Worcestershire Health & Well-being Board

JSNA Briefing on Physical Activity

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Summary

- The estimated rate of physically active adults in Worcestershire has fallen slightly from 59.9% in 2014 to 58.3% in 2015. This is now similar to the National average and the rates of the CIPFA nearest neighbours, and better than the regional average.
- The estimated rate of physically inactive adults in Worcestershire has risen slightly from 24.8% in 2014 to 26.4% in 2015. This is still significantly better than the National and regional average, and similar to the rates of the CIPFA nearest neighbours.
- The rate of adults that participate in sport and active recreation in Worcestershire increased from 21.7% for the period October 2005-October 2006 to around 24% in the period April 2015-March 2016.
- Worcestershire has a higher percentage of adults that have not participated in any sport and recreation over the previous four weeks (51.9%) when compared to Warwickshire (49.9%) and Gloucestershire (49.8%). There are also noticeable differences in the rates of participation in sport and active recreation at the Worcestershire District level.
- Worcestershire has a lower percentage of adults aged 55 and over participating in sport and active recreation (14.9%) when compared to Warwickshire (16.7%), Gloucestershire (16.9%) and Suffolk (16.0%). There are also noticeable differences in participation rates in sport and active recreation between different age groups at the Worcestershire District level.
- The estimated utilisation of outdoor space for exercise/health reasons in Worcestershire has fallen over the period 2011-12 to 2014-15, but is not significantly different from the National and regional averages nor the rates of the CIPFA nearest neighbours.

Background

Physical inactivity is the fourth leading risk factor for global mortality accounting for 6% of deaths globally. People who have a physically active lifestyle have a 20-35% lower risk of cardiovascular disease, coronary heart disease and stroke compared to those who have a sedentary lifestyle. Regular physical activity is also associated with a reduced risk of diabetes, obesity, osteoporosis and colon/breast cancer and with improved mental health. In older adults physical activity is associated with increased functional capacities. The estimated direct cost of physical inactivity to the NHS across the UK is over £0.9 billion per year. For Worcestershire this is estimated to be over £10 million per year[1].

The Chief Medical Officer currently recommends that adults undertake 150 minutes (2.5 hours) of moderate activity per week, in bouts of 10 minutes or more. The overall amount of activity is more important than the type, intensity or frequency.

[1] Sport England, Local Sport Profile Tool 2016, http://localsportprofile.sportengland.org/

Public Health England recently identified seven priorities for the next ten years to tackle the behaviour that increases the risk of poor mental and physical health[2]. Tackling physical inactivity is critical to delivering many of those priorities (e.g. dementia, obesity and giving every child the best start in life)[3].

Worcestershire County Council's Health and Well-being Board has identified 'being active at every age' as a priority for the next five years[4].

Key Indicators

Table 1 below shows the key indicators around physical activity from the Public Health Outcomes Framework for Worcestershire, the West Midlands and England in 2015.

Table 1: Comparison of Worcestershire against national and regional averages on key physical activity indicators from the PHOF

PHOF Indicator	Period	Units	England	West Midlands	Worcestershire	Trend
2.13i - Percentage of physically active and inactive adults - active adults	2015	%	**57.0** (LCI 56.8 - 57.3 UCI)	**55.1** (LCI 54.3 - 55.8 UCI)	**58.3** (LCI 56.5 - 60.0 UCI)	↓
2.13ii - Percentage of physically active and inactive adults - inactive adults	2015	%	**28.7** (LCI 28.4 - 28.9 UCI)	**30.9** (LCI 30.2 - 31.6 UCI)	**26.4** (LCI 24.8 - 27.9 UCI)	↑

Source: Public Health Outcomes Framework, http://www.phoutcomes.info/, August 2016

Key

Compared with National benchmark:	**Better**	**Similar**	**Worse**	**Lower**	**Similar**	**Higher**	**Not Compared**

Note: LCI refers to Lower Confidence Interval and UCI refers to Upper Confidence Interval.

It can be seen from the table that, compared to the national averages, Worcestershire currently has a similar rate physically active adults and a significantly better rate of inactive adults. However, the trend for both indicators in Worcestershire shows that performance is deteriorating. It is important to note the definitions of physically active and inactive here;

- Active is defined as the number of respondents aged 16 and over, with valid responses to questions on physical activity, doing at least 150 “equivalent” minutes of at least moderate intensity physical activity per week in bouts of 10 minutes or more in the previous 28 days expressed as a percentage of the total number of respondents aged 16 and over.
- Inactive is defined as the number of respondents aged 16 and over, with valid responses to questions on physical activity, doing less than 30 “equivalent” minutes

[2] Public Health England (2014), From evidence into action: opportunities to protect and improve the nation's health, Ref: PHE publications gateway number: 2014404, https://www.gov.uk/government/publications/from-evidence-into-action-opportunities-to-protect-and-improve-the-nations-health

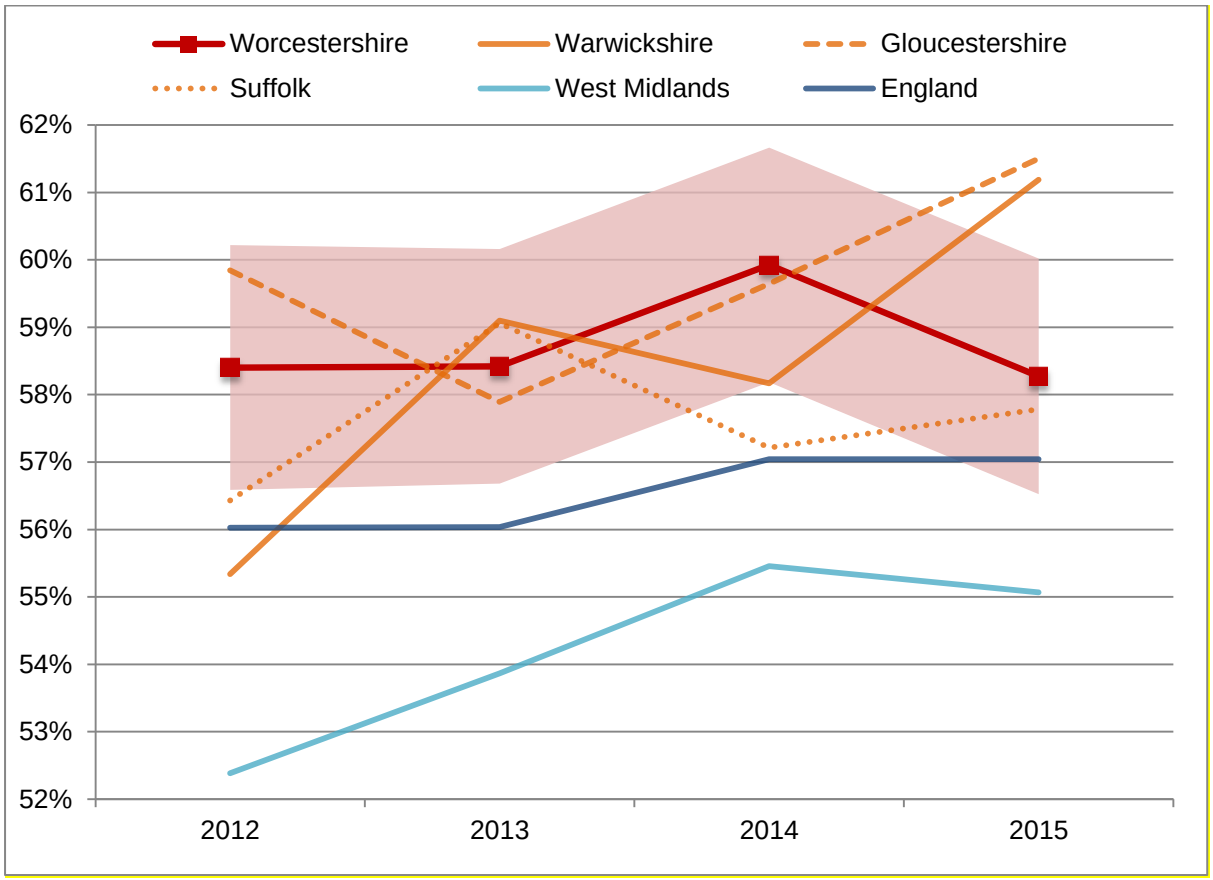
[3] Public Health England (2014), Everybody active, every day: an evidence-based approach to physical activity, Ref: PHE publications gateway number: 2014432, https://www.gov.uk/government/publications/everybody-active-every-day-a-framework-to-embed-physical-activity-into-daily-life

[4] Worcestershire County Council, Joint Health and Well-being Strategy 2016 to 2021, http://www.worcestershire.gov.uk/downloads/file/7051/joint_health_and_well-being_strategy_2016_to_2021

of at least moderate intensity physical activity per week in bouts of 10 minutes or more in the previous 28 days.

