

Worcestershire Health and Well-being Board

Joint Strategic Needs Assessment Briefing on Physical Activity

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By its nature this briefing is not an exhaustive resource on physical activity and should be read alongside other Joint Strategic Needs Assessment (JSNA) outputs.

Summary

- Physical activity includes activities that are done as part of playing, working, active transportation, household chores and recreation - not just exercise intended to improve fitness.
- Physical activity is an important component in health and well-being across all ages and being inactive is a major cause of ill-health throughout life.
- Physical inactivity is the fourth largest cause of disease and disability in the UK and is responsible for 1 in 6 deaths.
- Achieving the Chief Medical Officer's recommended physical activity levels reduces a person's risk of a range of diseases including: type 2 diabetes, colon cancer, coronary heart disease, stroke, falls, high blood pressure, Alzheimer's, osteoarthritis, hip fractures and depression.
- Wychavon has by far the highest proportion of 16 to 34-year olds participating in 30 minutes of sport or activity at least 3 days a week at 45.7%. Wyre Forest has the lowest at 21.3%.
- Worcester has the lowest proportion of 35 to 54-year olds participating in sport or activity at 23.5%. Bromsgrove reports the highest at 37.7%.
- Bromsgrove has a higher percentage of people in the middle-aged group participating in sport than in the 16 to 34-year old age group.

- For those aged 55 and above, the range between the lowest and highest rates of people participating in sport across all six districts is only 2% - ranging between 14% and 16%.
- Guidelines on physical activity were issued by the UK's Chief Medical Officer in 2011.
- The Worcestershire Health and Well-being Board identified 'Keeping Active at Every Age' as one of three priorities for 2016-2021.
- Overall, Worcestershire compares similarly to, or better than, regional and national averages on many physical activity measures.
- However, rates of adults walking and cycling for travel on at least three days a week are worse in Worcestershire than nationally.
- Locally, promoting physical activity across all age groups is achieved through actions drawn from the Public Health England evidence-based approach to physical activity and builds upon what we know works.
- As there is no individual method, intervention or treatment which alone will result in effective long-term behaviour change, the Worcestershire Plan aims to promote a holistic approach that is inclusive and participatory regardless of age and gender in order to promote resilience and sustainability at individual, family and community levels.
- There are a range of resources upon which to draw best practice. These are listed in the 'Best Practice' section of this report.

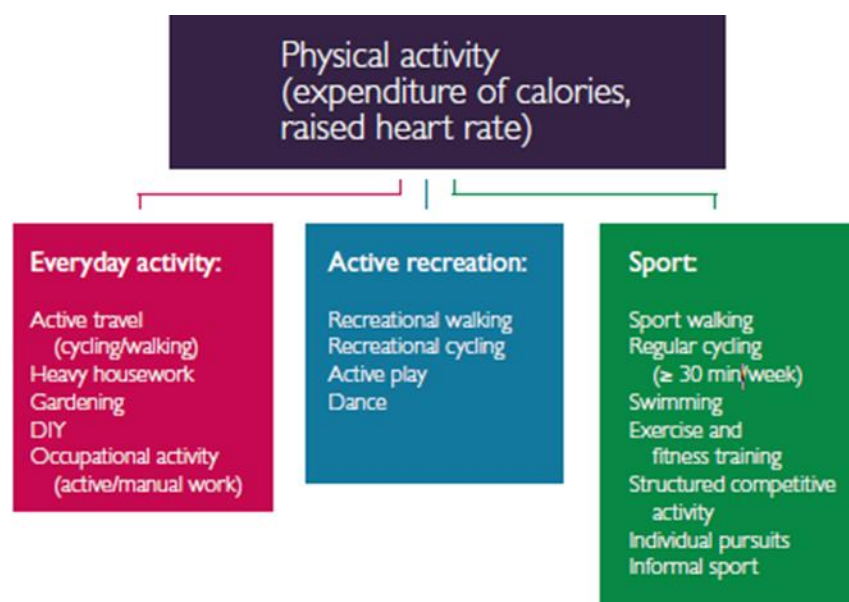
Background

Physical activity is an important component in health and well-being across all ages and being inactive is a major cause of ill-health throughout life.

The World Health Organisation (WHO) have defined physical activity as 'any bodily movement produced by skeletal muscles that requires energy expenditure'.¹ Therefore, physical activity includes activities that are done as part of playing, working, active transportation, household chores and recreation, not just exercise intended to improve fitness.² Error! Reference source not found.

