



# Physical Inactivity and Sedentary Behaviour Report 2017

## ABOUT THE BRITISH HEART FOUNDATION (BHF)

**We fight. For an end to heart disease, for an end to the devastation. We fight for every heartbeat, everywhere. Until we win.**

For over 50 years, we've pioneered life saving research. And already, we've helped halve the number of people dying from heart and circulatory disease in the UK. Tomorrow, we'll break new ground, create new treatments, discover new cures. So one day, we'll beat heart disease for good.

A red icon of a person sitting on a bicycle, with two large red circles representing the wheels.

**Around 20 million  
adults in the UK are  
physically inactive**

## ABOUT THIS REPORT

The British Heart Foundation (BHF) has compiled this report using the latest health statistics to provide a comprehensive overview of levels of physical inactivity and sedentary behaviour in adults across the UK. The Government recommends that adults undertake at least 150 minutes of moderate intensity physical activity a week and strength activities on at least two days a week. It is also recommended that adults minimise their levels of sedentary behaviour.

The data in this report suggests that large numbers of people in the UK are still failing to meet recommendations for physical activity, putting them at greater risk of heart and circulatory disease. The statistics also show that levels of sedentary behaviour in the UK remain stubbornly high. This is of particular concern as evidence is growing which shows that sedentary behaviour – time in which energy expenditure is very low – is an independent risk factor to physical inactivity.

## ABOUT MYMARATHON

We must find ways to help make physical activity an important part of everyone's routine. The BHF's MyMarathon challenge is the perfect activity to help ease people into increasing their physical activity.

Participants can complete the 26.2-mile challenge in their own time over the month of May, whether that's over 4 hours, 4 days or 4 weeks, meaning it can even be completed by running as little as a mile a day. Every pound raised from MyMarathon will help the BHF fulfil its ambition to fund half a billion pounds of new research in the next five years, to revolutionise and accelerate the fight against heart disease. [bhf.org.uk/mymarathon](http://bhf.org.uk/mymarathon)

## Foreword

Physical inactivity is a global health crisis, responsible for an estimated 5million deaths worldwide. This report highlights the significant problem that this presents in the UK, and its terrible burden on people's health.

Around 20 million adults in the UK are insufficiently active, putting them at a significantly greater risk of heart and circulatory disease, and premature death. Levels of sedentary behaviour also remains stubbornly high in the UK, and evidence is growing that shows a sedentary lifestyle, irrespective of your level of physical activity, is strongly associated with poor cardiovascular health. Combined these two risk factors present a considerable threat to people's individual risk of heart and circulatory disease.

The impact of physical inactivity and sedentary lifestyles also weighs heavily on UK healthcare, estimated to cost as much as £1.2 billion a year.

Making physical activity easier and more accessible for all is of paramount importance if we are to reduce the burden of inactivity-related ill health and improve the future cardiovascular health of our population.

The BHF's MyMarathon challenge is the ideal opportunity for people of all fitness levels to increase their physical activity, whilst helping support our vital research. More than 30,000 people took part last year and we hope even more will this year, as a stepping stone towards better heart health.

**Dr Mike Knapton,**  
**Associate Medical Director at the British Heart Foundation**

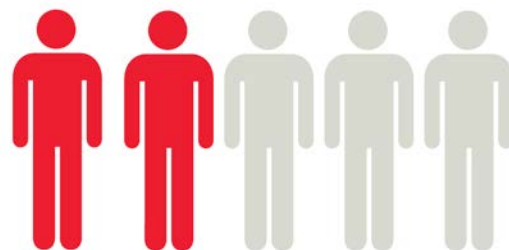
## Physical inactivity across the Four Nations

Keeping physically active is proven to help reduce your risk of heart and circulatory disease by helping you maintain a healthy weight, and reduce your blood pressure and cholesterol. The Government recommends adults need to do at least 150 minutes of moderate intensity activity a week and strength activities on two or more days a week. However, statistics show there are still large numbers of people across the UK who are failing to meet these recommendations, which is likely to have a negative impact on their health.

