



Public Health  
England

Protecting and improving the nation's health

# Everybody active, every day

An evidence-based approach  
to physical activity



October 2014

# About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through advocacy, partnerships, world-class science, knowledge and intelligence, and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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# Introduction

## A problem that demands a long-term solution

Around one in two women and a third of men in England are damaging their health through a lack of physical activity.<sup>1</sup> This is unsustainable and costing the UK an estimated £7.4bn a year.<sup>2,3</sup> If current trends continue, the increasing costs of health and social care will destabilise public services and take a toll on quality of life for individuals and communities.

- over one in four women and one in five men do less than 30 minutes of physical activity a week, so are classified as ‘inactive’<sup>1</sup>
- physical inactivity is the fourth largest cause of disease and disability in the UK<sup>4</sup>

Public Health England (PHE) wants to drive a step change in the public’s health. We recently identified seven priorities for the next ten years to tackle the behaviour that increases the risk of poor mental and physical health.<sup>5</sup> Tackling physical inactivity is critical to delivering many of those priorities (eg, dementia, obesity and giving every child the best start in life).

We know from other high-income countries like Finland,<sup>6</sup> the Netherlands and Germany,<sup>7</sup> that this situation can be changed. The solution is clear: everybody needs to become more active, every day.

A wealth of evidence shows that an active life is essential for physical and mental health and wellbeing. A number of diseases are currently on the increase and affecting people at an earlier age. They include cancer and diabetes, and conditions like obesity, hypertension and depression. Regular physical activity can guard us against these.

We want to enable people to take control of their current and future health, and to boost parents’ understanding of how active play and ‘physical literacy’ is essential for children. Being active at every age increases quality of life and everyone’s chances of remaining healthy and independent.

The benefits don’t stop there. There are many other social, individual and emotional reasons to promote more physical activity. Being active plays a key role in brain development in early childhood<sup>8,9</sup> and is also good for longer-term educational attainment.<sup>10</sup> Increased energy levels boost workplace productivity and reduce sickness absence. An active population can even reduce levels of crime and antisocial behaviour.<sup>11</sup>

The experience of other countries tells us that getting the whole nation active every day will only happen if we involve all sectors. To make real and lasting change we need to take a long-term, evidence-based approach, building upon what we know works. We need to embed physical activity into the fabric of daily life, making it an easy, cost-effective and ‘normal’ choice in every community in England.

### Definitions

*Physical activity:*  
body movement that expends energy and raises the heart rate

*Inactivity:*  
less than 30 minutes physical activity a week

*Sedentary:*  
time spent in low-energy postures, eg, sitting or lying

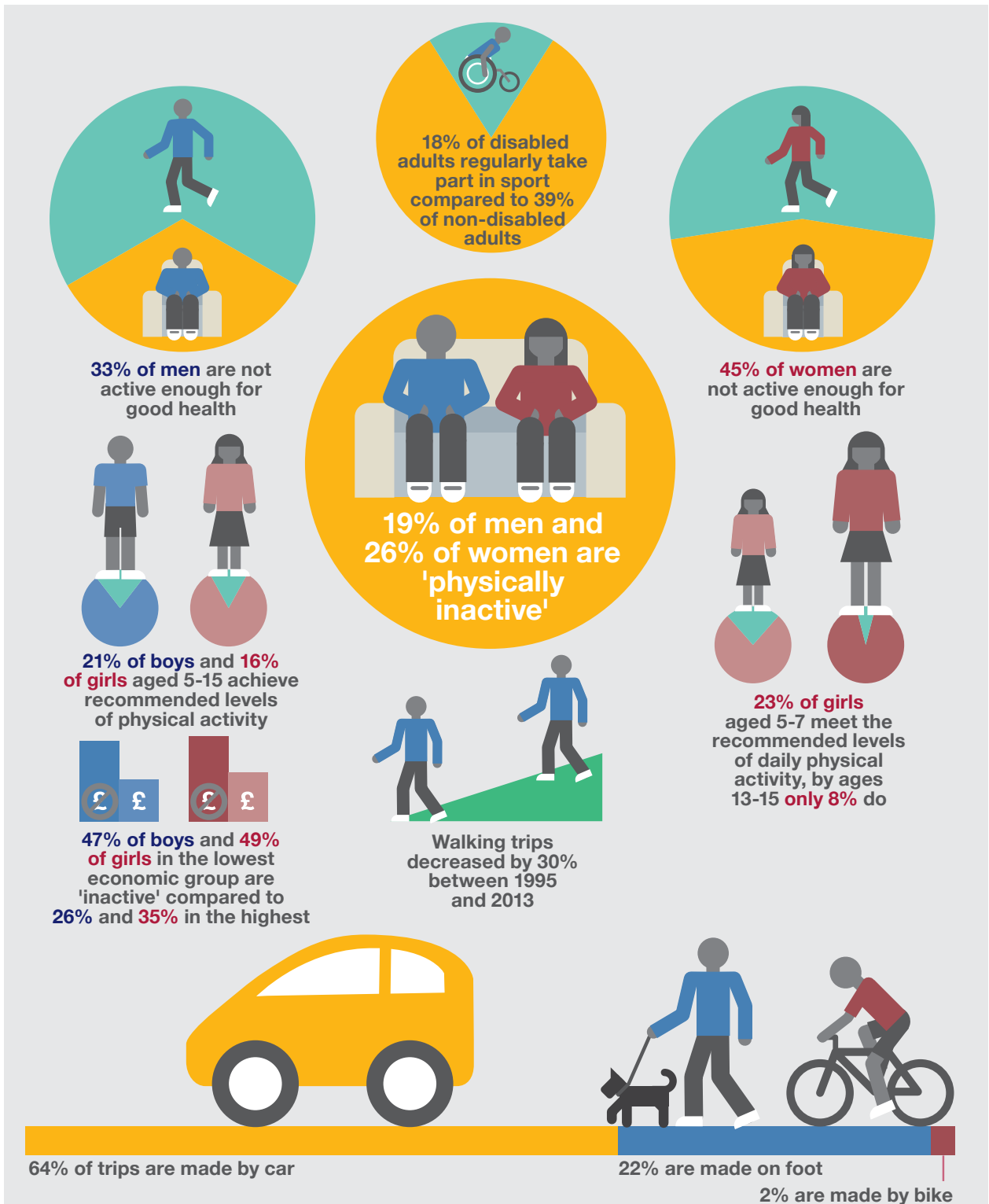
*Everyday activity*  
includes cycling, walking, heavy housework, active or manual work