Figure 1 shows some examples of physical activity.

Figure 1 Examples of Physical Activity



Source: Department of Health, 2009³

Guidelines on physical activity were issued by the UK's Chief Medical Officer in 2011. These cover both children and adults and aim to ensure an understanding of the amount and type of physical activity we should all do at each stage of our lives.

The Chief Medical Officer's guidance recommended that everyone should minimise spending time sitting or lying down (sedentary behaviour). Public Health England recommend that individual physical and mental capabilities should be considered when interpreting the guidance.

^{1, 2} WHO Global Strategy on Diet, Physical Activity and Health: <http://www.who.int/dietphysicalactivity/pa/en/>

³ Department of Health: <http://www.laterlifetraining.co.uk/wp-content/uploads/2011/12/DoH-Be-Active-Be-Healthy-2009.pdf>

The Chief Medical Officer's Guidelines⁴

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. The amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping) should be minimised for all under-fives.

For Children and Young People (5-18 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.

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 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.
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.

For Older Adults (65+ 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 10 minutes or more – one way to approach this is to do 30 minutes on at least 5 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 co-ordination on at least two days a week.
6. All older adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

⁴ DH (2011) Start Active, Stay Active: A report on physical activity from the four home countries' Chief Medical Officer : <https://www.gov.uk/government/publications/uk-physical-activity-guidelines>

The guidance is important because being physically active has well evidenced and wide-reaching health benefits to an individual. These include maintaining energy balance - a key determinant of weight control.

Spending large amounts of time being sedentary may increase the risk of poor health outcomes, even among people who are active at the recommended levels.

Sedentary behaviour is not merely a lack of physical activity but is a cluster of individual behaviours where sitting or lying is the dominant mode of posture and energy expenditure is very low.⁵

Table 1 shows the contribution of regular physical activity towards preventing a person’s risk of some chronic conditions and diseases.⁶

Table 1 Health Benefits of Regular Physical Activity

Disease risk	Risk Reduction
Hip fractures	68%
Type 2 diabetes	40%
Cardiovascular diseases	35%
All-cause mortality	30%
Colon cancer	30%
Depression	30%
Dementia	30%
Breast cancer	20%

Source: Public Health England.⁷

- Nationally, physical inactivity directly contributes to 1 in 6 deaths with almost a quarter of the population inactive
- Physical activity can prevent or help manage over 20 common conditions
- Reducing inactivity could prevent up to 40% of many long-term conditions, e.g., diabetes, colon cancer, coronary heart disease, stroke, falls and hypertension.
- Increased activity means better health and has wider economic benefits - reducing costs for families and services.

⁵ Sedentary Behaviour and Obesity Expert Working Group (2010) Sedentary Behaviour and Obesity: Review of the Current Scientific Evidence. London: Department of Health

⁶ Public Health England Everybody active, every day
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/374914/Framework_13.pdf

⁷ Available at: <https://www.gov.uk/government/publications/health-matters-getting-every-adult-active-every-day/health-matters-getting-every-adult-active-every-day>

The Worcestershire Picture

The Worcestershire Health and Well-being Board identified 'Keeping Active at Every Age' as one of three priorities for 2016-2021.

Figure 2 Key Performance Indicators (KPIs) for Worcestershire

	Period	Units	England	West Midlands	Worcs	CIPFA Rank *	Trend
Age-standardised rate of mortality from all cardiovascular diseases (including heart disease and stroke) <75yrs LCI - UCI	2014-16	DSR per 100,000	73.5 73. - 73.9	78.0 76.6 - 79.5	64.6 60.8 - 68.5	3	↓
Prevalence of overweight (including obese) among children in Reception (4-5yr olds) LCI - UCI	2016-17	%	22.6 22.5-22.7	24.2 23.9-24.5	23.6 22.6-24.7	4	↔
Prevalence of overweight (including obese) among children in Year 6 (10-11yr old) LCI - UCI	2016-17	%	34.2 34.1 - 34.4	37.1 36.7-37.5	33.8 32.6-35.1	3	↔
Percentage physically active for at least one hour per day seven days a week	2014-15	%	13.9 13.7 - 14.1	13.8 13.2 - 14.5	15.7 13.6 - 17.8	3	↔
Sport and Physical Activity Levels: Inactive LCI - UCI	2016-17	%	25.6% 25.3-25.9	29.5% 28.6-30.4	25.1% 23.2-27.2	3	↔
Sport and Physical Activity Levels: Fairly Active LCI - UCI	2016-17	%	12.4% 12.1-12.6	13.0% 12.3-13.6	12.3% 10.9-13.9	4	↔
Sport and Physical Activity Levels: Active LCI - UCI	2016-17	%	62.1% 61.8-62.4	58.7% 57.6-59.7	62.6% 60.3-64.8	2	↔
Adults (aged 16+) who have taken part in sport and physical activity at least twice in the last 28 days LCI - UCI	2016-17	%	77.2% 76.9 - 77.4	73.0% 73.1-73.9%	78.0% 76.05-79.8	2	↔
Adults (aged 16+) who have attended at least 2 live sports events in the last 12 months LCI - UCI	2016-17	%	23.5% 23.3 - 23.8	22.1% 21.2-22.9	27.9% 25.6 - 30.3	1	↔

