or standing.
- In 2011, in Scotland, 30% of men and 40% of women reported that their main activity at work involved sitting down or standing up.
- In 2012, in England, more than two thirds of trips were done by car and 22% were on foot in England.
- Among both girls and boys in England, 85% participated in informal sports and exercise.
- More than two thirds of boys and girls in England walk to school at least once a week. The proportion of children cycling to school remains low, with just 6% of boys and 1% of girls riding to school in 2012.

Chapter 3 INTERNATIONAL DIFFERENCES

This chapter reports on international guidelines for physical activity and the levels of physical activity in different countries, including the UK.

- WHO guidelines on physical activity align with those published by the UK Chief Medical Officers in 2011.
- In the UK 10% of adults play sport regularly, this compares to an EU average of 8% and a high of 16% in Ireland.
- In the Netherlands 44% of adults engage in physical activity outside of sport; the average in EU countries is 15% and 14% engage in the UK.
- In the UK 44% of adults never do any moderate physical activity. In the EU, the Netherlands has the lowest proportion with 14% and Malta and Cyprus the highest with 70%.
- In the EU 60% of adults walk for extended periods on four or more days per week. In the UK this is 68% and the highest in the EU is Bulgaria at 77%.
- 13% of UK adults are sedentary for longer than 8.5 hours a day. The EU average is 11%. Highest are the Netherlands and Denmark (25%).

Chapter 4 CARDIAC REHABILITATION

This chapter describes cardiac rehabilitation (CR) programmes in the UK and reports on physical activity and health outcomes among patients participating in these programmes using data from the BHF National Audit of Cardiac Rehabilitation (NACR).

- The proportion of CR programmes with access to exercise specialists dropped from 55% in 2009/10 to 44% in 2011/12.
- The percentage of patients taking part in exercise in CR programmes has changed little between 2009/10 and 2011/12.
- The percentage of CR patients doing 30 minutes of exercise five times a week increases from 33% before completing a CR programme to 56% 12 weeks after.
- 12 months after completing a CR programme the proportion of patients never exercising drops from 55% to 32%.
- The proportion of patients achieving physical fitness health status increases from 39% before completing CR programmes to 66% 12 months after.

Chapter 5 SEDENTARY BEHAVIOUR

This chapter reports on the prevalence of sedentary behaviour in adults and children by gender and age; sedentary behaviour by income group is reported for children and data are presented separately for weekends and weekdays.

- On weekdays, men and women had a similar amount of average sedentary time in England. The lowest prevalence of individuals sedentary for six or more hours on weekdays was found amongst those aged 35 to 44 years.
- On average in England, men and women were more sedentary on weekend days than weekdays.
- In 2011, in Scotland, men and women reported similar amounts of sedentary time, with 5.5 hours per weekday for men and 5.4 hours for women.
- A higher proportion of boys and girls were sedentary on weekend days than weekdays in England in 2012 with 43% of boys and 37% of girls aged 13 to 15 sedentary for 6 hours or more on weekend days.
- The average number of sedentary hours on weekdays was highest amongst the group with the lowest household income for both boys and girls in England in 2012.
- The average number of sedentary hours in children was higher on weekend days than weekdays for all income quintiles and both genders in England in 2012.

Chapter 6 TYPES OF SEDENTARY BEHAVIOUR

This chapter reports on the different types of sedentary behaviour among adults and children in the United Kingdom.

- Men 16 to 24 years of age spent an average of 2.5 hours watching television and 3.2 hours in other activities on weekdays, while women in the same age group spent 2.6 hours watching television and 3.0 hours in other activities.
- For all age groups of adults aged 25 and older, more than half of the total sedentary time was spent watching television.
 Adults 25 to 64 years spent more time watching television on weekend days than on weekdays.
- In Northern Ireland, as in England, a large proportion of total sedentary time was spent watching television. On weekends, a larger proportion of adults in all age groups spent over four hours a day watching television than on weekdays.

- Men 16 to 24 years of age spent an average of 2.5 hours watching television and
 Over half of children's total sedentary time in England was spent watching television.
 - The only age group where less than half of total sedentary time was spent watching television was 13 to 15 year old boys.
 - In Scotland, boys spent an average of 2.2 hours sitting in front of a screen per weekday and 2.8 hours per weekend day, while girls spent an average of 2.1 hours per weekday and 2.6 hours per weekend day.
 - In Scotland, the total time sitting in front of a screen increased for both genders with age and was highest among 13 to 15 year olds.

GLOSSARY

This section provides a definition for some of the terms used throughout *Physical Activity Statistics 2015*.

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.

Angioplasty – a technique to widen narrowed blood vessels by inflating a balloon that has been passed into the narrowed location via a catheter. When the balloon is inflated, fatty plaques are squashed against the walls of the arteries. A small metal tube called a stent is commonly used to help keep the artery open.

Bypass surgery – see Coronary Artery Bypass Graft (CABG).

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 heart and blood vessels.

Coronary artery bypass graft (CABG) – an operation to bypass a narrowed section of a coronary artery and improve the blood supply to the heart muscle.

Coronary heart disease (CHD) – the collective term for diseases that occur when the walls of the coronary arteries become narrowed by a gradual build-up of fatty material called atheroma. The two main forms of CHD are heart attack (also known as myocardial infarction) and angina.

Equivalised 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 activity – Moderate intensity aerobic exercise is where you're working hard enough to raise your heart rate and break into a sweat. You're working at a moderate intensity if you're able to talk but unable to sing the words to a song. 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.

Percutaneous coronary intervention (PCI) – see angioplasty.

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

Recall bias – a systematic error caused by differences in the accuracy or completeness of the recollections retrieved ("recalled") by study participants regarding events or experiences from the past.

Report bias – as selective reporting or suppression of information by subjects.

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.

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

Vigorous activity – Vigorous intensity aerobic exercise is where you're breathing hard and fast and your heart rate has increased significantly. If you're working at this level, you won't be able to say more than a few words without pausing for a breath.

Chapter I

LEVELS OF PHYSICAL ACTIVITY

People who are physically active are at lower risk of cardiovascular disease (CVD). 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. The UK analysis of the Global Burden of Diseases, Injuries and Risk Factors Study found physical inactivity and low physical activity to be the fourth most important risk factor in the UK. They estimated that physical inactivity contributes to almost one in ten premature deaths (based on life expectancy estimates for world regions) from coronary heart disease (CHD) and one in six deaths from any cause.¹ As well as the health burden in the UK, physical inactivity has a significant financial burden with the direct financial cost of physical inactivity to the NHS estimated to be greater than £900 million in 2009/10.²

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 and we present self-report physical activity data throughout this publication. It should be noted, however, that self-report can lead to some inaccuracies if individuals are unable to recall how much physical activity they have done, or they feel that they should say they have done more than they actually have.³

In 2012, in England and Scotland, 67% of men met the guidelines. More men met the guidelines than women and physical activity declined with age for both genders.

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PHYSICAL ACTIVITY GUIDELINES

Guidelines issued by the Chief Medical Officers (CMOs) of England, Scotland, Wales and Northern Ireland in 2011, emphasised the importance of physical activity for people of all ages through following a life course approach (Box 1.1). The guidelines recommend a combination of moderate and vigorous intensity activities, as well as highlighting the importance of minimising the amount of time spent being sedentary.⁴

Box 1.1

UK guidelines for physical activity 2011

Adults aged 19 to 64 years	 Adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more – one way to approach this is to do 30 minutes on at least 5 days a week.
	2. Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or combinations of moderate and vigorous intensity activity.
	 Adults should also undertake physical activity to improve muscle strength on at least two days a week.
	 All adults should minimise the amount of time spent being sedentary (sitting) for extended periods.
Adults aged 65 years and over	1. Recommendations for older adults are the same as those for adults aged 19 to 64.
	2. Older adults at risk of falls should incorporate physical activity to improve balance and coordination on at least two days a week.
Children and young people aged 5 to 18 years	 All children and young people should engage in moderate to vigorous intensity physical activity for at least 60 minutes and up to several hours every day.
	 Vigorous intensity activities, including those that strengthen muscle and bone, should be incorporated at least three days a week.
	3. All children and young people should minimise the amount of time spent being sedentary (sitting) for extended periods.
Children aged under 5 years who can walk	 Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes (3 hours), spread throughout the day.
	2. All under 5s should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

MEETING PHYSICAL ACTIVITY GUIDELINES

In 2012, in England and Scotland, 67% of men over 16 years met the guidelines. More men met the guidelines than women and physical activity declined with age for both genders. For example, in Scotland 68% of women aged 16 to 24 met the physical activity recommendations, but in women aged over 75 only 21% did (Table 1.1, Figures 1.1a and 1.1b).

The latest Welsh Health Survey still reports physical activity according to the pre-2011 guidelines. The old guidelines recommended 30 minutes or more of moderate or vigorous activity on at least five days a week. In 2013, 37% of men and 23% of women were active on five or more days in the previous week. Almost half of women in Wales (47%) were active for one day or less in the last week. Men aged 16 to 34 were the most active, with 44% being active on five or more days. Activity then declined with age. In women, the percentage of those active remained similar between the ages of 16 and 54 (25% for women aged 25 to 34, 27% for 16 to 24 year olds and 35 to 54 year olds). Activity declined after age 55 for women, with only 9% of women aged over 75 meeting the pre-2011 recommendations for physical activity (Table 1.1, Figures 1.1a and 1.1b).

The highest percentages of men and women achieving the recommended levels of physical activity in England are found in the South East (72% and 61% respectively).

Table 1.1

Physical activity levels in adults, by age and gender, England 2012, Scotland 2012, Northern Ireland 2012/13 and Wales 2013

2011 Recommendations	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%	%
England								
Men								
Meeting recommendations	67	83	76	71	70	55	58	36
Some activity	10	6	9	10	9	14	11	12
Low activity	4	2	4	4	3	5	4	6
Inactive	19	8	11	14	18	26	27	46
Base	3,267	373	479	584	609	616	587	379
Women								
Meeting recommendations	55	57	61	66	62	55	52	18
Some activity	13	15	13	13	13	12	15	10
Low activity	6	7	6	5	4	6	5	7
Inactive	26	22	19	16	21	27	27	65
Base	4,546	461	684	760	806	677	631	527

2011 Recommendations	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+				
	%	%	%	%	%	%	%	%				
Scotland												
Men												
Meeting recommendations	67	83	74	75	69	61	56	31				
Some activity	10	8	13	10	7	10	12	9				
Low activity	4	3	4	2	5	3	4	4				
Very low activity	19	7	9	13	19	26	28	55				
Base	2,122	170	228	345	408	362	384	225				
Women												
Meeting recommendations	58	68	65	67	64	53	52	21				
Some activity	14	16	14	16	11	13	13	12				
Low activity	6	5	6	3	4	9	5	7				
Very low activity	23	10	15	13	21	25	30	60				
Base	2,685	228	329	474	499	442	387	326				

2011 Recommendations	All adults	19-24	25-34	35-44	45-54	55-64	65-74	75+			
	%	%	%	%	%	%	%	%			
Northern Ireland											
Men											
Meeting recommendations	59	71	73	73	60	41	43	19			
Some activity	14	16	16	16	12	16	14	7			
Low activity	3	1	4	1	5	5	3	6			
Very low activity	24	12	8	10	24	38	40	67			
Base	1,667	74	217	251	321	339	281	184			
Women											
Meeting recommendations	49	58	63	59	59	43	30	8			
Some activity	14	16	13	17	15	15	15	7			
Low activity	5	3	8	4	2	6	6	8			
Very low activity	31	22	16	20	23	36	49	76			
Base	2,545	134	394	466	471	389	405	286			

Pre-2011 Recommendations	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+			
	%	%	%	%	%	%	%	%			
Nales											
Men											
Active on 5 or more days a week	37	44	44	41	39	34	27	16			
Active on 2 to 4 days a week	25	28	29	27	24	24	24	16			
Active on 1 day or less a week	38	28	27	32	37	42	49	68			
Base	6,943	826	793	967	1,213	1,226	1,130	788			
Women											
Active on 5 or more days a week	23	27	25	27	27	23	18	9			
Active on 2 to 4 days a week	31	34	40	35	31	32	27	13			
Active on 1 day or less a week	47	39	35	38	42	45	55	78			
Base	8,064	947	1,035	1,136	1,418	1,310	1,239	979			

Notes Results relating to the 2011 physical activity guidelines: Some activity: 60-149 minutes moderate physical activity (MPA) per week (pw) or 30-74 minutes vigorous physical activity (VPA) pw or an equivalent combination of these. Low activity: 30-59 minutes MPA pw or 15-29 minutes VPA pw or an equivalent combination of these. Inactive: Less than 30 minutes MPA pw or less than 15 minutes VPA pw or an equivalent combination of these. Inactive: Less than 30 minutes MPA pw or less than 15 minutes VPA pw or an equivalent combination of these. Inactive: Less than 30 minutes MPA pw or less than 15 minutes VPA pw or an equivalent combination of these. Inactive: Less than 30 minutes or more of moderate physical activity guidelines: 'Active' means 30 minutes or more of moderate or vigorous physical activity on at least 5 days a week. Source Joint Health Survey Sunit (2013). Health Survey for England 2012: Health, social care and lifestyles. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved. If Soctish Health Executive (2012). The Soctish Health Survey 2012: Results. The Soctish Executive: Edinburgh. If Northern Ireland Statistics and Research Agency (2014). Health Survey Northern Ireland – 2012/13. DHSSPS: Belfast. If Welsh Government (2014). Welsh Health Survey 2013. Welsh Assembly: Cardiff.

Figure 1.1a

Prevalence of men meeting physical activity recommendations, by age and country, latest available year

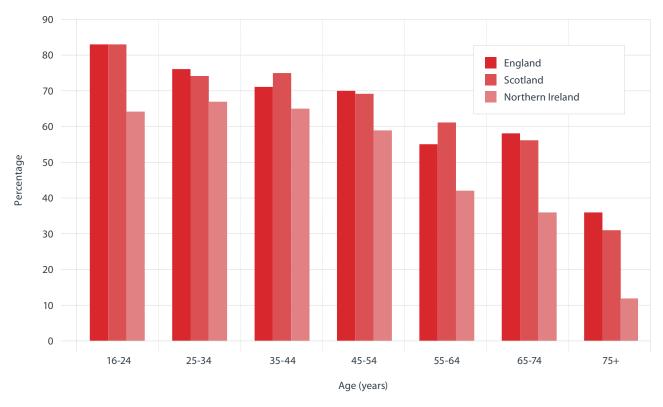
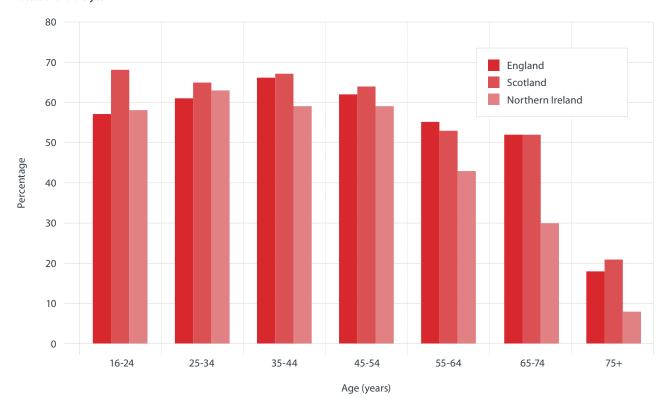


Figure 1.1b

Prevalence of women meeting physical activity recommendations, by age and country, latest available year



Due to the introduction of the new recommendations in 2011, there are no long-term trends for individuals achieving these physical activity targets. In England, 2008 data have been reanalysed to measure physical activity against the 2011 recommendations. This shows that there was no overall change between 2008 and 2012 (Table 1.2).

Table 1.2

Adults meeting the physical activity recommendations, by age and gender, England 2008 and 2012

	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75 +
	%	%	%	%	%	%	%	%
Men								
2008	66	81	78	71	69	57	46	25
2012	66	83	76	71	70	55	51	30
Base							*	
2008	7,284	1,129	1,207	1,404	1,203	1,083	720	538
2012	4,024	597	688	713	711	590	421	303
Women								
2008	53	61	64	63	59	53	37	14
2012	54	57	61	66	62	55	42	13
Base								
2008	7,638	1,088	1,206	1,424	1,226	1,118	795	781
2012	4,210	593	695	724	713	605	458	421

Notes Adults aged 16 and over. ¶ Meets 2011 recommendations: at least 150 minutes moderate or 75 minutes vigorous activity per week or an equivalent combination of these. Source Joint Health Surveys Unit (2013). Health Survey for England 2012: Health, social care and lifestyles. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.



The highest levels of physical inactivity in England are in the North West for both men (26%) and women (31%).

SEE TABLE 1.4

In Scotland, as measured according to the 2011 guidelines, between 2008 and 2012 there was very little change in the overall percentage of people meeting physical activity guidelines in either gender (Table 1.3).

Table 1.3

Adults meeting the physical activity recommendations, by age and gender, Scotland 2008 to 2012

	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%	%
Men								
2008	62	77	77	73	64	51	37	21
2009	62	78	74	70	62	56	41	23
2010	62	81	78	68	63	54	40	19
2011	62	80	79	73	65	49	40	21
2012	63	80	72	72	65	57	43	21
Base								
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
2011	3,274	306	399	516	599	600	511	343
2012	2,122	170	228	345	408	362	384	225
Women								
2008	55	68	65	65	62	53	40	12
2009	55	63	67	67	64	52	36	15
2010	54	62	66	69	63	52	35	14
2011	54	65	67	65	61	51	36	13
2012	53	65	62	66	61	50	41	13
Base								
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
2011	4,253	363	562	710	801	738	596	483
2012	2,685	228	329	474	499	442	387	326

Notes Adults aged 16 and over. ¶ Meets 2011 recommendations; 150 mins moderate / 75 mins vigorous / combination of both per week, using 2008-11 definitions of walking pace, sports and time spent very active at work (time series version). Source Scottish Health Executive (2013). The Scottish Health Survey 2012. Scottish Executive: Edinburgh.

Some regional variation in physical activity levels are found in England. The highest percentages of men and women achieving the recommended levels of physical activity are found in the South East (72% and 61% respectively). The lowest levels are found in the North West of England for men (59%) and the North West and North East for women (both 48%). The highest levels of physical inactivity are found in the North West for both men (26%) and women (31%) (Table 1.4 and Figure 1.4).

Table 1.4

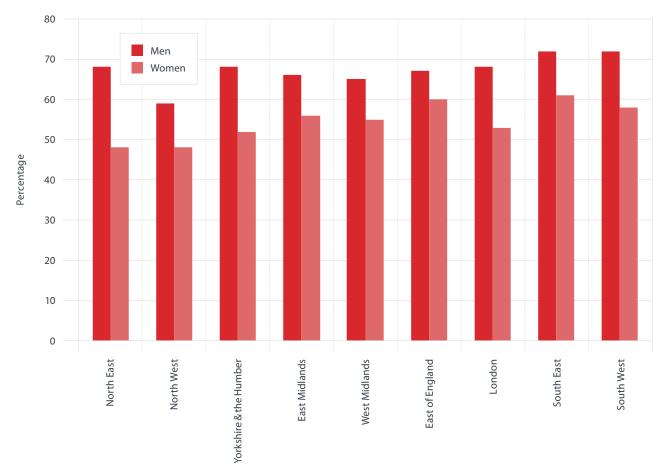
Age-standardised physical activity levels among adults, by gender and region, England 2012

		Government Office Region									
	North East	North West	Yorkshire & the Humber	East Midlands	West Midlands	East of England	London	South East	South West		
	%	%	%	%	%	%	%	%	%		
Men											
Meets recommendations	68	59	68	66	65	67	68	72	72		
Some activity	8	11	10	10	11	9	8	10	10		
Low activity	3	4	4	4	4	4	5	3	2		
Inactive	20	26	19	19	21	20	19	14	15		
Women											
Meets recommendations	48	48	52	56	55	60	53	61	58		
Some activity	17	14	14	14	14	14	12	10	15		
Low activity	6	7	7	5	6	5	6	6	5		
Inactive	30	31	27	26	25	22	28	23	23		
Base											
Men	278	534	362	332	273	417	411	555	366		
Women	367	644	433	383	461	497	561	754	446		

Notes Meets aerobic guidelines: At least 150 minutes moderately intensive physical activity (MPA) or 75 minutes vigorous activity (VPA) per week (pw) or an equivalent combination of these. ¶ Some activity: 60-149 minutes MPA pw or 30-74 minutes VPA pw or an equivalent combination of these. ¶ Low activity: 30-59 minutes MPA pw or 15-29 minutes VPA pw or an equivalent combination of these. ¶ Low activity: 30-59 minutes MPA pw or 15-29 minutes VPA pw or an equivalent combination of these. ¶ Columns may not add up to 100% due to rounding. Source Joint Health Surveys Unit (2013). Health Survey for England 2012: Health, social care and lifestyles. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.



Adults meeting the recommended physical activity guidelines, by gender and region, England 2012



Government Office Region

Physical activity levels vary by household income.

In England, in 2012, 76% of men in the highest income quintile reached recommended levels, compared to 55% of men in the lowest income quintile. Physical activity levels also vary by household income level. In England, in 2012, the percentage of adults achieving recommended levels increased with income (equivalised by number of people in the household): 76% of men in the highest income quintile reached recommended levels, compared to 55% of men in the lowest income quintile. Just over one-third (34%) of women in the lowest income quintile were inactive, compared to 18% of women in the highest income quintile (Table 1.5, Figures 1.5a and 1.5b).