*Active recreation*  
includes dance, yoga, active play, recreational walking or cycling

*Sport* includes swimming, rowing, fitness training, climbing, parkour, tennis, organised sports

We want to engage with professionals, providers and commissioners in health, social care, transportation, planning, education, sport and leisure, the voluntary, community and cultural sectors as well as public and private employers to make the case for more – much more – physical activity, every day.

**The extent of the problem**



Data sources: Health Survey for England 2012 (HSE); Active People Survey 8, April 2013-April 2014 (APS); National Travel Survey 2013 (NTS)

# Inactivity

## The toll it takes on our health

Physical inactivity directly contributes to one in six deaths in the UK:<sup>12</sup> the same number as smoking.<sup>13,14</sup> Around a quarter of us are still classified as inactive, failing to achieve a minimum of 30 minutes of activity a week. In some communities only one in ten adults are active enough to stay healthy. While measurement differences limit direct comparisons, the problem is worse in the UK than many other countries (see graph below).

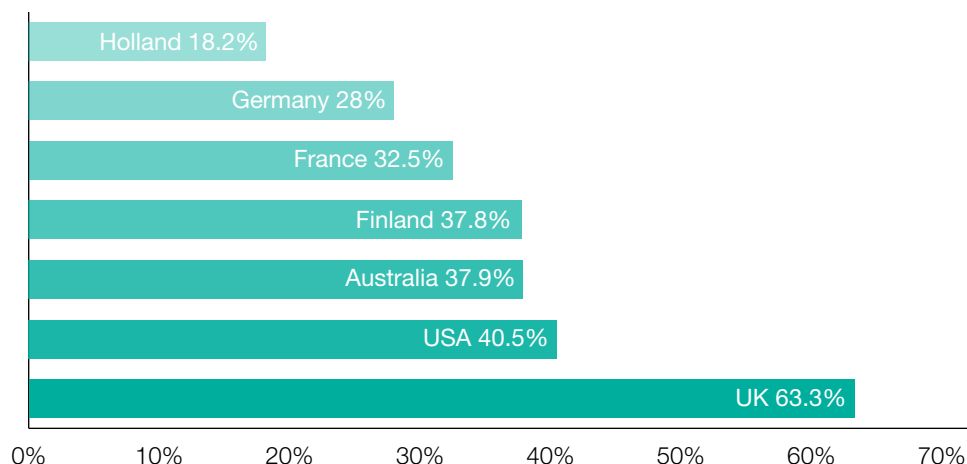
There are several reasons for this. Social, cultural and economic trends have removed physical activity from daily life. Fewer of us have manual jobs.<sup>16</sup> Technology dominates at home and work, the two places where we spend most of our time. It encourages us to sit for long periods – watching TV, at the computer, playing games or using mobile phones and tablets. Over-reliance on cars and other motorised transport is also a factor.

Many features of cities and towns – and even some parks – work against physical activity. The design of schools, public buildings and urban spaces prioritise convenience and speed ahead of walking or cycling. People sit all day in offices where it is often easier to find the lift than the stairs. Concerns about vandalism and maintenance have left public spaces without the benches and toilets that allow older or disabled people to venture out. Cars and other vehicles dominate, not the needs of pedestrians.