Figure 1 below shows the estimated percentage of physically active adults for Worcestershire the CIPFA nearest neighbours of Warwickshire, Gloucestershire, and Suffolk, the West Midlands, and England. The figures are based on Sport England's Active People Survey (APS). These are calculated using the number of respondents aged 16 and over who state they are completing at least 150 "equivalent" minutes of at least moderate intensity physical activity per week, in bouts of 10 minutes or more in the previous 28 days. This is then expressed as a percentage of the total number of respondents aged 16 and over. It should be noted that this only includes those respondents with valid responses to questions on physical activity. The activities included in the APS are; sport, recreational cycling and walking, walking and cycling for active travel purposes, dance and gardening.

Figure 1: Percentage of Physically Active Adults for Worcestershire and Comparators, 2012-15



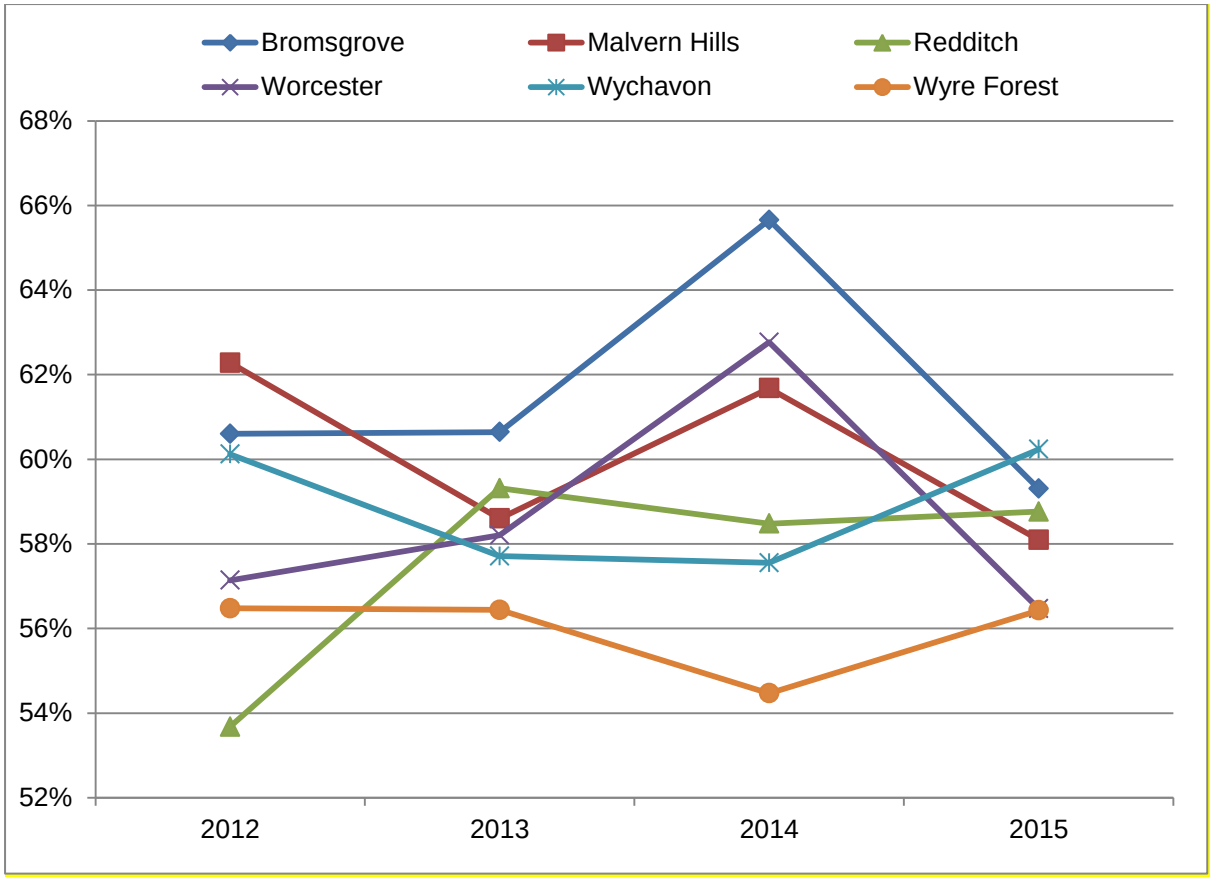
Source: Public Health Outcomes Framework, http://www.phoutcomes.info/, August 2016

It can be seen that;

- The level of active adults in Worcestershire has decreased slightly from 58.9% in 2014 to 58.3% in 2015. This is now similar to the national average and previous levels experienced in Worcestershire.
- The percentage of active adults in Worcestershire also remains similar to that of CIPFA nearest neighbours Warwickshire, Gloucestershire and Suffolk, although it is worth noticing that levels of activity in Warwickshire and Gloucestershire have increased over the time period.

Figure 2 below shows the estimated percentage of physically active adults for each of the District areas in Worcestershire.

Figure 2: Percentage of Physically Active Adults for Worcestershire Districts 2012 to 2015



Source: Public Health Outcomes Framework, http://www.phoutcomes.info/, August 2016

It can be seen that;

- The estimated percentage of physically active adults in Bromsgrove, Malvern Hills and Worcester has fallen in 2015 compared to 2014. Each of these areas has moved from having an estimated percentage of physically active adults that was significantly better than the National average in 2014, to one that is similar to the National average in 2015.

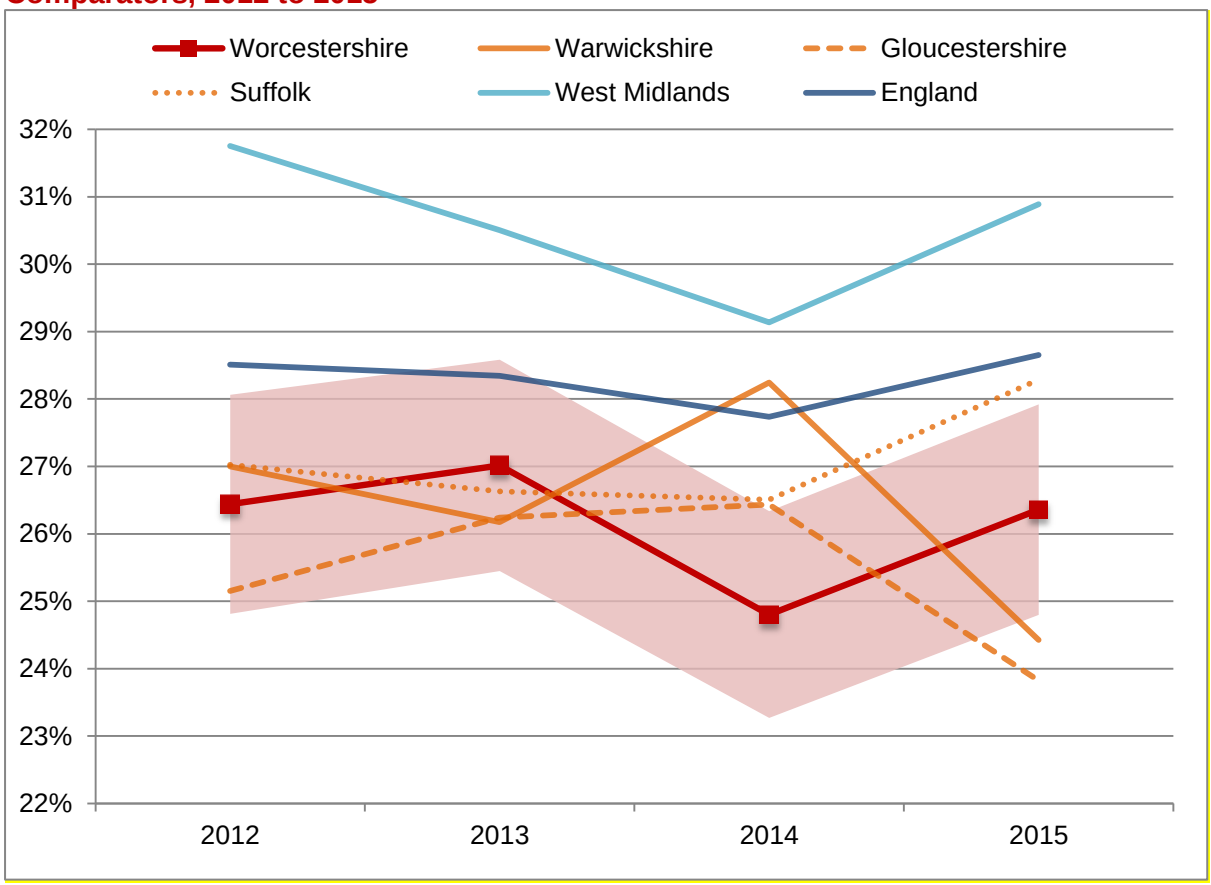
It is also worth noting that;