Table 1.5

Physical activity levels in adults, by gender and household income, England 2012

	Equivalised household income quintile									
	Highest	Second	Third	Fourth	Lowest					
	%	%	%	%	%					
Men										
Meets recommendations	76	75	70	62	55					
Some activity	10	9	11	11	11					
Low activity	3	4	5	3	4					
Inactive	11	12	14	24	29					
Women										
Meets recommendations	63	63	56	50	47					
Some activity	14	11	13	15	13					
Low activity	5	7	6	4	6					
Inactive	18	19	24	31	34					
Base										
Men	607	710	589	488	520					
Women	676	763	719	721	745					

Notes Meets aerobic guidelines: At least 150 minutes moderately intensive physical activity (MPA) or 75 minutes vigorous activity (VPA) per week (pw) or an equivalent combination of these. ¶ Some activity: 60-149 minutes MPA pw or 30-74 minutes VPA pw or an equivalent combination of these. ¶ Low activity: 30-59 minutes MPA pw or 15-29 minutes VPA pw or an equivalent combination of these. ¶ Low activity: 30-59 minutes MPA pw or 15-29 minutes VPA pw or an equivalent combination of these. ¶ Low activity: 30-59 minutes MPA pw or 15-29 minutes VPA pw or an equivalent combination of these. ¶ Low activity: 30-59 minutes MPA pw or 15-29 minutes VPA pw or an equivalent combination of these. ¶ Low activity: 30-59 minutes MPA pw or 15-29 minutes VPA pw or an equivalent combination of these. ¶ Inactive: Less than 30 minutes MPA pw or less than 15 minutes VPA pw or an equivalent combination of these. Source Joint Health Surveys Unit (2013). Health Surveys for England 2012: Health, social care and lifestyles. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.



Adults meeting the physical activity recommendations, by gender and household income, England 2012

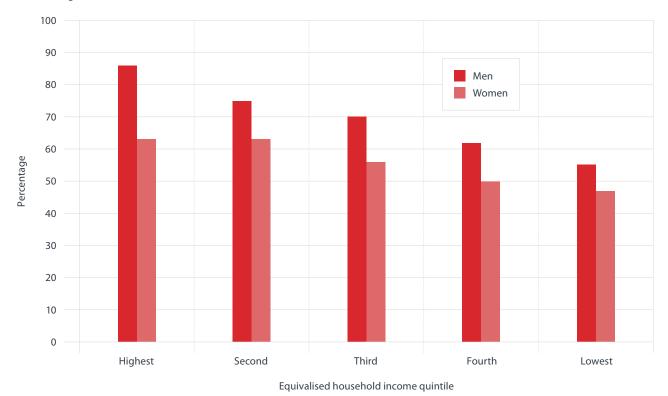
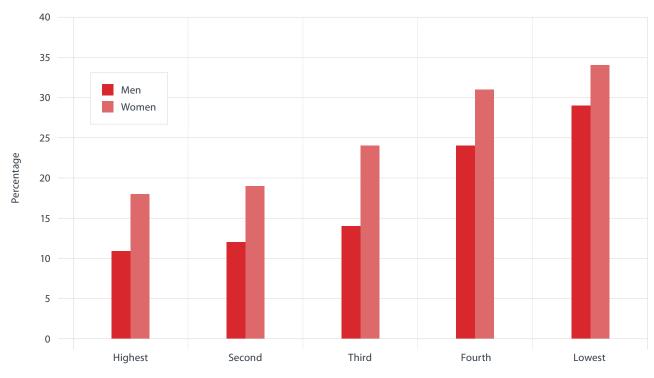


Figure 1.5b

Adults who are inactive, by gender and household income, England 2012



Equivalised household income quintile

PHYSICAL ACTIVITY LEVELS IN CHILDREN

The 2011 physical activity guidelines included, for the first time, recommendations for children under five, encouraging physical activity from birth. The 2011 recommendations for children aged 5 to 18 years include at least moderate activities for 60 minutes a day or more and vigorous intensity activity, including muscle and bone strengthening activities, at least three days each week.

In the 2012 Health Survey for England (HSE) and Scottish Health Survey (SHeS), a child was classified as meeting the recommendations if they were doing 60 minutes or more physical activity on all seven days in the previous week. In the 2012 HSE children aged 2 to 4 were classified as active if they did at least three hours of physical activity per day. Children aged 13 to 15 were asked questions directly about their physical activity, while the parents of children aged 2 to 12 were asked the questions on the child's behalf. In the HSE, physical activity measures did not include activity performed at school.

In both boys and girls in England the proportion of children aged 5 to 15 years meeting recommendations fell between 2008 and 2012.

> The largest declines were at age 13 to 15 years for both genders.

In England, in 2012, around one in ten boys and girls aged 2 to 4 years met the recommended levels of activity. A higher proportion of boys (21%) than girls (16%) reported meeting recommendations in the 5 to 15 years age group. Boys in the 8 to 10 age group had the highest proportion of active children (26%), while for girls it was found in the 5 to 7 age group (23%) (Table 1.6, Figure 1.6).

Table 1.6

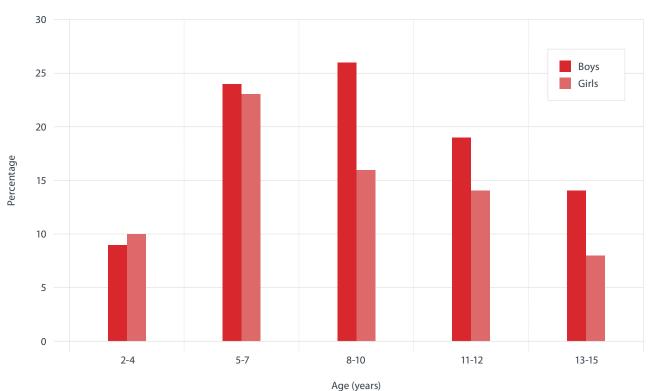
Physical activity levels in children, by age and gender, England 2012

England	All children 5-15	2-4	5-7	8-10	11-12	13-15
	%	%	%	%	%	%
Boys						
Meeting recommendations	21	9	24	26	19	14
Some activity	41	6	39	40	38	44
Low activity	39	85	37	34	43	42
Base	643	212	192	175	123	153
Girls						
Meeting recommendations	16	10	23	16	14	8
Some activity	40	7	37	41	44	38
Low activity	45	83	40	43	42	54
Base	651	206	182	190	133	146

Notes Meets recommendations: Aged 2 – 4, 180 minutes or more daily on all 7 days per week; Aged 5-15, 60 minutes or more on all 7 days of the week. ¶ Some activity: Aged 2-4, 60-179 minutes daily on all 7 days; Aged 5-15 : 30 to 59 minutes on all 7 days of the week. ¶ Low activity: lower levels than those defined above. Source Health and Social Care Information Centre (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

Figure 1.6

Children meeting physical activity recommendations, by age and gender, England 2012



In 2012, in Scotland 73% of boys and 68% of girls in the 2 to 15 years age group met the recommendations. Although data from the Scottish Health Survey (SHeS) did include activity performed at school it is unlikely that this explains the whole difference between HSE and SHeS data. It is likely that data collection differences between the surveys, including the questions asked, also affect this, meaning that direct comparison between the surveys should not be carried out (Table 1.7, Figures 1.7).

Table 1.7

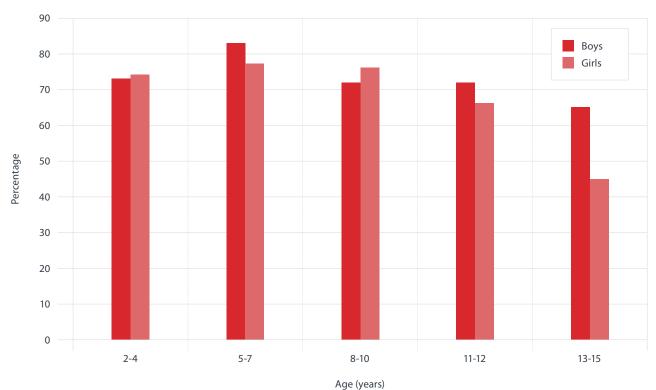
Physical activity levels in children, by age and gender, Scotland 2012

Scotland	All children 2-15	2-4	5-7	8-10	11-12	13-15
	%	%	%	%	%	%
Boys						
Meeting recommendations	73	73	83	72	72	65
Base	791	184	166	159	107	175
Girls						
Meeting recommendations	68	74	77	76	66	45
Base	774	180	179	140	123	152

Notes Meeting recommendations: at least 60 minutes of activity on all 7 days in previous week. ¶ Includes activities in schools. Source Scottish Health Executive (2013). The Scottish Health Survey 2012: Results. The Scottish Executive: Edinburgh.

Figure 1.7





In Wales 59% of boys and 42% of girls aged 4 to 15 years were active for at least one hour per day in five or more days in the past week (Table 1.8).

Table 1.8

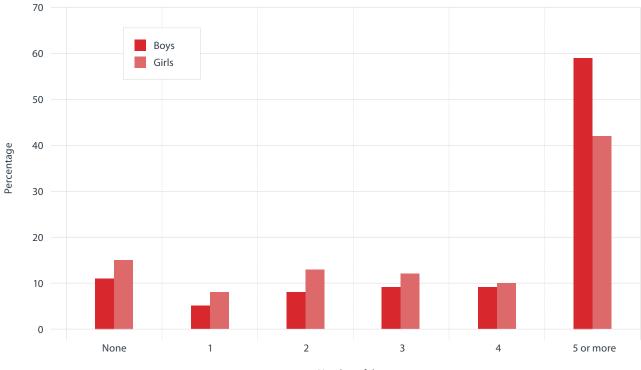
Physical activity levels in children, by gender, Wales 2012

Wales	Number of days with at least one hour of exercise in past week						
	None 1 2 3 4 5 or more						
	%	%	%	%	%	%	
Boys	11	5	8	9	9	59	1,134
Girls	15	8	13	12	10	42	1,056

Notes Children aged 4-15 Source Statistical Publication Unit (2013). Welsh Health Survey 2012. Welsh Government: Cardiff.

Figure 1.8

Number of days with at least one hour of exercise in past week in children, by gender, Wales 2012



Number of days

TRENDS IN CHILDREN

In 2008, the child physical activity questions in the Health Survey for England (HSE) were extensively revised, the 2012 HSE used the same questions so 2012 data could be compared to those from 2008 but no earlier. In both boys and girls in England the proportion of children aged 5 to 15 years meeting recommendations fell between 2008 and 2012. A higher decline was observed amongst boys (2008 = 28%, 2012 = 21%) than girls, amongst whom 19% met physical activity recommendations in 2008 compared to 16% in 2012. The largest declines were at age 13 to 15 years for both genders (Table 1.9, Figures 1.9a and 1.9b).

Regional differences in children achieving physical activity recommendations are found in England.

More than 25% of boys in the South East met recommendations, while only 13% did so in the South West.

SEE TABLE I.II

Table 1.9

Physical activity levels in children, by age and gender, England 2008 and 2012

England					Age (years)
	All children 5 – 15	5-7	8-10	11-12	13-15
	%	%	%	%	%
Boys					
Meeting recommendations					
2008	28	30	29	25	28
2012	21	24	26	19	14
Some activity					
2008	40	37	40	45	40
2012	41	39	40	38	44
Low activity					
2008	32	33	32	30	32
2012	39	37	34	43	42
Base					
2008	2,753	723	734	514	782
2012	643	192	175	123	153
Girls	, ,			·	
Meeting recommendations					
2008	19	25	22	13	14
2012	16	23	16	14	8
Some activity					
2008	38	36	41	43	35
2012	40	37	41	44	38
Low activity					
2008	43	39	36	44	51
2012	45	40	43	42	54
Base					
2008	2,802	715	775	531	781
2012	651	182	190	133	146

Notes Meets recommendations: Aged 2-4, 180 minutes or more daily on all 7 days per week; Aged 5-15, 60 minutes or more on all 7 days of the week. ¶ Some activity: Aged 2-4, 60-179 minutes daily on all 7 days; Aged 5-15 : 30 to 59 minutes on all 7 days of the week. ¶ Low activity: lower levels than those defined above. Source Health and Social Care Information Centre (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.



Boys meeting physical activity recommendations, by age, England 2008 and 2012

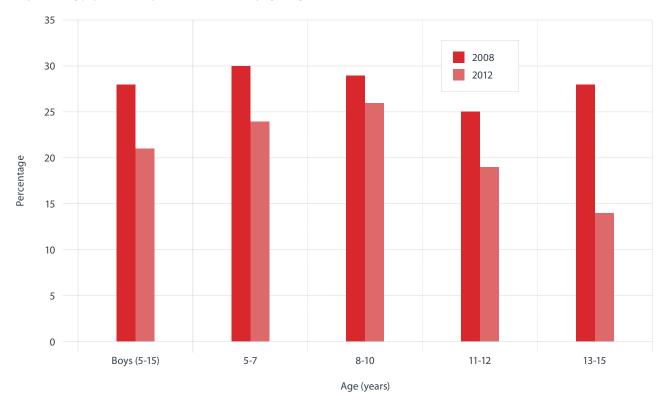
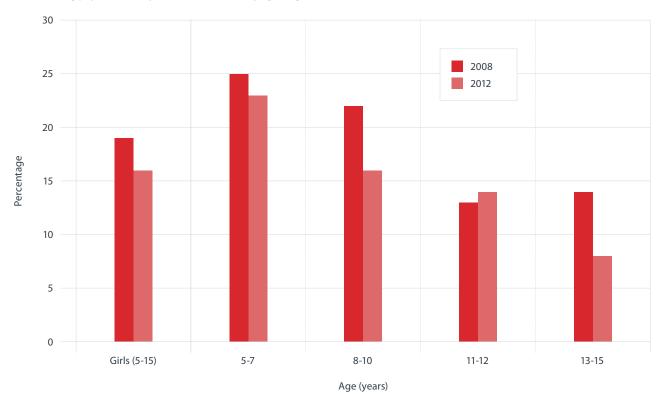


Figure 1.9b

Girls meeting physical activity recommendations, by age, England 2008 and 2012



In Scotland children meeting the new recommendations decreased between 2010 and 2012 for both boys and girls. However, this was not the case for all age groups; the greatest decrease was found in girls aged 11 to 12 years whilst some ages showed an increase, the largest of which was found in boys aged 5 to 7 (Table 1.10).

Table 1.10

Physical activity levels in children, by age and gender, Scotland 2010 & 2012

Scotland						Age (years)
	All children 2-15	2-4	5-7	8-10	11-12	13-15
	%	%	%	%	%	%
Boys						
Meeting recommendations						
2010	75	70	75	85	69	75
2012	73	73	83	72	72	65
Base						
2010	811	188	190	170	104	159
2012	791	184	166	159	107	175
Girls						
Meeting recommendations						
2010	70	69	71	83	79	48
2012	68	74	77	76	66	45
Base						
2010	694	174	143	132	100	145
2012	774	180	179	140	123	152

Notes Meeting recommendations: at least 60 minutes of activity on all 7 days in previous week. ¶ Including activities in schools. Source Scottish Health Executive (2013). The Scottish Health Survey 2012: Results. The Scottish Executive: Edinburgh.



Boys meeting physical activity recommendations, by age, Scotland 2010 and 2012

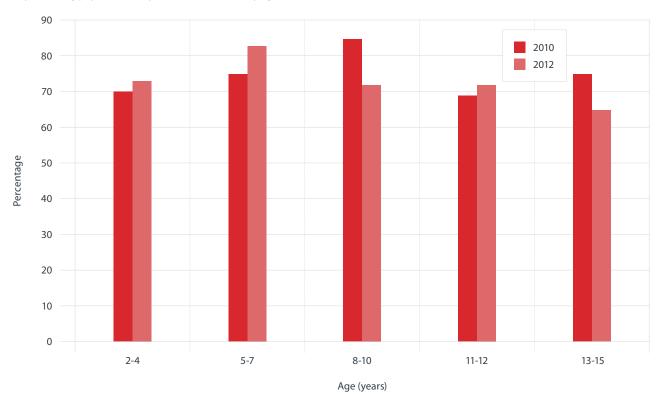
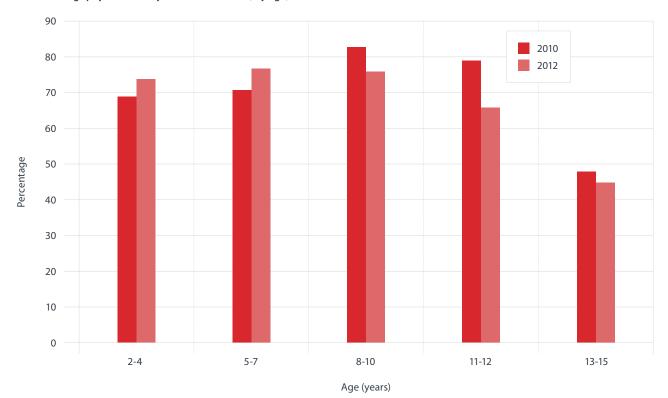


Figure 1.10b

Girls meetings physical activity recommendations, by age, Scotland 2010 and 2012



Regional differences in children achieving physical activity recommendations are found in England. More than 25% of boys in the South East met recommendations, while only 13% did so in the South West and 22% of girls met recommendations in London compared to 10% in the West Midlands (Table 1.11, Figure 1.11).

Table 1.11

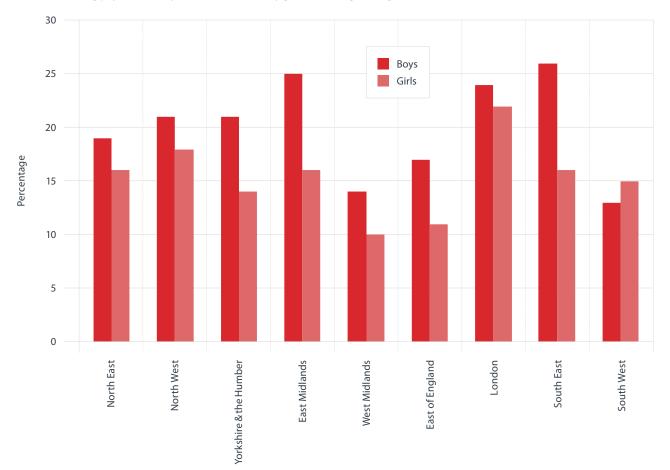
Age-standardised physical activity levels among children, by gender and region, England 2012

		Government Office Region									
	North East	North West	Yorkshire & the Humber	East Midlands	West Midlands	East of England	London	South East	South West		
	%	%	%	%	%	%	%	%	%		
Boys											
Meets recommendations	[19]	21	21	25	14	17	24	26	13		
Some activity	[45]	46	40	40	43	42	34	43	34		
Low activity	[36]	33	39	35	43	41	42	32	52		
Girls											
Meets recommendations	[16]	18	14	16	10	11	22	16	15		
Some activity	[39]	35	46	38	43	46	34	36	47		
Low activity	[45]	47	40	46	47	43	44	48	38		
Base			·								
Boys	39	93	55	64	78	76	84	103	51		
Girls	42	84	64	54	82	71	83	115	56		

Notes Meets recommendations: At least 60 minutes on all 7 days per week. Some activity: Active for 30-59 minutes on all 7 days. ¶ Low activity: Less than 30 minutes per day. ¶ North East data should be treated with caution due to the smaller sample size. Source Health and Social Care Information Centre (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.



Children meeting physical activity recommendations, by gender and region, England 2012



Government Office Region

In 2012, children didn't show any clear pattern in physical activity levels by household income. The lowest percentage of boys meeting physical activity recommendations was in the third income quintile. Amongst girls the highest percentage (19%) of active girls was found in the lowest income quintile and the lowest percentage (13%) in the highest income quintile. It should be noted that these percentages do not include activity at school (Table 1.12, Figure 1.12).

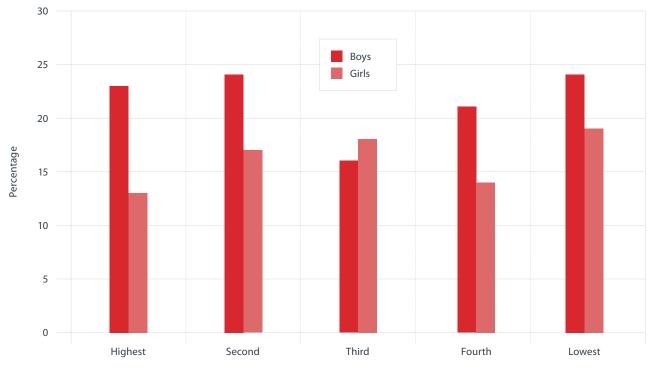
Table 1.12

Age-standardised physical activity levels in children, by gender and household income, England 2012

				Equivalised housel	nold income quintile
	Highest	Second	Third	Fourth	Lowest
	%	%	%	%	%
Boys					
Meets recommendations	23	24	16	21	24
Some activity	51	50	46	31	30
Low activity	26	26	38	47	47
Girls					
Meets recommendations	13	17	18	14	19
Some activity	51	47	39	41	32
Low activity	35	36	43	45	49
Base					
Boys	89	115	107	126	111
Girls	88	106	95	135	130

Notes Meets recommendations: At least 60 minutes on all 7 days per week. Some activity: Active for 30-59 minutes on all 7 days. Low activity: Less than 30 minutes per day. Source Health and Social Care Information Centre (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.





Age-standardised physical activity levels in children, by gender and household income, England 2012

Equivalised household income quintile

ENDNOTES

- 1 Lee IM, et al. (2012). Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. Lancet ; 380: 219–29.
- 2 Local area costs of physical inactivity, Sport England. http://archive.sportengland.org/ support__advice/local_government/local_sport_profile_tool/costs_of_physical_ inactivity.aspx (Accessed October 2014).
- 3 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).
- 4 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.

Chapter 2

TYPES OF PHYSICAL ACTIVITY

Physical activity occurs and can be measured in many contexts beyond sport, such as walking, doing household chores or gardening.¹ This chapter reports on the levels of the various types of physical activity occurring inside and outside of the workplace in the United Kingdom, how it varies between weekdays or weekend days, and between genders. It presents data about the various modes of travel used by adults and children and how these modes have changed over time. Finally, it considers the levels and types of physical activity made available to children within schools and how these vary by age and type of school.

PHYSICAL ACTIVITY OUTSIDE OF WORK

The Health Survey for England (HSE) reports on physical activity occurring both inside and outside of the workplace. Physical activity outside of the workplace includes heavy housework, heavy manual work/gardening/DIY, walking and sports/exercise. In 2012, women in England averaged more time than men on heavy housework, but spent less time on heavy manual/DIY activities and sports/exercise. Men and women spent similar amounts of time walking, but women spent less time engaging in any physical activity outside of the workplace (women = 5.4 hours/week, men = 6.5 hours/week) with the largest difference between genders found amongst 16 to 24 year olds (men = 9.4 hours/week, women = 5.0 hours/week) (Table 2.1, Figure 2.1).