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 for premature death from any cause, including coronary heart disease.

According to the latest health surveys:

- Around 39% of UK adults – that's **around 20 million people** – are failing to meet Government recommendations for physical activity.
- Around **11.8million women** across the UK are insufficiently active, compared to around **8.3million men**.
- Overall women are 36% more likely to be classified physically inactive than men.
- In Northern Ireland almost half (46%) of the adult population – that's **around 650,000 people** – are physically inactive.
- In Scotland almost two fifths (37%) of the adult population – that's around **1.6million people** – are physically inactive.
- In Wales over two fifths (42%) of the adult population – **over 1million people** – are physically inactive.
- According to a BHF survey, around **60% of adults are unaware** of the Government's physical activity guidelines.



**39% of adults in the UK do not meet physical activity recommendations**

**BHF** BHF-funded research, at Oxford University, showed middle-aged women could significantly lower their risk of heart disease and stroke by exercising even just two or three times a week. The study, of over one million UK women, showed women who did strenuous physical activity two to three times a week, or any activity up to four to six times a week, had around a 20% lower risk of coronary heart disease, stroke and blood clots compared to women who were inactive.

**BHF** Research funded by the BHF has shown exercise could stimulate dormant stem cells in the heart to trigger the formation of new heart muscle cells. The findings, from Liverpool John Moores University, showed in rats that doing regular, intense exercise could reactivate specialist cardiac stem cells that are usually dormant in the adult heart, resulting in the formation of new blood vessel and heart muscle cells.

The results of this study could bring hope for new treatments to mend and regenerate damaged heart muscle after a heart attack.

# NUMBERS OF INACTIVE ADULTS ACROSS THE UK



**% of population** (number of inactive adults)



## Physical inactivity in England regions

Physical inactivity remains consistently high in all regions across England. In England alone there are **16.8 million adults** who are insufficiently active. According to the latest health surveys:-

- The North West has the highest proportion of people who are not meeting the Government's physical activity recommendations.
- Almost half (47%) of the adult population in the North West – that's **2.7million people** – are physically inactive.
- The South East has the lowest proportion of people who were failing to meet Government guidelines, with 34% – around 2.4million people – not keeping active enough.

**Table 1** shows the level of physical inactivity in adults in all four nations across the UK, and the nine regions in England.

PHYSICAL INACTIVITY LEVELS ACROSS THE UK				
Nation	Percentage of adults who are physically inactive	Number of adults who are physically inactive	Number of women who are physically inactive	Number of men who are physically inactive
England	39%	16,800,000	9,900,000	6,900,000
Scotland	37%	1,620,000	930,000	690,000
Wales	42%	1,030,000	600,000	430,000
Northern Ireland	46%	650,000	370,000	280,000
United Kingdom	39%	20,100,000	11,800,000	8,300,000
PHYSICAL INACTIVITY LEVELS IN THE ENGLISH REGIONS				
North East	42%	900,000	570,000	330,000
North West	47%	2,640,000	1,510,000	1,130,000
Yorkshire and the Humber	40%	1,720,000	1,050,000	670,000
East Midlands	39%	1,460,000	840,000	620,000
West Midlands	40%	1,810,000	1,040,000	770,000
East of England	37%	1,750,000	980,000	770,000
London	40%	2,670,000	1,610,000	1,060,000
South East	34%	2,370,000	1,410,000	960,000
South West	35%	1,550,000	950,000	600,000

## 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. Research suggests a sedentary lifestyle is associated with an increased risk of heart and circulatory disease and general poor health. Sedentary behaviour is an independent risk factor to physical inactivity, meaning that even individuals who are sufficiently active at the recommended levels, are at increased risk if they spend large amounts of time sitting.

In 2011, the Chief Medical Officer issued the Start Active, Stay Active Report which provided the first recommendations around sedentary behaviour. The report recommends that both children and adults should minimise the amount of time spent being sedentary for extended periods.