- All of the Worcestershire Districts now have a similar percentage of physically active adults to that of the National average when confidence intervals are taken into account.

Physically Inactive Adults

Figure 3 below shows the estimated percentage of physically inactive adults for Worcestershire, the CIPFA nearest neighbours of Warwickshire, Gloucestershire, and Suffolk, the West Midlands, and England. The figures are based on Sport England's Active People Survey and are calculated using the number of respondents aged 16 and over, with valid responses to questions on physical activity, doing less than 30 “equivalent” minutes of at least moderate intensity physical activity per week in bouts of 10 minutes or more in the previous 28 days expressed as a percentage of the total number of respondents aged 16 and over. The activities included in the APS are; sport, recreational cycling and walking, walking and cycling for active travel purposes, dance and gardening.

Figure 3: Percentage of Physically Inactive Adults for Worcestershire and Comparators, 2012 to 2015



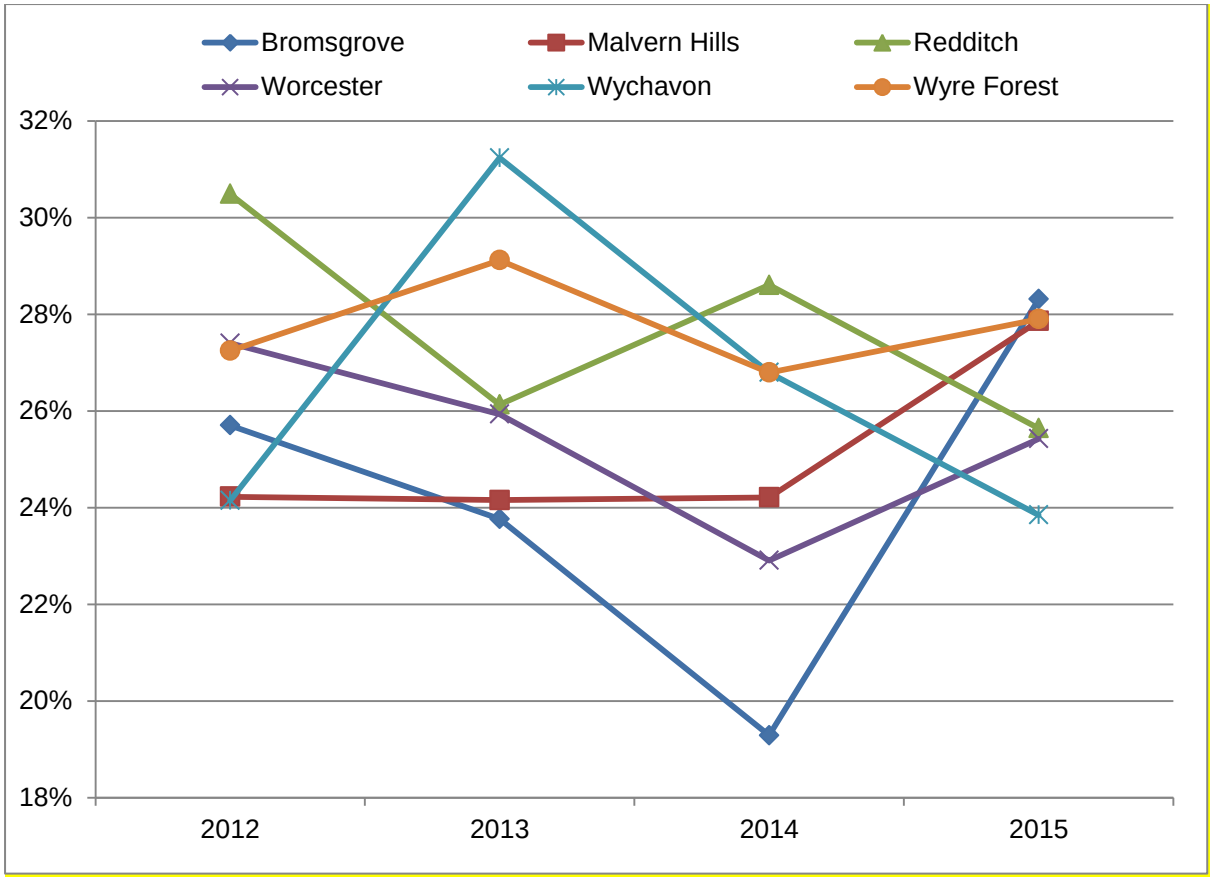
Source: Public Health Outcomes Framework, http://www.phoutcomes.info/, August 2016.

It can be seen that;

- The level of inactive adults in Worcestershire has increased from 24.8% in 2014 to 26.4% in 2015, but remains significantly better than the national average.
- Rates of inactive adults in Worcestershire are similar to that of CIPFA nearest neighbours Warwickshire, Gloucestershire and Suffolk, although it is worth noticing that levels of inactivity in Warwickshire and Gloucestershire have decreased over the time period.

Figure 4 below shows the estimated percentage of physically inactive adults for each of the District areas in Worcestershire.

Figure 4: Percentage of Physically Inactive Adults for Worcestershire Districts 2012 to 2015



Source: Public Health Outcomes Framework, http://www.phoutcomes.info/, August 2016

It can be seen that;

- The estimated percentage of physically inactive adults in Wychavon has fallen since 2013 and is now significantly better than the National average.
- The estimated percentage of physically inactive adults in Bromsgrove, Malvern Hills and Worcester has increased since 2014. Each of these areas has moved from having an estimated percentage of physically inactive adults that was significantly better than the National average to one that is similar to the National average.