* 1 = Highest Ranking and 4 = Lowest Ranking

Key

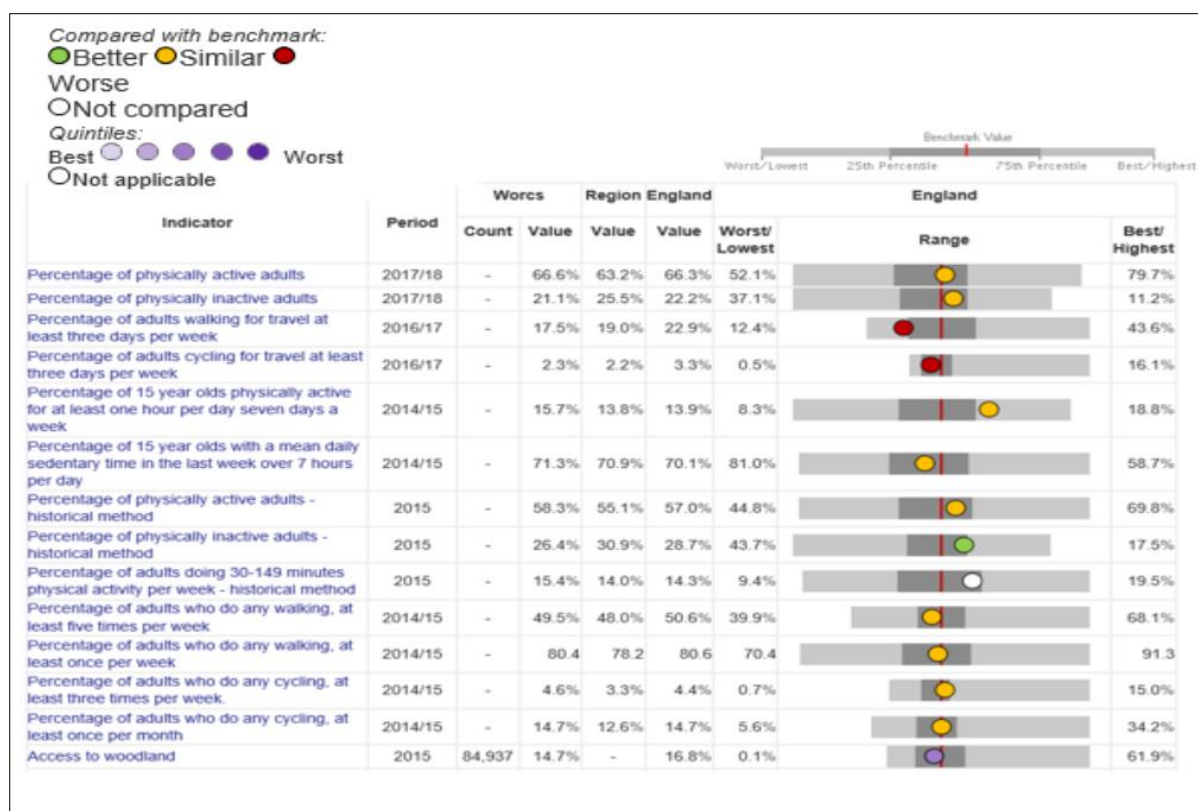
- Better than England Average
- Similar to England Average
- Worse than England Average
- Increasing getting better
- Increasing getting worse
- Decreasing getting better
- Decreasing getting worse
- Increasing similar
- Decreasing similar
- Similar trend

Source: Public Health Outcomes Framework (2018) <https://fingertips.phe.org.uk/>

The indicators identified in Figure 2 cover a wide range of measures related to physical activity.⁸ The overall picture is that Worcestershire compares similarly to, or better than, regional and national averages.