- The BHF estimates that the average man in the UK spends the equivalent of **78 days each year** sitting. The average woman in the UK spends around **74 days each year** sitting.
- According to Ofcom the average UK adult spends **1,779 minutes – almost 30 hours – a week watching TV**. This is equivalent to **64 days a year**.

## Health implications of physical inactivity

- According to a study published in the Lancet, over **5million deaths worldwide** are attributed to physical inactivity.
- The World Health Organization ranks sedentary behaviour among the 10 leading causes of death worldwide.
- The UK analysis of the Global Burden of Diseases, Injuries and Risk Factors Study estimated that physical inactivity contributes to almost **one in ten premature deaths** from coronary heart disease, and **one in six deaths** from any cause.
- Research shows that doing regular physical activity can reduce the risk of coronary heart disease and stroke by **as much as 35%**.
- Keeping physically active can also reduce the risk of early death by **as much as 30%**.
- Physical inactivity has a significant financial burden on the UK healthcare service, with the direct financial cost estimated to be **as high as £1.2billion each year**.
- Globally, the cost of physical inactivity to healthcare services is **around £35billion each year**.
- Physical inactivity also has a significant wider impact on the UK economy of as much as **£1.5billion**, and **£42billion worldwide**.



Regular physical activity reduces the risk of coronary heart disease by up to **35%**

The annual healthcare cost of physical inactivity in the UK is around



## Exercise and cardiac rehabilitation

In the UK cardiac rehabilitation should be offered to patients who have suffered a heart attack, angina, stable heart failure, or anyone who has undergone coronary angioplasty, had an ICD fitted or had heart surgery. The aim of these services which offer exercise and information sessions is to help people get back on their feet again, improve their lifestyle and reduce the risk of future heart problems.

The National Audit of Cardiac Rehabilitation (NACR) Annual Statistical Report 2016, compiled for the BHF, provides a comprehensive overview of the use of these services. Statistics show the number of people referred to these services who are failing to meet current guidelines for physical activity vary enormously across the UK. However, the data shows that cardiac rehabilitation programmes did have a positive impact on people's physical activity levels after completing the programme.

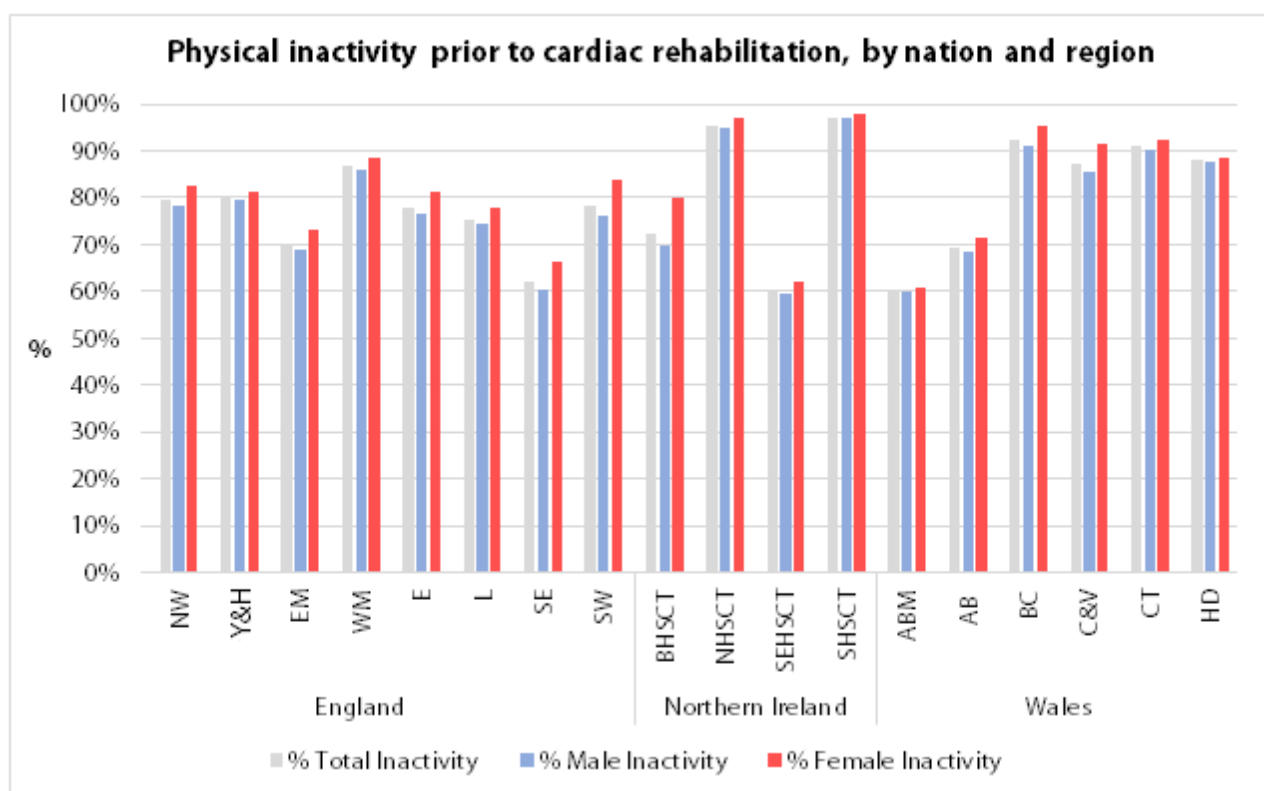
- In Northern Ireland, on average more than eight in ten (82%) of the patients referred to a cardiac rehabilitation service, were considered physically inactive.
- In England on average 76% of people referred for cardiac rehabilitation were considered physically inactive.
- In Wales on average 81% of patients attending cardiac rehabilitation services were physically inactive.
- The number of patients meeting the Government's physical activity guidelines rose **from 40% to 70%** in the 12 weeks since the start of their cardiac rehabilitation programme.
- Compared to last year, the number of patients reporting to feel positively about their physical fitness rose from **43% to 76%** after they underwent a cardiac rehabilitation programme.