It is also worth noting that;

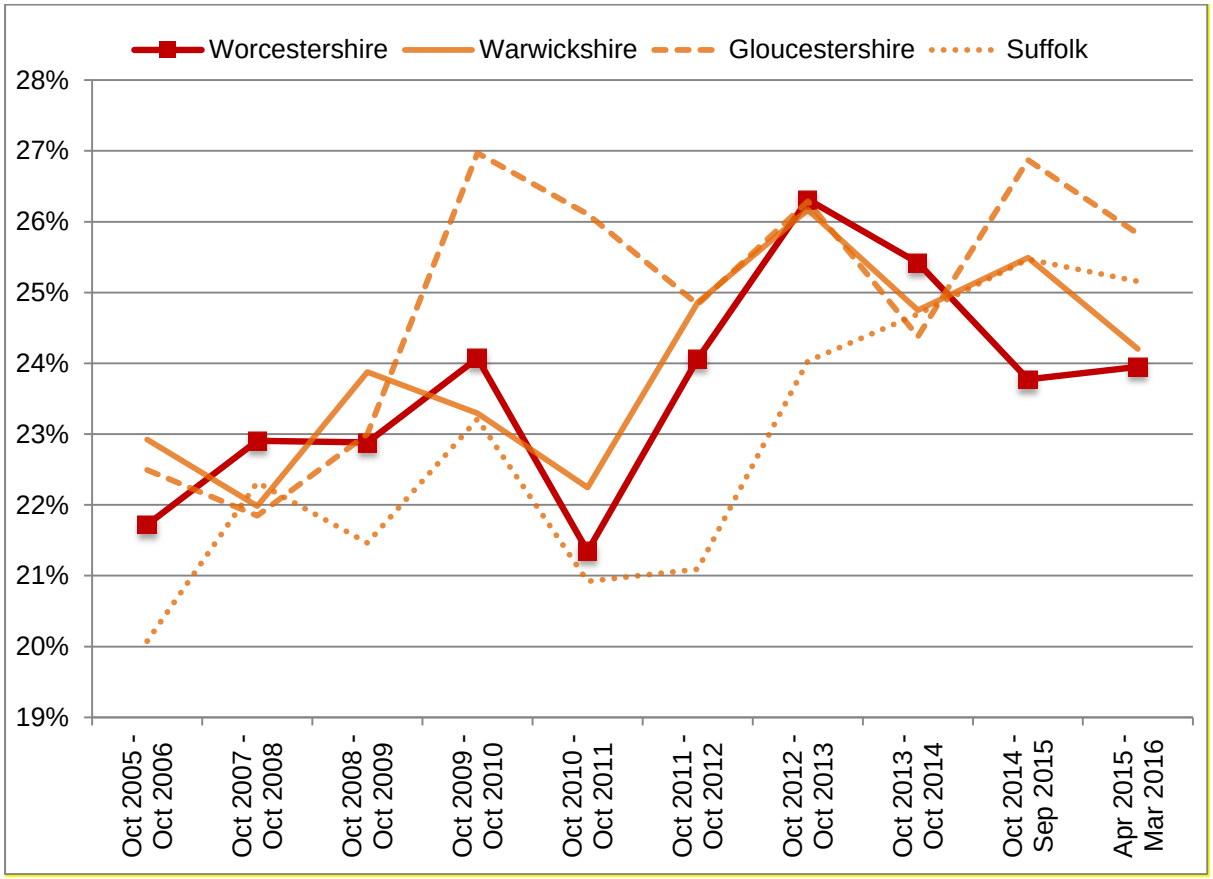
- All of the Worcestershire Districts, with the exception of Wychavon, now have a similar percentage of physically inactive adults to that of the National average when confidence intervals are taken into account.

Participation in Sport and Active Recreation

Figure 5 below shows the participation rates in sport and active recreation (formerly NI8) from the year of October 2005 to October 2006 to the period April 2015 to March 2016 for Worcestershire and the CIPFA comparator areas of Warwickshire, Gloucestershire and Suffolk, as reported by Sport England.

The participation rates are defined as the percentage of the adult population (age 16 and over) who participate in sport and active recreation, at moderate intensity, for at least 30 minutes on at least 12 days out of the last 4 weeks (equivalent to 30 minutes on 3 or more days a week). This includes light intensity activities (bowls, archery, croquet, yoga and pilates) for those aged 65 and over[5].

Figure 5: Percentage of the Population that Participate in 30 minutes Sport and Active Recreation at least 3 times a week (formerly NI8) for Worcestershire and Comparators 2005-16



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

It can be seen that;

- The sport and active recreation participation rates in Worcestershire increased from 21.7% for the period October 2005-October 2006 to around 24% in the period April 2015-March 2016.

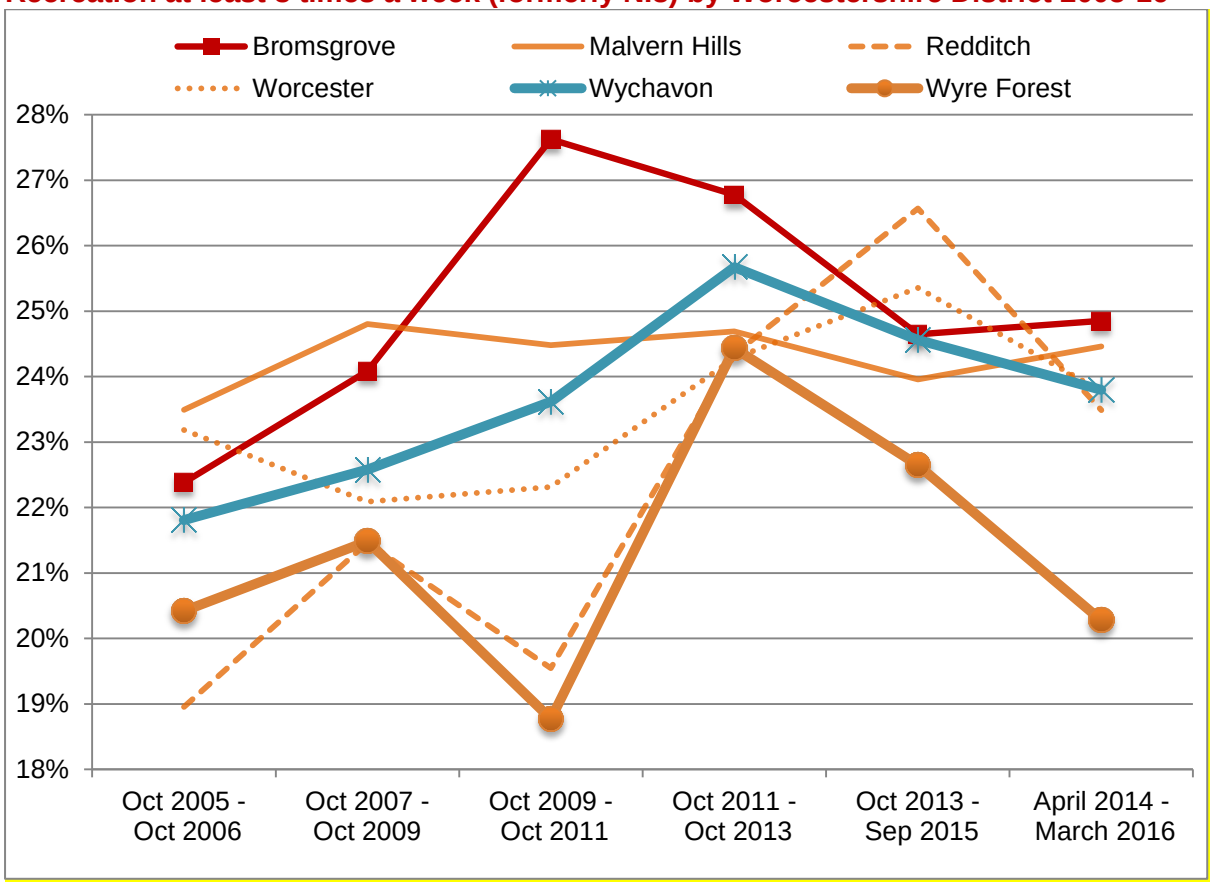
[5] Please note the local area estimates of adult participation in sport and active recreation differ from Sport England's 1x30 sports participation indicator. Sport England's 1x30 sports participation indicator includes a narrower range of activities (than specified for NI8) and does not include recreational walking. The 1x30 sport participation measure is based on once a week participation, rather than three times a week for the former NI8 measure of sport and active recreation.

- The current sport and active recreation participation rate in Worcestershire is below that of the CIPFA nearest neighbours of Warwickshire, Gloucestershire and Suffolk.

Figure 6 below shows the participation rates in sport and active recreation from the year of October 2005 to October 2006 to the period April 2015 to March 2016 for the Worcestershire Districts as reported by Sport England.

For single tier and district authorities results are based on 24 months of data, with the combined results based on a target sample of 1,000 respondents. Please see http://www.sportengland.org/research/who-plays-sport/active-people-interactive/ for further details.