⁸ NS SEC National Statistics Socio-economic Classification

Figure 3 Physical Activity Indicators: Worcestershire Versus England



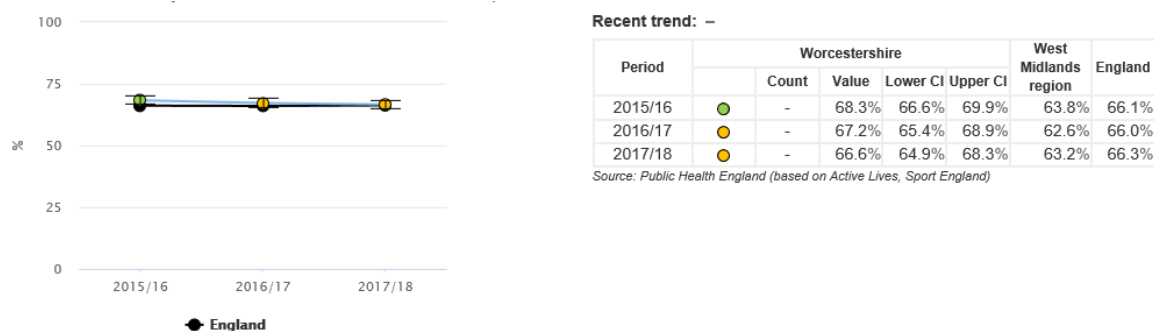
Source: Public Health Outcomes Framework (2018)

- Worcestershire is similar to, or better than, the England average on a range of measures, however, rates of adults walking and cycling for travel on at least three days a week are worse
- Worcestershire has a smaller proportion of adults walking for travel at 17.5% compared to England's 22.9%
- Worcestershire has a smaller proportion of adults cycling for travel at 2.3% compared to England's 3.3%

The low percentages of adults walking and cycling in Worcestershire could be related to the rurality of the county and services being spread across a large area. Considering a limited public transport network, longer travel times, accessibility and affordability, driving may be the preferred mode of transport. There is also a generally older population in Worcestershire compared to England.⁹

⁹ Public Health England, 2018 (PHOF) <https://fingertips.phe.org.uk/>

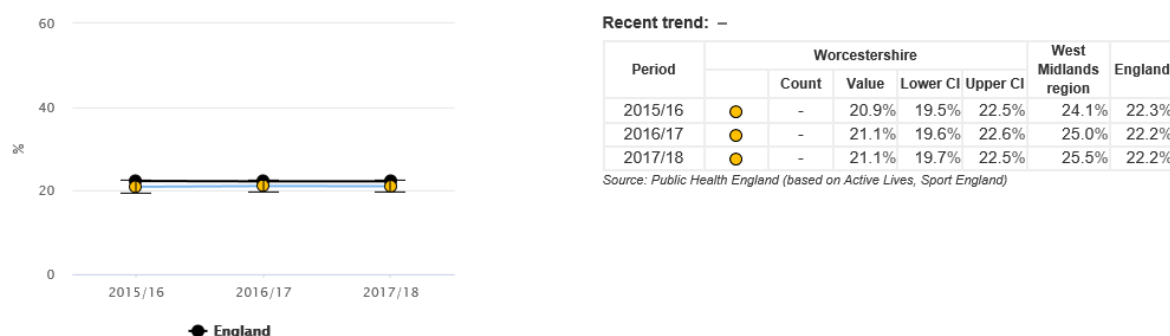
Figure 4 Proportion of Physically Active Adults - Worcestershire 2015/16 to 2017/18



Source: Public Health Outcomes Framework (2018)

The proportion of the Worcestershire population who are physically active is similar to the national average (not significantly different).