For more information on NACR please visit [www.cardiacrehabilitation.org.uk](http://www.cardiacrehabilitation.org.uk)

**Table 2** shows the percentage of the cardiac rehabilitation population considered physically inactive when referred for cardiac rehabilitation programme in the UK .

PHYSICAL INACTIVITY IN UK CARDIAC REHABILITATION POPULATION BY NATION AND REGION				
Nation	Region	Total percentage of people considered physically inactive	Percentage of men considered physically inactive	Percentage of women considered physically inactive
England	North West (NW)	80%	78%	83%
	Yorkshire & The Humber (Y&H)	80%	80%	81%
	East Midlands (EM)	70%	69%	73%
	West Midlands (WM)	87%	86%	88%
	East of England (E)	78%	76%	81%
	London (L)	75%	74%	78%
	South East (SE)	62%	60%	66%
	South West (SW)	78%	76%	84%
	<b>England average</b>		<b>76%</b>	<b>74%</b>
Wales	Abertawe Bro Morgannwg UHB (ABM)	60%	60%	61%
	Aneurin Bevan LHB (AB)	69%	68%	71%
	Betsi Cadwaladr UHB (BC)	92%	91%	95%
	Cardiff & Vale UHB (C&V)	87%	86%	91%
	Cwm Taf LHB (CT)	91%	90%	92%
	Hywel Dda LHB (HD)	88%	88%	89%
<b>Wales average</b>		<b>81%</b>	<b>80%</b>	<b>82%</b>
Northern Ireland	Belfast HSCT	72%	70%	80%
	Northern HSCT	95%	95%	97%
	South Eastern HSCT	60%	60%	62%
	Southern HSCT	97%	97%	98%
<b>Northern Ireland average</b>		<b>82%</b>	<b>82%</b>	<b>85%</b>

Scotland is not currently in NACR; statistics not available for North East England, Powys (Wales) and Western HSCT (NI)





## Heart and circulatory disease in the UK

Improving people's levels of physical activity in the UK is critical to reducing the burden of heart and circulatory disease. Heart and circulatory disease encompasses all diseases of the heart and circulation, from conditions that are diagnosed at birth, or inherited, to developed conditions such as coronary heart disease, atrial fibrillation, heart failure, and stroke. Although death rates from heart and circulatory disease in the UK have been falling, it still causes more than a quarter of all deaths in the UK.