Figure 6: Percentage of the Population that Participate in 30 minutes Sport and Active Recreation at least 3 times a week (formerly NI8) by Worcestershire District 2005-16



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

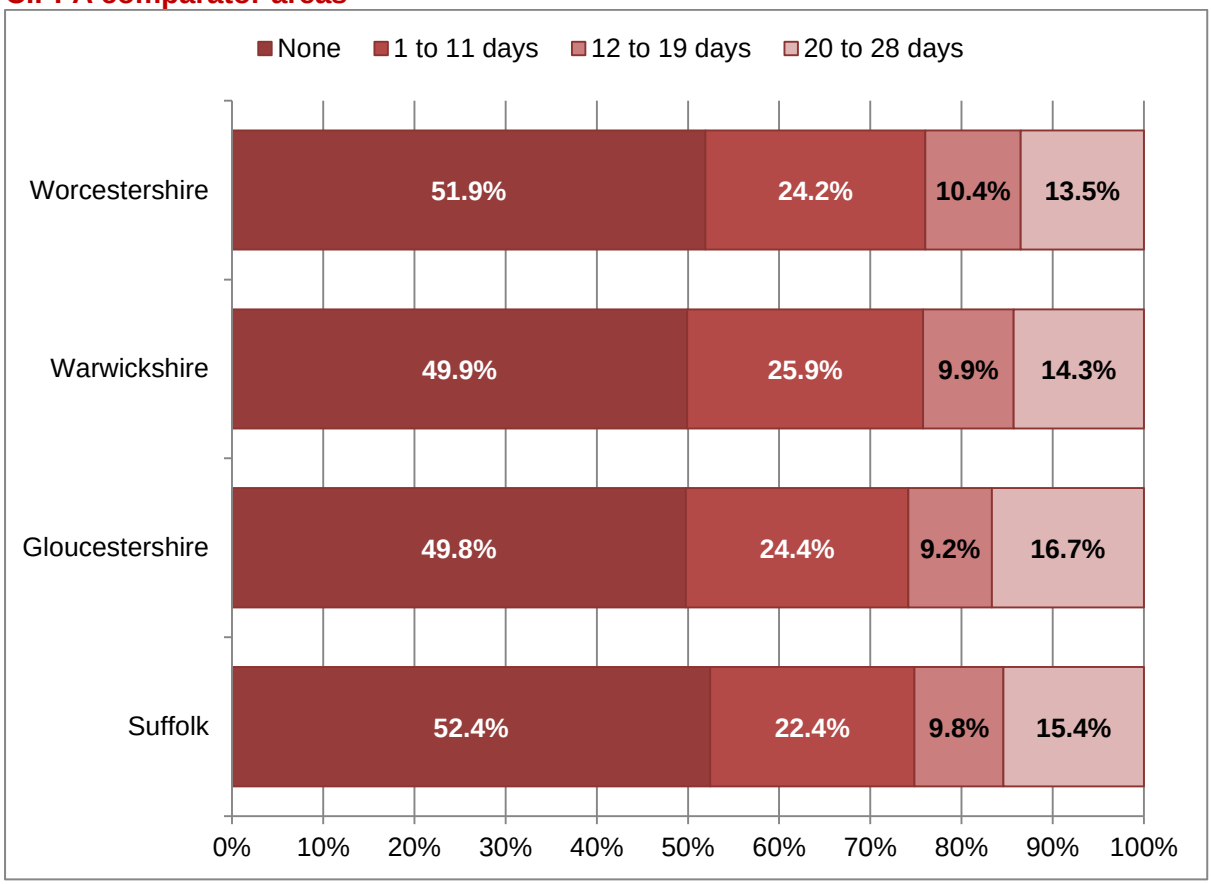
In summary it can be seen that;

- Rates of participation in sport and activity are currently highest in Bromsgrove closely followed by Malvern Hills.
- Wyre Forest currently has the lowest levels of participation in sport and activity.
- Redditch has experienced an increase of over 4% in participation levels since October 2005-06.
- Wyre Forest is the only district area that has experienced decrease in participation levels since October 2005-06 (although this is not significant).

Frequency of Participation in Sport and Active Recreation

Figure 7 below shows the proportion of adults in Worcestershire County and the CIPFA comparator areas of Warwickshire, Gloucestershire and Suffolk, by the number of days out of the previous 28 that they have participated in sport and active recreation. This information is taken from combined results from the Active People Survey 9 Q3 to Active People Survey 10 Q2 (April 2015 to March 2016).

Figure 7: Frequency of Adult Participation in Sport and Active Recreation (formerly NI8) April 2015 to March 2016 by number of days for Worcestershire County and CIPFA comparator areas



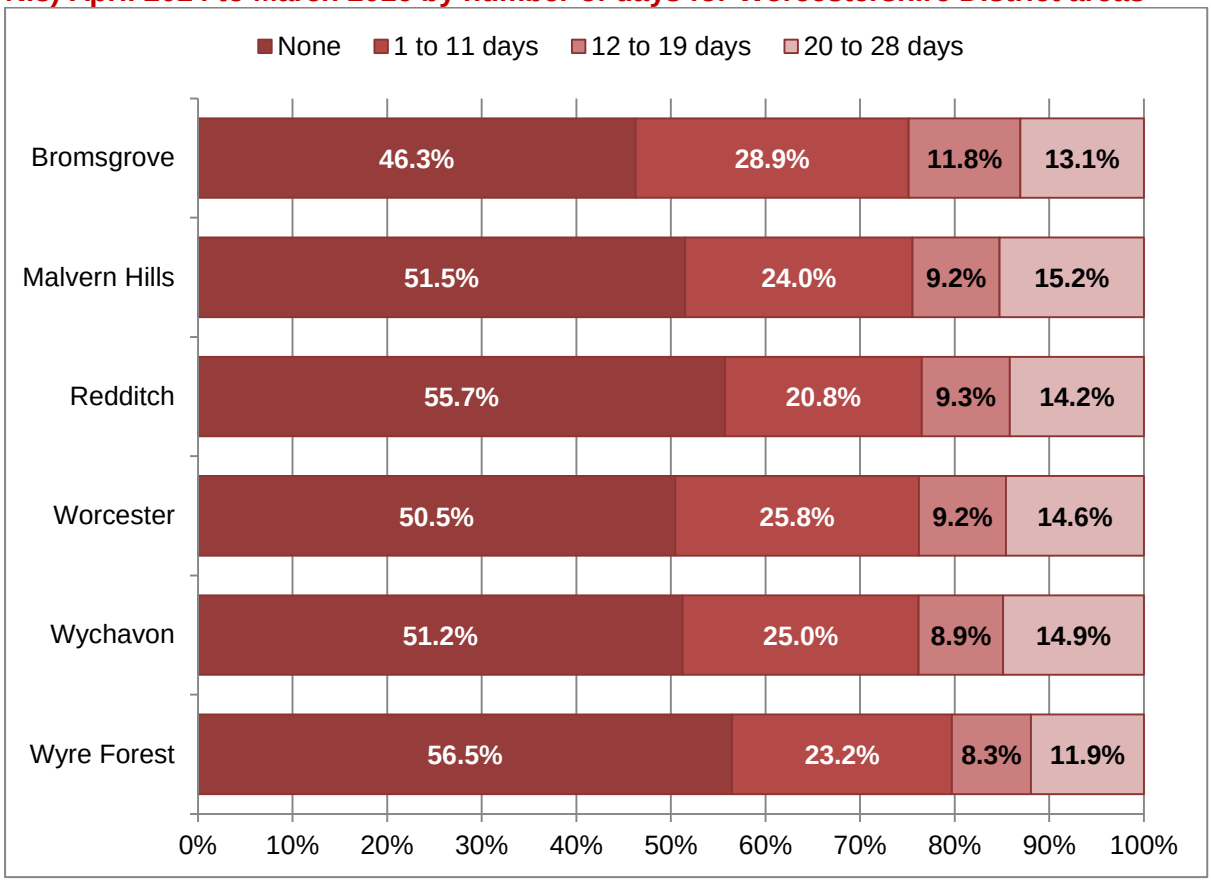
Source: Sport England, http://www.sportengland.org/research/who-plays-sport/active-people-interactive/ August 2016.