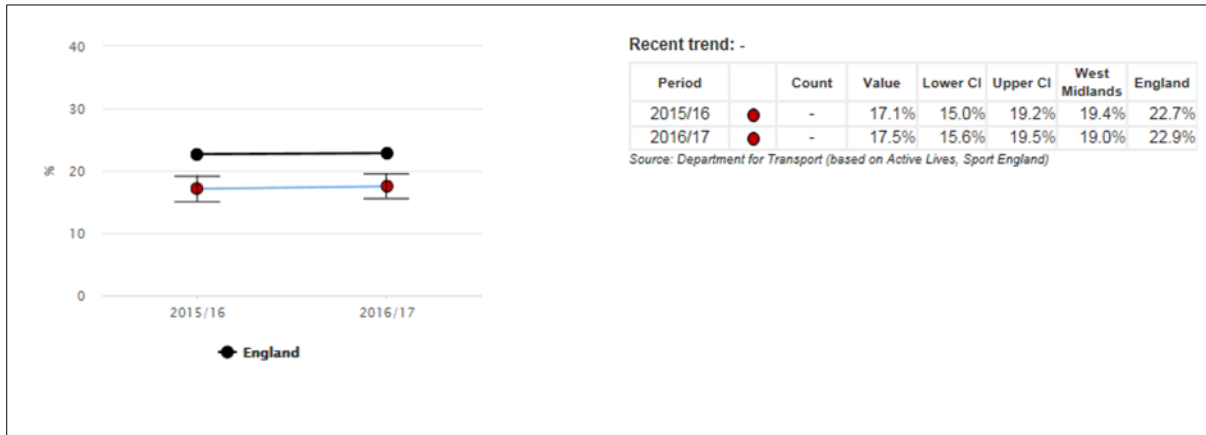
Figure 5 Proportion of Physically Inactive Adults - Worcestershire 2015/16 to 2017/18



Source: Public Health Outcomes Framework (2018)

The proportion of the Worcestershire population who are physically inactive is similar to the national average (not significantly different).

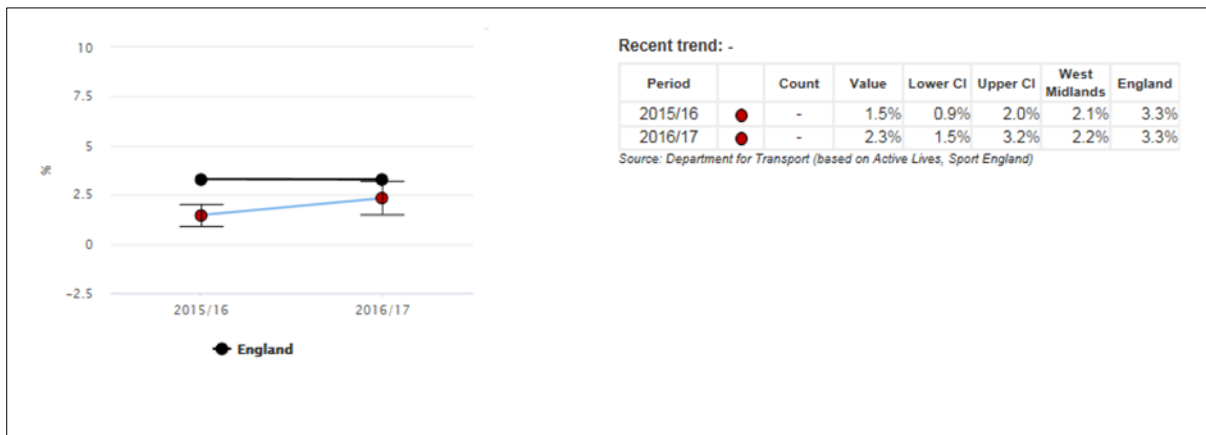
Figure 6 Percentage of Adults Walking for Travel at Least Three Days Per Week - Worcestershire 2015-2017



Source: Public Health Outcomes Framework (2018) <https://fingertips.phe.org.uk/>

There has been not much change in adults taking up walking for travel in Worcestershire and England. Worcestershire remains statistically significantly worse than England.

Figure 7 Percentage of adults cycling for travel at least three days per week - Worcestershire 2015/16-2016/17