The government's aim, restated in the report 'Moving more, living more' as a Olympic and Paralympic legacy commitment, is to increase the number of adults taking at least 150 minutes of physical activity a week and to reduce the number taking less than 30 minutes per week, year on year.<sup>17</sup> Although there has been progress, it remains too slow.

“ Around a quarter of us are still classified as inactive, failing to achieve a minimum of 30 minutes of activity a week. In some communities only one in ten adults are active enough to stay healthy

### International comparison of physical inactivity (at ages 15 and over)<sup>15</sup>



With time and commitment in short supply, being active every day is – as always – about weaving incidental activity into our daily lives: taking the opportunity for short trips on foot, by bicycle or on public transport, as well as doing whatever exercise, dance, leisure or sport we enjoy.

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### A snapshot

1. The link between physical inactivity and obesity is well established. With more than half of adults and almost a quarter of children overweight or obese,<sup>18,19,20</sup> everyone would benefit from being more active every day. It helps to maintain a healthy weight and improves health, regardless of weight.
2. Only 21% of boys and 16% of girls aged 5-15 in England take the amount of physical activity they need for good development.<sup>1</sup>
3. More than 1 in 17 adults in the UK have diabetes;<sup>21</sup> 90% have type 2 diabetes, which is associated with lifestyle. Being active can reduce the risk of developing this condition by 30-40%.<sup>22</sup> People with diabetes can reduce their need for medication and the risk of complications by being more active.<sup>23</sup>
4. Persuading inactive people to become more active could prevent one in ten cases of stroke<sup>12</sup> and heart disease<sup>24</sup> in the UK.
5. One in eight women in the UK are at risk of developing breast cancer at some point in their lives.<sup>25</sup> Being active every day can reduce that risk by up to 20% and also improve the lives of those living with cancer.<sup>22,26</sup>
6. Dementia affects 800,000 people in the UK. Staying active can reduce the risk of vascular dementia and also have a positive impact on non-vascular dementia.<sup>27</sup>
7. Depression is increasing in all age groups. People who are inactive have three times the rate of moderate to severe depression of active people.<sup>28</sup> Being active is central to our mental health.<sup>29</sup>

Disease and disability create costs, and not just for the NHS. Long term conditions such as diabetes, cardiovascular and respiratory disease lead to greater dependency on home, residential and ultimately nursing care. This drain on resources is avoidable, as is the personal strain it puts on families and individuals.

Being inactive is an issue at every age. Generally, the more we do, the greater the benefit. Moving those who are inactive to a significant level of activity would have the greatest benefit, but any shift helps. There is a three-year difference in life expectancy between people who are inactive and people who are minimally active.<sup>30</sup> This is an incentive to focus on the most inactive – we need to identify these individuals and investing resources appropriately.

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### The problem of sedentary behaviour

Sedentary behaviour is not simply a lack of physical activity. It is spending too much time in positions that do not use energy. Many of us sit for long periods on the sofa, or at the computer or desk. This



#### Key fact

Only 21% of boys and 16% of girls aged 5-15 in England take the physical activity they need for good development



#### Key fact

Persuading inactive people to become more active could prevent one in ten cases of stroke and heart disease in the UK

damages health, because of the way it affects circulation and fails to use muscles and bones. This is a risk even to those who regularly take vigorous regular exercise.<sup>31</sup>

More than 40% of women and 35% of men spend more than six hours a day desk-bound or sitting still. This applies as much to those aged 16-24 to those who are 64-75.<sup>32</sup> Many of us become more sedentary as we get older, damaging our bone, brain and muscle health. It does not have to be that way. Lots of older adults remain active, which helps to keep them healthy and more engaged, contributing to community and family life, as well as preventing falls and circulatory problems.

While a growing body of evidence points to the risks of sedentary behaviour, we don't yet know what exact level harm is incurred.<sup>33</sup> However, we should try to avoid being sedentary for extended periods.<sup>22</sup>

### Payback

Increasing our physical activity will pay back not just in terms of health and social care. Although there is still to work to do on the evidence, boosting levels of activity can stimulate economic growth.

For instance, sport offers many entry-level jobs and opportunities for volunteering that can lead to full-time careers. Businesses with active workforces are more productive, have lower sickness rates and lower staff turnover.<sup>34</sup> Pedestrians help keep local high streets alive.

In every way, activity gets us out the door and connecting with others, avoiding social isolation, increasing social capital and community spirit.

PHE has developed a summary of the tools (including the NICE return-on-investment tool)<sup>36</sup> that make the case for investment, and of the guidance on what local authorities and commissioners can do. PHE will also soon publish a definitive review of the return-on-investment data – in costs to the NHS and wider costs to communities – explaining the origin, components and robustness of figures.

Getting the nation moving every day is essential. At a national level it will help keep the welfare state economically viable. At a personal level it's fun and sociable – and helps people stay physically and mentally well.