### Heart and circulatory disease causes **over a quarter** of all deaths in the UK

- Heart and circulatory disease causes nearly **160,000 deaths** each year – an average of 435 people each day or one death every three minutes.
- Around 42,000 people under the age of 75 in the UK die from these conditions each year.
- Since the BHF was established the annual number of deaths from heart and circulatory disease in the UK has **fallen by half**.
- Since 1961 the UK death rate from CVD has declined by more than **three quarters**. Death rates have fallen more quickly than the actual number of deaths because people in this country are now living longer lives.
- Around 7million people across the UK are living with heart and circulatory disease. The total annual healthcare cost of heart and circulatory disease in the UK is **£11 billion**.

**Table 3** shows the number of deaths from heart and circulatory disease and the number of people living with heart and circulatory disease across the UK.

DEATHS FROM CVD AND NUMBERS LIVING WITH CVD			
Nation	Number of People Dying from CVD (Latest Year)	Number of People Under 75 Years Old Dying from CVD (Latest Year)	Estimated Number of People Living with CVD
England (2015)	129,147	33,662	5.9 million
Scotland (2015)	15,768	4,655	670,000
Wales (2015)	9,027	2,544	375,000
Northern Ireland (2015)	3,773	1,087	225,000
United Kingdom (2015)	158,155	42,245	7 million +



## References

STATISTIC	REFERENCE
<b>PHYSICAL INACTIVITY</b>	
Physical inactivity UK	BHF estimate based on latest UK health surveys
Physical inactivity England	BHF analysis of Health Survey for England, NHS Digital
Physical inactivity Scotland	BHF analysis of the Scottish Health Survey, Scottish Government
Physical inactivity Wales	BHF analysis of the Welsh Health Survey, Welsh Government
Physical inactivity Northern Ireland	BHF analysis of Northern Ireland Health Survey, Department of Health NI
<b>SEDENTARY BEHAVIOUR</b>	
Hours spent sitting	BHF estimate based on Health Survey for England and Health Survey for Scotland data
Hours spent watching TV	Ofcom Communications Market Report 2016
<b>HEALTH IMPLICATIONS OF PHYSICAL INACTIVITY</b>	
Physical inactivity CHD and stroke risk	UK Chief Medical Officers' Guidelines 2011 Start Active, Stay Active
Physical inactivity risk of death	UK Chief Medical Officers' Guidelines 2011 Start Active, Stay Active
Financial cost of physical inactivity	BHF analysis of The Lancet, The economic burden of physical inactivity: global analysis
<b>CARDIAC REHABILITATION</b>	
All statistics	National Audit of Cardiac Rehabilitation (NACR) - Annual Statistical Report 2016
<b>HEART AND CIRCULATORY DISEASE</b>	
CVD deaths, men/women	BHF analysis of latest UK mortality statistics: ONS/NRS/NISRA (2015 data)
CVD ASDRs (death rates)	BHF/Oxford University in collaboration with UK statistical agencies: ONS/NRS/NISRA
Numbers living with CVD	BHF estimate based on GP patient data and latest UK health surveys with CVD fieldwork
£11bn healthcare cost	CEBR, The Economic Cost of Cardiovascular Disease, 2014



## About the British Heart Foundation (BHF)

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

But heart and circulatory disease still kills more than 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 or endure their daily battles with 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.

[bhf.org.uk/donate](http://bhf.org.uk/donate)



**BIGGEST**  
independent funder of  
cardiovascular disease  
research in the UK

## Physical Activity Statistics 2015

For more information and statistics on physical activity visit [bhf.org.uk/statistics](http://bhf.org.uk/statistics)

CVD factsheets are also available for Scotland, Wales (in English/Welsh) and Northern Ireland.



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