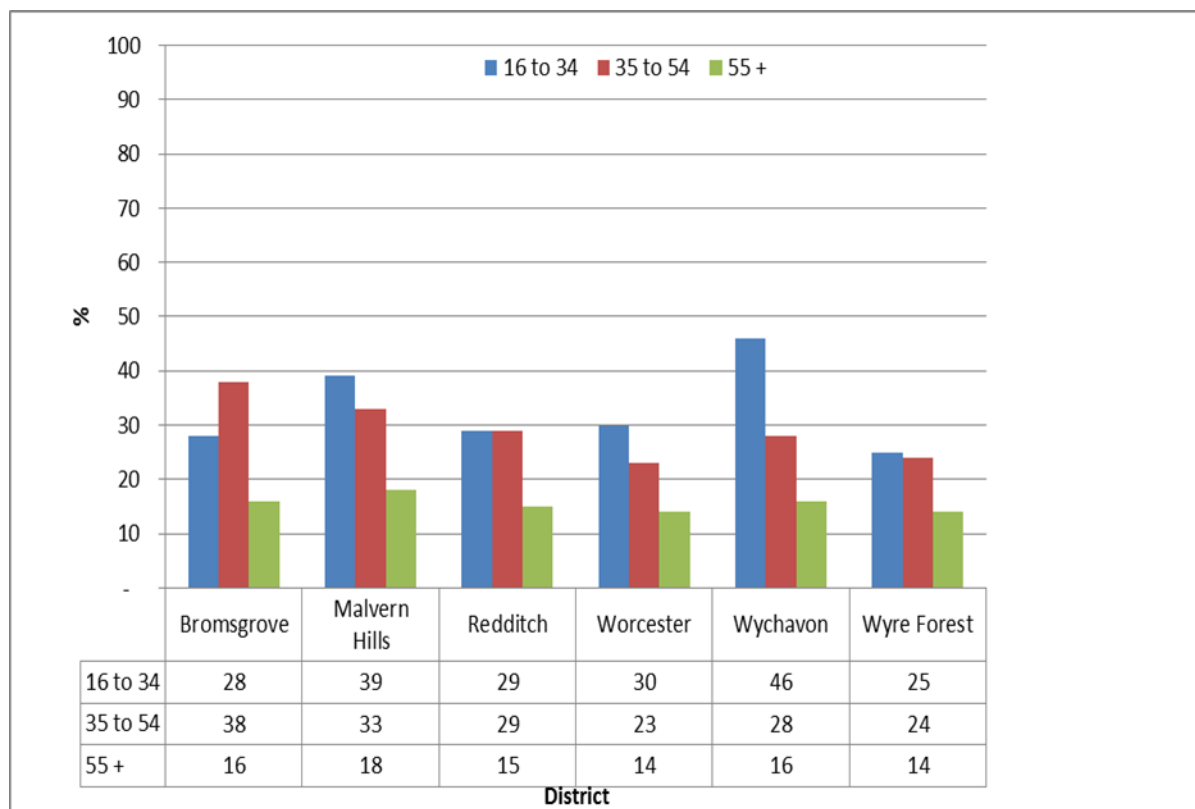


Source: Public Health Outcomes Framework (PHOF), (2018) <https://fingertips.phe.org.uk/>

Although still significantly worse than the national figure, the percentage of adults cycling for travel has improved in 2016/17 compared to 2015/16 by 0.8%.

Figure 8 shows adult participation in sport and active recreation for each of the Worcestershire districts.

Figure 8 Adult participation in sport and active recreation 2014-2016



Source: Sport England, 2016 <http://www.sportengland.org/research/who-plays-sport/active-people-interactive/>.

- Wychavon has by far the highest proportion of 16 to 34-year olds participating in 30 minutes of sport or active recreation at least 3 days a week at 45.7%, with Wyre Forest showing the lowest at 21.3%.
- Worcester has the lowest proportion of 35 to 54-year olds participating in sport or active recreation at 23.5% with Bromsgrove reporting the highest at 37.7%.
- Bromsgrove has a higher percentage of middle-aged people participating in sport or active recreation than the younger age group of 16 to 34-year olds
- For participation in sport or active recreation in those aged 55 and above the range between the lowest and highest rates across all six districts is only 2% - ranging between 14% and 16%.
- The percentage of the population aged 55 and above participating in sport and active recreation is low across all districts.

Increasing Physical Activity

Locally, promoting physical activity across all age groups is achieved through actions drawn from the Public Health England evidence-based approach to physical activity and builds upon what we know works. The approach focuses on increasing everyday activity across the population through engaging with local communities to build local health assets. The aim is to build resilient communities with informed residents who can help themselves and each other in ways that will impact positively on health and well-being.¹⁰

Physical activity needs to be made easy, fun and affordable and requires action across four areas, at national and local level:

- **Strengthening Communities** – including: community development, asset-based approaches, social action and social network approaches.
- **Volunteer and Peer Roles** – including bridging roles such as: health trainers, peer support and volunteer health roles.
- **Collaborations and Partnerships** – including: community-based participatory research, area-based initiatives such as healthy cities, community engagement in planning and co-production (a term used to describe engaging community members and service users as equal partners in service design and delivery).
- **Access to Community Resources** - including approaches that improve pathways to participation such as: social prescribing, community hubs and community-based commissioning.