### Summary

- Physical inactivity directly contributes to 1 in 6 deaths
- Around a quarter of people are inactive
- Physical activity can prevent or help manage over 20 common conditions
- Reducing inactivity could prevent up to 40% of many long term conditions, eg, diabetes
- Inactivity creates costs for families and services
- The aim is to have more adults taking at least 150 minutes activity a week, and fewer taking less than 30 minutes
- Even small increases in activity can make a difference
- Increased activity means better health *and* has wider economic benefits





# Inequalities

## How to close the gap

Being active every day needs to be embedded across every community in every aspect of life. The association between physical activity and leading a healthy, happy life means that issues of cost, access or cultural barriers need to be tackled. Under the Equality Act 2010 there is a responsibility to consider vulnerable groups – for example, by ensuring access, monitoring, and staff training.

### Common inequalities

#### Economic

- people living in the least prosperous areas are twice as likely to be physically inactive as those living in more prosperous areas<sup>37</sup>

#### Geographic

- south east England has the highest proportion of men and women meeting recommended levels of physical activity; north west England has the lowest<sup>1</sup>

#### Age

- physical activity declines with age to the extent that by the age of 75 years only one in ten men and one in 20 women are active enough for good health<sup>38</sup>
- between 2008 and 2012, the proportion of children aged two to 15 years meeting recommended physical activity levels fell from 28% to 21% for boys and 19% to 16% for girls<sup>39</sup>

#### Disability

- disabled people are half as likely as non-disabled people to be active<sup>40</sup>
- only one in four people with learning difficulties take part in physical activity each month compared to over half of those without a disability<sup>41</sup>

#### Race

- only 11% of Bangladeshi women and 26% of men are sufficiently active for good health compared with 25/37% of the general population<sup>42</sup>

#### Gender

- men are more active than women in virtually every age group<sup>18</sup>
- girls are less likely to take part in physical activity than boys, and participation begins to drop even more from the age of ten to 11<sup>19</sup>

#### Sexual orientation and gender identity

- half of all lesbian, gay, bisexual and transgender people say they would not join a sports club, twice the number of their heterosexual counterparts<sup>43</sup>

#### Key fact

People in the least prosperous areas are twice as likely to be inactive than those in the most prosperous areas

#### Key fact

Disabled people are half as likely to be active than non-disabled people



## The challenge

### How we need to respond

We are around 20% less active than in 1961. If current trends continue, we will be 35% less active by 2030.<sup>44</sup> We have to turn the tide.

Physical activity does not need to be strenuous to be effective. Thirty minutes a day of moderate aerobic activity can be a brisk walk, a swim, or even a spell of gardening. Each ten-minute bout that gets the heart rate up has a health benefit. Although sport can be part of the picture, activity can also be more informal. Fitness does not have to be a 'regime'. Dancing can be as beneficial as going to the gym,<sup>45</sup> and everyday activity such as walking or cycling to the shops or to work can be a great way to get the heart pumping.

Being active is not just about moving more. We also need to build our muscle strength and motor skills, and our 'physical literacy'. Active play is a fundamental part of physical, social and emotional development from infancy. Good physical development in children is linked to other types of positive development, such as speech and coordination. Moreover, being active in childhood builds the foundation for an active adult life.<sup>46</sup> Once learnt, a skill like swimming or riding a bike is there for life.

From the age of 30, an adult's muscle and bone mass peaks and begins to decline slowly.<sup>47</sup> Performing simple resistance-type activity – such as press-ups or light lifting – twice a week improves muscle strength and stability. It also helps prevent the development of musculoskeletal disease. New evidence from neuroscience suggest that being physically active also supports further brain development during adulthood.<sup>48</sup> We need to revise our physical literacy as we get older, changing our expectations of what we can do so that we have the confidence to do it. That will help maintain mental agility, wellbeing and independence.

With around a quarter of the nation not managing even 30 minutes of physical activity a week, this may seem like too great a challenge. However, we know that change on a national scale is possible.

Once the world record holder for heart disease, Finland started a nationwide campaign for change 40 years ago.<sup>6</sup> The government shifted money to local authorities, a move similar to the transfer of public health responsibilities to a local level in England. Authorities responded by creating heritage and conservation trails, building active outdoor play and exercise spaces, and encouraging sport at all levels, formal and informal. They developed innovative approaches for distinct groups, such as the elderly or the persistently hard-to-reach, that directly addressed their problems. Change has run across all age groups: young people, working age and older people are all much more active.<sup>6</sup>

#### Key fact

People in the UK today are 24% less active than in 1961

#### Key fact

Thirty minutes a week of moderate aerobic activity can make a big difference

#### Key fact

People in Finland are far more active after a long term, nationwide, locally-based campaign to encourage physical activity across the life course

The experience in Finland and elsewhere shows that effectively increasing population levels of physical activity<sup>49</sup> involves two common factors: persistence and collaboration. Creating such a major change requires all of us to take action: no single agency or organisation can respond to the challenge alone.