Table 2.1

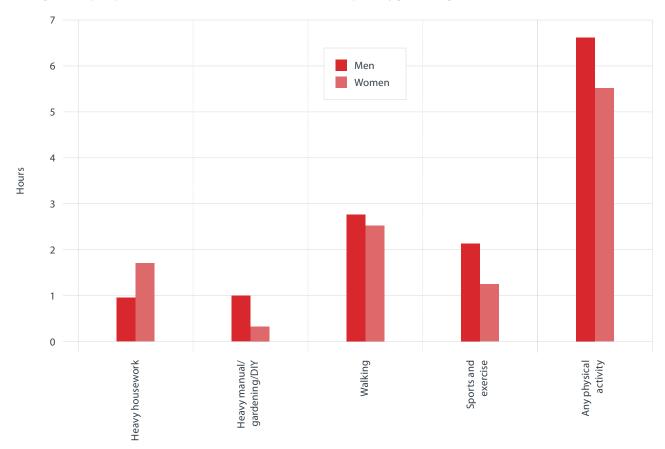
Time spent on different activities outside of the workplace, by gender and age, England 2012

							Average hou	ırs per week
	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
Men								
Heavy housework	0.9	0.9	0.9	0.8	1.2	0.9	0.9	0.8
Heavy manual/gardening/DIY	1.0	0.4	0.9	0.8	1.0	1.2	1.9	0.7
Walking	2.7	3.3	2.8	2.2	2.7	2.7	3.3	1.7
Sports and exercise	2.1	4.7	2.6	2.0	1.9	0.9	1.0	0.5
Any physical activity	6.5	9.4	6.7	5.8	6.3	5.3	7.1	3.6
Base	3,646	374	483	589	613	617	591	379
Women								
Heavy housework	1.7	1.1	1.9	2.1	2.1	1.7	1.6	0.6
Heavy manual/gardening/DIY	0.3	0.1	0.1	0.3	0.5	0.5	0.6	0.1
Walking	2.5	1.9	1.8	3.4	3.2	2.5	3.1	0.9
Sports and exercise	1.2	1.9	1.5	1.5	1.2	0.9	0.8	0.2
Any physical activity	5.4	5.0	5.4	6.8	6.1	5.4	5.9	1.7
Base	4,564	462	687	765	810	680	633	527

Notes Average time based on all participants including those who reported no participation. Source Joint Health Surveys Unit (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.







In 2012, in England, men and women spent similar amounts of time walking, but women spent less time engaging in physical activity outside of the workplace. When looking at the amount of time spent on different activity outside of the workplace, more men than women reported doing no heavy housework, while more women reported doing no heavy manual work/gardening/ DIY. More than half of men (54%) reported not walking compared to 63% of women, with women also less likely to participate in sports and exercise. Men did more physical activity than women outside of the workplace, with more women doing none at all (Tables 2.2a and 2.2b, Figures 2.2a and 2.2b).

Table 2.2a

Time spent on different activities outside of the workplace by men, by age, England 2012

Average time spent per week	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%	%
Heavy housework								
Less than 10 minutes	52	63	48	48	47	53	53	62
10 to 74 minutes	29	23	32	33	31	29	29	22
75 to 299 minutes	14	9	16	15	17	15	12	13
300 minutes or more	4	4	4	3	5	3	6	3
Heavy manual/ gardening/ DIY					·		·	
Less than 10 minutes	74	85	80	74	70	67	64	80
10 to 74 minutes	9	6	9	11	11	9	10	8
75 to 299 minutes	11	6	7	10	15	17	15	7
300 minutes or more	6	4	5	4	5	6	10	6
Walking								
Less than 10 minutes	54	41	46	54	56	65	53	69
10 to 74 minutes	11	12	12	12	12	8	10	13
75 to 299 minutes	20	27	28	21	19	14	15	9
300 minutes or more	14	21	14	13	12	13	22	8
Sports and exercise								
Less than 10 minutes	48	24	30	38	53	67	67	80
10 to 74 minutes	15	11	21	18	12	15	14	9
75 to 299 minutes	22	28	30	30	23	13	12	8
300 minutes or more	15	36	19	13	12	6	7	2
Any non-occupational physical a	ctivity							
Less than 10 minutes	17	7	11	10	17	26	23	37
10 to 74 minutes	13	9	10	15	14	16	13	19
75 to 299 minutes	29	24	35	34	32	26	22	24
300 minutes or more	40	59	43	40	38	32	43	20
Base	3,646	374	483	589	613	617	591	379

Notes Average time spent per week. Source Joint Health Surveys Unit (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

Table 2.2b

Time spent on different activities outside of the workplace by women, by age, England 2012

Average time spent per week	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%	%
Heavy housework				-	•	-		
Less than 10 minutes	41	52	34	28	35	38	44	72
10 to 74 minutes	29	29	32	34	28	28	29	17
75 to 299 minutes	20	11	24	26	24	24	18	8
300 minutes or more	10	8	11	13	13	10	8	3
Heavy manual/ gardening/ DIY	;						· · ·	
Less than 10 minutes	89	96	94	87	86	83	84	96
10 to 74 minutes	5	1	3	7	6	8	6	3
75 to 299 minutes	4	2	2	5	6	6	6	2
300 minutes or more	2	0	1	2	3	3	4	0
Walking								
Less than 10 minutes	63	62	63	57	63	68	51	77
10 to 74 minutes	8	8	7	7	8	4	12	10
75 to 299 minutes	16	20	18	18	15	12	17	8
300 minutes or more	14	11	12	17	14	16	19	5
Sports and exercise								
Less than 10 minutes	55	38	48	45	56	61	65	87
10 to 74 minutes	19	24	21	23	18	18	17	9
75 to 299 minutes	19	28	21	24	19	17	15	4
300 minutes or more	7	10	10	8	6	6	3	1
Any non-occupational physical ad	ctivity			*	*	*	·	
Less than 10 minutes	20	15	14	12	16	22	21	54
10 to 74 minutes	18	20	19	16	15	17	16	21
75 to 299 minutes	29	30	31	32	31	25	27	15
300 minutes or more	34	35	36	40	37	35	36	10
Base	4,564	462	687	765	810	680	633	527

Notes Average time spent per week. Source Joint Health Surveys Unit (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.



Average time spent per week on different activities outside of the workplace in men, England 2012

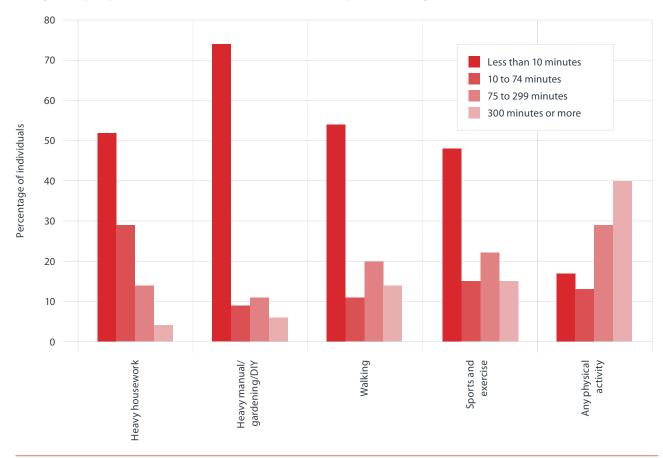
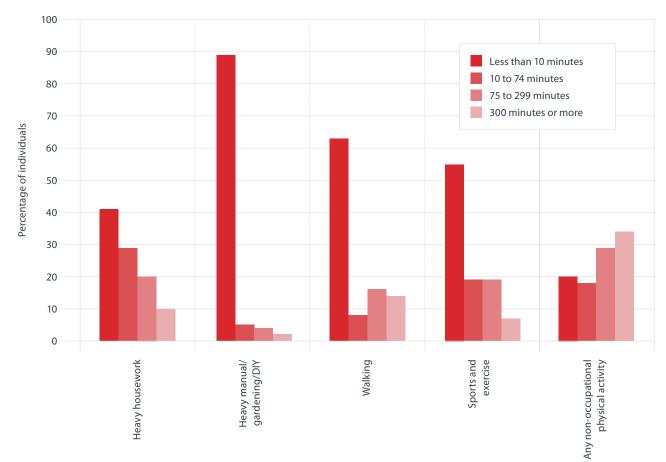


Figure 2.2b

Average time spent per week on different activities outside of the workplace in women, England 2012



When asked about the amount of time over a four week period spent participating in heavy manual work/DIY/gardening men reported an average of 1.1 days, more than women who spent on average 0.5 days over four weeks. Men also spent more time walking (7.9 days) than women (6.9 days), and doing sports/exercise (men = 7.4 days, women = 5.2 days). Women spent more time participating in heavy housework (women = 3.5 days , men = 2.3 days) (Table 2.3, Figures 2.3a and 2.3b).

Table 2.3

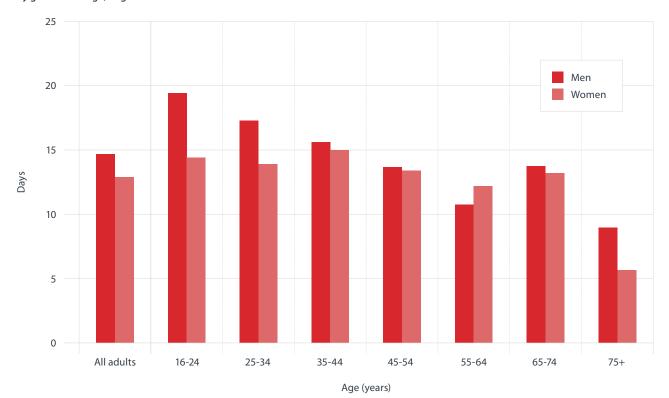
Participation in different activities outside of the workplace, by gender and age, England 2012

				Ave	rage number	of days partic	ipation in the l	ast 4 weeks
	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+
Men								
Heavy housework	2.3	1.7	2.5	2.4	2.4	2.2	2.7	2.1
Heavy manual/ gardening/ DIY	1.1	0.5	0.8	0.9	1.1	1.5	2.2	1.1
Walking	7.9	10.7	9.5	7.9	6.8	5.6	8.6	4.7
Sports and exercise	7.4	13.0	9.8	8.1	6.7	4.0	3.9	2.8
Any physical activity	14.7	19.4	17.3	15.6	13.7	10.8	13.8	9.0
Base	3,646	374	483	589	613	617	591	379
Women								
Heavy housework	3.5	2.5	3.9	4.4	4.2	3.6	3.4	1.7
Heavy manual/ gardening/ DIY	0.5	0.1	0.2	0.4	0.7	0.8	0.9	0.2
Walking	6.9	7.5	7.0	8.2	6.6	6.2	8.4	3.3
Sports and exercise	5.2	7.8	6.2	6.3	5.0	4.4	3.5	1.1
Any physical activity	12.9	14.4	13.9	15.0	13.4	12.2	13.2	5.7
Base	4,564	462	687	765	810	680	633	527

Notes Average is based on all participants, including those who reported no activity. Source Joint Health Surveys Unit (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

Figure 2.3

Average number of days in the last 4 weeks adults participated in activity outside of the workplace, by gender and age, England 2012





PHYSICAL ACTIVITY AT WORK

The Health Survey for England (HSE) reports four types of workplace physical activity: sitting down or standing up; walking around; climbing stairs or ladders and lifting, moving or carrying heavy loads. In 2012, 59% of men and 54% of women reported spending five hours or more per work day sitting or standing. Similar proportions of men (43%) and women (46%) spent no time at work walking around. More than half of men and more than two thirds of women did not spend any time climbing stairs or ladders (men = 57%, women = 65%) or lifting, carrying or moving heavy loads (men = 53%, women = 69%). The mean hours per day of moderate or vigorous workplace activity was more than twice as high for men as it was for women (men = 3.8 hours per week, women = 1.7 hours per week) (Tables 2.4a and 2.4b, Figures 2.4a and 2.4b).

Table 2.4a

Time spent in workplace physical activity in men, by age, England 2012

Average time spent per day	All adults	16-24	25-34	35-44	45-54	55-64	65-74
	%	%	%	%	%	%	%
Sitting or standing							
Less than 10 minutes	12	23	16	7	9	10	14
10 minutes to less than 1 hour	2	5	3	2	2	1	4
1 to less than 5 hours	27	27	20	26	30	31	34
5 hours or more	59	46	61	65	60	58	48
Walking around at work					<u>.</u>		
Less than 10 minutes	43	39	46	44	40	46	54
10 minutes to less than 1 hour	7	6	8	7	7	7	9
1 to less than 5 hours	36	37	32	36	39	36	29
5 hours or more	14	18	15	13	14	12	7
Climbing stairs or ladders	· · · ·						
Less than 10 minutes	57	60	60	54	53	59	66
10 minutes to less than 1 hour	29	22	27	31	31	30	27
1 to less than 5 hours	14	18	13	15	16	9	7
5 hours or more	1	0	1	1	1	1	0
Lifting, carrying, or moving heavy lo	bads						
Less than 10 minutes	53	39	50	58	53	60	65
10 minutes to less than 1 hour	18	20	18	19	18	15	18
1 to less than 5 hours	23	32	23	21	23	21	16
5 hours or more	6	8	9	3	5	5	1
Moderate or vigorous occupational	activity						
Mean hours per day	3.8	5.4	3.3	3.3	4.3	4.0	2.0
Base	2,137	187	413	501	496	396	144

Notes Based on participants aged 16-74 who reported working in the last four weeks, including unpaid work. ¶ Average time spent per day (at least 10 minutes a day). Source Joint Health Surveys Unit (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

Table 2.4b

Time spent in workplace physical activity in women, by age, England 2012

Average time spent per day	All adults	16-24	25-34	35-44	45-54	55-64	65-74
	%	%	%	%	%	%	%
Sitting or standing					2		
Less than 10 minutes	9	11	9	9	9	10	13
10 minutes to less than 1 hour	3	4	1	5	2	3	4
1 to less than 5 hours	33	38	25	31	37	37	44
5 hours or more	54	47	65	55	52	50	39
Walking around at work							
Less than 10 minutes	46	48	50	44	43	43	44
10 minutes to less than 1 hour	8	9	10	9	7	7	13
1 to less than 5 hours	32	26	27	33	38	37	35
5 hours or more	13	18	13	14	12	13	9
Climbing stairs or ladders							
Less than 10 minutes	65	66	67	66	62	61	75
10 minutes to less than 1 hour	27	25	25	27	28	30	18
1 to less than 5 hours	8	6	7	8	9	9	7
5 hours or more	0	2	1	0	0	0	0
Lifting, carrying, or moving heavy l	oads						
Less than 10 minutes	69	65	77	68	65	69	75
10 minutes to less than 1 hour	17	18	14	18	17	17	11
1 to less than 5 hours	13	14	9	13	16	13	13
5 hours or more	1	3	1	1	2	0	1
Moderate or vigorous occupationa	lactivity					·	
Mean hours per day	1.7	1.6	1.6	1.9	2.0	1.7	0.7
Base	2,328	238	452	553	623	362	100

Notes Based on participants aged 16-74 who reported working in the last four weeks, including unpaid work. ¶ Average time spent per day (at least 10 minutes a day). Source Joint Health Surveys Unit (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

> In 2012, in England, 59% of men and 54% of women reported spending five hours or more per work day sitting or standing.



Average time spent per week in workplace physical activities in men, by age, England 2012

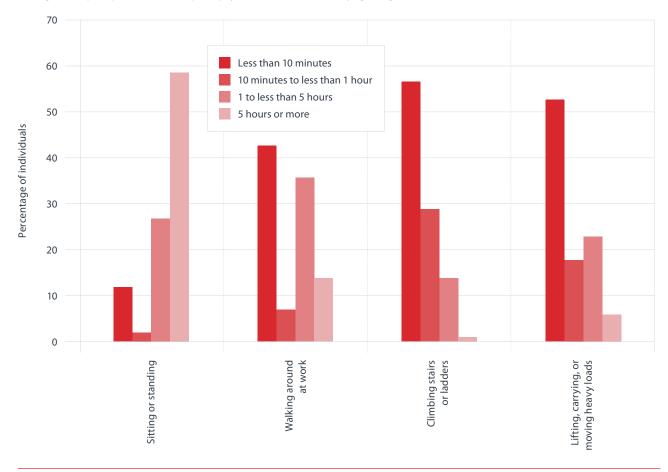
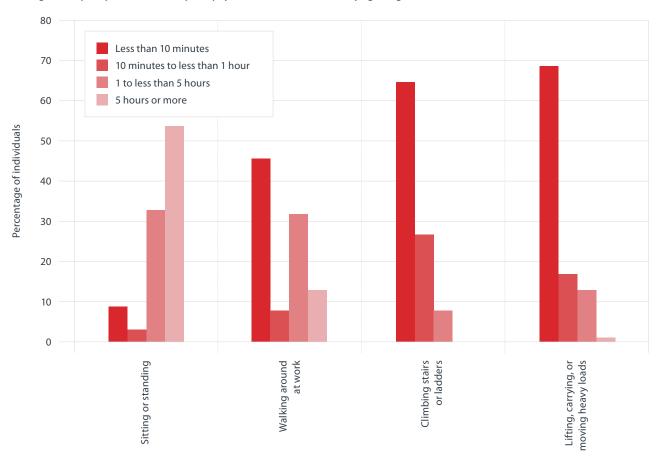


Figure 2.4b

Average time spent per week in workplace physical activities in women, by age, England 2012



The Scottish Health Survey also considered physical activity among adults at work, with questions about moving between floors, climbing (ladders, scaffolds etc.), lifting heavy loads and carrying heavy objects. Thirty per cent of men and 40% of women reported that their main activity at work involved sitting down or standing up, while 29% of men and 25% of women reported that it involved walking about (Table 2.5, Figures 2.5a and 2.5b).

Table 2.5

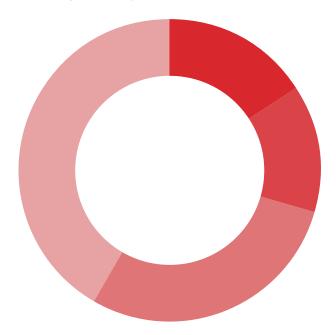
Workplace physical activity among adults in paid work, by gender, Scotland 2010

	All adults	16-24	25-34	35-44	45-54	55-64
	%	%	%	%	%	%
Men						
Number of activities involved in job						
None	39	[19]	37	46	35	46
One	35	[46]	34	30	38	32
At least two	26	[35]	29	23	27	22
Main activity at workplace						
Sitting down	16	[7]	16	25	14	15
Standing up	14	[9]	17	11	19	10
Walking about	29	[21]	30	21	36	37
Equal time spent doing 2 or more of the above	42	[63]	36	43	31	38
Base	547	31	118	133	154	111
Women						
Number of activities involved in job						
None	52	[38]	53	58	49	56
One	31	[26]	33	25	35	35
At least two	16	[36]	14	17	15	9
Main activity at workplace						
Sitting down	33	[15]	40	38	27	38
Standing up	7	[16]	6	8	2	6
Walking about	25	[47]	26	20	21	25
Equal time spent doing 2 or more of the above	35	[22]	28	34	49	30
Base	648	36	125	174	195	118

Notes Questions concerned the following activities: moving between floors, climbing (ladders, scaffolding etc), lifting heavy loads, carrying heavy objects. ¶ Figures in this table are based on those in paid work under the age of 65. ¶ Figures for those aged 16-24 are presented in brackets to highlight the small base that was used and should be interpreted with caution. Source Scottish Centre for Social Research (2011). Scottish Health Survey 2010, web tables. The Scottish Government: Edinburgh.

Figure 2.5a

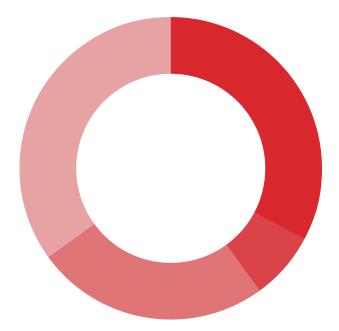
Main activity in the workplace in men, Scotland 2010



- Sitting down **16%**
- Standing up 14%
- Walking about 29%
- Equal time spent doing two or more of the other activities **42%**

Figure 2.5b

Main activity in the workplace in women, Scotland 2010



- Sitting down **33%**
- Standing up 7%
- Walking about 25%
- Equal time spent doing two or more of the other activities **35%**

DISTANCE AND MODE OF TRAVEL

The average number of miles travelled by individuals per year in Great Britain increased between 1975 and 2007, but since 2007 it has decreased. In 2007, on average people travelled 7,103 miles, in 2012 this was 6,691 miles. In 2012, the majority of miles were travelled as a car driver (3,367 miles) or a car passenger (1,847 miles). Just under 3% of all miles travelled per person per year were through walking, an average of 181 miles (Table 2.6, Figure 2.6).

In 2012, in England, more than two thirds of trips were done by car and 22% were on foot in England.