There is no individual method, intervention or treatment which will result in effective long-term behaviour change, therefore, the Worcestershire Plan aims to promote a holistic approach that is inclusive and participatory regardless of age and gender in order to promote resilience and sustainability at individual, family and community levels.¹¹

People of all ages and abilities are encouraged and empowered to become more active through:

- **Provision of clear information and advice** to all ages through a county-wide marketing campaign to increase awareness, motivation, uptake and improve attitudes towards physical activity
- **Encouraging families, children and young people** to start active lives and stay active throughout life, taking responsibility for their own health
- **Supporting those who have the poorest health outcomes** and those who are the most inactive, including older people and those with a disability to lead active lives and increase physical activity
- **Creating health-promoting environments**, supporting active spaces including within the workplace. Encouraging the use of active and sustainable travel modes and green space for active recreation

¹⁰ Worcestershire County Council

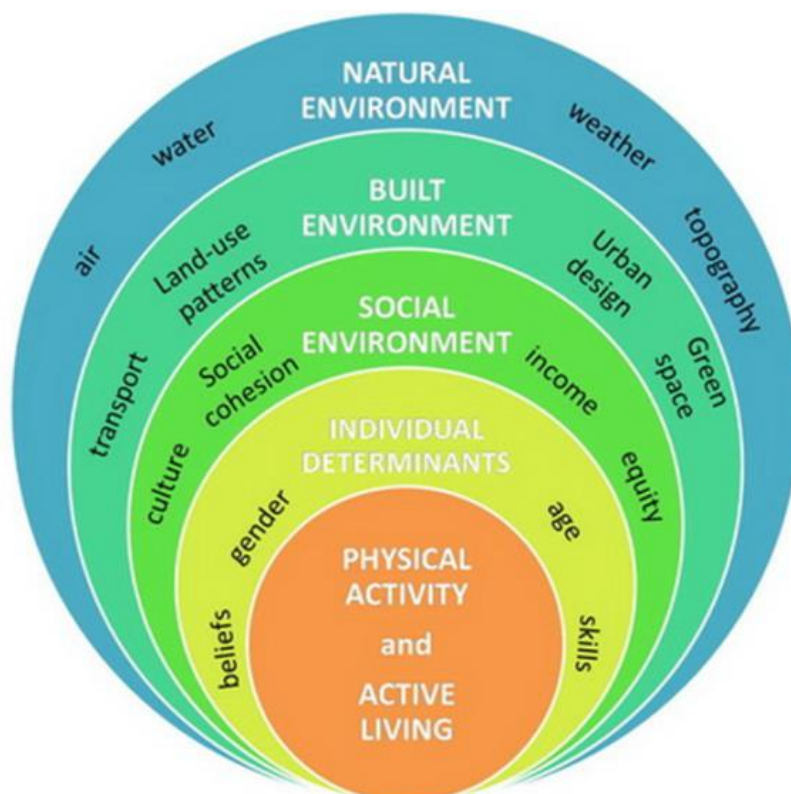
http://www.worcestershire.gov.uk/downloads/file/7051/joint_health_and_well-being_strategy_2016_to_2021

¹¹ Marmot: Fair lives (2010) <http://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review/fair-society-healthy-lives-full-report-pdf.pdf>

Figure 9 shows a model of the determinants of physical activity which highlights the interaction between people and place. The model illustrates that, as well as individual knowledge and attitudes, a person’s physical activity is heavily influenced by the environments in which they live, play, work and learn. The model is useful in understanding some of the barriers to people being physically active.¹²

Interventions to increase physical activity require community-centered approaches that maximise the use of local assets and other environmental variables (natural or built).

Figure 9 Determinants of Physical Activity - The Social-Ecological Model



Source: Social-Ecological Model Adapted for Physical Activity¹³

The county possesses a variety of accessible natural environments in and around urban areas. There are over 11,750 hectares of strategic natural green space that can be used by the public.¹⁴

¹² Physical activity strategy for the WHO European Region 2016–2025
<http://www.euro.who.int/en/publications/abstracts/physical-activity-strategy-for-the-who-european-region-20162025>

¹³ The Transportation Profession's Role in Improving Public Health: Research Gate
https://www.researchgate.net/figure/e-Social-Ecological-Model-Adapted-for-Physical-Activity-24_fig1_264347123 [accessed 22 Jan, 2019]

¹⁴ Natural England, 2011 Nature Nearby; Accessible Natural Greenspace Guidance:
http://www.ukmaburbanforum.co.uk/documents/other/nature_nearby.pdf.