We know that change on a national scale is possible

# Action

## Four areas where we need to take measures

What we need to do is simple: be more active. Now we need it to happen.

This is a question of creating cultural change. Many studies have already made the urgent case for a more active nation. There have been reports from national government,<sup>17</sup> across political parties,<sup>50</sup> the private sector<sup>51</sup> and from the voluntary sector.<sup>52,53</sup>

If we want everyone to be active every day, physical activity needs to be made easy, fun and affordable. Exercise and active recreation must be available to all, in every community across England.

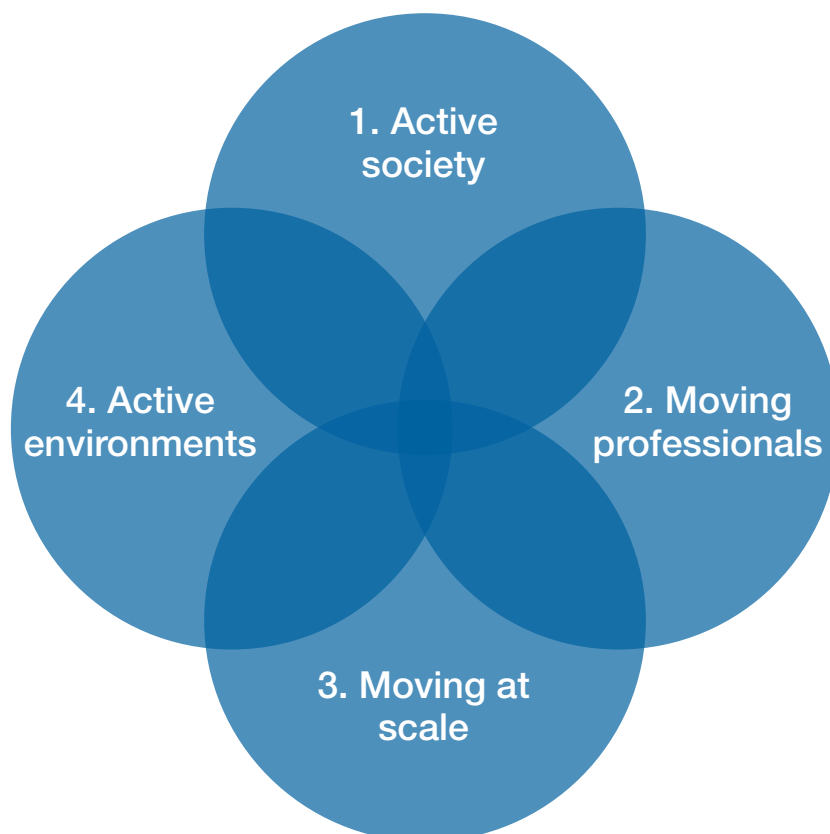
To deliver this vision requires action across four areas (below), at national and local level:

1. Active society: creating a social movement
2. Moving professionals: activating networks of expertise
3. Active environments: creating the right spaces
4. Moving at scale: scaling up interventions that make us active

A pro-activity movement needs to cascade right through society. To get the country back on its feet, we need to think smarter, making better use of existing resources.



Physical activity needs to be made easy, fun and affordable



## 1. Active society: creating a social movement

Social norms can only shift if we can change attitudes radically. The message is that being active is not just fulfilling and fun but can also be an easy choice, and this needs to be a linking thread that unites the public sector with the voice of charities, local residents and community leaders. It's a message that can be woven into the policies, commissioning and planning decisions made every day across the country.

This is especially true in communities where there are significant inequalities in health, often within ethnic groups. The communities with the lowest levels of physical activity often have the highest burden of disability and poor health. The most successful agents of change will be people from the communities themselves.

Good marketing and communications strategies can strike deep into the national psyche. PHE's Change4Life '10 Minute Shake Up' campaign with Disney and supported by local partners saw a quarter of a million families sign up in the first month. PHE plans to expand on this initiative. Other successes include NHS Choices' 'Couch to 5K' an app and podcast downloaded 209,000 times in its first month, and the range of voluntary sector mass participation challenges such as Race for Life. There is a definite appetite for more activity. Yet if this is to address the alarming epidemic of inactivity we need to do much more.

PHE can help lead the movement for change, but there is no quick fix. It will take long-term promotion of physical activity over months, years and decades.

This can only come about if all sectors in the places we live and work act together:

- national and local government
- schools, youth clubs, community and voluntary organisations
- transport, planning, leisure and sports providers
- employers and business
- health and social care professionals

The common vision is to get everybody active every day, driving a radical shift in the take-up of physical activity on a national scale – and making it a routine part of daily life in England.