It can be seen that;

- Worcestershire has a lower percentage of adults participating in sport and active recreation for 20 to 28 days over the previous four weeks when compared to Warwickshire, Gloucestershire and Suffolk.
- Worcestershire has a higher percentage of adults that have not participated in any sport and recreation over the previous four weeks when compared to Warwickshire and Gloucestershire.

Figure 8 below shows the proportion of adults in each Worcestershire District by the number of days out of the previous 28 that they have participated in sport and active recreation. This information is taken from combined results from the Active People Survey 8 Q3 to Active People Survey 10 Q2 (April 2014 to March 2016).

Figure 8: Frequency of Adult Participation in Sport and Active Recreation (formerly NI8) April 2014 to March 2016 by number of days for Worcestershire District areas



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

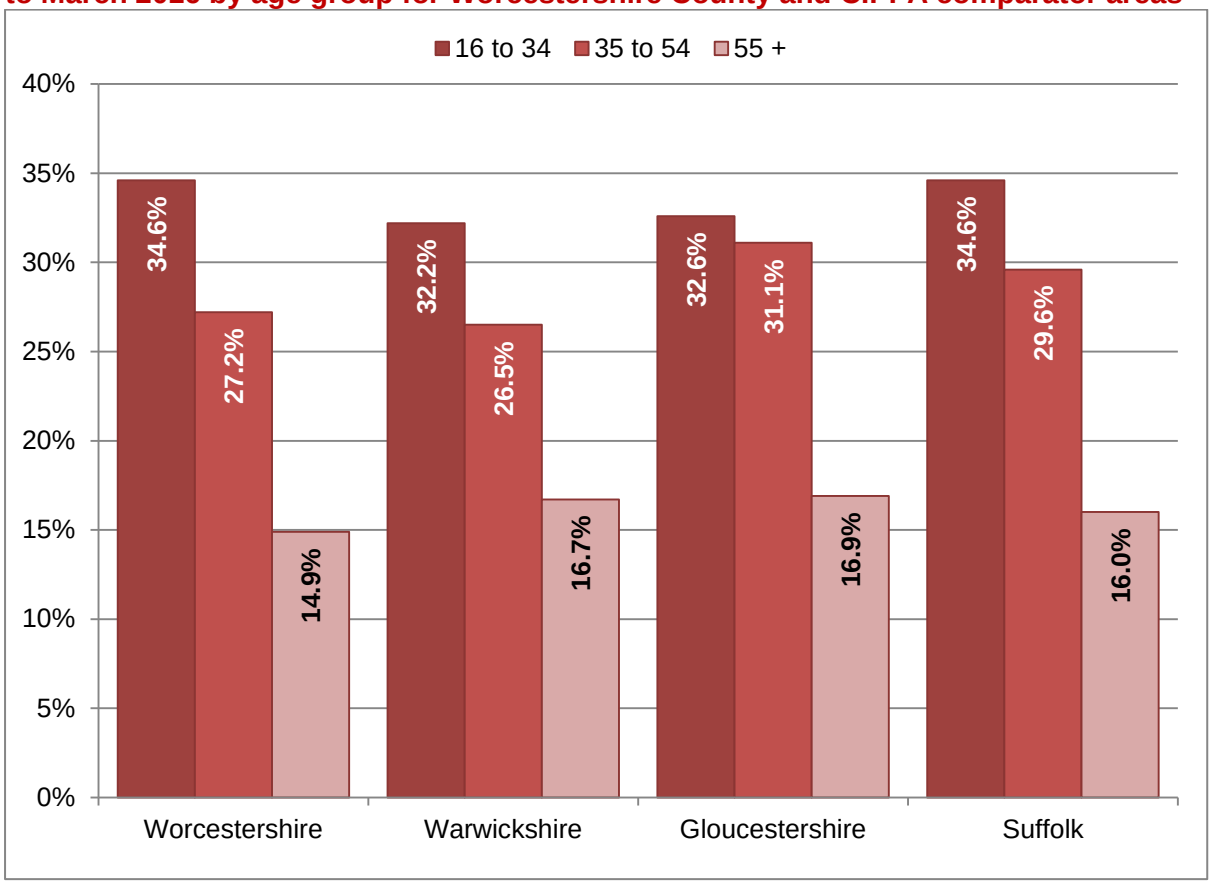
It can be seen that;

- Wyre Forest has the largest percentage of adults that had not participated in any sport or active recreation over a four week period, with over 56% of adults participating in no activity. Redditch is not far behind with almost 56% of adults participating in no activity over the previous four weeks.
- Bromsgrove has the lowest percentage of adults that had not participated in any sport or active recreation over a four week period, with around 46% of adults participating in no activity, which is well below the Worcestershire average of 51.9%.
- Malvern Hills has the largest percentage of adults that participate in the most amount of sport and active recreation i.e. 20 to 28 days in the previous four week period, followed closely by Wychavon.

Participation in Sport and Active Recreation by Age

Figure 9 below shows the proportion of respondents that participated in sport and active recreation by age group for Worcestershire County and the CIPFA comparator areas of Warwickshire, Gloucestershire and Suffolk. This is defined as participation in sport and activity at a moderate intensity, for at least 30 minutes on at least 12 days in the last 4 weeks (equivalent to at least 3 times a week over the previous month). This information is taken from combined results from the Active People Survey 9 Q3 to Active People Survey 10 Q2 (April 2015 to March 2016).

Figure 9: Adult Participation in Sport and Active Recreation (formerly NI8) April 2015 to March 2016 by age group for Worcestershire County and CIPFA comparator areas



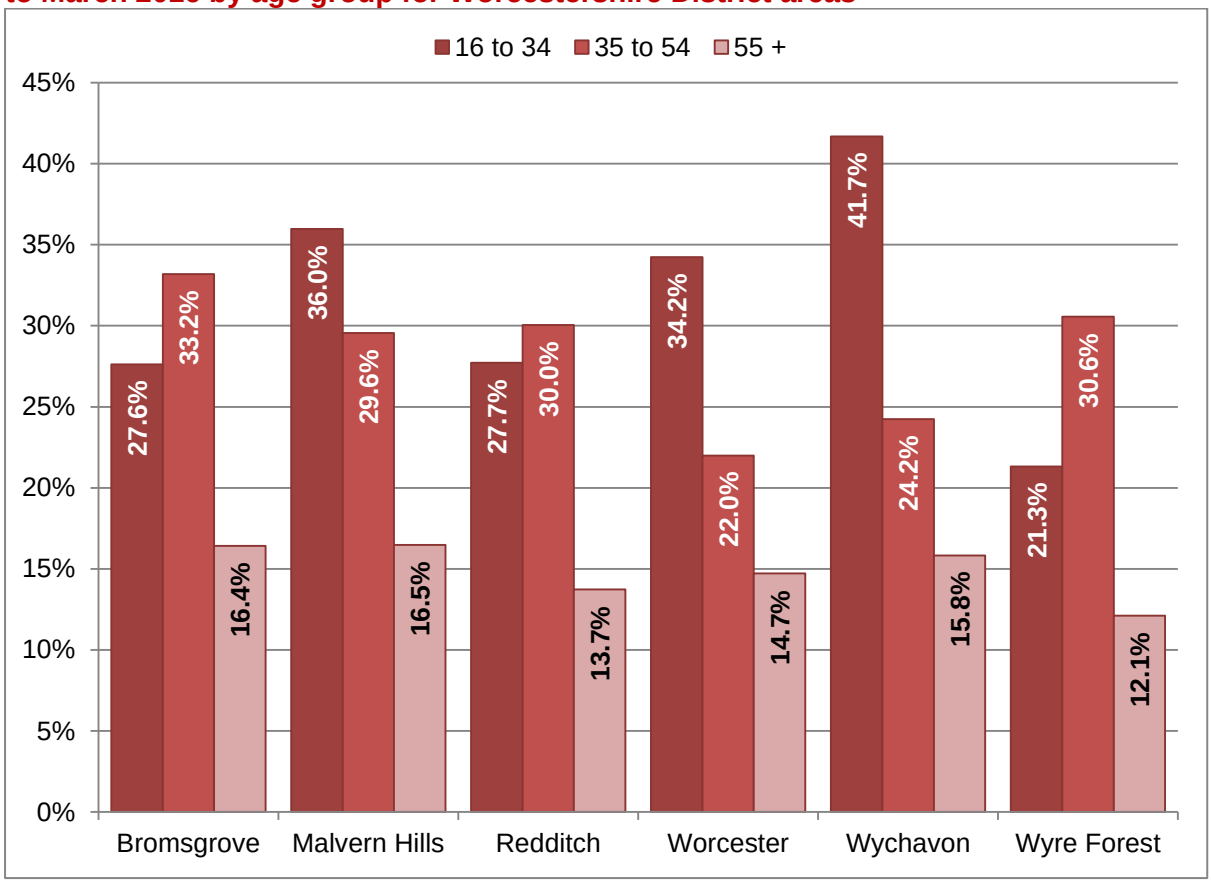
Source: Sport England, http://www.sportengland.org/research/who-plays-sport/active-people-interactive/ August 2016.