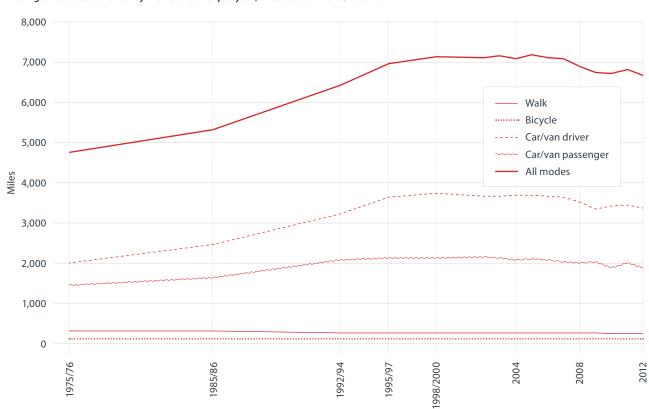
Table 2.6

Average distance travelled by mode of travel, Great Britain 1975/76 to 2012

Average miles travelled per year	1975/76	1985/86	1992/94	1995/97	1998/2000	2002	2003	2004
Walk	255	244	199	200	198	198	201	203
Bicycle	51	44	38	43	40	36	37	39
Car/van driver	1,971	2,425	3,205	3,623	3,725	3,661	3,659	3,675
Car/van passenger	1,401	1,600	2,030	2,082	2,086	2,114	2,099	2,032
Motorcycle/moped	47	51	32	35	33	35	41	38
Other private vehicles	16	33	43	43	44	56	60	59
Bus in London	57	39	42	225	218	224	230	219
Other local bus	372	258	217	94	100	59	87	70
Non-local bus	54	109	96	60	65	81	68	68
London Underground	36	44	50	321	401	413	384	433
Surface rail	289	292	298	46	63	59	55	51
Taxi/minicab	13	27	38	75	46	55	108	61
Other public including air, ferries, light rail, etc.	18	22	41	51	30	35	77	47
All modes	4,740	5,317	6,439	6,981	7,164	7,136	7,192	7,103
Base		25,785	24,671	22,861	21,868	16,886	19,467	19,199

Average miles travelled per year	2005	2006	2007	2008	2009	2010	2011	2012
Walk	197	201	190	193	196	183	187	181
Bicycle	36	39	40	42	46	42	49	53
Car/van driver	3,682	3,660	3,640	3,494	3,340	3,416	3,438	3,367
Car/van passenger	2,063	2,033	1,990	1,973	1,984	1,841	1,958	1,847
Motorcycle/moped	35	34	35	38	38	30	36	35
Other private vehicles	67	63	67	69	71	81	70	67
Bus in London	212	233	239	243	237	226	228	233
Other local bus	75	63	71	56	56	63	53	68
Non-local bus	67	75	71	75	77	73	68	73
London Underground	461	466	509	494	470	506	484	553
Surface rail	60	52	56	53	56	54	55	53
Taxi/minicab	97	96	83	80	56	77	73	67
Other public including air, ferries, light rail, etc.	70	77	76	64	48	58	40	29
All modes	7,208	7,133	7,103	6,920	6,774	6,732	6,826	6,691
Base	19,904	19,490	19,735	18,983	19,914	19,072	18,069	19,154

Notes Short walks believed to be under-recorded in 2002 and 2003 and short trips in 2007 and 2008 compared to other years. ¶ Base not provided for 1975/1976. Source Department for Transport (2013). National Travel Survey 2013. Department for Transport: London. ¶ Department for Transport (2001). National Travel Survey 1991/2001:update. Department for Transport: London. Subject to Crown Copyright.





The average number of trips per person in 2012 was 954, this is a decrease from 1995/97. More than two-thirds of trips were done by car (614 trips) and 22% were on foot (212) (Table 2.7, Figure 2.7).

Table 2.7

Trips per person per year by mode of travel, Great Britain 1976/76 to 2012

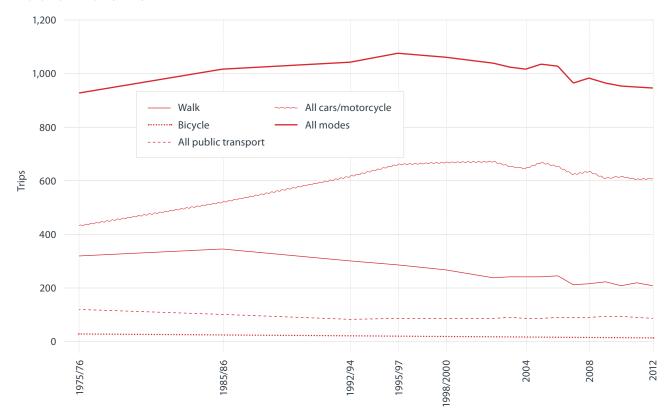
Average trips travelled per year	1975/76	1985/86	1992/94	1995/97	1998/2000	2002	2003	2004
Walk	325	350	306	292	271	244	246	246
Bicycle	30	25	18	18	17	16	15	16
Car/ van driver	262	317	389	425	434	435	425	422
Car/ van passenger	167	200	229	239	238	239	232	229
Motorcycle	9	9	5	4	4	4	4	3
Other private	15	14	11	9	8	9	8	8
Bus in London	14	11	12	13	13	15	15	16
Other local bus	93	72	54	53	50	49	51	48
Non-local bus	1	2	2	2	2	1	1	1
London Underground	4	6	6	7	8	9	8	7
Surface rail	11	12	11	12	13	13	14	16
Taxi/minicab	3	7	9	11	13	12	12	11
Other public	N/A	1	1	1	2	2	3	2
All modes	935	1,024	1,053	1,086	1,071	1,047	1,034	1,026
Base		25,785	24,671	22,861	21,868	16,886	19,467	19,199

Average trips travelled per year	2005	2006	2007	2008	2009	2010	2011	2012
Walk	245	249	216	221	227	213	222	212
Bicycle	14	16	14	16	15	15	16	16
Car/ van driver	435	430	408	410	395	405	398	401
Car/ van passenger	236	228	218	227	217	213	211	213
Motorcycle	4	3	3	4	3	3	4	3
Other private	9	8	8	9	9	8	7	7
Bus in London	16	16	17	18	19	21	18	16
Other local bus	46	49	48	47	49	46	46	44
Non-local bus	1	1	1	1	1	1	1	1
London Underground	7	8	8	9	9	8	8	8
Surface rail	16	16	17	18	16	19	17	19
Taxi/minicab	12	10	11	11	11	10	10	10
Other public	3	3	2	2	2	2	2	2
All modes	1,044	1,037	972	992	972	963	958	954
Base	19,904	19,490	19,735	18,983	19,914	19,072	18,069	19,154

Notes Short walks believed to be under-recorded in 2002 and 2003 and short trips in 2007 and 2008 compared with other years. ¶ Other private includes mostly private hire buses and school buses. ¶ Base not provided for 1975/1976. Source Department for Transport (2013). National Travel Survey 2013. Department for Transport: London. ¶ Department for Transport (2001). National Travel Survey 1991/2001: update. Department for Transport: London. Subject to Crown Copyright.



Trips per person per year by mode of travel, Great Britain 1975/76 to 2012



Increasing car use is a major contributing factor to low levels of physical activity in the UK² and this can be reflected in the increase in car ownership found within the UK. In 1961, 69% of households did not own a car or van, but by 2012 this had decreased to 25%. The number of households with two or more cars or vans has increased from 9% in 1972 to 31% in 2012 (Table 2.8, Figure 2.8).

Table 2.8

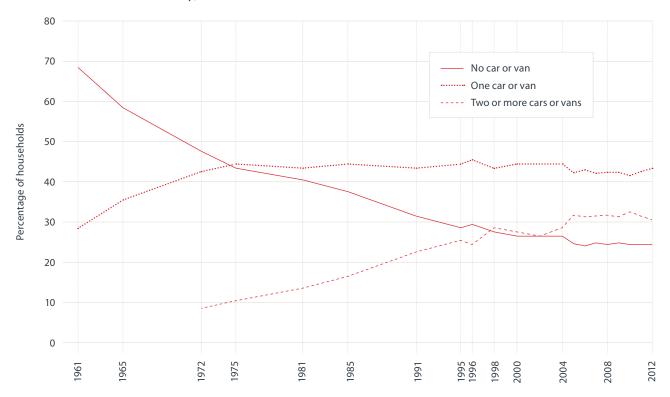
Percentage of households with car or van ownership, Great Britain 1961 to 2012

	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	9,127
2010	25	42	33	8,775
2011	25	43	32	8,460
2012	25	44	31	8,971

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 (2013). National Travel Survey 2013. Department for Transport: London.



Households with car or van ownership, Great Britain 1961 to 2012



CHILDREN'S PHYSICAL ACTIVITY

The Health Survey for England (HSE) also reported children's participation in different types of activity. Among both girls and boys, 85% participated in informal sports and exercise. Just over a half of children reported walking (excluding walking to or from school). Participation in all types of physical activity was above 90% for all age groups for both genders, apart from girls 13 to 15 years of age, amongst whom it was 85% (Table 2.9, Figure 2.9).

Table 2.9

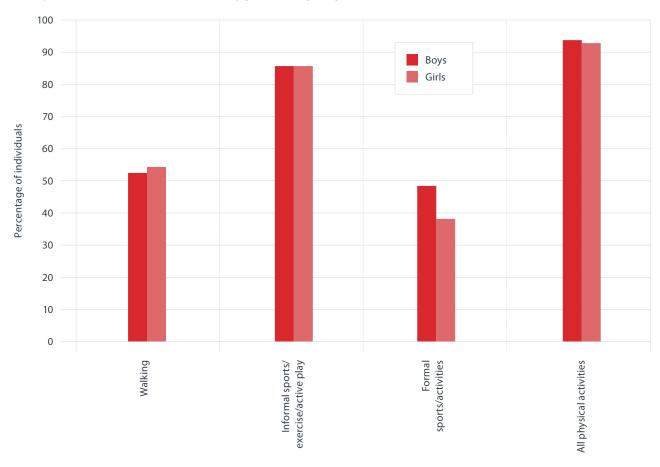
Participation in different activities in children, by gender and age, England 2012

Participation on at least one day in the last week	All children 2-15	2-4	5-7	8-10	11-12	13-15
	%	%	%	%	%	%
Boys						
Walking	52	55	56	44	54	51
Informal sports/exercise/active play	85	89	89	88	79	78
Formal sports/activities	48	32	51	60	52	46
All physical activities	93	95	94	92	92	91
Base	860	214	192	177	124	153
Girls						
Walking	54	57	50	47	59	57
Informal sports/exercise/active play	85	88	92	92	84	68
Formal sports/activities	38	24	47	44	46	32
All physical activities	92	91	95	95	92	85
Base	865	210	184	191	134	146

Notes Walking does not include walking to or from school. Source Joint Health Surveys Unit (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.



Participation in different activities in children, by gender and age, England 2012



85%

Among both girls and boys in England, 85% participated in informal sports and exercise. More than two thirds of boys and girls walk to school, with the proportion increasing with age. The proportion of children cycling to school remains low, particularly among girls, with just 6% of boys and 1% of girls riding to school (Table 2.10, Figure 2.10).

Table 2.10

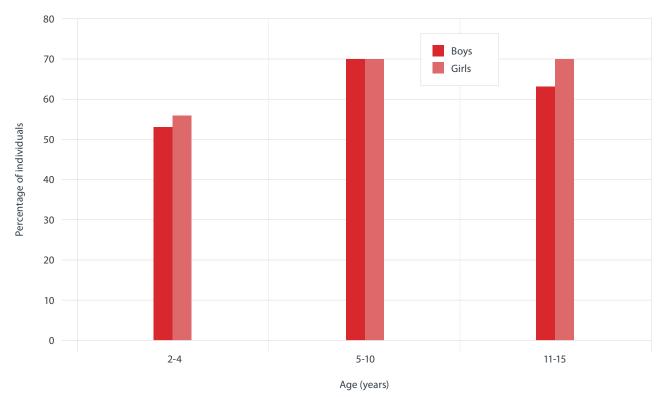
Percentage of children walking or cycling to school, playgroup or nursery by gender and age, England 2012

	Age (years)			
	All children 2-15	2-4	5-10	11-15
	%	%	%	%
Boys				
Walking	64	53	70	63
Cycling	6	3	7	5
Base	696	165	307	224
Girls				
Walking	67	56	70	70
Cycling	1	2	1	1
Base	685	145	311	229

Notes Participation in active travel on at least one day in the last week. ¶ Includes children attending school, playgroup or nursery in the last week Source Health Survey for England 2012: Physical activity and fitness. The Stationery Office: London. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

Figure 2.10

Children walking to school, playgroup or nursery, by gender and age, England 2012



SCHOOL SPORT

ENGLAND

In the latest Taking Part survey, 68% of boys and 66% of girls aged 5 to 10 years played sport in their school in an organised competition. Among children 11 to 15 years of age, the percentage participating in school competitions was lower and there was a larger difference observed between genders (boys = 56%, girls = 48%). Most children aged 11 to 15 years (boys = 79%, girls = 77%) reported playing a competitive sport in physical education or games lessons. Boys were more likely than girls to be a member of a club that plays sport in schools (boys = 36%, girls = 26%) or to have played for a sports team (boys = 49%, girls = 43%) (Table 2.11, Figure 2.11).

Table 2.11

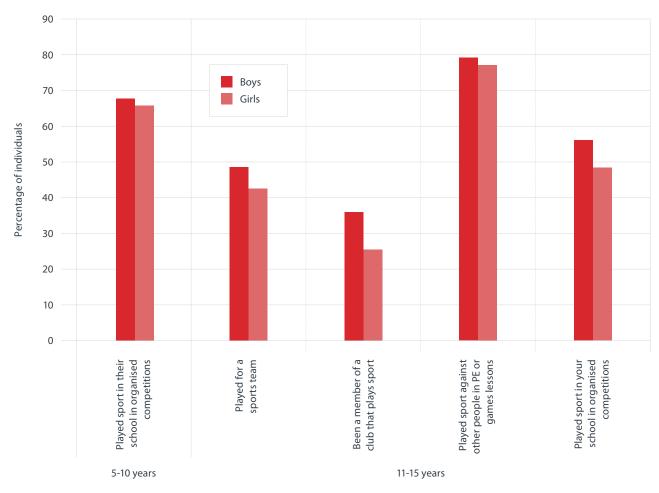
Participation in competitive sport in school in children, by gender, England 2012/13

	Boys	Girls
	%	%
5-10 years		
Played sport in their school in organised competitions	68	66
Base	584	552
11-15 years		
Played for a sports team	49	43
Been a member of a club that plays sport	36	26
Played sport against other people in PE or games lessons	79	77
Played sport in school in organised competitions	56	48
Base	386	415

Notes The results presented here are based on child survey interviews issued between April 2012 and March 2013. Source Department for Culture, Media and Sport. (2013). Taking Part-2012/13 Annual Child Report. Office for National Statistics: London.

Figure 2.11





SCOTLAND

In 2013, the Scottish Healthy Living Survey started including questions on physical education provision in schools; this followed a commitment made by the Scottish Government in 2011 to ensure that by 2014, every student would be allocated two hours of physical activity a week in primary school and 100 minutes a week in secondary school (ages 12-16 years).³ In 2013, a slightly higher proportion of secondary schools (91%) met physical education targets than primary schools (88%). During that year, six out of the 32 Scottish local authorities (19%) reported that all of their primary schools met recommendations, while 20 (63%) reported the same for secondary schools (Table 2.12).

The proportion of children cycling to school remains low, with just 6% of boys and 1% of girls riding to school in 2012. More than two-thirds of boys and girls in England walk to school at least once a week.

SEE TABLE 2.10

Table 2.12

Schools meeting physical education target by local authority, Scotland 2012 to 2013

		Primary	Secondary (S1-S4)		
	2012	2013	2012	2013	
	%	%	%	%	
Aberdeen City	77	67	100	100	
Aberdeenshire	79	87	88	76	
Angus	62	100	100	100	
Argyll & Bute	83	87	100	100	
Clackmannanshire	95	95	100	100	
Dumfries & Galloway	79	82	100	88	
Dundee City	86	100	56	100	
East Ayrshire	100	100	100	100	
East Dunbartonshire	73	95	100	88	
East Lothian*	83	83	0	17	
East Renfrewshire	100	100	100	100	
Edinburgh City	79	89	78	83	
Eilean Siar	78	89	63	83	
Falkirk	55	62	100	100	
Fife	90	94	95	95	
Glasgow City	99	96	100	100	
Highland	80	84	90	72	
Inverclyde	67	75	100	100	
Midlothian	80	77	67	67	
Moray	91	96	100	100	
North Ayrshire	91	92	100	100	
North Lanarkshire	91	95	96	100	
Orkney Islands	85	100	100	100	
Perth & Kinross	99	90	100	100	
Renfrewshire	96	98	100	100	
Scottish Borders	89	79	100	100	
Shetland Islands	61	84	75	63	
South Ayrshire	100	98	100	100	
South Lanarkshire	78	81	100	100	
Stirling	68	85	86	71	
West Dunbartonshire	100	100	100	100	
West Lothian	75	85	91	91	
Scotland	84	88	92	91	

Notes Target provision of physical education refers to at least 120 minutes per week in primary and at least 100 minutes per week in secondary timetabled periods. ¶ * East Lothian contains 6 secondary schools, only one of which was meeting PE targets in 2013. East Lothian reported that it expected all schools to be reaching PE targets by August 2014. Source Scottish Government (2013). Healthy Living Survey 2013. http://www.scotland.gov.uk/Publications/2013/06/7503

WALES

In Wales, the time allocated for physical education in primary schools varied by age group and region. Younger students were generally more likely to be allocated the recommended two hours of physical activity on the curriculum every week. More than half (53%) of schools allocated students aged 3 to 6 years two hours per week, whereas 15% of schools did so for students aged 7 to 11 years. Students aged 7 to 11 in South East Wales were least likely to have the recommended 120 minutes/week (8% of schools), while children aged 3 to 6 in North Wales were most likely (57% of schools) (Table 2.13, Figure 2.13).

Table 2.13

Time allocated for curricular Physical Education (PE) in state schools, by age group and region, Wales 2013

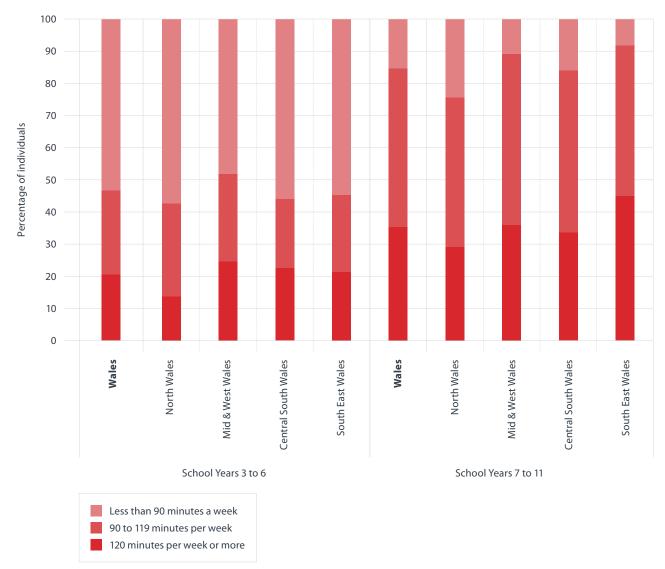
					School Years 3 to 6	
	Wales	North Wales	Mid & West Wales	Central South Wales	South East Wales	
	%	%	%	%	%	
Average number of m	Average number of minutes per week					
Less than 90	21	14	25	23	21	
90 to 119	26	29	27	22	24	
120 or more	53	57	48	56	55	

					School Years 7 to 11	
	Wales	North Wales	Mid & West Wales	Central South Wales	South East Wales	
	%	%	%	%	%	
Average number of mi	Average number of minutes per week					
Less than 90	35	29	36	34	45	
90 to 119	49	46	54	50	47	
120 or more	15	24	11	16	8	

Notes Base: Years 3 to 6 = all state primary schools (n=861), Years 7 to 11 = all state secondary schools (n=194) in Wales. ¶ Geographical areas reported in these tables combine the following local authorities. ¶ North Wales: Isle of Anglesey, Conwy, Denbighshire, Flintshire, Gwynedd, Wrexham. ¶ Mid & West Wales: Carmarthenshire, Ceredigion, Neath Port Talbot, Pembrokeshire, Powys, Swansea. ¶ Central South Wales: Bridgend, Cardiff, Merthyr Tydfil, Rhondda Cynon Taf, the Vale of Glamorgan. ¶ South East Wales: Blaenau Gwent, Caerphilly, Monmouthshire, Newport, Torfaen. Source Sports Wales (2013). School Sport Survey 2013. Cardiff.



Time allocated for curricular Physical Education (PE) in state schools, by age group and region, Wales 2013



ENDNOTES

- 1 World Health Organization (2011). Global recommendations on physical activity for health. WHO: Geneva.
- 2 Sustainable Development Commission (2007). Sustainable transport and active travel. Sustainable Development Commission: London.
- 3 Scottish Government (2013). Healthy Living Survey 2013.

Chapter 3

INTERNATIONAL DIFFERENCES

This chapter reports on international guidelines for physical activity and the levels of physical activity in different countries, including the UK. It presents statistics on adult physical activity collected from EU countries through the Eurobarometer survey. Also included are statistics on child physical activity from many countries from the Health Behaviour in School-aged Children (HBSC) study.

WHO GUIDELINES

The World Health Organization (WHO) recommendations for physical activity, published in 2010,¹ advise that adults should do a minimum of 150 minutes of moderate-intensity, or 75 minutes of vigorous-intensity, aerobic physical activity, every week, although they say that more can be done to provide additional health benefits. Muscle-strengthening activities are also recommended. Additional recommendations are made for people over 65 with poor mobility, or health conditions that may impact on their ability to be active. The recommendations also advise that school-aged children should do at least one hour of moderate to vigorous-intensity activity every day. They advise that the majority of this activity should be aerobic but that muscle and bone strengthening activities should be performed at least three times a week. These recommendations match those published by the UK Chief Medical Officers' in 2011² (Table 3.1).

Table 3.1

WHO recommended guidelines for physical activity, 2010

Adults aged 18 to 65	1. Adults aged 18–64 should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate – and vigorous-intensity activity.
	2. Aerobic activity should be performed in bouts of at least 10 minutes duration.
	3. For additional health benefits, adults should increase their moderate-intensity aerobic physical activity to 300 minutes per week, or engage in 150 minutes of vigorous-intensity aerobic physical activity per week, or an equivalent combination of moderate – and vigorous-intensity activity.
	 Muscle-strengthening activities should be done involving major muscle groups on 2 or more days a week.
Adults aged over 65	 Adults aged 65 years and above should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate – and vigorous- intensity activity.
	2. Aerobic activity should be performed in bouts of at least 10 minutes duration.
	3. For additional health benefits, adults aged 65 years and above should increase their moderate- intensity aerobic physical activity to 300 minutes per week, or engage in 150 minutes of vigorous- intensity aerobic physical activity per week, or an equivalent combination of moderate-and vigorous-intensity activity.
	4. Adults of this age group, with poor mobility, should perform physical activity to enhance balance and prevent falls on 3 or more days per week.
	 Muscle-strengthening activities should be done involving major muscle groups, on 2 or more days a week.
	6. When adults of this age group cannot do the recommended amounts of physical activity due to health conditions, they should be as physically active as their abilities and conditions allow.
School-aged youth	 Children and youth aged 5–17 should accumulate at least 60 minutes of moderate – to vigorous-intensity physical activity daily.
	2. Amounts of physical activity greater than 60 minutes provide additional health benefits.
	 Most of the daily physical activity should be aerobic. Vigorous-intensity activities should be incorporated, including those that strengthen muscle and bone, at least 3 times per week.

Source Global Recommendations on Physical Activity for Health, WHO (2010) http://whqlibdoc.who.int/publications/2010/9789241599979_eng.pdf (Accessed July 2014).