### Summary

- Attitudes need to change
- Key message: activity is fun, fulfilling and can be an easy choice
- Physical activity needs to be a main component of policies and planning
- People in communities will be agents of change
- Good marketing can help, but more is needed
- PHE can help lead change, but all sectors need to commit over the long term

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## 2. Moving professionals: activating networks of expertise

We already have the ideal information network: the hundreds of thousands of professionals and volunteers who work directly with the public every day. Every one of us – from researchers, receptionists, designers and marketers to park rangers – can help spread the word. Together we can make physical activity the social norm.

The existing push for ‘making every contact count’<sup>54</sup> needs to come from all sectors and disciplines, not just from health specialists. We need to activate professionals in spatial planning, design, development, landscaping, sport and leisure, social care, psychology, the media, trade unions, transport, education and business to bring about radical change. Areas with particular ability to provide leadership include:

### Education

Schools are a key influence on children’s attitudes to activity. Teachers at every level of education, from early years and primary school to higher education, have a huge impact on young people’s emotional, physical and social development and wellbeing. This includes discussing children’s levels of activity and involving them in choosing from available activities: whether it’s sport or other activities like dance, variety is important. Inspiring the next generation can also cross the curriculum: discussing forces and energy transfer in physics, designing active cities with urban planning students, or understanding team dynamics within psychology or business studies. Some children and young people may need more support, including those with disabilities or health issues, or in transition stages (for example, teenage years, leaving school).

### Sport and leisure

It is easy to assume that sport and leisure professionals do not need support, but many would welcome the opportunity to develop their knowledge about physical activity, as would the many volunteers who run local clubs and activities. Enthusiasts find new ways to use knowledge to motivate and inspire people. We also need to do more to develop and engage those professionals working on targeted programmes with individuals who need extra support to be more active – those with complex health needs or impairments.

### Health and social care

For health professionals in primary, secondary or community care, the evidence is clear: not enough action is taken to integrate and recommend physical activity as a part of treatment. Physical activity is essential for maximising physical and mental health irrespective of body weight or health status. It is particularly beneficial for those with health issues. The NHS and patients will lose out if the message isn’t broadened to address the additional barriers some groups face (for example, the disabled). Social care professionals and volunteers also need much more information about helping others to increase their independence and autonomy.

## Summary

- The thousands of public-facing professionals and volunteers are a ready-made network
- The push needs to involve all sectors, not just health
- Those sectors in a good position to lead and influence include education, sport and leisure, health and social care, and planning, design, development and transport

### Planning, design, development and transport

Thoughtful urban design, understanding land use patterns, and creating transportation systems that promote walking and cycling will help to create active, healthier, and more liveable communities.<sup>55,56</sup> Asset audits help to identify innovative uses of existing community resources. A good example of using existing infrastructure in new ways is the Sustrans Connect 2 cycling networks, building new bridges and crossings to overcome busy roads, rivers and railways, and linking them to popular walking and cycle routes.<sup>57</sup>

Local economic partnerships currently have a similar opportunity to change public space for the better in more imaginative, sustainable and exciting ways.<sup>58</sup>



### 3. Active environments: creating the right spaces

The World Health Organisation defines a healthy city as one that “supports health, recreation and wellbeing, safety, social interaction, easy mobility, a sense of pride and cultural identity and ... is accessible to the needs of all its citizens”.<sup>59</sup> The same principles apply to villages, towns and communities of all shapes and sizes, rural and urban.

The way land is used in communities has an immense impact on the public’s health.<sup>60,61</sup> Although it is the quality and not just the quantity of public parks and spaces that encourages people to be active, evidence shows just having ease of access to open space makes a crucial difference. One study showed that respondents living closest to parks were more likely to achieve recommended physical activity levels and less likely to be overweight or obese.<sup>62</sup>

Those with close access to green space live longer than those without it,<sup>63</sup> even adjusting for factors such as social class, employment and smoking. The health of older people increases where there is more space for walking near home, with parks and tree-lined streets nearby.<sup>64</sup> Children become more active when they live closer to parks, playgrounds and recreation areas.<sup>65</sup> The impact is most significant among the least well off.

Building more physical activity into daily routines – the commute, walking the dog, the journey to the shops, school or workplace – involves creating the kinds of environments that support active living.

Re-shaping the world we live in can be done with sensitivity, tapping into and improving existing resources such as canal footpaths, disused railways and river paths. We can help older people and those with impairments to be more active with simple measures, such as benches and toilets. Providing cycle parking and showers in workplaces, improving stairwells so they are as attractive a choice as the lifts, and creating pleasant walkways between buildings and in neglected spaces are just a few effective ways we can make it easier for people to be routinely more active by fitting it in to their schedule. Mixed-use development, street connectivity, and good design make walking and cycling more attractive by reducing psychological and physical barriers.<sup>55</sup>

Issues in rural communities, where distances and resource distribution can be significant challenges, are often very different to urban contexts. Existing spaces, from forests to school playgrounds, can be used more imaginatively. With new approaches, putting local people and their ideas at the heart of planning, these spaces can bring people together, sustain communities and improve everybody’s health at the same time.<sup>66</sup>