It can be seen that;

- Worcestershire has a lower percentage of adults aged 55 and over participating in sport and active recreation when compared to Warwickshire, Gloucestershire and Suffolk.
- Worcestershire has a lower percentage of adults aged 35 to 54 participating in sport and active recreation when compared to Gloucestershire and Suffolk.
- Worcestershire has a higher percentage of adults aged 16 to 34 participating in sport and active recreation when compared to Warwickshire and Gloucestershire.

Figure 10 below shows the proportion of respondents that participated in sport and active recreation by age group in each Worcestershire District. This information is taken from combined results from the Active People Survey 8 Q3 to Active People Survey 10 Q2 (April 2014 to March 2016).

Figure 10: Adult Participation in Sport and Active Recreation (formerly NI8) April 2015 to March 2016 by age group for Worcestershire District areas



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

It can be seen that;

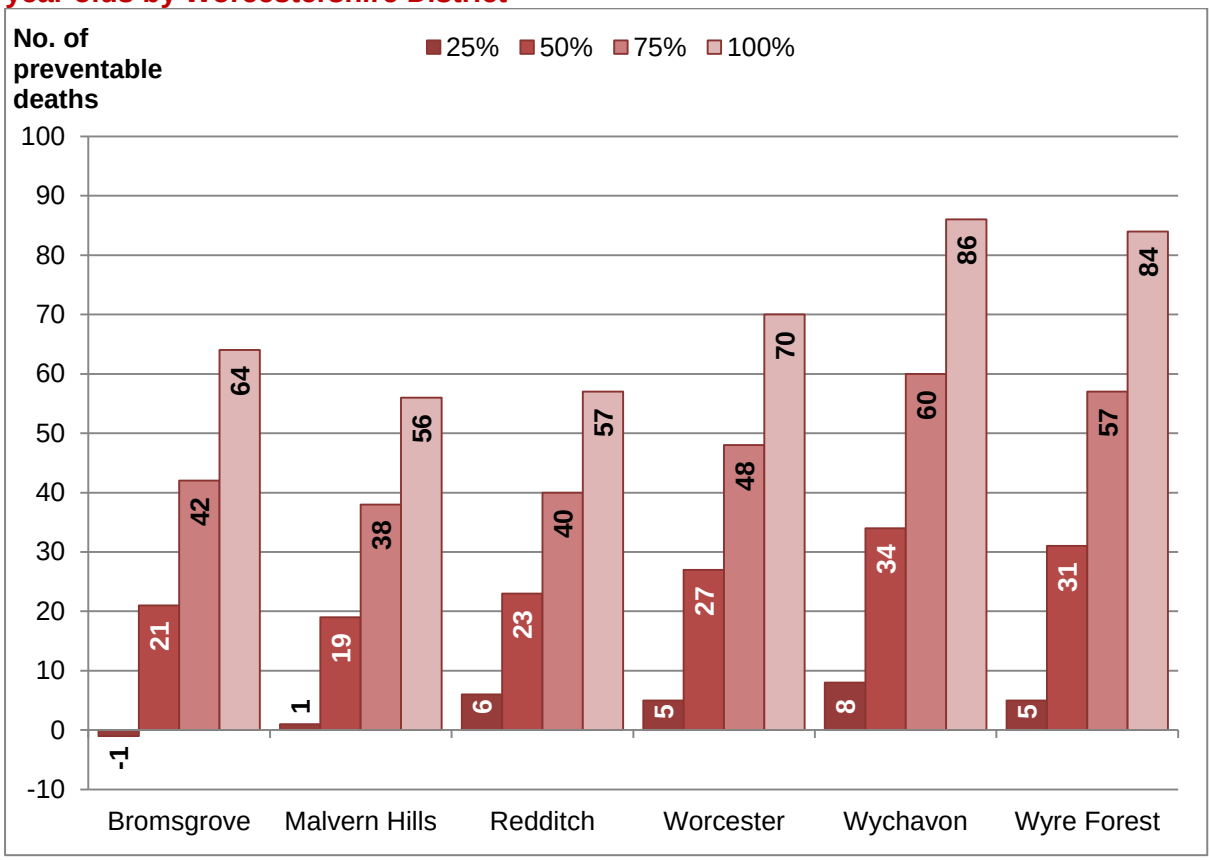
- Wychavon has by far the highest proportion of 16 to 34 year olds participating in 30 minutes of sport or activity at least 3 days a week at 41.7%, with Wyre Forest showing the lowest at 21.3%.
- Worcester has the lowest proportion of 35 to 54 year olds participating in sport or activity at 22.0% with Bromsgrove reporting the highest at 33.2%.
- For those aged 55 and above Bromsgrove and Malvern Hills have similarly high participation rates around 16.5%, whilst Wyre Forest shows the lowest at 12.1%.

Preventable Deaths by Increases in Activity

Figure 11 below shows the estimated number of deaths from all causes that could be prevented by increases in levels of physical activity for 40-79 year olds. These are taken from the Health Impact of Physical Inactivity (HIPI) tool which has been developed to estimate how many cases of certain diseases could be prevented in each local authority in England, if the population aged 40-79 were to engage in recommended amounts of physical activity.

HIPI uses estimates of local levels of physical activity from the Sport England Active People survey. It models the potential benefit from increased levels of physical activity for each local authority. This is pre-calculated to show the health impacts if 100%, 75%, 50% or 25% of the local population undertake the UK Chief Medical Officers' recommended levels of physical activity. Other assumptions and sources of data are described in the technical document (see http://www.apho.org.uk/resource/view.aspx?RID=123472).

Figure 11: Preventable deaths by increasing levels of physical activity among 40-79 year olds by Worcestershire District



Source: Public Health England. Measure: Health impact of physical inactivity - estimated preventable deaths in persons aged 40-79, all causes. Time period(s): 2009/10, http://www.apho.org.uk/resource/view.aspx?RID=123459

As you would expect, the estimated number of deaths that could be prevented increases with increases in physical activity levels, with the greatest impact occurring in Wychavon and Wyre Forest.