ADULTS

A European Commission report on physical activity levels was published in March 2014.³ This presented findings from interviews conducted in all 28 European Union (EU) states, examining the physical activity levels of individuals. Self-reported rates of regularly exercising or participating in sport varied dramatically by country, although it should be noted that issues of self-report, such as report and recall bias, may show differences between countries. Bulgaria had the lowest prevalence, with only 2% of adults in these countries reporting that they exercised regularly. At 16%, Ireland had the highest reported prevalence of regular exercise. In the UK 10% of adults reported to exercise or play sport regularly, higher than the EU average of 8%, these were both slightly lower than found in 2009 (UK = 14%, EU = 9%)⁴ (Table 3.2, Figure 3.2).

WHO guidelines on physical activity align with those published by the UK Chief Medical Officers in 2011.

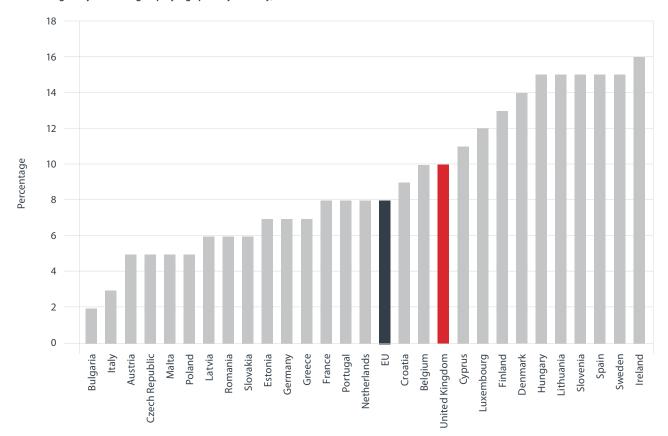
Frequency of adults exercising or playing sport by country, EU 2013

	Never	Seldom	With some regularity	Regularly	Don't know
	%	%	%	%	%
Austria	27	28	40	5	0
Belgium	31	22	37	10	0
Bulgaria	78	9	9	2	2
Croatia	29	36	26	9	0
Cyprus	54	10	25	11	0
Czech Republic	35	29	31	5	0
Denmark	14	18	54	14	0
Estonia	36	24	32	7	1
Finland	15	19	53	13	0
France	42	15	35	8	0
Germany	29	23	41	7	0
Greece	59	10	24	7	0
Hungary	44	18	23	15	0
Ireland	34	14	36	16	0
Italy	60	10	27	3	0
Latvia	39	30	25	6	0
Lithuania	46	17	22	15	0
Luxembourg	29	17	42	12	0
Malta	75	6	14	5	0
The Netherlands	29	13	50	8	0
Poland	52	18	23	5	2
Portugal	64	8	20	8	0
Romania	60	18	15	6	1
Slovakia	41	25	28	6	0
Slovenia	22	27	36	15	0
Spain	44	10	31	15	0
Sweden	9	21	55	15	0
United Kingdom	35	19	36	10	0
EU	42	17	33	8	0

Notes All adults aged 15 and above. ¶ Question asked: How often do you exercise or play sport? Source European Commission (2014). Sport and Physical Activity: Special Eurobarometer 412 / Wave EB80.2 – TNS Opinion & Social. http://ec.europa.eu/public_opinion/archives/ebs/ebs_412_en.pdf (Accessed July 2014).



Adults regularly exercising or playing sport by country, EU 2013



In the UK 10% of adults play sport regularly, this compares to an EU average of 8% and a high of 16% in Ireland. This survey also asked respondents about their physical activity outside of sport. Marked variation by country was found for this question, with 7% of Cypriots, Italians and Portuguese answering that they regularly engage in physical activity outside of sport compared to 44% of Dutch people. In the UK 14% of adults reported that they did, compared to the EU average of 15%, changes to the questions mean that direct comparison between 2013 and previous years is not possible (Table 3.3, Figure 3.3).

Table 3.3

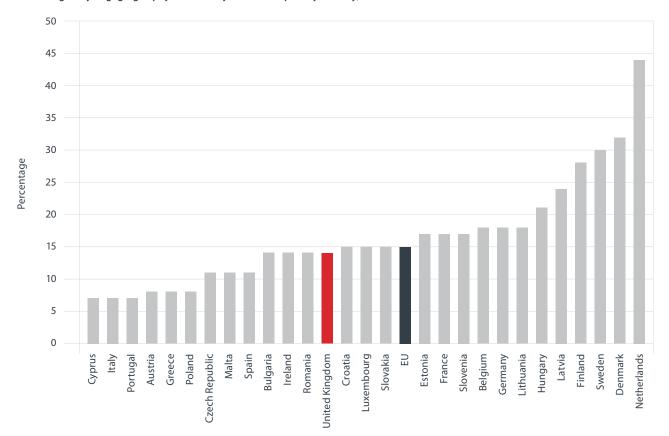
Frequency of adults doing physical activity outside of sport by country, EU countries 2013

	Never	Seldom	With some regularity	Regularly	Don't know
	%	%	%	%	%
Austria	15	36	41	8	0
Belgium	20	25	37	18	0
Bulgaria	51	15	18	14	2
Croatia	17	36	32	15	0
Cyprus	57	15	21	7	0
Czech Republic	19	36	34	11	0
Denmark	6	18	44	32	0
Estonia	18	27	37	17	1
Finland	7	18	46	28	1
France	29	20	34	17	0
Germany	14	23	45	18	0
Greece	49	18	25	8	0
Hungary	28	21	30	21	0
Ireland	29	23	34	14	0
Italy	50	20	23	7	0
Latvia	13	28	34	24	1
Lithuania	28	26	28	18	0
Luxembourg	16	26	42	15	1
Malta	57	11	20	11	1
The Netherlands	6	11	39	44	0
Poland	35	28	26	8	3
Portugal	60	16	17	7	0
Romania	36	24	25	14	1
Slovakia	19	29	37	15	0
Slovenia	13	29	41	17	0
Spain	49	13	27	11	0
Sweden	4	21	45	30	0
United Kingdom	23	25	38	14	0
EU	30	22	33	15	0

Notes All adults aged 15 and above. ¶ Question asked: How often do you engage in other physical activity such as cycling from one place to another, dancing, gardening etc.? Source European Commission (2014). Sport and Physical Activity: Special Eurobarometer 412 / Wave EB80.2 – TNS Opinion & Social. http://ec.europa.eu/public_opinion/archives/ebs/ ebs_412_en.pdf (Accessed July 2014).



Adults regularly engaging in physical activity outside of sport by country, EU 2013



In the Netherlands 44% of adults engage in physical activity outside of sport. The EU average is 15% with 14% engaging in the UK. The percentage of adults reporting to do no vigorous activity during the week ranged from a low of 37% in Finland to a high of 76% in Portugal. The EU average was 54% whilst the percentage for the UK was 50%, in the 2002 survey 58% of the EU population reported to do no vigorous activity (Table 3.4, Figure 3.4).

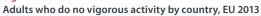
Table 3.4

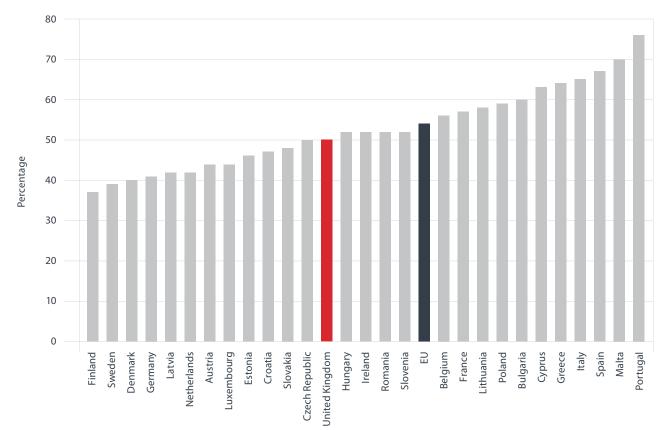
Frequency of adults doing vigorous activity by country, EU 2013

	None	1-3 days	4-7 days	Don't know	
	%	%	%	%	
Austria	44	37	18	1	
Belgium	56	29	14	1	
Bulgaria	60	22	16	2	
Croatia	47	35	16	2	
Cyprus	63	23	14	0	
Czech Republic	50	35	15	0	
Denmark	40	45	15	0	
Estonia	46	29	24	1	
Finland	37	45	18	0	
France	57	27	16	0	
Germany	41	38	20	1	
Greece	64	23	13	0	
Hungary	52	27	21	0	
Ireland	52	27	21	0	
Italy	65	25	9	1	
Latvia	42	30	28	0	
Lithuania	58	24	18	0	
Luxembourg	44	37	17	2	
Malta	70	19	10	1	
The Netherlands	42	41	17	0	
Poland	59	27	13	1	
Portugal	76	15	9	0	
Romania	52	25	20	3	
Slovakia	48	34	17	1	
Slovenia	52	32	16	0	
Spain	67	20	13	0	
Sweden	39	44	17	0	
United Kingdom	50	30	20	0	
EU	54	29	16	1	

Notes All adults aged 15 and above. ¶ Question asked: In the last 7 days how many days did you do vigorous activity like lifting heavy things, digging, aerobics or fast cycling? Source European Commission (2014). Sport and Physical Activity: Special Eurobarometer 412 / Wave EB80.2 – TNS Opinion & Social. http://ec.europa.eu/public_opinion/archives/ebs/ ebs_412_en.pdf (Accessed July 2014).







In comparison with vigorous activity, more adults reported taking part in moderate activity, but 44% of adults in the EU and the UK do none, compared to 54% (EU) and 50% (UK) for vigorous activity. In the Netherlands 14% of adults said that they never did moderate activity compared to 70% in Malta and Cyprus. Data from the fifteen countries of the 2005 Eurobarometer survey showed that the 41% of adults in the EU and 54% in the UK did no moderate activity⁵ (Table 3.5, Figure 3.5).

Table 3.5

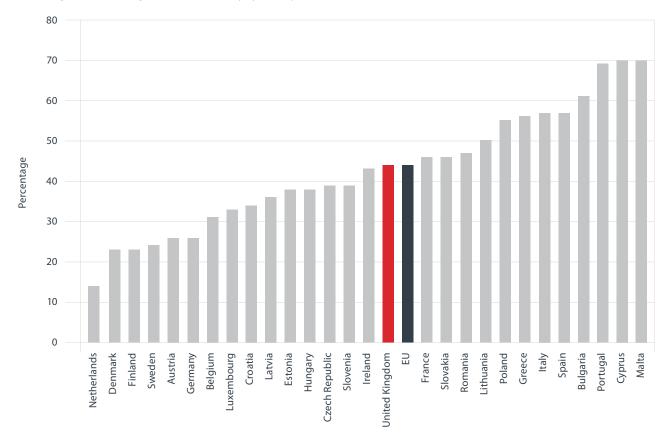
Frequency of adults doing moderate activity by country, EU 2013

	Never	1-3 days	4-7 days	Don't know
	%	%	%	%
Austria	26	40	33	1
Belgium	31	37	32	0
Bulgaria	61	19	18	2
Croatia	34	37	27	2
Cyprus	70	18	12	0
Czech Republic	39	38	22	1
Denmark	23	39	38	0
Estonia	38	36	25	1
Finland	23	42	34	1
France	46	30	23	1
Germany	26	33	39	2
Greece	56	27	17	0
Hungary	38	30	31	1
Ireland	43	30	27	0
Italy	57	28	14	1
Latvia	36	31	33	0
Lithuania	50	26	23	1
Luxembourg	33	41	24	2
Malta	70	17	12	1
The Netherlands	14	33	53	0
Poland	55	28	14	3
Portugal	69	17	14	0
Romania	47	25	24	4
Slovakia	46	34	19	1
Slovenia	39	37	24	0
Spain	57	23	20	0
Sweden	24	41	35	0
United Kingdom	44	31	24	1
EU	44	30	25	1

Notes All adults aged 15 and above. ¶ Question asked: In the last 7 days how many days did you do moderate activity like carrying light loads, cycling at normal pace or doubles tennis? Source European Commission (2014). Sport and Physical Activity: Special Eurobarometer 412 / Wave EB80.2 – TNS Opinion & Social. http://ec.europa.eu/public_opinion/archives/ebs/ebs_412_en.pdf (Accessed July 2014).



Percentage of adults doing no moderate activity by country, EU 2013



In the UK 44% of adults never do any moderate physical activity. Within the EU the Netherlands has the lowest proportion with 14% and Malta and Cyprus the highest with 70%. A low percentage of adults reported that they never walked, 13% in the EU and 9% in the UK. The country with the highest percentage of adults reporting that they never walked was Cyprus with 31%, whilst the countries with the lowest were Romania and Germany with 6%. The EU proportion was lower than that found for 2002 (17%) and 2005 (16%) and the UK lower than found in 2005 (14%) (Table 3.6, Figure 3.6).

Table 3.6

Frequency of adults walking for more than 10 minutes at a time by country, EU 2013

	Never	1-3 days	4-7 days	Don't know	
	%	%	%	%	
Austria	13	30	56	1	
Belgium	19	38	43	0	
Bulgaria	8	13	77	2	
Croatia	10	29	59	2	
Cyprus	31	26	43	0	
Czech Republic	10	28	62	0	
Denmark	14	28	58	0	
Estonia	12	19	68	1	
Finland	8	30	61	1	
France	17	24	59	0	
Germany	6	23	70	1	
Greece	13	25	62	0	
Hungary	18	32	50	0	
Ireland	10	21	69	0	
Italy	23	36	39	2	
Latvia	10	19	71	0	
Lithuania	10	19	70	1	
Luxembourg	10	25	63	2	
Malta	15	31	52	2	
The Netherlands	14	27	59	0	
Poland	25	29	41	5	
Portugal	17	22	60	1	
Romania	6	20	72	2	
Slovakia	8	20	70	2	
Slovenia	13	33	54	0	
Spain	8	16	76	0	
Sweden	7	29	64	0	
United Kingdom	9	23	68	0	
EU	13	26	60	1	

Notes All adults aged 15 and above. ¶ Question asked: In the last 7 days, on how many days did you walk for at least 10 minutes at a time? Source European Commission (2014). Sport and Physical Activity: Special Eurobarometer 412 / Wave EB80.2 – TNS Opinion & Social. http://ec.europa.eu/public_opinion/archives/ebs/ebs_412_en.pdf (Accessed July 2014).



Estonia

Austria

Greece Slovenia EU Belgium

ltaly Poland Cyprus

Hungary

Portugal

Malta

France

Netherlands

Denmark

Figure 3.6

15

10

5

0

Sweden

Germany Romania Bulgaria Finland Slovakia Spain Croatia

Czech Republic

United Kingdom

Ireland Latvia Lithuania Luxembourg

In the EU 60% of adults walk for extended periods for four or more days per week. The UK proportion is 68% of adults and the highest is Bulgaria at 77%.

Eleven percent of adults in the EU and 13% in the UK reported that they were sedentary for longer than eight and a half hours a day. The EU figure was slightly lower than that found in 2002 (13%). In 2013 this percentage was smallest in Spain, Italy and Portugal with 6% and highest in the Netherlands and Denmark with 25% (Table 3.7, Figure 3.7).

Table 3.7

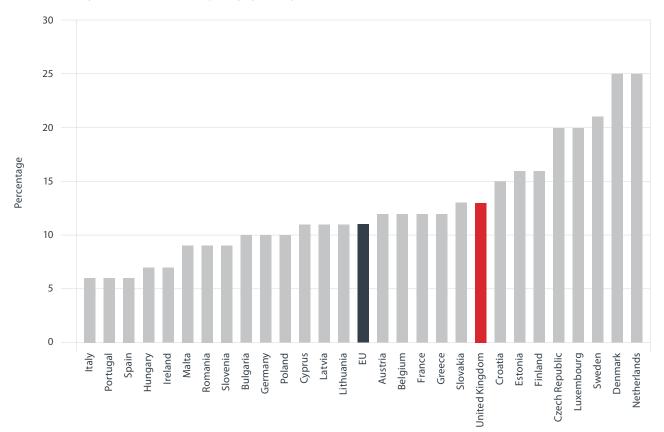
Time spent in sedentary behaviour in adults by country, EU 2013

	8 hours 31 minutes or more	5 hours 31 minutes to 8h 30m	2 hours 31 minutes to 5h 30 m	2 hours 30 minutes or less	Don't know
	%	%	%	%	%
Austria	12	34	42	6	6
Belgium	12	30	41	17	0
Bulgaria	10	33	41	10	6
Croatia	15	28	39	17	1
Cyprus	11	29	43	17	0
Czech Republic	20	27	40	12	1
Denmark	25	35	33	7	0
Estonia	16	27	41	15	1
Finland	16	35	38	9	2
France	12	26	44	17	1
Germany	10	28	42	18	2
Greece	12	30	43	15	0
Hungary	7	19	47	25	2
Ireland	7	23	48	20	2
Italy	6	25	42	21	6
Latvia	11	25	44	19	1
Lithuania	11	29	43	16	1
Luxembourg	20	27	38	14	1
Malta	9	22	37	30	2
The Netherlands	25	37	32	5	1
Poland	10	22	37	21	10
Portugal	6	18	37	33	6
Romania	9	18	40	27	6
Slovakia	13	32	37	15	3
Slovenia	9	17	46	28	6
Spain	6	20	55	18	1
Sweden	21	34	36	7	2
United Kingdom	13	24	45	16	2
EU	11	26	43	17	3

Notes All adults aged 15 and above. ¶ Question asked: How much time do you spend sitting on a usual day? This may include time spent at a desk, visiting friends, studying or watching television? Source European Commission (2014). Sport and Physical Activity: Special Eurobarometer 412 / Wave EB80.2 – TNS Opinion & Social. http://ec.europa.eu/public_opinion/ archives/ebs/ebs_412_en.pdf (Accessed July 2014).



Adults sedentary for more than 8.5 hours per day by country, EU 2013



13% of UK adults are sedentary for longer than 8.5 hours a day. The EU average is 11%.

Highest are the Netherlands and Denmark (25%).

CHILDREN

The Health Behaviour in School-aged Children (HBSC) study is a school based self-completion survey targeting 11 to 15 year olds. The HBSC is a cross-national study gaining insight into young people's well-being, health behaviours and their social context. This research collaboration with the WHO Regional Office for Europe is conducted every four years in 43 countries across Europe and North America. The latest data collection took place in the 2009/10 academic years with findings published in 2012.⁶

Of the UK countries taking part in the HBSC only Scotland (55%) had a greater percentage of 11 year old children reporting that they did vigorous physical activity for two or more hours a week than found for the HBSC average (49%), with England (49%) equal to it and Wales lower (46%). UK countries had a higher percentage than the HBSC average (51%) for 13 year olds (England 52%, Wales 52%, and Scotland 60%) and 15 year olds (HBSC average 51%; Wales 53%, England 57% and Scotland 60%) (Table 3.8).

For the UK countries only girls at 13 (22%) and 15 (13%) years of age in England had a lower percentage reporting to spend two or more hours playing computer games than the average for the HBSC (13 year old girls = 25%, 15 year old girls = 20%). For all other ages the UK countries had a higher percentage than the HBSC average (Table 3.9).

The HBSC average of children reporting to use a computer for e-mail, internet or homework on two or more hours on a weekday was lower for all age groups than for the UK countries (Table 3.10).

Percentage of children participating In vigorous physical activity for two or more hours per week by age and country, HBSC 2009/10

Country/Region		11 yea	ar olds (%)		13 yea	ar olds (%)		15 yea	r olds (%)
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Armenia	47	25	36	47	32	40	50	23	36
Austria	69	51	60	76	55	66	66	43	55
Belgium (Flemish)	70	57	64	68	52	60	68	52	60
Belgium (French)	65	47	56	66	53	59	68	49	58
Canada	60	52	56	63	54	58	66	59	62
Croatia	49	32	40	54	35	44	54	27	41
Czech Republic	46	35	40	48	32	40	47	28	37
Denmark	75	64	70	78	66	72	71	67	69
England	52	45	49	55	48	52	66	47	57
Estonia	39	33	36	40	35	37	47	40	44
Finland	73	64	69	64	55	59	59	55	57
France	63	45	54	67	43	55	65	40	53
Germany	64	52	58	70	59	64	73	57	65
Greece	65	53	59	69	52	60	64	43	53
Greenland	35	38	36	44	28	36	50	37	43
Hungary	52	37	45	58	42	50	60	36	48
Iceland	54	51	52	60	60	60	66	63	64
Ireland	55	45	50	57	46	51	55	38	47
Italy	55	36	45	65	45	55	64	38	51
Latvia	43	34	38	48	37	42	51	39	45
Lithuania	38	26	32	48	26	37	57	33	45
Luxembourg	81	68	75	80	61	70	77	57	67
FYRO Macedonia	33	19	26	41	29	35	47	26	37
Netherlands	82	79	80	79	75	77	81	70	75
Norway	68	64	66	75	70	73	73	67	70
Poland	46	35	40	44	29	36	49	27	38
Portugal	41	23	32	51	29	40	56	30	43
Romania	40	23	32	46	20	33	38	17	28
Russian Federation	53	39	46	49	37	43	54	38	46
Scotland	58	52	55	67	53	60	65	54	60
Slovakia	55	37	46	55	37	46	58	36	47
Slovenia	53	39	46	57	44	50	55	36	45
Spain	53	31	42	41	16	29	56	34	45
Sweden	55	50	52	59	51	55	61	50	56
Switzerland	78	63	70	76	63	69	73	55	64
Turkey	40	24	32	43	19	31	46	16	31
Ukraine	43	31	37	46	33	39	50	25	37
United States	48	40	44	54	41	48	58	38	48
Wales	51	40	46	58	46	52	62	43	53
HBSC average	55	43	49	58	44	51	60	42	51

Notes Young people were asked to report the number of hours per week that they were usually physically active in their free time (outside school hours), so much that they got out of breath or sweated. Source Currie C et al., eds. Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) study: international report from the 2009/2010 survey. Copenhagen, WHO Regional Office for Europe, 2012 (Health Policy for Children and Adolescents, No. 6).