Local authorities are seizing their new opportunity to link local health policy with other policy strands such as planning, transport infrastructure and housing. Improvements to the road infrastructure can include new facilities for walkers and cyclists. This opens up the ability to create new networks of expertise, and to design in physical activity from the ground up. New

#### Summary

- Healthy environments support health recreation and wellbeing
- Land use has a big impact on health – green spaces, playgrounds, cycle lanes, age-friendly high streets all encourage people to be active every day
- Physical activity needs to be built into daily routines
- Re-shaping existing places can make the difference
- Local authorities can work across policy areas and bring together experts to deliver real change that has an impact for generations



partnerships – for example, between architects, engineers and urban planners working directly with professionals in health and leisure – can help to create the step change in activity levels that we need.

If we are to make active living an easy and enjoyable choice, it is helpful to plan long-term, as has happened in a number of European cities such as Copenhagen, European Green Capital 2014, where an urban development project first started in the 1970s.<sup>67</sup>



#### 4. Moving at scale: scaling up interventions that make us active

We need to create an appetite for a revolution in physical activity and then light the blue touch paper.

Evidence shows that inactivity is an entrenched problem. Positive change needs to happen at every level, in every region. It needs to be measurable, permanent and consistent. NICE evidence-based guidance needs to be put into practice, but on a major scale, with long-term planning.

To scale up interventions, we need to base them on targeted community needs and then evaluate what really works. Local health and wellbeing boards have the knowledge and understanding of their local communities and assets to make systematic implementation a reality. If services are to have long-term impact, research or co-design helps to make them relevant. Building the evidence base will boost our understanding of what works.

Alongside this document PHE is publishing an overview of the evidence base, and recently published guidance on online tools. We will also be providing further support on using the standard evaluation framework.

##### Existing NICE guidelines:

PH6	2007	Behaviour change: the principles for effective interventions
PH8	2008	Physical activity and the environment
PH13	2008	Promoting physical activity in the workplace
PH17	2009	Promoting physical activity for children and young people
PH41	2012	Walking and cycling: local measures to promote walking and cycling as forms of travel or recreation
PH42	2012	Obesity: working with local communities
PH44	2013	Physical activity: brief advice for adults in primary care
PH49	2014	Behaviour change; individual approaches
PH54	2014	Exercise referral schemes to promote physical activity

Much of this is not about new investment; it's about maximising the potential of the many assets we already have in common land, woodland, streets, parks, leisure facilities, community halls, and workspaces, and thinking differently about how we commission and plan public services.



#### Summary

- Positive change needs to be long-term and large-scale
- Interventions must be based on community needs
- Research and co-design will mean initiatives are workable and effective
- It is not about new investment – it is more about maximising existing assets

## Measuring impact

### Four areas where we need to take measures

To make everybody active every day a reality we need to monitor progress and measure the impact at a population, organisational, programme and individual level.

The key outcomes within the public health outcomes framework (PHOF) will be central, ie, the percentage of adults physically inactive (primary outcome, PHOF 2.13ii) and physically active (secondary, PHOF 2.13i). A range of population-level surveys of physical activity provide more detail of the picture at national, regional and local levels. These include:

- Health Survey for England
- Active People Survey
- National Travel Survey
- Labour Force Survey

Most data is on self-reported physical activity. Although studies that compared this with accelerometers show that most of us overestimate our level of activity, the chief medical officer's guidance takes this into account.

Technology is an emerging area with huge potential to change set patterns among individuals, communities and nationally. This is particularly so for accurately monitoring activity. An increasing number of new apps empower individuals to set targets for their own physical activity.

Understanding levels of activity in children and young people remains a challenge. The 'what about youth' indicator for 15-year olds is being piloted<sup>68</sup> and we are working with Natural England to explore a new indicator.

We recognise the significant challenge in measuring impact and return on investment. PHE will continue to work with partners to support better evaluation of interventions.

To support local practitioners, PHE has developed the physical activity standard evaluation framework (SEF).<sup>69</sup> We are keen to raise the quality of evidence in this area, and SEF is a helpful guide for interventions that work at an individual or group level. PHE provides training and guidance on how to use SEF, and we will be further developing this in 2015-16. PHE has also developed a summary of tools to make the case for investment (including the NICE tool), and guidance on which tool to use in which situation.<sup>35,36</sup>



Technology is an emerging area with huge potential to change set patterns among individuals, communities and nationally



# Making it happen

## The structure for change

### Capacity-building over time

The vision of making everybody active every day will not be delivered in five or even ten years. This document is a framework for action, supported by resources that we will update and adapt to keep pace with change.