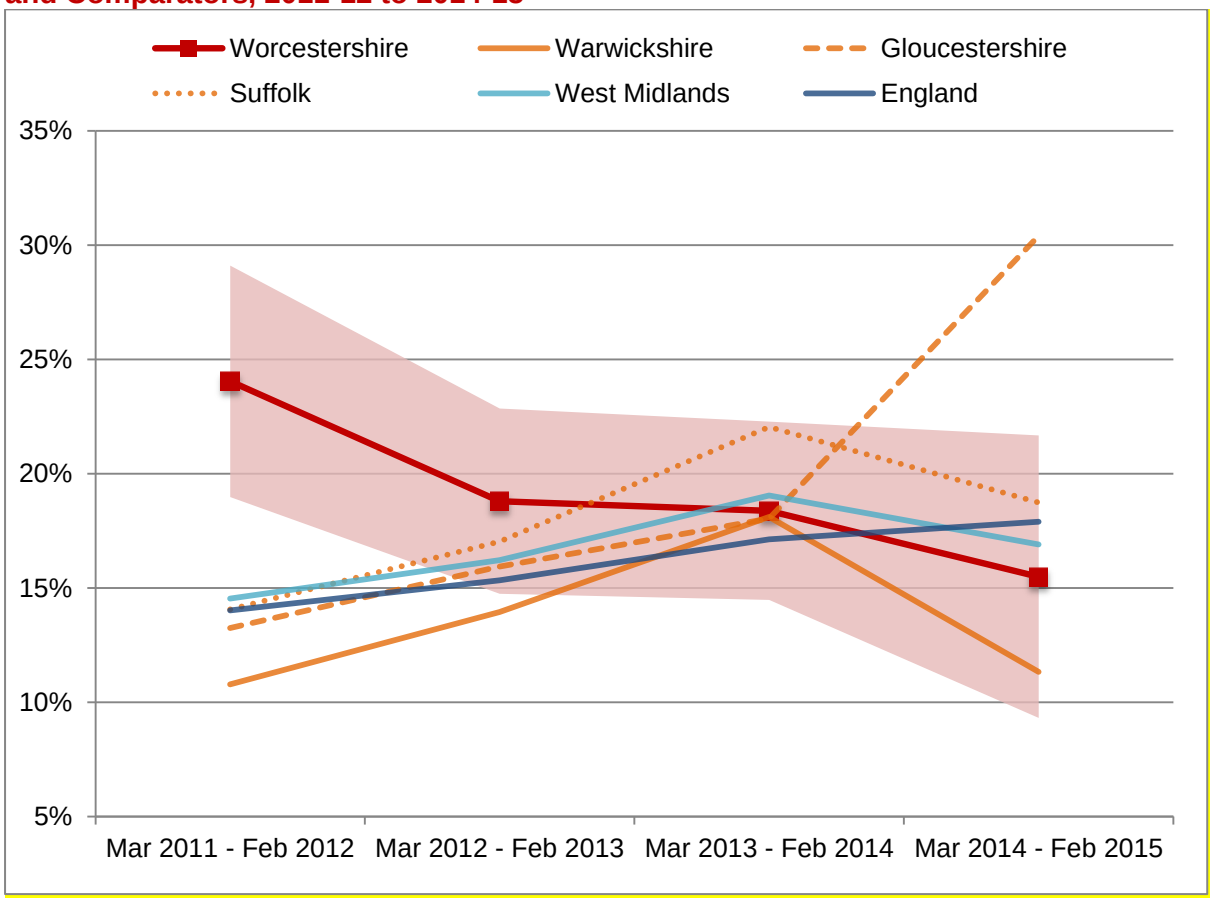
For Worcestershire County as a whole it is estimated that;

- 24 deaths could be prevented with a 25% increase in physical activity levels for 40-79 year olds.
- 155 deaths could be prevented with a 50% increase in physical activity.
- 285 deaths could be prevented with a 75% increase in physical activity.
- 417 deaths could be prevented with a 100% increase in physical activity.

Utilisation of Outdoor Space for Exercise/Health Reasons

Figure 12 below shows the estimated percentage of people using outdoor space for exercise/health reasons in Worcestershire and comparators. There is strong evidence to suggest that green spaces have a beneficial impact on physical and mental wellbeing and cognitive function through both physical access and usage.

Figure 12: Utilisation of outdoor space for exercise/health reasons for Worcestershire and Comparators, 2011-12 to 2014-15



Source: Public Health Outcomes Framework, http://www.phoutcomes.info/, August 2016.

Utilisation of outdoor space for exercise/health reasons in Worcestershire has fallen over the period 2011-12 to 2014-15. This is in contrast to the trend experienced during the same time period for the CIPFA comparator areas of Gloucestershire, and Suffolk, and also both regionally and nationally. However, the level of utilisation of outdoor space in Worcestershire in 2014-15 is not significantly different from any of these comparators, partially due to the large confidence intervals involved with these figures.

Associated documents and information:

National Policy and Guidelines

NICE Physical Activity Overview http://pathways.nice.org.uk/pathways/physical-activity

UK Physical Activity guidelines - Guidance from the Chief Medical Office (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 Choices Physical activity guidelines for adults: http://www.nhs.uk/Livewell/fitness/Pages/physical-activity-guidelines-for-adults.aspx

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

HM Government, Sporting Future: A new strategy for an active nation: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/486622/Sporting_Future_ACCESSIBLE.pdf

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, 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

Evidence and Best Practice

Department of Health, 2011, Start Active, Stay Active: A report on physical activity for health from the four home countries' Chief Medical Officers: http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/152108/dh_128210.pdf

British Heart Foundation Health Promotion Research Group, Improving Health Through Participation in Sport: a review of research and practice: http://www.sportengland.org/media/103075/full-report-inactivity-sport.pdf

British Heart Foundation National Centre for Physical Activity and Health (BHFNC), Economic costs of physical inactivity: http://www.bhfactive.org.uk/resources-and-publications-item/40/420/index.html

British Heart Foundation National Centre for Physical Activity and Health (BHFNC), Making the case for physical activity: http://www.bhfactive.org.uk/resources-and-publications-item/40/419/index.html

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

Public Health England, Everybody active, every day: what works, the evidence. Obesity and the environment: increasing physical activity and active travel: www.gov.uk/government/publications/obesity-and-the-environment-briefing-increasing-physical-activity-and-active-travel

Local and National Information Resources

Worcestershire County Council Joint Health and Well-being Strategy 2016 to 2021 http://www.worcestershire.gov.uk/downloads/file/7051/joint_health_and_well-being_strategy_2016_to_2021

Joint Strategic Needs Assessment Briefing on Obesity: http://www.worcestershire.gov.uk/downloads/file/2886/2014_briefing_on_obesity

Healthy Weight, Healthy Lives Obesity and Physical Activity: http://www.worcestershire.gov.uk/downloads/file/2918/2012_healthy_weight_healthy_lives_obesity_and_physical_activity

Health Impact of Physical Activity: http://www.apho.org.uk/resource/view.aspx?RID=123459

Public Health Outcomes Framework: http://www.phoutcomes.info/

Public Health England Physical Activity Tool http://fingertips.phe.org.uk/profile/physical-activity

Sport England Active People Survey Analysis Tool: http://activepeople.sportengland.org/

Sport England Small Area Estimates Tool: http://sae.sportengland.org/index.aspx#focusType=CSP&focusName=18&dataset=aps6-ni8

Sport England Local Sport Profile Tool: http://localsportprofile.sportengland.org/

Active travel briefings for local authorities: www.noo.org.uk/slide_sets/activity

Standard evaluation framework for physical activity interventions: http://www.noo.org.uk/core/frameworks/SEF_PA

Guide to physical activity data sources: http://www.noo.org.uk/data_sources/physical_activity

Guide to online tools for valuing physical activity, sport and obesity programmes: http://www.noo.org.uk/securefiles/150629_1236//online_tools_briefing_13011_%20FINAL.PDF

E-Learning modules on physical activity and health: http://learning.bmj.com/learning/course-intro/physical-activity.html?courseId=10051913

Change4Life campaign resources: http://www.nhs.uk/change4life/pages/resource-casestudy.aspx

PHE Obesity website: www.noo.org.uk

Data notes

To find out more about Sport England's Active People Survey and the local area estimates of adult participation in sport and active recreation, see http://www.sportengland.org/research/about-our-research/what-is-the-active-people-survey/.

Further information & feedback

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

Email: pfryers@worcestershire.gov.uk Tel: 01905 845848

References

Public Health England (2014), From evidence into action: opportunities to protect and improve the nation's health, Ref: PHE publications gateway number: 2014404, https://www.gov.uk/government/publications/from-evidence-into-action-opportunities-to-protect-and-improve-the-nations-health

Public Health England (2014), Everybody active, every day: an evidence-based approach to physical activity, Ref: PHE publications gateway number: 2014432, https://www.gov.uk/government/publications/everybody-active-every-day-a-framework-to-embed-physical-activity-into-daily-life

Worcestershire County Council (2016), Joint Health and Well-being Strategy 2016 to 2021, http://www.worcestershire.gov.uk/downloads/file/7051/joint_health_and_well-being_strategy_2016_to_2021

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