Percentage of children playing games on a computer or games console for two or more hours on weekdays by age and country, HBSC 2009/10

Country/Region		11 ye	ar olds (%)		13 уе	ar olds (%)		15 yea	r olds (%)
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Armenia	41	24	33	45	29	37	51	28	39
Austria	29	16	22	43	24	34	47	23	35
Belgium (Flemish)	36	17	26	40	20	30	44	14	29
Belgium (French)	26	22	24	36	29	33	45	29	37
Canada	45	25	35	53	30	41	52	27	40
Croatia	45	21	33	51	26	39	46	23	35
Czech Republic	50	24	37	62	28	45	62	21	41
Denmark	57	28	42	64	31	47	68	22	45
England	54	24	39	61	22	41	50	13	32
Estonia	62	32	47	68	32	50	63	21	42
Finland	45	25	35	49	12	31	45	9	27
France	39	21	30	49	25	37	41	15	28
Germany	26	16	21	46	31	38	56	27	41
Greece	41	19	30	50	23	37	49	18	34
Greenland	38	15	26	39	12	25	35	11	23
Hungary	41	24	32	55	26	40	53	23	38
Iceland	34	11	22	48	10	29	51	6	29
Ireland	32	15	24	35	14	24	28	12	20
Italy	31	16	24	40	26	33	44	26	35
Latvia	53	23	38	63	23	43	59	15	37
Luxembourg	23	16	19	40	24	32	44	19	32
FYRO Macedonia	43	26	35	56	41	49	59	40	50
Netherlands	48	26	37	55	26	41	59	16	37
Norway	—	—	_	54	15	34	61	14	38
Poland	57	34	46	65	27	46	62	20	41
Portugal	43	23	33	49	28	39	51	16	34
Romania	57	43	50	70	50	60	68	52	60
Russian Federation	54	36	45	57	38	48	61	31	46
Scotland	63	29	46	69	31	50	64	26	45
Slovakia	57	29	43	65	26	46	59	17	38
Slovenia	39	17	28	47	14	31	46	9	28
Spain	35	21	28	39	29	34	43	31	37
Sweden	52	25	39	61	37	49	66	28	47
Switzerland	16	8	12	24	12	18	28	8	18
Turkey	33	19	26	41	22	31	45	22	33
Ukraine	42	26	34	48	25	37	44	23	33
United States	31	17	24	32	20	26	28	13	20
Wales	54	32	43	63	34	48	54	22	38
HBSC average	40	22	31	50	25	37	49	20	35

Notes No data for Norway (11-year-olds) or Lithuania all ages. ¶ Young people were asked how many hours per day they played games on a computer or a games console in their spare time on weekdays. Source Currie C et al., eds. Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) study: international report from the 2009/2010 survey. Copenhagen, WHO Regional Office for Europe, 2012 (Health Policy for Children and Adolescents, No. 6).

Percentage of children using a computer for e-mail, internet or homework for two or more hours on weekdays by age and country, HBSC 2009/10

Country/Region		11 yea	ar olds (%)		13 yea	r olds (%)		15 yea	r olds (%)
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Armenia	30	16	23	33	24	29	47	34	40
Austria	24	19	22	35	38	36	53	56	55
Belgium (Flemish)	31	30	31	38	44	41	48	53	50
Belgium (French)	19	19	19	28	34	31	38	39	38
Canada	29	36	32	40	57	48	50	61	56
Croatia	34	29	32	43	50	47	54	61	57
Czech Republic	27	29	28	40	56	48	57	70	64
Denmark	33	28	31	45	53	49	64	66	65
England	36	41	39	48	66	57	68	75	71
Estonia	44	39	41	53	66	60	64	76	70
Finland	31	35	33	44	55	50	58	60	59
France	27	24	26	36	43	40	43	52	48
Germany	18	17	18	38	44	41	55	58	56
Greece	33	22	27	41	43	42	54	49	52
Greenland	12	8	10	16	16	16	23	28	26
Hungary	33	25	29	45	47	46	53	53	53
Iceland	30	28	29	53	55	54	71	75	73
Ireland	15	17	16	25	31	28	30	33	31
Italy	23	23	23	36	46	41	51	57	54
Latvia	30	32	31	41	55	48	54	64	59
Lithuania	33	26	29	38	44	41	47	57	52
Luxembourg	20	18	19	41	45	43	56	55	55
FYRO Macedonia	35	25	30	49	46	47	58	60	59
Netherlands	36	35	36	58	64	61	62	75	69
Norway	22	24	23	43	57	50	65	81	73
Poland	47	44	45	54	56	55	64	66	65
Portugal	33	32	33	52	54	53	60	51	55
Romania	38	30	34	49	41	45	57	55	56
Russian Federation	43	46	44	45	53	49	59	65	62
Scotland	33	38	35	45	61	53	60	67	63
Slovakia	42	39	40	53	61	57	65	70	68
Slovenia	26	28	27	42	50	46	51	58	55
Spain	26	25	25	40	42	41	48	56	52
Sweden	31	31	31	46	58	52	61	69	65
Switzerland	12	11	12	25	30	28	42	45	44
Turkey	35	29	32	39	37	38	40	33	37
Ukraine	24	19	22	30	27	29	32	37	35
United States	18	19	18	23	39	31	34	43	39
Wales	37	44	41	52	66	59	61	68	65
HBSC average	29	28	29	41	48	44	53	57	55

Notes Young people were asked how many hours per day they used a computer for e-mail, Internet or homework in their spare time on weekdays. Source Currie C et al., eds. Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) study: international report from the 2009/2010 survey. Copenhagen, WHO Regional Office for Europe, 2012 (Health Policy for Children and Adolescents, No. 6).

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- 1 Global Recommendations on Physical Activity for Health, WHO (2010). http://whqlibdoc. who.int/publications/2010/9789241599979 eng.pdf (Accessed July 2014).
- 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 European Commission (2014). Sport and Physical Activity: Special Eurobarometer 412 / Wave EB80.2 – TNS Opinion & Social. http://ec.europa.eu/public_opinion/archives/ebs/ ebs_412_en.pdf (Accessed July 2014).
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- 5 Allender A, Scarborough P, Peto V, Rayner M, Leal J, Luengo-Fernandez R, Gray A (2008). European Cardiovascular Disease Statistics 2008 edition. European Heart Network, Brussels.
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Chapter 4

CARDIAC REHABILITATION

This chapter describes cardiac rehabilitation (CR) programmes in the UK and reports on physical activity and health outcomes among patients participating in these programmes using data from the BHF National Audit of Cardiac Rehabilitation (NACR).

In 2011/12, 43% of the patients in England, Northern Ireland and Wales who had a heart attack (myocardial infarction), coronary artery bypass surgery (CABG), or an angioplasty (PCI) took part in cardiac rehabilitation (CR).¹ Cardiac rehabilitation programmes aim to reduce cardiac mortality, promote self-management and improve quality of life.

CARDIAC REHABILITATION PROGRAMMES IN THE UK

National clinical guidelines for cardiac rehabilitation recommend that CR programmes be multi-disciplinary and tailored to the needs of the individual.² The team of health professionals includes nurses, physiotherapists, dietitians, pharmacists and exercise specialists. In the UK, the number of different health professionals available to patients in CR programmes fell between 2009/10 and 2011/12. The percentage of phase III programmes (initial outpatient CR programmes) with access to physiotherapists remained steady (ranging from 62% to 64% between 2009/10 and 2011/12), but the proportion of programmes with access to exercise specialists dropped from 55% in 2009/10 to 44% in 2011/12 (Table 4.1, Figure 4.1).

Table 4.1

Cardiac rehabilitation programmes with access to health professionals, NACR 2009/10 to 2011/12

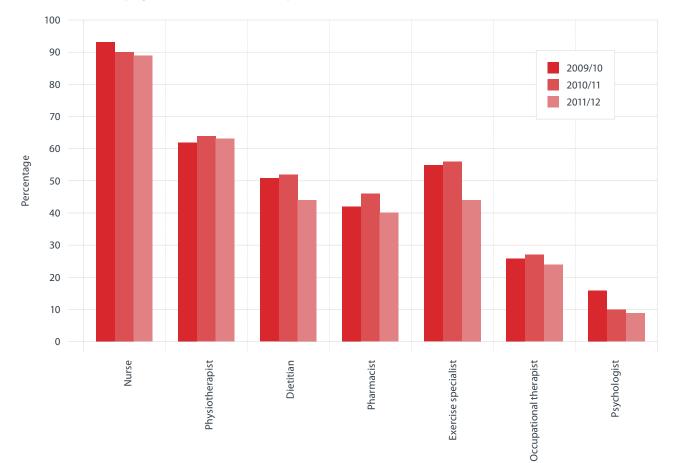
	2009/10	2010/11	2011/12
	%	%	%
Nurse	93	90	89
Physiotherapist	62	64	63
Dietitian	51	52	44
Pharmacist	42	46	40
Exercise specialist	55	56	44
Occupational therapist	26	27	24
Psychologist	16	10	9

Notes NACR collects data from England, Wales and Northern Ireland. ¶ No data from Scotland included. The Scottish Government funds its own audit. Source British Heart Foundation (2013). The National Audit of Cardiac Rehabilitation: Annual Statistical Report 2013. British Heart Foundation: London.

The proportion of CR programmes with access to exercise specialists dropped from 55% in 2009/10 to 44% in 2011/12.



Cardiac rehabilitation programmes with access to health professionals, NACR 2009/10 to 2011/12



The percentage of patients taking part in exercise in CR programmes has changed little between 2009/10 and 2011/12. Patients choose from a range of interventions that are offered at the level of the individual (e.g. written lifestyle education, individual exercise, therapy) or in group settings (e.g. group exercise, lifestyle education talks or group classes). One of the most popular interventions is group exercise, with about half of CR patients participating between 2009/10 and 2011/12. Relative to group exercise, the individual-level exercise interventions were less popular, with 27% of CR patients taking part in home exercise and 15% to 17% in individual exercise (Table 4.2, Figure 4.2).

Table 4.2

Cardiac rehabilitation patients taking part in exercise, NACR 2009/10 to 2011/12

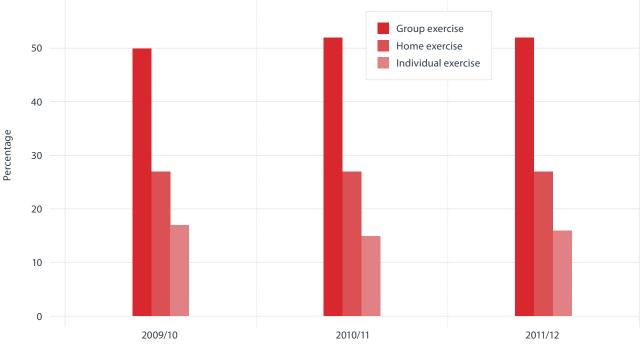
	2009/10	2010/11	2011/12
	%	%	%
Group exercise	50	52	52
Home exercise	27	27	27
Individual exercise	17	15	16
Base	44,606	42,708	40,893

Notes NACR collects data from England, Wales and Northern Ireland. ¶ No data from Scotland included. The Scottish Government funds its own audit. Source British Heart Foundation (2013). The National Audit of Cardiac Rehabilitation: Annual Statistical Report 2013. British Heart Foundation: London.

Figure 4.2



Cardiac rehabilitation patients taking part in exercise, NACR 2009/10 to 2011/12



CARDIAC REHABILITATION AND PHYSICAL ACTIVITY OUTCOMES

Promoting physical activity is one of the key components of cardiac rehabilitation programmes. In England in 2000, the National Service Framework for Coronary Heart Disease recommended that at 12 months, at least half of all people who participated in cardiac rehabilitation should be taking regular physical activity of at least 30 minutes duration on average for five times a week.³

12 WEEK OUTCOMES

According to the 2013 National Audit of Cardiac Rehabilitation (NACR) annual review, the proportion of patients meeting these recommendations increased from 33% before CR to 56% 12 weeks after (Table 4.3, Figure 4.3a). Comparing the physical activity outcomes between genders, the proportion of patients meeting recommended physical activity levels increased by 22% for men and by 24% for women. Women were still less likely to meet the recommendations than men due to lower baseline levels (Table 4.3).

Table 4.3

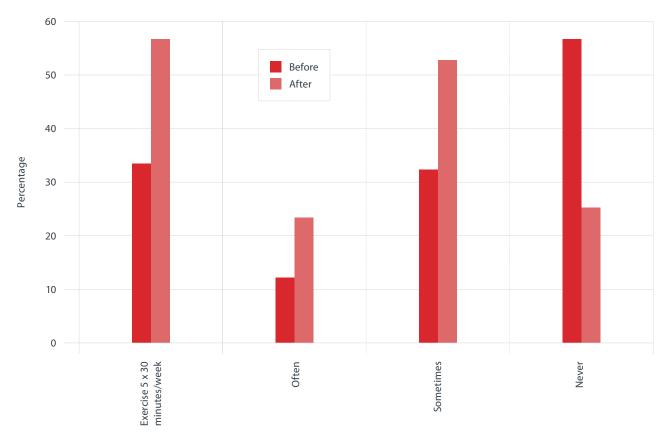
Patient physical activity outcomes before and after completing cardiac rehabilitation, NACR 2011/12

		12 weeks		12 months
	Before	After	Before	After
	%	%	%	%
Exercise – 5 x 30 minutes/week				
Men	36	58	n/a	n/a
Women	26	50	n/a	n/a
All adults	33	56	34	48
Exercise – all adults				
Often	12	23	12	21
Sometimes	32	52	32	47
Never	56	25	55	32
Base		15,967		3,780

Notes In England, the National Service Framework for Coronary Heart Disease (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. ¶ Twelve month data not available for men and women separately. ¶ NACR collects data from England, Wales and Northern Ireland. ¶ No data from Scotland included. The Scottish Government funds its own audit. Source British Heart Foundation (2013). The National Audit of Cardiac Rehabilitation: Annual Statistical Report 2013. British Heart Foundation: London.



Patient physical activity outcomes before and 12 weeks after completing cardiac rehabilitation, NACR 2011/2012



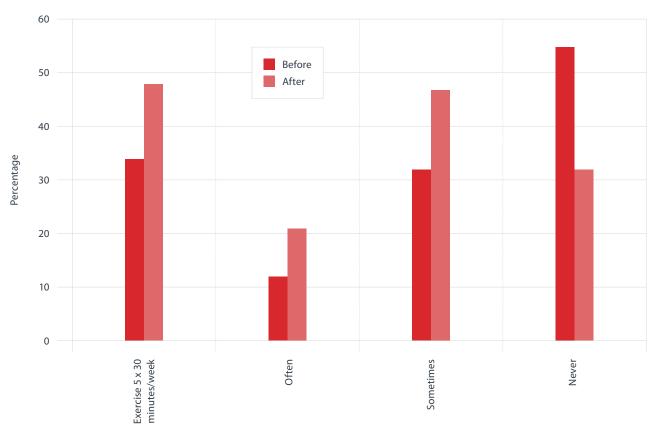
The percentage of CR patients doing 30 minutes of exercise five times a week increases from 33% before completing a CR programme to 56% I2 weeks after.

12 MONTH OUTCOMES

The proportion of patients meeting recommendations increased from 34% before CR to 48% 12 months after. Furthermore, the percentage of patients reporting to rarely or never exercise decreased by 23% (Table 4.3, Figure 4.3b).

Figure 4.3b

Patient physical activity outcomes before and 12 months after completing cardiac rehabilitation, NACR 2010/2011



In addition to these self-reported physical activity outcomes, the NACR annual review collected indicators to measure the impact of CR using the Dartmouth outcomes method, which has been validated in cardiac populations and includes a set of measures related to the patient's functional health status in areas including physical fitness, feelings, daily activities, social activities and change in status.⁴ Twelve weeks after CR, there was a 30% increase in the proportion of patients with a normal score for physical fitness and after 12 months, there was a 27% increase (Table 4.4, Figure 4.4).

Table 4.4

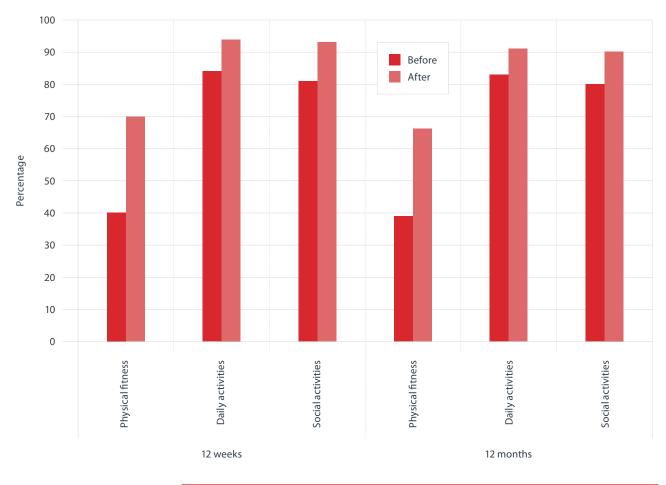
Patients with a normal score in functional health status outcomes before and twelve weeks after completing cardiac rehabilitation, NACR 2011/12

		12 weeks	12 month			
	Before	After	Before	After		
	%	%	%	%		
Physical fitness	40	70	39	66		
Daily activities	84	94	83	91		
Social activities	81	93	80	90		
Base		12,135		2,973		

Notes NACR collects data from England, Wales and Northern Ireland. ¶ No data from Scotland included. The Scottish Government funds its own audit. Source British Heart Foundation (2013). The National Audit of Cardiac Rehabilitation: Annual Statistical Report 2013. British Heart Foundation: London.

Figure 4.4

Normal health status score before and after cardiac rehabilitation, NACR 2011/12



ENDNOTES

- 1 British Heart Foundation (2013). The National Audit of Cardiac Rehabilitation: Annual Statistical Report 2013. British Heart Foundation: London.
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- 3 Department of Health (2000). National Service Framework for Coronary Heart Disease: Modern Standards and Service Models. The Stationary Office: London.
- 4 The Dartmouth Primary Care Cooperative (CO-OP) Information Project. http://www.dartmouthcoopproject.org/coopcharts_overview.html

Chapter 5

SEDENTARY BEHAVIOUR

Sedentary behaviour refers to a number of individual behaviours in which energy expenditure is very low and sitting or lying is the dominant mode of posture.¹ Research suggests that sedentary behaviour is associated with poor health at all ages. As sedentary behaviour is not simply a lack of physical activity, this association is independent of the level of overall physical activity.^{2,3,4,5,6}

Even amongst individuals who are active at the recommended levels, spending large amounts of time sedentary may increase risk of some adverse health outcomes.

The Chief Medical Officers' report 'Start Active, Stay Active: a report on physical activity for health from the four home countries', launched in 2011, provided recommendations on sedentary behaviour for the first time. The report recommends that both children and adults should minimise the amount of time spent being sedentary for extended periods. The report states that while there is evidence that suggests sedentary behaviour is associated with adverse health outcomes, there are not enough data to provide a specific quantitative recommendation on daily sedentary time for health or maintaining a healthy body weight.

This chapter reports on the prevalence of sedentary behaviour in adults and children by gender and age; sedentary behaviour by income group is reported for children and we present data separately for weekends and weekdays.

On weekdays, men and women had a similar amount of average sedentary time in England.

16%



The lowest prevalence of individuals sedentary for six or more hours on weekdays was found amongst those aged 35 to 44 years.

SEDENTARY BEHAVIOUR IN ADULTS

On weekdays, men and women had a similar amount of average sedentary time in England. The lowest prevalence of individuals sedentary for six or more hours on weekdays was found amongst those aged 35 to 44 years (men = 16%, women = 15%), with sedentary behaviour increasing with age after 44.

A similar pattern is apparent for sedentary time on weekends, with men more sedentary than women. In the 35 to 44 age group, 31% of men were sedentary for six or more hours on a weekend day, whilst the equivalent figure for women was 24% (Table 5.1, Figures 5.1a and 5.1b).

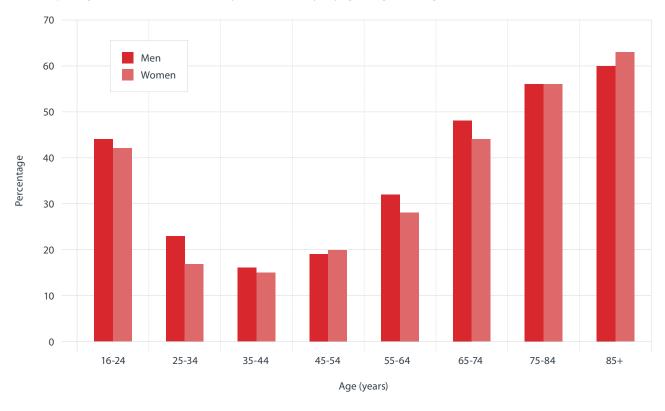
Table 5.1

Sedentary time per day in adults, by age and gender, England 2012

	Age (yea								
	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
	%	%	%	%	%	%	%	%	%
Men									
Weekday									
Less than 2 hours	7	5	7	13	8	5	2	1	5
2 to 4 hours	32	23	41	42	40	30	19	13	5
4 to 6 hours	30	28	29	29	32	34	32	30	30
6 hours or more	31	44	23	16	19	32	48	56	60
Weekend day								· · ·	
Less than 2 hours	5	8	4	7	5	4	2	2	6
2 to 4 hours	23	20	26	29	26	21	18	13	5
4 to 6 hours	32	34	32	36	35	28	29	27	24
6 hours or more	40	49	36	31	32	40	52	56	62
Base	3,676	377	485	593	613	623	596	305	84
Women									
Weekday									
Less than 2 hours	8	4	10	14	10	6	2	2	2
2 to 4 hours	32	20	42	48	38	31	17	12	9
4 to 6 hours	31	34	31	23	32	35	38	31	26
6 hours or more	29	42	17	15	20	28	44	56	63
Weekend day									
Less than 2 hours	6	4	6	9	8	5	3	4	2
2 to 4 hours	24	20	28	34	30	22	19	11	10
4 to 6 hours	34	31	39	33	34	40	34	30	23
6 hours or more	35	45	27	24	29	33	45	56	65
Base	4,600	466	694	767	817	685	638	396	137

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 (2013). Health Survey for England 2012: Health, social care and lifestyles. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

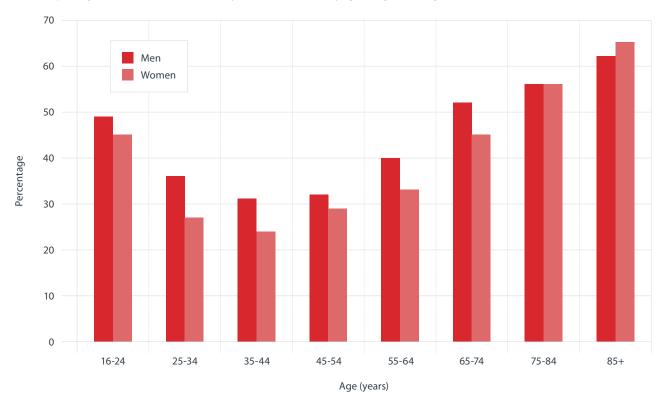
Figure 5.1a



Adults reporting six or more hours of sedentary time on weekdays, by age and gender, England 2012

Figure 5.1b

Adults reporting six or more hours of sedentary time on weekends, by age and gender, England 2012



On average in England, men and women were more sedentary on weekend days (men = 5.4 hours, women = 5.1 hours) than weekdays (men = 4.9 hours, women = 4.7 hours). Although older individuals had the highest average number of sedentary hours, 16 to 24 year olds were sedentary for just under six hours a day (men = 5.7 hours, women = 5.6 hours, on both weekdays and weekend days), which was higher than those aged 55 to 64 (Table 5.2, Figures 5.2a and 5.2b).