The evidence guide that accompanies this document gives evidence-based opportunities for action across the public health system. These include five steps for local areas to support change:

1. Teach every child to have and enjoy the skills to be active every day
2. Create safe and attractive environments where everyone can walk or cycle, regardless of age or disability
3. Make every contact count for professionals and volunteers to encourage active lives
4. Lead by example in every public sector workspace
5. Evaluate and share the findings so the learning of what works can grow

PHE is working with partners including the LGA, ukactive and the County Sports Partnership Network to continue the programme of regional fora to support and energise action at a local level and continue to build capacity across the public health system to make this change happen.

### Governance and leadership

At a national level, the minister for public health through the chair of the Olympic and Paralympic legacy cabinet committee and the ministerial sub-group on physical activity will continue to oversee cross-government action to increase activity across the country, supported by the civil service officials group.

At local level, health and wellbeing boards are pivotal to developing and delivering the partnership actions required to truly shift society forward. In many areas local county sports partnerships are bringing together organisations providing sport, active travel, dance and cultural activity as well as outdoor programmes to support local government and partners in promoting and delivering more activity. District councils have a critical role in two-tier jurisdictions, with strategic partnership with their local authority counterparts essential for delivering the necessary changes.

Businesses and institutions can contribute – eg, signing up to the public health responsibility deal and working with the local workplace charter scheme can translate active, healthy workplaces into sickness absence and productivity savings. Local enterprise partnerships and chambers of commerce can lead and coordinate strategic and practical action.

PHE will continue to work with national partners and through its centres to support implementation and build the evidence base.



Local health and wellbeing boards are pivotal to developing and delivering the partnership actions required to shift society forward



# PHE

## How we will support local and national action

Recognising the importance of physical activity to individual, community and national health and wellbeing, and the need to support the public health system, PHE is working up resources to support local and national action. These include:

1. Topic overviews – a set of in-depth summaries of evidence to support action on challenging issues. They will include: older people; children and young people; disability; ethnicity; gender; lesbian, gay, bisexual and transgender people; and active places.
2. An overview of online tools – summary of online tools to make the case for investment in promoting physical activity and/or preventing obesity with guidance on which tool to use in which situation.
3. Toolkits for elected representatives – guidance for MPs and local elected members to support them undertaking their unique role in local leadership.
4. Promising practice report – a summary of the national process that received 958 submissions of promising practice on increasing physical activity in local communities. An academic panel reviewed these against the Nesta standards of evidence.<sup>70</sup>
5. BMJ e-learning resources – a suite of free, CPD-accredited modules covering motivational interviewing techniques, and nine modules on physical activity and health covering the science and specific clinical conditions, including diabetes, depression and cancer.
6. A review of return-on-investment evidence – a definitive summary of the economic benefits of investing in physical activity, not only in terms of health but also on the wider social benefits (for example, social care, regeneration, travel and transport, business and economic productivity, crime and education).
7. Developing the academic/practitioner interface – a mapping of the academic landscape for physical activity forms the basis for ongoing work.
8. Embedding in clinical pathways – work with the National Centre for Sports and Exercise Medicine on implementing physical activity into clinical care pathways in acute settings.
9. Health professional education – PHE will be working with professional bodies and leaders (for example, Royal Colleges, Health Education England, allied health professionals networks) to develop expertise and leadership among health professionals.



PHE is developing resources to support local and national action



# Chief medical officer's guidelines

## On physical activity<sup>22</sup>

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### For early years (under fives)

1. Physical activity should be encouraged from birth, particularly through floor-based play and water-based activities in safe environments.
2. Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes (three hours), spread throughout the day.
3. All under fives should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

These guidelines are relevant to all children under five, irrespective of gender, race or socio-economic status, but should be interpreted with consideration for individual physical and mental capabilities.

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### For children and young people (five to 18 years):

1. 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.
2. 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.

Based on the evidence, the guidelines can be applied to disabled children and young people, emphasising that they need to be adjusted for each individual based on that person's exercise capacity and any special health issues or risks.

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### For adults:

1. 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 ten minutes or more – one way to approach this is to do 30 minutes on at least five days a week.
2. Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous intensity activity.
3. Adults should also undertake physical activity to improve muscle strength on at least two days a week.
4. All adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Based on the evidence, the guidelines can be applied to disabled adults, emphasising that they need to be adjusted for each individual, based on that person's exercise capacity and any special health or risk issues.

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**For older adults (65-plus years):**

1. Older adults who participate in any amount of physical activity gain some health benefits, including maintenance of good physical and cognitive function. Some physical activity is better than none, and more physical activity provides greater health benefits.
2. Older 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 ten minutes or more – one way to approach this is to do 30 minutes on at least five days a week.
3. For those who are already regularly active at moderate intensity, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous activity.
4. Older adults should also undertake physical activity to improve muscle strength on at least two days a week.
5. Older adults at risk of falls should incorporate physical activity to improve balance and coordination on at least two days a week.
6. All older adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Based on the evidence, the guidelines can be applied to disabled older adults emphasising that they need to be adjusted for each individual based on that person's exercise capacity and any special health or risk issues.



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