Worcestershire has been promoting exercise and the use of green spaces through the provision of cycle routes, park runs and health walks. However, many of these initiatives rely on volunteers working in partnership with District Councils (who have statutory duties to provide service in these areas).¹⁵ Other supported physical activity initiatives can be found through Worcestershire-based online resources, as follows:

1. One You, Worcestershire Works Well¹⁶
2. Make Every Contact Count (MECC)¹⁷
3. Herefordshire and Worcestershire Sport Partnership¹⁸
4. Sport Leisure Facilities¹⁹

Best Practice

The following resources are a useful source of best practice in this area.

National Institute for Health and Care Excellence

- PH6 Behaviour change: the principles for effective interventions (2007).
<https://www.nice.org.uk/guidance/ph6>
- NG90 Physical activity and the environment (2008).
<https://www.nice.org.uk/guidance/ng90>
- PH13 Promoting physical activity in the workplace (2008).
<https://www.nice.org.uk/guidance/ph13>
- PH17 Promoting physical activity for children and young people (2009).
<https://www.nice.org.uk/guidance/ph17>
- PH41 Walking and cycling: local measures to promote walking and cycling as forms of travel or recreation (2012). <https://www.nice.org.uk/guidance/ph41>
- PH42 Obesity: working with local communities (2012).
<https://www.nice.org.uk/guidance/ph42>
- PH44 Physical activity: brief advice for adults in primary care (2013).
<https://www.nice.org.uk/guidance/ph44/resources>
- PH49 Behaviour change; individual approaches (2014).
<https://www.nice.org.uk/guidance/ph49>
- PH54 Exercise referral schemes to promote physical activity (2014).
<https://www.nice.org.uk/guidance/ph54>

¹⁵ Worcestershire County Council, Health Walks

http://www.worcestershire.gov.uk/info/20239/walks_and_rides/1013/health_walks/1

¹⁶ Public Health England; <https://www.nhs.uk/oneyou/about-one-you/>

¹⁷ Worcestershire County Council <http://www.worcestershire.gov.uk/MECC>

¹⁸ Sports Partnerships <https://www.sportpartnershiphw.co.uk/school-games>

¹⁹ Freedom Leisure: <https://www.freedom-leisure.co.uk/>

Public Health England

- Everybody active, every day: an evidence-based approach to physical activity.
www.gov.uk/government/publications/everybody-active-every-day-a-framework-to-embed-physical-activity-into-daily-life

Department of Health and Social Care

- Guidance from the Chief Medical Officer (CMO) on how much physical activity people should be doing, along with supporting documents.
<https://www.gov.uk/government/publications/uk-physical-activity-guideline>

NHS

- Physical activity guidelines for adults.
<http://www.nhs.uk/Livewell/fitness/Pages/physical-activity-guidelines-for-adults.aspx>
- Physical activity guidelines for children and young people.
<http://www.nhs.uk/Livewell/fitness/Pages/physical-activity-guidelines-for-young-people.aspx>

Sport England

- Towards an Active Nation, Strategy 2016-2021.
<https://www.sportengland.org/media/10629/sport-england-towards-an-active-nation.pdf>

World Health Organisation (WHO)

- Physical Activity Strategy for the WHO European Region 2016-2025.
http://www.euro.who.int/_data/assets/pdf_file/0010/282961/65wd09e_PhysicalActivityStrategy_150474.pdf

Associated Documents and Links

1. Worcestershire County Council Joint Health and Well-being Strategy 2016 to 2021.
http://www.worcestershire.gov.uk/download/downloads/id/7051/joint_health_and_well-being_strategy_2016_to_2021.pdf
2. Joint Strategic Needs Assessment Briefings
http://www.worcestershire.gov.uk/homepage/301/jsna_briefings

Who Might Find This Report Useful?

Not intended to be an exhaustive list, the following groups may find this report particularly useful:

- Local Councillors
- District Councils
- Adult Social Care
- Children's Social Care
- Libraries, Archive and Archaeology
- Schools, Education and Learning
- Private companies
- Third sector organisations

Data Notes

Data quality is influenced by its currency - particularly so for children.

The Viewpoint Survey reflects the expressed needs of a sample of the adult population.

Further Information and Feedback

This report has been written by Worcestershire County Council's Public Health Team. We welcome your comments on these reports and how they could better suit your requirements, please do contact us with your ideas.

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