Table 5.2

Average number of hours of sedentary time per day in adults, by age and gender, England 2012

	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Men									
Weekday	4.9	5.7	4.5	3.9	4.2	5.0	6.0	6.4	6.7
Weekend day	5.4	5.7	5.2	4.7	5.0	5.4	6.1	6.3	6.7
Base	4,075	603	696	724	716	596	429	244	68
Women									
Weekday	4.7	5.6	4.0	3.6	4.2	4.7	5.7	6.6	7.2
Weekend day	5.1	5.6	4.6	4.3	4.7	4.9	5.6	6.3	7.3
Base	4,600	466	694	767	817	685	638	396	137

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 (2013). Health Survey for England 2012: Health, social care and lifestyles. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

On average in England, men and women were more sedentary on weekend days than weekdays.



Average number of hours of sedentary time per day in men, by age, England 2012

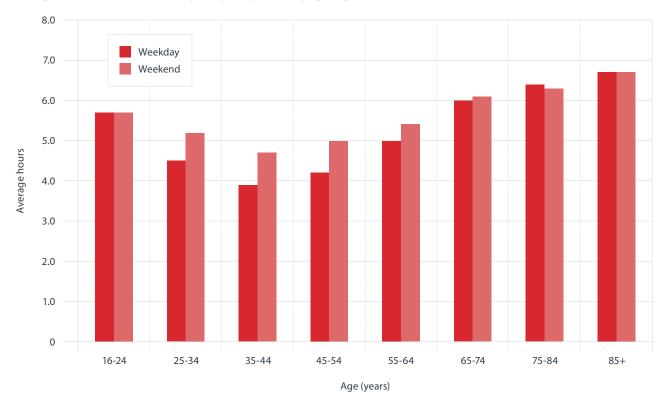
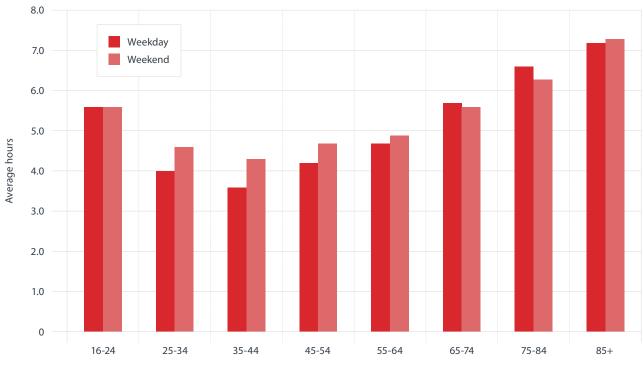


Figure 5.2b

Average number of hours of sedentary time per day in women, by age, England 2012



Age (years)

The Scottish Health Survey also reported on sedentary activities outside of work. The time people reported sitting in front of a screen or sitting doing other things (such as reading) were combined into one summary estimate of sedentary leisure time. Men and women reported similar amounts of sedentary time (5.5 hours per weekday and 6.1 hours per weekend day for men and 5.4 hours per weekday and 5.9 hours per weekend day for women). Patterns are similar to England, with the highest sedentary times observed in the lowest (16 to 24 years) and highest (75+) age groups. In almost all age groups (with the exception of women 75 and older), adults spent more leisure time sedentary on the weekend compared to the rest of the week (Table 5.3, Figures 5.3a and 5.3b).

Table 5.3

Time spent on sedentary activities in adults, by age and gender, Scotland 2012

	Average hours per day								
	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75+	
Men									
Weekday	5.5	5.6	5.1	4.6	5.1	5.6	6.7	7.4	
Base	2,112	168	227	344	409	363	382	219	
Weekend day	6.1	6.0	5.6	5.7	5.8	6.1	6.9	7.6	
Base	2,102	168	228	341	406	361	380	218	
Women									
Weekday	5.4	5.5	4.6	4.6	4.7	5.5	6.5	7.6	
Base	2,665	224	327	474	496	438	387	319	
Weekend day	5.9	5.9	5.3	5.3	5.5	5.8	6.5	7.5	
Base	2,661	223	328	473	495	438	386	318	

Notes Data come from a short set of questions asking about time spent sitting down in a number of leisure time activities. ¶ Sedentary activities include both television and non-television activities. Source Scottish Health Executive (2013). The Scottish Health Survey 2012. The Scottish Executive, Edinburgh.

In 2011, in Scotland, men and women reported similar amounts of sedentary time, with 5.5 hours per weekday for men and 5.4 hours for women.



Average sedentary time per day in men, Scotland 2012

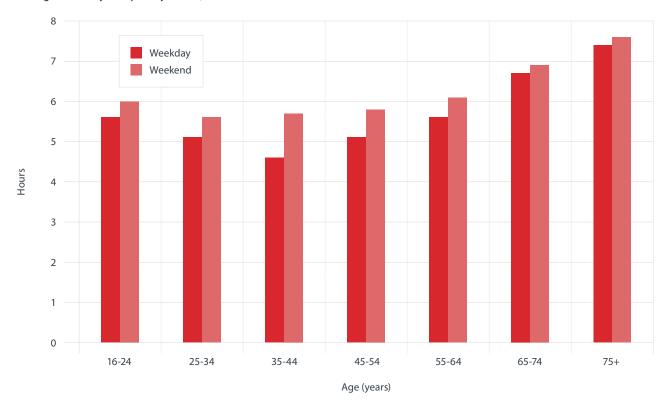
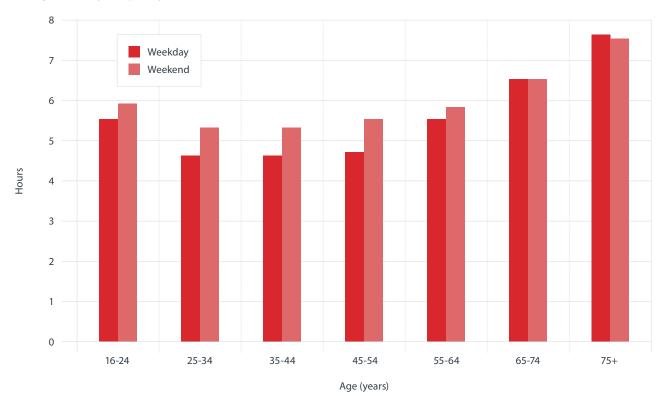


Figure 5.3b Average sedentary time per day in women, Scotland 2012



SEDENTARY BEHAVIOUR IN CHILDREN

On weekdays, the highest proportion of children sedentary for six hours or more was found in the oldest age group (13 to 15 years) for both genders (boys = 24%, girls = 16%). A higher proportion of both gender were sedentary on weekend days than weekdays with 43% of boys and 37% of girls aged 13 to 15 sedentary for 6 hours or more on weekend days (Table 5.4, Figures 5.4a and 5.4b).

Table 5.4

Total sedentary time per day in children, by age and gender, England 2012

	Age (year:								
	All children 2-15	2-4	5-7	8-10	11-12	13-15			
	%	%	%	%	%	%			
Boys									
Weekday									
Less than 2 hours	18	28	26	15	9	9			
2 to 4 hours	48	44	52	60	46	38			
4 to 6 hours	23	21	19	18	34	29			
6 hours or more	11	7	4	7	11	24			
Weekend day									
Less than 2 hours	11	22	13	4	9	8			
2 to 4 hours	33	36	40	38	23	24			
4 to 6 hours	33	32	31	36	40	26			
6 hours or more	23	10	15	22	27	43			
Base	862	216	192	177	124	153			
Girls									
Weekday									
Less than 2 hours	17	26	28	14	11	3			
2 to 4 hours	49	48	52	57	47	39			
4 to 6 hours	26	18	16	25	36	41			
6 hours or more	7	7	4	3	6	16			
Weekend day									
Less than 2 hours	12	19	11	9	13	7			
2 to 4 hours	37	48	38	35	37	23			
4 to 6 hours	31	24	34	35	32	33			
6 hours or more	20	9	16	21	17	37			
Base	868	212	184	191	135	146			

Notes Data come from a short set of questions asking about time spent sitting down in a number of leisure time activities. Source Health and Social Care Information Centre (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.



Children reporting six hours or more sedentary time on weekdays, by age and gender, England 2012

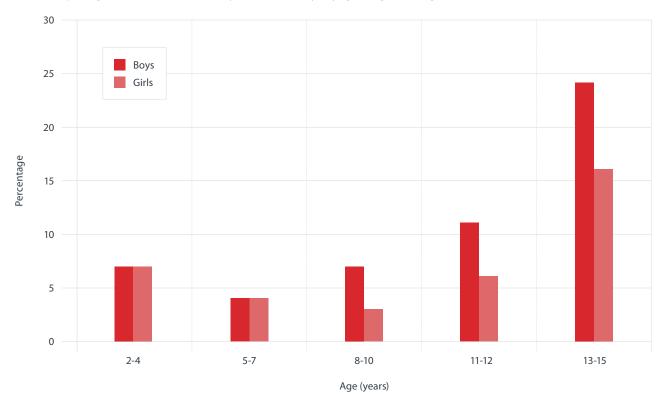
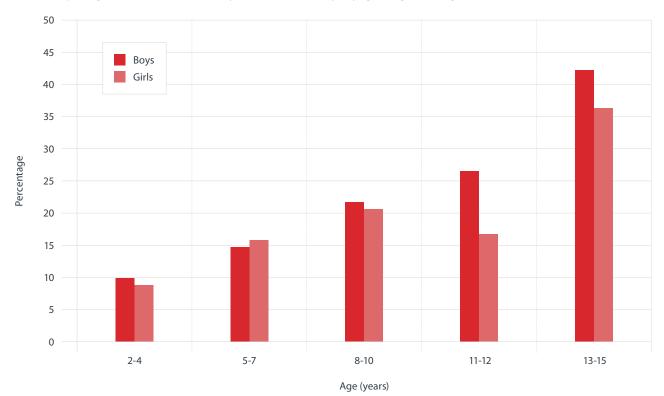


Figure 5.4b

Children reporting six hours or more sedentary time on weekend days, by age and gender, England 2012



The average sedentary time increased with age for boys. Although girls in the oldest age group (13 to 15 years) showed the highest average sedentary time this trend was not so apparent, with those aged 5 to 7 years showing the lowest amount of time spent sedentary on weekdays and those aged 8 to 10 showing the second highest on weekend days. A higher average number of sedentary hours were found on weekend days than weekdays for both genders. Girls were sedentary for an average of 3.2 hours on weekdays and 4.0 hours on weekend days, whilst boys were sedentary for an average of 3.3 hours on weekdays and 4.2 hours on weekend days (Table 5.5, Figures 5.5a and 5.5b).

Table 5.5

Sedentary time per day in children, by age and gender, England 2012

Age									
	All children 2-15	2-4	5-7	8-10	11-12	13-15			
						Hours			
Boys									
Weekday	3.3	2.8	2.8	3.0	3.7	4.2			
Weekend day	4.2	3.2	3.8	4.3	4.6	5.3			
Base	862	216	192	177	124	153			
Girls									
Weekday	3.2	2.8	2.7	3.1	3.5	4.3			
Weekend day	4.0	3.2	3.9	4.1	3.8	5.1			
Base	868	212	184	191	135	146			

Notes Data come from a short set of questions asking about time spent after school on a typical weekday and a weekend day. Any sedentary time during school hours is not included. Source Health and Social Care Information Centre (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

A higher proportion of boys and girls were sedentary on weekend days than weekdays in England in 2012. Figure 5.5a



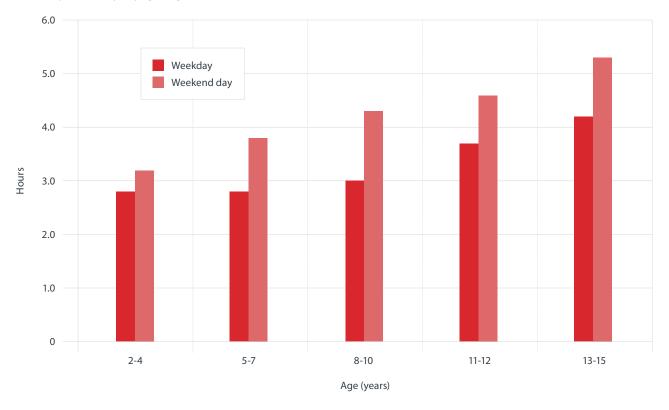
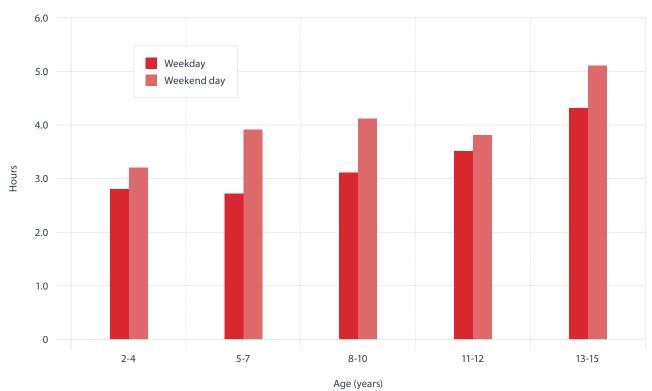


Figure 5.5b





The average number of sedentary hours on weekdays was highest amongst the group with the lowest household income for both boys and girls. However, on weekend days those in the highest income quintile spent the shortest amount of time sedentary, with those in the 3rd and 5th quintiles in boys and the 4th quintile in girls reporting the highest average sedentary time. The average number of sedentary hours was higher on weekend days for all income quintiles and both genders (Table 5.6, Figures 5.6a and 5.6b).

Table 5.6

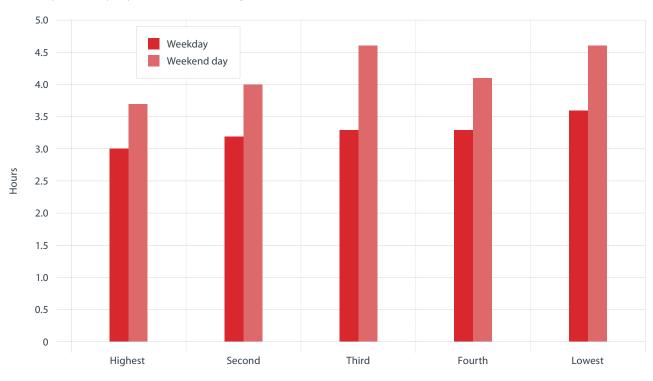
Average sedentary time in children, by household income, England 2012

	Quintile of household income									
	Highest	Second	Third	Fourth	Lowest					
					Hours					
Boys										
Weekday	3.0	3.2	3.3	3.3	3.6					
Weekend day	3.7	4.0	4.6	4.1	4.6					
Base	121	158	137	180	149					
Girls										
Weekday	2.9	3.0	2.9	3.3	3.5					
Weekend day	3.7	3.9	3.8	4.2	4.1					
Base	114	141	126	163	186					

Notes Children aged 2 to 15 years. ¶ Sedentary time in the last week, excluding time at school. Source Health and Social Care Information Centre (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

Figure 5.6a

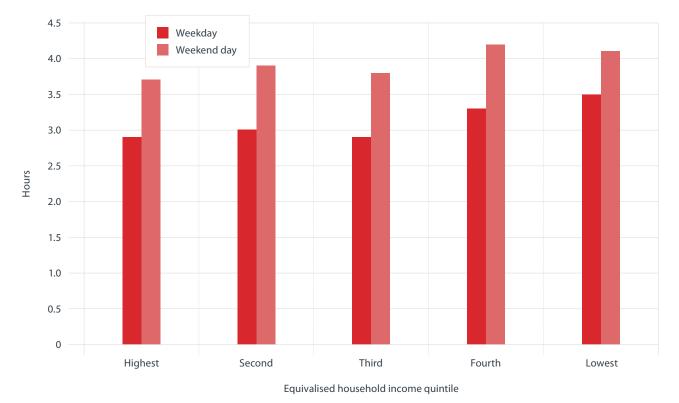
Sedentary time in boys, by household income, England 2012



Equivalised household income quintile



Sedentary time in girls, by household income, England 2012



ENDNOTES

- 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 behavior, and the risk of colon and rectal cancer in the NIH-AARP Diet and Health Study. Cancer Causes Control. 2008(19):939-953.

Chapter 6

TYPES OF Sedentary Behaviour

Sedentary activities occur in many contexts including work, school, home or during transit and leisure-time. Common examples of sedentary activities include watching television, using a computer, playing video games, motorised transport or sitting to read, eat, talk or work.¹ This chapter presents information about the various types of sedentary behaviour among adults and children in the United Kingdom.

Data from England, Scotland and Northern Ireland highlight the proportion of total sedentary time that is spent watching television or participating in other sedentary activities and how patterns vary between sexes, across age groups and throughout the week. Although in-depth data on all types of sedentary behaviour is hard to come by, this chapter presents the information that is available, such as the proportion of time that is spent watching television relative to other sedentary activities.

ADULTS

The Health Survey for England in 2012 reports on what proportion of leisure time, on average, adults spent participating in various types of sedentary behaviour. For almost all of the age groups, the most sedentary time was spent watching television. The exception to this rule was seen among men and women aged 16 to 24 years, who spent at least half of their sedentary time in other activities such as reading, doing homework, drawing, using a computer or playing video games. Men 16 to 24 years of age spent an average of 2.5 hours watching television and 3.2 hours in other activities on weekdays, while women in the same age group spent 2.6 hours watching television and 3.0 hours in other activities. At the weekend, men and women in this age group spent slightly more time watching television than on weekdays and less time participating in other sedentary activities, meaning their total sedentary time remained consistent throughout the week (Table 6.1, Figures 6.1a to 6.1d).

Table 6.1

Time spent on different sedentary activities in adults, by age and gender, England 2012

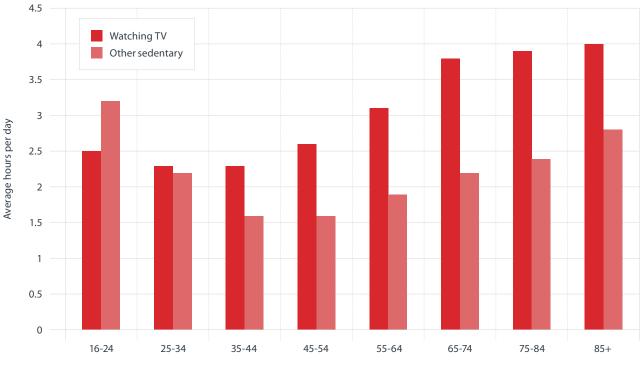
	Average hours per day									
	All adults	16-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	
Men										
Weekday										
Watching TV	2.8	2.5	2.3	2.3	2.6	3.1	3.8	3.9	4.0	
Other sedentary time	2.1	3.2	2.2	1.6	1.6	1.9	2.2	2.4	2.8	
Total sedentary time	4.9	5.7	4.5	3.9	4.2	5.0	6.0	6.4	6.7	
Weekend day			·	·				· ·		
Watching TV	3.1	2.7	2.7	2.8	3.1	3.5	3.9	3.9	4.0	
Other sedentary time	2.2	3.0	2.4	1.9	1.9	2.0	2.2	2.5	2.7	
Total sedentary time	5.4	5.7	5.2	4.7	5.0	5.4	6.1	6.3	6.7	
Base	3,676	377	485	593	613	623	596	305	84	
Women								, ,		
Weekday										
Watching TV	2.8	2.6	2.2	2.1	2.5	3.0	3.6	4.2	4.2	
Other sedentary time	2.0	3.0	1.7	1.5	1.6	1.8	2.1	2.4	3.1	
Total sedentary time	4.7	5.6	4.0	3.6	4.2	4.7	5.7	6.6	7.2	
Weekend day			<u> </u>	<u> </u>	<u>.</u>	·				
Watching TV	3.0	2.8	2.7	2.6	2.9	3.1	3.5	4.0	4.1	
Other sedentary time	2.1	2.8	1.9	1.7	1.8	1.8	2.1	2.3	3.2	
Total sedentary time	5.1	5.6	4.6	4.3	4.7	4.9	5.6	6.3	7.3	
Base	4,600	466	694	767	817	685	638	396	137	

Notes Data come from a short set of questions asking about time spent sitting down in a number of leisure time activities. ¶ 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 (2013). Health Survey for England 2012: Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

For all age groups of adults aged 25 and older, more than half of the total sedentary time was spent watching television. Adults aged 25 to 64 years spent more time watching television and on other activities on weekend days than on weekdays. For adults 65 and older, there was less of a difference for both watching television and other sedentary activity when comparing weekends and weekdays (Table 6.1, Figures 6.1a to 6.1d).

Figure 6.1a

Time spent sedentary in men on weekdays, England 2012



Age (years)

For all age groups of adults aged 25 and older, more than half of the total sedentary time was spent watching television. Adults 25 to 64 years spent more time watching television on weekend days than on weekdays.



Time spent sedentary in men on weekend days, England 2012

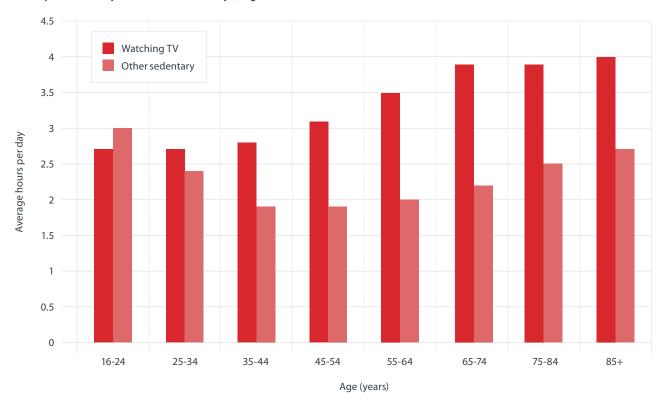
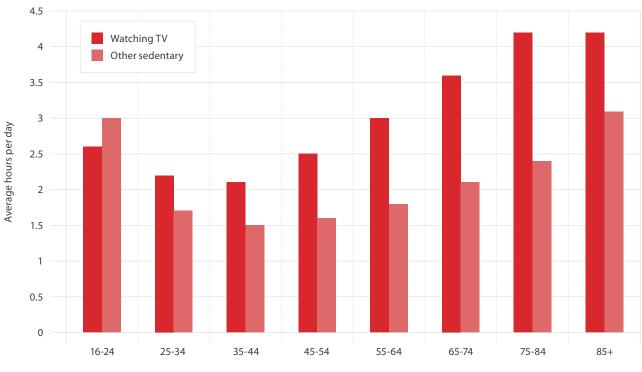


Figure 6.1c

Time spent sedentary in women on weekdays, England 2012



Age (years)

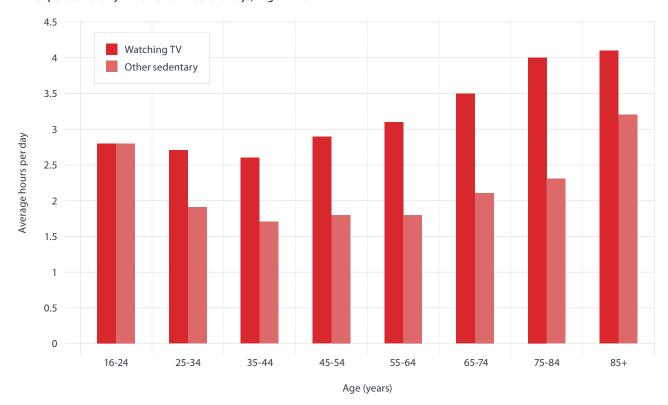


Figure 6.1d Time spent sedentary in women on weekend days, England 2012

In Northern Ireland, as in England, a large proportion of total sedentary time was spent watching television. On weekends, a larger proportion of adults in all age groups spent over four hours a day watching television than on weekdays. Individuals spent more time watching television than engaging in other sedentary activities in all age groups, except 19 to 24 years old (Table 6.2, Figures 6.2a and 6.2b).

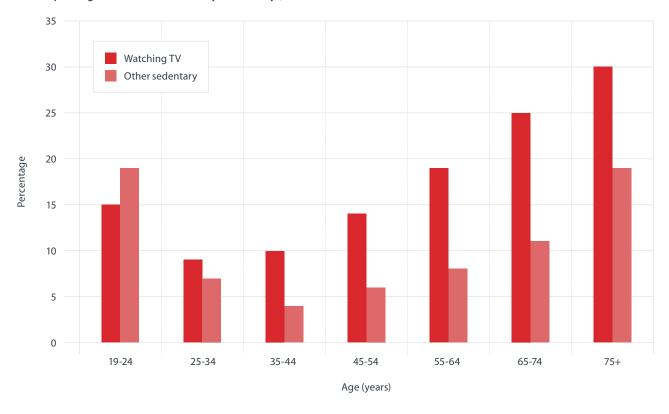
Table 6.2

Time spent on sedentary activities in adults, by age and gender, Northern Ireland 2012/13

	All adults	Men	Women	19-24	25-34	35-44	45-54	55-64	65-74	75+		
	%	%	%	%	%	%	%	%	%	%		
Weekday												
Watching TV												
Less than 1 hour	26	24	27	24	31	36	29	19	17	15		
1-2 hours	29	30	29	34	34	33	29	28	22	17		
2-3 hours	18	18	18	19	17	14	18	21	19	21		
3-4 hours	11	11	11	9	8	8	10	13	17	17		
Over 4 hours	16	18	15	15	9	10	14	19	25	30		
Other sedentary time												
Less than 1 hour	45	44	46	33	49	58	50	44	36	29		
1-2 hours	27	26	28	26	27	24	29	28	32	26		
2-3 hours	11	12	11	13	12	8	9	12	13	16		
3-4 hours	7	7	6	9	5	5	5	8	8	10		
Over 4 hours	9	11	9	19	7	4	6	8	11	19		
Total sedentary time	· ·											
Less than 1 hour	4	3	4	2	5	6	4	3	2	2		
1-2 hours	13	11	15	8	16	21	16	9	7	5		
2-3 hours	21	21	20	20	25	27	23	18	13	10		
3-4 hours	17	17	18	16	20	16	18	20	17	14		
Over 4 hours	45	48	43	54	35	30	39	51	61	70		
Weekend day												
Watching TV												
Less than 1 hour	20	17	22	24	20	21	22	19	17	16		
1-2 hours	26	26	26	23	27	30	28	27	22	18		
2-3 hours	19	18	20	20	21	20	19	19	19	19		
3-4 hours	15	17	14	12	18	16	14	15	17	17		
Over 4 hours	19	22	17	21	15	14	17	21	26	31		
Other sedentary time												
Less than 1 hour	39	39	39	33	38	48	44	40	31	27		
1-2 hours	30	28	31	29	31	29	31	31	30	25		
2-3 hours	13	13	13	16	14	11	12	11	16	16		
3-4 hours	8	8	8	9	8	6	7	8	11	13		
Over 4 hours	10	12	8	13	9	5	7	10	11	19		
Total sedentary time												
Less than 1 hour	3	3	3	4	3	4	3	2	2	2		
1-2 hours	9	8	10	9	9	11	11	9	6	4		
2-3 hours	15	14	16	10	14	20	17	17	12	10		
3-4 hours	18	17	19	17	22	20	20	17	15	13		
Over 4 hours	55	58	52	59	52	45	48	55	65	71		
Base	3,473	1,404	2,069	381	627	645	636	494	376	313		

Notes Results have been weighted by age and sex to reflect the composition of the general population in Northern Ireland. Unweighted bases were not available. ¶ Data are for adults aged over 19 years. Source Department of Health, Social Services and Public Safety (2013). Public Health Information and Research Branch: Health Survey Northern Ireland-2012/13. Belfast.

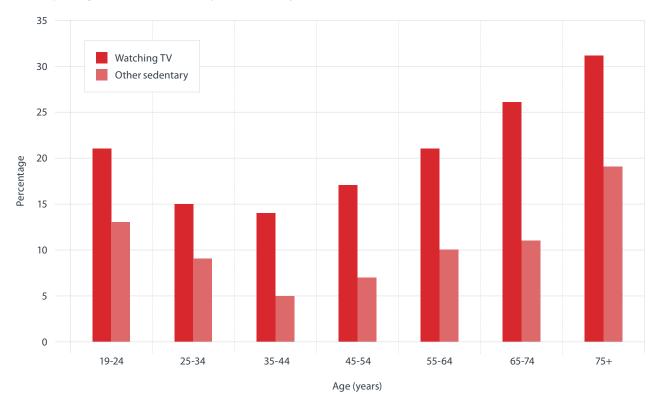




Adults spending over four hours sedentary on weekdays, Northern Ireland 2012/13

Figure 6.2b

Adults spending over four hours sedentary on weekend days, Northern Ireland 2012/13



CHILDREN

The Health Survey for England reported on behaviour among children 2 to 15 years of age, splitting sedentary activities outside of school between television viewing time and other sedentary activity on a typical weekday or weekend day. Similar to the adult population, over half of children's total sedentary time was spent watching television. The average time spent watching television on weekdays was 1.7 hours for boys and girls. On weekends, the average time spent watching television was higher, 2.2 hours for boys and girls. The only age group where less than half of total sedentary time was spent watching television was sedentary of which 1.8 hours were spent watching television. In comparison girls in this age group spent an average of 4.3 hours sedentary of which 2.2 hours were spent watching television (Table 6.3, Figures 6.3a to 6.3d).

Table 6.3

Average hours per day spent on sedentary activities in children, by age and gender, England 2012

	Age (years)								
	All children 2-15	2-4	5-7	8-10	11-12	13-15			
						Hours			
Boys									
Weekday									
Watching TV	1.7	1.5	1.6	1.6	1.9	1.8			
Other sedentary time	1.6	1.3	1.2	1.4	1.9	2.4			
Total sedentary time	3.3	2.8	2.8	3.0	3.7	4.2			
Weekend day			*	X	·				
Watching TV	2.2	1.8	2.2	2.5	2.3	2.4			
Other sedentary time	2.0	1.4	1.6	1.8	2.2	2.9			
Total sedentary time	4.2	3.2	3.8	4.3	4.6	5.3			
Base	862	216	192	177	124	153			
Girls	·		·						
Weekday									
Watching TV	1.7	1.5	1.4	1.7	1.9	2.2			
Other sedentary time	1.5	1.3	1.2	1.4	1.6	2.1			
Total sedentary time	3.2	2.8	2.7	3.1	3.5	4.3			
Weekend day			1						
Watching TV	2.2	1.8	2.2	2.4	2.2	2.7			
Other sedentary time	1.7	1.4	1.7	1.6	1.6	2.4			
Total sedentary time	4.0	3.2	3.9	4.1	3.8	5.1			
Base	868	212	184	191	135	146			

Notes Data come from a short set of questions asking about time spent sitting down in a number of leisure time activities. ¶ 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 (2013). Health Survey for England 2012; Physical activity and fitness. The Information Centre: Leeds. Copyright © 2013, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.



Time spent sedentary in boys on weekdays, England 2012

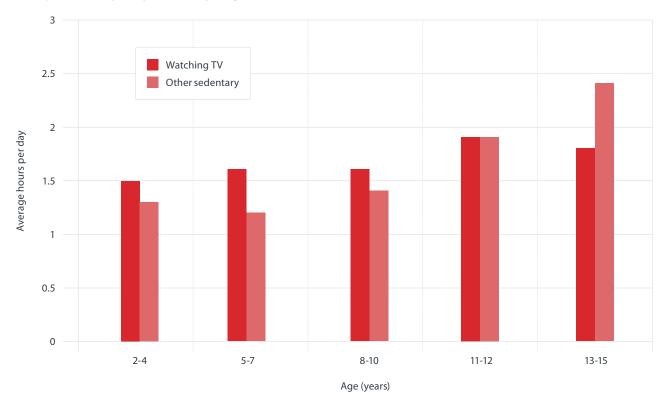
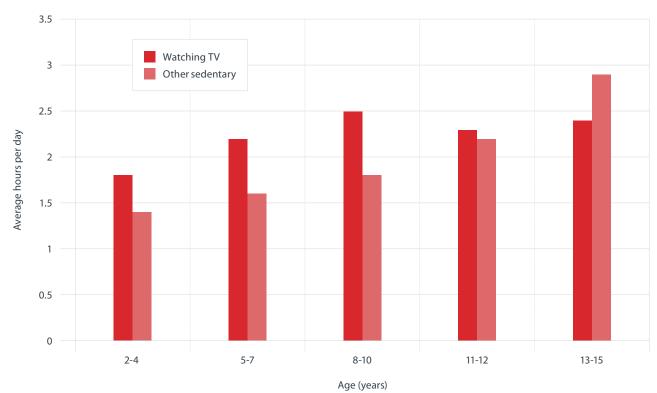


Figure 6.3b

Time spent sedentary in boys on weekend days, England 2012





Time spent sedentary in girls on weekdays, England 2012

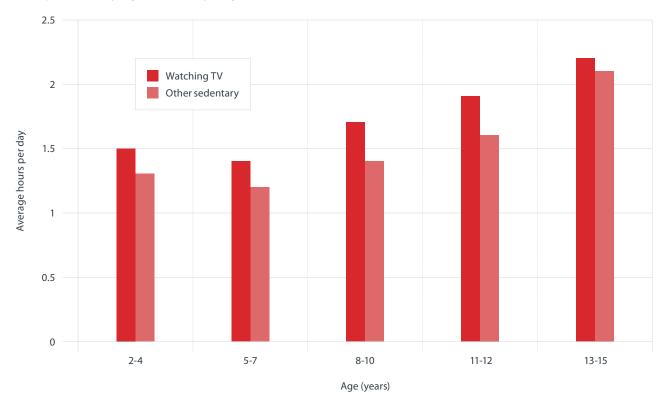
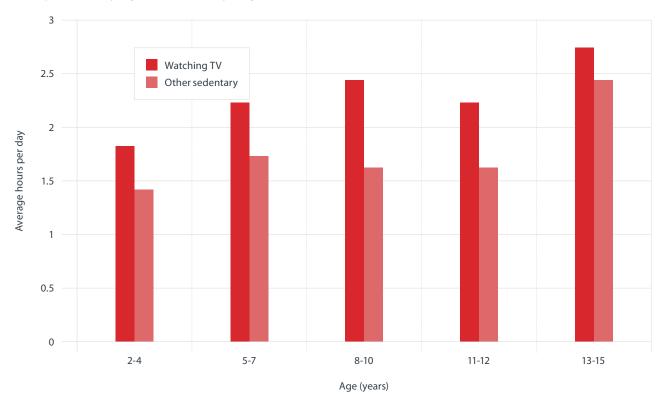


Figure 6.3d

Time spent sedentary in girls on weekend days, England 2012



In Scotland, boys spent an average of 2.2 hours sitting in front of a screen per weekday and 2.8 hours per weekend day, while girls spent an average of 2.1 hours per weekday and 2.6 hours per weekend day. The total time sitting in front of a screen increased for both genders with age and was highest among 13 to 15 year olds. Children of both genders and in all age groups spent less time sitting in front of a screen on weekdays than on weekend days (Table 6.4, Figures 6.4a to 6.4b).

Table 6.4

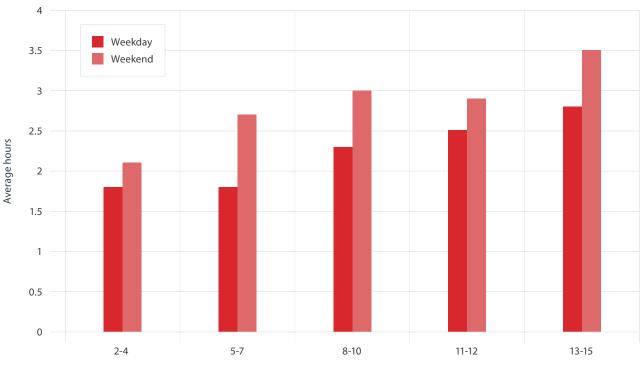
Hours per day spent sitting in front of a screen in the last week, by age and gender, Scotland 2010

	Age (ye								
	All children 2-15	2-4	5-7	8-10	11-12	13-15			
						Hours			
Boys									
Weekday	2.2	1.8	1.8	2.3	2.5	2.8			
Weekend day	2.8	2.1	2.7	3.0	2.9	3.5			
Base	398	88	88	86	47	89			
Girls									
Weekday	2.1	1.6	1.7	1.8	2.3	3.1			
Weekend day	2.6	1.9	2.2	2.6	2.8	3.8			
Base	343	90	75	61	60	57			

Notes Time spent in front of a screen included television viewing or using a computer or games console, other than at work, school or college. Source Scottish Health Executive (2011). Scottish Health Survey 2010. The Scottish Executive, Edinburgh.

Figure 6.4a

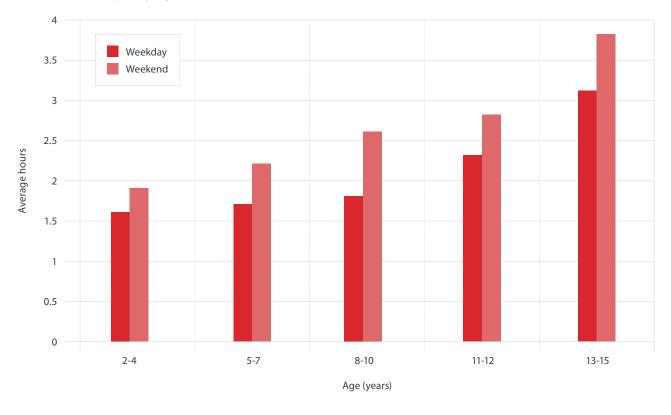
Hours of screen time per day in boys, Scotland 2010



Age (years)



Hours of screen time per day in girls, Scotland 2010



ENDNOTES

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.

BRITISH HEART FOUNDATION RESOURCES

The following resources will give you more information on making changes to your lifestyle and reducing your risk of heart and circulatory disease.

These are our resources most closely related to the topics in this publication. For more information on the services, programmes and resources that are available from the British Heart Foundation please order our **Heart health resources and services catalogue (order code: M116)**.

Information for teachers, parents and youth workers of 3-18 years olds can also be found in our **Teaching heart disease a lesson catalogue (order code: G66)**.

Details of how to order our resources are provided at the end of this list.

PHYSICAL ACTIVITY

Get active, stay active (order code: G12)

Discusses strategies for getting and staying active. Encourages individuals to think about the range of ways they can be active, without needing to slip into lycra or join a gym!

Put your heart into walking (order code: G26)

Introduces physical activity through walking – one of the best ways to get a daily dose of healthy activity. Includes practical tips and a personal walking plan.

Be active for life (order code: G364)

As you get older, it's particularly important to stay active. This booklet helps older adults understand more about physical activity and how they can benefit from activities such as brisk walking and gardening.

Physical activity and your heart (order code: HIS1)

This booklet is for people who have a heart condition or who are at risk of developing heart disease because they have a condition such as high blood pressure or high cholesterol.

10 minutes to change your life – Time to get moving (order code: G924)

This simple guide to getting active includes information about why you should be active, and tells you what type of activity you need to do to help your heart. It comes with a challenge chart to help you track your activity over a week and set yourself a goal for the future.

For more information, visit **bhf.org.uk/active**

PHYSICAL ACTIVITY AT WORK

Health at Work Toolkit (order code: G566)

The Health at Work Toolkit is our new resource for coordinators to plan and deliver a health at work programme. The toolkit includes booklets on how to set up and run a successful programme, and information, tips and ideas about organising health interventions focusing on physical activity, healthy eating and mental wellbeing at work. It also includes the pocket mission booklet and three posters.

Pedometer Challenge pack (order code: G621)

This pack includes a 'how-to' guide for the coordinator, a team captain booklet, posters, record sheets, motivational emails, progress charts, rules and safety tips, a pedometer sample and certificates – all you need to successfully organise a pedometer challenge in the workplace.

Health at Work pocket mission booklet (order code: G566A)

Encourage your employees to be more active, eat healthily and get into mental wellbeing by providing them with a copy of our new pocket mission booklet. This booklet is for employees and includes tips and health challenges for a healthier lifestyle.

Health at Work physical activity poster (order code: G566B)

Promote physical activity at work by using our Mission very possible poster where you can insert your own 'mission' and 'action'.

EARLY YEARS (AGES 0-5)

Early movers (order code: G609)

A resource to help under-fives live active and healthy lives. This pack is designed to help early years practitioners plan and organise physically active play environments for children under five. Early movers includes seven booklets for early years practitioners to help plan, organise and deliver physical activity with the under-fives, information leaflets for parents, a height chart, six posters and stickers. Elements of the pack are also available to order separately.

Help your child move and play every day (order code: G610 and G611)

Information leaflet for parents with ideas for active play with your baby (G610) or child (G611). Also available in Welsh and for parents and child care settings in Northern Ireland.

PRIMARY SCHOOL (AGES 3-11)

Let's get active award pocket planner (order code: G417)

A resource to encourage 7–11 year old children to record how much activity they do each day in working towards the 60 minute a day target. Also available in Welsh.

Get kids on the go (order code: G80)

An information booklet for parents of 7–11 aged children with useful tips, hints and physical activity ideas on how to encourage and support their children to be active. Also available in Welsh.

Active club pack (order code: G132)

The Active club pack contains a wealth of practical physical activity ideas and guidance to help develop provision in primary schools.

Make a move programme

The Make a move programme helps schools become active schools that can increase activity levels among secondary students, in particular those who are inactive or have low activity levels. For more information email bhfnctraining@lboro.ac.uk

Physical activity for all

A one day course for professionals working with children and young people with asthma, obesity, diabetes and congenital heart conditions. The course is designed for those wanting to improve their knowledge of medical conditions that may cause concern during physical activity sessions. For more information contact 01509 226419 or visit **bhfactive.org.uk**

CARDIAC REHABILITATION

Cardiac rehabilitation (order code: HIS23)

This booklet is for people who have a cardiac event such as a heart attack, or have had treatment for their heart condition, such as coronary bypass surgery. It explains what cardiac rehabilitation is, how you can help your recovery in the first few weeks and what happens on a cardiac rehabilitation programme and what you can do to keep your heart healthy.

Cardiac rehabilitation – your quick guide (order code: G964)

This short illustrated leaflet is for people who have had a heart attack, coronary angioplasty or heart surgery. It explains what cardiac rehabilitation is and what happens on a programme.

Active heart, healthy heart (order code: DVD29)

Active heart, healthy heart is a DVD which provides a fully seated, assisted standing and five levels of fully standing exercise programmes suitable for patients engaged in a cardiac rehabilitation programme.

ORDERING RESOURCES

To order any of our resources:

- call the BHF Orderline on 0870 600 6566, or
- email orderline@bhf.org.uk or
- visit bhf.org.uk/publications

Most of our booklets can also be downloaded from **bhf.org.uk/publications**

Our resources and services are free of charge, but we rely on donations to continue our vital work. If you'd like to make a donation, please call our donation hotline on 0300 330 3322 or visit our website at **bhf.org.uk/donate**

Acknowledgements

The compilers would like to thank Matt McArdle, Adam Naylor, Mervyn Wilson and Mark Wheatcroft for their help in producing this publication.



For over 50 years we've pioneered research that's transformed the lives of millions of people living with cardiovascular disease. Our work has been central to the discoveries of vital treatments that are changing the fight against heart disease.

But cardiovascular disease still kills around one in four people in the UK, stealing them away from their families and loved ones.

From babies born with life-threatening heart problems, to the many mums, dads and grandparents who survive a heart attack and endure the daily battles of heart failure.

Join our fight for every heartbeat in the UK. Every pound raised, minute of your time and donation to our shops will help make a difference to people's lives.

